

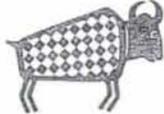
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5 MARCH 2007

EXHIBIT
March 5, 2007
TC 1C
12-3-07 SP Motors

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MAC

Metcalf Archaeological Consultants, Inc.

January 19, 2006

Ms. Paige Hoskinson, Historical Archaeologist
South Dakota State Historical Society
900 Governors Drive
Pierre, South Dakota 57501-2217

RE: Keystone Pipeline Project Survey Report

Dear Ms. Hoskinson,

Enclosed is a copy of the final survey report for fieldwork conducted during 2006 for the Keystone Pipeline Project.

After you have had the opportunity to review, please contact the MAC Bismarck office, as well as the client, with your comments:

Ms. Kim Munson, Anthropologist
ENSR International
1601 Prospect Parkway
Fort Collins, Colorado 80525

If you should you have any questions please contact the MAC Bismarck office.

Sincerely,

Amy Bleier
Staff Archaeologist

cc: Ms. Kim Munson

enclosure

(970) 328-6244
FAX: (970) 328-5623
P.O. Box 899
Eagle, CO 81631
e-mail: mac@metcalfarchaeology.com

(701) 258-1215
FAX: (701) 258-7156
P.O. Box 2154
Bismarck, ND 58502
e-mail: macnodak@metcalfarchaeology.com

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MAC

Metcalf Archaeological Consultants, Inc.

January 19, 2006

Ms. Jane Watts
South Dakota Archaeological Research Center
P.O. Box 1257
Rapid City, South Dakota 57709-1257

RE: Keystone Pipeline Project Site Forms

Dear Ms. Watts:

Enclosed are final copies of 15 site forms (five railroad sites, two foundation/depression sites, two rock cairn sites, one farmstead site, one foundation site, one artifact scatter site and two isolated find locales) that were encountered and recorded during fieldwork conducted in 2006 within the corridor surveyed for the proposed Keystone Pipeline.

Should you have any comments or questions in regards to these site forms, please contact the MAC Bismarck office.

Sincerely,

A handwritten signature in cursive script that reads "Amy C. Bleier".

Amy Bleier
Staff Archaeologist

cc: Ms. Kim Munson

enclosure:	39BE2072 (Update)	39YK77
	39CK50	39YK78
	39DA70	39YK79
	39DA71	39YK2003 (Update)
	39DA2000 (Update)	
	39HT133	
	39HT134	
	39KB2003 (Update)	
	39ML2000 (Update)	
	39YK75	
	39YK76	



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MAC

Metcalf Archaeological Consultants, Inc.

March 7, 2007

Mr. Albert M. LeBeau III
Tribal Historic Preservation Officer
Cheyenne River Sioux Tribe Cultural Preservation Office
P.O. Box 590
Eagle Butte, South Dakota 57625

RE: Keystone Pipeline Project Cultural Resource Investigation Survey Reports

Dear Mr. LeBeau III,

In response to your request at the February 21, 2007, Corps of Engineers meeting in Pierre, South Dakota, Kim Munson with ENSR International requested that our office send the enclosed copies of the final drafts of the survey reports prepared for TransCanada's Keystone Pipeline Project (*Keystone Pipeline Project: Class I, II, and III Cultural Resource Investigations in Eastern North Dakota* and *Keystone Pipeline Project: Level I and II Cultural Resource Investigations in Eastern South Dakota*).

Metcalf Archaeological Consultants, Inc., the subcontractor who conducted the investigations, is sending these reports on behalf of the Department of State which is conducting the government-to-government consultation with respect to this matter. If you have any comments or concerns regarding the survey reports please contact the Department of State. The contact information is:

Elizabeth A. Orlando, Esq.
US Department of State
OES/ENV
Foreign Affairs Officer
Multilateral Team
Telephone: 202-647-4284
Fax: 202-647-1052
Cell: 240-723-3157
orlandoea2@state.gov

Sincerely,

Suzanne Nelsen
Office Manager

cc: Kim Munson

enclosures

(701) 258-1215
Fax (701) 258-7156
P.O. Box 2154
Bismarck, North Dakota 58502
e-mail: macnodak@metcalfarchaeology.com

(970) 328-6244
Fax (970) 328-5623
P.O. Box 899
Eagle, Colorado 58502
e-mail: mac@metcalfarchaeology.com

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MAC

Metcalfe Archaeological Consultants, Inc.

February 7, 2007

Mr. James Whitted
Tribal Historic Preservation Officer
Sisseton-Wahpeton Oyate Planning and Development
Old Agency
P.O. Box 509
Sisseton, South Dakota 57262-0509

RE: Keystone Pipeline Project Cultural Resource Investigation Survey Reports

Dear Mr. Whitted,

Upon review we noticed that the cover letter with the reports we sent out January 22, 2007, was inadvertently addressed to Mr. Frankly and Mr. CrowsBreast. We apologize for the oversight and do hope that no harm has been caused by the error. It is our hope that you received the copies of the final drafts of the survey reports prepared for TransCanada's Keystone Pipeline Project (*Keystone Pipeline Project: Class I, II, and III Cultural Resource Investigations in Eastern North Dakota and Keystone Pipeline Project: Level I and II Cultural Resource Investigations in Eastern South Dakota*).

Metcalfe Archaeological Consultants, Inc., the subcontractor who conducted the investigations, has sent these reports on behalf of the Department of State which is conducting the government-to-government consultation with respect to this matter. If you have any comments or concerns regarding the survey reports please contact the Department of State. The contact information is:

Elizabeth A. Orlando, Esq.
US Department of State
OES/ENV
Foreign Affairs Officer
Multilateral Team
Telephone: 202-647-4284
Fax: 202-647-1052
Cell: 240-723-3157
orlandoea2@state.gov

Sincerely,

Ed Stine
Staff Archaeologist

cc: Kim Munson
enclosures

(701) 258-1215
Fax (701) 258-7156
P.O. Box 2154
Bismarck, North Dakota 58502
e-mail: macnodak@metcalfarchaeology.com

(970) 328-6244
Fax (970) 328-5623
P.O. Box 899
Eagle, Colorado 58502
e-mail: mac@metcalfarchaeology.com

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MAC

Metcalf Archaeological Consultants, Inc.

January 22, 2007

Mr. Franky Jackson
Tribal Historic Preservation Officer
Sisseton-Wahpeton Oyate Planning and Development
Old Agency
P.O. Box 509
Sisseton, South Dakota 57262-0509

RE: Keystone Pipeline Project Cultural Resource Investigation Survey Reports

Dear Mr. Crows Breast,

Enclosed are copies of the final drafts of the survey reports prepared for TransCanada's Keystone Pipeline Project (*Keystone Pipeline Project: Class I, II, and III Cultural Resource Investigations in Eastern North Dakota* and *Keystone Pipeline Project: Level I and II Cultural Resource Investigations in Eastern South Dakota*).

Metcalf Archaeological Consultants, Inc., the subcontractor who conducted the investigations, has sent these reports on behalf of the Department of State which is conducting the government-to-government consultation with respect to this matter. If you have any comments or concerns regarding the survey reports please contact the Department of State. The contact information is:

Elizabeth A. Orlando, Esq.
US Department of State
OES/ENV
Foreign Affairs Officer
Multilateral Team
Telephone: 202-647-4284
Fax: 202-647-1052
Cell: 240-723-3157
orlandoea2@state.gov

Sincerely,

Amy Bleier
Staff Archaeologist

cc: Kim Munson

enclosures

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P.O. Box 899
Eagle, CO 81631
e-mail: mac@metcalfarchaeology.com

(701) 258-1215
FAX: (701) 258-7156
P.O. Box 2154
Bismarck, ND 58502
e-mail: macnodak@metcalfarchaeology.com

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MAC

Metcalf Archaeological Consultants, Inc.

January 22, 2007

Mr. Calvin Grinnell
Tribal Historian
Mandan, Hidatsa, Arikara Nation
220 8th Avenue North
New Town, North Dakota 58673

RE: Keystone Pipeline Project Cultural Resource Investigation Survey Reports

Dear Mr. Grinnell,

Enclosed are copies of the final drafts of the survey reports prepared for TransCanada's Keystone Pipeline Project (*Keystone Pipeline Project: Class I, II, and III Cultural Resource Investigations in Eastern North Dakota* and *Keystone Pipeline Project: Level I and II Cultural Resource Investigations in Eastern South Dakota*).

Metcalf Archaeological Consultants, Inc., the subcontractor who conducted the investigations, has sent these reports on behalf of the Department of State which is conducting the government-to-government consultation with respect to this matter. If you have any comments or concerns regarding the survey reports please contact the Department of State. The contact information is:

Elizabeth A. Orlando, Esq.
US Department of State
OES/ENV
Foreign Affairs Officer
Multilateral Team
Telephone: 202-647-4284
Fax: 202-647-1052
Cell: 240-723-3157
orlandoea2@state.gov

Sincerely,

Amy Bleier
Staff Archaeologist

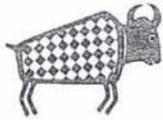
cc: Kim Munson

enclosures

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P.O. Box 899
Eagle, CO 81631
e-mail: mac@metcalfarchaeology.com

(701) 258-1215
FAX: (701) 258-7156
P.O. Box 2154
Bismarck, ND 58502
e-mail: macnodak@metcalfarchaeology.com

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MAC

Metcalf Archaeological Consultants, Inc.

January 22, 2007

Mr. Elgin Crows Breast
Cultural Resource Program Director
Mandan, Hidatsa, Arikara Nation
P.O. Box 673
New Town, North Dakota 58673

RE: Keystone Pipeline Project Cultural Resource Investigation Survey Reports

Dear Mr. Crows Breast,

Enclosed are copies of the final drafts of the survey reports prepared for TransCanada's Keystone Pipeline Project (*Keystone Pipeline Project: Class I, II, and III Cultural Resource Investigations in Eastern North Dakota* and *Keystone Pipeline Project: Level I and II Cultural Resource Investigations in Eastern South Dakota*).

Metcalf Archaeological Consultants, Inc., the subcontractor who conducted the investigations, has sent these reports on behalf of the Department of State which is conducting the government-to-government consultation with respect to this matter. If you have any comments or concerns regarding the survey reports please contact the Department of State. The contact information is:

Elizabeth A. Orlando, Esq.
US Department of State
OES/ENV
Foreign Affairs Officer
Multilateral Team
Telephone: 202-647-4284
Fax: 202-647-1052
Cell: 240-723-3157
orlandoea2@state.gov

Sincerely,

Amy Bleier
Staff Archaeologist

cc: Kim Munson

enclosures

(970) 328-6244
FAX: (970) 328-5623
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Eagle, CO 81631
e-mail: mac@metcalfarchaeology.com

(701) 258-1215
FAX: (701) 258-7156
P.O. Box 2154
Bismarck, ND 58502
e-mail: macnodak@metcalfarchaeology.com



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Overview – Keystone Pipeline Project Cultural Resource Surveys and Reports

March 2007

Cultural Resource Surveys and Reports

Construction and operation of the Keystone Pipeline Project (Keystone) may affect cultural resources protected under the National Historic Preservation Act (NHPA), and by individual State legislation. During 2006, Keystone initiated contact with the State Historic Preservation Officer (SHPO) in each state to identify known cultural resource sites, and to develop survey plans. Keystone submitted records searches and research designs to each state for review and approval. Agency coordination documentation and survey protocols were filed by Keystone with the Department of State (DOS) on September 15, 2006.

Cultural resource field surveys along the proposed Keystone Mainline pipeline right-of-way were initiated in the spring and summer of 2006, and were completed in the fall of 2006. 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 during the spring and summer of 2007 to survey pipeline reroutes, pump stations, certain pipe storage yards and contractor yards, access roads, and pipeline segments where access was not previously available. Field surveys will be conducted along the Cushing Extension and on pump station sites, pipe storage yards and contractor yards associated with the extension in 2007.

Keystone reached an agreement with Kinder Morgan to purchase the cultural resources survey reports for the proposed Rockies Express Pipeline (REX) segment that will be located parallel to the Keystone pipeline route in Nebraska, Kansas, and Missouri. The REX reports and concurrence letters received from the SHPO in each state were included in the November 17, 2006, supplemental filing. Site testing along the REX corridor is ongoing and results will be provided when available.

Keystone initiated discussions with the Nebraska, Kansas, and Missouri SHPOs to define a process for incorporating the REX survey results into the Keystone Pipeline project. Keystone prepared maps of its proposed construction surface disturbance footprint in relation to the REX cultural resources survey corridor. These maps documented the portion of the REX survey corridor that includes the proposed Keystone surface disturbance. The SHPOs reviewed this submittal and provided concurrence letters for the portion of the Keystone Project located within the REX survey corridor. The concurrence letters were included in the January 2007 supplemental filing.

Keystone documented proposed surface disturbance located outside the REX survey corridor and began field surveys of these areas in January 2007. The status of surveys conducted to date along deviations from the REX corridor will be submitted to the SHPOs in a separate Keystone report and are included in this filing.

Results of the pedestrian survey along the Mainline pipeline right-of-way in North/South Dakota, Nebraska, Missouri, and Illinois were submitted to the North/South Dakota, Nebraska, and Missouri SHPOs. As directed by the Illinois SHPO, the survey report will not be submitted to the SHPO until survey is completed along the Illinois segment of the Mainline. The Nebraska and North Dakota SHPOs have concurred with the findings in the cultural resources survey reports. The North Dakota SHPO will not provide NRHP determinations until requested in writing by the DOS. Copies of the letters from the North Dakota and Nebraska SHPOs are included in this filing. Concurrence from the South Dakota and Missouri SHPOs is pending and will be submitted in a supplemental filing.

Site testing to determine National Register eligibility was conducted in North Dakota, Missouri, and Illinois. The results of site testing in Missouri and Illinois can be found in the testing reports included in January 2007 supplemental filing. Two sites were tested in North Dakota, and both sites were recommended as ineligible. Results of testing in North Dakota will be included in this filing. Site testing

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has not yet been conducted at two sites in Missouri due to lack of access. All potentially eligible sites in South Dakota and Nebraska were avoided by reroutes; therefore, no site testing was conducted in these states. With the exception of Illinois, the site testing reports were submitted to SHPOs for review and concurrence. A copy of the North Dakota SHPO letter is included in this filing. Concurrence on the Missouri site testing report is pending and will be included in a supplemental filing.

Cushing Extension

Pedestrian survey along the Cushing Extension in Nebraska, Kansas, and Oklahoma began in January 2007. To date, survey of the Nebraska segment is complete; surveys in Kansas and Oklahoma are ongoing and scheduled for completion in summer 2007. The status reports for survey conducted to date are included in this filing and will be submitted to the Nebraska, Kansas, and Oklahoma SHPOs. Keystone will file cultural resource status reports for remaining segments of the Cushing Extension, as well as addendum reports for Mainline reroutes, ancillary facilities, and any additional site testing (if required) in the next supplemental filing.

Table 1 outlines the process for the collection and submission of cultural resource data.

