DRAFT ENVIRONMENTAL ASSESSMENT

Williston to Stateline Transmission Line Project

Mountrail Williams Electric Cooperative

DOE/EA - 1896

December 2011

MWEC

WILLISTON TO STATELINE
TRANSMISSION LINE PROJECT
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Acronyms, Abbreviations, and definitions

Abbreviation	Definition
Access Road	A dirt or graveled road or driveway used in areas where structures are not adjacent to township roads.
ACSR	aluminum core steel reinforced
ACSS	aluminum core steel supported
APE	Area of Potential Effect
APLIC	Avian Power Line Interaction Committee
Applicant	Mountrail Williams Electric Cooperative (MWEC)
BCC	Birds of Conservation Concern
BEPC	Basin Electric Power Cooperative
BMP	best management practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulation
dB	Decibel
dBA	A-weighted sound level recorded in units of decibels
DOE	Department of Energy
EA	Environmental Assessment
EMF	Electric and Magnetic Fields
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
G	Gauss
kV	Kilovolt
MBTA	Migratory Bird Treaty Act
MDU	Montana Dakota Utility
MWEC	Mountrail Williams Electric Cooperative
MFSA	Major Facility Siting Act
NAIP	National Agriculture Imagery Program
NDDH	North Dakota Department of Health
NDPRD	North Dakota Parks and Recreation Department
NDGF	North Dakota Game and Fish Department
NDSLD	North Dakota State Land Department
NDSWC	North Dakota State Water Commission
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NESC	National Electrical Safety Code
NHPA	National Historic Preservation Act
NPDES	National Pollution Discharge Elimination System
NRCS	National Resources Conservation Service
NRHP	National Register of Historical Places

Abbreviation	Definition
NWI	National Wetlands Inventory
PEMA	Temporarily Flooded Wetland
PEMB	Saturated Wetland
PEMC	Seasonally Flooded Wetland
PEP	Population Estimates Program
PLOTS	Private lands open to sportsmen
ROW	right-of-way
RUS	Rural Utilities Service
SH	State Highway
SHPO	State Historic Preservation Office
SoCP	species of conservation priority
SPCC	Spill Prevention Control and Countermeasure Plan
Tariff	Notice of Final Open Access Transmission Service Tariff
UMG&T	Upper Missouri Generation and Transmission Electric Cooperative
USCB	U.S. Census Bureau
USC	U.S. Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
Western	Western Area Power Administration

1.0 INTRODUCTION

Mountrail Williams Electric Cooperative (MWEC), through Upper Missouri Generation and Transmission (UMG&T), has applied to the U.S. Department of Energy (DOE) Western Area Power Administration (Western) for a new electrical interconnection to serve oil and gas activities in the Williston area. This project would require the construction of an interconnect at Western's Williston Substation and a new 115-kilovolt (kV) transmission line which would extend about 16 miles north and west from Western's Williston Substation to MWEC's Stateline Substation located at the Bear Paw Gas Plant (Figure 1.1-1). The project also includes construction of the MWEC Judson Distribution Substation which would be located approximately 2 miles west of Western's Williston Substation. The MWEC distribution substation would occupy approximately five acres of a 25 acre parcel where Basin Electric Power Cooperative (BEPC) is proposing to build a substation in the future (Figure 1.1-2). The BEPC Judson Substation would be covered under a separate environmental review. MWEC and BEPC are proposing to double circuit in two areas along the 16 mile transmission line. These areas are identified in Figure 1.1-2. A detailed description of the proposed action is included in sections 2.3 and 2.4 of this document.

The entire proposed Project would be located in Williams County, North Dakota. Figure 1.1-1 provides an overview of the project facilities and identifies the Project Area. A detailed description of the Proposed Action is provided in Chapter 2.0. In order for the Proposed Action to be constructed, Western must approve UMG&T's interconnection request. Western's approval or denial of UMG&T's interconnection request constitutes a Federal action under the National Environmental Policy Act (NEPA), Section 102(2) (1969), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulation (CFR) parts 1500-1508), DOE NEPA Implementing Procedures (10 CFR part 1021), and other regulations. Therefore, Western has prepared this environmental assessment (EA) under these regulations to analyze the environmental effects of the Proposed Action and alternatives, including the no-action alternative.

Figure 1.1-1
Williston to Stateline Project Overview

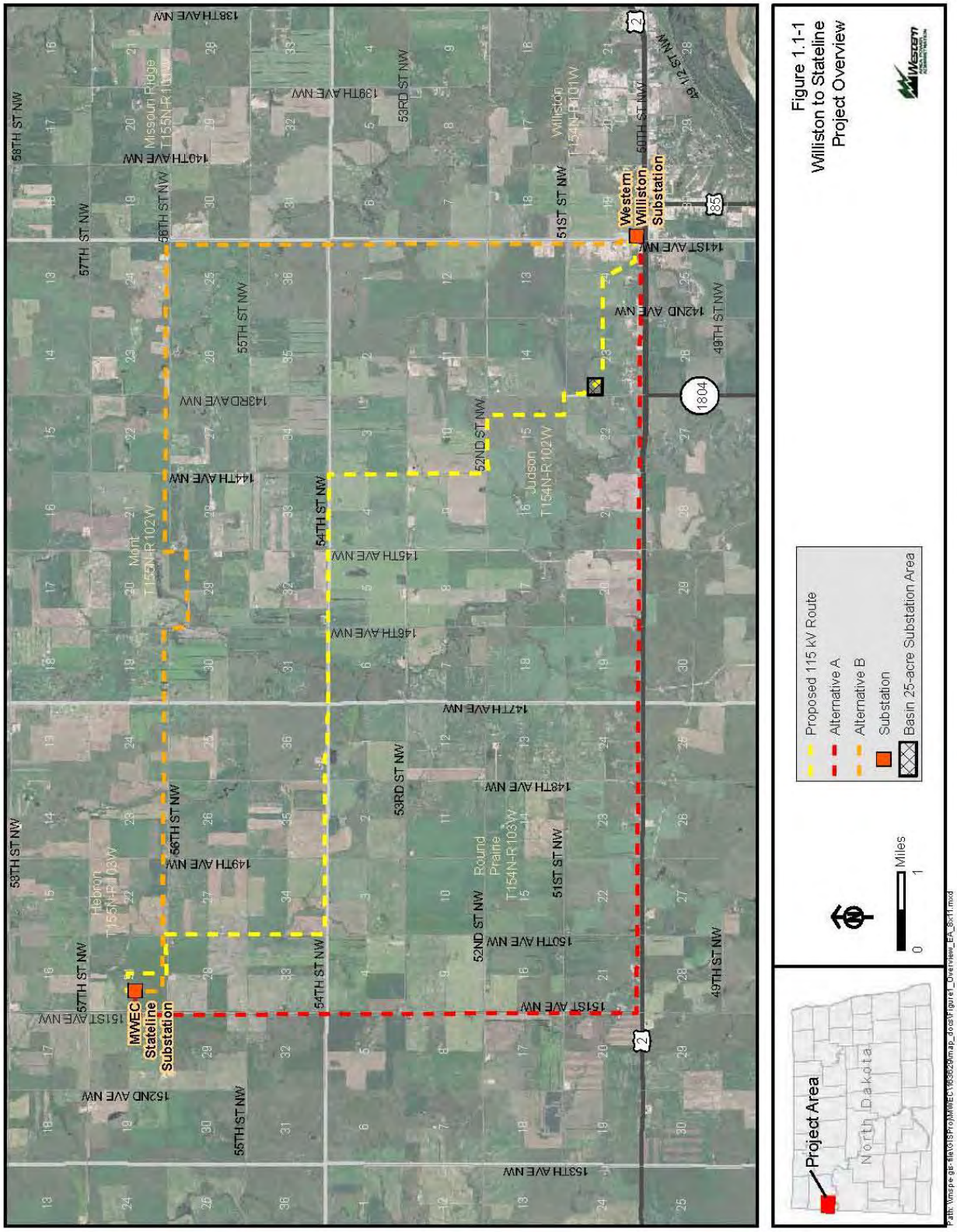
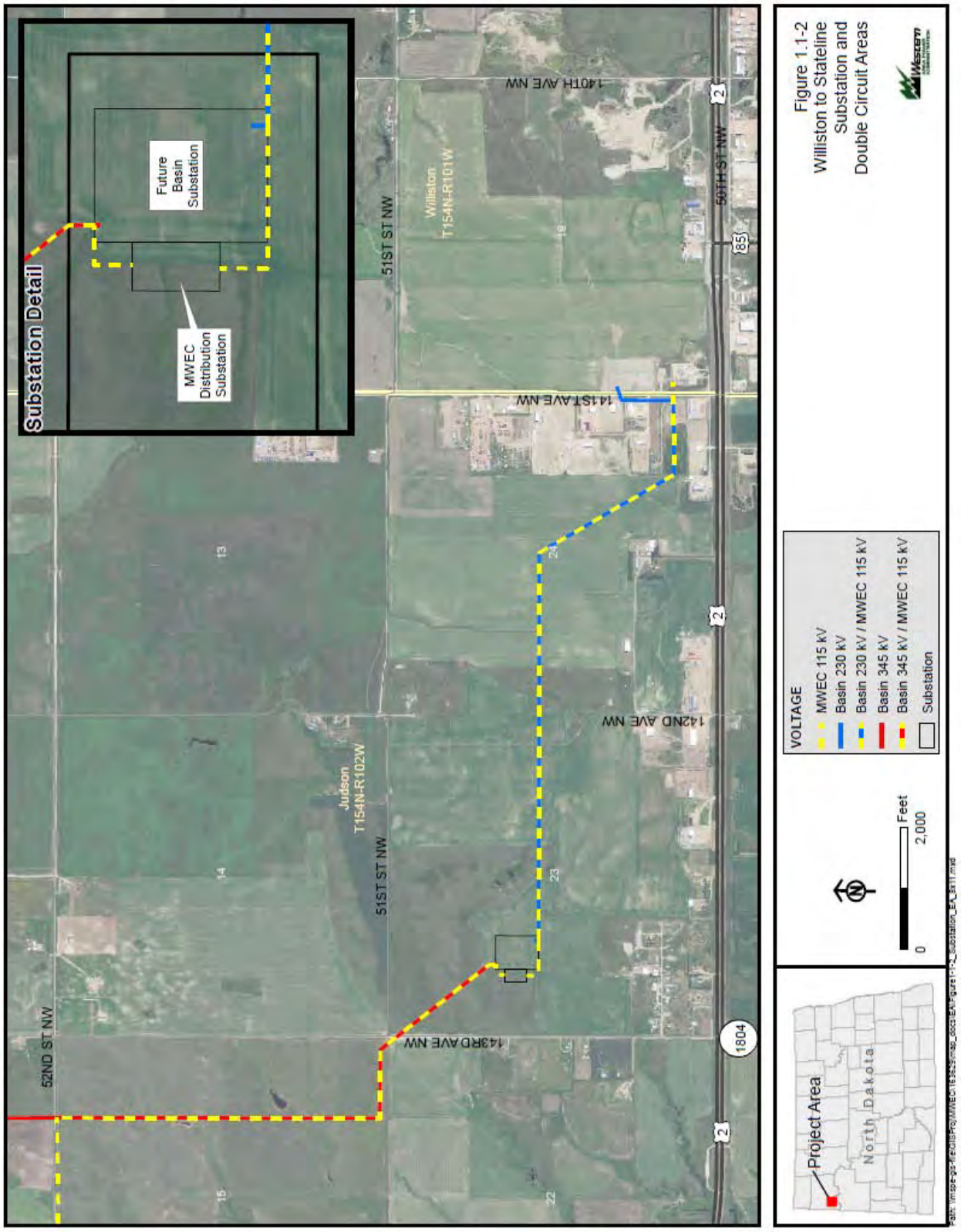


Figure 1.1-2
Williston to Stateline Substation and Double Circuit Areas



1.1 PURPOSE OF AND NEED FOR ACTION

1.1.1 WESTERN'S RESPONSE TO MWEC'S INTERCONNECTION REQUEST

Western's purpose is to market and deliver reliable power. Western provides power through interconnection requests from power providers. In this EA Western is considering an interconnection request from MWEC. In responding to the interconnection request (need for agency action), Western must abide by the following purposes:

- **Providing Transmission Service.** Western published its *Notice of Final Open Access Transmission Service Tariff (Tariff)* in the Federal Register on January 6, 1998 amended on January 25, 2005. Under Western's *Tariff*, Western offers transmission capacity in excess of the capacity Western requires for the delivery of long-term, firm capacity and energy to current contractual electrical services customers of the Federal government. The *Tariff* also requires Western to provide firm and non-firm, point-to-point transmission service and network integration transmission service to the extent that Western has available transmission capability.
- **Addressing Interconnection Requests.** Western's *General Guidelines for Interconnection* provides a process for addressing applications for interconnection. The process dictates that Western respond to an application as presented by an applicant. Section 211 of the Federal Power Act requires transmission service be provided upon application if transmission capacity is available.
- **Protecting Transmission System Reliability and Service to Existing Customers.** Western's purpose is to ensure that existing reliability and service is not degraded. Western's *General Guidelines for Interconnection* provides for transmission and system studies to ensure that system reliability and service to existing customers are not adversely affected.
- **Consideration of the Applicant's Objectives.** Since the statement of purpose and need affects the extent to which alternatives are considered reasonable, it is important to understand both the agency's purpose and need and that of the Applicant.

1.1.2 MWEC'S NEED FOR THE INTERCONNECTION REQUEST

MWEC's need for this project is to serve the 60 MVA Bear Paw Gas Plant. The Bear Paw Gas Plant is being constructed to reduce flaring from the oil fields. Phase I is currently under construction with subsequent expansion phases planned. ONEOK has requested that MWEC provide redundant electrical supply to the plant. MWEC's system does not have the capacity to serve the gas plant with a primary and redundant power source. The Proposed Action will provide the redundancy necessary to operate the plant, and it will serve the gas plant expansion.

Additionally, the Proposed Action could accommodate the additional load growth related to the continued increase of oil and gas activity in the area. At the time, MWEC is receiving numerous

requests monthly; most of the requests are to support compressors for drilling activities and ancillary structures. MWEC anticipates that the load growth being experienced in the area due to the oil and gas industry will continue to increase.

MWEC is proposing to construct the new transmission facility to meet the increased and redundant demand associated with the gas plant, and for potential future demands, in the most reliable manner possible to avoid jeopardizing the existing transmission system and the service provided to its existing or new customers. The new transmission line would assist in providing the area with reliable infrastructure for existing and future load demands.

1.2 AUTHORIZING ACTIONS

In addition to Western's action, other Federal, State, and local agencies have jurisdiction over certain aspects of the Proposed Action. Table 1.2-1 provides a listing of agencies with permitting and authorizing responsibilities for the Proposed Action.

