United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
DESCRM
MC-208

SEP 0 9 2010

MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: Regional Director, Great Plains Region

SUBJECT: Environmental Assessment and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, for the proposed Environmental Assessment to authorize land use for 28 miles of oil and gas gathering pipelines on the Fort Berthold Reservation, an Environmental Assessment (EA) has been completed and a Finding of No Significant Impact (FONSI) has been issued.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the EA, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the FONSI (1506.6(b)). Please post the attached notice of availability at the agency and tribal buildings for 30 days.

If you have any questions, please call Marilyn Bercier, Regional Environmental Scientist, Division of Environment, Safety and Cultural Resources Management, at (605) 226-7656.

Attachment

cc: Marcus Levings, Chairman, Three Affiliated Tribes (with attachment)
Perry "No Tears" Brady, THPO (with attachment)
Roy Swalling, BLM, Dickenson, ND (with attachment)
John Shelman, US Army Corps of Engineers
Jeff Hunt, Virtual One Stop Shop
Jeffrey Towner, Field Supervisor, U.S. Fish and Wildlife Service

Finding of No Significant Impact
Saddle Butte Pipeline, LLC
Saddle Butte Trunk Lines

Fort Berthold Indian Reservation
Dunn and McKenzie County, North Dakota

The U.S. Bureau of Indian Affairs (BIA) has received a proposal for the construction of approximately 28 miles of natural gas and oil pipelines in Dunn and McKenzie Counties, North Dakota, on the Fort Berthold Reservation. Associated federal actions by the BIA include determinations of effect regarding cultural resources and approval of rights-of-way and easements.

The potential of the proposed action to impact the human environment is analyzed in the following Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the EA, I have determined that the proposed project will not significantly affect the quality of the human or natural environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement solicited for the preceding NEPA document was sufficient to ascertain potential environmental concerns associated with the currently proposed project.

2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed action and the No Action alternatives.

3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species.

4. The proposed action is designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.

5. Environmental justice was fully considered.

6. Cumulative effects to the environment are either mitigated or minimal.

7. No regulatory requirements have been waived or require compensatory mitigation measures.

8. The proposed project will improve the socio-economic condition of the affected Indian community.

Regional Director

Date 8/9/10

Environmental Assessment

Prepared for:
United States Bureau of Indian Affairs

Great Plains Regional Office
Aberdeen, South Dakota

Saddle Butte Pipeline, LLC

Saddle Butte Trunk Lines

Fort Berthold Indian Reservation

September 2010

For information contact:
Bureau of Indian Affairs, Great Plains Regional Office
Division of Environment, Safety and Cultural Resources Management
115 4th Avenue SE
Aberdeen, South Dakota 57401
(605) 226-7656

Notice of Availability and Appeal Rights

Saddle Butte Pipeline: Saddle Butte Trunk Lines

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Environmental Assessment to Authorize Land Use for 28 miles of Oil and Gas Gathering Pipelines as shown on the attached map. Construction by Saddle Butte Pipeline is expected to begin in the Summer/Fall of 2010.

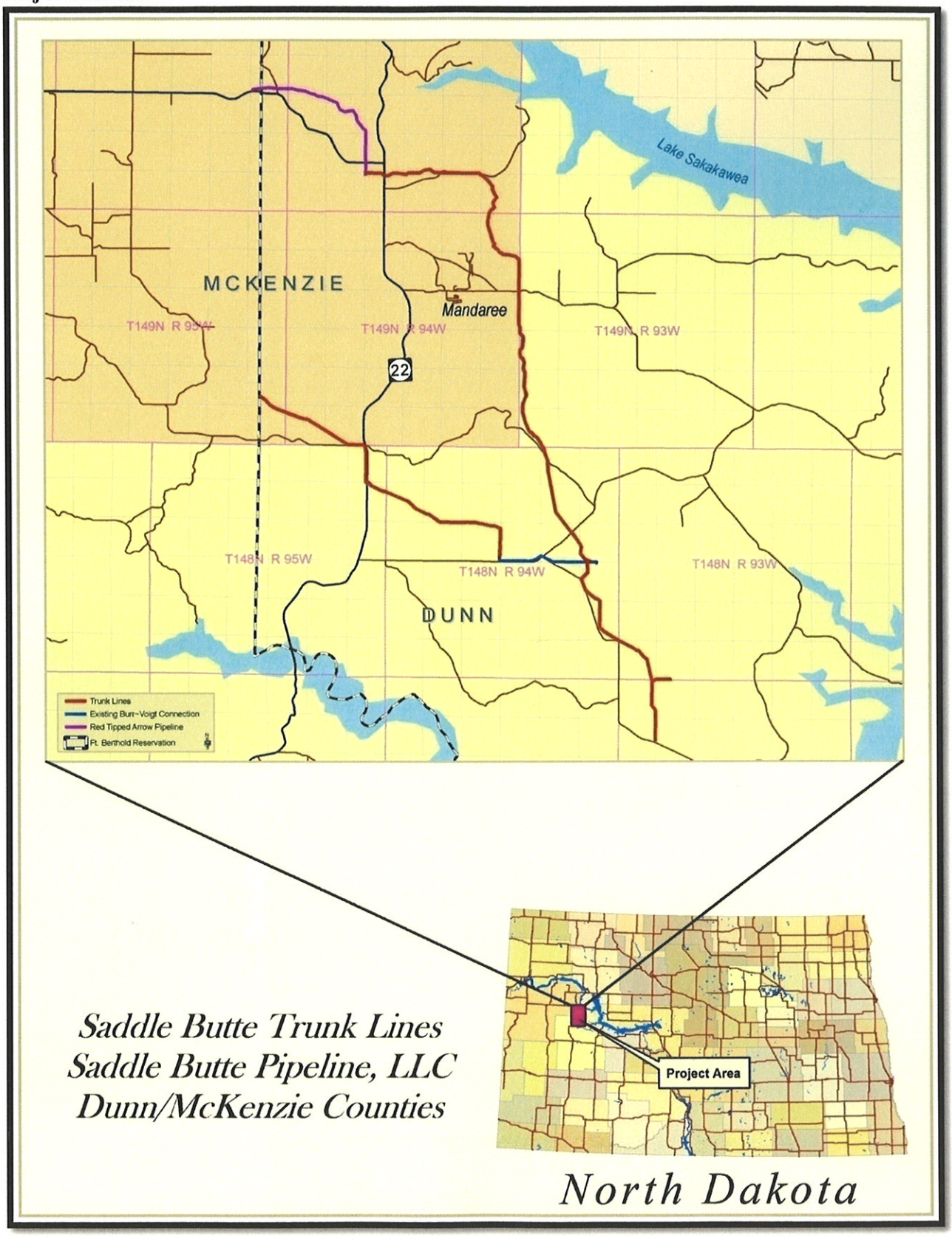
An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Howard Bemer, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).

The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA's decision to proceed with administrative actions *can* be appealed until October 9, 2010, by contacting:

United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Indian Appeals
801 N. Quincy Street, Suite 300, Arlington, Va 22203.

Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.

Project locations



Saddle Butte Trunk Lines
Saddle Butte Pipeline, LLC
Dunn/McKenzie Counties

Table of Contents

Exhibits

Tables

Appendices

1.0 Purpose and Need for Action

Saddle Butte Pipeline, LLC (SBP) is proposing to construct approximately 28 miles of natural gas and oil pipelines on the Fort Berthold Indian Reservation. These pipelines are proposed to connect the existing Red Tipped Arrow pipeline[1] and the Burr-Voigt Connection pipeline[2] and provide infrastructure to collect oil and gas from approximately 30 to 250 well sites operated by local producers. ***See Exhibit 1-1, Project Location Map.*** Following the initial connection to the two existing pipelines, the project is expected to connect to existing and proposed wells from the following three local producers: EnerPlus (42 well sites); EOG Resources, Inc. (17 well sites); and Peak North Dakota, LLC (12 well sites). Additional well connections are unknown at this time.

Development has been proposed in tribal land held in trust by the United States in Dunn and McKenzie County, North Dakota. The U.S Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The proposed project would cross and utilize lands owned in fee simple title.

The economic development of available resources and associated BIA actions are consistent with BIA's general mission. Leasing and development of mineral resources offer substantial economic benefits to the Three Affiliated Tribes, to individual tribal members, and fee land owners. SBP is proposing these pipelines to reduce waste of valuable resources associated with continued flaring of produced natural gas and to reduce environmental and public health and safety concerns. The BIA must comply with the National Environmental Policy Act (NEPA) before it authorizes the proposed project. Therefore, an Environmental Assessment (EA) for the proposed action is necessary to analyze the direct, indirect, and cumulative impacts of the BIA's approval of the proposed project.

Oil and gas activities on Indian lands are subject to a variety of federal environmental regulations and policies under authority of the BIA and Bureau of Land Management (BLM). This inspection and enforcement authority derives from the United States trust obligations to the Tribes, the *Indian Mineral Leasing Act* of 1938, the *Indian Mineral Development Act* of 1982, and the *Federal Oil and Gas Royalty Management Act* of 1982. No construction or other ground-disturbing activities will begin until all necessary easements, surveys, clearances, permissions, determinations and permits are in place. Additional NEPA analysis, findings, and federal actions will be required prior to development beyond what is described and analyzed in this EA.

[1] *Red Tipped Arrow 33-11H Well Site to Bear Paw Energy Connection Environmental Assessment/Finding of No Significant Impact (January 2010)*

[2] *Burr-Voigt Connection Environmental Assessment/Finding of No Significant Impact (September 2009)*

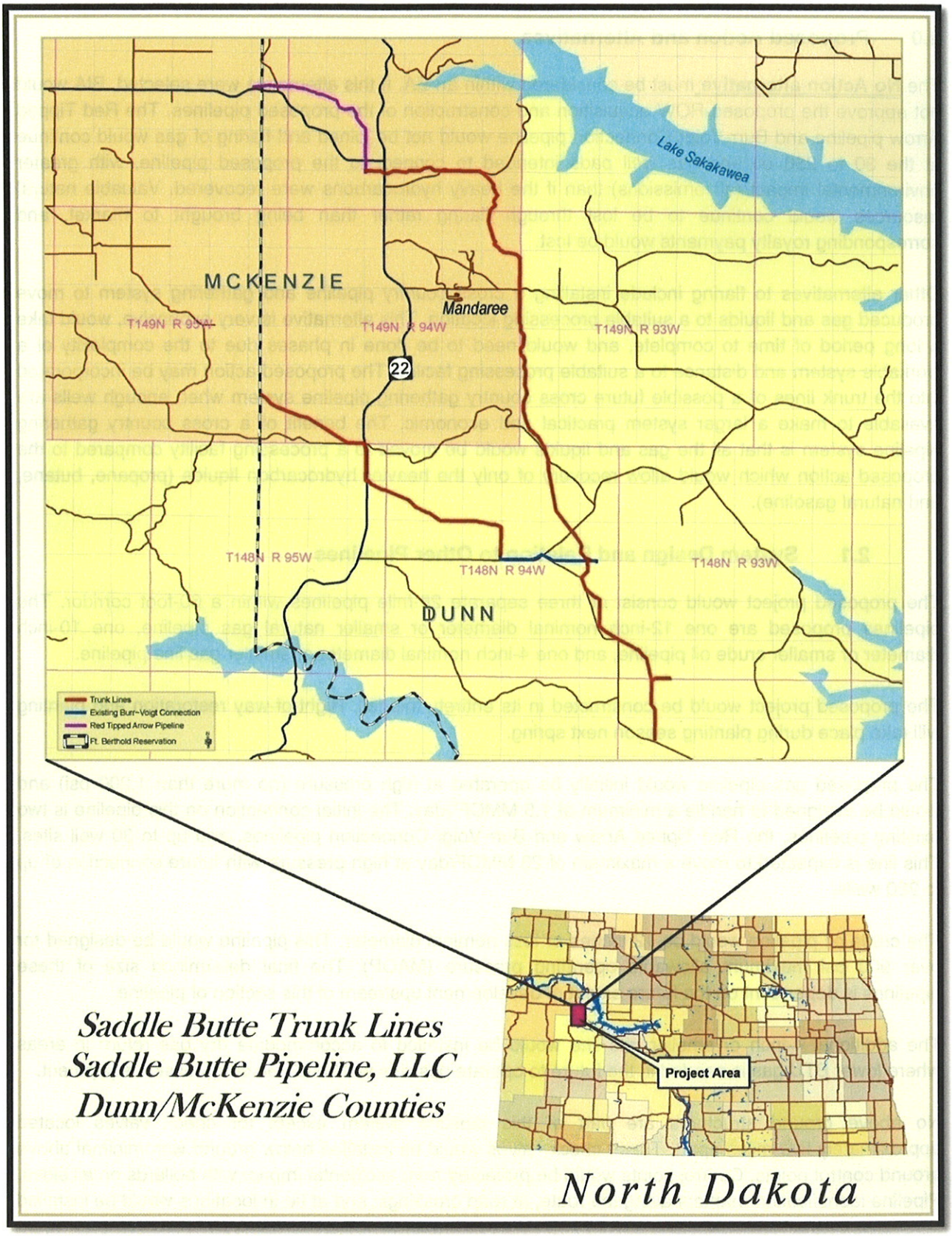


Exhibit 1-1: Project Location Map

2.0 Proposed Action and Alternatives

The **No Action alternative** must be considered within an EA. If this alternative were selected, BIA would not approve the proposed ROW acquisition and construction of the proposed pipelines. The Red Tipped Arrow pipeline and Burr-Voigt Connection pipeline would not be joined and flaring of gas would continue at the 30 to 250 oil and gas well pads intended to connect to the proposed pipeline, with greater environmental impact (air emissions) than if the heavy hydrocarbons were recovered. Valuable natural resources would continue to be lost through flaring rather than being brought to market, and corresponding royalty payments would be lost.

Other alternatives to flaring include installing a cross country pipeline and gathering system to move produced gas and liquids to a suitable processing location. This alternative is very expensive, would take a long period of time to complete, and would need to be done in phases due to the complexity of a workable system and distance to a suitable processing facility. The proposed action may be incorporated into the trunk lines of a possible future cross country gathering pipeline system when enough wells are available to make a larger system practical and economic. The benefit of a cross country gathering pipeline system is that all the gas and liquids would be moved to a processing facility compared to the proposed action which would allow recovery of only the heavier hydrocarbon liquids (propane, butane, and natural gasoline).

2.1 System Design and Relation to Other Pipelines

The proposed project would consist of three separate 28-mile pipelines within a 60-foot corridor. The pipelines proposed are one 12-inch nominal diameter or smaller natural gas pipeline, one 10-inch diameter or smaller crude oil pipeline, and one 4-inch nominal diameter or smaller gas line pipeline.

The proposed project would be constructed in its entirety this fall. Right-of-way restoration and planting will take place during planting season next spring.

The proposed gas pipeline would initially be operated at high pressure (no more than 1,200 psi) and would be designed to handle a minimum of 1.5 MMCF[3]/day. The initial connection on this pipeline is two existing pipelines, the Red Tipped Arrow and Burr-Voigt Connection pipelines, and up to 30 well sites. This line is expected to move a maximum of 23 MMCF/day at high pressure with future connection of up to 250 wells.

The crude oil pipeline would be 12 inches or less nominal diameter. This pipeline would be designed for over 900 psi maximum allowable operating pressure (MAOP). The final determined size of these pipelines is dependent on the future extent of development upstream of this section of pipeline.

The additional 4-inch or smaller gas line would be installed to accommodate dry gas return in areas where lower BTU gas is needed in the future to operate possible wellhead and compression equipment.

No above ground structures are part of this pipeline system except for check valves located approximately five miles apart. These check valves would be installed below ground with minimal above ground control points. Control points would be protected from accidental impact with bollards on all sides. Pipeline identification markers along the route, at road crossings, and at tie-in locations would be installed

[3] Million Cubic Feet

above ground. All other above ground equipment would be installed on the existing well pad or future compression facility locations included with future Environmental Assessments.

This EA discloses the impacts of the acquisition of 30 feet of temporary right-of-way (ROW), 30 feet of permanent ROW, and the installation of three pipelines.

2.2 Construction and Plan Specifications

Construction of the gas and oil lines are expected to take 8 weeks or less and would be confined within a 60-foot wide ROW, including 30 feet of temporary easements, adjacent to the proposed line as shown in ***Exhibit 1-1, Project Location Map on page 2.*** Pipeline materials would be staged at existing well pads or trucked directly to the temporary ROW corridor on existing federal, state, county, tribal, and private roads. Access to the ROW would be made at well pads and existing roadway crossing points only. Traffic at access points is expected to be heavy during brief periods at the beginning and end of shift and heavy at various times during the day when equipment and materials are delivered to the site. Traffic would be confined to the marked pipeline ROW corridor. Vehicle and personnel travel off the pipeline ROW would be strictly prohibited at all times. Signs would be installed at access points to remind operators that access or travel off the pipeline ROW is not permitted.

Installation of the pipelines may require clearing and grading of 60-foot wide sections at locations within the ROW along the entire pipeline corridor. Every effort would be made to minimize surface disturbance during the construction process. Topsoil would be separated and stockpiled along either side of any disturbed cross section to be used for prompt reseeding and reclamation of the disturbed area. Continued use of pasture and livestock grazing areas would be maintained during construction via use of temporary fencing or cattle guards when crossing land with livestock present and temporary crossings, as needed. Trenches would be excavated to a depth sufficient to maintain a minimum of 48 inches of ground coverage over the pipeline. Coverage would be increased to 72 inches of burial depth at roadway crossings and at any driveway crossings. ***Typical ROW cross section is as shown in Exhibit 2-1.*** It is understood that other utilities, including phone and water pipelines, are also present in the immediate area.

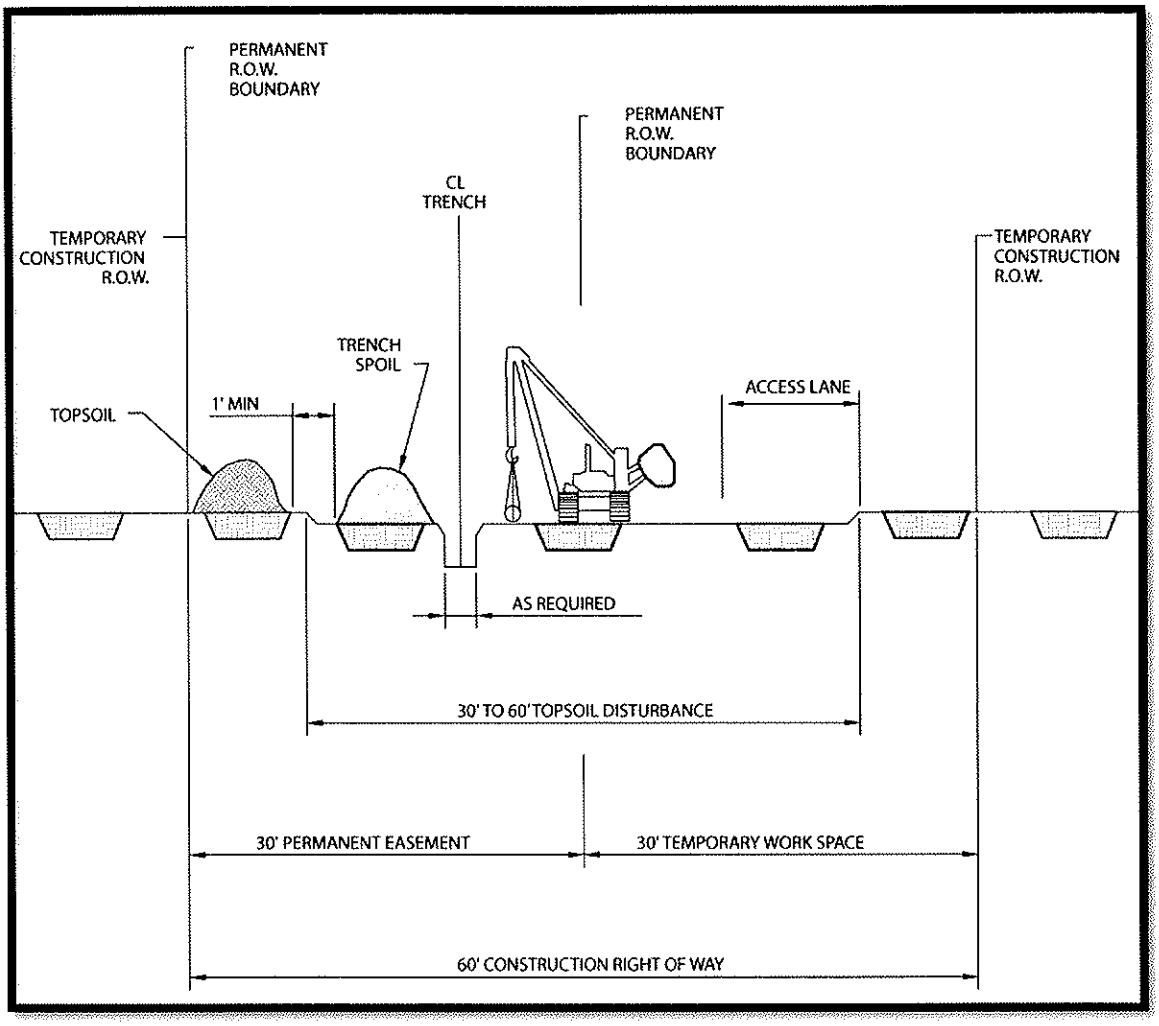


Exhibit 2-1: Typical ROW Cross Section

The Fort Berthold Rural Water (FBRW) pipeline would be crossed by the proposed pipelines in several locations. Because of the normal 84-inch burial depth of the water line, the proposed pipelines would pass over the installed water line to achieve no impact on depth or functionality of either line. Five feet of lateral distance would be maintained from all telephone and cable lines. Any line crossing conflicts would be worked out individually at each location with the respective utility.

During construction, the entire distance of trench could be open for several days during excavation, stringing, bending and installation of the pipelines. Crossings would be created at access locations and driveways. Pipe would be strung along the ditch as bending, welding and other installation preparations were completed. After the pipelines were lowered into the ditch they would be hydro-tested with water acquired from a local commercial source. Water used for hydro-testing would be removed from the site and disposed of at a permitted location.

After the trench is backfilled, disturbed areas would be re-graded to original contours, stockpiled topsoil reset over the ROW, pipeline marking signs would be installed, reclamation would be finalized, and the ROW would be reduced to 30 feet.

To prevent erosion and sedimentation prior to reclamation procedures, the following will occur:

- All slopes greater than 15 percent will be hydroseeded.
- Straw wattles, silt fence, or water bars shall be installed on all slopes greater than 5 percent.
- Trees and shrubs with a trunk diameter greater than four inches will be chipped and spread as erosion control. Small shrubs will be buried, shredded, or left with backfill and respread during reclamation.

2.3 Directional Drilling

Directional drilling, also known as boring, is often used to cross sensitive areas such as wetlands and stream beds where the disturbance of ditch excavation may be prohibitive or cause unwarranted stress on the environment. To construct, a hole is drilled under the identified area at a radius suitable for pulling straight pipe. Six environmental related bores under wetlands and/or stream crossings, and one bore due to topography in the area of a creek bed, are planned along the pipeline route. These bores would occur at the following locations:

- SE ¼ NW ¼ Section 31, T149N, R94W
- NW ¼ NE ¼ Section 17, T148N, R94W
- NW ¼ NW ¼ Section 16, T148N, R94W
- NE ¼ SE ¼ Section 6, T147N, R93W
- SE ¼ SE ¼ Section 31, T148N, R93W
- SE ¼ SW ¼ Section 24, T148N, R94W
- NW ¼ Section 1, T149N, R94W (Due to topography)

Directional drilling is also used to cross roadways where traffic should not be disrupted and disturbance of compacted substrate may be an issue with open trenches. The proposed project would bore under the following roadways in the specified locations:

- ND Highway 22—N ½ Section 33, T150N, R94W and NE ¼ NW ¼ Section 12, T148N, R95W
- Turnuey Ridge Road—NE ¼ NE ¼ Section 35, T150N, R94W
- BIA 12—NE ¼ NE ¼ Section 13, T149N, R94W
- BIA 14—NE ¼ Section 14, T148N, R94W
- BIA 30—SW ¼ SW ¼ Section 33, T149N, R94W

2.4 Reclamation

All reclamation is the responsibility of SBP as the ROW permit holder. Reclamation shall be required after initial construction, after additional lines are installed, after any maintenance activity, and after final abandonment of a decommissioned line.

Regrading, contouring, and reseeding of disturbed areas would occur as soon as practical after construction but no later than the next appropriate planting season. The ROW would be reseeded with certified seed mixtures approved by the BIA. All reseeding and planting would comply with BIA directions to ensure successful reclamation. Further, the ROW would be monitored for areas of excessive erosion and subsidence. Periodic monitoring would be performed and repeated reclamation efforts would be undertaken in problem areas until the ROW is certified as reclaimed.

Decommissioning of pipelines would result in mandatory final reclamation of the corridor. All surface facilities would be removed. Foundations, if any, would be hauled to an approved disposal site. Gravel pad would be buried on site or hauled to a disposal site. Compacted areas would be scarified, ripped and

re-contoured. Stockpiled topsoil would be redistributed and re-vegetated. Long-term monitoring would be required to ensure successful reclamation and implementation of any necessary remedial efforts. The pipelines would be purged with water to remove hydrocarbons, capped, and abandoned in place.