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Table 1. Keystone Pipeline Project - Cultural Resources Field Surveys and Report Completion Plan – March 2007

State	Survey Status	September 2006 DOS Filing	November 2006 DOS Filing	January 2007 DOS Filing	March 2007 DOS Filing	Supplemental Reports
North Dakota	<p>Field Survey Completion Status as of March 2007:</p> <ul style="list-style-type: none"> • Pedestrian Survey – 88% • Site Testing – 100% <p>Spring 2007 – follow up surveys as needed for reroutes and ancillary sites.</p>	<p>Cultural resources record search; Survey protocols and survey areas.</p>	<p>Keystone Cultural Resources Status Report (pedestrian survey results and site forms, site testing methodology).</p>	<p>Compilation of 2006 surveys (pedestrian and geomorphological surveys).</p>	<p>SHPO Concurrence, 2 sites.</p> <p>Site testing report, 2 sites, February 2007.</p> <p>SHPO Concurrence on Class I-III report submitted to DOS January 2007.</p> <p>Site Forms Errata submitted to DOS January 2007.</p> <p>Transmittal Letters to Tribes</p>	<p>May or June 2007</p> <p>Reports will include survey results for pipeline reroutes and ancillary facilities, and site testing (if required).</p>
South Dakota	<p>Completion Status as of March 2007:</p> <ul style="list-style-type: none"> • Pedestrian Survey – 86% • Site Testing – no sites <p>Spring 2007 –follow up surveys as needed for reroutes and ancillary sites.</p>	<p>Cultural resources record search; Survey protocols and survey areas.</p>	<p>Keystone Cultural Resources Status Report (pedestrian survey results and site forms, site testing methodology).</p>	<p>Compilation of 2006 surveys (pedestrian and geomorphological surveys).</p>	<p>Transmittal Letter for 2006 Survey Reports</p> <p>Transmittal Letter - 15 site forms recorded in 2006 survey reports</p> <p>Transmittal Letters to Tribes</p>	<p>May or June 2007</p> <p>Reports will include survey results for pipeline reroutes and ancillary facilities, and site testing (if required).</p>

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Table 1. Keystone Pipeline Project - Cultural Resources Field Surveys and Report Completion Plan – March 2007

State	Survey Status	September 2006 DOS Filing	November 2006 DOS Filing	January 2007 DOS Filing	March 2007 DOS Filing	Supplemental Reports
Nebraska	<p>Mainline Completion Status as of March 2007:</p> <ul style="list-style-type: none"> • Pedestrian Survey – 97% • Site Testing – no sites • Cushing Extension 100% <p>Spring 2007 – Mainline follow up surveys; Cushing Extension.</p>	Cultural resources record search; Survey protocols and survey areas.	<p>Keystone Cultural Resources Status Report (pedestrian survey results and site forms).</p> <p>Rockies Express (REX) Cultural Surveys in NE (pedestrian survey results and SHPO concurrence for segments where REX and Keystone are co-located).</p>	<p>Compilation of 2006 surveys (pedestrian and geomorphological surveys).</p> <p>Map documentation of Keystone proposed construction ROW overlap with REX cultural resource survey areas and SHPO concurrence.</p>	Cushing Extension field surveys – status report.	<p>May or June 2007</p> <p>Reports will include Keystone Mainline survey results for pipeline reroutes and ancillary facilities, and site testing (if required).</p> <p>Cushing Extension – Pedestrian survey results; site testing (if required).</p>
Kansas	<p>Field Survey Completion Status as of March 2007:</p> <ul style="list-style-type: none"> • Mainline Pedestrian Survey – 99% • Mainline Site Testing – 0% • Cushing Extension – 100% <p>2007 Spring – Mainline Follow up surveys; Cushing Extension.</p>	Cultural resources record search; Survey protocols and survey areas.	REX Cultural Surveys in KS (pedestrian survey results and SHPO concurrence for segments where REX and Keystone are co-located).	<p>Map documentation of Keystone proposed construction ROW overlap with REX cultural resource survey areas and SHPO concurrence.</p> <p>Cushing Extension Revised research design (maps included) and SHPO concurrence.</p>	<p>Mainline field survey status report for any areas outside REX survey area.</p> <p>Cushing Extension field surveys – status report.</p> <p>Cushing Extension Tribal Letters.</p>	<p>May or June 2007-</p> <p>Reports will include Keystone Mainline survey results for pipeline reroutes and ancillary facilities, and site testing (if required).</p> <p>Cushing Extension – Pedestrian survey results; site testing (if required).</p>

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Table 1. Keystone Pipeline Project - Cultural Resources Field Surveys and Report Completion Plan – March 2007

State	Survey Status	September 2006 DOS Filing	November 2006 DOS Filing	January 2007 DOS Filing	March 2007 DOS Filing	Supplemental Reports
Missouri	<p>Field Survey Completion Status as of March 2007:</p> <ul style="list-style-type: none"> • Mainline Pedestrian Survey – 79% • Mainline Site Testing – 44% <p>Spring 2007 – Follow up surveys for reroutes and ancillary sites.</p>	Cultural resources record search; Survey protocols and survey areas.	<p>Keystone Cultural Resources Status Report (pedestrian and geomorphological survey results and site forms)</p> <p>REX Cultural Surveys in MO (pedestrian survey results and SHPO concurrence for segments where REX and Keystone are co-located.</p>	<p>Compilation of 2006 surveys (pedestrian and geomorphological surveys and site testing).</p> <p>Map documentation of Keystone proposed construction ROW overlap with REX cultural resource survey areas and SHPO concurrence.</p>	<p>SHPO Concurrence on 2006 Phase II (11 Sites) Report</p> <p>REX Deviations Phase I Cultural Survey status report.</p>	<p>May or June 2007</p> <p>Reports will include Keystone Mainline survey results for pipeline reroutes and ancillary facilities, and site testing (if required).</p>
Illinois	<p>Field Survey Completion Status as of March 2007:</p> <ul style="list-style-type: none"> • Pedestrian Survey – 89% • Site Testing – 33% <p>Spring 2007 – Follow up surveys for reroutes and ancillary sites.</p>	Cultural resources record search; Survey protocols and survey areas.	Keystone Cultural Resources Status Report (pedestrian survey results and site forms).	Compilation of 2006 surveys (pedestrian and geomorphological surveys, and site testing).	Wood River Terminal Pump Station survey status report.	<p>May or June 2007</p> <p>Keystone Mainline survey results for pipeline reroutes and ancillary facilities, and site testing (if required).</p>

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Table 1. Keystone Pipeline Project - Cultural Resources Field Surveys and Report Completion Plan – March 2007

State	Survey Status	September 2006 DOS Filing	November 2006 DOS Filing	January 2007 DOS Filing	March 2007 DOS Filing	Supplemental Reports
Oklahoma	Spring 2007 Pedestrian and geomorphological surveys; site testing, if required. • Cushing Extension – 81%	Cultural resources record search; Survey protocols and survey areas.	No information filed.	No information filed.	Cushing Extension field surveys – status report. Cushing Extension Revised research design (maps included) and SHPO concurrence. Cushing Extension Tribal Letters	May or June 2007 Cushing Extension survey results for pipeline reroutes, ancillary facilities; site testing, if required.



CONTENTS
SUPPLEMENTAL FILING, MARCH 2007

KEYSTONE MAINLINE

- **NORTH DAKOTA**
 - Metcalf report transmittal letter sites 32RM160 and 32RMx89 February 2007
 - Letter from North Dakota SHPO, concurrence on sites 32RM160 and 32RMx89
 - Testing Report for sites 32RM160 and 32RMx89, February 2007
 - SHPO Concurrence on Class I-III Report submitted to DOS January 2007
 - Metcalf letter to SHPO forwarding site form updates on above testing report
 - Metcalf letter to SHPO forwarding reports submitted to DOS January 2007
 - Site Forms Errata from ND Class I, II, III Cultural Resource Investigations in Eastern, North Dakota, submitted to DOS in January 2007
- **SOUTH DAKOTA**
 - Letters (2) from Metcalf to SD SHPO - survey reports (DOS January 2007 submission)
- **NORTH DAKOTA AND SOUTH DAKOTA LETTERS TO TRIBES (5)**
- **MISSOURI**
 - MO SHPO concurrence on Phase II (11 sites) – (January 2007 DOS submission)
 - ARG transmittal letter – Phase II (11 sites) Report

REX DEVIATIONS SURVEYS

- **KANSAS**
 - REX Deviations Phase I Cultural Survey Status Report, March, 2007
- **MISSOURI**
 - REX Deviations Phase I Cultural Survey Status Report, March, 2007

CUSHING EXTENSION

- **NEBRASKA**

- Cultural Survey Status Report March 2007

- **KANSAS**

- Cultural Survey Status Report March 2007
- Letters to Tribes

- **OKLAHOMA**

- Cultural Survey Status Report March 2007
- Letter to Oklahoma SHPO from ARG requesting concurrence on Phase I Surveys, February, 2007
- Proposed Methods for Phase I Cultural Surveys, Oklahoma, February 2007
- Letter from Oklahoma SHPO – Phase I Concurrence
- Letters to Tribes



**Environmental Permitting Coordination for the Keystone Pipeline Project
Coordination Summary – Biological Resources**

March 2007

Supplemental State Agency and USFWS Consultation

This biological consultation package includes documentation of consultation with state agencies and the United States Fish and Wildlife Service (USFWS) regarding the Keystone Mainline and Cushing Extension following the January 2007 supplemental filing with the Department of State (DOS). These correspondence summaries include species specific survey information and continued consultation with the state and federal agencies regarding coordination of the 2007 biological surveys and additional biological concerns for the Keystone Pipeline Project.

In January 2007, ENSR sent a biological survey package to all state agencies involved in the Keystone Pipeline Project, and to the lead USFWS office. Each 2007 biological survey consultation package contained information regarding the sensitive species, survey locations, survey windows, and survey protocols that ENSR is proposing to include during the 2007 biological survey field effort. Concurrence forms were also contained in each biological survey package, and ENSR requested that each state agency and the USFWS approve, or provide recommended changes to ENSR's 2007 survey plan before Keystone initiates biological surveys in 2007. Concurrence forms were received from the following state agencies: North Dakota, South Dakota, Nebraska, Missouri, and Oklahoma. The Illinois Department of Natural Resources declined ENSR's request to send ENSR a signed concurrence form.

In February 2007, ENSR met with state agencies and the USFWS to review the biological survey package material that was sent to each agency in January 2007 and the biological survey reports that were sent to the agencies in December 2006, and to discuss additional concerns, if any, that the agencies had regarding the Keystone Pipeline Project. The meeting minutes from each agency meeting are included in this consultation package.

The majority of remaining consultation material included in this package details follow-up with agencies with regard to specific action items from the state and USFWS agency meetings.

Based on the consultation with state agencies and the USFWS in January and February 2007, ENSR obtained approval for the proposed 2007 biological surveys from all of the state agencies and the USFWS. Continuing consultation will take place to follow up with survey results, and to continue to discuss other agency concerns, if any, that may arise as the Keystone Pipeline Project moves forward.

**Environmental Permitting Coordination for the Keystone Pipeline Project
Coordination Summary – Wetlands**

This wetlands consultation package includes documentation of consultation with federal agencies regarding the Keystone Mainline and Cushing Extension following the January 2007 supplemental filing with the DOS. These correspondence summaries include detailed wetland mapping information and continued consultation with the federal agencies regarding coordination of the 2007 wetlands surveys and additional wetlands-related concerns for the Keystone Pipeline Project.

In February 2007, ENSR met with the U.S. Army Corps of Engineers (USACE) (Omaha District) and the USFWS in North Dakota and South Dakota to review potential impacts to protected wetlands found on wetland easements, the Section 404 permitting process and to discuss additional concerns, if any, that the agencies had regarding the Keystone Pipeline Project. The meeting minutes from each agency meeting are included in this consultation package.

The majority of remaining consultation included in this package details follow-up with agencies with regard to specific action items from USACE and USFWS agency meetings.

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Continuing consultation will take place to discuss other agency concerns that may surface as the Keystone Pipeline Project moves forward.



CONTENTS REVISED 3/23/07
SUPPLEMENTAL FILING MARCH 2007

BIOLOGICAL RESOURCES – AGENCY CONSULTATION

U.S. Fish and Wildlife Service

Type/Date	To /From	Content
E-mail, March 7, 2007	MO FWS (Milligan) to ENSR	Biological Opinion for Missouri DNR Confluence State Park provided to ENSR
E-mail, March 6, 2007	MO FWS (Scott) to ENSR	Response to 021207 Meeting Minutes with MO USFWS and ENSR
E-mail, March 6, 2007	NE FWS (Cochnar) to ENSR	Best Management Practices for Dakota Skipper and Native Prairie Crossings
E-mail, March 5, 2007	ENSR (Stribley) to NE FWS (Cochnar)	Best Management Practices for Dakota Skipper and Native Prairie Crossings
E-mail, March 5, 2007	ENSR (Stribley) to NE FWS (Cochnar)	Acreage of Sensitive Habitat affected by Keystone Project in regards to MBTA Negotiations
E-mail, February 26, 2007	ENSR (Castle) to NE FWS (Cochnar)	Circulation of 020507 Meeting Minutes
E-mail, February 21, 2007	SD FWS (Bessken) to ENSR (Stribley)	Response to Request for Native Grassland Crossings/Dakota Skipper Best Management Practices
E-mail, February 21, 2007	ENSR (Stribley) to SD FWS (Bessken)	Request for Native Grassland Crossings/Dakota Skipper Best Management Practices
Phone Communication, February 16, 2007	ENSR (Stribley) to SD FWS (Bessken)	Follow-up to South Dakota Topeka Shiner Report and South Dakota Stream Crossing Best Management Practices
Meeting Minutes, February 12, 2007	ENSR and MO FWS	Treatment of Federally Threatened and Endangered Plants on Private Lands
Meeting Minutes, February 12, 2007	ENSR and MO FWS	FWS Concerns Regarding Wetlands, and Threatened and Endangered Species and Sensitive Lands Associated with Wetlands in St. Charles County, MO
E-mail, February 9, 2007	ENSR (Stribley) to NE FWS (Cochnar)	re: Meeting on February 5, 2007
E-mail, January 24, 2007	NE FWS (Cochnar) to ENSR	Response to Information Request Regarding Aerial Bald Eagle Surveys, and February 5, 2007 Meeting
E-mail, January 23, 2007	ENSR (Caddis) to NE FWS (Cochnar)	Aerial Bald Eagle Surveys

U.S. Fish and Wildlife Service

Type/Date	To /From	Content
Meeting Minutes, January 23, 2007	ENSR, Keystone, REX-West, and MO FWS	Conservation Opportunities for the Indiana Bat
Phone Communication, January 22, 2007	ENSR (Stark) to SD FWS (Bessken)	Follow-up Regarding Topeka Shiner Report
Phone Communication, January 22, 2007	ENSR (Stark) to KS FWS (Tabor)	Follow-up Regarding Topeka Shiner Report
Consultation Package, January 17, 2007	ENSR (Johnson) to NE FWS (Cochnar)	Distribution of 2007 Biological Survey Package (material not included in consultation package; see specific state for details on duplicate information that was sent to the NE FWS)
E-mail, January 16, 2007	NE FWS (Cochnar) to ENSR	Response to Request from ENSR to Discuss Concerns Regarding Keystone and REX-West Projects
Phone Communication, January 16, 2007	ENSR (Stark) to MO FWS (Hansen)	Follow-up Regarding Topeka Shiner Report
Phone Communication, January 16, 2007	ENSR (Stark) to SD FWS (Gates)	Follow-up Regarding Topeka Shiner Report

North Dakota Game and Fish Department

Type/Date	To /From	Content
Phone Communication, March 5, 2007	ENSR (Stribley) to NDGFD	Best Management Practices for Streams, Wetlands, Sensitive Species
Concurrence Form, February 12, 2007	NDGFD (Dyke) to ENSR	2007 Biological Survey Signed Concurrence Form
Concurrence Form, February 12, 2007	NDGFD (Dyke) to ENSR	2007 Biological Survey Schedule Concurrence Form
Phone Communication, February 12, 2007	NDGFD (Schumacher) to ENSR	Follow-up to 2007 Biological Survey Package Information
Phone Communication,	ENSR (Stribley) to McKenna	Follow-up to 2007 Biological Survey Package Information

North Dakota Game and Fish Department

Type/Date	To /From	Content
February 9, 2007		
Consultation Package, January 17, 2007	ENSR (Johnson) to NDGFD	Distribution of 2007 Biological Survey Package