Table 1.2-1
Permits that May be Required

Permit	Jurisdiction	Status
Local Approvals		
Conditional Use Permits (for 115-kV transmission line and distribution substation)	Williams County, North Dakota	Will be applied for if needed
State of North Dakota Approvals		
Consolidated Certificate of Corridor Compatability and Route Permit	North Dakota Public Service Commission	Pending*
Right-of-Way Grant	North Dakota State Land Department	Pending
National Pollutant Discharge Elimination System Permit	North Dakota Department of Health	To be applied for where ground disturbance would disrupt more than 1 acre.
Section 401 Water Quality Certification	North Dakota Department of Health	To be applied for, if necessary
Federal Approvals		
Interconnection Approval	Western Area Power Administration	Pending
Endangered Species Act (ESA) Section 7 Consultation	U.S. Fish and Wildlife Service	Biological assessment and consultation to be completed as part of the NEPA process
National Historic Preservation Act Section 106 Consultation	North Dakota State Historic Preservation Officer	Cultural survey and consultation to be completed concurrent with theNEPA process
Clean Water Act Complaince (Section 404 Approval)	U.S. Army Corps of Engineers	To be applied for, if necessary.

* *The PSC is requiring BEPC to obtain a permit for the 4 miles of transmission line that is being double circuited with MWEC's 115-kV transmission line.*

1.3 AGENCY CONSULTATION AND PUBLIC PARTICIPATION

Western has consulted with the various federal and state agencies and tribes in the development of this analysis (Appendix D). In addition to these consultations, Western will consider comments to this EA from agencies, tribes, landowners, and other interested persons.

Western held a scoping meeting for the proposed project on July 6, 2011, in Williston, North Dakota, at the Ernie French Extension Center. The meeting was to inform landowners and other interested parties about the project. Western staff and MWEC representatives were available to address questions and concerns. There were no comments received at or following the public scoping meeting.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action, as shown in Figure 1.1-1, consists of a new, approximately 16-mile-long, 115-kV transmission line, owned and operated by MWEC, between the Williston Substation and the Stateline Substation located at Bear Paw Gas Plant. The project also includes construction of the MWEC Judson Distribution Substation approximately two miles west of the Western Williston Substation. The MWEC Judson Distribution Substation would occupy approximately five acres.

Table 2.1-1 provides legal descriptions of where the proposed facilities would be located in Williams County:

Table 2.1-1
Location of Proposed Action in Williams County

Township Name	Township	Range	Sections
Judson	154 N	102W	3-6, 10,14-15,23-24
Round Prairie	154 N	103W	1
Hebron	155N	103W	21-22, 27, 34-36

2.2 INTERCONNECTION AT THE WILLISTON SUBSTATION

The proposed interconnection would utilize an existing 115-kV transmission line termination position that will be vacated by the upgrade of the Watford City 115-kV transmission line to 230-kV. Western will modify the relays, potential and current transformers, and revenue metering at the termination position as necessary. The modifications will occur within the existing termination bay and no new surface disturbance will be necessary.

2.3 TRANSMISSION LINE

Figure 2.3-1 through Figure 2.3-5 provide photos typical of the proposed structures to be installed for the transmission line. MWEC is proposing to use single-pole wooden structures placed approximately 300 feet apart (with a maximum span of 325 feet) along most of the transmission line. The height of the new structures would vary from 60 feet above ground to 90 feet, depending on terrain and structure type. This structure may be used to support transmission line only or may be modified as shown in Figure 2.3-2 to serve as a distribution underbuild structure.

Between the Williston Substation and proposed BEPC Judson Substation (Township 154N, Range 102 W, Sections 23 and 24) and north of the BEPC Judson Substation through Township 154N, Range 102W, Section 15, MWEC is proposing to use single-pole steel structures that would accommodate a double circuit transmission line build out. Figure 1.1-2 shows the location of the potential 230/115-kV double circuit and the location of the 345/115-kV double circuit. The structures would be placed approximately 800 feet apart (with a maximum span of 850 feet).

The height of the new structures would vary from 100 feet above ground to 115 feet, depending on terrain and structure type. Photos of the 230/115-kV double circuit are shown in Figure 2.3-3 and Figure 2.3-4. A typical 345/115-kV is shown in Figure 2.3-5. Only the 115-kV line would be placed on the structures and energized as part of this project. However, future lines are being planned in the area and MWEC is coordinating with BEPC to reduce environmental impacts by double-circuiting where feasible. The transmission line structures would be constructed with the davit arms for the second circuit for the Project. However, the second circuit would not be strung and energized until BEPC receives applicable state and federal approvals. Near Township155N Range 103W Section 36, two-pole wooden H-frame structures or a three-pole wooden structure with H-frame structures on each end are proposed to span a sensitive wetland and wildlife area. The spans for these structures would be between 600 to 700 feet apart.

The proposed permanent right-of-way (ROW) width would be 100 feet for the single circuit line and 150 feet for double circuit configurations. During construction of single- or multi-pole structures, each pole and anchor facility would typically involve up to 10,000 square feet, or 0.2 acres, of ground disturbance. The permanent impact would be approximately 100 square feet, or 0.002 acres. The H-frame or three-pole structures would permanently impact up to 0.6 acre. These acreages might increase slightly where guy wires are used to stabilize the pole. Guy wires would be used on wooden angle structures or areas where soil conditions are less stable[1]. Up to six guys wires may be used per pole structure.

[1] To estimate impacts, it has been assumed that up to 25 structures may require guy wires.

Figure 2.3-1
Standard Single Pole 115-kV Structure with Distribution Underbuild

Figure 2.3-2
Standard Single Pole 115-kV Structure with Distribution Underbuild Typical

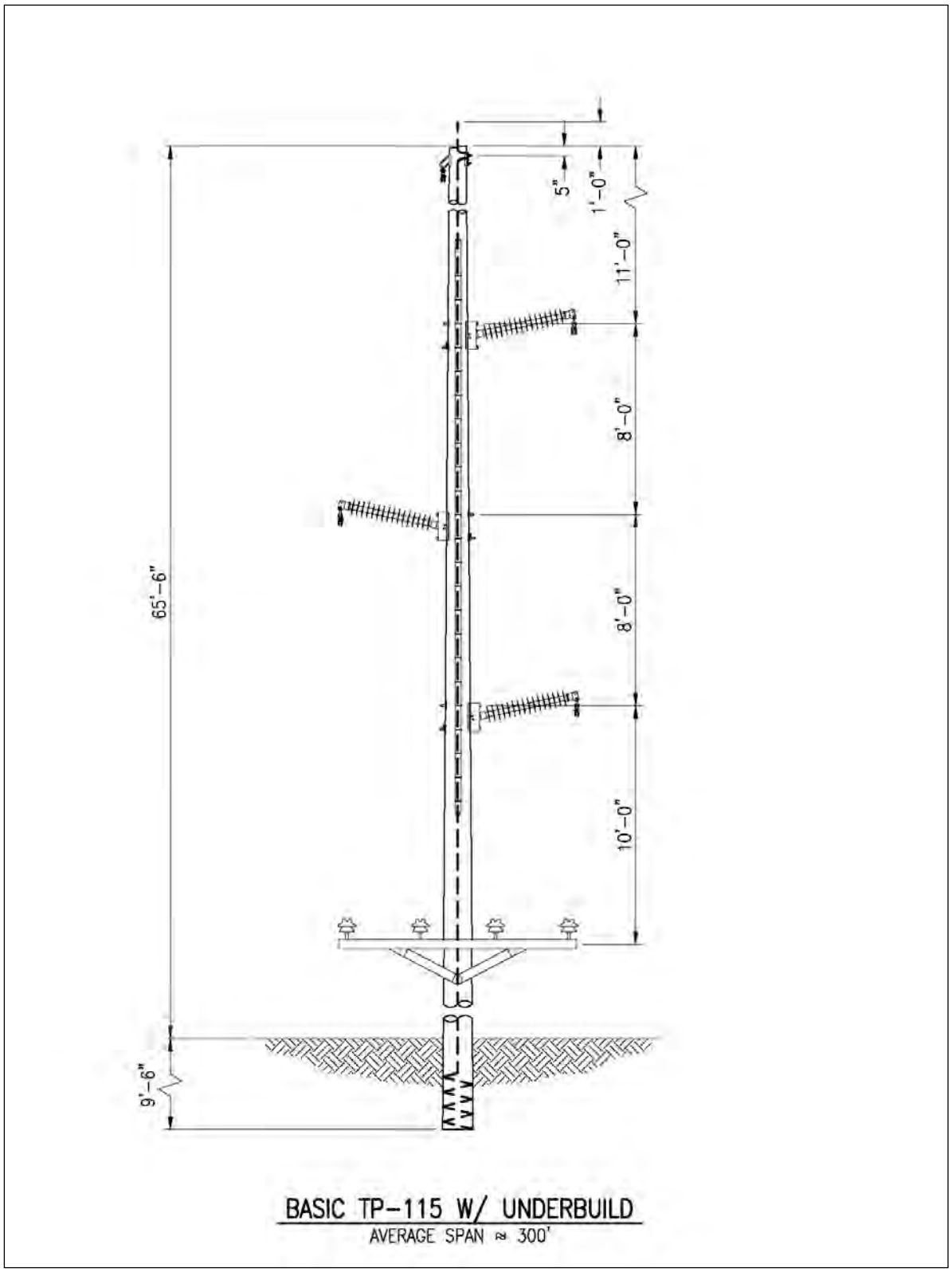


Figure 2.3-3
Single Pole Double circuit 230/115-kV Structure

Figure 2.3-4
Single Pole Double circuit 230/115-kV Structure Typical

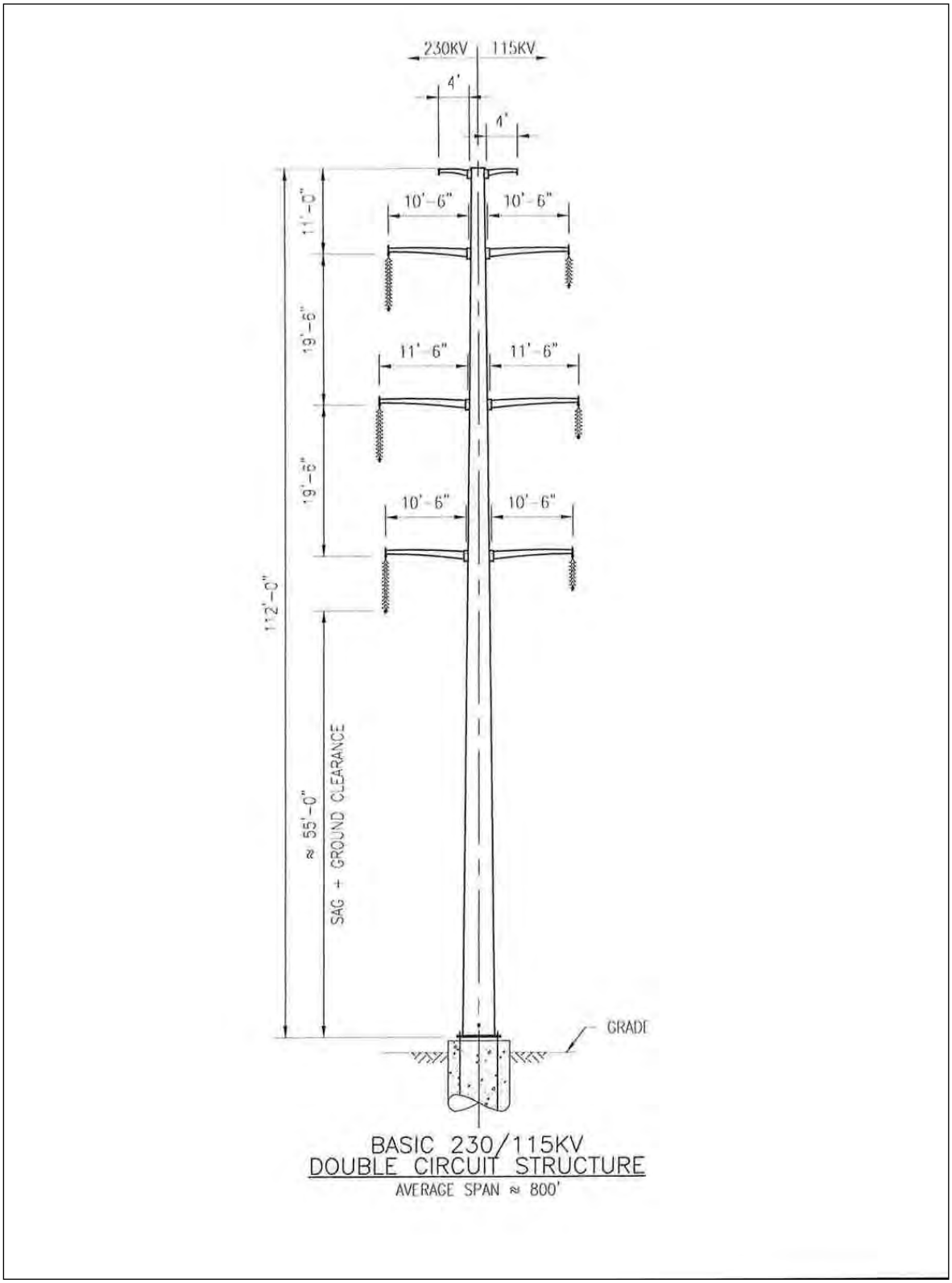
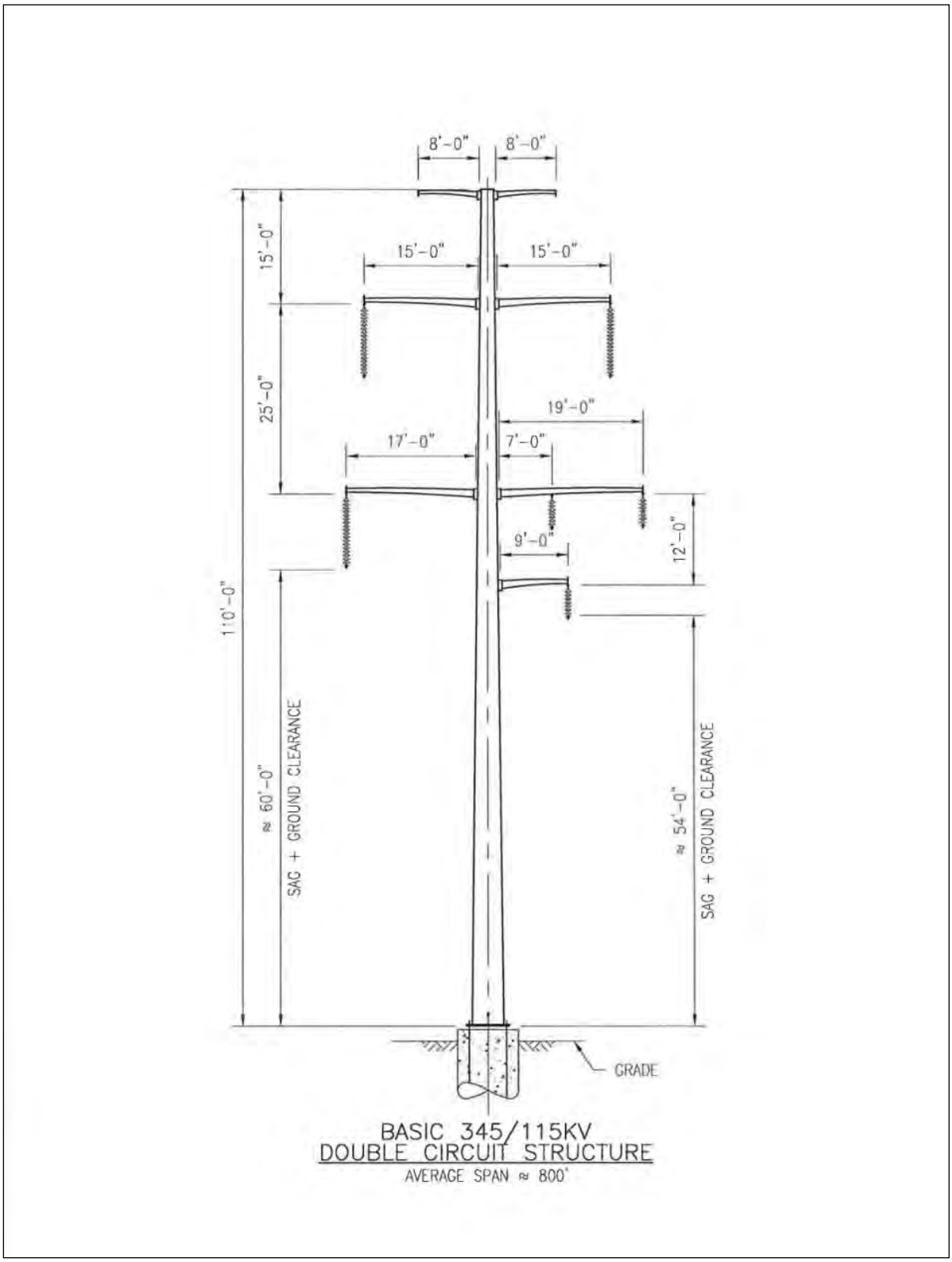