2.5 Operation and Maintenance

After construction is complete, maintenance of the ROW would be confined to the 30-foot ROW width. Access to this section of the line would be confined to existing roadways and as permitted by landowners. Excessive rutting or other surface disturbances, such as installing additional lines, would be immediately repaired and reclaimed under guidelines from the previous section. If any surface damage occurs that affects crops or other surface activities, repairs would be made immediately. Landowners would be compensated for damages accordingly.

Repair, replacement, inspection or additional lines that require extensive excavation may require ROW increased to 60 feet on a temporary basis. In that event, the BIA would be notified immediately. In the case of an emergency, the BIA may be notified during or after repairs have begun. In all cases, BIA would be consulted as soon as possible. All applicable regulations and best management practices would be followed.

2.6 Preferred Alternative

The preferred alternative is to complete all administrative actions and approvals necessary to authorize or facilitate the installation of the pipelines in order to protect the environment, reduce public hazards, and increase economic gain associated with production of oil and gas.

3.0 Description of the Affected Environment and Impacts

3.1 Introduction

This chapter describes the existing conditions within the study area. The existing conditions, or affected environment, are the baseline conditions that may be affected by the proposed action. This chapter also summarizes the positive and negative direct environmental impacts of the project alternatives, as well as cumulative impacts. Indirect impacts are discussed in impact categories where relevant. Information regarding the existing environment, potential effects to the environment resulting from the proposed alternative, and avoidance, minimization, and/or mitigation measures for adverse impacts is included.

3.2 Climate, Geologic Setting, and Land Use

The proposed pipelines are situated geologically within the Williston basin, where the shallow structure consists of sandstones, silts and shales dating to the Tertiary Period (65 to 2 million years ago), including the Sentinel Butte and Golden Valley Formations.

According to Great Plains Regional Climate Center data collected at the Dunn Center weather station from 1971–2000, temperatures in excess of 80 degrees Fahrenheit are common in summer months. The area receives approximately 16.5 inches of rain annually, predominantly during spring and summer. Winters in this region are cold, with temperatures often falling near zero degrees Fahrenheit. Snow generally remains on the ground from November to March, and approximately 38.5 inches of snow are received annually.

The topography within the project area is primarily identified as part of the Missouri Plateau ecoregion. According to the United States Geological Survey, the Missouri Plateau "was largely unaffected by glaciation and retains its original soils and complex stream drainage pattern." The western and southern portions of the Fort Berthold Reservation consist of prairie grasslands and buttes. The northern and eastern areas of the reservation provide fertile farmland. The proposed project area is located within a predominately rural area; land use consists primarily of grassland (86%). ***Please refer to Table 3.1, Land Use, and the Land Use Map in Appendix A, Exhibits.*** The North Dakota Geological Survey also identified several landslide areas in or adjacent to the project corridor. Landslide areas are areas where masses of sediment or rock have slid or tumbled down slope.

3.2.1 Geologic Setting and Land Use Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no impacts to climate, geology, or land use within the study area.

Alternative B (Proposed Action)—The proposed project would temporarily convert approximately 212.1 acres of land from its existing use into a pipeline corridor. ***Please refer to Table 3.1, Land Use.*** The pipelines would be buried underground and the majority of land uses would be able to resume following construction and reclamation activities. Some activities, such as those associated with developed lands, may be restricted within the permanent 30-foot right-of-way.

Table 3.1: Land Use

Land Classification	Percent of Study Area	Impacted Acres
Cultivated	2.7	5.6
Developed/Roadways	3.3	7.0
Grassland	86.4	183.3
Shrubland	0.6	1.4
Wetland	0.2	0.4
Woodland	6.8	14.3

3.3 Soils

The published soil survey for Dunn County dates from 1982 and the published soil survey for McKenzie County dates from 2006. Updated information is available online from Natural Resource Conservation Service (NRCS), with updated information available online through the NRCS Web Soil Survey. Location and characteristics of the soils encountered within the project corridor are identified in ***Table 3.2, Soil Mapping Units and Attributes.*** Generally, the listed soils have a low susceptibility to sheet and rill erosion and can tolerate high levels of erosion without loss of productivity.

Table 3.2: Soil Mapping Units and Attributes

Map Unit Symbol	Soil Type	Slope (%)	Composition (in upper 60 inches)			Erosion Factor[4]		Hydrologic Soil Group[5]
			% sand	% silt	% clay	Kf	T	
Dunn County								
3	Straw loam	0–2	—	—	—	.32	5	B
4	Arnegard loam	0–2	40	37	23	.28	5	B
7	Straw-Rhoades loams	0–2	37	37	26	.32	5	B
8C	Cabba-Chama silt loams	6–9	18	57	25	.43	2	D
9D	Amor-Cabba loams	9–15	40	39	21	.43	3	B
9E	Cabba loam	15–45	41	39	20	.32	2	D
10D	Cabba extremely stony loam	3–25	41	40	19	.43	2	D
13D	Wabek gravelly loam	2–15	85	14	1	.10	2	A
15	Belfield-Farland silt	0–2	22	44	34	.43	5	C

[4] Erosion Factors indicate susceptibility of a soil to sheet and rill erosion by water. Kf indicates the erodibility of material less than two millimeters in size. Values of K range from 0.02 to 0.69. Higher values indicate greater susceptibility. T Factors estimate maximum average annual rates of erosion by wind and water that will not affect crop productivity. Tons/acre/year range from 1 for shallow soils to 5 for very deep soils. Soils with higher T values can tolerate higher rates of erosion without loss of productivity.

[5] Hydrologic Soil Groups (A, B, C, and D) are based on estimates of runoff potential according to the rate of water infiltration under the following conditions: soils are not protected by vegetation, soils are thoroughly wet, and soils receive precipitation from long-duration storms. The rate of infiltration decreases from Group A (high infiltration, low runoff) to D (low infiltration, high runoff).

Table 3.2: Soil Mapping Units and Attributes

Map Unit Symbol	Soil Type	Slope (%)	Composition (in upper 60 inches)			Erosion Factor[4]		Hydrologic Soil Group[5]
			% sand	% silt	% clay	Kf	T	
	loams							
18	Belfield-Grail silty clay loams	0–2	22	43	35	.37	5	C
22	Regan silt loam	0–1	26	65	9	.43	5	C/D
27B	Farland silt loam	2–6	10	64	26	.32	5	B
29B	Farland-Rhoades silt loam	0–6	10	65	25	.32	5	B
30E	Cohagen-Vebar fine sandy loams	9–25	79	14	7	.20	2	B
42C	Lefor fine sandy loam	6–9	71	18	11	.49	3	C
46B	Bowdle loam	2–6	63	37	0	.28	4	B
49C	Morton silt loam	6–9	18	58	24	.43	3	B
52B	Morton-Dogtooth silt loams	0–6	19	58	23	.43	3	B
52C	Morton-Dogtooth silt loams	6–9	18	57	25	.43	3	B
54B	Parshall fine sandy loam	0–6	72	15	13	.24	5	B
62B	Rhoades silt loam	0–6	11	51	38	.32	2	D
62D	Dogtooth-Cabba complex	9–15	5	48	47	.32	2	D
71B	Sen silt loam	3–6	7	50	43	.43	3	C
71C	Sen silt loam	6–9	13	67	20	.43	3	B
81B	Vebar-Parshall fine sandy loams	0–6	75	15	10	.49	3	B
81C	Vebar-Parshall fine sandy loams	6–9	75	15	10	.49	3	B
81D	Vebar fine sandy loams	9–15	75	15	10	.49	3	B
82D	Vebar extremely stony fine sandy loam	3–15	75	15	10	.49	3	B
88B	Williams loam	3–6	35	35	30	.37	5	B
88C	Williams loam	6–9	35	35	30	.37	5	B
90C	Williams extremely stony loam	0–9	35	35	30	.37	5	B
91B	Williams-Noonan loams	3–6	35	37	28	.37	5	B
91C	Williams-Noonan loams	6–9	35	37	28	.37	5	B
93C	Williams-Zahl loams	6–9	35	37	28	.37	5	B
93D	Zahl-Williams loams	9–15	35	35	30	.37	5	B
93E	Zahl-Williams loams	15–25	35	34	31	.37	5	B
101C	Amor loam	6–9	40	37	23	.43	3	B
102	Shambo loam	0–2	39	37	24	.32	5	B

Table 3.2: Soil Mapping Units and Attributes

Map Unit Symbol	Soil Type	Slope (%)	Composition (in upper 60 inches)			Erosion Factor[4]		Hydrologic Soil Group[5]
			% sand	% silt	% clay	Kf	T	
105	Harriet silt loam	0–2	36	36	28	.37	2	D
106B	Daglum silt loam	0–6	27	38	35	.32	2	D
McKenzie County								
38B	Dogtooth-Janesburg silt loams	0–6	4	47	49	.32	2	D
38F	Dogtooth-Janesburg-Cabba complex	6–30	4	47	49	.43	2	D
41	Williams-Bowbells loams	0–3	35	35	30	.37	5	B
41B	Williams-Bowbells loams	3–6	35	35	30	.37	5	B
42C	Williams loam	6–9	35	35	30	.37	5	B
43C	Williams-Zahl loams	6–9	35	35	30	.37	5	B
44D	Zahl-Williams loams	9–15	35	34	31	.37	5	B
44E	Zahl-Williams loams	15–25	35	34	31	.37	5	B
51B	Amor-Shambo loams	3–6	40	39	21	.43	3	B
51D	Amor-Cabba loams	9–15	40	39	21	.43	3	B
54F	Cabba-Sen-Chama silt loams	15–70	18	62	20	.43	2	D
55B	Sen-Janesburg silt loams	0–6	8	48	44	.43	3	B
61F	Beisigl-Flasher-Tally complex	9–50	81	14	5	.49	3	A
63B	Vebar-Flasher complex	3–6	75	15	10	.49	3	B
63C	Vebar-Flasher complex	6–9	75	15	10	.49	3	B
63D	Vebar-Flasher-Tally complex	9–15	75	15	10	.49	3	B
84F	Cabba-Chama-Havrelon silt loams	3–70	18	62	20	.43	2	B
145F	Zahl-Cabba-Arikara Complex	9–70	35	34	31	.37	5	B
154F	Arikara-Shambo-Cabba loams	9–70	46	38	16	.28	5	B
164D	Vebar fine sandy loam	3–15	75	15	10	.49	3	B
211F	Cabba-Badland, outcrop Arikara complex	9–70	41	40	19	.43	2	D
340B	Niobell-Williams loams	0–6	34	34	32	.37	5	B
341B	Noonan-Niobell-Williams loams	0–60	35	34	31	.37	5	D
341C	Noonan-Williams loams	6–9	35	34	31	.37	5	B

3.3.1 Soil Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no soil impacts.

Alternative B (Proposed Action)—Construction of the proposed pipelines would disturb subsoil and topsoil within the project area. Construction would result in the removal of vegetation from the soil surface. As a result, the soil surface could become more prone to accelerated erosion by wind and water. BMPs used to reduce these impacts would include; the use of erosion and sediment control measures during and after construction, segregating topsoil from subsurface material for future reclamation, reseeding of disturbed areas, the use of construction equipment appropriately sized to the scope and scale of the project and maintaining proper drainage.

Another soil resources issue is soil compaction, which can occur by use of heavy equipment. When soil is compacted, it decreases permeability and increases surface runoff. This is especially evident in silt and clay soils. In addition, soils may be impacted by mixing of soil horizons. Soil compaction and mixing of soil horizons would be minimized by the previously discussed topsoil segregation. Disturbed areas would be reseeded following construction. No mitigation for soil impacts is anticipated.

3.4 Water Resources

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, provides authority to the EPA (Environmental Protection Agency) for establishing water quality standards, controlling discharges into surface and ground waters, developing waste treatment management plans and practices, and issuing permits for discharges of pollutants (Section 402). It also provides the authority to the US Army Corps of Engineers for issuing permits for discharges of dredged or fill material (Section 404). Within the Fort Berthold Reservation, the Missouri River and Lake Sakakawea are both considered navigable waters and are therefore subject to Section 10 of the Rivers and Harbors Act of 1899.

3.4.1 Surface Water

The proposed project is situated in the Great Plains region of North Dakota. This is an arid area with few isolated surface water basins. The majority of the surface waters in the region are associated with the Missouri River, Lake Sakakawea, and tributaries to these water bodies. Surface water generally flows overland until draining into these systems.

The majority of the project corridor occurs within the Little Missouri River Basin. The remainder of the project occurs within the Lake Sakakawea Basin. Runoff throughout the study area is by sheetflow until collected by ephemeral and perennial streams draining to Lake Sakakawea. ***Please refer to the Surface Waters Map in Appendix A, Exhibits, for a summary of watersheds and sub-watersheds encompassing the project corridor and general drainage patterns.*** During field surveys, 15 wetlands/drainages were identified, which include those associated with Squaw and Moccasin Creeks. ***For a summary of wetlands/drainages identified in the field, please refer to areas identified as "Wetlands" on the Dominant Plant Communities and Noxious Weeds Maps in Appendix A, Exhibits.***

3.4.1.1 Surface Water Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no surface water impacts.

Alternative B (Proposed Action)—The proposed project has been sited to minimize direct impacts to surface water and disruption of drainages to the greatest extent practicable. No identified floodplains exist within the proposed corridor. Erosion control measures will be used to mitigate migration of sediment downhill or downstream. No measurable increase in runoff or impacts to surface waters is expected. Six of the 15 identified wetlands/drainages would be bored under. During the on-sites, it was agreed upon by the BIA that the remaining nine would be trenched through due to the small size of the wetlands/drainages and ability to limit the impact to a minimal disturbance area. The crossing (trenching) of identified wetland/drainage areas during the proposed construction is to be conducted in a manner which causes minimal disturbance with no fill being placed within the wetland basins, along with immediate reclamation of the site. Equipment would be required to remain outside the basins to the greatest extent practicable to minimize disturbance to the wetland vegetation and pipe would be laid within a 24-hour period.

3.4.2 Ground Water

The North Dakota State Water Commission's electronic records reveal that there are no permitted stock or domestic wells within one-mile of the project corridor. There are no additional active or permitted water wells or ground water-fed surface water impoundments immediately within the project corridor. The nearest aquifer to the proposed project is the Fort Union glacial aquifer which is adjacent to the northwest portion of the project. No sole source aquifers have been identified within the state of North Dakota. ***Please refer to the Aquifer and Ground Water Map in Appendix A, Exhibits.***

3.4.2.1 Ground Water Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no ground water impacts.

Alternative B (Proposed Action)—No aquifers or ground water wells are located within the project corridor; therefore, no impacts to ground water are expected to result from Alternative B.

3.5 Air Quality

The Clean Air Act, as amended, requires the Environmental Protection Agency (EPA) to establish air quality standards for pollutants considered harmful to public health and the environment by setting limits on emission levels of various types of air pollutants.

The North Dakota Department of Health (NDNH) operates a network of Ambient Air Quality Monitoring (AAQM) stations. No AAQM sites are located within McKenzie County. The closest AAQM station to the proposed well sites is located in Dunn Center, North Dakota. It is located approximately 14.5 miles southwest of the proposed pipeline. Criteria pollutants tracked under EPA's National Ambient Air Quality Standards in the Clean Air Act include SO_2 (sulfur dioxide), PM (particulate matter), NO_2 (nitrogen dioxide), O_3 (ozone), Pb (lead), and CO (carbon monoxide). In addition, the NDDH has established state air quality standards. State standards must be as stringent as (but may be more stringent than) federal standards. The federal and state air quality standards for these pollutants, and current air quality data from Dunn Center, Dunn County (the closest county AAQM), is summarized in ***Table 3.3, Federal and State Air Quality Standards and Reported Data for Dunn Center.***

North Dakota was one of thirteen states in 2008 that met standards for all criteria pollutants. The state also met standards for fine particulates and the eight-hour ozone standards established by the EPA

(NDDH 2009). In addition, monitoring data from the Dunn Center AAQM shows that the station is currently well within air quality standards.

Table 3.3: Federal and State Air Quality Standards and Reported Data for Dunn Center

Pollutant	Averaging Period	EPA Air Quality Standard		NDDH Air Quality Standard		Dunn Center 2009 Reported Data	
		$\mu g/m^3$	parts per million	$\mu g/m^3$	parts per million	$\mu g/m^3$	parts per million
SO_2	24-Hour	365	0.14	260	0.099	--	.0055
	Annual Mean	80	0.030	60	0.023	--	.0005
PM_{10}	24-Hour	150	--	150	--	44.5	--
	Annual Mean	50	--	50	--	11.3	--
$PM_{2.5}$	24-Hour	35	--	35	--	14.2	--
	Weighted Annual Mean	15	--	15	--	3.4	--
NO_2	Annual Mean	100	0.053	100	0.053	--	.0015
CO	1-Hour	40,000	35	40,000	35	--	--
	8-Hour	10,000	9	10,000	9	--	--
Pb	3-Month	1.5	--	1.5	--	--	--
O3	1-Hour	240	0.12	235	0.12	--	.064
	8-Hour	--	0.08	--	0.08	--	.055

Source: EPA 2006, NDDH 2009

Furthermore, the Fort Berthold Reservation complies with the North Dakota National Ambient Air Quality Standards and visibility protection. The Clean Air Act affords additional air quality protection near Class I areas. Class I areas include national parks greater than 6,000 acres in size, national monuments, national seashores, and federally designated wilderness areas larger than 5,000 acres designated prior to 1977. There are no Federal Class I areas[6] within the project area. The Theodore Roosevelt National Park is the nearest Class I area, located approximately 22 miles west of the proposed pipeline.

3.5.1 Air Quality Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no air quality impacts.

Alternative B (Proposed Action)—The Fort Berthold Reservation complies with North Dakota National Ambient Air Quality Standards and visibility protection. Alternative B would not include any major sources of air pollutants. Construction of the project would result in temporary dust generation and minor gaseous emissions of PM, SO_2, NO_2, CO, and volatile organic compounds. Emissions would be limited to the immediate project area and are not anticipated to cause or contribute to a violation of National Ambient

[6] Federal Class I areas are generally national parks and wilderness areas.

Air Quality Standards. No detectable or long-term impacts to air quality or visibility are expected within the airsheds of the Fort Berthold Reservation, state, or Theodore Roosevelt National Park.

The proposed project is anticipated to have a long-term benefit to air quality in the project area because it would reduce emissions associated with gas flaring at the up to 250 wells that may connect to the pipelines. In addition, instead of trucks having to travel to these well sites to collect oil, gas, and possibly produced water, there would ultimately be one consolidated storage location. In the long-term, this may improve air quality in the area by reducing mobile source air toxics associated with trucking operations. No mitigation or monitoring measures are recommended.

3.6 Threatened and Endangered Species

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, 50 CFR Part 402 as amended, each federal agency is required to ensure the following two criteria. First, any action funded or carried out by such agency must not be likely to jeopardize the continued existence of any federally-listed endangered or threatened species or species proposed to be listed. Second, no such action can result in the destruction or adverse modification of habitat of such species that is determined to be critical by the Secretary. An endangered species is one which is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future. A candidate species is a plant or animal for which the USFWS has sufficient information on its biological status and threats to propose it as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. While candidate species are not legally protected under the ESA, it is within the spirit of the ESA to consider these species as having significant value and worth protecting.

The proposed action area was evaluated to determine the potential for occurrences of federally-listed threatened, endangered, and candidate species. The United States Fish and Wildlife Service (USFWS) March 2010 Endangered, Threatened, and Candidate Species and Designated Critical Habitat in North Dakota county list has identified the gray wolf, interior least tern, pallid sturgeon, black-footed ferret and whooping crane as endangered species that may be found within Dunn and McKenzie Counties. The piping plover is listed as a threatened species for Dunn and McKenzie Counties. In addition, Dunn and McKenzie Counties contain designated critical habitat for the piping plover adjacent to Lake Sakakawea. The Dakota skipper, a candidate species, is also listed for Dunn and McKenzie Counties. Field surveys were conducted by KL&J on October 21, 2009, June 2, 2010, and July 20, 2010 along the entire proposed pipeline route using a 100-foot wide survey corridor. These surveys included habitat assessments for threatened, endangered, and candidate species. None of these species were observed in the field. Habitat requirements, the potential for suitable habitat within the project area, and other information regarding listed species for Dunn and McKenzie Counties are as follows:

Black-footed Ferret (*Mustela nigripes*)

The black-footed ferret historically could be found throughout the Rocky Mountains and Great Plains. In North Dakota, the black-footed ferret may potentially be present in prairie dog towns. However, they have not been confirmed in North Dakota for over 20 years and are presumed extirpated. Their preferred habitat includes areas around prairie dog towns, as they rely on prairie dogs for food and live in prairie dog burrows. Black-footed ferrets require at least an 80-acre prairie dog town to survive. No prairie dog towns were identified during the field surveys.

Gray Wolf (*Canis lupus*)

The gray wolf is the largest wild canine species in North America. It is found throughout northern Canada, Alaska, and the forested areas of Northern Michigan, Minnesota, and Wisconsin and has been re-introduced to Yellowstone National Park in Wyoming. While the gray wolf is not common in North Dakota, occasionally individual wolves do pass through the state. Historically, its preferred habitat includes biomes such as boreal forest, temperate deciduous forest, and temperate grassland. Gray wolves live in packs of up to 21 members, although some individuals will roam alone. The proposed project area is located far from other known wolf populations.

Interior Least Tern (*Sterna antillarum*)

The interior least tern nests along inland rivers rather than along the coast. The interior least tern is found in isolated areas along the Missouri, Mississippi, Ohio, Red, and Rio Grande Rivers. In North Dakota, it is sighted along the Missouri River during the summer nesting season. The interior least tern nests on sandbars or barren beaches, preferably in the middle of a river for increased safety while nesting. These birds nest close together, using safety in numbers to scare away predators.

There is no existing or potential habitat within the project area. Potential habitat in the form of sandy/gravely Lake Sakakawea shoreline exists approximately 1.7 miles away at the closest point in a backwater bay.

Pallid Sturgeon (*Scaphirhynchus albus*)

The pallid sturgeon is known to exist in the Yellowstone, Missouri, middle and lower Mississippi, and Atchafalaya Rivers, and seasonally in some tributaries. In North Dakota, the pallid sturgeon is found principally in the Missouri River and upstream of Lake Sakakawea in the Yellowstone River. Dating to prehistoric times, the pallid sturgeon has become well adapted to living close to the bottom of silty river systems. According to the USFWS, its preferred habitat includes "a diversity of water depths and velocities formed by braided river channels, sand bars, sand flats, and gravel bars." Weighing up to 80 pounds, pallid sturgeons are long lived, with individuals possibly reaching 50 years of age.

Potential habitat for pallid sturgeon can be found in a bay of Lake Sakakawea approximately 1.7 miles from the project site at the closest point.

Whooping Crane (*Grus americana*)

The whooping crane is the tallest bird in North America. In the United States, this species ranges through the Midwest and Rocky Mountain regions from North Dakota south to Texas and east into Colorado. Whooping cranes migrate through North Dakota along a band running from the south central to the northwest parts of the state. They use shallow, seasonally and semi-permanently flooded palustrine (marshy) wetlands for roosting and various cropland and emergent wetlands for feeding. During migration, whooping cranes are often recorded in riverine habitats, including the Missouri River. Currently there are three wild populations of whooping cranes, yielding a total species population of about 383. Of these flocks, only one is self-sustaining.

The USFWS (USFWS; [CWCTP 2007]) documented a 200-mile wide migration corridor for whooping cranes based on the historical sightings of whooping cranes from the early 1960s through 2007. This 200-mile wide corridor (100 miles either side of the centerline) encompasses approximately 94% of the observations and a 100-mile wide corridor subset of this encompasses approximately 82% of the

observations. According to a map produced by the USFWS, the project area is located within the whooping crane central flyway where 75% of confirmed sightings occurred.

The proposed pipeline corridor crosses 15 wetland basins/drainages, six of which would be bored under. In addition, a portion of the pipeline corridor crosses cropland which may be used for feeding.

Piping Plover (*Charadrius meoldus*)

The piping plover is a small migratory shorebird. Historically, piping plovers could be found throughout the Atlantic Coast, Northern Great Plains, and the Great Lakes. Drastically reduced, sparse populations presently occur throughout this historic range. In North Dakota, breeding and nesting sites can be found along the Missouri River. Preferred habitat for the piping plover includes riverine sandbars, gravel beaches, alkali areas of wetlands, and flat, sandy beaches with little vegetation. The USFWS has identified critical habitat for the piping plover on the Missouri River system. Critical habitat includes reservoir reaches composed of sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with water bodies.

There is no existing or potential habitat within the project area. Potential habitat in the form of sandy/gravely Lake Sakakawea shoreline exists approximately 1.7 miles away at the closest point in a backwater bay.

Dakota Skipper (*Hesperia dacotae*)

The Dakota skipper is a small butterfly with a one-inch wing span. These butterflies historically ranged from southern Saskatchewan, across the Dakotas and Minnesota, to Iowa and Illinois. The preferred habitat for the Dakota skipper consists of flat, moist bluestem prairies and upland prairies with an abundance of wildflowers. Dakota skippers are visible in their butterfly stage from mid June to early July.

The proposed project corridor consists mainly of native upland vegetation which would be suitable habitat for the Dakota skipper.

3.6.1 Threatened and Endangered Species Effects/Mitigation

Alternative A (No Action)—Alternative A would have no effect to threatened or endangered species or designated critical habitat.