South Dakota Game, Fish, and Parks

Type/Date	To /From	Content
E-mail, February 26, 2007	ENSR (Castle) to SDGFP	Circulation of 020607 Meeting Minutes
E-mail, February 9, 2007	ENSR (Stribley) to SDGFP	RE: 020607 Meeting
Phone Communication, February 9, 2007	ENSR (Stribley) to SDGFP	T&E state permit requirements
Concurrence Form, February 5, 2007	SDGFP (Backlund) to ENSR	2007 Biological Survey Signed Concurrence Form
Meeting Material, February 2, 2007	SDGFP (Backlund) to ENSR	Material provided to ENSR by the SDGFP at the 020207 Meeting: 1) SDGFP Public Lands http site, and 2) South Dakota Game Production Area Map
Comment Forms, February 2, 2007	SDGFP to ENSR	Signed Topeka Shiner, Unionid, and Native Grassland Comment and Recommendation Forms from the SDGFP
E-mail, January 29, 2007	SDGFP (Backlund) to ENSR	Accepted Invitation for 020207 Meeting with ENSR
Consultation Package, January 17, 2007	ENSR (Johnson) to SDGFP	Distribution of 2007 Biological Survey Package

Nebraska Game and Parks Commission

Type/Date	To /From	Content
E-mail, March 5, 2007	ENSR (Stribley) to Jorgensen	Piping Plover and Least Tern Survey Protocol
E-mail, March 5, 2007	ENSR (Stribley) to Wilson	River Otter Survey Protocol
Phone Communication, March 5, 2007	ENSR (Stribley) to Fritz	Scientific Collector's Permit
E-mail, February 26,	ENSR (Castle) to	Circulation of 020507 Meeting Minutes

Nebraska Game and Parks Commission

Type/Date	To /From	Content
2007	NGPC	
Letter, February 21, 2007	ENSR (Johnson) to Grell	Revised 2007 Biological Survey Protocols and Schedule
E-mail, February 9, 2007	ENSR (Stribley) to NGPC	RE: 0205007 Meeting
Consultation Package, January 17, 2007	ENSR (Johnson) to Grell	Distribution of 2007 Biological Survey Package

Kansas Department Of Wildlife and Parks

Type/Date	To /From	Content
Phone Communication, March 5, 2007	Davis to ENSR (Stribley)	Stream Crossing Best Management Practices, Neosho Madtom, and SINC species
Phone Communication, February 12, 2007	Davis to ENSR (Stribley)	Biological Survey Report and 2007 Biological Survey Proposal Follow-up
E-mail, February 4, 2007	Davis to ENSR (Johnson)	Formal response to Keystone Biological Survey Reports and 2007 Biological Survey Package. Attached Spawning Date Restrictions for Kansas Action Permit Conditions
E-mail, January 22, 2007	Davis to ENSR (Stribley)	Response to Request for Fish Survey Protocols
Consultation Package, January 17, 2007	ENSR (Johnson) to Davis	Distribution of 2007 Biological Survey Package
E-mail, January 15, 2007	ENSR (Stribley) to Davis	Request for Fish Survey Protocols
Phone Communication, January 12, 2007	ENSR (Stark) to Davis	Follow-up with Topeka Shiner Report
E-mail, January 8, 2007	Davis to ENSR (Stribley)	Response to February 2007 Meeting with ENSR

Missouri Department of Conservation

Type/Date	To /From	Content
E-mail, March 2, 2007	Brown to ENSR (Stribley)	Response to Request for Ornithologist Contact Information

Missouri Department of Conservation

Type/Date	To /From	Content
E-mail, February 27, 2007	Brown to ENSR (Lorenz)	MDC Massasauga and Western Fox Snake Survey Requirements
E-mail, February 26, 2007	ENSR (Castle) to MDC	Circulation of 020607 Meeting Minutes
E-mail, February 23, 2007	ENSR to ENSR	MO FWS Topeka Shiner Spawning Stream Restrictions for Missouri Stream Crossings
E-mail, February 22, 2007	ENSR to ENSR	MDC Survey Requirements for the Greater Prairie Chicken
E-mail, February 16, 2007	ENSR to ENSR	MDC Survey Requirements for the Massasauga and Western Fox snake
E-mail, February 15, 2007	ENSR to ENSR	MDC Survey Requirements and Survey Protocol for the King Rail
E-mail, February 9, 2007	ENSR (Stribley) to Brown	RE: Massasauga/Western Fox Snake Report
Letter, February 9 2007	ENSR (Johnson) to Brown	Distribution of Massasauga/Western Fox Snake Report
E-mail, February 9, 2007	ENSR (Stribley) to MDC	RE: 020607 Meeting
Concurrence Form, February 6, 2007	Brown to ENSR	Signed 2007 Survey Schedule Concurrence Form
Concurrence Form, February 6, 2007	Brown to ENSR	Signed 2007 Survey Protocol Concurrence Form
Letter, February 6, 2007	MDC to ENSR	Affects of Keystone Mainline on Missouri Conservation Opportunity Areas. Attached Cuivre River and Confluence COA Guidance Documents.
E-mail, January 30, 2007	Brown to ENSR (Stribley)	Response to Meeting Confirmation
E-mail, January 29, 2007	ENSR (Stribley) to Brown	020607 Meeting Confirmation
Consultation Package, January 17, 2007	ENSR (Johnson) to Brown	Distribution of 2007 Biological Survey Package
Phone Communication, January 16, 2007	ENSR (Stark) to Novinger	Follow-up to Missouri Topeka Shiner Survey Report

Missouri Department of Conservation

Type/Date	To /From	Content
Phone Communication, January 16, 2007	ENSR (Stark) to Brown	Follow-up to Missouri Topeka Shiner Survey Report

Illinois Department of Natural Resources

Type/Date	To /From	Content
E-mail, March 1, 2007	Esker to ENSR (Stribley)	Contact Information
Phone Communication, March 1, 2007	Esker to ENSR (Stribley)	Survey Protocols for Illinois Bird Surveys
E-mail, February 26, 2007	ENSR (Castle) to IDNR and USACE	Circulation of 020607 Meeting Minutes
E-mail, February 15, 2007	Pietruszka to ENSR (Stribley)	Response to Follow-up Question regarding State Listed Plants from 020607 Meeting
E-mail, February 14, 2007	Hammel to ENSR (Stribley)	Response to Follow-up Question regarding State Listed Bird Surveys from 020607 Meeting
Letter, February 14, 2007	Kruse to ENSR (Stribley)	Transmittal of Example IDNR Conservation Plan for ITA Permit Application
E-mail, February 14, 2007	ENSR (Stribley) to Hammel	Follow-up Questions from 020607 Meeting
E-mail, February 14, 2007	ENSR (Stribley) to Kruse	Request for Habitat Conservation Plan Example
E-mail, February 9, 2007	ENSR (Stribley) to IDNR	RE: 020607 Meeting
Phone Communication, January 30, 2007	ENSR to Smothers	Scheduling 020607 Meeting with IDNR and USACE
E-mail, January 30, 2007	ENSR to Hammel	Scheduling 020607 Meeting with IDNR and USACE
E-mail, January 29, 2007	ENSR to Hammel	Scheduling 020607 Meeting with IDNR and USACE
E-mail, January 24, 2007	Pietruszka to ENSR (Stribley)	Incidental Take Permit Recommendation from the IDNR for Massasauga and Kirtland's snake. Attached example of ITA Permit Application.

Illinois Department of Natural Resources

Type/Date	To /From	Content
Consultation Package, January 17, 2007	ENSR (Johnson) to Hammel	Distribution of 2007 Biological Survey Package
Consultation Package, January 17, 2007	ENSR (Johnson) to Pietruszka	Distribution of 2007 Biological Survey Package
E-mail, January 16, 2007	Hammel to ENSR (Stribley)	Response to 020607 Meeting Request
E-mail, January 5, 2007	Pietruszka to ENSR (Stribley)	Response to 020607 Meeting Request

Oklahoma Department of Wildlife Conservation

Type/Date	To /From	Content
E-mail, February 13, 2007	ENSR (Stribley) to Howery	Receipt of Signed 2007 Biological Survey Concurrence Forms
Concurrence Form, February 7, 2007	Howery to ENSR	Signed 2007 Biological Survey Schedule Concurrence Form
Concurrence Form, February 7, 2007	Howery to ENSR	Signed 2007 Biological Survey Protocol Concurrence Form
E-mail, January 30, 2007	Howery to ENSR (Stribley)	Response to Follow-up with 2007 Biological Survey Package
E-mail, January 30, 2007	ENSR (Stribley) to Howery	Follow-up with 2007 Biological Survey Package
Phone Communication, January 16, 2007	ENSR (Stribley) to Howery	Request to Meet with the OKDWC in February
Consultation Package, January 17, 2007	ENSR (Johnson) to Howery	Distribution of 2007 Biological Survey Package (see Appendix A for oversized charts and maps)

WETLANDS – AGENCY CONSULTATION

US Army Corps of Engineers

Type/Date	To /From	Content
E-mail, January 31, 2007	ENSR (Walsh) to Denny Needham (Ellis and Assoc.)	Milford Lake, KS, wetland information/maps
Meeting Minutes February 21, 2007		USFWS, USACE, SDDOE, SDGFP, NRCS Pierre, SD
Meeting Minutes February 22, 2007		USFWS, USACE, NDGFP, NDBR, NDDOT, NRCS Bismarck, ND
Meeting Minutes February 27, 2007		USFWS Tewaukon WMD, Waubay WMD, Cayuga ND
Meeting Minutes February 28, 2007		USFWS Huron WMD, Lake Andes WMD, Huron SD
Meeting Minutes March 1, 2007		USFWS Madison WMD, Madison SD

US Fish and Wildlife Service

Type/Date	To /From	Content
E-mail, January 9, 2007	ENSR (Walsh) to Meendering	Request for "Exhibit A" maps of protected wetlands within FWS easements in the Valley City WMD
E-mail, January 23, 2007	Meendering to ENSR (Walsh)	Confirmation of maps mailed to ENSR
Letter, January 15, 2007	Meendering to ENSR (Walsh)	Maps of protected wetlands in Valley City WMD
E-mail, February 1, 2007	ENSR (Walsh) to Meendering	Map receipt confirmation
E-mail, March 12, 2007	ENSR (Walsh) to Tom Tornow	Confirm preparation on new maps for Madison WMD

NATIONAL PARK SERVICE – AGENCY CONSULTATION

National Park Service

Type/Date	To /From	Content
Document, October 9, 2006		HDD Crossing Plan and Maps for the Missouri River crossing at Yankton, South Dakota
Meeting Minutes, February 8, 2007		ENSR, TROW, Universal, National Park Service, Yankton, SD

National Park Service

Type/Date	To /From	Content
Document, October 9, 2006		HDD Crossing Plan and Maps for the Missouri River crossing at Yankton, South Dakota
Meeting Minutes, February 8, 2007		ENSR, TROW, Universal, National Park Service, Yankton, SD



Stribley, Sara

From: Castle, Carla
Sent: Monday, February 26, 2007 11:07 AM
To: John.c.kirk@state.sd.us; Leslie.Pertersen@state.sd.us; Doug.Backlund@state.sd.us;
David.Ode@state.sd.us; Andrew.Burgess@state.sd.us
Cc: Johnson, Charlie; Stribley, Sara
Subject: Keystone Pipeline Meeting Minutes
Attachments: SDGFP Minutes 020207D.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 1st. Thank you for your time.

Janie Castle
Project Coordinator
ENSR
1601 Prospect Parkway
Fort Collins, CO 80525
T (970) 493-8878
F (970) 493-0213
ccastle@ensr.aecom.com

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**Draft - South Dakota Game, Fish, and Parks Division of Wildlife; Foss Bldg,
Pierre, SD
February 2, 2007. 9:00am – 10:25am**

Attendees:

Charles Johnson (ENSR)
Jon Alstad (ENSR)
John Kirk (SDGFP)
Doug Backlund (SDGFP)
Leslie Peterson (SDGFP)
Andy Burgess (SDGFP)
David Ode (SDGFP)

Meeting Objectives

ENSR met with the SDGFP 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: discuss the 2006 survey results for sensitive mussels, Topeka shiner, and native grassland habitat surveys for Dakota skipper and western prairie fringed orchid; proposed 2007 survey protocol and survey locations; and other issues or concerns that SDGFP have regarding the project.

Response Overview

A number of general questions from SDGFP regarding the project (e.g., size of pipe, width of construction ROW, number of construction spreads, number of construction workers/spread, trenching, laying of pipe, etc.) were answered (in general terms) by ENSR.

ENSR indicated that there are ongoing discussions with the USFWS regarding the Hecla reroute.

Agency Issues, Concerns, and Recommendations:

ENSR should follow-up with DENR regarding possible issues pertaining to the crossing of the Crow Creek Ditch along Hecla reroute. There could be a potential conflict from the Upper and Lower Drainage Districts.

Bald Eagle. No issues with survey protocol and survey locations.

Interior Least Tern/ Piping Plover. No issues with survey protocol and survey locations.

Topeka Shiner. Areas identified in the tables and march-chart is correct as far as SDGFP is aware. Andy Burgess will review the 2006 Topeka Shiner Report and provide input, if necessary.

Recommendations:

- Based on the results from the survey report, SDGFP indicated that they are only concerned with the 5 sites that were identified as having potential habitat for Topeka shiner (sites 1, 7, 10, 11, and 13). Topeka shiner is known to occur within these streams. As a result, SDGFP indicated that presence should be assumed at these locations.
- The SDGFP is not concerned with any of the other streams that were analyzed for the Topeka shiner in 2006.
- Review the Biological Opinion developed for stream crossing methods in South Dakota. This document is located on the South Dakota Department of Transportation website. These measures should be used for all stream crossings in South Dakota.

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- If the DOT stream crossing methods are implemented, construction would be able to proceed in Topeka shiner habitat during the spawning period (May through August).

Conclusion: Although SDGFP has provided recommendations that would protect the Topeka shiner and its habitat, they would defer the species issue to USFWS.

Higgin's Eye Pearlymussel/ Scaleshell Mussel/ Winged Mapleleaf. The SDGFP concurs with the 2006 survey report. The SDGFP indicated that although no special status mussels (Higgin's Eye Pearlymussel/ Scaleshell Mussel/ Winged Mapleleaf) were located during the 2006 surveys, a relatively large population of mussels was documented within the construction ROW.

Recommendations:

- Move mussels upstream from the construction ROW prior to construction at the James River crossing. If mussels were moved in 2007, no further mussel surveys or relocation would be required prior to construction. SDGFP recommends Keith Perkins (University of Sioux Falls).

Dakota Skipper. The SDGFP concurs with the 2006 Native grassland survey report and habitat for the Dakota skipper. Habitat surveys will be completed for the Hecla reroute to determine suitable habitat for the Dakota skipper.

Recommendations:

- Change survey window for Dakota skipper to June 1 – June 15.
- Surveyor should contact the SDGFP or Dennis Skaskden in mid-June to determine status of skipper emergence prior to initiating surveys.

Western Prairie Fringed Orchid. The SDGFP concurs with the 2006 Native grassland survey report and habitat for the western prairie fringed orchid. Habitat surveys will be completed for the Hecla reroute to determine suitable habitat for the orchid.

Stribley, Sara

From: Stribley, Sara
Sent: Friday, February 09, 2007 3:26 PM
To: 'Backlund, Doug'; 'Andy.Burgess@state.sd.us'; 'Leslie.Petersen@state.sd.us'; 'John.Kirk@state.sd.us'; 'Dave.Ode@state.sd.us'
Cc: Johnson, Charlie
Subject: Thank you

Doug, Andy, Leslie, John, and Dave, Charles and I just wanted to quickly thank all of you again for taking time to meet with us last 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

Sara Stribley
Environmental Coordinator
ENSR | AECOM
1601 Prospect Pkwy
Ft. Collins, Colorado 80525
970.493.8878
970.4930213
sstribley@ensr.aecom.com
www.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 2/9/07
Keystone Team Member(s) Sara Stribley

Contact Information:

Name	Doug Backlund
Title	Wildlife Biologist
Organization	South Dakota Game, Fish, & Parks
Address	Foss Building, 523 East Capitol Pierre, South Dakota 57501-3182
County	
Phone	605-773-3381
mail address	Doug.Backlund@state.sd.us

Meeting Information:

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

Issue: Clarification on Mussel Surveys

Concern Level: High Moderate Low

Description:

I called Doug to check on any state T&E permits Keystone may need in order to move any species within the ROW. Doug directed me to the SDGF website and stated that the only two permits we may possibly need are the 1) the Scientific Collector's Permit, and 2) the State Endangered Species Permit. These permits only apply to *state listed species*. He did not know of any other permit requirements.