Figure 2.3-5
Single Pole Double circuit 345/115-kV Structure Typical



2.4 DISTRIBUTION SUBSTATION

To accommodate the additional load growth related to the continued increase of oil and gas development activity in the area, an additional substation would be constructed in Township 154N, Range 102W, Section 23. The proposed BEPC Judson Substation site would include a MWEC distribution substation and a BEPC Judson transmission substation. Figure 1.1-2 shows the general layout and configuration of the overall site. This EA will note natural and cultural resources in the overall site location, however, the impacts associated with the construction of the distribution portion of the substation will be the focus of the impact analysis for the EA. Five acres have been secured for construction of the MWEC distribution substation. The BEPC Judson transmission substation will be covered in more detail in an environmental analysis being prepared by BEPC in subsequent environmental documents.

The proposed MWEC Judson distribution substation would be located on a 5-acre parcel and would be owned, constructed, and operated by MWEC. The five acre parcel would be located within the larger BEPC Judson Substation site. Table 2.4-1 summarizes the equipment to be installed at the MWEC Judson distribution substation. During construction approximately 3 acres of this site would be disturbed. Once the equipment is installed, the area that would be permanently occupied by the distribution substation would be less than 2 acres. Access to the substation site would be from the north.

Table 2.4-1
MWEC Distribution Substation Equipment

Equipment	Installation (Total)
Control House	1
15/20/25MVA, 115-24.9/14.4 kV Transformer	1
15/20/25 MVA, 115-12.47/7.2 kV Transformer	1
115 kV Circuit Breakers	4
24.9 kV Circuit Recloser	6 initial, 12 ultimate
24.9 kV Voltage Regulator	3
12.5 kV Voltage Regulator	3

2.5 PRECONSTRUCTION ACTIVITIES

Preconstruction activities include literature searches, site engineering surveys, environmental surveys and studies, landowner agreements, and engineering design. Preconstruction activities would apply to all components of the Proposed Action.

2.5.1 PRECONSTRUCTION SURVEYS AND STUDIES

A summary of completed and planned surveys are as follows:

- Geotechnical borings to provide detailed information for foundation design of the proposed facilities; and
- Cultural and natural resource surveys to assess existing conditions. These surveys identify sensitive resources and assure that the placement of the proposed facilities avoid them, or minimize/mitigate potential impacts in the event avoidance is not possible.

2.5.2 LANDOWNER AGREEMENTS

MWEC has been working with affected landowners to negotiate agreements for the Proposed Action.

2.5.3 PROJECT PLANNING AND DESIGN

The Proposed Action has been designed to comply with applicable Federal, State, and local regulations. All facilities would be constructed in accordance with the National Electrical Safety Code (NESC) and the U.S. Department of Labor Occupational Safety and Health Standards. The MWEC components would be built to RUS transmission engineering and construction standards, substation and design standards and control engineering and design standards. In addition, the Proposed Action has been sited to avoid sensitive resources, such as sensitive habitat, native prairie remnants, wetlands, cultural resources and residential areas as much as possible. Construction schedules are being planned to avoid breeding seasons for nesting birds and other sensitive wildlife, to the extent practicable. Construction will be delayed during the breeding season (February 1 to July 1) in T154N, R102W Section 23, 10; T155N, R102W, Section 31; and T155N, R103W, Section 36 along native grassland areas to minimize impacts to migratory birds.

General land requirements and disturbance areas for each of the components are shown in Table 2.5-1. A summary of construction equipment, personnel, and time required for each task is provided in Table 2.5-2

Table 2.5-1
Summary of Disturbances

Component	Impact (acres)[1]	
	Construction Requirements (temporary)	Maintenance Requirements (long-term)
115-kV transmission line	49	0.49
Distribution Substation area	3	2
Total Impacts	**52**	**2.49**

[1] *Impacts were calculated based on preliminary design layouts for taking into account the various structure types and average span lengths. Temporary construction impacts include temporary impacts associated with pole construction, as described in Sections 2.3 and 2.4. Materials would be stored at the Stateline substation, proposed Judson substation, and the MWEC maintenance yard. No new areas of disturbance would be necessary.*

Table 2.5-2
Summary of Construction Equipment and Personnel

Task	Number of Construction Personnel Needed	Equipment Needed	Length of Time for Task
Transmission Line			
Site Clearing	3	Pickups, ATVs, hand tools	2 weeks
Transmission Line Structure Assembly	6 – 8	Pickups, cranes, material trucks,	2 months
Transmission Line Hole Excavation	2 - 3	Rotary drilling rigs, backhoes, pickups, ATVs, portable compressors	2 months
Concrete Foundations for Transmission Line Structures	5	Excavators, concrete trucks, skid steer	1 -2 months
Transmission Line Structure Erection	6 – 8	Cranes, boom trucks, pickups	2 months
Ground Wire and Conductor Stringing	10 – 14	Pickups, manlifts, boom trucks, hydraulic tensioning machines, reel trailers	1 – 2 months
MWEC Distribution Substation			
Site Grading	4 -6	Graders, dump trucks, pickups	2 weeks
Concrete Foundations	6-8	Excavators, concrete trucks, skid steer	3 weeks
Steel Erection	6-8	Cranes, boom trucks, pickups	3 weeks
Wiring and Buswork	4-6	Pickups	3 weeks
Commissioning	4	Pickups	1 week
Clean up	4	Pickups, dump trucks, flatbed trucks	On-going during construction

2.6 CONSTRUCTION ACTIVITIES

2.6.1 CONSTRUCTION OF THE TRANSMISSION LINE

Site Clearing

Because the majority of the proposed 115-kV transmission line would be constructed in cultivated agricultural fields and pastures (one pasture area includes mixed grass prairie species and construction will be delayed in this area to minimize impacts to migratory birds), minimal vegetation clearing would be required. Trees would be removed in T154N, R102W, Section 5 and in T155N, R103W, Section 34. The proposed 115-kV transmission line would be constructed at-grade for the majority of the ROW. In some isolated cases, grading could be required at structure locations if there is sloping or uneven ground. Grading may be necessary in

that situation to provide a level working area. Trees will be cleared within the ROW. Equipment used for this grading would likely consist of a front end loader or a small bulldozer. A summary of disturbances is included in Table 2.5-1 in Section 2.5.

Equipment Delivery and Transportation

Most of the material required for construction of the transmission line (e.g. poles, conductors, insulator bells) would be delivered to temporary material storage areas either located at the MWEC Office in Williston, proposed Judson Substation or the Stateline Substation. The materials and equipment would then be transported to the construction ROW along the route as construction progresses or from existing access points along county and section roads. No new access roads would be constructed.

Excavation, Foundations and Structure Erection

Insulators and other hardware would be attached to each structure while on the ground. Each single circuit wooden pole structure would require excavating or auguring a hole approximately 8.5 to12 feet deep and approximately 2 to 4 feet in diameter. Excavation dimensions would depend upon soil conditions, whether the structures would support an angle, and guying room available. Double circuit pole structures would require excavating or auguring a hole approximately 12 to 40 feet deep and approximately 7 to 8 feet in diameter.

The pole would then be lifted, and placed in the hole by a crane or similar heavy-duty equipment. The holes would be back-filled with native material or select backfill.

Conductor Stringing

Conductors would be installed by establishing stringing setup areas within the ROW, typically every two miles, which would store the spools of conductor cable. Temporary guard or clearance poles would be installed as needed over existing distribution or communication lines, streets, roads, highways, or other obstructions after any necessary notifications are made and permits obtained. This ensures that conductors would not obstruct traffic or contact existing energized conductors or other cables. Once the structures have been erected, crews would drive along the ROW, securing the conductor line through the insulators on the poles and installing shield wire clamps once final sag is established. The structures would be accessed by a hydraulic bucket system vehicle or “cherry picker.”

Gravel and Fill

Various construction activities associated with the Proposed Action could require access to gravel. The source for gravel would be from a commercially available source such as an already disturbed gravel pit.

Construction Waste Management

All waste and scrap, such as wire reels and pallets, would be removed from the area and disposed of properly at an approved disposal site. Personal waste generated by the construction crew, such

as bottles, cans, and paper would be disposed of in receptacles placed at the construction sites and disposed of at approved disposal sites.

Environmental Protection Measures

Western and MWEC have sited the line to minimize environmental impacts. Construction scheduling and Best Management Practices (BMPs) (i.e. silt fencing, spanning sensitive habitat) as outlined in the resource discussions contained in chapter 3 and summarized in Appendix A would be implemented to further reduce impacts associated with the project.

ROW Restoration Procedures

During construction, crews would attempt to limit ground disturbance wherever possible. Temporary disturbance areas would be restored to their original condition to the extent practicable, as negotiated with the landowner. Reclamation activities would include removing and disposing debris, dismantling all temporary facilities (including staging and temporary material storage areas), leveling or filling tire ruts, and erosion control. Reseeding areas disturbed by construction activities would be done with a seed mix, free of noxious weeds, containing vegetation similar to that which was removed. County or agriculture extension office seed mixes would be used if there are local recommendations.

2.7 OPERATION AND MAINTENANCE ACTIVITIES

2.7.1 OPERATION AND MAINTENANCE OF THE TRANSMISSION LINE

ROW Maintenance Procedures

The ROW defines the area where the proposed transmission line can be operated safely and reliably. Maintenance crews would perform inspections, maintain equipment, and make repairs over the life of the transmission line. Inspections would occur by vehicle along the ROW or on foot. Routine maintenance would be performed approximately every five years or more frequently, if necessary, to remove vegetation that may interfere with the safe and reliable operation of the proposed transmission line.

Decommissioning

If the Proposed Action is decommissioned in the future, the decommissioning process would follow MWEC's typical decommissioning process. The transmission line would be de-energized, and crews would move along the transmission line in a bucket truck and trailer removing conductors. After the conductors are removed, crews would remove the wood poles. Holes would be filled with clean fill. In areas that are within cultivated agricultural fields, the landowner would re-seed the pole locations with whatever crop is planted that season. In pasture and other non-cultivated areas, disturbed areas would be re-seeded with a weed-free seed mixture similar to nearby vegetation.

2.8 ALTERNATIVES

In evaluating the purpose and need for this project, two alternatives and the No-Action alternative were initially considered during project development. Alternatives A and B border the Project area and are identified on Figure 1.1-1. However, as described below, only the Proposed Action and the No-Action were carried forward for further analysis. A summary of alternative and route variations considered is provided below followed by Western's determination regarding how these alternatives compare to the Proposed Action.

2.8.1 NO-ACTION OR NO-BUILD ALTERNATIVE

Under the No-Action alternative, Western would not approve the MWEC's interconnection request. MWCE would not have backup to its primary source of power to the Bear Paw Gas Plant. Although the absence would avoid the construction of any new facilities and associated environmental impacts in this location, the overall benefits of providing back up power for the gas collection facility would not be realized. The Bear Paw Gas Plant request included a closed loop service for system reliability. If the Williston to Stateline transmission line is not built the system would not be a closed loop and system reliability would not be provided. If there would be a planned or unplanned outage on the primary source of power to the Bear Paw Gas Plant and there was not a secondary source of power the plant would have to shut down. This would result in flaring to occur at hundreds of pumping sites.

No alternative power generation facilities are known to have been proposed in the project area that could meet the purpose and need of the Proposed Action, or are known to be under consideration as reasonable, technically feasible or economically viable alternatives. Therefore, the No-Action alternative would delay or limit new oil and gas recovery efforts.

The additional capacity that would be provided with the proposed Judson Substation would not be available to serve load growth in the MWEC service area, which could mean delayed service for new requests or brown outs and decreased reliability for existing customers if additional power is not supplied to the MWEC system. The potential impacts of the No-Action alternative on specific resources are analyzed further in Chapter 3.0.

2.8.2 ROUTE ALTERNATIVES

The Williston to Stateline transmission line was proposed in its current location to provide power to the Bear Paw Gas Plant and to facilitate the future expansion. It is also located in close proximity to existing and anticipated new oil and gas development wells as well as future growth areas for the community of Williston. The location was selected after careful analysis of the regional electrical system factors related to construction and operation requirements. This analysis was focused on a location that would: 1) meet the project purpose and need; 2) be consistent with planned and anticipated system needs; 3) meet design and reliability standards; 4) avoid and minimize impacts to environmentally-sensitive resources; 5) be reasonable; 6) be

technically feasible; and 7) be economically viable. A variety of data sources, including regional electrical system models, system plans, aerial photographs, topographic maps, geographic information system (GIS) data, site visits and landowner input were used to select the location of the route.

MWEC considered the following route alternatives, which are discussed below:

- Alternative A
- Alternative B

Alternative A

Alternative A would exit the Western Williston Substation and travel west along Highway 2 for approximately 10 miles until 151st Ave NW at this point the route would turn north and travel six miles north to the new MWEC Stateline Substation (Figure 1.1-1).

This alternative would be placed in an area where two 115-kV transmission lines already parallel Highway 2. One of these transmission lines is constructed for 230-kV and will likely be converted in the future. As a result space is limited in this area to support another transmission line route. In addition, Alternative A route would be located near more homes and businesses than the Proposed Action and near or over multiple communication towers resulting in possible conflicts or relocations. It was not the preferred route by landowners who were not supportive of easements along this route.

The route would be longer than the Proposed Action, impacting more land resources and resulting in higher cost for the transmission line; it would not provide benefits over the Proposed Action.

Alternative B

Alternative B would exit the Williston Substation and travel six miles north to 56th street NW where the route would turn west and travel ten miles west terminating at the MWEC Stateline Substation (Figure 1.1-1).

This alternative would be located closer to documented whooping crane sightings which are likely associated with Lake Sakakawea and the Missouri and Little Muddy rivers to the east. The area east of this route has been identified as a future growth area in the Williston comprehensive plan as a mixture of industrial, commercial, residential and agricultural uses. Landowners were not supportive of this route when approached regarding possible land easements.