Alternative B (Proposed Action)—Due to lack of habitat, observance of the species within the project area, and that the species is assumed extirpated from North Dakota, the proposed project would have no effect to the black-footed ferret. In addition, due to a lack of potential habitat or the observance of species within the project area, along with the distance to known habitat or populations, it was determined that the proposed project may affect, but is unlikely to adversely affect, the interior least tern, pallid sturgeon, gray wolf and piping plover. The proposed project is not likely to jeopardize the continued existence of these species and is not likely to destroy or adversely modify critical habitat.

The proposed project is located within the corridor where 75 percent of confirmed whooping crane sightings have occurred and suitable cropland food sources and wetlands suitable for roosting can be found within the corridor. Per USFWS recommendations, if a whooping crane is sighted within one mile of the pipeline while under construction, all work would cease within one mile of that part of the project and the USFWS would be contacted immediately. In coordination with USFWS, work may resume after the

bird(s) leave the area. Therefore, the proposed project may affect, but is not likely to adversely affect the whooping crane. The proposed project is not likely to jeopardize the continued existence of this species and is not likely to destroy or adversely modify critical habitat. The USFWS concurred with the effect determinations for the interior least tern, pallid sturgeon, gray wolf, piping plover, and whooping crane in a letter dated August 18, 2010. ***Please refer to Appendix C, USFWS Concurrence and Recommendations.***

On the account of the potential effect of this project, SBP has developed avoidance and minimization measures for the proposed project in coordination with the BIA Environmental Protection Specialist during the field visits. ***Please refer to section 3.17, Environmental Commitments/Mitigation.***

3.7 Wetlands, Wildlife, and Vegetation

Intensive resource surveys of wildlife and botany species and habitats were conducted along the pipeline route on October 21, 2009, June 2, 2010 and July 20, 2010 with the BIA Environmental Protection Specialist, SBP, BIA THPO, Beaver Creek Archaeology and Kadrmas, Lee & Jackson present at various stages of the surveys. The purpose of these surveys was to gather site-specific data and photos with regards to biological, botanical, soil, and water resources. A 100-foot corridor centered on pipeline center point was evaluated during these visits. The pipeline corridor was adjusted, as appropriate, to best avoid impacts to any identified environmental areas of concern.

Those present at the on-site assessments agreed on the selected location and best management practices to be implemented to minimize impacts to wildlife and botanical resources. During these site visits, the pipeline corridor and center line locations were finalized, and the BIA gathered information needed to develop site-specific mitigation measures and BMPs to be incorporated into the final plans.

During the on-site visits, raptor and raptor nest surveys were also conducted by Kadrmas, Lee & Jackson. These surveys consisted of visual inspection specifically focusing on potential nesting sites within the line of sight of project disturbance areas, including cliffs and wooded draws.

3.7.1 Wetlands

Wetlands are defined in both the 1977 Executive Order 11990, Protection of Wetlands, and in Section 404 of the Clean Water Act of 1986, as those areas that are inundated by surface or groundwater with a frequency to support and under normal circumstances do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Three parameters that define a wetland, as outlined in the Federal Manual for Delineating Jurisdictional Wetlands (US Army Corps of Engineers, 1987) are hydric soils, hydrophytic vegetation, and hydrology. Wetlands are an important natural resource serving many functions, such as providing habitat for wildlife, storing floodwaters, recharging groundwater, and improving water quality through purification.

Fifteen wetlands were identified during the field surveys. ***For a summary of wetlands/drainages identified in the field, please refer to areas identified as "Wetlands" on the Dominant Plant Communities and Noxious Weeds Maps in Appendix A, Exhibits.***

3.7.1.1 Wetland Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no wetland impacts.

Alternative B (Proposed Action)—Avoidance of impacts to six wetlands/drainages would be accomplished by directional drilling (boring) under these locations. The boring of these drainages would occur in the following locations:

- SE ¼ NW ¼ Section 31, T149N, R94W
- NW ¼ NE ¼ Section 17, T148N, R94W
- NW ¼ NW ¼ Section 16, T148N, R94W
- NE ¼ SE ¼ Section 6, T147N, R93W
- SE ¼ SE ¼ Section 31, T148N, R93W
- SE ¼ SW ¼ Section 24, T148N, R94W

The remaining nine wetlands would be trenched due to the small size of the wetlands and ability to limit the impact to a minimal disturbance area. This would result in approximately 0.15 acres of temporary wetland impacts. Wetlands that would be impacted are located in the following locations:

- NE ¼ SE ¼ Section 7, T148N, R94W
- SE ¼ SW ¼ Section 8, T148N, R94W
- NE ¼ NE ¼ Section 16, T148N, R94W
- SE ¼ SW ¼ Section 27 and NE ¼ NW ¼ Section 34, T150N, R94W
- NE ¼ NE ¼ Section 13, T149N, R94W
- NW ¼ Section 19, T149N, R93W (Two wetlands)
- SW ¼ NW ¼ Section 30, T149N, R93W
- SW ¼ NW ¼ Section 31, T149N, R93W

The crossing (trenching) of identified wetlands during the proposed construction is to be conducted in a manner which causes minimal disturbance with no fill being placed within the wetland basins, along with immediate reclamation of the site. Equipment would be required to remain outside the basins to the greatest extent practicable to minimize disturbance to the wetland vegetation and pipe would be laid within a 24-hour period. Following construction, disturbed wetlands will be returned to pre-construction contours and re-seeded with an approved seed mixture from the BIA Environmental Protection Specialist.

3.7.2 Bald and Golden Eagles

Protection is provided for the bald and golden eagle through the Bald and Golden Eagle Protection Act (BGEPA) of 1940, 16 U.S.C. 668–668d, as amended, which was written with the intent to protect and preserve bald and golden eagles, both of which are treated as species of concern within the Department of the Interior. Under the BGEPA, "take" includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb, wherein "disturb" means to agitate or bother a bald or golden eagle to the degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, causing injury, death, or nest abandonment.

The bald eagle (*Haliaeetus leucocephalus*) is sighted along the Missouri River during spring and fall migration periods and periodically in other places in the state such as the Devils Lake and Red River areas. In 2009, the ND Game and Fish Department estimated that 66 nests were occupied by bald eagles, though not all eagle nests were visited and verified[7]. Its preferred habitat includes open areas, forests, rivers, and large lakes. Bald eagles tend to use the same nest year after year, building atop the previous year's nest.

[7] Source: "Nesting in Numbers." ND Outdoors February 2010 issue.

The golden eagle (*Aquila chrysaetos*) can be spotted in North Dakota throughout the badlands and along the upper reaches of the Missouri River in the western part of the state. Golden eagle pairs maintain territories that can be as large as 60 square miles and nest in high places including cliffs, trees, and human-made structures. They perch on ledges and rocky outcrops and use soaring to search for prey. Golden eagle preferred habitat includes open prairie, plains, and forested areas. During the July 20, 2010 on-site, one golden eagle was observed soaring along the pipeline corridor; however, no nests were observed within the line of sight of the proposed project disturbance areas during the field surveys.

The United States Geological Survey (USGS) Northern Prairie Wildlife Research Center maintains information on bald eagle and golden eagle habitat within the state of North Dakota. According to the USGS data, the proposed 0.5-mile buffered survey area does contain recorded habitat for both the bald eagle and the golden eagle. In addition, Dr. Anne Marguerite Coyle of Dickinson State University has completed focused research on golden eagles and maintains a database of golden eagle nest sightings. According to Dr. Coyle's information, there are six golden eagle nests located within two miles of the project corridor, the closest being approximately 1.7 miles from the project corridor. ***Please refer to the Bald and Golden Eagle Habitat and Nest Sightings Map in Appendix A, Exhibits.***

3.7.2.1 Bald and Golden Eagle Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact bald or golden eagles.

Alternative B (Proposed Action)—Though one golden eagle was observed soaring in the surrounding area during the field investigations, no evidence of eagle nests were found within the project area. If a bald or golden eagle or eagle nest is sighted within 0.5 miles of the project construction area, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.

3.7.3 Migratory Birds and Other Wildlife

The Migratory Bird Treaty Act (MBTA), 916 U.S.C. 703–711, provides protection for 1,007 migratory bird species, 58 of which are legally hunted. The MBTA regulates impacts to these species such as direct mortality, habitat degradation, and/or displacement of individual birds. The MBTA defines "taking" to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof, except when specifically permitted by regulations.

The study area lies in the prairie pothole region of North Dakota and the Central Flyway of North America. As such, this area is used as resting grounds for many birds on their spring and fall migrations, as well as nesting and breeding grounds for many waterfowl species. Other non-game bird species are known to fly through and inhabit this region.

During the pedestrian field surveys, big and small game species, migratory birds, raptors, non-game species, as well as their potential habitats and and/or their nests were identified if present. The project area contains suitable habitat for mule deer (*Odocoileus hemionus*), whitetail deer (*Odocoileus virginianus*), plains sharptail grouse (*Tympanuchus phasianellus),* ring-necked pheasant (*Phasianus colchicas*), wild turkey (*Meleagris gallopavo*), beaver (*Castor canadensis*), *red* tail hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), song birds, coyote (*Canis latrans*), red fox (*Vulpes vulpes*), American badger (*Taxidea taxus*), Eastern cottontail rabbit (*Sylvilagus floridanus*), white-tailed jackrabbit (*Lepus townsendii*), North American porcupine (*Erethizon dorsatum*), elk (*Cervus elaphus*), and mountain lion (*Puma concolor*).

Species observed along the pipeline corridor include numerous western meadowlark (*Sturnella neglecta*), approximately 10 mallard duck (*Anas platyrhynchos*), approximately 10 sharp-tailed grouse (*Tympanuchus phasianellus*), one porcupine (*Erethizon dorsatum*), two elk (*Cervus elaphus*), one mountain lion (*Puma concolor*), three kingbirds (*Tyrannus tyrannus*), three field sparrows (*Spizella pusilla*), numerous cabbage butterflies (*Pieris rapae*), three red-winged blackbirds (*Agelaius phoeniceus*), four grasshopper sparrows (*Ammodramus savannarum*), three yellow-winged blackbirds (*Agelaius thilius*), three antelope (*Antilocapra Americana*), and five cowbirds (*Molothrus*). ***Please refer to Exhibit 3-1, Antelope.***

bit 3-1: Antelope

3.7.3.1 Migratory Birds and Other Wildlife Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact other wildlife species or habitats.

Alternative B (Proposed Action)—Due to suitable habitat being present for many wildlife species within the proposed project corridor, it is determined that ground clearing activities associated with the proposed project may impact individuals or suitable habitat for the wildlife species discussed above; however, no avian nests are anticipated to be impacted by the proposed construction. Due to the nature of the proposed action, surface disturbances would be only temporary, during construction. While wildlife may use the project corridor for breeding and feeding, wildlife are expected adapt to the temporary construction disturbances and continue to thrive. The proposed project may affect individual wildlife species, but is not likely to adversely affect populations to result in a trend towards listing of the species. No grouse leks were observed in project area at the time of the surveys; therefore, timing restrictions for construction on account of impacts to leks are not required.

All construction activities shall begin after July 15 in order to avoid impacts to migratory birds during the breeding/nesting season. Additionally, all reasonable, prudent, and effective measures to avoid the taking of migratory bird species will be implemented during the construction and operation phases. These measures will include the use of suitable mufflers on all internal combustion engines and only utilizing approved roadways.

3.7.4 Vegetation

Botanical resources were evaluated using visual inspection. The project corridor was also investigated for the presence of invasive plant species.

The proposed project area consisted of numerous vegetative communities along the length of the corridor. The local topography found within and adjacent to the project corridor strongly influenced the types of vegetation found on site. ***Please refer to Table 3.4, Plant Species Summary.*** The majority of the project corridor occurred on upland sites dominated by mixed-grass prairie consisting of species such as green needle grass, little bluestem, and Western wheatgrass. ***Please refer to Exhibit 3-2, Mixed-grass Prairie.*** Wooded draws also occurred within the project corridor, consisting largely of American elm, green ash, silver buffaloberry, and chokecherry. ***Please refer to Exhibit 3-3, Wooded Draw. For a summary of dominant plant species within the corridor, please refer to the Dominant Plant Communities and Noxious Weeds Maps in Appendix A, Exhibits.***

grass prairie

'ooded Draw

Table 3.4: Plant Species Summary

Scientific Name	Common Name	Vegetation Type
Andropogon gerardii	Big bluestem	Grass
Artemisia cana	Silver Sagebrush	Forb
Artemisia frigid	Fringed Sagewort	Forb
Artemisia ludoviciana	Cudweed Sagewort	Forb
Bouteloua gracilis	Blue Grama	Grass
Echinacea angusifolia	Purple Coneflower	Forb
Fraxinus pennsylvanica	Green Ash	Woody
Grindelia squarrosa	Curly Cup Gumweed	Forb
Koeleria macrantha	Junegrass	Grass
Opuntia humifusa	Prickly Pear Cactus	Forb
Pascopyrum smithii	Western Wheatgrass	Grass
Poa pratensis	Kentucky Bluegrass	Grass
Prunus virginiana	Chokecherry	Woody
Psoralea argophylla	Silverleaf scurfpea	Forb
Rosa arkansa	Prairie Wild Rose	Forb
Schizachyrium scoparium	Little Bluestem	Grass
Shepherdia argentea	Silver Buffalo Berry	Forb
Stipa comata	Needle and Thread	Grass
Stipa viridula	Green Needle Grass	Grass
Symphoricarpos occidentalis	Western Snowberry	Forb
Ulmus americana	American Elm	Woody
Calamovilfa longifolia	Prairie Sandreed	Grass
Chrysothamnus nauseosus	Rabbitbrush	Forb
Juniperus scopulorum	Rocky Mountain Juniper	Woody
Solidago rigida	Stiff Goldenrod	Forb
Antennaria neglecta	Field Pussytoes	Forb
Andropogon hallii	Sand Bluestem	Grass
Achillea millefolium	Yarrow	Forb
Oligoneuron album	Sneezewort Aster	Forb
Astragalus missouriensis	Missouri Milkvetch	Forb
Hyacinthoides non-scripta	Bluebells	Forb
Monarda fustulosa	Wild Bergamont	Forb
Artemisia campestris	Western Sagewort	Grass
Arabis glabra	Tower Rockcress	Forb
Artistida purpurea	Red Threeawn	Grass
Allium textile	Textile Onion	Forb
Dalea purpurea	Purple Prairie Clover	Forb
Bromus tectorum L.	Cheatgrass	Grass
Carex filifolia	Threadleaf Sedge	Sedge
Gutierrezia sarothrae	Broom Snakeweed	Forb
Sphaeralcea coccinea	Scarlet Globemallow	Forb
Juniperus horizontalis	Creeping Juniper	Woody
Elaeagnus angustifolia L.	Russian Olive	Woody
Artemisia frigida	Fringed Sagewort	Forb

Table 3.4: Plant Species Summary

Scientific Name	Common Name	Vegetation Type
Melilotus officinalis	Sweet Clover	Forb
Bromus inermus	Smooth Bromegrass	Grass
Populus tremuloides	Aspen	Woody
Ribes uva-crispa L.	Gooseberry	Forb
Typhia sp.	Cattail	Grass
Boutelous curtipendula	Sideoats Grama	Grass
Panicum virgatum L.	Switchgrass	Grass
Erysimum asperum	Western Wallflower	Forb
Quercus macrocarpa	Burr Oak	Woody

In addition, the project area was surveyed for the presence of noxious weeds. Of the 11 species declared noxious under the North Dakota Century Code (Chapter 63-01.0), three are known to occur in Dunn County and seven are known to occur in McKenzie County. ***Please refer to Table 3.5, Noxious Weed Species.*** In addition, counties and cities have the option to add species to the list to be enforced only in their jurisdiction. Dunn County has not listed any additional noxious weeds. However, McKenzie County has listed black henbane, common burdock, houndstongue, halogeton, and baby's breath. Canada thistle was observed in the following locations: SW ¼ SE ¼ Section 31, T149N, R93W; NW ¼ NW ¼ Section 31, T149N, R93W; NE ¼ NW ¼ Section 33, T150N, R94W; and NW ¼ Section 33, T150N, R94W. ***Please refer to Exhibit 3-4: Canada Thistle.***

Canada Thistle

Table 3.5: County Noxious Weed Distribution

Common Name	Scientific Name	2009 Dunn County Reported Acres	2009 McKenzie County Report Acres
Absinth wormwood	*Artemesia absinthium* L.	39,300	15
Canada thistle	*Cirsium arvense (L.) Scop*	28,500	33,600
Dalmation toadflax	*Linaria genistifolia ssp. Dalmatica*	—	1
Diffuse knapweed	*Centaurea diffusa Lam*	—	1
Leafy spurge	*Euphorbia esula* L.	18,300	26,200
Musk thistle	*Carduus nutans* L.	—	—
Purple loosestrife	*Lythrum salicaria*	—	—
Russian knapweed	*Acroptilon repens (L) DC.*	—	—
Salt cedar (tamarisk)	*Tamarix ramosissima*	—	2,400
Spotted knapweed	*Centaurea maculosa Lam.*	—	5
Yellow starthistle	*Centaurea solstitalis* L.	—	—

3.7.4.1 Vegetation Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no vegetation impacts.

Alternative B (Proposed Action)—Construction of the proposed project would disturb vegetation within the project corridor. Disturbed areas would be re-vegetated following construction. Careless construction of the proposed project could introduce undesirable species to the area. Infestations within the project area could spread to neighboring tracts, causing reductions in the quality or quantity of forage or crop production. Reclamation of the disturbed area will include monitoring of the project corridor to identify and help coordinate the control of noxious weeds.

3.8 Cultural Resources

Historic properties, or cultural resources, on federal or tribal lands are protected by many laws, regulations and agreements. The National Historic Preservation Act of 1966 (16 USC 470 et seq.) at Section 106 requires, for any federal, federally assisted or federally licensed undertaking, that the federal agency take into account the effect of that undertaking on any district, site, building, structure or object that is included in the National Register of Historic Places (National Register) before the expenditure of any federal funds or the issuance of any federal license. Cultural resources is a broad term encompassing sites, objects, or practices of archaeological, historical, cultural and religious significance. Eligibility criteria (36 CFR 60.6) include association with important events or people in our history, distinctive construction or artistic characteristics, and either a record of yielding or a potential to yield information important in prehistory or history. In practice, properties are generally not eligible for listing on the National Register if they lack diagnostic artifacts, subsurface remains or structural features, but those considered eligible are treated as though they were listed on the National Register, even when no formal nomination has been filed. This process of taking into account an undertaking's effect on historic properties is known as "Section 106 review," or more commonly as a cultural resource inventory.

The area of potential effect (APE) of any federal undertaking must also be evaluated for significance to Native Americans from a cultural and religious standpoint. Sites and practices may be eligible for protection under the American Indian Religious Freedom Act of 1978 (42 USC 1996). Sacred sites may be identified by a tribe or an authoritative individual (Executive Order 13007). Special protections are afforded to human remains, funerary objects, and objects of cultural patrimony under the Native American Graves Protection and Repatriation Act (NAGPRA, 25 USC 3001 et seq.).

Whatever the nature of the cultural resource addressed by a particular statute or tradition, implementing procedures invariably include consultation requirements at various stages of a federal undertaking. The MHA Nation has designated a Tribal Historic Preservation Officer (THPO) by Tribal Council resolution, whose office and functions are certified by the National Park Service. The THPO operates with the same authority exercised in most of the rest of North Dakota by the State Historic Preservation Officer (SHPO). Thus, BIA consults and corresponds with the THPO regarding cultural resources on all projects proposed within the exterior boundaries of the Fort Berthold Reservation.

Cultural resource inventories of these pipeline routes were conducted by personnel of Beaver Creek Archaeology, Inc., using an intensive pedestrian methodology. For the portions of the line located in Sections 24 and 25, T148N, R94W, Section 31, T148N, R93W and Sections 6 and 7, T147N, R93W; and in Sections 31, 32 and 33, T149N, R94W and Sections 25 and 36, T149N, R95W, approximately 131.04 acres were inventoried on October 13, 2009 (W. Burns 2009). No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. Five "avoidance areas" were located that may qualify for protection under the American Indian Religious Freedom Act (42 USC 1996). As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of no historic properties affected for this undertaking. This determination was communicated to the THPO on November 16, 2009; however, the THPO did not respond within the allotted 30 day comment period. For the remaining portions of this pipeline project approximately 215 acres were inventoried between June 1 and July 27, 2010 (C. Burns 2010a). One previously recorded archaeological site was located that had been evaluated as a historic property that possesses the quality of integrity and meets at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of adverse effect for this portion of the undertaking as then designed. This determination was communicated to the THPO on August 11, 2010, and the THPO concurred on August 17, 2010. An additional 14 acres for a reroute through this site and another 6 acres segment of pipeline were inventoried, and evaluative testing of that portion of the archaeological site that would be impacted by the pipeline construction was conducted between August 23 and 25, 2010 (C. Burns 2010b) to determine if that portion of the site contributed to its eligibility for the National Register. As no cultural materials were found in these excavations (ibid.), BIA reached a determination of no adverse effect for this portion of the project. This determination was communicated to the THPO on September 1, 2010, and the THPO concurred on that same day.

3.8.1 Cultural Resource Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no cultural resource impacts.

Alternative B (Proposed Action)—The proposed pipelines have been positioned to avoid impacts to cultural resources with the exception of one previously recorded site. This site has been unevaluated for listing and will be tested prior to construction activity to determine eligibility for listing. If cultural resources are discovered during construction or operation, work shall immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery, work shall not resume until written authorization to proceed has been received from the BIA. All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.

3.9 Socioeconomic Conditions

Socioeconomic conditions depend on the character, habits, and economic conditions of people living within the proposed project area. The proposed action's effects on businesses, employment, transportation, utilities, etc., are factors that affect the social climate of a community. Other factors that distinguish the social habits of one particular area from another include the geography, geology, and climate of the area.

The Fort Berthold Reservation and Dunn and McKenzie Counties have lower than statewide averages of per capita income and median household income. In addition, they have higher rates of unemployment and individuals living below poverty level than the state average. ***Please refer to Table 3.6, Employment and Income.***

Table 3.6: Employment and Income

Location	Per Capita Income	Median Household Income	Unemployment Rate	Individuals Below Poverty Level
Dunn County	$14,624	$30,015	4.0%	17.5%
McKenzie County	$14,732	$29.342	4.1%	17.2%
Fort Berthold Reservation	$10,291	$26,274	6.4%	28.1%
North Dakota	$17,769	$34,604	3.0%	11.9%

Source: U.S. Census Bureau, 2000

Population decline in rural areas of North Dakota has been a growing trend as individuals move toward metropolitan areas of the state, such as Bismarck and Fargo. While the Dunn and McKenzie County population has been slowly declining, the Fort Berthold Reservation has experienced a steady increase in population. American Indians are the majority population on the Fort Berthold Reservation but are the minority population in Dunn and McKenzie Counties and the state of North Dakota. ***Please refer to Table 3.7, Demographic Trends.***

Table 3.7: Demographic Trends

Location	Population in 2000	% of State Population	% Change 1990–2000	Predominant Race	Predominant Minority
Dunn County	3,600	0.56%	-10.1%	White	American Indian (12%)
McKenzie County	5,737	0.89%	-11.3%	White	American Indian (21.2%)
Fort Berthold Reservation	5,915	0.92%	+9.8%	American Indian	White (26.9%)
North Dakota	642,000	—	+0.5%	White	American Indian (5%)

Source: U.S. Census Bureau, 2000

3.9.1 Socioeconomic Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact the socioeconomic conditions in the project area. However, Alternative A would allow the continued loss of valuable natural resources through current flaring practices rather than being brought to market, and corresponding royalty payments would be lost.

Alternative B (Proposed Action)—The proposed project is not anticipated to substantially impact the socioeconomic conditions in the project area, but it does have the potential to yield minor beneficial impacts on Tribal income. This may occur through minor increases in royalty payments due to capturing natural gas which is currently being lost through flaring practices.

3.10 Environmental Justice

Per Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, measures must be taken to avoid disproportionately high adverse impacts on minority or low-income communities. With 28% of its population living below the poverty line and the majority of its population of American Indian ancestry, the Fort Berthold Reservation contains both minority and low-income communities.

3.10.1 Environmental Justice Impacts/Mitigation

Alternative A (No Action)—Alternative A would not result in disproportionate impacts to minority or low-income populations.

Alternative B (Proposed Action)—Alternative B is not anticipated to result in disproportionately adverse impacts to minority or low-income populations. The proposed action would not require the relocation of homes or businesses, and no community disruptions are expected.

3.11 Infrastructure and Utilities

The Fort Berthold Reservation's infrastructure consists of roads, bridges and access points, utilities, and facilities for water, wastewater, and solid waste.

Known utilities and infrastructure within the vicinity of the proposed project include both paved and gravel roadways as well as existing and proposed rural water distribution pipelines. Numerous roadways occur throughout the project corridor, including North Dakota State Highway 22, BIA 12, BIA 14, BIA 30, and Turnuey Ridge Road. In addition, BIA 17 occurs adjacent to the project corridor. North Dakota Highway 22 is known as Killdeer Mountain Four Bears Scenic Byway. To qualify as a scenic byway, the roadway must be an all weather surface which possesses a scenic, natural, historical, cultural, archeological or recreational aspect. Existing or proposed water pipelines also occur throughout the project corridor.

Additionally, there are currently 316 active and/or proposed oil and gas wells on the Fort Berthold Reservation. Proposed and/or existing pipelines provide infrastructure connecting a number of these wells.

3.11.1 Infrastructure and Utility Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no infrastructure or utility impacts.