Issue: _____ Concern Level: High Moderate Low

Description:

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<http://www.sdgfp.info/Wildlife/PublicLands/PubLand.htm>

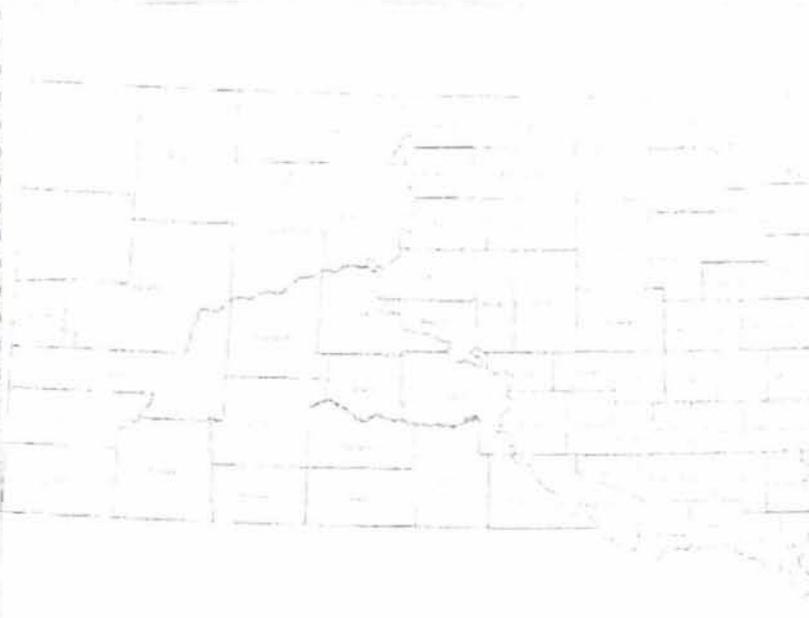
SOUTH DAKOTA PUBLIC LANDS - Microsoft Internet Explorer provided by State of South Dakota

Wildlife Division **SOUTH DAKOTA PUBLIC LANDS** Current tool: Public Land

Legend

- Zoom In
- Zoom Out
- Zoom Full
- Zoom Last
- Pan
- Identify
- Measure
- Map Units
- Buffer
- Select
- Draw
- Clear
- Print

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Contact Us
Help



LAYERS

- All Layers
- Base Data
- Interstates
- Highways
- Roads
- Railroads
- Waterways
- Townships
- Sections
- Cities
- Counties
- Lakes
- Aerial Photos
- Federal Lands
- Hunting Units
- State Lands

Refresh Map
Auto Refresh

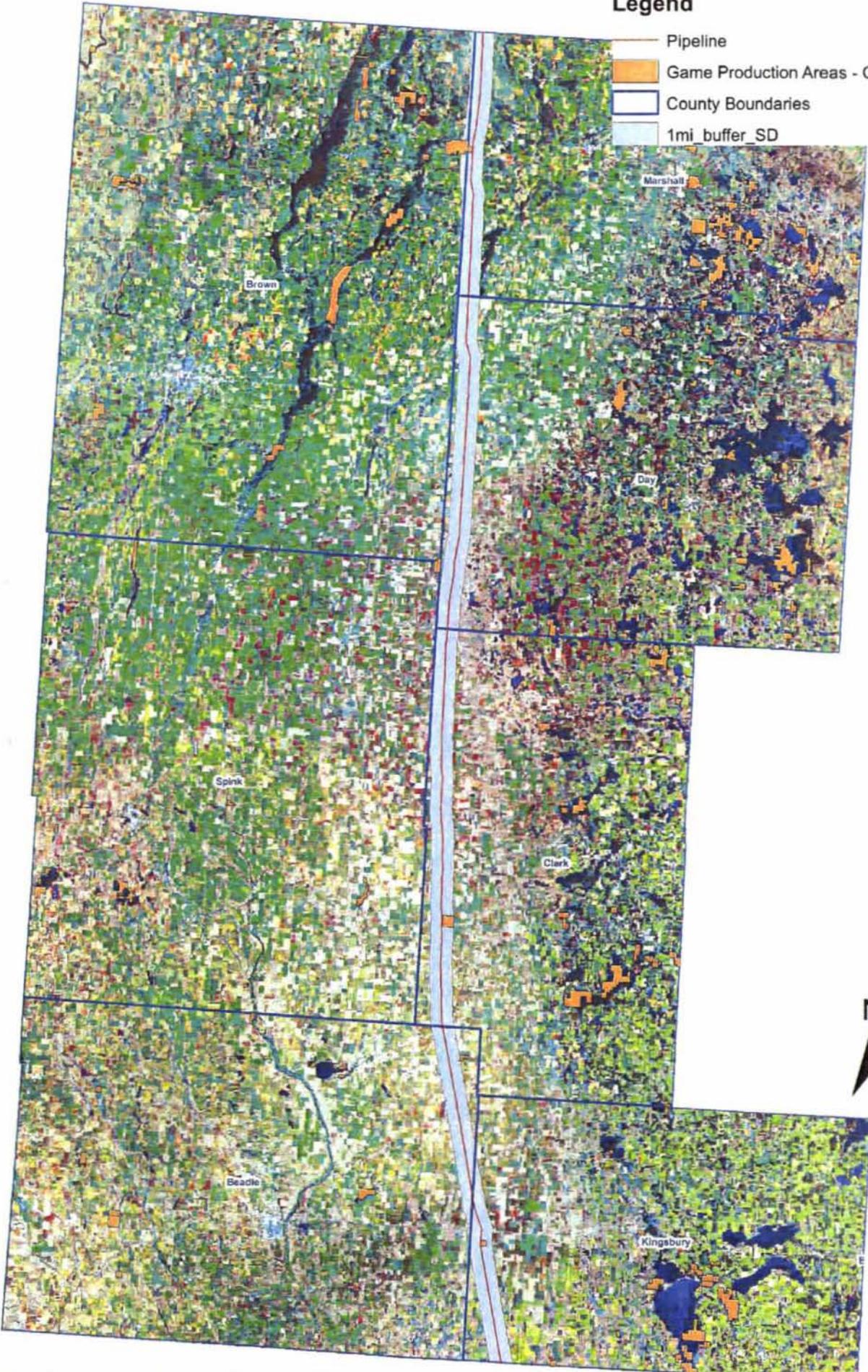
HELP:

- A closed group, click to open.
- An open group, click to close.
- A map layer.
- A hidden group/layer, click to make visible.
- A visible group/layer, click to hide.
- A visible layer, but not in this scale.
- A partially visible group, click to make visible.
- An inactive layer, click to make active.
- The active layer.

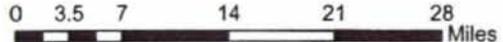
Scale: 1:2,500,000

Legend

-  Pipeline
-  Game Production Areas - GFP
-  County Boundaries
-  1mi_buffer_SD



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Legend

-  Pipeline
-  Game Production Areas - GFP
-  County Boundaries
-  1mi_buffer_SD

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0 2.5 5 10 15 20 Miles



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Doug Backlund
 December 19, 2006
 Page 3

Keystone Pipeline Project Survey Report (Topeka Shiner) Comment and Recommendation Form

Sect. #	Para. #	Specific Comments
3	2	Include site 7 with as well as sites listed in Para #3 (1,10,11,13) as assumed TS sites
3	3	Include all of these sites as assumed Topeka shiner sites and apply SDDOT road crossing protocol

Recommendations

Refer to SD Dept of Transportation stream crossing protocol for Topeka shiner streams when crossing Assumed Topeka Shiner Streams listed in your report (1, 7, 10, 11, 13). Use SDDOT protocols and avoid construction during TS spawning season in SD (May - Aug).
 - Seek additional details from FWS (Natalie Gates?) in Pierre.

Andy Burgess
 Name

Aquatic Ecologist
 Title

2/2/07
 Date

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Doug Backlund
December 19, 2006
Page 4

Keystone Pipeline Project Survey Report (Unionids) Comment and Recommendation Form

<u>Sect. #</u>	<u>Para. #</u>	<u>Specific Comments</u>

Recommendations

Even though no T+E species were found, the survey documented 5 species that are considered rare in S.D. I recommend that freshwater mussels in the area of the proposed pipeline crossing be moved upstream. The distance downstream for mussel removal can be determined by your consultant.

Also, I commend ENSR for the great job you've done on this issue.

Doug Backlund
Name

Wildlife Biologist
Title

2/2/2007
Date

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Doug Backlund
December 19, 2006
Page 5

Keystone Pipeline Project Survey Report (Native Grassland) Comment and Recommendation Form

Sect. #	Para. #	Specific Comments
Appendix II	Page 2	<i>Liatris mucronata</i> (or <i>L. punctata</i> var <i>mucronata</i>) has not yet been found in SD. A specimen is needed to prove its existence in the state. (Also Appendix I - Site SD194713)
Appendix II	Page 1	<i>Juniperus scopulorum</i> / <i>Juniperus virginiana</i> - substantial introgression in SD, taxonomists usually restrict <i>scopulorum</i> to w/2 of SD
Appendix II	P. 5	<i>Typha angustifolia</i> is pretty well now recognized as an exotic spp in central N. Am. Phalaris, Phragmites have exotic ecotypes

Recommendations

Nice job - Keep up the good work & good luck in 2007.

Doug Backlund
Name

Botanist / Ecologist
Title

JAN 2007
Date

Stribley, Sara

From: Doug Backlund@state.sd.us
Sent: Monday, January 29, 2007 9:37 AM
To: Stribley, Sara
Subject: RE: Accepted: Keystone ENSR - Meeting with the SDGFP

Yes, I've reserved the small conference room for this meeting. Just ask the secretary where that is when you come in.

See you then.

Doug

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

From: Stribley, Sara [mailto:sstribley@ensr.aecom.com]
Sent: Monday, January 29, 2007 10:27 AM
To: Backlund, Doug
Cc: Johnson, Charlie
Subject: RE: Accepted: Keystone ENSR - Meeting with the SDGFP

Hi Doug,

I just wanted to confirm our meeting this Friday at 9:00 in Pierre, and that you received the package of survey information that I sent out last week? Charles Johnson and I will be attending the meeting. Please let me know if you would like any additional materials, and I can plan on brining those to our meeting on Friday.

Thanks Doug!
Sara

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

From: Backlund, Doug [mailto:Doug.Backlund@state.sd.us]
Sent: Thursday, January 11, 2007 8:29 AM
To: Stribley, Sara
Subject: Accepted: Keystone ENSR - Meeting with the SDGFP
When: Friday, February 02, 2007 9:00 AM-11:00 AM (GMT-07:00) Mountain Time (US & Canada).
Where: Pierre, South Dakota

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ENSR | AECOM

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

January 17, 2007

Doug Backlund
South Dakota Department of Game, Fish and Parks
Foss Building
523 East Capitol
Pierre, SD 57501-3182

Dear Mr. Backlund:

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 South Dakota, 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 South Dakota. ENSR sent these 2006 biological survey reports to the South Dakota Game, Fish and Parks (SDGFP), and the U.S. Fish and Wildlife Service (USFWS) in December, for review and evaluation. 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 SDGFP, the South Dakota Natural Heritage Program, and the 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:

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Doug Backlund
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 South Dakota. Please sign and return the survey schedule 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.
- 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 South Dakota – 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 John Cochran (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.

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 South Dakota
2006 - 2007

Completed 2006 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
Raptors	April 26 – May 2, 2006	MP: 217 – 436 (Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hanson, McCook, Hutchinson, Yankton counties)	An aerial survey was conducted to identify raptor nest sites and breeding territories within at least 0.25 miles of the proposed ROW.	Karen Caddis, Charles Johnson – ENSR wildlife biologists	
Native Prairie	September 11-16, 2006	Marshall: 228.4-228.9 Day: 258.6-258.8, 260.0-260.8, 261.4-262.6, 264.5-264.8, 265.2-266.2, 267.2-267.7, 270.6-271.6 Clark: 272.3-273.3, 277.2-277.9, 278.4-279.2, 280.1-280.5, 280.8-281.1, 285.3-285.7, 293.7-294.1, 296.9-297.9 Kingsbury: 325.1-326.4 Miner: 342.9-344.0, 358.5-359.9 McCook: 383.9-384.5 Hutchinson: 389.7-390.6, 390.9-391.7 Yankton: 418.7-419.2, 419.6-420, 420.6-420.8, 421.8-422.1, 423.5-423.8, 426.7-428.9	Habitat evaluations were conducted within the construction ROW to determine potential habitat for the Dakota Skipper and Western Prairie Fringed Orchid.	Don Hazlet, Ph.D. - ENSR Botanist	
Topeka shiner <i>Notropis Topeka</i> FE; SD-SC	September 14-19, 2006	Beadle: 309.5 (Trib. of Shue Creek), 313.2 (Shue Creek), 317.8 (Middle Pearl Creek) Clark: 298, 299 (Foster Creek), 304.2 (Trib. of Shue Creek)	Habitat surveys were conducted to document habitat suitability; intermittent/ perennial flow; and spawning habitat.	William J. Stark, Ph.D. – ENSR Aquatic Biologist	

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**Keystone Pipeline Project
Proposed Survey Schedule for South Dakota
2006 - 2007**

Completed 2006 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
		Hanson: 375.7 (Wolf Creek). Hutchinson: 391 (Wolf Creek), 391.4, 394.8 (Trib. of Wolf Creek). Kingsbury: 326.2 (South Fork Pearl Creek), 334.8 (Redstone Creek), 337.3 (W. Redstone Creek). McCook: 384 (Wolf Creek). Miner: 343 (Redstone Creek), 362.1 (Rock Creek). Yankton: 417.7 (Trib. of James River), 421.8 (James River), 423.5 (Trib. of James River), 427.9 9 (Beaver Creek), 425.7 (Missouri River).			
Higgins'-eye pearly mussel <i>Lampsilis higginsii</i> Scaleshell mussel <i>Leptodea leptodon</i> Winged mapleleaf <i>Quadrula gragosa</i> FE; SD-SC	September 9 and 16, 2006	Yankton: 421.8-421.9 (James River).	Habitat and occurrence surveys were conducted to determine potential presence at the James River crossing.	Keith Perkins, Ph.D. – ENSR Mussel Expert	

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Keystone Pipeline Project
Proposed Survey Schedule for South Dakota
2006 - 2007

Proposed 2007 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
Bald eagle <i>Haliaeetus leucocephalus</i> FT; SD-T	January	Yankton: 434.9-435.1 (Missouri River)	Aerial survey to locate winter roosts and eagle nests along major river crossings in ROW. Survey will be conducted 1-mile from the construction ROW.	Mike Phelan, Karen Caddis – ENSR wildlife biologists	See attached survey protocol. <i>2008 pre-construction surveys will not be required if construction occurs outside of the breeding/winter roost seasons for this species.</i>
Raptors	March – April	MP: 217-436 (Brown, Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hansen, McCook, Hutchinson, Yankton counties)	Aerial survey to locate active and inactive nest sites and breeding territories within at least 0.25 miles of the proposed ROW.	Qualified ENSR biologist and/or contractor.	See attached survey protocol. <i>2008 pre-construction surveys will not be required if construction occurs outside of the breeding season.</i>
Interior Least Tern <i>Sterna antillarum athalassos</i> FE; SD-E Piping Plover <i>Charadrius melodus</i> FT; SD-T	Nesting period: 15-April to 15-Sept.	Yankton: 434.9-435.1 (Missouri River)	One ground or aerial survey will be conducted 0.25-mile from the construction ROW.	Qualified ENSR biologist and/or contractor.	See attached survey protocol. <i>2008 pre-construction surveys will not be required if construction occurs outside of the breeding season.</i>