This route would be longer than the Proposed Action, but would not provide benefits over the Proposed Action. Instead, it may result in impacts to future land use and would be closer to areas where whooping cranes have been sited.

2.8.3 WESTERN'S DETERMINATION

Based on the summary of evaluations, impacts and considerations discussed above, Western determined that, compared to the Proposed Action, neither route alternatives A or B offered substantive environmental and/or economic benefits that would warrant further, more detailed investigation. For these reasons, the alternatives described above were not carried forward for detailed analysis in this EA.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

This chapter describes the existing environmental resources in the Project area and the direct, indirect, and cumulative impacts that could result from the construction, operation, and maintenance of the Proposed Action. An environmental impact is a change in the status of the existing environment as a result of the Proposed Action. Direct impacts are those that result from construction, operation, and/or maintenance. Indirect impacts generally occur following construction and may or may not be directly related to the Proposed Action. Indirect impacts can be positive (beneficial), negative (adverse), permanent (long-term) and/or temporary (short-term). Short-term impacts are generally associated with the construction phase of the Proposed Action, while long-term impacts remain for the life of the Proposed Action.

In this EA we examine the following environmental resource areas and factors for direct and indirect impacts: soils; air; climate change, water; wetlands; vegetation; wildlife; endangered, threatened, proposed, and candidate species; designated critical habitat; socioeconomics; environmental justice; land use; transportation, visual; noise; safety and health; historic and Native American religious concerns. An analysis of cumulative impacts and a comparison to resource impacts under the No-Action alternative are included for each resource.

For those resources that would be impacted, the measures that would be implemented to avoid, minimize, or mitigate environmental impacts are noted. The Proposed Action would not affect the following resource areas:

- Soils
- Air Quality
- Environmental Justice
- Cultural Resources

3.2 NATURAL RESOURCES

3.2.1 SOILS

A regional discussion of geology is necessary for an understanding of the soil types within the study area. The soil types that would be subject to construction disturbance—those crossed by the proposed right-of-way (ROW), temporary material storage areas, and the proposed MWEC distribution substation—were analyzed.

Existing Environment

The underlying geology in the study area consists of the Devonian-Mississippian Bakken Formation, and the Sentinel Butte Formation. The Bakken Formation covers portions of eastern Montana, western North Dakota, Saskatchewan, and Manitoba, and consists of three members:

the lower shale member, middle sandstone member, and the upper shale member. Both the upper and lower shale members are organic-rich marine shale; these are the petroleum source rocks and part of the continuous reservoir of hydrocarbons produced from the Formation. The Sentinel Butte Formation consists of alternating beds of grayish brown to gray sandstone, siltstone, mudstone, claystone, and lignite (USGS 2008a).

The Paleontology Portal and the U.S. Geological Survey (USGS) website did not identify any known paleontological resources near the study area (USGS 2008b). The closet identified paleontological sites are in the Theodore Roosevelt National Park and Historic Medora areas, which are located more than 100 miles to the southwest of the Proposed Action.

According to the North Dakota Geological Survey (NDGS), North Dakota is located in an area of very low earthquake probability. There are no known active tectonic features in south-central North Dakota and the deep basement formations underlying North Dakota are expected to be geologically stable (Bluemle 1991). This information is supported by USGS seismic hazard maps, which show that the Proposed Action would be located in an area with very low seismic risk (USGS 2008). Related hazards, such as soil liquefaction, are therefore also unlikely.

Over the past 100 years, soils in the study area have been suitable for agricultural activities (e.g., crops or pasture land), rangeland, and oil and gas production. This is expected to continue for the reasonably foreseeable future. Slopes range from nearly flat to up to 65 percent. The typical landscape is gently rolling, with some steep coulees.

Soils crossed by the Proposed Action include Arnegard Series Loam, Bowbells Series Loam, Bowdle Series Loam, Divide Series Sandy Loam, Hamerly Series Loam, Harriet Series Loam, Korchea Series Loam, Niobell Series Loam, Shambo Series Fine Loam, Stirium Fine Sandy Loam, Tonka Series Silt Loam, Wildrose Series Clay, Williams Series Loam, and Zahl Series Loam. Soils of the Divide, Hamerly, Korchea, Stirum, Wildrose, Williams, and Zahl Series are susceptible to water or wind erosion. (NRCS 1998). Erosive soils account for approximately 20 percent of the soils disturbed by the Proposed Action. The majority of these soils are located in T154N R102W, sections 5, 14, and 15, and T145N R103W, sections 1 and 3. Prime Farmland accounts for approximately 1.6 percent of land within a quarter mile of the Proposed Action, and is defined as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses” (7 CFR, 675.5 (a) (1)).

Environmental Consequences

A significant impact to soils would occur under the following conditions:

- Erosion or siltation resulting in measurable loss of soil productivity (e.g., loss of topsoil), or which contributes to air or water degradation; or

- Soil Contamination from leaks or spills causing a decline in agricultural or habitat productivity.

Proposed Action

Construction Impacts

Soil disturbance would result from site clearing and excavation activities at structure locations and pulling and tensioning sites, and during transport of crews, machinery, materials, and equipment through the ROW. As noted in Section 2.5, approximately 52 acres of construction disturbance would occur. To the extent practicable, excavation activities would be limited to locations of pole placement and would avoid steep slope areas. Where excavation in steep slope areas cannot be avoided Best Management Practices (BMPs) would be implemented to minimize erosion during construction. BMPs would include installation of silt fencing, straw bales, and ditch blocks, and covering bare soils with mulch, plastic sheeting, or fiber rolls as necessary to ensure that disturbed areas are protected from erosion, and drainageways and streams are not impacted by sediment runoff from exposed soils, especially during significant precipitation events.

Disturbed areas would be revegetated with an approved seed mix after construction is completed. The seed mix will be coordinated with the landowner. A measurable loss in soil productivity and a contribution to air or water degradation would not occur as a result of the Proposed Action. There is the possibility with any construction activity of spilling fuel, hydraulic fluid, or other regulated materials. MWEC would minimize the likelihood of such an event by ensuring that refueling takes place at secure areas. Spill kits would be maintained at these sites to contain and clean up any spills that may occur. Construction crew members would be trained in spill prevention and clean up, as noted in Appendix A.

Operational Impacts

During operation of the Project, maintenance personnel traveling on gravel roads and across ROWs, would impact soils. Due to the temporary and intermittent nature of these activities a measurable loss in soil productivity and a contribution to air or water degradation would not occur as a result of the day to day operation, and permanent installation of the Project. The transmission line poles and distribution substation would permanently impact about 2.5 acres of soil.

No-Action (No-Build)

Under the No-Action Alternative, increased disturbance from site clearing, excavation activities, and travel on gravel roads and ROWs would not occur. The overall impacts to soil resources would be less under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

The Proposed Action would take a relatively small amount of soil out of agricultural use; approximately 0.5 acres for the transmission line and approximately 2.5 acres for all facilities combined. With BMP implementation, soil erosion would be minimized and contained. BMPs would be implemented to ensure that erosion is avoided, minimized, and contained during construction. Adherence to National Pollutant Discharge Elimination System (NPDES) permits would require adequate design, grading, and use of BMPs to ensure that water quality is not affected by soil erosion from the Proposed Action. The wide spacing of the transmission line poles associated with the Project would take a relatively small area of soils out of agricultural uses. The Proposed Action in combination with the other reasonably foreseeable projects discussed in Section 3.4, therefore, would not result in erosion or siltation that would lead to measurable degradation, and would not result in a loss of topsoil that would cause a measurable decline in agricultural or habitat uses.

No substantive direct, indirect, or cumulative impacts to soils would result from the Proposed Action or the No-Action Alternative.

3.2.2 AIR RESOURCES

Existing Environment

The study area for air quality includes west central North Dakota. The North Dakota Department of Health (NDDH), Environmental Health Section, Division of Air Quality enforces state and federal environmental laws through the division's permitting, inspection, sampling, analytical services, and monitoring activities.

Air quality generally is determined by comparing monitored pollutant concentrations with prescribed standards. The maximum level of a pollutant considered to be acceptable is specified by the U.S. Environmental Protection Agency (USEPA). The Clean Air Act (CAA) established two types of National Ambient Air Quality Standards (NAAQS). The primary standards set limits to protect public health, and the secondary standards set limits to protect public welfare (42 U.S.C. 7409). The USEPA Office of Air Quality Planning and Standards has set NAAQS for the following six criteria pollutants: ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), respirable particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb). Ambient air quality standards adopted by North Dakota are more stringent than the national standards for the following:

- SO_2 Annual – 0.023 ppm (NAAQS – 0.03 ppm)
- SO_2 24-Hour – 0.099 ppm (NAAQS – 0.14 ppm)

Additionally, North Dakota has standards for Hydrogen Sulfide (H_2S) as follows:

- H_2S Maximum Instantaneous – 10 ppm
- H_2S 1-Hour – 0.20 ppm
- H_2S 24-Hour – 0.10 ppm
- H_2S 3-Month – 0.02 ppm

To determine compliance with NAAQS, concentrations of pollutants are measured and averaged over a specified duration (ranging from one hour to one year, depending on the pollutant and standard) for comparison with the applicable standard. A table showing the NAAQS for the criteria pollutants can be found in Appendix B.

The proposed transmission line and distribution substation are within Williams County, North Dakota, which is classified as an NAAQS attainment area for all criteria pollutants. NDDH operates seven air quality monitoring sites across the state and eight additional industry specific monitoring sites. The only monitoring site in Williams County is the industry specific Amerada Hess Corporation monitoring site, which only monitors SO_2. Monitors in Burke and McKenzie counties – both adjacent to Williams County – monitor for SO_2, NO_2, O_3, $PM_{2.5,}$ and PM_{10}. Present air quality trends in the area are affected primarily by fugitive dust from agricultural operations, oil and gas drilling activities, and traffic along unimproved roads. These effects may be exacerbated by wind conditions.

Environmental Consequences

A significant impact to air quality would occur under the following condition:

- Increased emissions resulting in a violation of federal or state air quality standards.

Proposed Action

Construction Impacts

During construction of the Proposed Action, there would be limited, temporary emissions from construction vehicles and equipment and fugitive dust from construction activities, especially on unpaved roads. Emissions would be influenced heavily by weather conditions and the specific construction activity occurring. Exhaust emissions, primarily from diesel equipment, would vary according to the phase of construction. Fugitive dust would be controlled by spraying the working area with water, as needed. Due to the temporary and intermittent nature of these emissions and the fact that the study area is currently in attainment for both federal and state ambient air quality standards, impacts anticipated from the Proposed Action would not result in a violation of ambient air quality standards.

Operational Impacts

The only pollutants of concern relating to the transmission lines are O_3 and NO_x (nitrogen oxides). However, vehicles required for operational maintenance of the transmission line and the

proposed distribution Substation would result in temporary emissions of $PM_{2.5}$ and $PM_{10.}$ Emissions of O_3, NO_x, $PM_{2.5}$, and PM_{10} would not significantly impact air quality in the Project Area.

The O_3 and NO_x emissions from a 115-kV transmission line result from corona effects and are very minor. Corona consists of the breakdown or ionization of air within a few centimeters or less of conductors, which can produce ozone and oxides of nitrogen. For a 115-kV transmission line, the conductor gradient surface is usually below the air breakdown level. Typically, some imperfection, such as a scratch on the conductor or a water droplet, is necessary to cause corona. Ozone is not only produced by corona, but also forms naturally in the lower atmosphere from lightning discharges and from reactions between solar ultraviolet radiation and air pollutants such as hydrocarbons from auto emissions. The natural production rate of ozone is directly proportional to temperature and sunlight and inversely proportional to humidity. Thus, humidity (or moisture), the same factor that increases corona discharges from transmission lines, inhibits the production of ozone from chemicals in the atmosphere. Ozone is a very reactive form of oxygen and combines readily with other elements and compounds in the atmosphere. Because of its reactivity, it is relatively short lived.

Transmission lines and substations do not produce substantial amounts of O_3 and NO_x and emissions of $PM_{2.5}$ and PM_{10} would be temporary and intermittent. Due to the temporary and intermittent nature of these emissions and the fact that the study area is currently in attainment for both federal and state ambient air quality standards, impacts anticipated from the Proposed Action would not result in a violation of ambient air quality standards.

No-Action (No-Build)

Under the No-Action Alternative, continued flaring at hundreds of pumping stations could result in a decrease in air quality. While flaring may not violate federal and state air quality standards, the overall impacts to air quality would be greater under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

Neither the Proposed Action nor the No-Action Alternative, in combination with other projects, would result in a violation of federal or state air standards. Predicted emission levels during construction and maintenance of any facilities would be low and the resulting concentrations would not exceed state or federal standards.

No substantive direct, indirect, or cumulative impacts to air resources would result from the Proposed Action or the No-Action Alternative.

3.2.3 CLIMATE CHANGE

Existing Environment

Greenhouse gases (GHG) are chemical compounds in the Earth's atmosphere that absorb and emit radiation within the thermal infrared range. The primary GHGs consist of water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_20), and fluorinated gases (USEPA 2010). Human activities such as deforestation, soil disturbance, and burning fossil fuels can increase emissions of GHGs, resulting in a build up of heat in the atmosphere. Models predict that atmospheric concentrations of all GHGs will increase over the next century due to human activity; however, the extent and rate of change is difficult to predict. In response to concerns over the predicted increase of global GHG levels, several federal regulations address the need to reduce GHG emissions. One of these regulations, the USEPA Mandatory Reporting Threshold for Large Sources, requires reporting of GHG emissions exceeding 25,000 metric tons of carbon dioxide equivalent (CO_2e) per year. This threshold is approximately equivalent to the amount of CO_2 generated by 4,400 passenger vehicles per year.

Environmental Impacts

Proposed Action

Construction Impacts

During construction, GHG emissions from the Proposed Action would result from the use of gasoline and diesel-powered vehicles and temporary disturbance of vegetation would result in a reduction of GHG storage in the Project Area. Based on the low workforce and the limited amount of temporary vegetation clearing required to construct the transmission line, GHG emissions resulting from construction would be negligible and well below the USEPA Mandatory Reporting Threshold.

Operation Impacts

Fossil fuels consumed during periodic maintenance would be the only producers of GHGs during Project operation, while permanent clearing of vegetation and trees along the transmission line corridor would reduce the overall GHG storage capacity of the Project Area. The amount of CO_2 produced by maintenance vehicles over the life of the project would be negligible and well below the USEPA Mandatory Reporting Threshold. Permanent vegetation removal and proposed mitigation is discussed in Section 3.2.5. Because operation and maintenance activities would be similar to existing conditions, project GHG emissions would not represent a substantial change.

No-Action (No-Build)

Under the No-Action Alternative, continued flaring at hundreds of pumping stations could result in increased GHG emissions. While flaring may not exceed the USEPA Mandatory Reporting Threshold, overall GHG emissions would be greater under the No-Action Alternative than the build alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

All levels of GHG emissions are relevant in that they contribute to global GHG concentrations and climate change. Predicted emission levels during construction and maintenance of any facilities would be low and the resulting impact on GHG concentrations would be low.