Alternative B (Proposed Action)—The proposed pipelines cross all of the aforementioned roadways, with the exception of BIA 17. Directional drilling (boring) is planned at all roadway crossings and, therefore, no impacts to roadways are anticipated. Construction of the project may temporarily impact the scenic qualities of the Byway; however, these impacts are anticipated to cease once construction is completed. No other mitigation measures would be required for construction of the proposed pipelines.

In addition, the proposed pipelines cross FBRW existing or proposed water pipelines in several locations. The FBRW pipeline is typically buried to a depth greater than the 48-inch depth of the proposed pipelines. The FBRW pipeline would be located at the crossing locations to ensure construction of the proposed pipelines would cause no impacts to the FBRW pipeline.

In addition, the proposed project would initially provide infrastructure for at least 30 oil and gas wells on the Fort Berthold Reservation, which is anticipated to be a beneficial impact.

3.12 Public Health and Safety

Health and safety are key concerns on any construction project. One major objective in designing and constructing a pipeline is to minimize the risk to public health and safety. Typically, the highest probability

of an accident occurs during the construction phase due to the variety of equipment, number of personnel and types of activity which are present during this period.

Generally, negative impacts, such as noise, dust, air pollution from the use of fossil fuels, ground water contamination from liquid spills as well as traffic hazards from construction are temporary. These temporary negative impacts can be controlled through routine education, safety reminders/briefings, careful planning and proper preparation.

Combustion and explosive hazards, although an uncommon possibility in and around operating pipelines, are none the less an important consideration when evaluating public health and safety for any project. The risk and extent of negative impact from system operation is considerably more difficult to predict than the impact from construction due to the many, diverse variables involved.

The size of an area which can potentially be affected by a pipeline leak or rupture and possible resulting fire, or even an explosion, is specific to each particular site. In many instances it is impossible to find a route which does not have some possible negative impact during the life of a project. The ultimate goal is therefore to route, design and construct the pipelines in a manner which has the least probable impact on the environment and on society.

Factors which must be considered in establishing a pipeline corridor location and width include:

- Pipeline diameter, pipe material, and pressure rating
- Normal operating pressure of pipeline
- Product to be conveyed by the pipeline
- Depth to bury below the ground surface
- Type of soil
- Presence of vegetation (grass, trees, shrubs, barren etc.)
- Possibility of leak, fire, explosion, product discharge to surface or ground water etc.
- Topography (flat, rolling, badlands etc) and minimum and maximum gradients of terrain
- Historical wind speed and direction
- Existing nearby structures, occupied and unoccupied
- Nearby roads and trails

3.12.1 Public Health and Safety Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no public health or safety impacts.

Alternative B (Proposed Action)—The 12-inch or smaller diameter steel pipelines proposed for this project are to be buried a minimum of six feet below the ground surface. Soil conditions found along the pipeline corridor vary from sandy to clay. The initial normal operating pressure is expected to be approximately 800 psig but future pressures could be much greater. The maximum allowable operating pressure (MOAP) for these pipelines is 1,400 psig. The products being conveyed within the pipelines include natural gas and crude oil, either of which can be highly flammable and explosive. The topography along the pipeline corridor is variable, ranging from flat with nearly no slope to 1:1 slopes (nearly vertical). Vegetative communities range from native uplands and hardwood draws to farmed agricultural fields. Historical wind direction is from the northwest and velocity varies from 0 mph to >40 mph.

An explosion, although extremely unlikely, is possible; therefore, human safety and structural damage are potentially at risk. A gas pipeline rupture within the normal operating pressure could, depending on soil conditions and exact location, create a crater 50–100 feet in diameter depending on the depth of the

buried pipeline, pipeline diameter, actual pipeline pressure, and soil conditions. If a fire resulted, temperatures could reach well in excess of several thousand degrees Fahrenheit at the point of rupture and decrease outward, depending upon wind speed and direction as well as ambient temperatures and vegetative foilage in the area. This could cause structural damage in an area up to 2,500 feet downwind of the point of the blast.

Based upon the above information, the blast impact corridor width would be approximately one mile (½-mile on each side of the proposed pipeline). Aerial view imagery shows 20 residences located within this mile-wide corridor, including a number of residences/structures on the incorporate boundary of Mandaree. This corridor also includes approximately 1.4 miles of BIA 30, 0.5 miles of BIA 12, 2.0 miles of BIA 14, 4.1 miles of BIA 17, 3.1 miles of ND Highway 22, 0.9 miles of ND Highway 73, 0.9 miles of County Road 53, 1.5 miles of Turnuey Ridge Road, and 11.5 miles of additional roads and trails which could be utilized at various times of the year. ***Please refer to the Blast Zone Perimeter Map in Appendix A, Exhibits.***

3.13 Cumulative Considerations

Cumulative impacts result from the incremental consequences of an action "when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). Effects of an action may be minor when evaluated in an individual context, but these effects can add to other disturbances and collectively may lead to a measureable environmental change. By evaluating the impacts of the proposed action with the effects of other actions, the relative contribution of the proposed action to a projected cumulative impact can be estimated.

3.13.1 Past, Present, and Reasonably Foreseeable Actions

At the time this EA was written, there were approximately 316 active and/or proposed oil and gas wells within the Fort Berthold Reservation and 26 active and/or proposed oil and gas wells within one mile of the project corridor. Commercial success at any new well may result in additional nearby oil/gas exploration proposals, but such developments remain speculative until APDs have been submitted to the BLM or BIA. While specific developments are speculative, published estimates from the North Dakota Department of Mineral Resources indicate that oil and gas development in the Bakken Formation (both inside and outside the Reservation Boundaries) is expected to continue for the next 3–4 decades or longer if technology improves.

In addition to oil and gas activity within the project area, the Bureau of Reclamation is in the process of expanding its water distribution system on the Fort Berthold Reservation and has identified existing and proposed water distribution lines in the vicinity of the proposed project.

3.13.2 Cumulative Impacts

Pipelines within the area generally result in temporary surface disturbance, as would the proposed pipelines; therefore, when adding to past, present, or reasonably foreseeable pipeline proposals, it is not anticipated that a cumulative impact would occur.

Furthermore, the proposed project impacts are mainly related to construction and, therefore, would not add to the impacts resulting from operation of existing oil and gas wells or the construction and operation of potential future oil and gas wells. Temporary cumulative impacts in the form of wildlife and habitat disturbance may occur if project construction would overlap construction of additional oil and gas wells, or other unidentified projects, in the area. However, following construction, the project corridor would be

returned to preconstruction conditions and is not anticipated to result in permanent disturbance to wildlife or associated habitat. In the long-term, the proposed project is anticipated to aid in the reduction of air emissions within the project area through reduced flaring from connected well sites and reduced truck traffic to these sites. When added to potential impacts of future phases of the pipelines, the reduction in air emissions is anticipated to provide a cumulative benefit.

3.14 Irreversible and Irretrievable Commitment of Resources

Potential irreversible and irretrievable commitments of resources include soil lost through wind and water erosion, cultural resources inadvertently destroyed, wildlife killed during earthmoving activities or in collisions with vehicles, and energy expended during construction and operation.

3.15 Short-term Use of the Environment Versus Long-term Productivity

Short-term activities would not detract significantly from long-term productivity of the project area. The project area would generally remain available for livestock grazing, wildlife habitat and other uses. The Tribe and/or allottees with surface rights would be compensated for loss of productive acreage during construction. Successful and ongoing reclamation of the landscape would quickly support wildlife and livestock grazing, stabilize the soil, and reduce the potential for erosion and sedimentation. Long-term productivity of the oil and gas wells attached to the proposed pipeline would improve as previously lost hydrocarbons are collected and brought to market. In addition, there would be a long-term benefit as the proposed project would reduce air emissions associated with flaring and trucking of stored liquids at these well sites.

3.16 Permits

Prior to construction the developer would need to apply for a utility crossing permit from the NDDOT, Williston District Office, for boring under ND State Highway 22. On Indian land in North Dakota the EPA is responsible for permitting Storm Water Pollution Prevention Plans (SWPPP) through permit NDR1000I using the National Pollutant Discharge Elimination System (NPDES). For NPDES permitting, both the construction and operation activities for oil and gas are subject to permitting if any of three criteria are met:

- Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at any time since November 16, 1987;
- Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or
- Contributes to a violation of a water quality standard.

Construction of the proposed pipelines does not meet any of the three criteria; therefore, a SWPPP is not required for construction of the proposed project. Should one of these criteria be met during construction or operation of the pipelines, a SWPPP would need to be acquired through coordination with the EPA.

3.17 Environmental Commitments/Mitigation

The following commitments have been made by SBP:

- Topsoil will be segregated and stored on-site to be used in the reclamation process. All disturbed areas will be re-contoured to original elevations as part of the reclamation process.

- BMPs will be implemented to minimize wind and water erosion of soil resources.
- Water will be used as a palliative to control dust during construction.
- Disturbed vegetation will be re-seeded with an approved seed mixture from the BIA Environmental Protection Specialist upon completion of the project. The seeding will be maintained until such time that the vegetation be consistent with surrounding undisturbed areas and the area be free of noxious weeds.
- If cultural resources are discovered during construction or operation, work shall immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery, work shall not resume until written authorization to proceed has been received from the BIA.
- All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.
- If a bald or golden eagle or eagle nest is sighted within 0.5 miles of the project construction area, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.
- Following construction, disturbed wetlands will be returned to pre-construction contours and re-seeded with an approved seed mixture from the BIA Environmental Protection Specialist.
- Prior to construction, SBP will coordinate with the Fort Berthold Water Authority Director to ensure minimization of impacts to existing water distribution pipelines.
- Utility modifications will be identified during design and coordinated with the appropriate utility company.
- Disposal areas will be properly fenced to prevent human or animal access.
- Suitable mufflers will be put on all internal combustion engines and certain compressor components to mitigate noise levels.
- No construction activities will take place between March 1 and July 15 in order to avoid potential impacts to raptors and migratory bird breeding and nesting.
- If a whooping crane is sighted within one-mile of a well site or associated facilities while it is under construction, that all work cease within one-mile of that part of the project and the USFWS be contacted immediately. In coordination with USFWS, work may resume after the bird(s) leave the area.
- The crossing of identified wetland areas during the proposed construction is to be conducted in a manner which causes minimal disturbance with no fill being placed within the wetland basin, along with immediate reclamation of the site. Equipment would be required to remain outside the basin to the greatest extent practicable to minimize disturbance to the wetland vegetation.
- If trenching within a wet area, pipe will be laid and reclamation will take place within a 24-hour period.
- All slopes greater than 15 percent will be hydroseeded.
- During reclamation, slopes shall be roughened to reduce erosion.
- Straw wattles, silt fence, or water bars shall be installed on all slopes greater than 5 percent.
- Trees and shrubs with a trunk diameter greater than four inches will be chipped and spread as erosion control. Small shrubs will be buried, shredded, or left with backfill and respread during reclamation.

4.0 Preparers and Agency Coordination

4.1 Introduction

This chapter identifies the names and qualifications of the principal people contributing information to this EA. In accordance with Part 1502.6 of the CEQ (Council on Environmental Quality) regulations for implementing the National Environmental Policy Act, the efforts of an interdisciplinary team comprising technicians and experts in various fields were required to accomplish this study.

This chapter also provides information about consultation and coordination efforts with agencies and interested parties, which has been ongoing throughout the development of this EA.

4.2 Preparers

Kadrmas, Lee & Jackson, Inc. prepared this EA under a contractual agreement between Saddle Butte Pipeline, LLC and Kadrmas, Lee & Jackson, Inc. A list of individuals with the primary responsibility for conducting this study, preparing the documentation, and providing technical reviews is contained in ***Table 4.1, Preparers.***

Table 4.1: Preparers

Affiliation	Name	Title	Project Role
Bureau of Indian Affairs	Marilyn Bercier	Regional Environmental Scientist	Review of Draft EA and recommendation to Regional Director regarding FONSI or EIS
	Mark Herman	Environmental Engineer	Review of Draft EA and recommendation to Regional Director regarding FONSI or EIS
Saddle Butte, LLC	Jim Nichols	Senior Project Manager	Project development, document review
Kadrmas, Lee & Jackson	Charlotte Brett	Environmental Planner	Quality Assurance/Quality Control
	Jerry Krieg	Professional Engineer	Client coordination
	Becky Rude	Environmental Planner	Client and agency coordination, impact assessment, primary document author
	Skip Skattum	GIS Analyst	Impact assessment, exhibit creation
	Grady Wolf	Environmental Scientist	Field resources surveys
Beaver Creek Archaeology	Wade Burns	Principal Investigator	Cultural resources surveys

4.3 Agency Coordination

To initiate early communication and coordination, an early notification package to tribal, federal, state, and local agencies and other interested parties was distributed on May 18, 2010. This scoping package included a brief description of the proposed project, as well as a location map. Pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, a solicitation of views was requested to ensure that social, economic, and environmental effects were considered in the development of this project. ***Appendix A contains Agency Scoping Materials.***

At the conclusion of the 30-day comment period, 13 responses were received. These comments provide valuable insight into the evaluation of potential environmental impacts. The comments were referenced and incorporated where appropriate within the environmental impact categories addressed in this document. ***Appendix B contains Agency Scoping Responses.***

4.4 Public Involvement

Provided the BIA approves this document and determines that the proposed action would not result in any significant environmental impacts, a Finding of No Significant Impact (FONSI) will be issued. The FONSI is followed by a 30-day public appeal period. BIA will advertise the FONSI and public appeal period by posting notices in public locations throughout the Reservation. No construction activities may commence until the 30-day public appeal period has expired.

5.0 References

"Bald Eagle Fact Sheet: Natural History, Ecology, and History of Recovery." U.S. Fish & Wildlife Service. June 2007. U.S. Department of Interior, U.S. Fish & Wildlife Service, Midwest Region. Web. 7 June 2010. <http://www.fws.gov/midwest/eagle/recovery/biologue.html>.

"The Cranes Status Survey and Conservation Action Plan Whooping Crane (*Grus americana*)." U.S. Geological Survey Northern Prairie Wildlife Research Center. 3 Aug. 2006. U.S. Department of Interior, U.S. Geological Survey, Northern Prairie Wildlife Research Center. Web. 7 June 2010. <http://www.npwrc.usgs.gov/resource/birds/cranes/grusamer.htm>.

"Fact Sheet: Pallid Sturgeon (*Scaphiryhynchus albus*)." U.S. Fish & Wildlife Service. 29 Mar. 2010. U.S. Department of Interior, U.S. Fish & Wildlife Service, Midwest Region. 7 June 2010. <http://www.fws.gov/midwest/endangered/fishes/palld_fc.html>.

North Dakota State Water Commission and U.S. Geological Survey. USGS Digital Elevation Models for North Dakota. U.S. Department of Interior, U.S. Geological Survey. Web. 19 July 2010. <http://www.nd.gov/gis/>.

---. USGS Hydrography Dataset for North Dakota. U.S. Department of Interior, U.S. Geological Survey. Web. 19 July 2010. <http://nhd.usgs.gov/>.

"Golden Eagle." National Geographic. Web. 7 June 2010. <http://animals.nationalgeographic.com/animals/birds/golden-eagle.html>.

"Gray Wolves in the Northern Rocky Mountains." U.S. Fish & Wildlife Service. 1 June 2010. U.S. Department of Interior, U.S. Fish & Wildlife Service, Mountain-Prairie Region. Web. 7 June 2010. <http://www.fws.gov/mountain-prairie/species/mammals/wolf/>.

"Hawks, Eagles, and Falcons of North Dakota." U.S. Geological Survey Northern Prairie Wildlife Research Center. 3 Aug. 2006. U.S. Department of Interior, U.S. Geological Survey, Northern Prairie Wildlife Research Center. Web. 7 June 2010. <http://www.npwrc.usgs.gov/resource/birds/hawks/intro.htm>.

"Least Tern (Interior Population)." U.S. Fish & Wildlife Service. 2 Nov. 2009. U.S. Department of Interior, U.S. Fish & Wildlife Service, Midwest Region. Web. 7 June 2010. <http://www.fws.gov/midwest/Endangered/birds/tern.html>.

"Least Tern (*Sterna antillarum*)." U.S. Fish & Wildlife Service. 18 Dec. 2008. U.S. Department of Interior, U.S. Fish & Wildlife Service, North Dakota Field Office. Web. 7 June 2010. <http://www.fws.gov/northdakotafieldoffice/endspecies/species/least_tern.htm>.

"Major Research Gives Insight into the Needs of Whooping Cranes." GBRA. 29 April 2009. Guadalupe-Blanco River Authority. Web. 7 June 2010. <http://www.gbra.org/News/2009042901.aspx>.

— 1979. Soil Survey for McLean County, North Dakota. U.S. Department of Agriculture, Soil Conservation Service. U.S. Government Printing Office.

North Dakota Department of Health. Annual Report: North Dakota Air Quality Monitoring Data Summary 2008. North Dakota Department of Health, Bismarck: June 2009.

North Dakota State Water Commission Staff. Query Water Permits. State of North Dakota, State Water Commission. Web. 27 July 2010. <http://www.swc.state.nd.us/4dlink7/4dcgi/permitsearchform/Permits>.

Northern Prairie Wildlife Research Center. 24 Aug. 2006. Ecoregions of North Dakota and South Dakota. Web. 7 June 2010. <http://www.npwrc.usgs.gov/resource/habitat/ndsdeco/index.htm>.

"Noxious Weeds Team." North Dakota Department of Agriculture. Web. 7 June 2010. <http://www.agdepartment.com/Programs/Plant/NoxiousWeeds.html>.

"Piping Plover." U.S. Fish & Wildlife Service. U.S. Department of Interior, U.S. Fish & Wildlife Service, Mountain-Prairie Region. Web. 18 Dec. 2009. <http://www.fws.gov/mountainprairie/species/birds/pipingplover/>.

"Three Forks formation to yield lots of oil in North Dakota." Bismarck Tribune Online. Posted 30 Apr. 2010. http://www.bismarcktribune.com/news/state-and-regional/article_368dcb38-53ef-11df-a6c8-001cc4c03286.html.

United States. "Whooping Crane Recovery Plan Revised." U.S. Fish & Wildlife Service. 29 May 2007. <http://www.fws.gov/mountainprairie/pressrel/WO_717_Whooping_crane_recovery planpr.pdf >.

U.S. Census Bureau. 16 July 2010. <http://www.census.gov>.

U.S. Department of Agriculture. Spatial and Tabular Data of the Soil Survey for Dunn County, North Dakota. U.S. Department of Agriculture, Natural Resources Conservation Service. Web. 28 July 2010. <http://soildatamartnrcs.usda.gov/>.

---. Spatial and Tabular Data of the Soil Survey for McKenzie County, North Dakota. U.S. Department of Agriculture, Natural Resources Conservation Service. Web. 28 July 2010. <http://soildatamartnrcs.usda.gov/>.

---. 1982. Soil Survey for Dunn County, North Dakota. U.S. Department of Agriculture, Soil Conservation Service. U.S. Government Printing Office.

---. 2006. Soil Survey for McKenzie County, North Dakota. U.S. Department of Agriculture, Soil Conservation Service. U.S. Government Printing Office.

U.S. Fish & Wildlife Service—North Dakota Field Office. 17 Mar. 2010. County Occurrence of Endangered, Threatened, and Candidate Species and Designated Critical Habitat in North Dakota. 7 June 2010. <http://www.fws.gov/northdakotafieldoffice/county_list.htm>.

Burns, Christina

(2010a) The 2010 Trunk Line Northern Section Pipeline: A Class III Cultural Resource Inventory, McKenzie and Dunn Counties, North Dakota. Beaver Creek Archaeology, Inc. for Saddle Butte Pipeline, LLC, Durango, CO.

(2010b) Project: 32DU620 Evaluative Testing / Pipeline Inventory, Location: Fort Berthold Reservation, Dunn County... Beaver Creek Archaeology, Inc. for Saddle Butte Pipeline, LLC, Durango, CO.

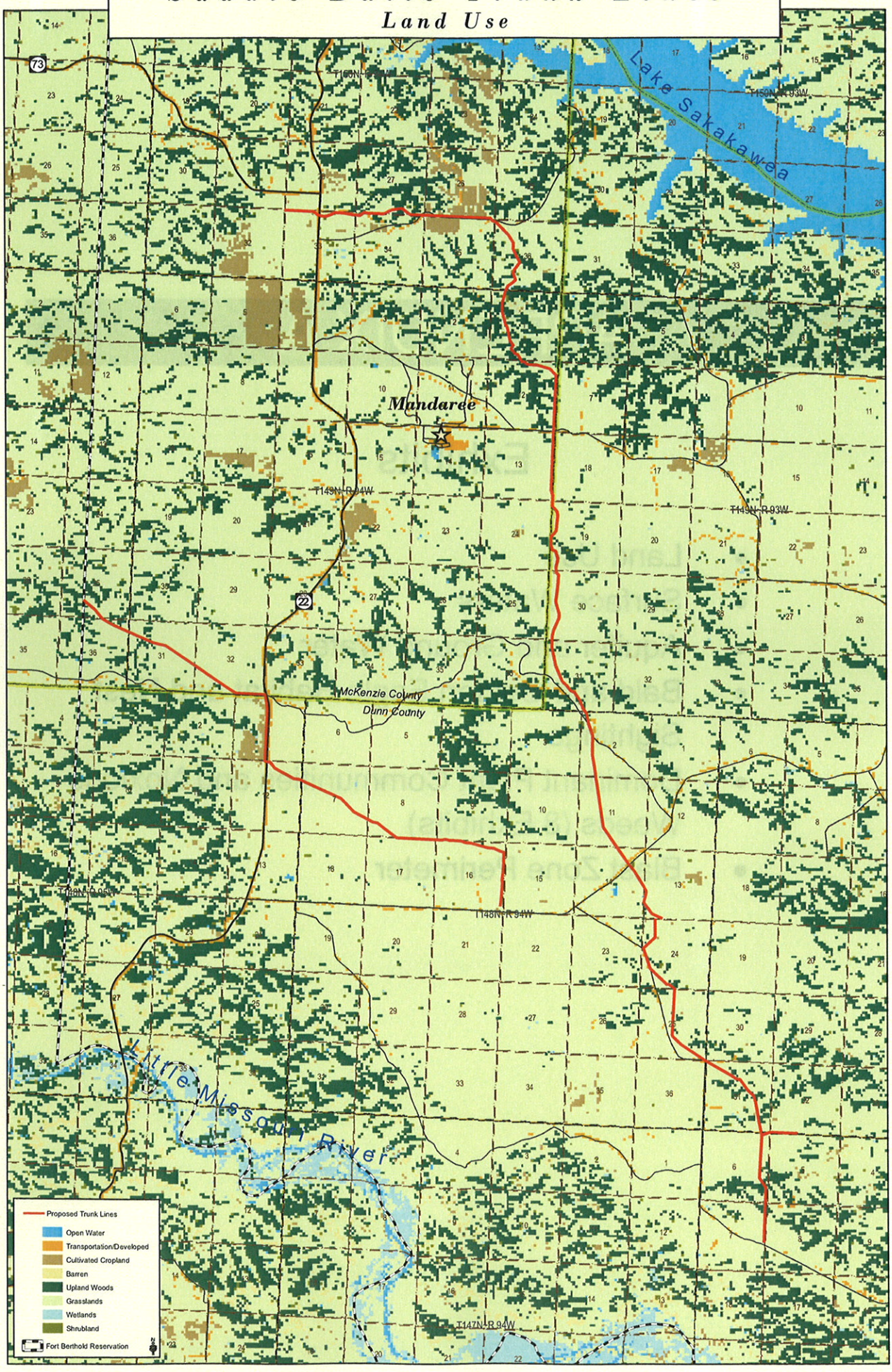
Burns, Wade
(2009) Three Saddle Butte Pipeline Connection Projects: A Class III Cultural Resource Inventory, Dunn and McKenzie Counties, North Dakota. Beaver Creek Archaeology for Saddle Butte Pipeline, LLC, Durango, CO.