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Keystone Pipeline Project
Proposed Survey Schedule for South Dakota
2006 - 2007

Proposed 2007 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
Dakota Skipper <i>Herperia dacotae</i> FC; SD-SC	Emergence: mid-June to 1-Aug. Peak - 1 st week of July.	Clark: 296.9-297.9 Day: 265.2-266.2 Hutchinson: 390.9-391.7 Yankton: 419.6-420.0, 420.6-420.8, 421.8-422.1	One survey will be conducted during the appropriate survey period to determine presence within the construction ROW.	Qualified ENSR biologist and/or contractor.	See attached survey protocol. <i>2008 pre-construction surveys would only be required in areas where this species was observed in 2007.</i>
Topeka shiner <i>Notropis Topeka</i> FE; SD-SC	Spawning season: 15-May to 31-July	Beadle: 309.5 (Trib. of Shue Creek), 313.2 (Shue Creek), 317.8 (Middle Pearl Creek) Clark: 298, 299 (Foster Creek), 304.2 (Trib. of Shue Creek) Hanson: 375.7 (Wolf Creek). Hutchinson: 391 (Wolf Creek), 391.4, 394.8 (Trib. of Wolf Creek). Kingsbury: 326.2 (South Fork Pearl Creek), 334.8 (Redstone Creek), 337.3 (W. Redstone Creek). McCook: 384 (Wolf Creek). Miner: 343 (Redstone Creek), 362.1 (Rock Creek). Yankton: 417.7 (Trib. of James River), 421.8	One sampling survey to determine species presence at stream crossings, if needed.	Topeka shiner expert and ENSR biologist.	See attached survey protocol. <i>In 2008, if stream channels identified in 2007 as having t. shiner populations are dry, open cut crossing would be appropriate. If stream channels are running, or if pools of water occur, construction should occur outside of the spawning period, and further consultation will be necessary.</i> <i>Obtain necessary permits from the state and federal agencies if salvage and relocation is conducted prior to</i>

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Keystone Pipeline Project
Proposed Survey Schedule for South Dakota
2006 - 2007

Proposed 2007 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
		(James River), 423.5 (Trib. of James River), 427.9 9 (Beaver Creek), 425.7 (Missouri River).			<i>construction.</i>
Western Fringed Orchid <i>Platanthera praeclara</i> FT; SD-SC	Flowering period: 15-June to 15-July.	Clark: 277.2-277.9, 278.4-279.2 Day: 258.6-258.8 Hutchinson: 390.9-391.7 McCook: 383.9-384.5	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. <i>2008 pre-construction surveys would only be required in areas where this species was observed in 2007.</i>

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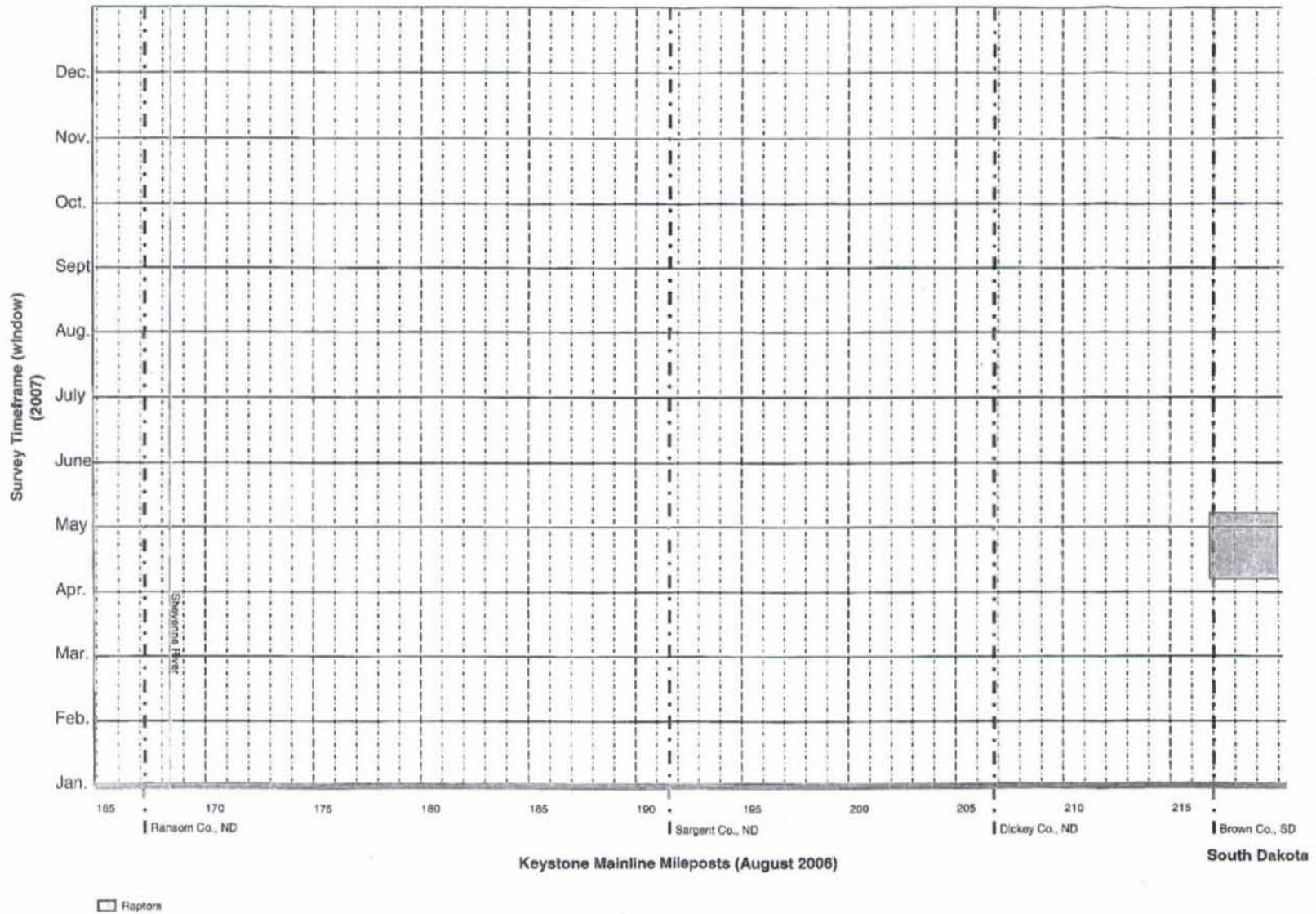
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Keystone Pipeline Project
Proposed Survey Schedule for South Dakota
2006-2007

ID	Task Name	Qtr 2, 2006	Qtr 3, 2006	Qtr 4, 2006	Qtr 1, 2007	Qtr 2, 2007	Qtr 3, 2007															
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
1	Trail Name Completed Raptor Surveys	Completed Raptor Surveys																				
2	Completed Native Prairie Habitat Surveys	Completed Raptor Surveys																				
3	Completed Topoka Shiner Habitat Surveys	Completed Raptor Surveys																				
4	Completed Freshwater Mussel Surveys	Completed Raptor Surveys																				
5	Bald Eagle Winter Food and Nest Surveys	Completed Raptor Surveys																				
6	Raptor Surveys	Completed Raptor Surveys																				
7	Interior Least Tern & Piping Plover Surveys	Completed Raptor Surveys																				
8	Topoka Shiner Fish Surveys	Completed Raptor Surveys																				
9	Western Prairie Fringed Orchid Surveys	Completed Raptor Surveys																				
10	Dakota Skipper Surveys	Completed Raptor Surveys																				

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Keystone Pipeline Project Biological Survey March-Chart 2007

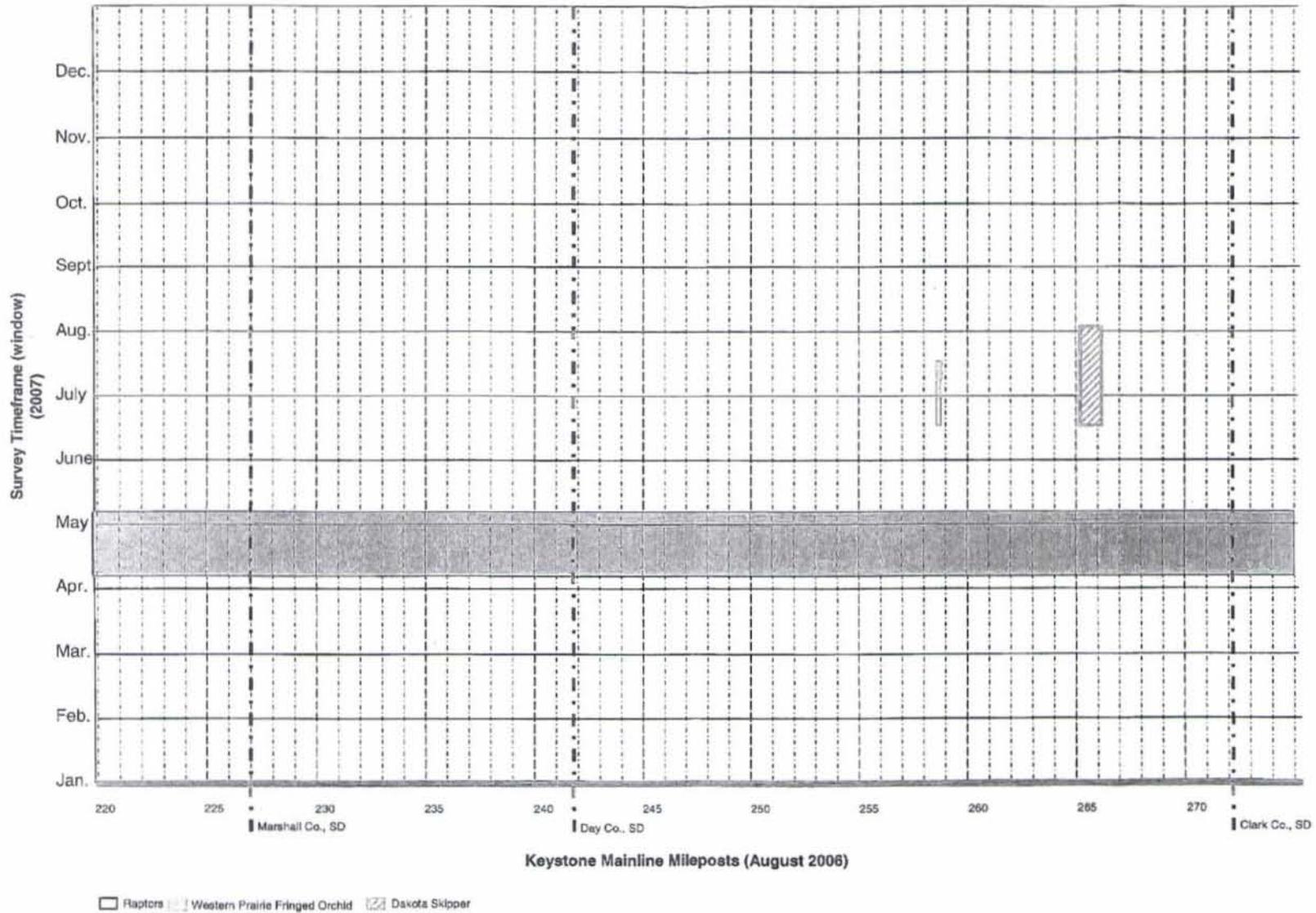


Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

January 2007

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Keystone Pipeline Project
Biological Survey March-Chart 2007

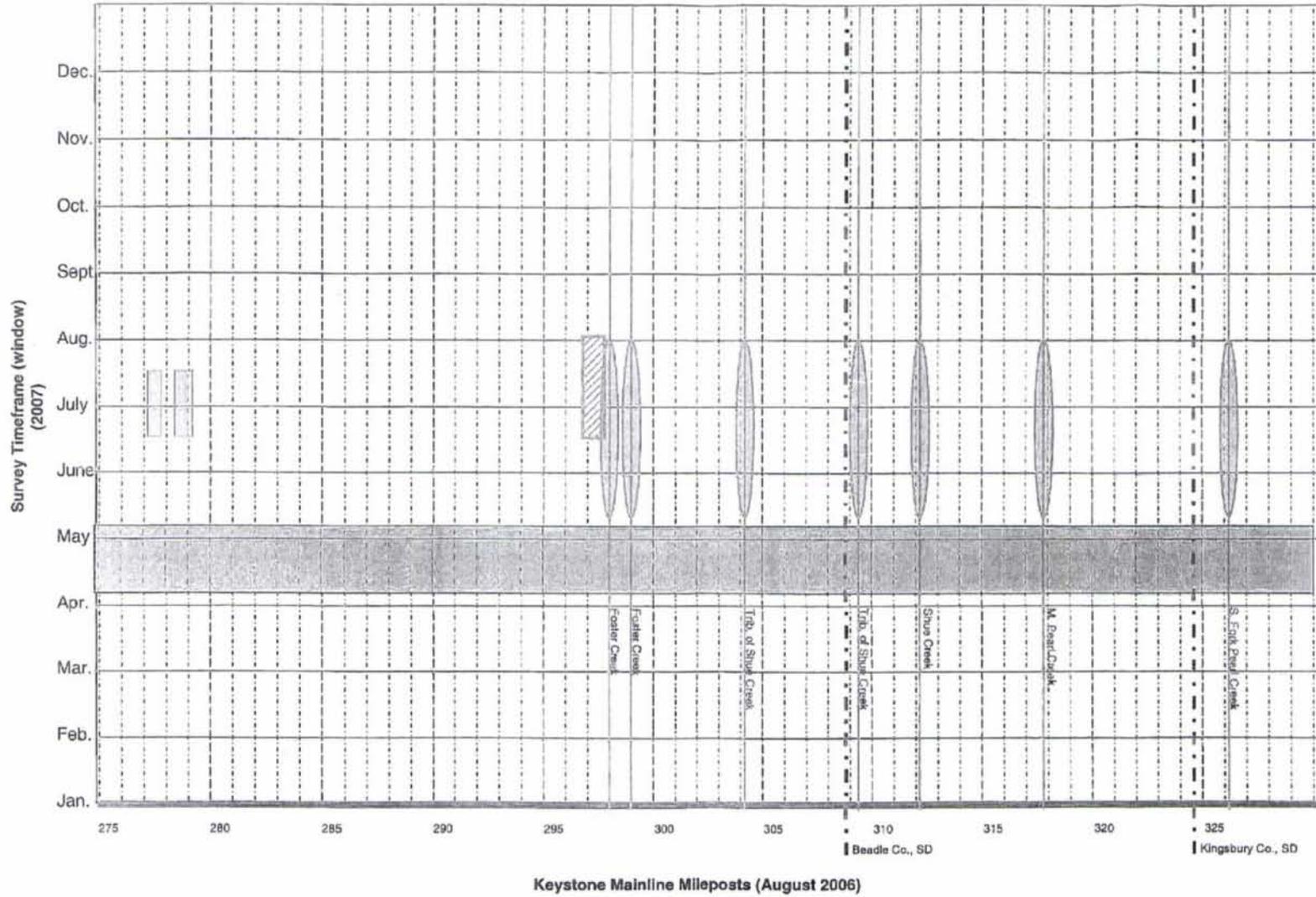


Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

January 2007

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Keystone Pipeline Project Biological Survey March-Chart 2007