No substantive direct, indirect, or cumulative impacts to air resources would result from the Proposed Action or the No-Action Alternative.

3.2.4 WATER RESOURCES AND QUALITY

Existing Environment

The study area for water resources and water quality is the proposed ROW. Some discussion of regional resources is necessary for context of site-specific water resources. Western North Dakota is a semiarid to subhumid and continental region, receiving approximately 14 inches of moisture annually (SCS 1998). Water resources within the study area include groundwater aquifers, streams and associated wetlands, isolated prairie pothole wetlands, and man-made lakes. Agriculture, cattle, and oil and gas facilities are the most likely sources of degraded water quality (See Appendix C).

Groundwater

Groundwater resources in the study area are included in the Fort Union Formation Tertiary aquifer. Tertiary aquifers consist mostly of semi-consolidated to consolidated sandstone beds of Oligocene to Paleocene age (USGS 1996). These water-yielding sandstones are an important water source in the region. According to the North Dakota State Water Commission (NDSWC), water observation wells access groundwater resources as shallow as 6 feet below the ground surface (NDSWC 2011).

Surface Water

Surface water resources in the study area are found within the Charlie-Little Muddy Creek watershed (NDSWC 2006). No major rivers are found in the study area. However, the Missouri River is located approximately two miles to the southeast of the study area. One stream, Painted Woods Creek, and several unnamed tributaries cross the proposed alignment (NRCS 1998). Individual stream crossings are listed in Table 3.2-1. In general, surface water in the study area drains southeast toward the Missouri River.

Table 3.2-1
Water Crossings

Waterbody Name	# of Crossings
Painted Woods Creek	1
Multiple Unnamed Tributaries	6

Source: (NRCS 1998)

Water Quality

Widespread agricultural practices in the region (e.g., feedlots, application of pesticides, herbicides, and fertilizers, cattle grazing and trampling of streams and riparian areas, and absence of erosion control) have contributed to a general decline in water quality over the last 100 years. Recent and ongoing oil extraction may also contribute to water quality degradation. According to the North Dakota Geographic Targeting System for Groundwater Monitoring, surface water and groundwater in Williams County has levels of pesticides and nitrates well within human health and aquatic life standards.

Wetlands

The study area for wetlands includes the proposed ROW, temporary material storage areas, MWEC distribution substation, and surrounding lands that may be temporarily affected by construction. Typical wetland vegetation is emergent, with seasonally saturated-to-ponded hydrologic regimes. The majority of the wetlands are associated with streams and stream impoundments. Isolated prairie pothole wetlands also occur in the Project area.

Wetland resources within the study area were initially identified by reviewing Williams County Soil Survey data published by the Natural Resources Conservation Service (NRCS), and National Wetlands Inventory (NWI 2011) data. Following review of this information, on-site wetland delineations took place in August 2011 according to the 1987 Army Corps of Engineers Field Guide for Wetland Delineation methods and the 2010 Army Corps of Engineers Great Plains Regional Supplement.

Scattered small wetlands (less than 1 acre) occur throughout the ROW landscape. Some of these wetlands are associated with the intermittent drainages that direct water to Painted Woods Creek; while others are isolated prairie pothole wetlands. According to USGS stream mapping there are no perennial streams that are crossed by the Project. The only named watercourse crossed by the Project is Painted Woods Creek, an intermittent stream. Twenty-three wetlands are located within the proposed ROW. Wetlands and other surface water features are shown in Appendix C.

As shown in Table 3.2-2, the wetlands in the Project area are typically temporarily or seasonally flooded, palustrine, emergent-type wetlands. Many wetlands in the area have been affected by agricultural practices, grazing and trampling by cattle, partial drainage or tillage, or runoff of fertilizers and herbicides.

Typical wetland vegetation includes green needlegrass (*Stipa viridula*), needleandthread (*Stipa comata*), western wheatgrass (*Agropyron smithii*), and blue grama (*Bouteloua gracilis*). Wetlands found in pasture areas are generally used by cattle for watering. Species diversity within these areas tends to be low, and impacts from soil disturbance by cattle are noticeable in many locations. Hydrologic regimes ranged from temporarily saturated in some swales, to deep-water habitat in intermittent streams.

Table 3.2-2
Wetlands within ROW

Cowardin Classification	Acres
PEMA	0.45
PEMB	0.0
PEMC	2.07
PABFx	0.10
Total	**2.62**

Environmental Consequences

A significant impact to water resources would occur under any of the following conditions:

- Groundwater, surface water quality, or wetland degradation resulting in violations of federal and/or state standards, including stormwater discharge events in violation of NPDES permit requirements; and
- Increased susceptibility to on-site or off-site flood damage due to altered surface hydrology; or
- Unmitigated discharge of dredged or fill material into jurisdictional waters of the United States under Section 404 of the Clean Water Act or in violation of a Section 404 permit or applicable state wetland regulations; or
- Unmitigated drainage or dewatering of jurisdictional waters of the United States under Section 404 of the Clean Water Act or in violation of a Section 404 permit or applicable State wetland regulations; or
- Loss of wetland area

Proposed Action

Groundwater may be encountered during excavations for transmission line structures, however, the Proposed Action is not expected to require dewatering. If dewatering is found to be necessary during construction (i.e., during pole embedding), the effects on water tables would be localized and short-term. Dewatered groundwater would be properly discharged to minimize erosion and facilitate infiltration back into the ground. The Proposed Action would have no impact on either

municipal or private water uses in the study area. No water storage, reprocessing, or cooling is required for either the construction or operation of the transmission line. Therefore the Proposed Action would not result in violations of groundwater quality standards.

The 115-kV transmission line would be designed to span and/or avoid surface water features, including streams and wetlands. Construction of the transmission line would not be expected to alter existing surface water drainage patterns due to the small cross section per pole and their relatively wide spacing. The typical distance between structures would be 350 feet. No wetlands or wetland complexes within the ROW are wider than the maximum span distance. Access roads would be routed to avoid wetlands. The small area of impermeable surfaces created by the pole structures would not cause an increase in the susceptibility of the region to flooding.

Sediment reaching tributaries to Painted Woods Creek has the potential to adversely affect water quality downstream. MWEC would employ BMPs and adhere to the terms and conditions of the NPDES permits during construction. These actions would protect topsoil and adjacent water resources and minimize and trap soil erosion before it could reach surface water resources.

Maintenance and operation activities for substation or transmission-line facilities are not expected to have an adverse impact on surface water quality.

There is the possibility with any construction activity of spilling fuel, hydraulic fluid, or other regulated materials that could reach surface water resources. MWEC would minimize the likelihood of such an event by ensuring that refueling takes place at secure areas away from drainages. Spill kits would be maintained at these sites to contain and clean up any spills that may occur. Construction crew members would be trained in spill prevention and clean up to insure proper handling of any accidental spill (Appendix A).

No-Action (No-Build)

Under the No-Action Alternative, increased disturbance from site clearing and excavation activities would not occur, resulting in less opportunity impacts to water quality in the Project area. The overall impacts to water resources would be less under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

The effect of the Proposed Action on water resources, in combination with the projects described in Section 3.4, would not be expected to degrade water resources. The proposed transmission projects in the area would have a similar construction methodology as the Proposed Action and would not be expected to impact water resources, including wetlands. BMPs would be employed by MWEC to ensure that erosion and sedimentation are avoided, minimized, and contained during construction, and that sediment does not reach surface water bodies. Adherence to

NPDES permits would require adequate design, grading, and use of BMPs to ensure that water quality is not affected by these projects.

No substantive direct, indirect, or cumulative impacts to surface water resources would result from the Proposed Action or the No-Action Alternative

3.2.5 VEGETATION

A biological reconnaissance survey was completed in August 2011, to identify vegetation in the study area. The study area for vegetation is 1 mile on either side of the proposed transmission line route and the proposed MWEC distribution substation location. Some discussion of regional resources is necessary for context of site-specific vegetation.

Existing Environment

Historically, vegetation in the western region of North Dakota consisted of mixed-grass prairie. The present vegetative cover in the study area is primarily row crops, pastured mixed-grass prairie, and non-native grassland. Trees and shrubs are scarce, consisting of planted trees and shrubs associated with farmstead windbreaks and tree rows. The following provides detailed descriptions of the vegetation communities observed during the August 2011, biological surveys.

Cropland

Cropland is frequent throughout the study area. Most cropland is used to cultivate wheat. In 2011, however, the majority of the crop fields were left fallow—possibly due to spring flooding—and fields consisted of wheat stubble and weeds such as horsetail (*Conza canadensis*), Canada thistle (*Cirsium arvense*), sowthistle (*Sonchus arvensis*), green foxtail (*Setaria viridis*), and pigweed (*Amaranthus spp*.).

Figure 3.2-1
Typical Cropland in Study Area (August 2, 2011)

Non-Native Grassland

Intermittent areas of non-native grassland have been planted within the study area. These areas, which appear to be used for hayland, are dominated by species such as intermediate wheatgrass (*Thinopyrum intermedium*), crested wheatgrass (*Agropyron cristatum*), smooth brome (*Bromus inermis*), and alfalfa (*Medicago sativa*).

Figure 3.2-2
Typical Non-native Grassland in Study Area (August 2, 2011)

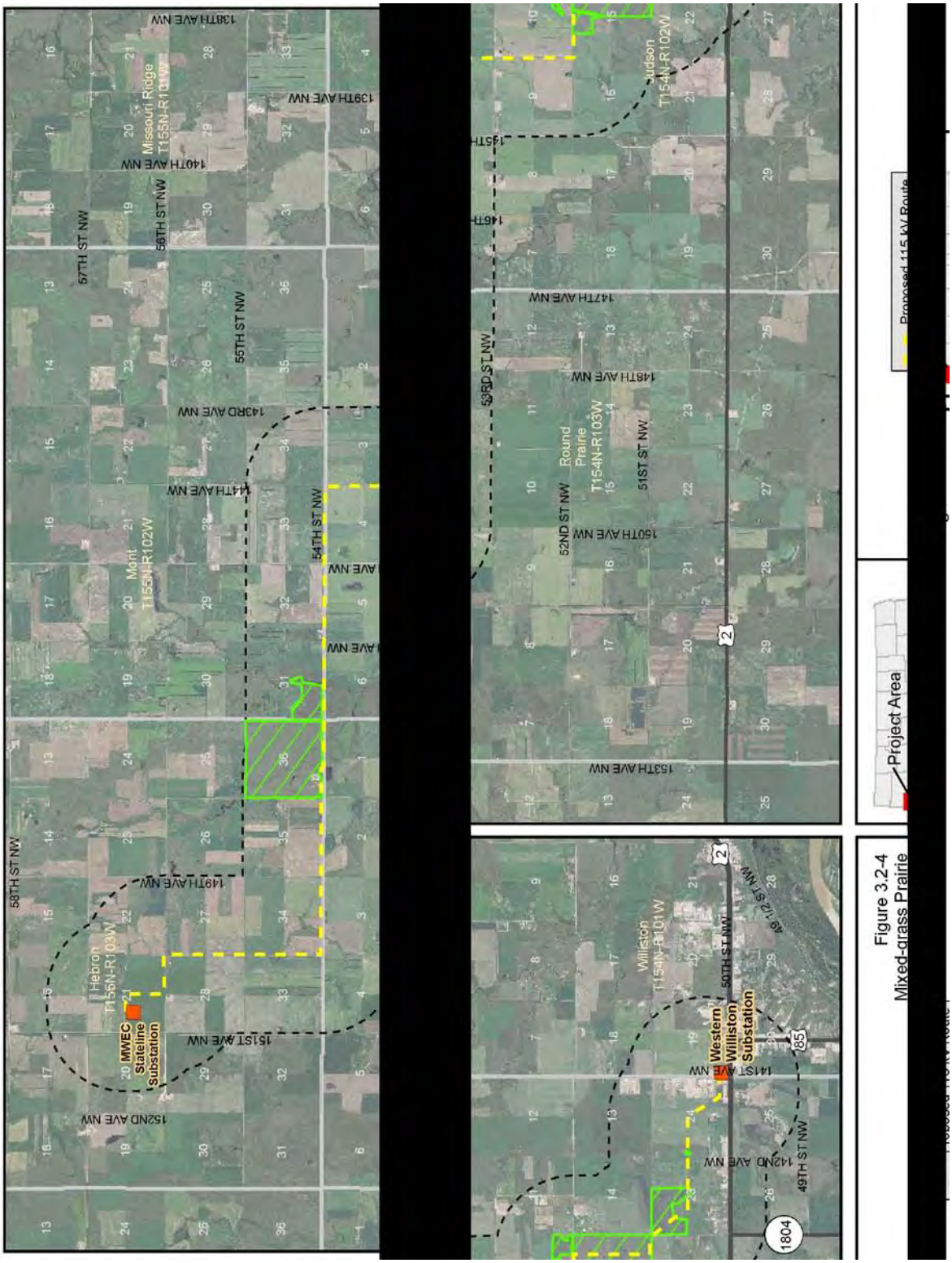
Mixed-Grass Prairie

Much of the pastureland within the study area is moderately grazed and maintains strong mixed-grass prairie characteristics. Dominant mixed-grass plant species (areas greater than 10 percent of the plant community) in order of abundance, include green needlegrass (*Stipa viridula*), junegrass (*Koeleria macrantha*) blue grama (*Bouteloua gracilis*), and western wheatgrass (*Pascopyrum smithii*). Other frequently observed species, in order of abundance, include fringed sagewort (*Artemisia frigida*), needleandthread (*Stipa comata*), purple coneflower (*Echinacea angustifolia*), prairie coneflower (*Ratibida columnifera*), white milkwort (*Polygala abla*), purple prairie clover (*Dalea purpurea*), silverleaf scurfpea (*Pediomelum argophyllum*), red threeawn (*Aristida purpurea*), pasqueflower (*Anemone patens*), blanket flower (*Gaillardia aristata*), dotted blazingstar (*Liatris punctata*), prairie rose (*Rosa arkansana*), prairie turnip (*Pediomelum esculetum*), and rush skeletonplant (*Lygodesmia juncea*).

A photo of the mixed grass prairie is found in Figure 3.2-3. Locations of mixed-grass prairie adjacent to the Project are shown in Figure 3.2-4. There are two main areas of mixed grass prairie, which account for approximately 6 percent of the land cover in the Project area. A search of the North Dakota Natural Heritage conservation database indicated no significant ecological communities or sensitive plant species within a 1-mile radius of the Project.

Figure 3.2-3
Typical Mixed-grass Prairie in Study Area (August 2, 2011)

Figure 3.2-4
Mixed Grass Prairie



Noxious Weeds

North Dakota has listed eleven species of noxious weeds (North Dakota Century Code chapter 63-01.1). Neither Williams County nor the city of Williston has additional listed noxious weed species (NDDA 2011). Six of the listed species are known to occur in Williams County (NDDA 2007). Table 3.2-3 shows the North Dakota noxious weed list and those weeds that have been identified in Williams County. Although these species occur in Williams County, mapped occurrences are outside of the study area, according to the North Dakota Weed Mapper (NDDA 2011). Canada thistle was intermittently present in the study area, mostly within untreated fallow agricultural fields along the transmission line, but it was not a dominant species.