APPENDIX A

Exhibits

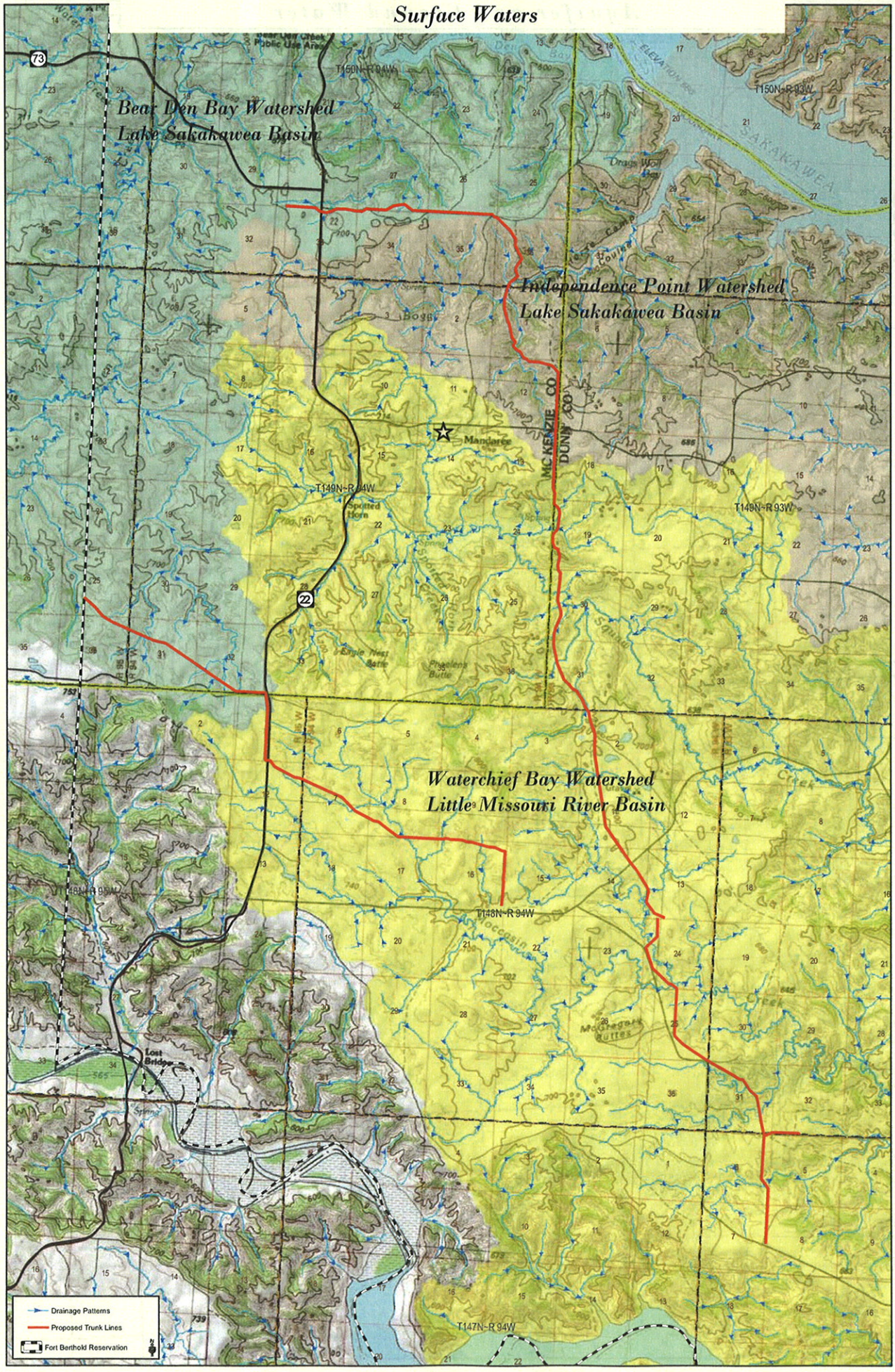
- Land Use
- Surface Waters
- Aquifer and Ground Water
- Bald and Golden Eagle Habitat and Nest Sightings
- Dominant Plant Communities and Noxious Weeds (8 Exhibits)
- Blast Zone Perimeter

Saddle Butte Trunk Lines
Land Use

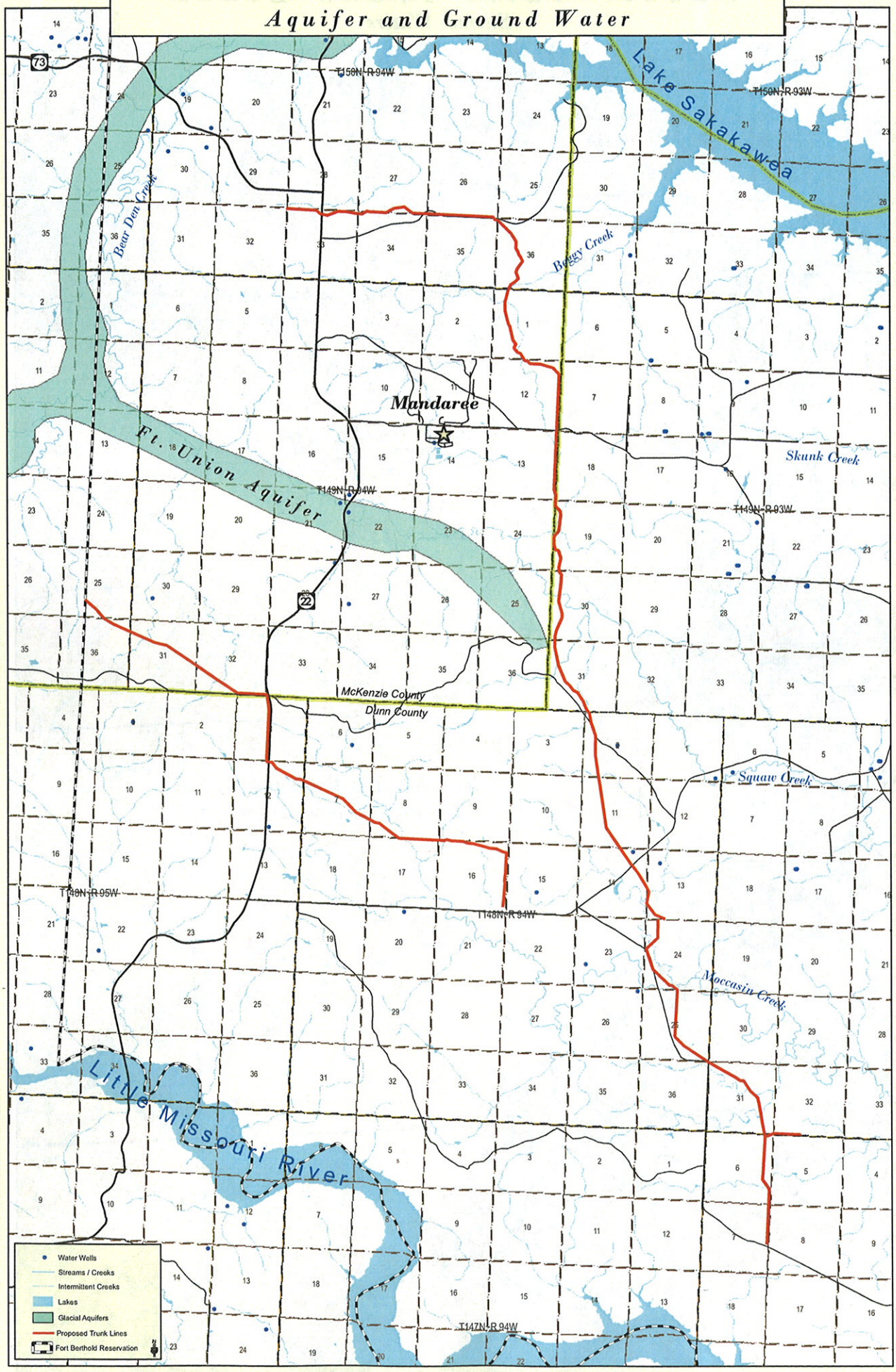


Saddle Butte Trunk Lines

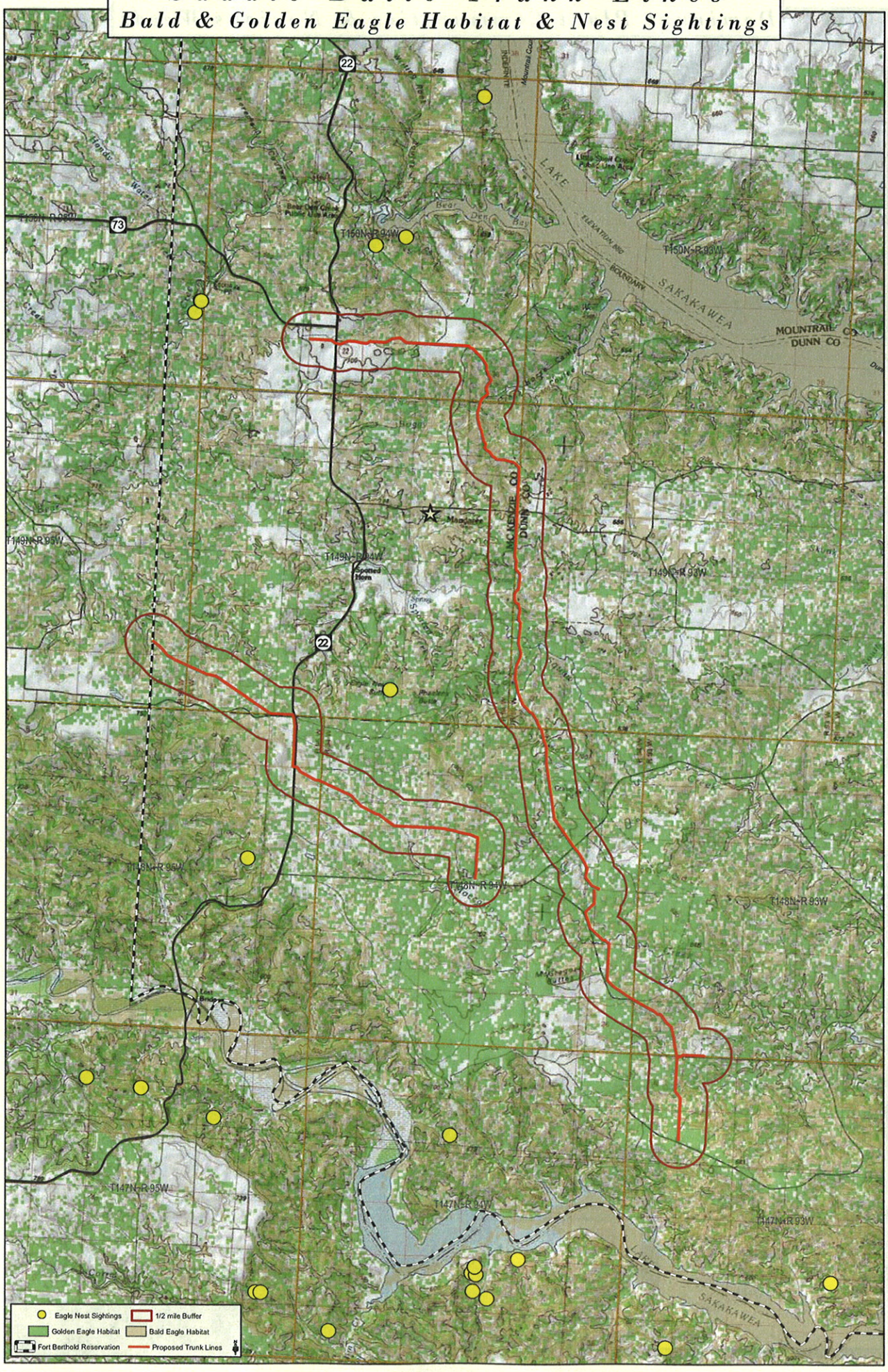
Surface Waters



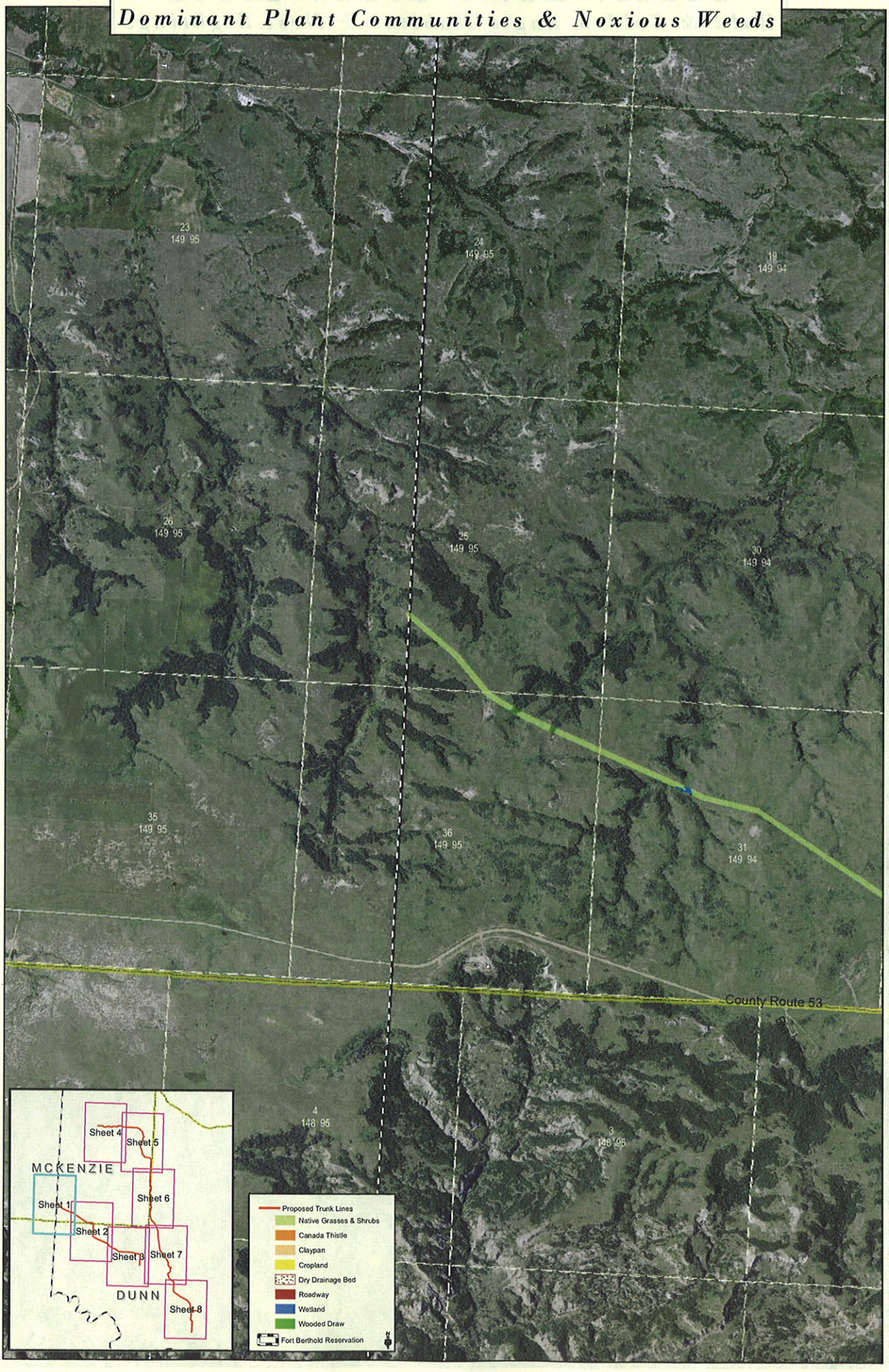
Saddle Butte Trunk Lines
Aquifer and Ground Water



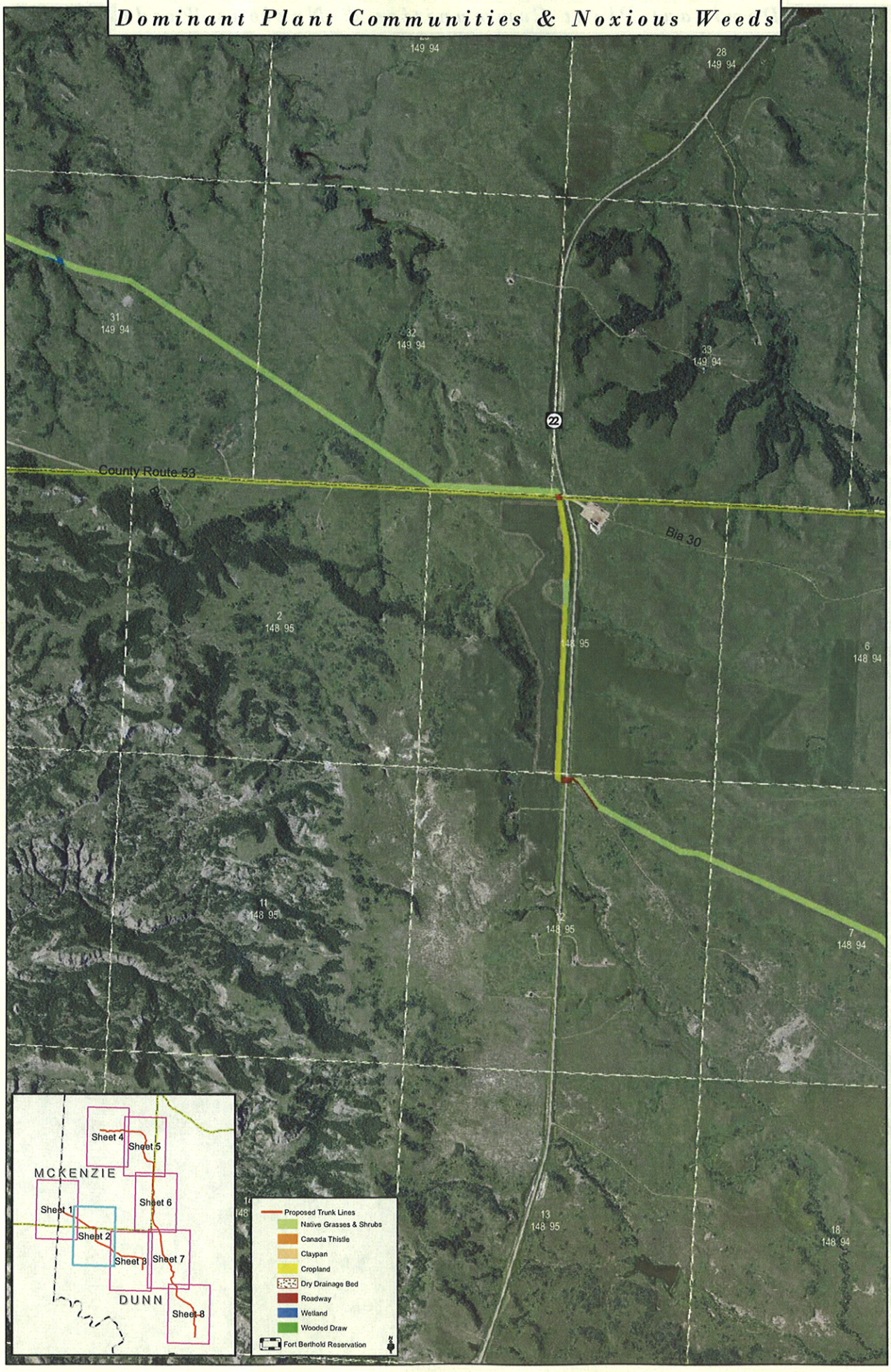
Saddle Butte Trunk Lines
Bald & Golden Eagle Habitat & Nest Sightings



Saddle Butte Trunk Lines
Dominant Plant Communities & Noxious Weeds



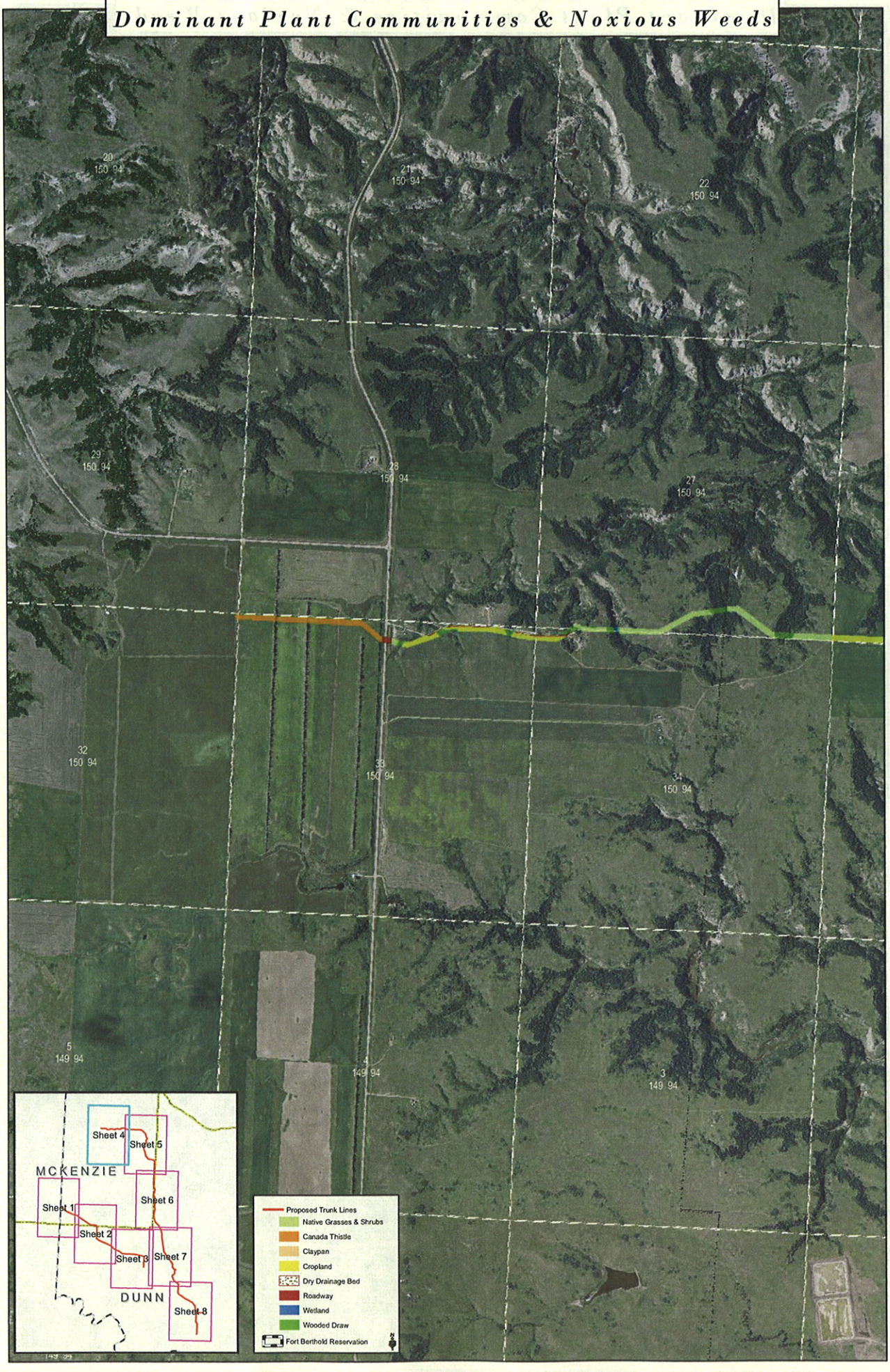
Saddle Butte Trunk Lines
Dominant Plant Communities & Noxious Weeds



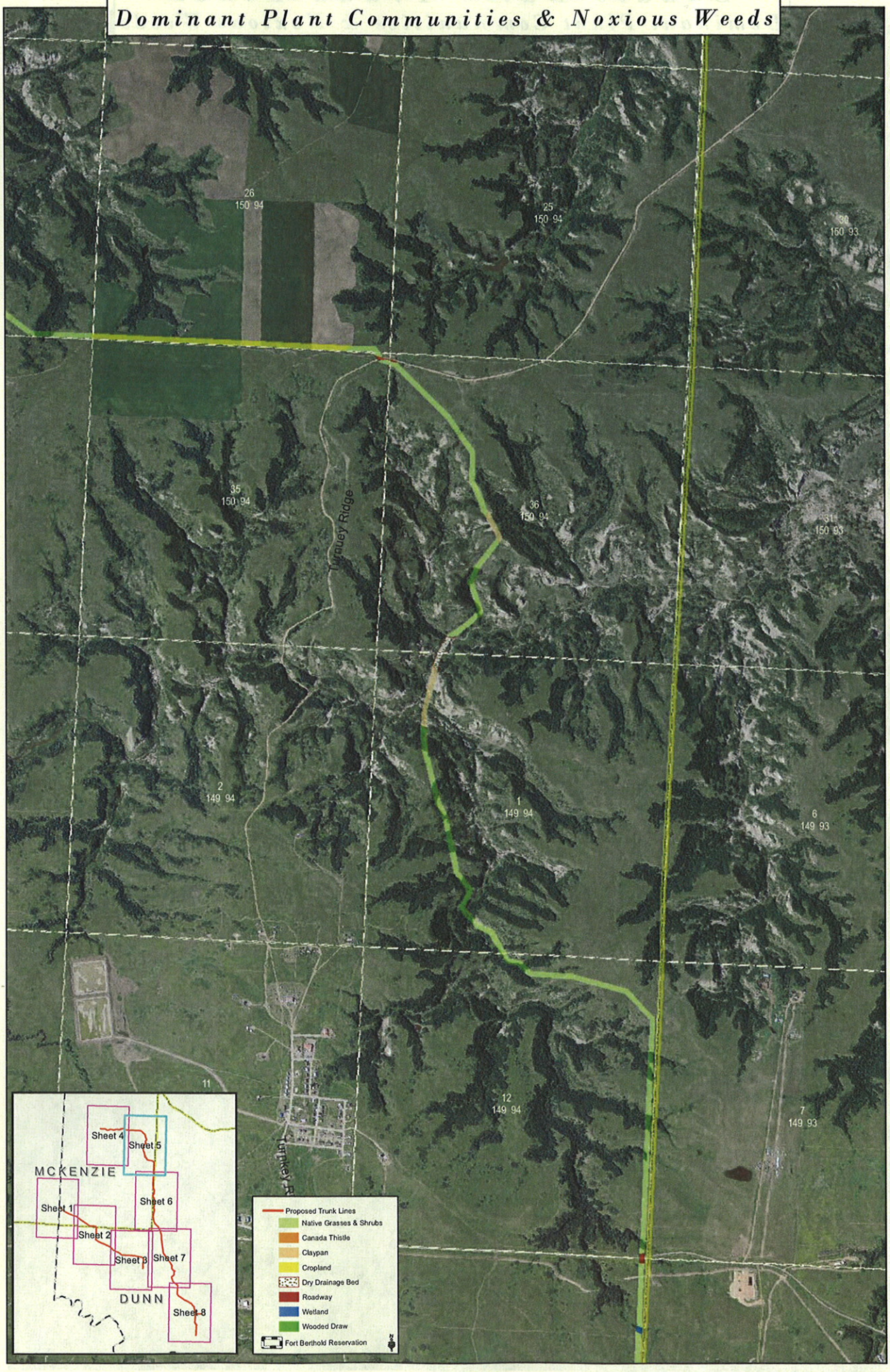
Saddle Butte Trunk Lines
Dominant Plant Communities & Noxious Weeds