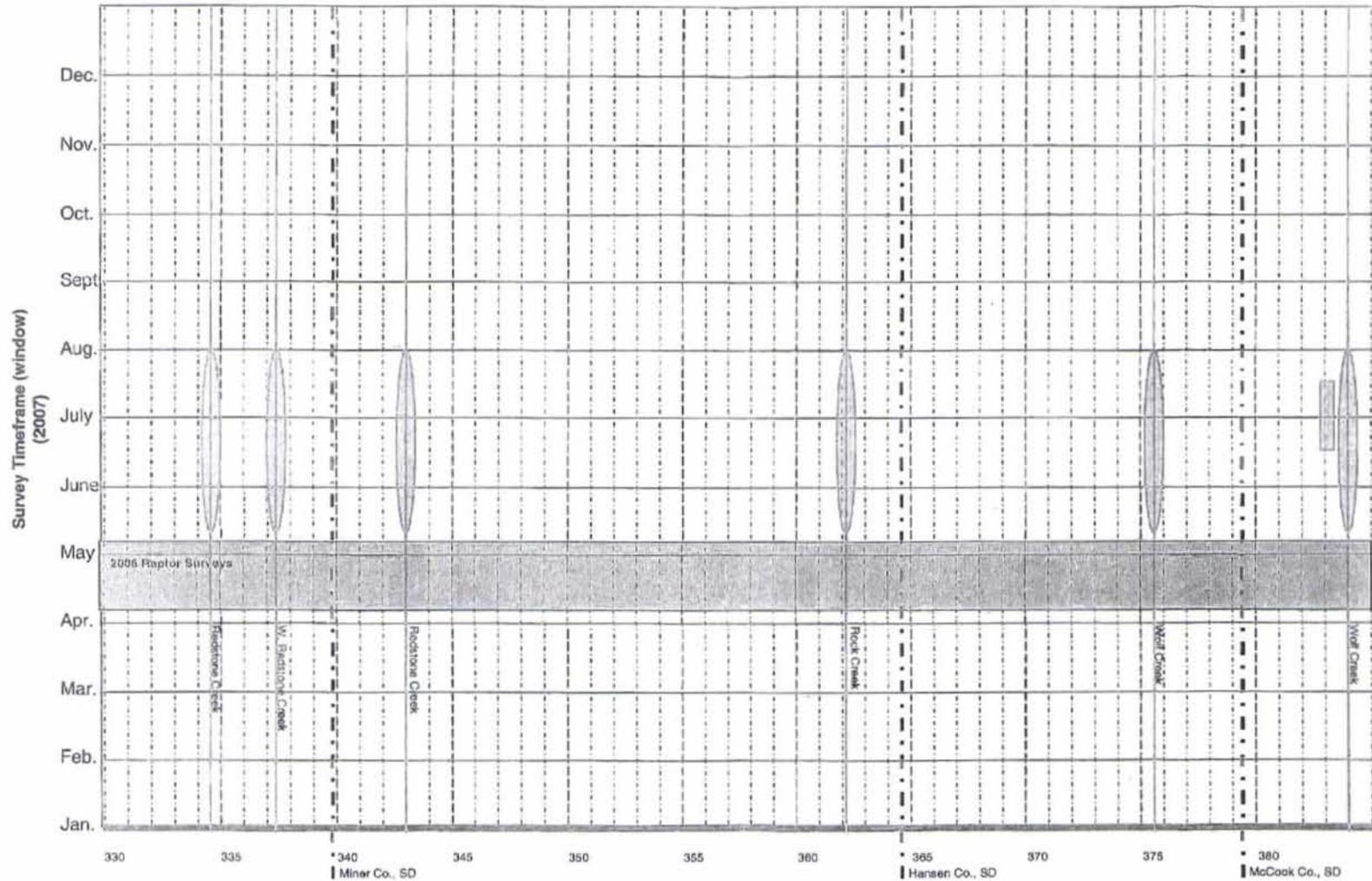
□ Raptor ○ Western Prairie Fringed Orchid ▨ Dakota Skipper ○ Topeka Shiner

Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

January 2007

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Keystone Pipeline Project Biological Survey March-Chart 2007



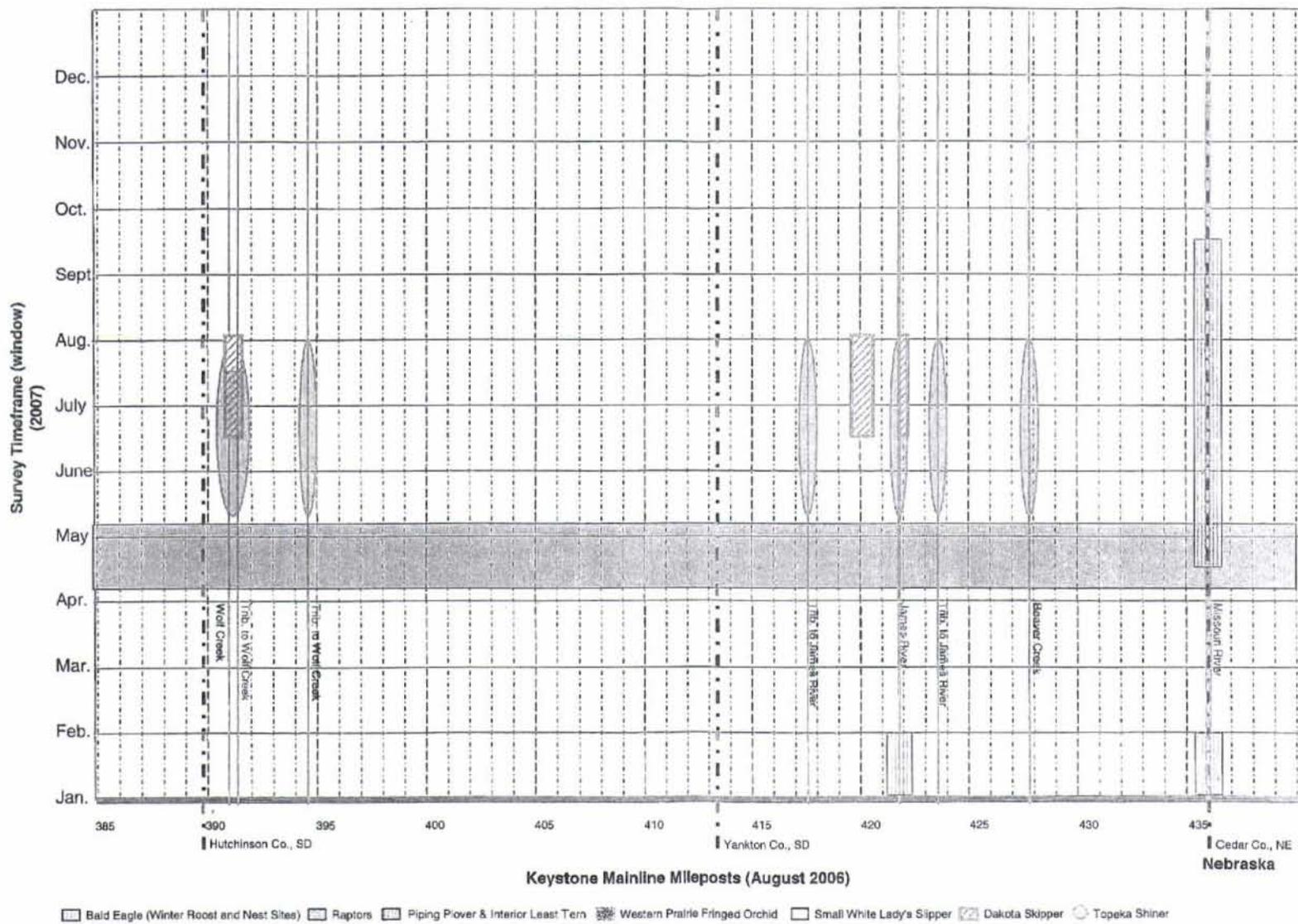
Raptor
 Western Prairie Fringed Orchid
 Topeka Shiner

Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

January 2007

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Keystone Pipeline Project Biological Survey March-Chart 2007



Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

January 2007

Keystone Pipeline Project
Survey Protocols for South Dakota Special Status Species

Species & Status	Survey Protocol
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> FT; SD-T</p>	<p>Survey Frequency: Aerial bald eagle surveys will be conducted for nest sites and winter roost sites in 2007. Surveys may also be required prior to construction in 2008, if pipeline construction occurs during the breeding season (1-February through 15-August) or winter roosting season (1-November through 1-April).</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. The bald eagle surveys will be conducted along river corridors or historical bald eagle nest/winter roosting sites that occur within 1-mile from the project Right-of-Way (ROW). Stands of coniferous or deciduous trees will be surveyed for active nest sites during the breeding season 2. Stands of coniferous or deciduous trees will be surveyed for active winter roost sites from 1 hour before sunrise or sunset to 1 hour after sunrise or sunset. 3. A helicopter will be used for the surveys. Whenever possible, two observers will be used to conduct the surveys. 4. Observations of individual eagles, nests, or roosting eagles will be recorded using Global Positioning Systems (GPS). The date, location, nest condition, activity status, nest condition, and habitat will be recorded for each sighting. 5. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the SDGFP and the appropriate U.S. Fish and Wildlife Service (USFWS) field office.
<p>Raptors</p>	<p>Survey Frequency: A raptor survey (aerial helicopter survey) was conducted within 0.25- to 0.50-mile from the edge of the construction ROW in April of 2006, to identify active and inactive nest sites along the project route. A raptor report was submitted to the USFWS in January 2007.</p> <p>A second raptor survey effort will be conducted prior to leaf-out in the spring of 2007. The focus of this survey is to identify nest sites that would be directly impacted from construction activities.</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. Raptor surveys will be conducted along the entire proposed project route, focusing on active and inactive nest sites that occur within the construction ROW.

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**Keystone Pipeline Project
Survey Protocols for South Dakota Special Status Species**

Species & Status	Survey Protocol
	<ol style="list-style-type: none"> 2. A helicopter will be used for the raptor surveys. Whenever possible, two observers will be used to conduct the surveys. 3. Observations of raptors and nest sites will be recorded using GPS. The date, location, nest condition, activity status, raptor species, and habitat will be recorded for each sighting. 4. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the SDGFP and the appropriate USFWS field office.
<p>Interior Least Tern <i>Sterna antillarum</i> <i>athalassos</i> FE; SD-E</p> <p>Piping Plover <i>Charadrius melodus</i> FT; SD-T</p>	<p>Survey Frequency: Surveys will be conducted in 2007 at the Missouri River crossing during the breeding season (15-April to 15-September) to identify occupied nest sites. Surveys may also be required prior to construction in 2008, if pipeline construction occurs during the breeding season.</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. Surveys will be conducted between April 15 and September 15 at the Missouri River crossing in Yankton County, SD. Surveys will extend 0.25-mile on either side of the construction ROW, depending on access. 2. Surveys will be conducted by a biologist familiar with the species and familiar with identifying tern and plover nests. 3. Surveys will be conducted from sunrise to approximately 1000, or approximately 1700 to sunset. 4. All plover or terns located within the survey area will be observed long enough to determine if the area is occupied by these species and if a nest is present. 5. Observations of plover and terns will be recorded using GPS. Date, time, observations, and habitat type will be recorded for each sighting. 6. Surveys will not be conducted in poor weather (i.e., high wind, precipitation, etc). 7. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the SDGFP and the appropriate USFWS field office.
<p>Dakota Skipper <i>Herperia dacotae</i></p>	<p>Survey Frequency: Habitat surveys were conducted in the fall of 2006 to determine areas of potentially suitable native grassland habitat for this species.</p>

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Keystone Pipeline Project
Survey Protocols for South Dakota Special Status Species

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Species & Status	Survey Protocol
FC; SD-SC	<p>Surveys will be conducted in 2007 to determine if the species occurs within the ROW. 2008 pre-construction surveys would be conducted only in areas where this species was observed in 2007.</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. Surveys will occur in suitable habitat that was identified during the 2006 habitat surveys. 2. Surveys will occur within the construction ROW for the project. 3. The surveyor will have previous experience with Hesperineae, including sight identification and capture experience (Endangered Species Permit Required) 4. The surveyor will have experience with collecting and preparing voucher specimens of Lepidoptera 5. Surveys will be attempted within 2 weeks of detection of emergence because of the short flight period of the species. 6. Surveys will be completed between the hours of 1000 and 1800. 7. If cloud cover is 0-50%, surveys will not be conducted unless the minimum temperature is at least 75° F; if cloud cover is 50-80%, surveys will not be conducted unless the minimum temperature is at least 80° F; if cloud cover is greater than 80%, surveys will not be conducted. 8. Surveys will not be conducted when wind speeds are greater than 20 mph. 9. Observations of skippers will be recorded using GPS. Date, time, land use and/or habitat type, and weather conditions will be recorded for each area surveyed. 10. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the SDGFP and the appropriate Service field office.
<p>Topeka Shiner <i>Notropis topeka</i> FE; SD-SC</p>	<p>Survey Frequency: Habitat surveys were conducted in the fall of 2006 at specific Topeka shiner stream crossings to document habitat suitability, stream characteristics (intermittent/perennial flow, water quality), and spawning habitat.</p> <p>One sampling (occurrence) survey will be conducted at each site in 2007 to determine species presence at the stream crossings, in coordination with the USFWS, if needed.</p>

Keystone Pipeline Project
Survey Protocols for South Dakota Special Status Species

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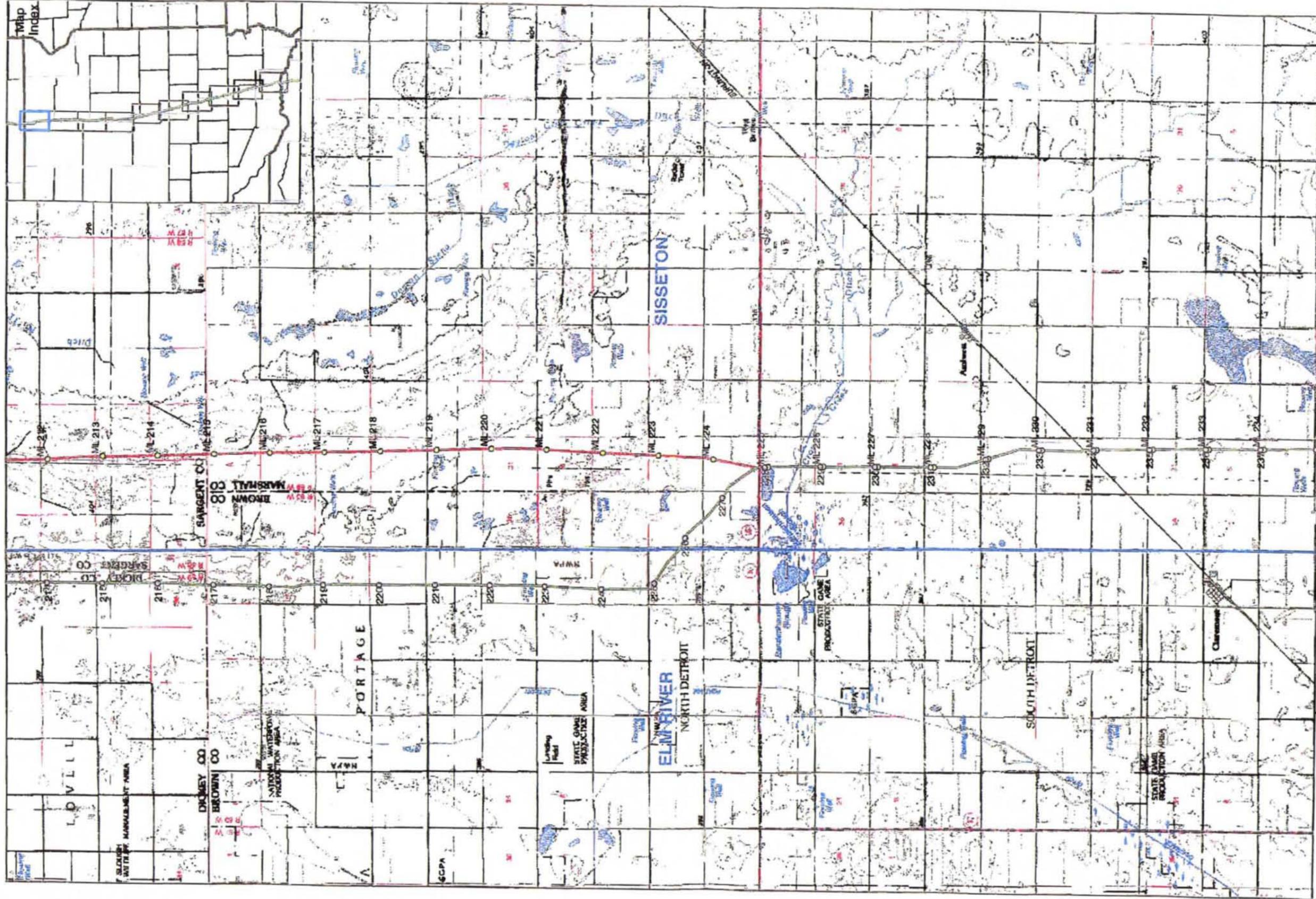
Species & Status	Survey Protocol
	<p>Procedures:</p> <ol style="list-style-type: none"> 1. Sampling surveys will be conducted only at locations identified as suitable habitat for Topeka shiners, in coordination with the USFWS. 2. Surveys will be conducted within a 200-m site that includes 100-m both upstream and downstream of the pipeline crossing, depending on private access. 3. Fish will be collected throughout the site using a 30x6-ft or 8x6-ft drag seine with ¼-inch mesh netting. 4. All fish collected will be identified to species to establish presence/absence of Topeka shiners. 5. Fish collected in the seine will be transferred immediately into a bucket of freshwater or live cage placed in a suitable part of the stream to minimize injuries and mortalities to fish during processing. 6. If Topeka shiners are present, 1 to 3 voucher specimens may be retained by fixing in 10% formalin and preserving in 70% ethanol and identification verified by USFWS or SDGFP staff. 7. GPS coordinates, detailed locality information, date, collector, and habitat information will be collected for each voucher specimen. 8. Other documentation and data management protocols will follow collection permit requirements. 9. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the SDGFP and the appropriate USFWS field office.
<p>Western Prairie Fringed Orchid <i>Platanthera praeclara</i> FT; SD-SC</p>	<p>Survey Frequency: Habitat surveys were conducted in the fall of 2006 to determine areas of potentially suitable native grassland habitat for this species.</p> <p>Surveys will be conducted in 2007 to determine if the species occurs within the ROW. 2008 pre-construction surveys would be conducted only in areas where this species was observed in 2007.</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. Occurrence surveys will occur in areas of "good" habitat that was identified during the 2006 habitat surveys including: <ol style="list-style-type: none"> a. Low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas

Keystone Pipeline Project
Survey Protocols for South Dakota Special Status Species

Species & Status	Survey Protocol
	<ul style="list-style-type: none">b. Upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple and upright coneflowers and blanketflower.2. Occurrence surveys will occur within the construction ROW for the project.3. Surveys will be conducted during the flowering period (15-June through 15-July) by a qualified botanist familiar with the species and trained to conduct rare plant surveys.4. Date, time, land use and/or habitat type, and number of orchids observed will be recorded for each sighting. Observations of orchids will be recorded using GPS.5. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the SDGFP and the appropriate Service field office.
Migratory Birds	TBD

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● Mileposts (8/17/06)
● Mileposts (2/9/06)
— Pipeline (8/17/06)
— Pipeline (2/9/06)

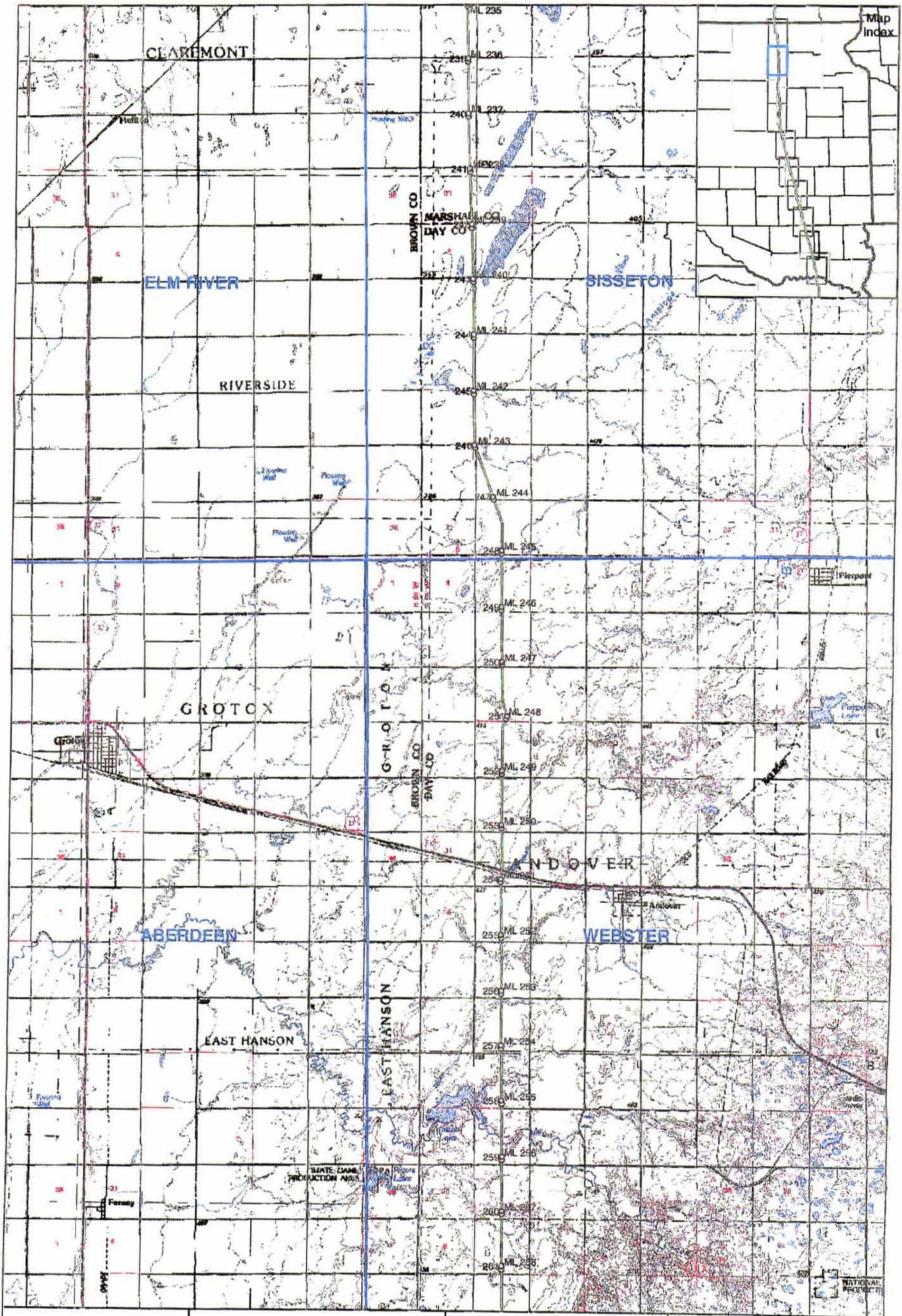


Keystone Pipeline Project

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Map 1 of 10
General Project Location
(South Dakota)

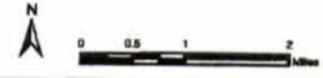
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Map Index

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- Mileposts (8/17/06)
- Mileposts (2/9/06)
- Pipeline (8/17/06)
- Pipeline (2/9/06)

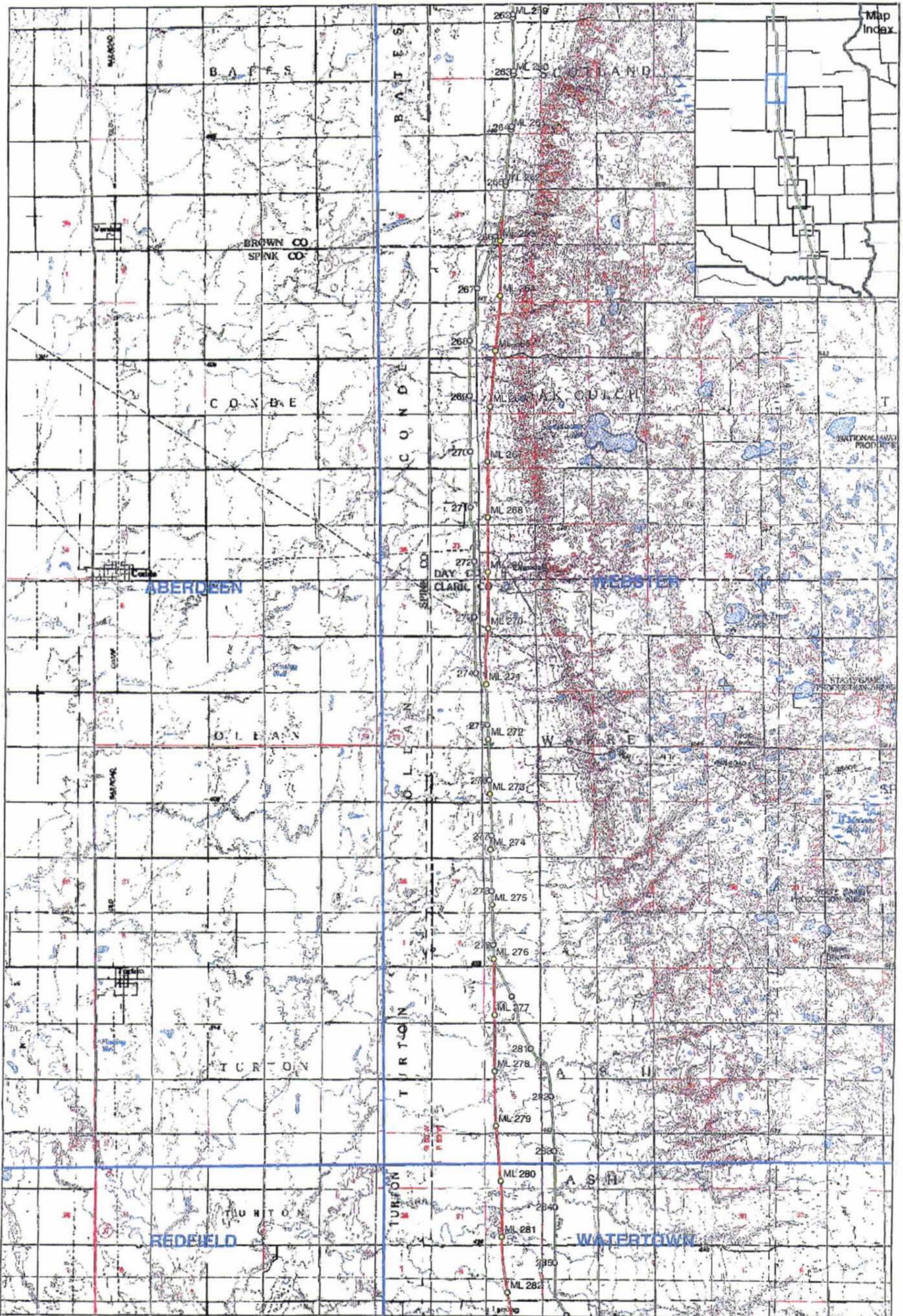


Keystone Pipeline Project



Map 2 of 10
General Project Location
(South Dakota)

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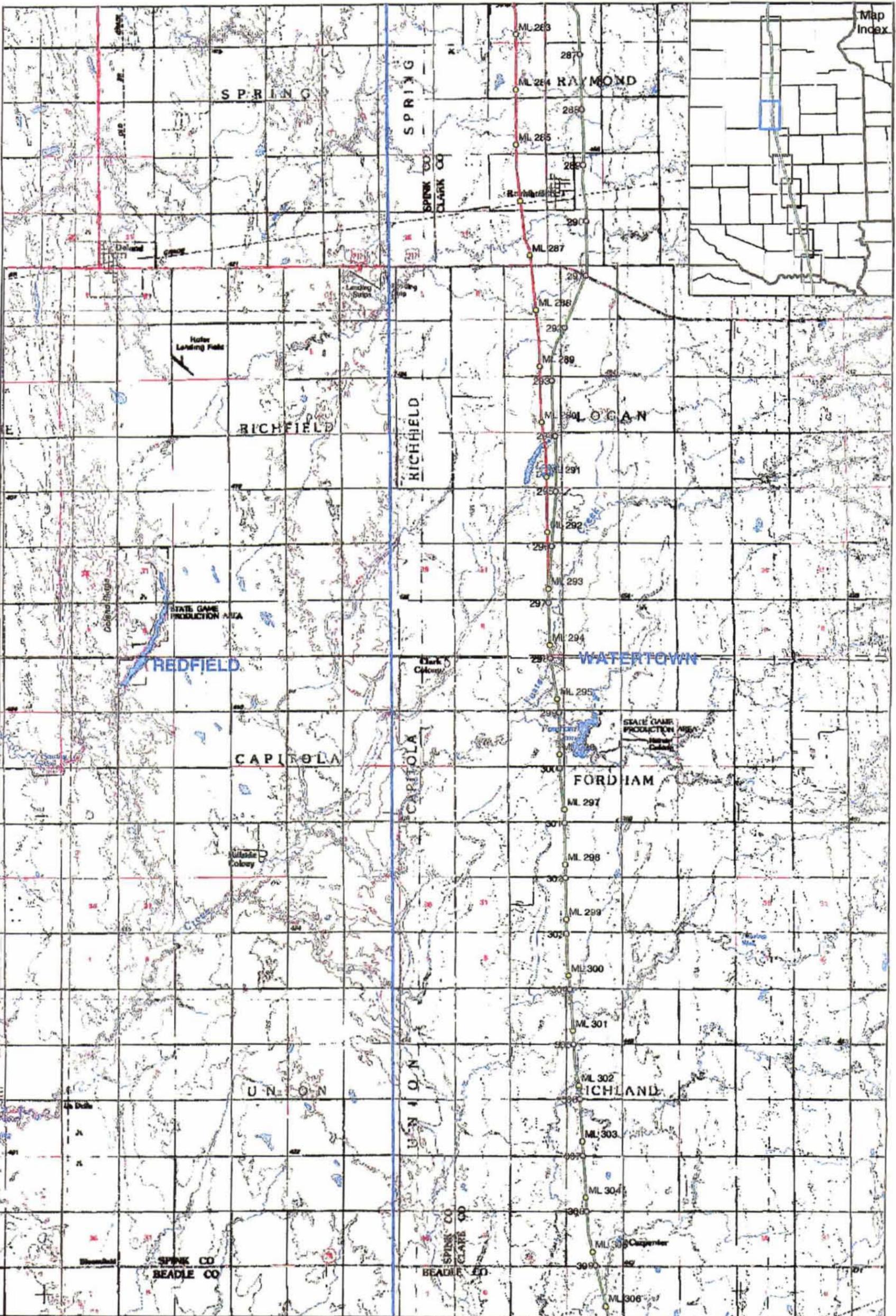


- Mileposts (8/17/06)
- Mileposts (2/9/06)
- Pipeline (8/17/06)
- Pipeline (2/9/06)