Table 3.2-3
North Dakota Noxious Weeds

Common Name	Scientific Name	ND	Williams County
Absinth Wormwood	*Artemesia absinthium* L.	X	X
Canada thistle	*Cirsium arvense* (L.) Scop.	X	X
Dalmatian toadflax	*Linaria genistifolia ssp. dalmatica*	X	
Diffuse knapweed	*Centaurea diffusa* Lam.	X	
Leafy spurge	*Euphorbia esula* L.	X	X
Musk thistle	*Carduus nutans* L.	X	X
Purple loosestrife or *Lythrum*	*Lythrum salicaria, L.* virgatum L. and all	X	X
Russian knapweed	*Acroptilon repens* (L.) DC	X	
Saltcedar (tamarisk)	*Tamarix ramosissima Ledeb*., including *T. chinensis* and *T. parvidflora* DC.	X	
Spotted knapweed	*Centaurea maculosa* Lam.	X	X
Yellow starthistle	*Centaurea solstitialis* L.	X	

Source: North Dakota Noxious Weeds List Regulations – Chapter 7-06-02 – Noxious Weeds Listed and North Dakota Department of Agriculture Noxious Weed Species Information http://www.agdepartment.com/Programs/Plant/NoxiousWeeds.html

Environmental Consequences

A significant impact to vegetation resources would occur under the following conditions:

- Loss of vegetation resulting in the listing or jeopardizing of the continued existence of any non-noxious plant species; or elimination or decrease of a local plant population to below self-sustaining levels
- Introduction of noxious weeds to areas presently free of noxious weeds.

Proposed Action

The Proposed Action was sited to follow existing distribution or transmission lines and along section and quarter section lines as much as possible. As a result, minimal impacts to mixed-grass prairie and agricultural vegetation are expected. No sensitive vegetation communities were identified in the Project impact area during the Natural Heritage Database search, nor were any observed during field surveys. Impacts to existing vegetation would be limited to areas where

poles are located. Trees would be removed in T154N, R102W, Section 5, and in T155N, R103W, Section 34. Areas disturbed due to construction activities would be restored to preconstruction contours and, if acceptable to the affected landowner, would be reseeded with weed-free regionally native seed mixes recommended by local land management agencies.

Introduction of noxious weeds would be minimized through prompt revegetation with regionally native species. Additionally, all vehicles would be washed, especially the under carriage, prior to construction start. Vehicles would also be washed before traveling from an area identified as contaminated by noxious weeds to an uncontaminated area.

No-Action (No-Build)

Under the No-Action Alternative, increased ground disturbance from site clearing and excavation activities would not occur, leaving current vegetative communities completely in tact. The overall impacts to vegetation resources would be less under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this Project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

The effects on vegetation from the Proposed Action, in combination with projects described in Section 3.4 would not be expected to significantly impact vegetation. Almost all of the past, present, and reasonably foreseeable projects involve temporary or permanent loss of vegetation in a small footprint. These losses may change the vegetative landscape in the study area. However, any resulting changes in vegetation will not jeopardize the continued existence of any non-noxious plant species or contribute to its listing, as most of the landscape is under cultivation.

No substantive direct, indirect, or cumulative impacts to vegetation resources would result from the Proposed Action or the No-Action Alternative.

3.2.6 WILDLIFE

The study area for wildlife resources is the ROW for the transmission line and the proposed MWEC distribution substation, with some discussion of regional resources. Existing literature and other information related to known species distribution were reviewed for relevance to the Proposed Action. A biological survey of the study area was conducted in August 2011. Sensitive species within the study area are discussed in Section 3.2.6, Special Status Species.

Existing Environment

In general the wildlife species present within the study area are typical of agricultural landscapes, pasture grasslands, and wetland habitat in the region. Common mammals for these habitats include raccoon *(Procyon lotor)*, mink *(Mustela vison)*, skunk *(Mephitis* spp.*)*, weasel *(Mustela*

nivalis), white-tailed deer *(Odocorleus virginianus),* coyote *(Canis latrans),* red fox *(Vulpes vulpes),* badger *(Mustilidae* family), and rabbit *(Syvilagus* spp.*)*. Common birds include songbirds such as the western meadow lark *(Sturnella neglecta),* Say's phoebe *(Sayornis saya),* and dark-eyed junco *(Junco hyemalis)*; waterfowl such as the blue winged teal *(Anas discors)* and Canada goose *(Branta canadensis)*; raptors such as the American kestrel *(Falco sparverius)* and red-tailed hawk *(Buteo jamaicensis);* and upland game birds, such as ringneck pheasant *(Phasianus colchinus),* sharp-tailed grouse (*Tympanuchus phasianellus*), or wild turkey *(Meleagus gallopavo).* Most of the bird species nest in fencerow trees and on the ground in the grasslands associated with the prairie remnant, other grasslands, and riparian corridors. Terrestrial wildlife is most common in farm fields, hayfields, pasture, fencerows, woodlots, and small creeks and wetland areas. These areas provide corridors for migration and foraging as well as ample cover for small mammals, raptors, waterfowl, upland game birds, and other common wildlife.

A review of the North Dakota Natural Heritage conservation database indicated no species of concern or sensitive ecological communities present within 1 mile of the proposed transmission line.

No game production areas, state recreation areas, lakeside use areas, or state game refuges are located within 1 mile of the Proposed Action. Two Wildlife Management Areas (WMAs) are located within 10 miles of the Proposed Action: Lewis & Clark WMA and Trenton WMA. One North Dakota State Land Surface tract is located adjacent to the Proposed Action. There are three Private Land Open to Sportsmen (PLOTS) parcels within 10 miles: one 6.6 miles southeast, one 7.7 miles southeast, and one 9.4 miles south of the Proposed Action. The Proposed Action does not affect any USFWS easements or other federally owned land. It is, however, approximately 2.7 miles from the closest U.S. Army Corps of Engineers (USACE) land (Garrison Dam – Lake Sakakawea) located along the Missouri River. Two Bureau of Land Management Surface and Mineral Lands are located approximately 6.3 miles southeast and approximately 8.1 miles southwest of the Proposed Action (NDGFD 2011).

The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, and transportation (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. Additionally, the Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone without a permit issued by the Secretary of the Interior from taking eagles, including their parts, nests, or eggs.

Some raptor species, including eagles, build stick nests that may be used for multiple years. As part of the August 2 to 3, 2011, biological surveys the following areas were reviewed for stick nests:

- Raptor stick nests – Area within 200 feet of edge of ROW
- Bald eagle nests – Area within 0.5 miles of edge of ROW

No raptor stick nests or eagle nests were identified within the area of review.

Environmental Consequences

Impacts to wildlife would be short-term if they impact one or two reproductive seasons, generally during the construction period; or long-term if they affect several generations during the life of the Proposed Action. Impacts would be direct if they affect an individual, a population, or a habitat; or indirect if the effect results from other actions. A significant impact to wildlife resources would occur under the following condition:

- Loss of habitat resulting in the listing of or jeopardizing the continued existence of any wildlife species

Proposed Action

Minor displacement of wildlife and alteration of habitat would occur from the Proposed Action. No designated wildlife areas occur in the study area and undesignated areas of high-quality wildlife habitat, including native prairie and wetlands, are not common. However there were areas of mixed grass prairie that may have increased presence of wildlife species such as the Sprague's pipit. Additionally, surveys have identified four wetlands within one-mile of the Project that offer suitable whooping crane stopover habitat. A discussion of these habitats is provided in Section 3.2.7, Special Status Species. Wildlife species may be displaced during construction, however, the transmission line has been sited to avoid large tracts of suitable habitat and follows roads and property lines wherever possible to avoid impacts associated with habitat fragmentation and disruption.

Raptors, waterfowl, and other bird species may be affected by the construction and placement of the transmission lines. Avian collisions are a possibility after the completion of the transmission line. Waterfowl, wading birds, and shorebirds are typically more susceptible to transmission line collision, especially if the transmission line is placed between agricultural fields that serve as feeding areas, or between wetlands and open water, which serve as resting areas. However, impacts to bird species due to collisions with the transmission line would be minimized by use of bird diverter devices or line markers placed in areas of likely wildlife foraging and movement, which make the transmission lines easier to see. Based on these measures, bird impacts would be minimized to the extent practicable, and would not be expected to be significant or to jeopardize the continued existence of any bird species.

Electrocution of large birds, such as raptors, can occur when birds come in contact with either two conductors or a conductor and a grounding device. Larger voltage lines (those above 69 kV) are less likely to cause electrocutions because the wires are spaced farther apart than on lower voltage lines. MWEC's transmission line design will meet Avian Power Line Interaction Committee (APLIC 2006) guidelines to provide adequate spacing between the conductors to minimize risk of raptor electrocution.

Nesting bird species may be affected by the operation of vehicles, equipment, and personnel associated with construction of the Proposed Action. These bird species and their young would be expected to occur in pasture, grassland, and prairie areas. Nesting season is approximately February 1 to July 1, according to USFWS (2011). Construction activities are planned for early spring and would avoid areas with mixed grass prairie habitat during nesting season whenever practicable. MWEC would survey construction and maintenance areas prior to work to identify and avoid nest locations. The USFWS (2011) recommends implementing all practicable measures to avoid a take, such as suspending construction where necessary, and/or maintaining adequate buffers to protect birds until the young have fledged.

Raptors may use the transmission structures as hunting perches. Concerns have been raised that raptors could impact the prairie nesting bird population, such as sharp-tailed grouse, due to this increase in perch availability. While this may occur, impacts are expected to be minor and localized to areas under the transmission line structures. Existing transmission and distribution lines in the study area already provide Raptor perches, and have not been shown to have significantly affected prairie nesting bird populations.

MWEC would install line marking devices in four locations of nesting, roosting or feeding areas (i.e., wetlands) to increase line visibility and reduce the potential for avian collisions.

Based on these measures, the Proposed Action would not result in listing of or jeopardizing the continued existence of any wildlife species.

No-Action (No-Build)

Under the No-Action Alternative, increased disturbance to wildlife from site clearing, excavation activities, and increased construction traffic would not occur. Potential impacts to avian species would be less under the No-Action Alternative due to the absence of new transmission line facilities under this scenario.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

The effects on wildlife from the Proposed Action, in combination with projects described in Section 3.4, would not be expected to adversely impact wildlife. Past, present, and anticipated developments with transmission and distribution lines could cause avian collisions to increase over current conditions. The Proposed Action and future projects in the area would conform to APLIC guidelines to insure that proper designs are incorporated into electrical transmission and distribution development.

No substantive direct, indirect, or cumulative impacts to wildlife resources would result from the Proposed Action or the No-Action Alternative.

3.2.7 SPECIAL STATUS SPECIES

The study area for special status species is the ROW and proposed MWEC distribution substation with a regional discussion on the Missouri Coteau geographic region. Threatened and endangered species within the Project area were identified using data obtained from the North Dakota Natural Heritage conservation database and the USFWS, and by conducting field surveys for identified species and habitats. The Endangered Species Act of 1973 (ESA) (16 USC 1531–1544) requires protection of federally listed threatened or endangered species and any habitat designated as essential to maintenance and recovery of a listed species designated as Critical Habitat. Critical Habitat areas are designated by the USFWS.

Existing Environment

The USFWS identified five federally listed endangered or threatened species and one candidate species that could occur in the study area (Table 3.2-4). Pallid sturgeon (*Scaphirhynchus albus*), the interior least tern (*Sterna antillarum*), the whooping crane (*Grus americana*), and the gray wolf (*Canis lupus*) are federally listed as endangered, and the piping plover (*Charadrius melodus*) is federally listed threatened. Designated critical habitat for the piping plover occurs along the Missouri River and alkali lakes and wetlands in Williams County. Sprague's pipit (*Anthus spragueii*) is federally listed as a candidate species.

North Dakota Game and Fish (NDGF) indicated that there are several species of conservation priority (SoCP) that have been documented in the Missouri Coteau geographic region. These species do not have specific legal status under North Dakota Statute, but NDGF encourages implementation of conservation measures to protect SoCP, including avoidance and minimization of impacts to suitable habitat. Surveys for wetland, native prairie, woodland habitat, and rock outcrops that support the federally protected species and SoCP, were conducted in August 2011. Wetlands are addressed in Section 3.2.4. Native prairie is addressed in Section 3.2.5.

Table 3.2-4
Federal Species that may occur in the project area

Species		Habitat and Range	ESA Status[1]
Common Name	Scientific Name		
Pallid sturgeon	*Scaphirhynchus albus*	Bottom dwelling, Missouri and Yellowstone Rivers	E
Piping plover	*Charadrius melodus*	Missouri River sandbars, alkali beaches	T, CH
Interior least tern	*Sterna antillarum*	Missouri River and Yellowstone sandbars; beaches;	E
Whooping crane	*Grus americana*	Wetlands; migrant western ND	E
Gray wolf	*Canis lupus*	Frequently observed in Turtle Mtns.	E
Sprague's pipit	*Anthus spragueii*	Native medium to intermediate height prairie.	C

[1] *E = Endangered, T = Threatened, CH = Critical Habitat, C = Candidate*

Pallid Sturgeon

The pallid sturgeons' native habitat in the Mississippi and Missouri Rivers and their tributaries includes large river ecosystems with high turbidity, free flow, and warm water, according to the Pallid Sturgeon Recovery Plan (USFWS 1993). Preferred habitat includes a diversity of depths and velocities formed by braided channels, sandbars, islands, and sandy and gravely bottom areas. Current pallid sturgeon populations near the proposed Project area are fragmented by dams on the Missouri River. Pallid sturgeon are known to occur in the upper Missouri River above Ft. Peck Reservoir; in the Missouri and lower Yellowstone Rivers between Ft. Peck Dam and Lake Sakakawea; in the Missouri River downstream of Gavins Point Dam; and in the Mississippi and Atchafalaya Rivers (USFWS 2011a). The pallid sturgeon was classified as an endangered species under the ESA in 1990.

Pallid sturgeons are long-lived, with some individuals reaching 60 years of age or more. Spawning likely occurs from early June through mid July, coinciding with increased river flows which initiate spawning migrations. Their diet is primarily composed of aquatic invertebrates and small fish. Human alteration of river systems due to dams and shoreline modification are the primary cause of decline in pallid sturgeon populations.

Currently, the main stem of the Missouri River and the Lower Yellowstone River are the habitat areas nearest to the Project that are suitable for pallid sturgeon. The Missouri River is approximately 1.75 miles south of the eastern terminus of the Project, while the Lower Yellowstone River is more than 50 miles from the Project. The Project does not cross the main stem of the Missouri River, but does cross tributaries well upstream of the main stem. The closest tributary crossing is more than 10 river miles north or the Missouri River.

Piping Plover

The piping plover breeding range stretches from south central Canada into the Midwest United States. North Dakota has the highest number of nesting piping plovers in the United States. North Dakota's population of piping plovers was 496 breeding pairs in 1991 and 399 breeding pairs in 1996. More than three-fourths of piping plovers in North Dakota nest on prairie alkali lakes, while the remainder use the Missouri River sandbars. The North Dakota population spends fall to early spring primarily in the Gulf of Mexico, especially along the Texas coast (USFWS 2011a). Piping plovers are known to nest along sparsely vegetated sand and gravel bars of the Missouri River and alkali lakes and wetlands, but breeding is opportunistic, and can occur at different sites in different years based on suitable water levels and habitat conditions.