Saddle Butte Trunk Lines

Dominant Plant Communities & Noxious Weeds

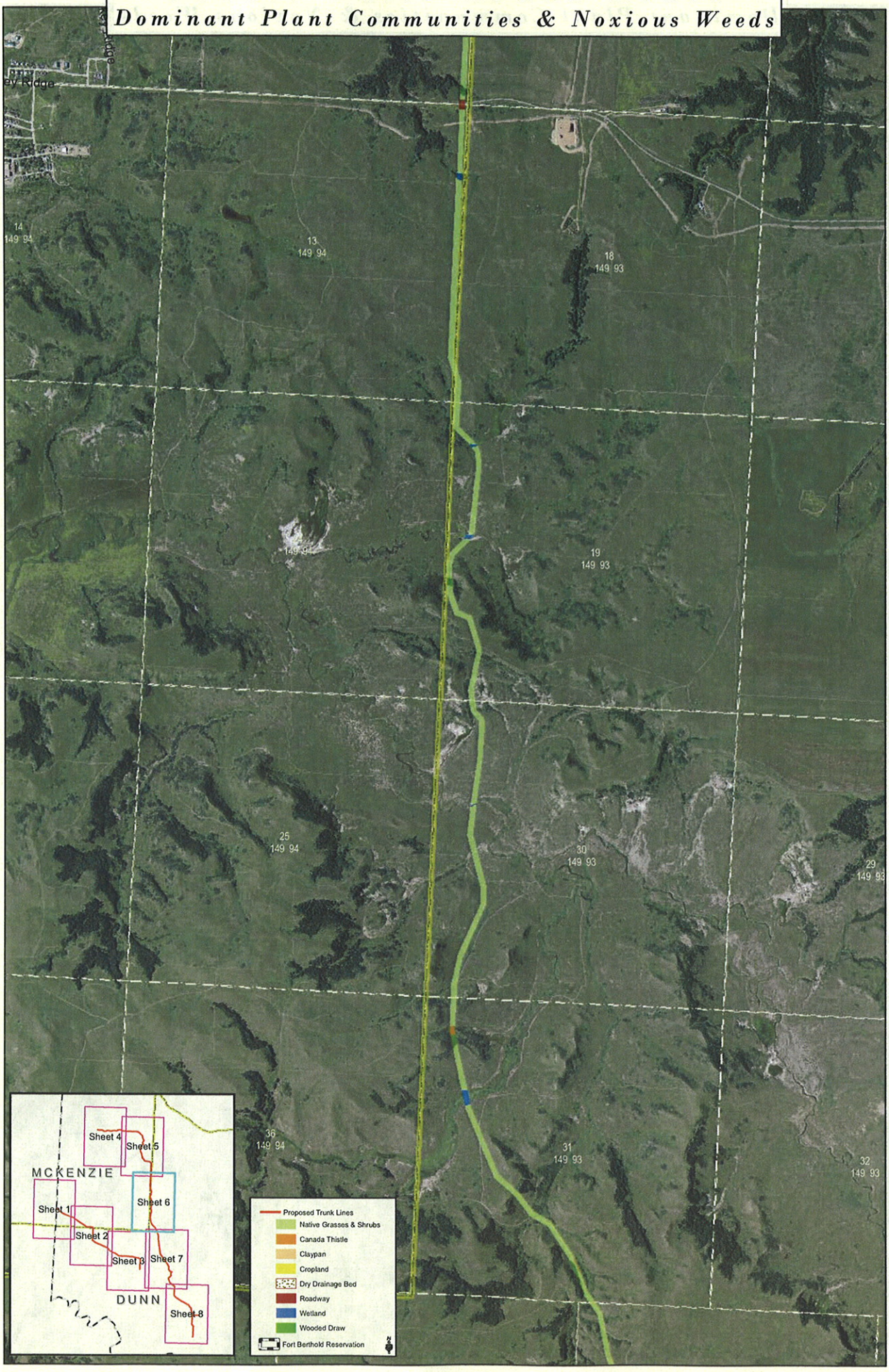


Saddle Butte Trunk Lines
Dominant Plant Communities & Noxious Weeds



Saddle Butte Trunk Lines

Dominant Plant Communities & Noxious Weeds

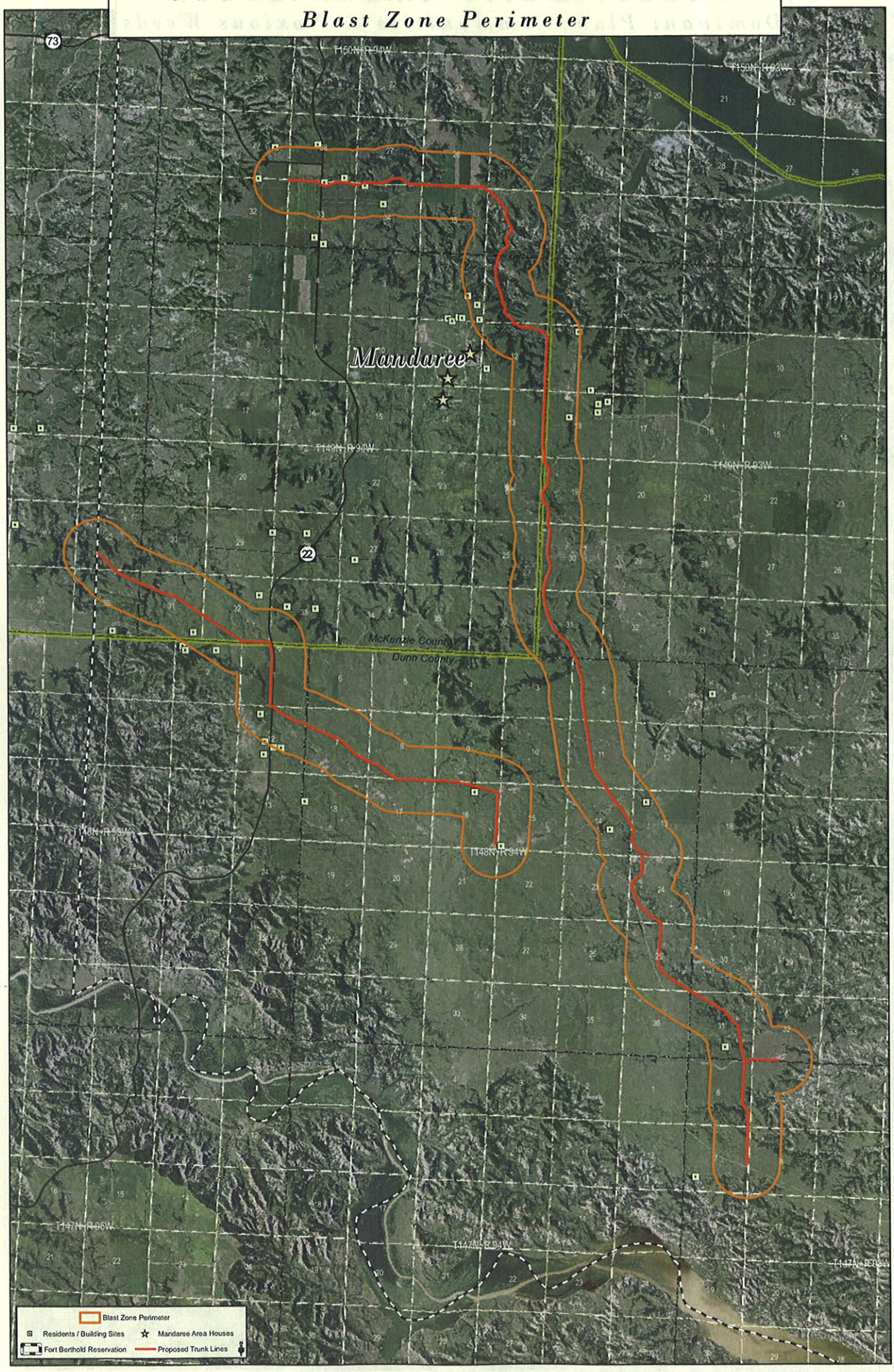


Saddle Butte Trunk Lines
Dominant Plant Communities & Noxious Weeds

Saddle Butte Trunk Lines

Dominant Plant Communities & Noxious Weeds

Saddle Butte Trunk Lines
Blast Zone Perimeter



APPENDIX B

Agency Scoping Materials

May 18, 2010

<<NAME>>
<<TITLE>>
<<AGENCY>>
<<ADDRESS>>
<<CITY>><<STATE>><<ZIP>>

RE: Proposed Saddle Butte Trunk Lines
Dunn and McKenzie Counties, ND
Fort Berthold Reservation

Dear <<NAME>>:

On behalf of Saddle Butte Pipeline LLC, Kadrmas, Lee & Jackson, Inc. is preparing an EA (Environmental Assessment) under the National Environmental Policy Act for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM of the development of three pipelines and an electric utility line approximately 28 miles long, all within a 90-foot right-of-way, on the Fort Berthold Reservation. The proposed pipelines would be a 16-inch nominal diameter natural gas pipeline, a 12-inch crude oil pipeline, and an 8-inch nominal diameter produced water pipeline. The natural gas pipeline would likely be installed first, with the oil and water pipelines and utility lines added at a later date.

The proposed action would connect to the existing 2.7-mile long pipeline known as the Burr-Voigt connection and would provide infrastructure to collect oil and gas from approximately 10 to 30 well sites operated by local producers. ***Please refer to the enclosed project location map***. Construction of the proposed project is anticipated to begin as early as fall 2010.

To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action. We are interested in existing or proposed developments you may have that should be considered in connection with the proposed project. We also ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted.

Please provide your comments by **June 18, 2010**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

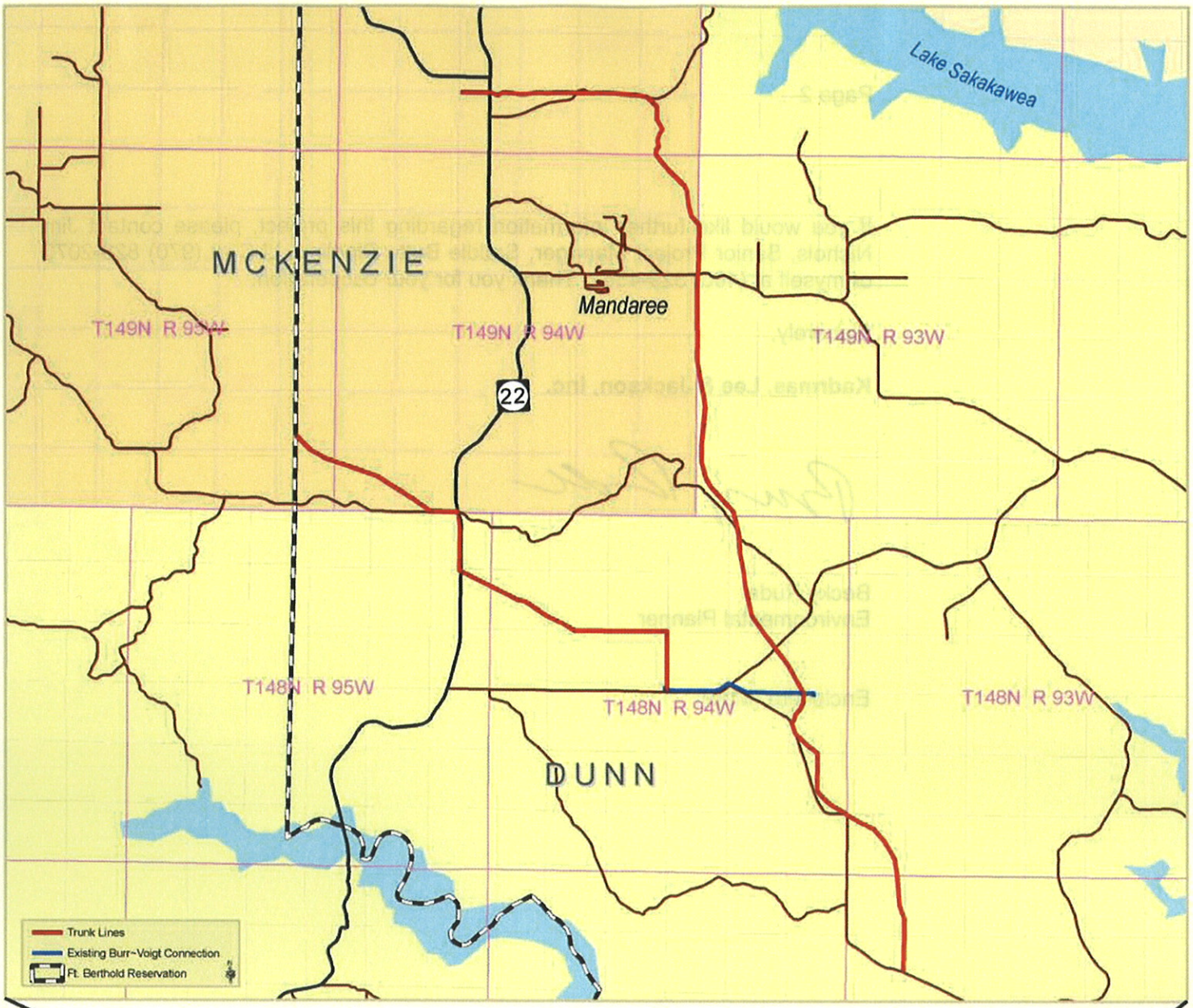
If you would like further information regarding this project, please contact Jim Nichols, Senior Project Manager, Saddle Butte Pipeline, LLC at (970) 828-2073 or myself at (406) 329-4562. Thank you for your cooperation.

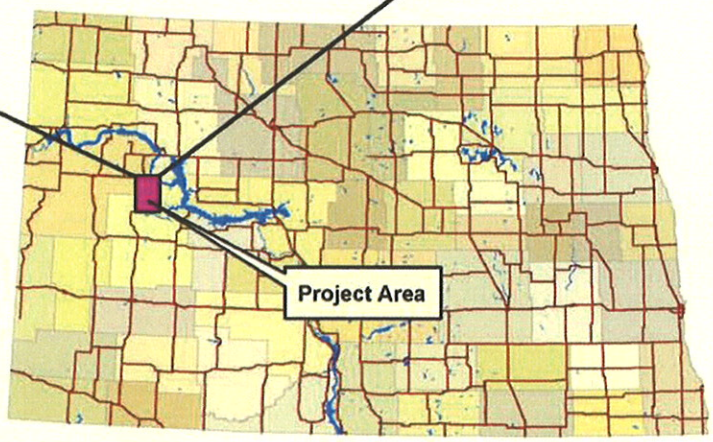
Sincerely,

Kadrmas, Lee & Jackson, Inc.

Becky Rude
Environmental Planner

Enclosure (Map)





Saddle Butte Trunk Lines
Saddle Butte Pipeline, LLC
Dunn/McKenzie Counties

North Dakota

CTitle	First	Last	Title	Department	Agency	Address	City	State	Zip
Mr.	Michael	Seivage	Tribal Chairman		Sisseton-Wahpeton Oyate	PO Box 509	Sisseton	SD	57262-0267
Ms.	Myra	Pearson	Tribal Chairperson	Ft. Totten Tribal Business Office	Spirit Lake Dacotah Nation	PO Box 359	Ft. Totten	ND	58335
Mr.	Marcus	Wells	Tribal Chairman		Three Affiliated Tribes	HC3 Box 2	New Town	ND	58763
Mr.	David	Brien	Tribal Chairman		Turtle Mountain Band of Chippewa Indians	PO Box 900	Belcourt	ND	58316-0900
Mr.	Ron	His Horse is Th	Tribal Chairman		Standing Rock Sioux Tribe	PO Box D	Fort Yates	ND	58538
Ms.	Adrienne	Swallow	Environmental Protection Specialist		Standing Rock Sioux Tribe	PO Box D	Fort Yates	ND	58538
Mr.	Elton	Spotted Horse	Environmental Division Director	Natural Resources Department	Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Damon	Williams	Tribal Attorney		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Fred	Fox	Director	Energy Department	Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Ms.	V. Judy	Brugh	Representative	Four Bears Segment	Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Arnold	Strahs	Representative	Mandaree Segment	Three Affiliated Tribes	PO Box 665	Mandaree	ND	58757
Mr.	Scott	Eagle	Representative	Shell Creek Segment	Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Mervin	Packineau	Representative	Parshall/Lucky Mound Segment	Three Affiliated Tribes	PO Box 468	Parshall	ND	58770
Mr.	Frank	Whitecalf	Representative	White Shield Segment	Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Barry	Benson	Representative	Twin Buttes Segment	Three Affiliated Tribes	70879 E Ave NW	Halliday	ND	58636
Mr.	Fred	Poitra		Game and Fish Department	Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Marvin	Danks	Director	Fort Berthold Rural Water	Three Affiliated Tribes	308 Four Bears Complex	New Town	ND	58763
Mr.	Roger	Hovda	Operations Manager		Reservation Telephone Cooperative	PO Box 68	Parshall	ND	58770-0068
Mr.	Silas	Ironheart, Jr.	SLT-EPA Director		Spirit Lake Dacotah Nation	P.O. Box 99	Fort Totten	ND	58335
Sir		*or Madam*	Chief Missile Engineer	91st Missile Maintenance Squadror	Cable Affairs Office	417 Bomber Blvd.	Minot AFB	ND	58705
Mr.	Weldon	Loudermilk	Acting Regional Director		Bureau of Indian Affairs	115 4th Ave. SE	Aberdeen	SD	57401
Mr.	Richard	Nelson	Chief, Resource Management	Dakotas Area Office	Bureau of Reclamation	PO Box 1017	Bismarck	ND	58502-1017
Mr.	Lonny	Bagley	Field Office Manager	North Dakota Field Office	Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	ND	58601
Mr.	Mike	Nash	Assistant Field Office Manager	Division on Mineral Resources	Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	ND	58601
Mr.	Steve	Obenauer	Manager	Bismarck Airports District Office	Federal Aviation Administration	2301 University Drive, Bldg 23B	Bismarck	ND	58504
Sir		*or Madam*		Office of Economic Analysis	Federal Railroad Administration	400 7th St. SW	Washington	DC	20590
Mr.	Dan	Cimarosti	Manager	ND Regulatory Office	US Army Corps of Engineers	1513 S. 12th St.	Bismarck	ND	58504
Mr.	Charles	Sorenson	Natural Resource Specialist	Riverdale Field Office	US Army Corps of Engineers	PO Box 527	Riverdale	ND	58565
Mr.	Irwin	Russell	State Conservationist		US Department of Agriculture	PO Box 1458	Bismarck	ND	58502-1458
Mr.	Gerald	Paulson	Director, Transmission Lines and Substatio	Western Area Power Admin.	US Department of Energy	PO Box 1173	Bismarck	ND	58502-1173
Mr.	Larry	Svoboda	Director	NEPA Program, Region 8	US Environmental Protection Agency	1595 Wynkoop Street	Denver	CO	80202-1129
Mr.	Richard	Clark	Wetlands Coordinator	Region 8, EPR-EP	US Environmental Protection Agency	1595 Wynkoop Street	Denver	CO	80202-1129
Mr.	Jeffrey	Towner	Field Supervisor	ND Field Office	US Fish & Wildlife Service	3425 Miriam Ave.	Bismarck	ND	58501
Mr.	Greg	Wiche	Director	Water Resources Division	US Geological Survey	821 E. Interstate Ave.	Bismarck	ND	58501
Ms.	Cheryl	Kulas	Executive Director		Indian Affairs Commission	600 E. Blvd. Ave. 1st Floor, Judicial Wing, Rm 117	Bismarck	ND	58505-0300
Mr.	L. David	Glatt	Chief	Environmental Health Section Gold Seal Center	ND Department of Health	918 E. Divide Ave., 4th floor	Bismarck	ND	58501-1947
Mr.	Mike	McKenna	Chief	Conservation & Communication Divisior	ND Game & Fish Department	100 Bismarck Expressway	Bismarck	ND	58501-5095
Mr.	Ed	Murphy	State Geologist		ND Geological Survey	600 E. Blvd. Ave.	Bismarck	ND	58505-0840
Mr.	Mark	Zimmerman	Director		ND Parks & Recreation Dept.	1600 E. Century Ave., Suite 3	Bismarck	ND	58503-0649
Mr.	Dale	Frink	State Engineer		ND State Water Commission	900 E. Blvd. Ave.	Bismarck	ND	58505-0850
Mr.	Scott	Hochhalter	Soil Conservation Specialist	NDSU Extension Service	Soil Conservation Committee	2718 Gateway Ave., #104	Bismarck	ND	58503
Mr.	Frances M.	Olson	Auditor		McKenzie County	PO Box 543	Watford City	ND	58854
Mr.	Rick	Lawlar	Chairman	Commission	McKenzie County	3102 127 Ave NW	Watford City	ND	58854
Mr.	Reinhard	Hauck	Auditor		Dunn County	PO Box 105	Manning	ND	58642

CTitle	First	Last	Title	Department	Agency	Address	City	State	Zip
Mr.	Tim	Steffan	Chairman	Commission	Dunn County	1740 Hwy 22	Manning	ND	58642
Mr.	Bill	Boyd	Construction Manager		Midcontinent Cable Company	719 Memorial Hwy	Bismarck	ND	58501
Mr.	Doug	Dixon	General Manager	Badlands Region	Montana Dakota Utilities	PO Box 1406	Williston	ND	58802-1406
Mr.	Ken	Miller		Land Department	Northern Border Pipeline	13710 FNB Parkway	Omaha	NE	68154-5200
Mr.	Ray	Christenson	Manager/CEO		Southwest Water Authority	4665 2nd St W	Dickinson	ND	58601
Mr.	David C.	Schelkoph	CEO		West Plains Electric Coop., Inc.	PO Box 1038	Dickinson	ND	58602-1038
Sir		*or Madam*	Manager		Xcel Energy	PO Box 2747	Fargo	ND	58108-2747
Mr.	Larry	Gangl	District Engineer	Dickinson District	ND Department of Transportation	1700 3rd Ave W, Suite 101	Dickinson	ND	58601
Mr.	Les	Alpert			Consolidated Telephone Company	PO Box 1408	Dickinson	ND	58602-1408
Mr.	Jim	Nichols	Senior Project Manager		Saddle Butte Pipeline, LLC	1970 3rd Ave, Suite 205	Durango	CO	81301

List of Commenting Agencies

Project No. NH-7-085(055)142

PCN 18692

Federal

US Department of Agriculture—Natural Resources Conservation Service

US Department of Defense— Army Corps of Engineers, Omaha District

US Department of Defense—Army Corps of Engineers, Riverdale

US Department of Interior— Bureau of Reclamation

US Department of Interior— Fish and Wildlife Service

US Department of Transportation—Federal Aviation Administration

State

North Dakota Department of Health

North Dakota Game and Fish Department

North Dakota Geological Survey

North Dakota Parks & Recreation Department

North Dakota State Water Commission

Local

Consolidated

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
P.O. Box 1458
Bismarck, ND 58502-1458

April 29, 2010

Becky Rude
Kadrmas, Lee & Jackson
128 Soo Line Drive
PO Box 1157
Bismarck, ND 58502-1157

RE: Proposed Saddle Butte Trunk Lines, Fort Berthold Reservation, Dunn and McKenzie Counties, ND

Dear Ms. Rude:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated May 18, 2010, concerning a proposed development of three pipelines and electric utility line approximately 28 miles long, all within a 90-foot right-of-way, on the Fort Berthold Reservation located in Dunn and McKenzie Counties, North Dakota.

NRCS has a major responsibility with the Farmland Protection Policy Act (FPPA) in documenting conversion of farmland (i.e., prime, statewide, and local importance) to non-agricultural use. It appears your proposed project is not supported by federal funding or actions; therefore, FPPA does not apply and no further action is needed.

The Wetland Conservation Provisions of the 1985 Food Security Act, as amended, provide that if a USDA participant converts a wetland for the purpose of, or to have the effect of, making agricultural production possible, loss of USDA benefits could occur. The NRCS has developed the following guidelines for the installation of permanent structures where wetlands occur. If these guidelines are followed, the impacts to the wetland(s) will be considered minimal allowing USDA participants to continue to receive USDA benefits. Following are the requirements: 1) Disturbance to the wetland(s) must be temporary, 2) no drainage of the wetland(s) is allowed (temporary or permanent), 3) mechanized landscaping necessary for installation is kept to a minimum and preconstruction contours are maintained, 4) temporary side cast material must be placed in such a manner not to be dispersed in the wetland, and 5) all trenches must be backfilled to the original wetland bottom elevation.

NRCS would recommend that impacts to wetlands be avoided. If the installment of permanent structures requires passage through a wetland, NRCS can complete a certified wetland determination if requested by the landowner/operator.

If you have additional questions pertaining to FPPA, please contact Steve Sieler, Liaison Soil Scientist, NRCS, Bismarck, ND at 701-530-2019.