N

Keystone Pipeline Project

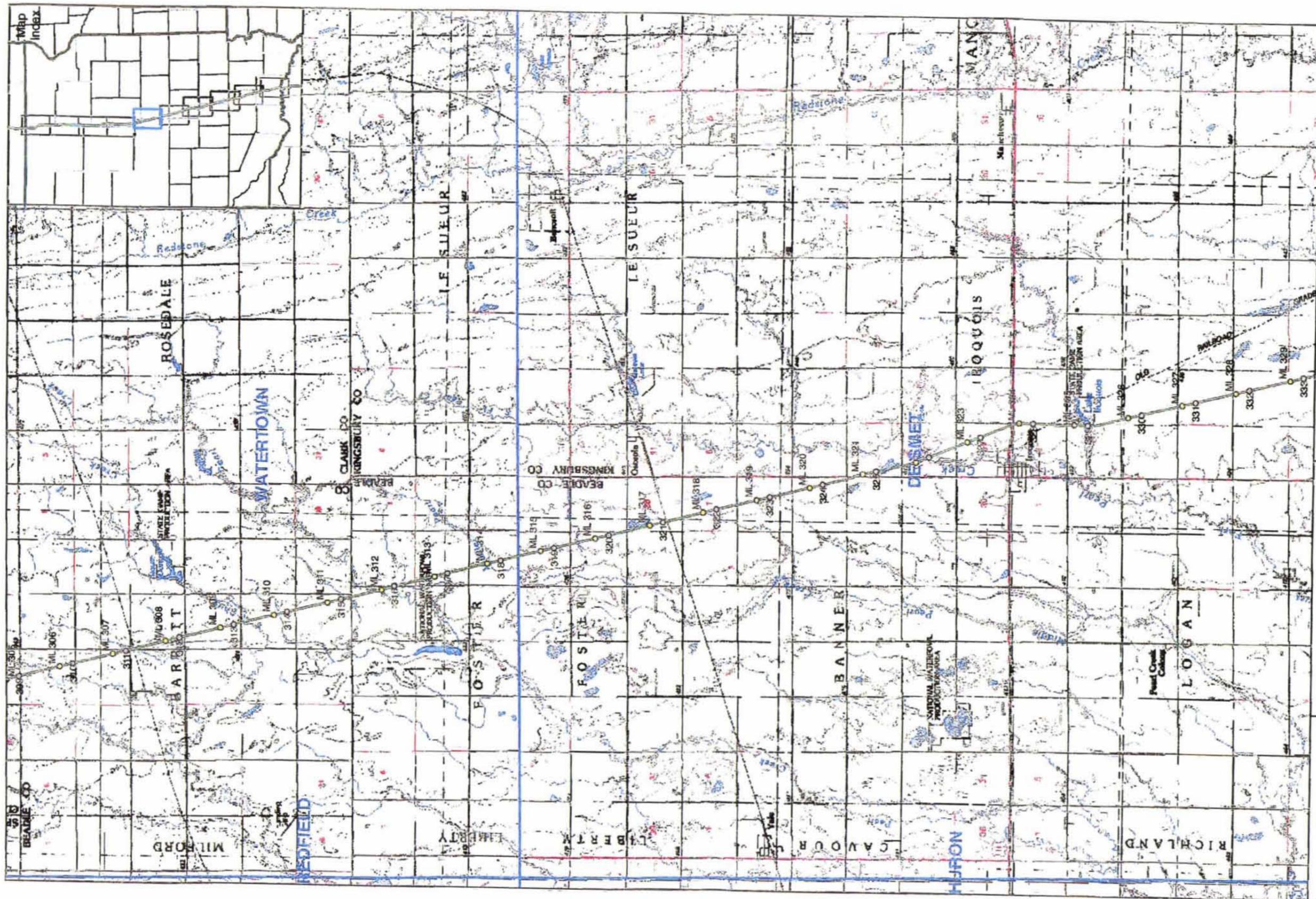
Map 3 of 10
General Project Location
(South Dakota)



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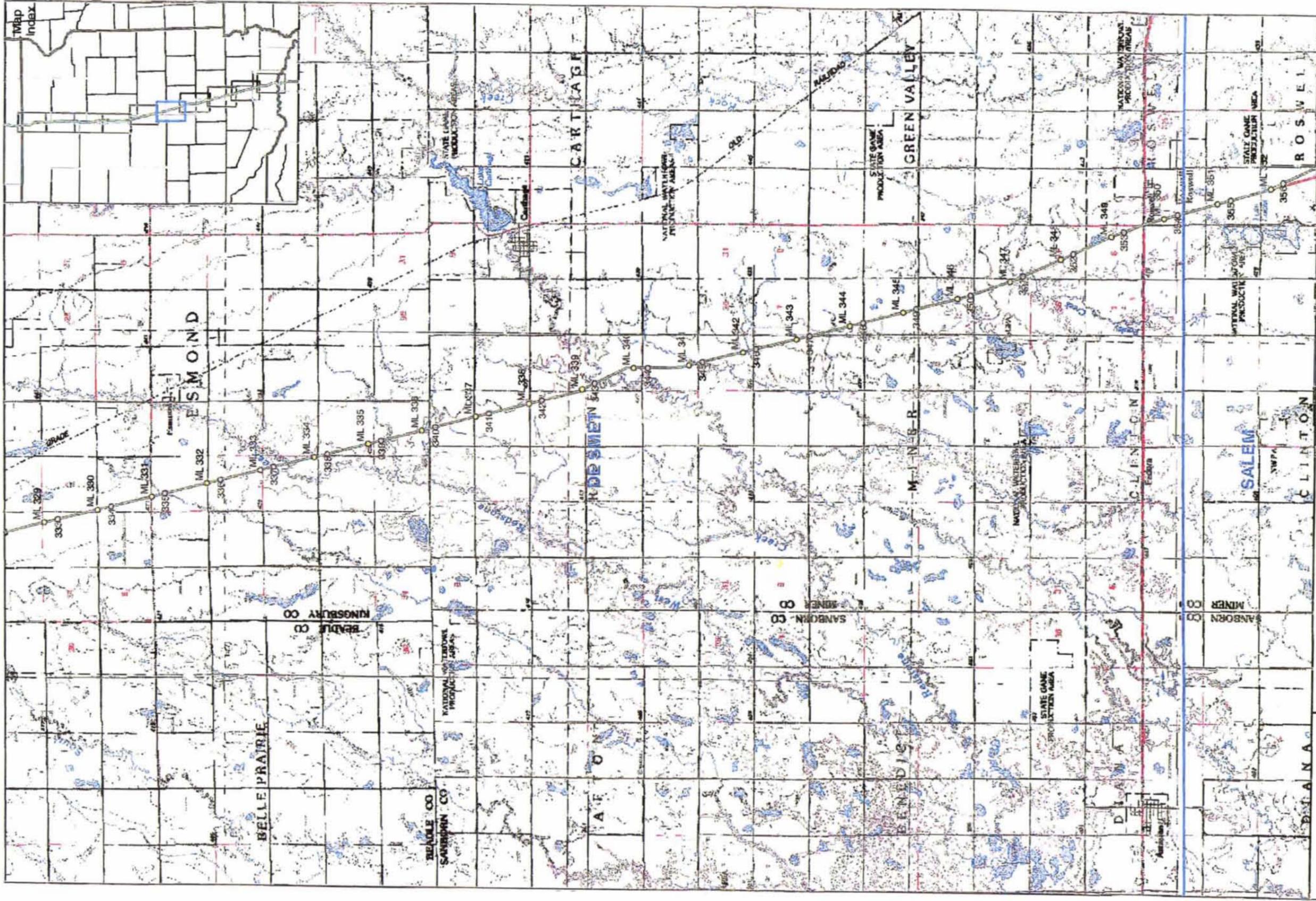
<ul style="list-style-type: none"> ○ Mileposts (8/17/06) ○ Mileposts (2/9/06) — Pipeline (8/17/06) - - - Pipeline (2/9/06) 	<p>N</p>	<p>Keystone Pipeline Project</p> <p><i>in business to deliver</i></p>	<p>Map 4 of 10 General Project Location (South Dakota)</p>
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<p>• Mileposts (8/17/06) • Mileposts (2/9/06) — Pipeline (8/17/06) — Pipeline (2/9/06)</p>	<p>N 0 0.5 1 2 Miles</p>	<p>Keystone Pipeline Project  in partnership with</p>	<p>Map 5 of 10 General Project Location (South Dakota)</p>
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Map 6 of 10
General Project Location
(South Dakota)

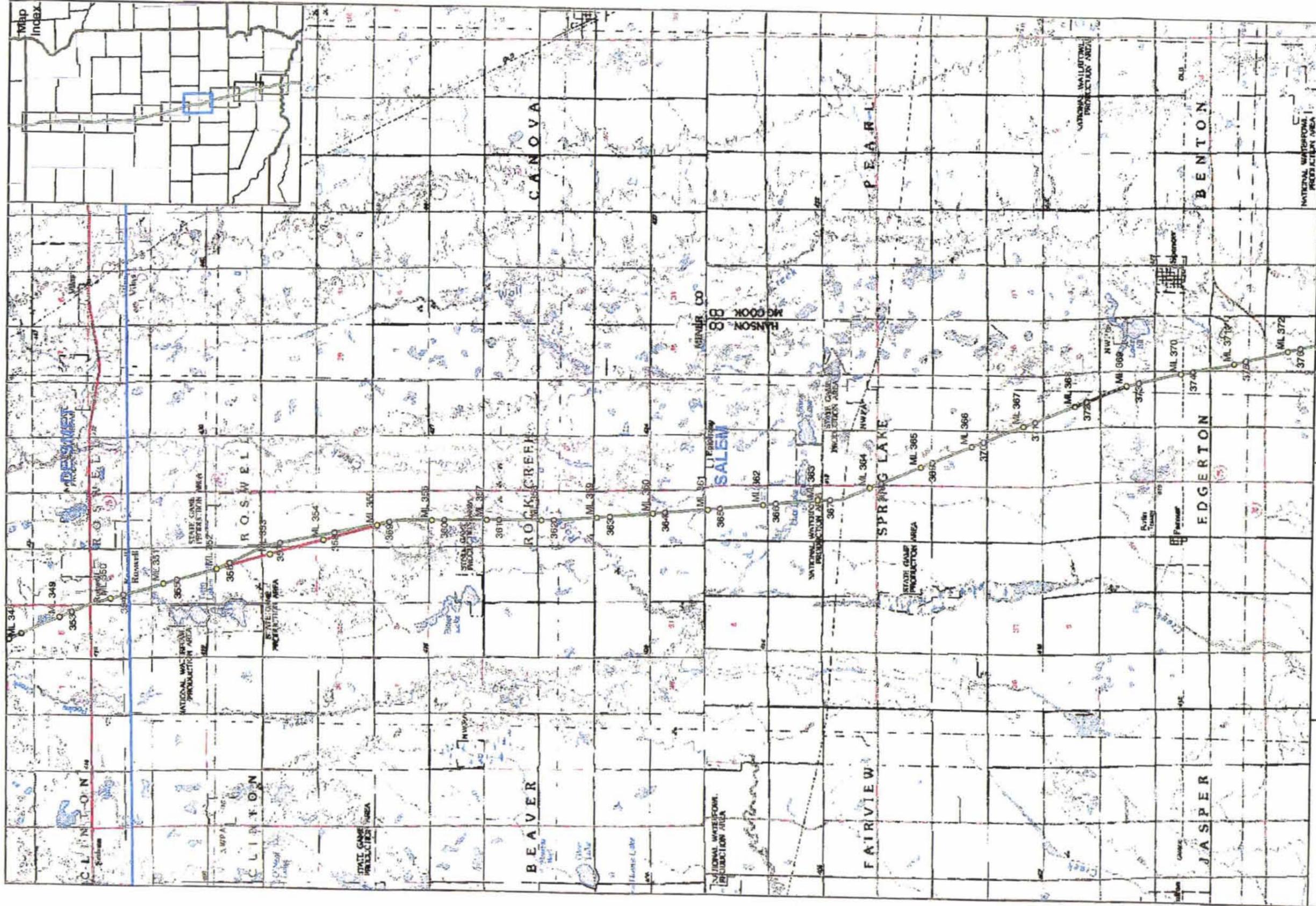
Keystone Pipeline Project

An Amalgamated Energy Services Company

Legend:
Mileposts (8/17/06)
Mileposts (2/9/06)
Pipeline (8/17/06)
Pipeline (2/9/06)

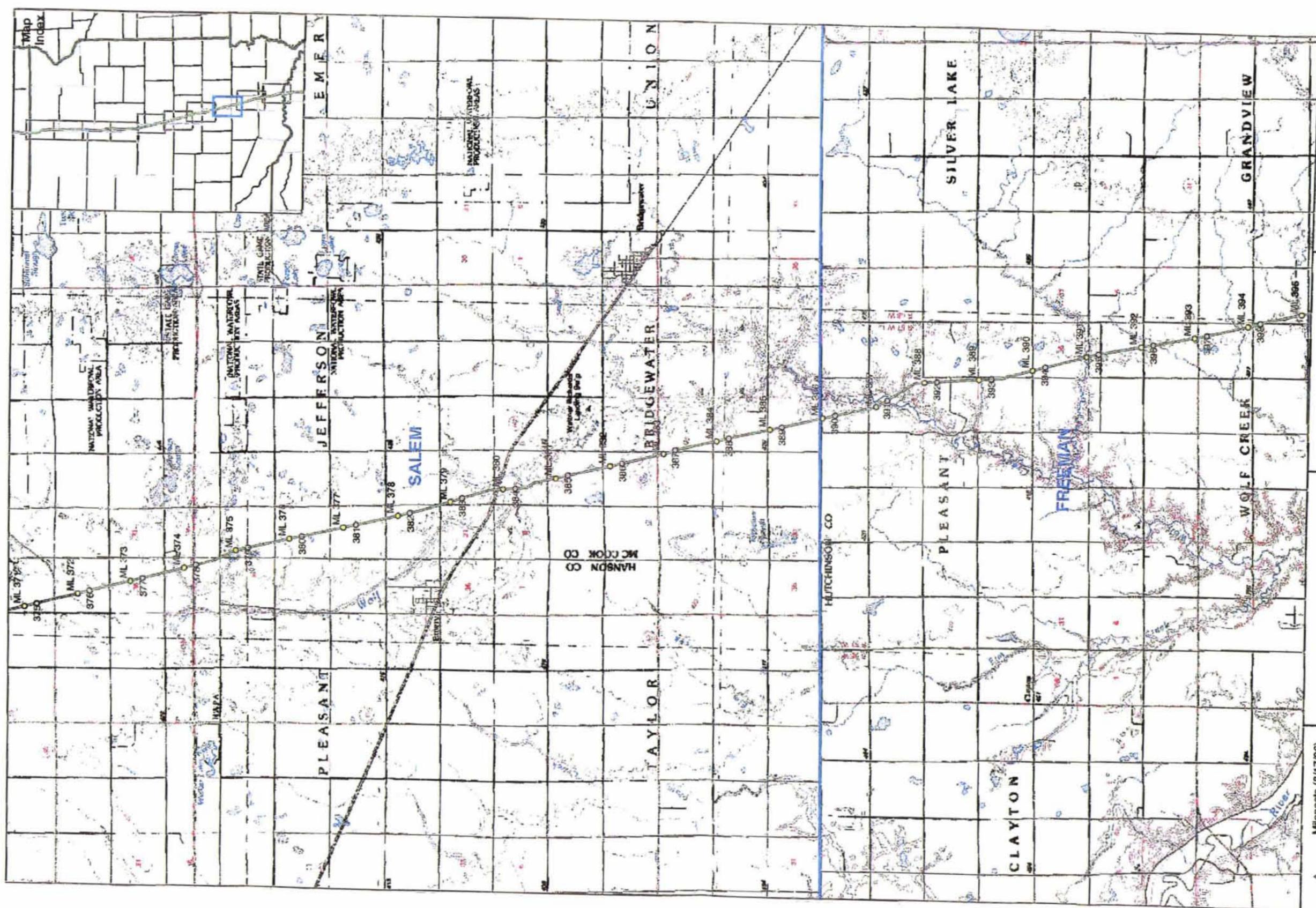
Scale: 0 0.5 1 2 Miles
North Arrow

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<p>◆ Mileposts (8/17/06) ○ Mileposts (2/9/06) — Pipeline (8/17/06) — Pipeline (2/9/06)</p>	<p>0 0.5 1 2 Miles</p> <p>▲ N</p>	<p>Keystone Pipeline Project</p>  <p>TransCanada to build what we believe</p>	<p>Map 7 of 10 General Project Location (South Dakota)</p>
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<p>• Mileposts (8/17/06) • Mileposts (2/9/06) — Pipeline (8/17/06) — Pipeline (2/9/06)</p>	<p>North Arrow Scale: 0, 0.5, 1, 2 Miles</p>	<p>Keystone Pipeline Project  An Enbridge Company</p>	<p>Map 8 of 10 General Project Location (South Dakota)</p>
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