Current piping plover breeding range boundaries are thought to be similar to historic boundaries, but distribution is much more fragmented and population isolation is now common. The piping plover was listed as a threatened species on December 11, 1985. An endangered status was given to the population within the Great Lakes Region and threatened status was established for the northern Great Plains and Northeast Region populations (USFWS 2011a). USFWS designated

critical habitat for the piping plover along the Missouri River and Little Missouri River in North Dakota in 2002 (USFWS 2002). Reduced habitat availability caused by shoreline development, habitat alteration resulting from agricultural practices, and increased raptor predation make up the leading causes of species decline in the Project area.

There is no designated critical habitat within the Project area (50 CFR Part 17). The nearest designated critical habitat to the Project is along the Missouri River, approximately 1.75 miles southeast of the southeast project terminus. Other suitable habitat for the piping plovers is found along the Lower Yellowstone River, more than 50 miles from the study area. Williams County has not been identified as a primary wintering or breeding area for the species (USFWS 1988).

Piping plover habitat includes (1) shallow, seasonally to permanently flooded, mixosaline to hypersaline wetlands with sandy to gravelly, sparsely vegetated beaches, salt-encrusted mud flats, and/or gravelly salt flats; (2) springs and fens along edges of alkali lakes and wetlands; and (3) adjacent uplands 200 feet (61 meters) above the high water mark of alkali lakes or wetland (USFWS 2008a). None of these habitat types were observed in the study area during the field survey.

Interior Least Tern

The interior least tern is a migratory species that breeds along the Pacific, Atlantic and Gulf coasts as well as the major interior rivers of North America. Historically, the interior population bred along the Mississippi, Missouri, Arkansas, Red, Rio Grande, and Ohio River systems (USFWS 1994b). According to the USFWS, the interior population of the least tern presently breeds in the Mississippi, Missouri, and Rio Grande River systems. In North Dakota, the least tern is found mainly on the Missouri River from Garrison Dam south to Lake Oahe, and on the Missouri and Yellowstone Rivers upstream of Lake Sakakawea. About 100 pairs breed in North Dakota (USFWS 2011a). The Missouri River is approximately 1.75 miles south of the eastern terminus of the Project, while the Lower Yellowstone River is more than 50 miles from the Project.

Breeding interior least terns typically nest on sandbars and sandy islands in the Missouri and Mississippi Rivers and their tributaries (Sidle et al. 1988). Gravel pits, river channel environments, and lake and reservoir shorelines are also used for nesting and foraging. Nest sites include gravelly substrate with a lack of vegetative cover, existence of favorable water conditions, and proximity to food sources (Atkinson and Dood 2006). Characteristic riverine nesting sites are dry, flat, barren-to-sparsely vegetated sections of sand or pebble beach within a wide, unobstructed, river channel. Nests are usually located on dry, isolated sandbars after the spring high flows recede. No known breeding areas exist on the Missouri River in Williams County (USFWS 1990).

Whooping Crane

Historic nesting ranges for the whooping crane are thought to have extended throughout the northern Great Plains (Whooping Crane International Recovery Plan, USFWS 2007a). Principal wintering range was the tall grass prairies in southwestern Louisiana, along the Gulf Coast of Texas, and in northeastern Mexico near the Rio Grande Delta. USFWS estimates that 10,000 whooping cranes once ranged across North America (Stehn and Wassenich 2008). The USFWS estimated the October 2010 size of the Aransas-Wood Buffalo flock, the only self-sustaining wild population, to be 263 individuals. The total wild whooping crane population is estimated at 407, with 119 birds in the eastern migratory flock, and 25 in the non-migratory Florida population (USFWS 2010a). The whooping crane has been federally protected since 1967 and was grandfathered into the ESA as an endangered species in 1973 (USFWS 2007a).

The Aransas-Wood Buffalo population of whooping cranes winters in the Aransas National Wildlife Refuge on the Texas Gulf Coast, and then migrates across the Great Plains to breed in the summer in the Wood Buffalo National Park in Northwest Territories, Canada. The current Aransas-Wood Buffalo population is known to occur in or migrate through Colorado, Kansas, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, and Texas. The Aransas-Wood Buffalo population migrates through North Dakota each spring and fall (USFWS 2008b), but no critical habitat has been designated in North Dakota.

Whooping cranes are diurnal migrants, using daily thermal drafts and prevailing winds to make the more than 2,000-mile migration possible. Whooping cranes use a variety of habitats for stopover locations during migration, but feed primarily in croplands and emergent wetlands and roost in shallow palustrine wetlands. Most wetlands used for roosting are less than 10 acres in size and are within 0.5 miles of a feeding area. Heavily vegetated wetlands are used less frequently than less densely vegetated wetlands. Whooping cranes choose stopover habitat opportunistically late in the day, and may not use the same stopover location annually (CWS and USFWS 2007b).

The study area is within the birds' 200-mile wide migratory corridor based on sightings since 1975 (USFWS 2007b). Although whooping cranes do not breed in the study area, prairie pothole wetlands of all sizes provide suitable migratory roost and stopover sites, particularly those near foraging grounds including agricultural fields. The Project area has seen conversion of native prairie and wetlands into agricultural land use beginning with 19th-century settlement, negatively impacting the quality and quantity of migration stopover habitat. Construction of utility lines and roads, and the increased urban and industrial developments with the associated human disturbance near the Project area have also negatively affected whooping cranes and migration habitat. On August 2 and 3, 2011 surveys for suitable whooping crane stopover habitat took place within 1 mile of the Project. During these surveys, four wetlands were identified that offer suitable whooping crane stopover habitat.

Gray Wolf

Historically, the gray wolf occupied almost all habitats in North America, including the Great Plains. In modern times, the gray wolf has been restricted to habitats with low densities of roads and people. There have been documented occurrences of gray wolves in North Dakota during the 1990s, but wolf presence in North Dakota will likely remain sporadic and consist of occasional dispersing animals from Minnesota and Manitoba (USFWS 2008c). Wolves have most frequently been observed in the Turtle Mountains of North Dakota (USFWS 2008c). The gray wolf was federally listed as an endangered species in 1978. Currently, the USFWS is proposing to remove endangered species act protection from the Western Great Lake Distinct Population Segment of gray wolves, which includes eastern areas of North Dakota (USFWS 2011b).

Wolf groups, or packs, typically include a breeding pair (the alpha pair), their offspring, and other non-breeding adults. Wolf packs live within territories, which they defend from other wolves. Their territories range in size from 50 square miles to more than 1,000 square miles, depending on the available prey and seasonal prey movements. Wolves travel over large areas to hunt, as far as 30 miles in a day. Lone, dispersing wolves have been known to travel as far as 600 miles in search of a new home (USFWS 2007c).

The gray wolf may pass through the Project area. However, it is unlikely that gray wolves would be present during construction and operation, with the possible exception of an occasional transient animal.

Sprague's Pipit

Sprague's pipits occur in southern south central Canada and parts of Wisconsin, North Dakota, and South Dakota in the U.S. Their nests are located in depressions in the ground and concealed in clumps of native grasses of intermediate height and density. In 2010, the USFWS found that protection of the Sprague's pipit under the ESA was warranted but precluded, and the species was added to the candidate species list (USFWS 2010b).

Sprague's pipit breeding habitat occurs from Alberta to central Manitoba, south to Montana and north central South Dakota, and east to northwestern Minnesota (USFWS 2010b). Sprague's pipits may avoid roads during nesting season. Typically, nests with eggs are found in June. Spring migration period occurs from mid-April through mid-May. Fall migration occurs in September, when Sprague's pipits gather in large flocks with horned larks and longspurs to migrate south (Jones 2010).

Segments of the Project are located within mixed-grass prairie habitat, suitable for Sprague's pipits. Additionally, casual observations of Sprague's pipit calls were noted at several locations within these mixed-grass prairies, confirming that Sprague's pipits utilize suitable habitat within the study area. The Biological Assessment has been prepared for the Project and includes a map of suitable habitat and areas where Sprague's pipit calls were noted. However, much of the

Project is located within disturbed lands and follows roads, existing distribution lines, section lines, and field lines, minimizing the disturbance to mixed-grass prairie habitat.

State Protected Species of Concern

NDGF has identified 100 SoCP across the state in its Wildlife Action Plan (Hagen et al. 2005). These species are considered important for conservation in the state of North Dakota but do not have any legal protection. Twenty-seven species have been identified in the Missouri Coteau geographic region, including seventeen level I species, ten level II species, and no level III species. NDGF places the most emphasis on level I species. Table 3.2-5 identifies all of the Species of Conservation Priority associated with the Missouri Coteau geographic area and their designated level of concern. No SoCP or significant ecological communities are known to occur within 1 mile of the proposed transmission line according to the records obtained from the North Dakota Natural Heritage biological conservation database (Appendix D).

Table 3.2-5
Species of Conservation Priority that Occur in the
Missouri Coteau Geographic Region

Priority Level	Species of Conservation Priority	
	Common Name	Scientific Name
I	American bittern	*Botaurus lentiginosus*
	Swainson's hawk	*Buteo swainsoni*
	Ferruginous hawk	*Buteo regalis*
	Willet	*Coturnicops noveboracensis*
	Upland sandpiper	*Bartramia longicauda*
	Marbled godwit	*Limosa fedoa*
	Wilson's phalarope	*Phalaropus tricolor*
	Sprague's pipit	*Anthus spragueii*
	Lark bunting	*Calamospiza melanocorys*
	Grasshopper sparrow	*Ammodramus savannarum*
	Baird's sparrow	*Ammodramus bairdii*
	Nelson's sharp-tailed sparrow	*Ammodramus nelsonii*
	Chestnut-collared longspur	*Calcarius ornatus*
	Plain's spadefoot toad	*Spea bombifrons*
	Canadian toad	*Bufo hemiophrys*
	Smooth green snake	*Liochlorophis vernalis*
	Western hognose snake	*Heterodon nasicus*
II	Northern pintail	*Anas acuta*
	Northern harrier	*Circus cyaneus*
	Sharp-tailed grouse	*Tympanuchus phasianellus*
	Short-eared owl	*Asio flammeus*
	Loggerhead shrike	*Lanius ludovicianus*
	Sedge wren	*Cistothorus platensis*

Priority Level	Species of Conservation Priority	
	Common Name	Scientific Name
	Le Conte's sparrow	*Ammodramus leconteii*
	Dickcissel	*Spiza americana*
	Bobolink	*Dolichonyx oryzivorus*
	Richardson's ground squirrel	*Spermophilus richardsonii*

Areas of suitable and potentially suitable habitat for level I SoCP were reviewed during the field surveys in August 2011. Casual observations of Sprague's pipit calls were noted at several locations within the mixed-grass prairies, but other occurrences of SoCP were not documented. It is possible that other species could be present in or near the Project, but high quality habitat in the study area is limited (See Biological Assessment for available habitat types observed in the study area). If SoCP were present, it is likely that they would avoid the area during construction when crews are present.

Environmental Consequences

A significant impact to endangered, threatened, and candidate species would occur under the following conditions:

- Loss of individuals that would jeopardize the continued existence of a species; or
- Loss of individuals leading to their being listed or a change in listing from threatened to endangered or the addition of a species to the federal list.

Proposed Action

No permanent, adverse impacts to special status species would be expected from the Proposed Action. Habitat for many of the listed species includes large river or lake habitats, wetlands, or remnant prairies. The Project will not cross any large river or lake habitats present in the study area, but will cross a number of wetlands, including several that could provide suitable stopover habitat to whooping cranes Direct permanent impacts to the mixed-grass prairie habitat would be minimized, resulting in areas large enough to provide suitable habitat. In cases where sensitive areas cannot be spanned, MEC would minimize the number of structures in the area by maximizing span length. Additional species-specific analyses are provided below.

Pallid Sturgeon

The nearest large river habitat suitable for pallid sturgeon is located 2 miles from the Project area. Based on this information, the Proposed Action would have no effect on the pallid sturgeon.

Piping Plover and Interior Least Tern

Large river sandbars and shoreline habitat of the Missouri and Lower Yellowstone Rivers are preferred by both piping plover and interior least tern. The Missouri River is located 1.75 miles from the Project, and the Yellowstone River is located more than 50 miles from the study area.

No piping plover or interior least tern habitat is located within the study area. Because the Project area is outside of breeding habitat and offers limited foraging habitat for both piping plovers and interior least terns, possible collisions would be limited to times of local bird movements or migration. Considering the low likelihood of collisions due to line marking, the Proposed Action may affect, but would not be likely to adversely affect piping plover and interior least tern. The Project does not cross designated piping plover critical habitat, therefore there will be no effect on designated piping plover critical habitat.

Whooping Crane

Wetlands in the study area may provide suitable roosting and stopover habitat for migrating whooping cranes. Collisions with power lines are a substantial cause of mortality for fledged whooping cranes (CWS and USFWS, 2007). Migrating cranes are most vulnerable to collisions with structures in the early morning or late evening when light levels are diminished, as they fly at very low altitudes between roost and foraging sites, or when flying at low altitude when starting or ending a migration flight.

Historic whooping crane observations do not indicate that the study area is frequently used by whooping cranes for migration, stopover, or foraging (USFWS 2008b), but whooping cranes have been observed at areas near the Missouri River, approximately 2 miles away. On August 2 and 3, 2011, surveys for suitable whooping crane stopover habitat took place within 1 mile of the Project. During these surveys, four wetlands were identified that offer suitable whooping crane stopover habitat. Construction and operation of the Project could displace whooping cranes from available stopover habitat, both temporarily and in the long-term. Additionally, if whooping cranes should frequent the study area, collisions with transmission lines during take-off and landing would be a concern. In order to prevent whooping crane collisions, within 1 mile of each of the four separate wetland areas noted, the lines would be marked with devices that would alert the birds to the presence of a line in the air. By following these mitigation measures, the Proposed Action would not likely adversely affect whooping cranes.

Gray Wolf

The gray wolf may pass through the Project area. However, it is unlikely that gray wolves would be present during construction and operation, with the possible exception of an occasional transient animal. If gray wolves entered the proposed Project area during construction they could be struck by vehicles, but the chance of collisions is considered negligible, particularly since posted speed limits would be very low. Due to the low likelihood of their presence, the absence of suitable wolf habitat, and low posted speed limits in the Project area, the Project would have no affect on the gray wolf.

Sprague's Pipit

Sprague's pipits are closely associated with native grassland throughout their range and are less abundant (or absent) in areas of introduced grasses than in areas of native prairie (Johnson and

Schwartz 1993, Madden et al. 2000, Grant et al. 2004). Loss of appropriate habitat is the primary reason that the species is in decline. During the breeding season, Sprague's pipits prefer large patches of native grassland with an approximate minimum size of 358 acres (USFWS 2010b).

On August 2 and 3, 2011, surveys indicated that suitable mixed-grass prairie habitat is present within the study area, and that Sprague's pipits likely utilize the habitat. Loss of habitat could occur where transmission line structures and the MWEC distribution substation impact mixed-grass prairie habitat. For transmission line structures, the impacts to mixed-grass prairie would be limited to localized permanent impacts due to structure installation, or temporary impacts due to construction activities. The MWEC distribution substation is adjacent to an area of mixed grass prairie, but is anticipated to be entirely located within an existing wheat field, avoiding impacts to Sprague's pipit habitat. The Project is not expected to fragment core Sprague's pipit habitat, as it follows roadways and field lines that form the edges of suitable pipit habitat. Minimization of habitat disturbance and limiting ground clearing to fall and winter (prior to the nesting season) make the Project unlikely to adversely affect Sprague's pipit.