Sincerely,

ACTING PAUL J. SWEENEY
State Conservationist

cc:
Susan Tuhy, DC, NRCS, Killdeer, ND
Kyle Hartel, DC, NRCS, Watford City, ND
Terrance Gisvold, ASTC (FO), NRCS, Dickinson, ND

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
1513 SOUTH 12TH STREET
BISMARCK ND 58504-6640

REPLY TO
ATTENTION OF
North Dakota Regulatory Office

May 21, 2010

Kadrmas, Lee & Jackson
ATTN: Becky Rude, Environmental Planner
PO Box 1157
Bismarck, North Dakota 58502-1157

RE[illegible]
MAY 2[illegible] 2010

Dear Ms. Brett:

This is in response to your request for comments received May 19, 2010 concerning **Saddle Butte Pipeline LLC's** proposal to install three pipelines (oil, gas and water) and an electric utility line for 28 miles on the Fort Berthold Reservation in Dunn and McKenzie Counties, North Dakota. The lines would connect to an existing 2.7-mile long pipeline known as the Burr-Voigt connection. We have assigned Application Number (**NWO-2010-1074-BIS**) to your request. Please reference this number when you write or call us regarding your proposal.

The Corps of Engineers regulates work affecting navigable waterways under Section 10 of the Rivers and Harbors Act and the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Navigable waterways regulated under Section 10 in North Dakota are: the entire Missouri River system, including Lake Sakakawea and Lake Oahe; the Yellowstone River from the North Dakota/Montana border to its mouth; Upper Des Lacs Lake; Red River of the North; Bois De Sioux; and James River from Jamestown south to the North Dakota/South Dakota border. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

If during project design, impacts to the tributary systems or adjacent wetlands cannot be avoided, permits would be required prior to commencement of construction. A DA permit application is enclosed for your convenience. If there is a question on whether or not permits would be required, the application and design specifications of the project should be forwarded our office for review and authorization prior to commencement of construction. It is essential to identify impacts to waters of the United States resulting from the project.

If you have any questions regarding this letter or our program, please do not hesitate to write me at the above address, or call this office at (701) 255-0015.

Sincerely,

Toni R. Erhardt
Project Manager
North Dakota Regulatory Office

Enclosure

Instructions for Preparing a
Department of the Army Permit Application

Blocks 1 through 4. To be completed by Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the E-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant Telephone Number(s). Please provide the number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by applicant, if an agent is to be employed.

Block 12. Proposed Project Name or Title. Please provide name identifying the proposed project, e.g., Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

Block 13. Name of Waterbody. Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Project Street Address. If the proposed project is located at a site having a street address (not a box number), please enter it here.

Block 15. Location of Proposed Project. Enter the latitude and longitude of where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality that the site is located in.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known

Block 18. Nature of Activity. Describe the overall activity or project. Give appropriate dimensions of structures such as wing walls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 18.

Block 19. Proposed Project Purpose. Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

Block 20. Reasons for Discharge. If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards. Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

Block 22. Surface Areas of Wetlands or Other Waters Filled. Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Description of Avoidance, Minimization, and Compensation. Provide a brief explanation describing how impacts to waters of the United States are being avoided and minimized on the project site. Also provide a brief description of how impacts to waters of the United States will be compensated for, or a brief statement explaining why compensatory mitigation should not be required for those impacts.

Block 24. Is Any Portion of the Work Already Complete? Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identity the authorization, if possible.

Block 25. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site. List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.

Block 26. Information about Approvals or Denials by Other Agencies. You may need the approval of other federal, state, or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

Block 27. Signature of Applicant or Agent. The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). **While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.**

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT *(33 CFR 325)*	OMB APPROVAL NO. 0710-0003 EXPIRES: 31 August 2012

Public reporting burden for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME:	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required)
First - Middle - Last – Company – E-mail Address –	First - Middle - Last – Company – E-mail Address –
6. APPLICANT'S ADDRESS: Address - City – State – Zip – Country –	9. AGENT'S ADDRESS Address - City – State – Zip – Country –
7. APPLICANT'S PHONE NOs. W/AREA CODE a. Residence b. Business c. Fax	10. AGENT'S PHONE NOs. W/AREA CODE a. Residence b. Business c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ _____

APPLICANT'S SIGNATURE DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable) Address
15. LOCATION OF PROJECT Latitude: °N Longitude: °W	City - State - Zip -

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)
State Tax Parcel ID Municipality
Section – Township – Range –

17. DIRECTIONS TO THE SITE

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres

Or

Liner Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? Yes ☐ No ☐ IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc , Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Address –

City – State – Zip –

26. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Becky Rude

From: Sorensen, Charles G NWO [Charles.G.Sorensen@usace.army.mil]
Sent: Wednesday, May 19, 2010 10:50 AM
To: becky.rude@kljeng.com
Cc: Ames, Joel O NWO; Wiehl, Christopher D NWO; charles.g.sorensen@usace.army.mil
Subject: Saddle Butte Trunk Lines

Becky
Thanks for the invitation for input on the Saddle Butte Pipeline Project located on the Fort Berthold Reservation. As the pipeline location is not located on COE lands, the Garrison Dam Lake Sakakawea Project would recommend the following

That construction of the pipelines be done using the BMP's available in regards to the construction of the pipelines.

It is also suggested, that KLJ contact the Corps of Engineers North Dakota State Regulatory Office in Bismarck (701-255-0015) regarding the issuing of any permits needed that would pertain to the proposed project.

Thank you

Charles Sorensen
Natural Resource Specialist
U.S. Army Corps of Engineers
Riverdale, North Dakota Office
(701) 654 7411 ext 232

Becky Rude

From: Waters, Ryan M [RWaters@usbr.gov]
Sent: Friday, June 25, 2010 11:04 AM
To: becky.rude@kljeng.com
Cc: Melhouse, Ronald D; Thompson, Thomas A; Bob Keller; lcheart@mhanation.com
Subject: RE: Saddle Butte Pipeline
Attachments: intersect_pipelines_saddle.pdf

Becky, attached is a map identifying the pipeline crossings (lat, long) for the proposed project. The existing rural water pipelines are blue and light blue in color on the provided map. I also included future rural water pipelines (orange in color) that will cross the Saddle Butte pipeline. Reclamation has not obtained easements for the future pipelines and will have to work with your client on the standard crossing requirements. Any questions please feel free to call. Thanks and have a good weekend.

Ryan

Ryan M. Waters, P.E.

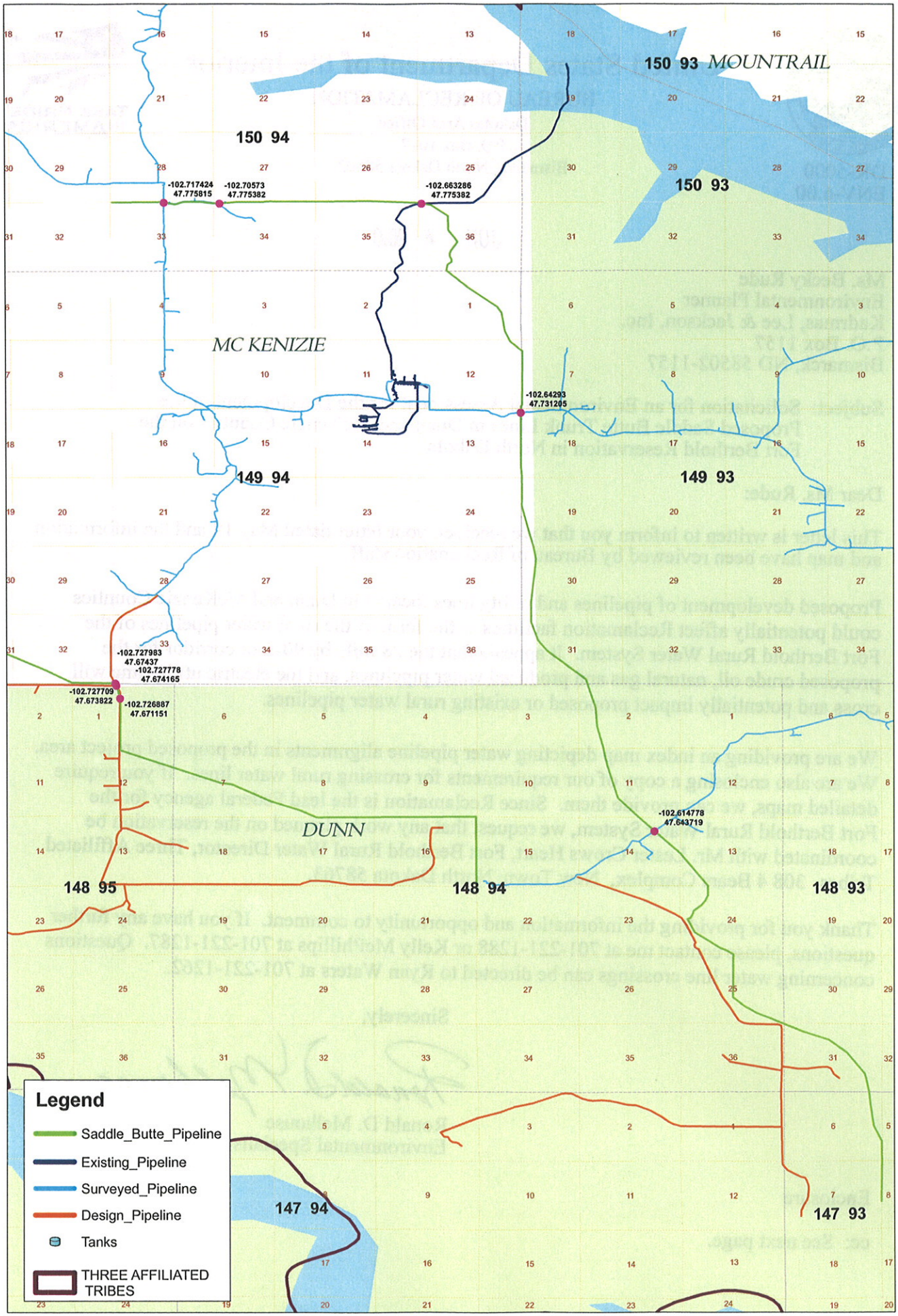
Civil Engineer
Bureau of Reclamation, DKAO
304 East Broadway Ave.
Bismarck, ND 58501
Office (701) 221-1262
Fax (701) 250-4326
rwaters@usbr.gov

From: Becky Rude [mailto:becky.rude@kljeng.com]
Sent: Monday, June 07, 2010 2:40 PM
To: Waters, Ryan M
Subject: Saddle Butte Pipeline

Ryan,
Attached is the proposed Saddle Butte pipeline alignment. If you need anything else or have any issues with the files, just let me know. Thanks!

Sincerely,

Becky Rude
Environmental Planner
Kadrmas, Lee & Jackson
Direct: (406) 329-4562
Cell: (406) 207-0273
2445 S 3rd St W, Suite B
Missoula, MT 59801-1330
www.kljeng.com



FORT BERTHOLD - THREE AFFILIATED TRIBES
new SADDLE BUTTE PIPELINE SYSTEM

United States Department of the Interior
BUREAU OF RECLAMATION
Dakotas Area Office
P.O. Box 1017
Bismarck, North Dakota 58502

TAKE PRIDE IN AMERICA

DK-5000
ENV-6.00

JUN 4 2010

Ms. Becky Rude
Environmental Planner
Kadrmas, Lee & Jackson, Inc.
P.O. Box 1157
Bismarck, ND 58502-1157

Subject: Solicitation for an Environmental Assessment for the Development of the Proposed Saddle Butte Trunk Lines in Dunn and McKenzie Counties on the Fort Berthold Reservation in North Dakota

Dear Ms. Rude:

This letter is written to inform you that we received your letter dated May 18 and the information and map have been reviewed by Bureau of Reclamation staff.

Proposed development of pipelines and utility lines located in Dunn and McKenzie Counties could potentially affect Reclamation facilities in the form of the rural water pipelines of the Fort Berthold Rural Water System. It appears that the 28 mile by 90-foot corridor for the proposed crude oil, natural gas and produced water pipelines, and the electric utility line will cross and potentially impact proposed or existing rural water pipelines.

We are providing an index map depicting water pipeline alignments in the proposed project area. We are also enclosing a copy of our requirements for crossing rural water lines. If you require detailed maps, we can provide them. Since Reclamation is the lead Federal agency for the Fort Berthold Rural Water System, we request that any work planned on the reservation be coordinated with Mr. Lester Crows Heart, Fort Berthold Rural Water Director, Three Affiliated Tribes, 308 4 Bears Complex, New Town, North Dakota 58763.

Thank you for providing the information and opportunity to comment. If you have any further questions, please contact me at 701-221-1288 or Kelly McPhillips at 701-221-1287. Questions concerning water line crossings can be directed to Ryan Waters at 701-221-1262.

Sincerely,

Ronald D. Melhouse

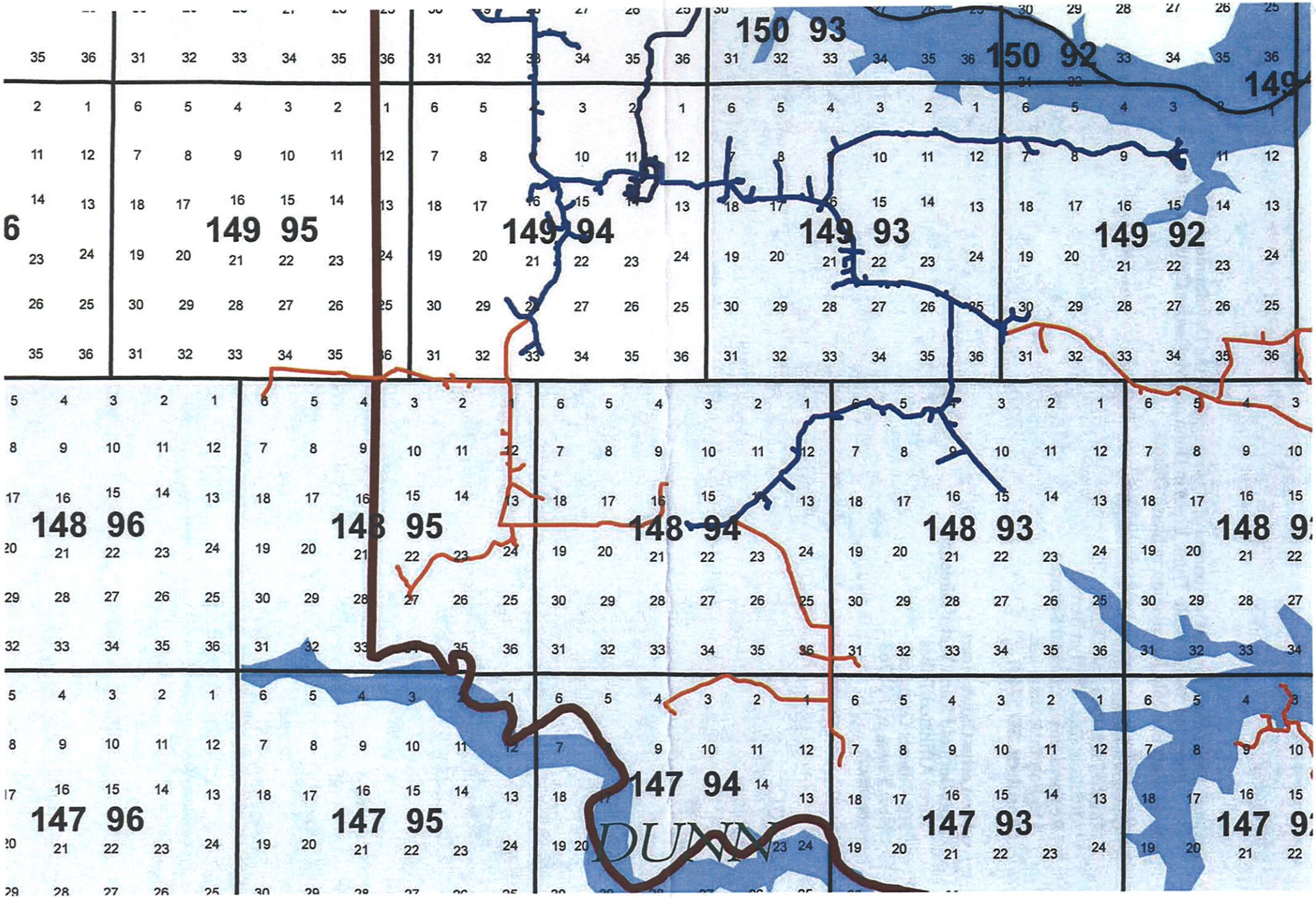
Ronald D. Melhouse
Environmental Specialist

Enclosure

cc: See next page.

cc: Bureau of Indian Affairs
Great Plains Regional Office
Attention: Ms. Marilyn Bercier
Regional Environmental Scientist
115 Fourth Avenue S.E.
Aberdeen, SD 57401

Mr. Lester Crows Heart
Fort Berthold Rural Water Director
Three Affiliated Tribes
308 4 Bears Complex
New Town, ND 58763
(w/encl)


150 93
150 92
149 95
149 94
149 93
149 92
148 96
148 95
148 94
148 93
147 96
147 95
147 94
147 93
DUNN

NOTES

1. Drawings are not to scale.
2. Clearances shown are minimum for all conditions.
3. Any additional permits required/needed for construction shall be provided by the Contractor.
4. Overhead conductor clearances shown are for 120 degrees F and final unlocked sag.
5. Erosion control measures, including re-vegetation, shall be implemented after completing construction activities.
6. The applicant shall submit a project description, and detailed construction plans showing plan views, profiles and sections and grading plans of proposed work within Reclamations Right-of-Way (ROW).
7. The applicant shall submit the procedures, excavation plans, and schedules in crossing the Reclamation pipeline.
8. At the completion of construction activities the applicant shall submit AS-BUILT drawings that indicates the horizontal and vertical alignments of all utilities in areas disturbed during construction within Reclamation ROW.
9. Pipelines carrying hazardous materials or pollutants (e.g., oils, gasoline, natural gas, contaminated waters and nonpotable waters, etc.) should be designed for a reduced risk of failure in the portion within Reclamation's ROW.
   The design shall require either:
   a. Designing the crossing pipeline with an additional 50 percent working pressure factor or
   b. Use secondary containment (pipe casing) for all hazardous material pipelines
10. All work within 18 inches of the facility shall be done using hand-held tools only. The excavation and backfill shall be made in the presence of Reclamation personnel or authorized representative.
11. The applicant and or their contractor shall be liable for all damages to Reclamation facilities and appurtenances as a result of construction and for any other damages or losses suffered by Reclamation, including power, municipal and industrial water supply and communication losses.
12. For crossings of all Reclamation facilities, Reclamation personnel familiar with the facilities will obtain and provide copies of existing files showing information about existing buried facilities (center of pipeline, approximate depth of cover, size of pipe, class of pipe, etc.) to the applicant.
13. Typical Reclamation potable and raw water pipelines are PVC. If metallic pipelines or those containing metallic reinforcement (e.g., reinforced concrete) are encountered in the crossing a suitable bonded dielectric coating and cathodic protection may be required.

DETECTABLE WARNING TAPE

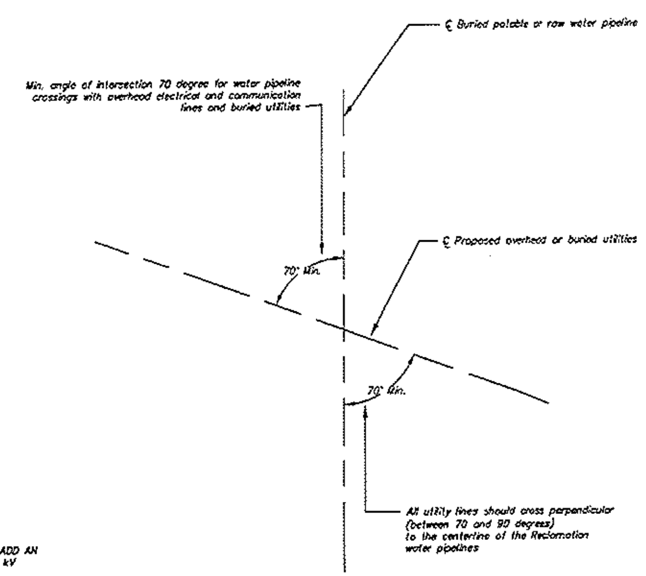
A. For potable water lines, the warning tape shall be a 3-inch-wide blue detectable tape imprinted with "CAUTION BURIED POTABLE WATER LINE".

B. For nonpotable water lines, the warning tape shall be a 3-inch-wide purple detectable tape imprinted with "CAUTION BURIED NONPOTABLE WATER LINE".

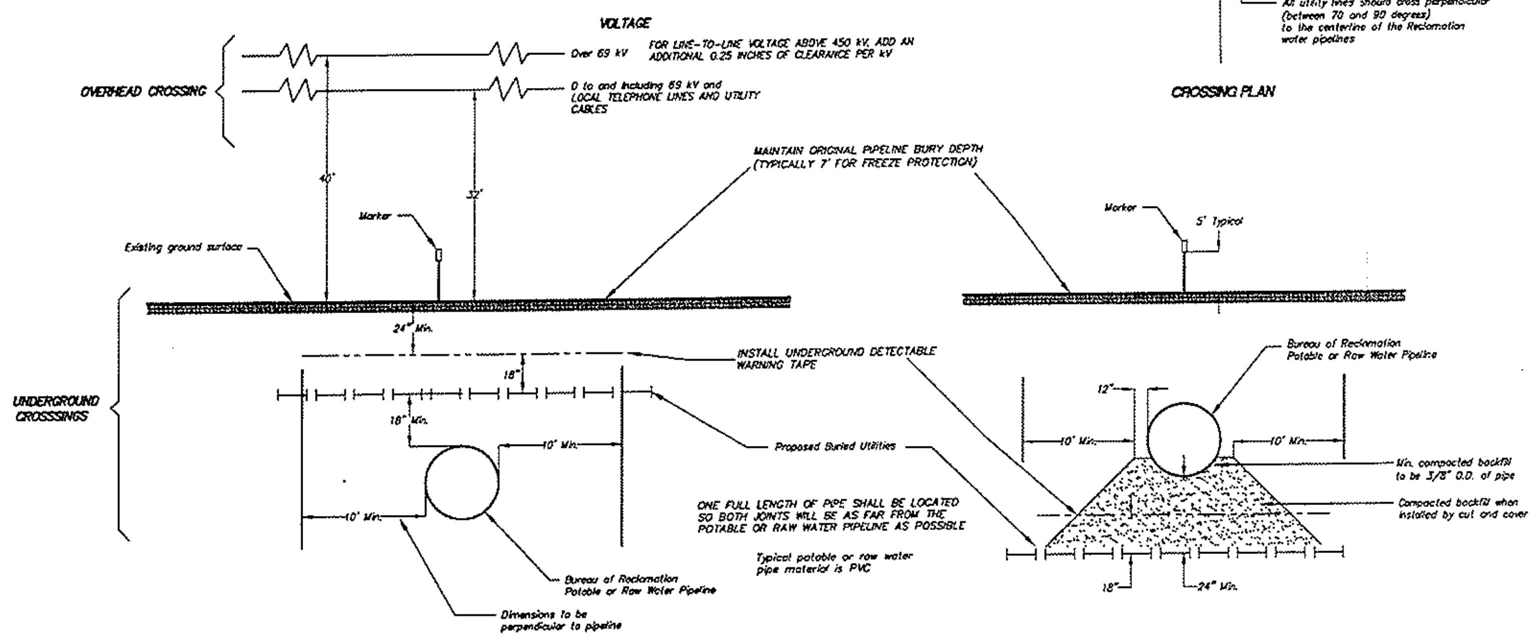
C. For gas, oil, and steam chemical lines, the warning tape shall be a 3-inch-wide yellow detectable tape imprinted with "CAUTION BURIED (type) LINE".

D. For telecommunications, telephone, television conduit(s), the warning tape shall be a 3-inch-wide orange detectable tape imprinted with "CAUTION BURIED (type) LINE".

E. For electrical conduit(s), the warning tape shall be a 3-inch-wide red detectable tape imprinted with "CAUTION BURIED ELECTRICAL LINE".



CROSSING PLAN



TYPICAL SECTION
POTABLE OR RAW WATER PIPELINE CROSSING

RECLAMATION
Managing Water in the West

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
GARRISON DIVISION GARRISON DIVERSION UNIT, N.DAK.
MR&I RURAL WATER SYSTEMS

STANDARD CROSSING AND CLEARANCE REQ.
POTABLE AND RAW WATER PIPELINES

769-603-000
SHEET 1 OF 1

Kadrmas
Lee &
Jackson
Engineers Surveyors
Planners

May 18, 2010

Mr. Jeffrey Towner
Field Supervisor
US Fish & Wildlife Service
3425 Miriam Ave.
Bismarck, ND 58501

RE: Proposed Saddle Butte Trunk Lines
Dunn and McKenzie Counties, ND
Fort Berthold Reservation

Dear Mr. Jeffrey Towner:

On behalf of Saddle Butte Pipeline LLC, Kadrmas, Lee & Jackson, Inc. is preparing an EA (Environmental Assessment) under the National Environmental Policy Act for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM of the development of three pipelines and an electric utility line approximately 28 miles long, all within a 90-foot right-of-way, on the Fort Berthold Reservation. The proposed pipelines would be a 16-inch nominal diameter natural gas pipeline, a 12-inch crude oil pipeline, and an 8-inch nominal diameter produced water pipeline. The natural gas pipeline would likely be installed first, with the oil and water pipelines and utility lines added at a later date.

The proposed action would connect to the existing 2.7-mile long pipeline known as the Burr-Voigt connection and would provide infrastructure to collect oil and gas from approximately 10 to 30 well sites operated by local producers. ***Please refer to the enclosed project location map***. Construction of the proposed project is anticipated to begin as early as fall 2010.

To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action. We are interested in existing or proposed developments you may have that should be considered in connection with the proposed project. We also ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted.

Please provide your comments by **June 18, 2010**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

701 355 8400
128 Soo Line Drive
PO Box 1157
Bismarck, ND 58502-1157
Fax 701 355 8781
www.kljeng.com
Kadrmas, Lee & Jackson, Inc.
A KLJ Solutions Company

If you would like further information regarding this project, please contact Jim Nichols, Senior Project Manager, Saddle Butte Pipeline, LLC at (970) 828-2073 or myself at (406) 329-4562. Thank you for your cooperation.

Sincerely,

Kadrmas, Lee & Jackson, Inc.

Becky Rude
Environmental Planner

Enclosure (Map)

U.S. Fish & Wildlife Service
Ecological Services

The Fish and Wildlife Service is unable to comment on this project due to insufficient information provided to allow an adequate review. It is the requestor's responsibility to provide information sufficient to allow a review under the Endangered Species Act, Migratory Bird Treaty Act, and the Fish and Wildlife Coordination Act.

6-10-10
Date

Jeffrey K. Towner
Field Supervisor

Kadrmas
Lee &
Jackson
Engineers Surveyors
Planners

Kadrmas
Lee &
Jackson
Engineers Surveyors
Planners

May 18, 2010

Mr. Steve Obenauer
Manager
Federal Aviation Administration
2301 University Drive, Bldg 23B
Bismarck, ND 58504

RE: Proposed Saddle Butte Trunk Lines
Dunn and McKenzie Counties, ND
Fort Berthold Reservation

Dear Mr. Steve Obenauer:

On behalf of Saddle Butte Pipeline LLC, Kadrmas, Lee & Jackson, Inc. is preparing an EA (Environmental Assessment) under the National Environmental Policy Act for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM of the development of three pipelines and an electric utility line approximately 28 miles long, all within a 90-foot right-of-way, on the Fort Berthold Reservation. The proposed pipelines would be a 16-inch nominal diameter natural gas pipeline, a 12-inch crude oil pipeline, and an 8-inch nominal diameter produced water pipeline. The natural gas pipeline would likely be installed first, with the oil and water pipelines and utility lines added at a later date.

The proposed action would connect to the existing 2.7-mile long pipeline known as the Burr-Voigt connection and would provide infrastructure to collect oil and gas from approximately 10 to 30 well sites operated by local producers. ***Please refer to the enclosed project location map***. Construction of the proposed project is anticipated to begin as early as fall 2010.

To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action. We are interested in existing or proposed developments you may have that should be considered in connection with the proposed project. We also ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted.

Please provide your comments by **June 18, 2010**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

701 355 8400
128 Soo Line Drive
PO Box 1157
Bismarck, ND 58502-1157
Fax 701 355 8781
www.kljeng.com
Kadrmas, Lee & Jackson, Inc.
A KLJ Solutions Company

If you would like further information regarding this project, please contact Jim Nichols, Senior Project Manager, Saddle Butte Pipeline, LLC at (970) 828-2073 or myself at (406) 329-4562. Thank you for your cooperation.

Sincerely,

Kadrmas, Lee & Jackson, Inc.

Becky Rude
Environmental Planner

Enclosure (Map)

Kadrmas Lee & Jackson
Engineers Surveyors Planners

U.S. Department of Transportation
Federal Aviation Administration

Date 6/22/10

No objection provided the Federal Aviation Administration is notified of construction or alterations as required by Federal Aviation Regulations, Part 77, Objects Affecting Navigable Airspace, Paragraph 77.13. Notice may be filed on-line at https://oeaaa.faa.gov.

Patricia L. Dressler, Environmental Protection Specialist
Federal Aviation Administration, Bismarck Airports District Office
2301 University Drive, Building 23B, Bismarck, ND 58504

NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

May 28, 2010

Ms. Becky Rude
Environmental Planner
Kadrmas Lee & Jackson, Inc.
P.O. Box1157
Bismarck, ND 5802-1157

Re: Proposed Saddle Butte Trunk Lines on the Fort Berthold Reservation
Dunn & McKenzie Counties

Dear Ms. Rude:

This department has reviewed the information concerning the above-referenced project submitted under date of May 18, 2010, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise are to be dealt with in an efficient and effective manner.

2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.

3. Oil and gas related construction activities that disturb five or more acres and are located within tribal boundaries within North Dakota may be required to obtain a permit to discharge storm water runoff from the U.S. Environmental Protection Agency. Further information may be obtained from the U.S. EPA website or by calling the U.S. EPA - Region 8 at (303) 312-6312. Also, cities or counties may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.

4. Noise from construction activities may have adverse effects on persons who live near the construction area. Noise levels can be minimized by ensuring that construction equipment is equipped with a recommended muffler in good working order. Noise effects can also be minimized by ensuring that construction activities are not conducted during early morning or late evening hours.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,

L. David Glatt, P.E., Chief
Environmental Health Section

LDG:cc
Attach.

NORTH DAKOTA
DEPARTMENT *of* HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

"VARIETY IN HUNTING AND FISHING"

NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

June 10, 2010

Becky Rude
Environmental Planner
Kadrmas, Lee & Jackson, Inc.
PO Box 1157
Bismarck, ND 58502-1157

Dear Ms. Rude:

RE: Proposed Saddle Butte Trunk Lines
Dunn & McKenzie Counties, ND
Fort Berthold Reservation

Saddle Butte Pipeline LLC is proposing the development of three pipelines and an electric utility line approximately 28 miles long, all within a 90-foot right-of-way, on the Fort Berthold Reservation in Dunn and McKenzie Counties, North Dakota.

Our primary concern with this project is the possible disturbance of native prairie and wooded draws associated with construction of the pipeline and access roads. We ask that work within these areas be avoided to the extent possible, every effort be made to prevent destruction of woody vegetation, and disturbed areas be reclaimed to pre-project conditions.

The National Wetland Inventory indicates various wetlands within the proposed project area, primarily intermittent waterways. We recommend that steps be taken to protect any wetlands that cannot be avoided, and existing drainage patterns be maintained.

Sincerely,

Steve Ryhe

(for) Michael G. McKenna
Chief
Conservation & Communication Division

js

North Dakota Geological Survey

Edward C. Murphy - State Geologist

Department of Mineral Resources

Lynn D. Helms - Director

North Dakota Industrial Commission

https://www.dmr.nd.gov/ndgs/

May 20, 2010

RECEIVED
MAY 24 2010

Ms. Becky Rude
Kadrmas, Lee & Jackson, Inc
128 Soo Line Drive
P.O. Box 1157
Bismarck, North Dakota 58502-1157

RE: Proposed Saddle Butte Trunk Lines, Dunn and McKenzie Counties

Dear Ms. Rude:

Enclosed please find the locations of landslides we have identified on the Parshall 100K sheet. These landslides were mapped from aerial photographs and plotted on 1:24,000 quadrangle maps. The landslide quads are available from our office. It appears from your map that the pipeline route east and north of Mandaree will cross a number of slide areas. Many of these landslides are likely hundreds or thousands of years old and may not have experienced any movement in recent years. However, I wanted to make sure you were aware of their existence.

Please contact me if you have any questions.

Sincerely,

Edward C. Murphy
State Geologist

encl.

600 E Boulevard Ave - Dept 405, Bismarck, North Dakota 58505-0840 Phone (701)328-8000 Fax (701)328-8010

John Hoeven, Governor
Mark A. Zimmerman, Director

1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649
Phone 701-328-5357
Fax 701-328-5363
E-mail parkrec@nd.gov
www.parkrec.nd.gov

June 9, 2010

Becky Rude
Kadrmas, Lee & Jackson
PO Box 1157
Bismarck, ND 58502-1157

Re: Installation of the Saddle Butte Trunk Lines Proposal

Dear Ms. Rude:

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced project proposal to install three pipelines and an electric utility line on the Fort Berthold Reservation in Dunn and McKenzie Counties.

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

The North Dakota Parks and Recreation Department is responsible for coordinating North Dakota's Scenic Byway and Backway Program. This proposed project is in proximity to the Killdeer Mountain Four Bears Scenic Byway and as such we recommend any project development be completed with the least amount of or no visual impact to the immediate and distant views from that Byway. North Dakota Parks and Recreation Department staff should be contacted at 701-328-5355 to assist in mitigation of any potential impacts.

The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any current of historic plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, several occurrences have been identified within or adjacent to the project area including: *Schizachyrium scoparium – Bouteloua spp. (curtipendula, gracilis) prairie* (Western little bluestem prairie), *Andropogon gerardii – Schizachyrium scoparium transition tallgrass prairie* (Central mesic tallgrass prairie), *Anthus spragueii* (Sprague's pipit), and *Hesperia dacotae* (Dakota skipper). Please see the attached spreadsheet and map for more specific information on these species. We defer further comments regarding animal species to the North Dakota Game and Fish Department and the United States Fish and Wildlife Service.

Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

The Department recommends that the project be accomplished with minimal impacts and that all efforts be made to ensure that critical habitats not be disturbed in the project area to help secure rare species conservation in North Dakota. Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

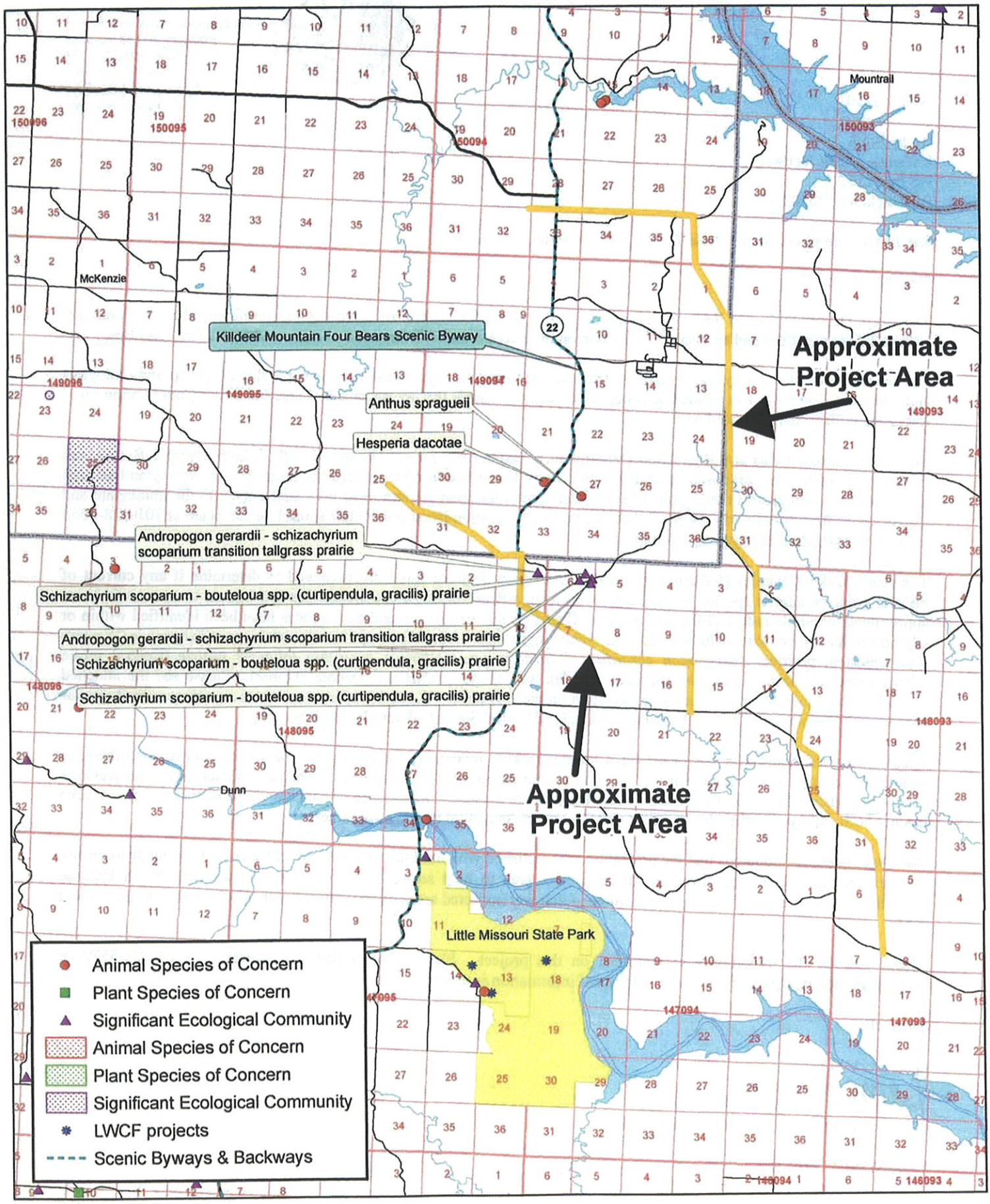
Thank you for the opportunity to comment on this project. Please contact Kathy Duttenhefner (701-328-5370 or kgduttenhefner@nd.gov) of our staff if additional information is needed.

Sincerely,

Jesse Hanson, Manager
Planning and Natural Resources Division

R.USNDNHI*2010-162

North Dakota Parks and Recreation Department
North Dakota Natural Heritage Inventory



June 2010

North Dakota Natural Heritage Inventory

Rare Animal and Plant Species and Significant Ecological Communities

State Scientific Name	State Common Name	State Rank	Global Rank	Federal Status	Township Range Section	County	Last Observation	Estimated Representation Accuracy	Precision
Schizachyrium scoparium - bouteloua spp. (curtipendula, gracilis) prairie	Western Little Bluestem Prairie	S2	GNR		148N094W - 06; 148N094W - 07; 148N094W - 04; 149N094W - 34; 148N094W - 09; 148N094W - 08; 149N094W - 33; 149N094W - 35; 148N094W - 05; 148N095W - 01; 148N095W - 12	Dunn, McKenzie	1967		M
Schizachyrium scoparium - bouteloua spp. (curtipendula, gracilis) prairie	Western Little Bluestem Prairie	S2	GNR		148N094W - 06; 148N094W - 07; 148N094W - 04; 149N094W - 34; 148N094W - 09; 148N094W - 08; 149N094W - 33; 149N094W - 35; 148N094W - 05; 148N095W - 01; 148N095W - 12	Dunn, McKenzie	1967		M
Schizachyrium scoparium - bouteloua spp. (curtipendula, gracilis) prairie	Western Little Bluestem Prairie	S2	GNR		148N094W - 06; 148N094W - 07; 148N094W - 04; 149N094W - 34; 149N094W - 33; 148N094W - 08; 149N094W - 35; 148N094W - 05; 148N095W - 01; 148N095W - 12	Dunn, McKenzie	1967		M
Andropogon gerardii - schizachyrium scoparium transition tallgrass prairie	Central Mesic Tallgrass Prairie	S1	GNR		148N094W - 06; 149N094W - 33; 148N095W - 12; 148N095W - 01; 149N094W - 34; 148N094W - 08; 149N094W - 35; 148N094W - 05; 148N094W - 07	Dunn, McKenzie	1967		M
Andropogon gerardii - schizachyrium scoparium transition tallgrass prairie	Central Mesic Tallgrass Prairie	S1	GNR		148N095W - 01; 149N094W - 33; 148N095W - 12; 148N094W - 05; 149N094W - 32; 148N095W - 11; 149N094W - 34; 148N095W - 02; 148N094W - 07; 148N094W - 06	Dunn, McKenzie	1967		M
Anthus spragueii	Sprague's Pipit	S3	G4		149N094W - 27	McKenzie	1976-06		S
Hesperia dacotae	Dakota Skipper	S2	G2	C	149N094W - 28	McKenzie	1997-07-05		S

North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer

The quantity and quality of data collected by the North Dakota Natural Heritage Inventory are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in North Dakota have never been thoroughly surveyed, and new species are still being discovered. For these reasons, the Natural Heritage Inventory cannot provide a definite statement on the presence, absence, or condition of biological elements in any part of North Dakota. Natural Heritage data summarize the existing information known at the time of the request. Our data are continually upgraded and information is continually being added to the database. This data should never be regarded as final statements on the elements or areas that are being considered, nor should they be substituted for on-site surveys.

Estimated Representation Accuracy

Value that indicates the approximate percentage of the Element Occurrence Representation (EO Rep) that was observed to be occupied by the species or community (versus buffer area added for locational uncertainty). Use of estimated representation accuracy provides a common index for the consistent comparison of EO reps, thus helping to ensure that aggregated data are correctly analyzed and interpreted.

Very high (>95%)
High (>80%, <= 95%)
Medium (>20%, <= 80%)
Low (>0%, <= 20%)
Unknown
(null) - Not assessed

Precision

A single-letter code for the precision used to map the Element Occurrence (EO) on a U.S. Geological Survey (USGS) 7.5' (or 15') topographic quadrangle map, based on the previous Heritage methodology in which EOs were located on paper maps using dots.

S - Seconds: accuracy of locality mappable within a three-second radius; 100 meters from the centerpoint
M - Minute: accuracy of locality mappable within a one-minute radius; 2 km from the centerpoint
G - General: accuracy of locality mappalbe to map or place name precision only; 8 km from centerpoint
U - Unmappable

North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: http://swc.nd.gov

July 1, 2010

Becky Rude
Kadrmas, Lee and Jackson
PO Box 1157
Bismarck, ND 58502

Dear Ms. Rude:

This is in response to your request for review of environmental impacts associated with the proposed Saddle Butte Trunk Lines, Dunn and McKenzie Counties, ND, Fort Berthold Reservation.

The proposed project have been reviewed by State Water Commission staff and the following comments are provided:

- The property is not located in an identified floodplain and it is believed the project will not affect an identified floodplain.

- It is the responsibility of the project sponsor to ensure that local, state and federal agencies are contacted for any required approvals, permits, and easements.

- All waste material associated with the project must be disposed of properly and not placed in identified floodway areas.

- No sole-source aquifers have been designated in ND.

There are no other concerns associated with this project that affect State Water Commission or State Engineer regulatory responsibilities.

Thank you for the opportunity to provide review comments. If you have any questions, please call me at 328-4969.

Sincerely,

Larry Knudtson
Research Analyst

LJK:dp/1570

507 South Main
Dickinson, ND 58601
701-483-4000
Fax 701-483-0001
1-888-225-5282
www.ctctel.com

Consolidated
Reach the World, from here.

Consolidated Telcom

Consolidated Enterprises, Inc.

Consolidated Communications Corporation

Consolidated Cable Vision, Inc.

Consolidated Communications Networks, Inc.

June 11, 2010

Ms. Becky Rude
Kadrmas, Lee & Jackson, Inc.
128 Soo Line Drive
PO Box 1157
Bismarck, ND 58502

RE: Proposed Saddle Butte Trunk Lines
Dunn and McKenzie Counties, ND
Fort Berthold Reservation

Dear Ms. Becky Rude;

This letter is in response to the above mentioned project. Consolidated Telcom does not have any buried facilities, in the proposed construction corridor.

Sincerely,

Les Alpert

Les Alpert
Field Services / Safety Supervisor
701-483-7362
Fax 701-483-7393

APPENDIX D

Cultural Resource Determination and Concurrence Letters

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401

TAKE PRIDE IN AMERICA

AUG 1 1 2010

IN REPLY REFER TO:
DESCRM
MC-208

Perry 'No Tears' Brady, THPO
Mandan, Hidatsa and Arikara Nation
404 Frontage Road
New Town, North Dakota 58763

Dear Mr. Brady:

We have considered the potential effects on cultural resources of the proposed Saddle Butte Trunk Line Northern Section in McKenzie and Dunn Counties, North Dakota. Approximately 215 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the area depicted in the enclosed report. One archaeological site (32DU620) was located that may possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. Five "avoidance areas" were located that may qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

As the surface management agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **adverse effect** for this undertaking, as site 32DU620 cannot be avoided by the project as currently designed. We recommend evaluation and mitigation excavation within the area of this site which will be impacted by the pipeline. Catalogued as **BIA Case Number AAO-1813/FB/10,** the proposed undertaking, location, and project dimensions are described in the following report:

Burns, Christina
(2010) The 2010 Trunk Line Northern Section Pipeline: A Class III Cultural Resource Inventory, McKenzie and Dunn Counties, North Dakota. Beaver Creek Archaeology, Inc. for Saddle Butte Pipeline, LLC, Durango, CO.

If your office concurs with this determination, consultation will continue under the National Historic Preservation Act and its implementing regulations. The Standard Conditions of Compliance will be adhered to.

If you have any questions, please contact Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

Sincerely,

ACTING Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes
Superintendent, Fort Berthold Agency

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
DESCRM
MC-208

SEP 0 1 2010

Perry 'No Tears' Brady, THPO
Mandan, Hidatsa and Arikara Nation
404 Frontage Road
New Town, North Dakota 58763

Dear Mr. Brady:

We have considered the potential effects on cultural resources of the proposed Saddle Butte Trunk Line Northern Section, where it crosses through archaeological site 32DU620 in Dunn County, North Dakota. This portion of the site was evaluated through a series of 32 auger probes and three meter-square test excavations. Potential surface disturbances within site 32DU620 are not expected to exceed the area depicted in the enclosed report. No cultural materials were located; this portion of the site does not possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion of site 32DU620 on the National Register of Historic Places.

As the surface management agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **no adverse effect** for this undertaking, as nothing in this portion of site 32DU620 contributes to its potential eligibility for the National Register. Catalogued as **BIA Case Number AAO-1818/FB/10,** the proposed undertaking, location, and project dimensions are described in the following report:

Burns, Christina
(2010) Project: 32DU620 Evaluative Testing / Pipeline Inventory, Location: Fort Berthold Reservation, Dunn County... Beaver Creek Archaeology, Inc. for Saddle Butte Pipeline, LLC, Durango, CO.

If your office concurs with this determination, consultation will continue under the National Historic Preservation Act and its implementing regulations. The Standard Conditions of Compliance will be adhered to.

If you have any questions, please contact Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

Sincerely,

ACTING Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes
Superintendent, Fort Berthold Agency

TRIBAL HISTORIC PRESERVATION
Mandan Hidatsa Arikara
Perry 'No Tears' Brady, Director
404 Frontage Road,
New Town, North Dakota 58763
Ph/701-862-2474 fax/701-862-2490
pbrady@mhanation.com

Three Affiliated Tribes
MANDAN * HIDATSA * ARIKARA

August 17, 2010

Dr. Carson N. Murdy
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401

RE: Recommendation and Concurrence:

As Director of the Tribal Historic Preservation Office and the Tribal Historical Preservation Officer representing the Mandan Hidatsa Arikara Nation I Concur with the, **BLA Case Number AAO-1813/FB/10,**

Burns, Christina
(2010) The 2010 Trunk Line Northern Section Pipeline: A Class III Cultural Resource Inventory McKenzie and Dunn Counties, North Dakota. Beaver Creek Archacology, Inc. For Saddle Butte Pipeline, LLC, Durango. CO.

If you have any questions or need additional information, you can contact me at (701) 862-2474 or Cell number (701) 421-0547

Sincerely:

Perry "No Tears" Perry
Director of Mandan, Hidatsa, & Arikara Nation

Cc. file

Three Affiliated Tribes
MANDAN * HIDATSA * ARIKARA

TRIBAL HISTORIC PRESERVATION
Mandan Hidatsa Arikara
Perry 'No Tears' Brady, Director.
404 Frontage Road,
New Town, North Dakota 58763
Ph/701-862-2474 fax/701-862-2490
pbrady@mhanation.com

Carson Murdy
Great Plains Regional Office
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401

As Director of the Tribal Historic Preservation Office and the Tribal Historical Preservation Officer representing the Mandan Hidatsa Arikara Nation I Concur with **BIA Case Number AAO-1818/FB/10** the location, and project are described in the following:

Burns, Christina
(2010) Project 32DU620 Evaluative Testing/Pipeline Inventory. Location: Fort Berthold Reservation, Dunn County...Beaver Creek Archaeology, Inc. for Saddle Butte Pipeline, LLC. Durango. CO.

If you have any questions or need additional information, you can contact me at (701) 862-2474 or 862-2475 or cell number (701) 421-0547

Sincerely,

Perry "No Tears" Brady
Director of the THPO
Mandan, Hidatsa, & Arikara Nation

Cc file

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
DESCRM
MC-208

NOV 16 2009

Perry 'No Tears' Brady, THPO
Mandan, Hidatsa and Arikara Nation
404 Frontage Road
New Town, North Dakota 58763

Dear Mr. Brady:

We have considered the potential effects on cultural resources of three oil pipeline extensions in Dunn and McKenzie Counties, North Dakota. Approximately 156 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed report. No historic properties were located which appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. Five "avoidance areas" were located that may qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

As the surface management agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **no historic properties affected** for this undertaking. Catalogued as **BIA Case Number AAO-1708/FB/10,** the proposed undertakings, locations, and project dimensions are described in the following report:

Burns, Wade
(2009) Three Saddle Butte Pipeline Connection Projects: A Class III Cultural Resource Inventory, Dunn and McKenzie Counties, North Dakota. Beaver Creek Archaeology for Saddle Butte Pipeline, LLC, Durango, CO.

If your office concurs with this determination, consultation will be completed under the National Historic Preservation Act and its implementing regulations. The Standard Conditions of Compliance will be adhered to.

If you have any questions, please contact Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

Sincerely,

Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes
Superintendent, Fort Berthold Agency