Species of Conservation Priority

Review of the North Dakota Wildlife Action Plan indicated that SoCP may occur in the Missouri Coteau geographic region where the Project would be located. Surveys for high quality native prairie, wetlands, and suitable grasslands were conducted in August 2011 to document suitable habitat for these species. Results from these surveys did not identify any SoCP. Habitat in the Project area was not high quality and it is unlikely that these species would be affected by the Project.

No-Action (No-Build)

Under the No-Action Alternative, increased disturbance from site clearing, excavation activities, and increased construction traffic would not occur. Potential impacts to avian species would be less under the No-Action Alternative due to the absence of new transmission line facilities under this scenario. Loss of individuals that would jeopardize the continued existence of species or a change in listing status of a species would not occur under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

The effects on special status species from the Proposed Action, in combination with the projects described in Section 3.4, would not be expected to result in significant impacts to any species. Future projects as a result of the Proposed Action include new construction of distribution lines from the proposed substations to new oil facilities and other outlets.

Pallid sturgeon

The Proposed Action would not add to or combine with the effects of other past and reasonably foreseeable future actions to adversely affect the pallid sturgeon.

Piping plover and Interior least tern

Considering the low likelihood of a direct effect due to line marking, the Project would not add to or combine with the effects of other past and reasonably foreseeable future actions to adversely affect the piping plover or interior least tern.

Whooping crane

Any additional distribution or transmission line construction throughout the principal migration corridor would increase the opportunity for whooping crane collision mortalities. Considering the low likelihood of a direct effect due to line marking, the Project would not add to or combine with the effects of other past and reasonably foreseeable future actions to adversely affect the whooping crane.

Gray Wolf

Wolves, should they pass through the area, would generally avoid areas of human presence. No cumulative effects to gray wolves are expected to be caused by the Project.

Sprague's Pipit

It can be assumed that as development and disturbance near the Project area would continue to increase, the quality and quantity of mixed-grass prairie habitat would decline. However, considering the small footprint of the Project, it would not add to or combine with the effects of other past and reasonably foreseeable future actions to adversely affect Sprague's pipit.

Species of Conservation Priority

Since pole placement takes up minor areas of land, and pole placement for distribution lines in wetlands and rock outcrops is structurally undesirable, future distribution projects in the area would be expected to have a minimal effect on native prairie, mixed grasslands, rock outcrops, and wetland habitats.

No substantive direct, indirect, or cumulative impacts to special status species resources would result from the Proposed Action or the No-Action Alternative.

3.3 SOCIAL RESOURCES

3.3.1 SOCIOECONOMICS

The socioeconomic setting and potential impacts of the Proposed Action were evaluated for the city of Williston and for Williams County.

Existing Environment

The Proposed Action would be located in Williams County, in the Judson, Hebron, and Round Prairie Townships. These townships are sparsely populated but do contain a number of farms and an increasing number of residences that may be associated with the growing energy industry. The city of Williston is the only community within the study area. Williston is located 3 miles east of the existing Williston Substation and 5 miles east of the proposed MWEC distribution substation. The city of Williston has a population of nearly 15,000 (USCB 2010). The population fluctuates due to the heavy development of oil and gas in the Bakken Formation. Table 3.3-1 shows the demographic characteristics of the city of Williston, Williams County, and the state of North Dakota.

Table 3.3-1
Demographic Characteristics of the Project Area

Area	Population				Percent Change 2000-2010	Percent White [c]	Percent below Poverty Level [c]	Median Household Income [c]
	1990 [b]	2000 [b]	2008 [c]	2010 [c]				
North Dakota	638,800	642,200	641,481	672,591 [c]	4.7% [c]	90.0% [c]	11.7% [c]	$47,898 [c]
Williams County	21,129	19,761	19,444	22,398 [c]	13.3% [c]	92.1% [c]	8.6% [c]	$53,958 [c]
Williston[a]	13,131	12,512	12,641	14,716[d]	16.4% [d]	91.9% [e]	11.9% [e]	$49,742 [e]

[a] *USCB 2005-2009.*

[b] *USCB 2000 or USCB 1990, http://www.nd.gov/dhs/info/pubs/docs/aging/2010-report-aging-is-everyones-business.pdf*

[c] *United States Census Bureau (USCB) 2009-10 (http://quickfacts.census.gov/qfd/states/38/38105.html)*

[d] *http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_PL_GCTPL2.ST13& prodType=table*

[e] *http://factfinder.census.gov/servlet/ACSSAFFFacts?_event=Search&geo_id=04000US38&_geoContext=01000US%7C04000US38&_street=&_county=Williston&_cityTown=Williston&_state=04000US38&_zip=&_lang=en&_sse=on&ActiveGeoDiv=geoSelect&_useEV=&pctxt=fph&pgsl=040&_submenuId=factsheet_1&ds_name=ACS_2009_5YR_SAFF&_ci_nbr=null&qr_name=null&reg=null%3Anull&_keyword=&_industry=*

Williams County is rural, with an energy based (oil and gas extraction) economy and a strong construction industry. Williams County also supports an agriculture economy and a small amount of recreation activity. The city of Williston, the county, and the state all experienced an increase in population from 2000 to 2010. Williston experienced the largest population increase of 16.4 percent.

This same trend in population growth also occurs at the state level; North Dakota experienced an increase of 4.7 percent. The County is currently experiencing a substantial amount of growth in oil and gas drilling activities. The result is an unemployment rate of 1.4 percent in June 2011 (USDL 2011) for Williams County compared to a state unemployment rate of 3.3 percent in July 2011. The national unemployment rate was 9.3 percent (ND Job Service 2011).

The city of Williston is the Williams County seat. Williston offers a range of services including hospitals and clinics, grocery and retail stores, banks, churches, emergency services, community

pools, parks, golf courses, and numerous hotels. Additional businesses include farm and heavy equipment dealers, and at least five car dealerships. Schools in the area include four elementary schools, a middle school, and Williston High School. The city is also home to Williston State College. Williston is a gateway to the Missouri River and Lake Sakakawea and associated recreation such as fishing and water sports. Sloulin Field International Airport is located north of Williston and east of the Proposed Action. There is an Amtrak station in Williston, which is one of the stops along the Empire Builder route.

Environmental Consequences

Overall, socioeconomic impacts of the construction of the 115-kV transmission line and substations would be slightly positive as a result of expenditures at businesses by the temporary workers during construction. Owners of the land on which the transmission lines will be located will receive financial compensation for potential farmland losses because of surface disturbance as a result of the new infrastructure.

Adverse effects to the socioeconomic environment would occur under the following conditions:

- Relocation of residences or businesses resulting in unrecoverable economic loss.
- Undue burden to community services and facilities.

Proposed Action

Construction and operation of the transmission line and substation would not affect any community facilities in Williston or Williams County. No residences or agricultural buildings in the county would be displaced. Socioeconomic impacts resulting from the Proposed Action would be primarily positive.

Construction Impacts

Construction of the Proposed Action is expected to occur over approximately 4 months. It is assumed that between 60 and 77 workers will be required for construction of the transmission line and MWEC distribution substation. Temporary construction jobs would provide a one-time influx of additional income to the area through increased spending on lodging, meals, and other consumer goods and services. Because the Project area is minimally populated, the addition of construction workers from outside of the study area is not expected to exceed the capacity of any local public services.

Operation Impacts

The socioeconomic impacts from the Proposed Action on a long term basis would be primarily positive. The additional power supplied to the area would allow oil extraction activities to continue to grow, resulting in new job opportunities for at least the next fifteen years (Seifert 2009). Contractors are needed for drilling activities like concrete work and well completion. Once a well is in production, a variety of support personnel are needed. These individuals perform such tasks as hauling water, maintaining pipelines, road construction and maintenance,

maintaining pads (i.e. weed control, fence repair, etc.), maintaining the pumps and other machinery necessary for production, and administrative support work. It is assumed that the majority of new permanent employees required for operation of the Project will be local residents, and will therefore not exceed the current capacity of local public services. Oil development activities have had a positive ripple effect throughout the local economy, as evidenced by the lower unemployment rates in Williams County. Local personal incomes increase as workers come into Williston and Williams County for both short- and long-term assignments and spend money on services in the community, putting dollars into circulation.

Local businesses and residents would benefit from reliable power. The increased availability of reliable power in the area would have a positive effect on local businesses and the quality of service provided to the general public.

No-Action (No-Build)

Because of the increasing energy demand, the proposed MWEC distribution substation would still be necessary. The substation would require a transmission line. This line may or may not have more adverse impacts on Socioeconomics and could result in greater disturbance to housing and agricultural income.

Under the No-Action Alternative, Williston would not experience the influx of income from the construction workers and needed supplies during the construction of the transmission line nor would it benefit from a more reliable power source.

The need for the project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

No substantive negative direct, indirect, or cumulative impacts to socioeconomic resources would result from the Proposed Action or the No-Action Alternative. The Proposed Action would increase economic wealth in the area.

3.3.2 ENVIRONMENTAL JUSTICE

Executive Order (EO) 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) is intended to ensure that adverse human health and environmental effects of agency actions would not disproportionately impact minority and low-income populations, including Native American Indian tribes. For the purposes of this section, minority and low-income populations are defined as follows:

Minority Populations

Ethnic origins include blacks or African Americans, American Indians or Alaska Natives, Asians, Hispanics or Latinos, and Native Hawaiian and other Pacific Islanders.

Low-Income Populations

Low-income populations include people living below the national poverty level. In 2010, the weighted-average poverty threshold for a family of four was $22,314, and for an individual was $11,136 (USCB 2010). The poverty threshold is calculated by the U.S. Census Bureau each year as a means to estimate the number of Americans living in poverty.

Existing Environment

The Project Area is located in a rural, predominantly ethnically white area that has historically been an agricultural economy. Currently, oil and gas exploration and drilling activities are being undertaken. Table 3.3-1, above, shows the majority and low-income populations for North Dakota, Williams County, and Williston. The city of Williston has the second highest percentage of the three entities for white residents (91.9 percent) (USCB 2010). According to the 2010 Census, 89 percent of the residents of the Judson, Hebron, and Round Prairie Townships are white.

Based on the information gathered from the U.S. Census Bureau, the percentage of people who reside in Williston and live below the national poverty line (11.9 percent) is slightly higher than for the state (11.7 percent) and higher than the county (8.6 percent). Information for poverty status in Judson and Hebron Township is based on 2000 Census data, and shows that 6.8 percent of individuals in Judson Township and 0 percent of individuals in the Hebron and Round Prairie Townships were below the poverty level in 1999.

Environmental Consequences

A significant impact would occur under the following condition:

- Low-income, minority, or subsistence populations in the region of the Proposed Action are disproportionately affected by the Proposed Action.

Proposed Action

The proposed action would not displace any residents. There are no low-income, minority, or subsistence populations in or around the study area that would be disproportionately affected by the Proposed Action. No residents will be displaced by the Project.

No-Action (No-Build)

Because of the increasing energy demand, the proposed MWEC distribution substation would still be necessary. The substation would require a transmission line. This line may or may not have more adverse impacts on environmental justice and could result in greater disturbance to low income and minority populations.

It would be speculative to define the exact nature of impacts to socioeconomic resources that would occur under the No-Action Alternative. However, it is likely that greater impacts would occur in terms of road traffic if more drill sites are developed because of the associated increase in the number of well pad sites that would require refueling and maintenance. Impacts could be greater than, equal to, or less than those expected under the Proposed Action depending on how the large engines used for enhanced recovery methods are re-fueled, such as by regular fuel deliveries or by use of fuel supply lines to each well injection site. Under the No-Action Alternative, no low-income or minority populations would be disproportionately affected.

The need for the project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

No substantive direct, indirect, or cumulative impacts to minority or low-income populations would result from the Proposed Action or the No-Action Alternative.

3.3.3 LAND USE

The study area for land use is a one-half mile buffer centered on the route and includes an interconnect at Western's Williston Substation and the 115-kV transmission line, and the proposed Judson Substation, which would be located approximately 2 miles west of the Western Williston Substation. This section also includes a discussion of regional land use issues.

Existing Environment

The study area is located in a mixture of flat terrain and rolling hills, cropland, and pasture typical of west central North Dakota. Historically, vegetation in the study area consisted of mixed-grass prairie. Land use in the area is predominantly agricultural. The primary commercial land use in the Project area is oil and gas extraction and transport. Pasture tracts are also found in the study area. Small patches of trees are clustered around rural homes, along field lines, and around the few natural water features near the Project Area. Wetlands, stream drainages, and mixed grass prairie are also found scattered in the landscape, although these habitats occupy a very small percentage of the land area. Oil and gas wells and oil infrastructure have become common, and are located throughout the area.

The transmission line route mostly parallels rural roads, property lines, and section on ¼ section lines to minimize impacts to farm fields. Road and road right-of-way (ROW) includes paved and gravel roads and two-track road ROW. This region of Williams County is lightly populated (see Table 3.3-1). Rural residences are widely dispersed across the four townships (Judson, Mont, Round Prairie, and Hebron). Residences and farmsteads are located along the roads paralleled by the proposed route. Home sites include residential structures, yards, barns, and other farm and agricultural facilities. Commercial and industrial uses are located on the eastern end of the

transmission line, which is just outside the western edge of the city of Williston, particularly along US Highway 2, and 141st Avenue NW.

While the Proposed Action route is generally rural in nature, oil pads, pipelines, and truck traffic maintain a noticeable presence. The present vegetative covers are primarily row crops, pastured mixed-grass prairie, and non-native grasses. Scattered prairie pothole wetlands and intermittent drainages also are present. Wetlands and streams are addressed in Section 3.2.3 and in a separate wetland report.

Within one-quarter mile of the Proposed Action, approximately, 1.6 percent of land is considered Prime Farmland if irrigated and approximately 66.5 percent of the land is classified as Farmland Of Statewide Importance (USDA 1980; SSURGO 1999). Federal regulations define Prime Farmland as "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses" (7 CFR, 675.5 (a) (1)). Farmland of Statewide Importance includes land that supports production of crops important to North Dakota. Farmland of Statewide Importance is often the same soil types as Prime Farmland but at steeper slopes. Development on Designated Prime Farmland and Farmland of Statewide Importance is restricted through land use regulations.

One section along the Project alignment is owned by the North Dakota State Land Department (T155N, R103W, Section 36). These state-owned lands need a special permit or easement for placement of transmission facilities. Transmission line easements are a compatible land use on State Trust Lands. No other land management easement or other land use limitation occurs in the study area.

Vegetation in the study area consists of cropland, non-native grasses, and mixed-grass prairie. A description of these vegetation communities is provided in Section 3.2.4, Vegetation.

Eight different land cover types were documented along the proposed route based on aerial photo analysis and visits to the study area. The categories are cropland (row crops and hay), grassland (pastureand potential native vegetation), roads, riparian (stream/ditch zone), developed-general, developed-energy (oil and gas), developed-residence (homes and farmsteads), and wetland. Aerial images showing land cover are provided in Appendix C and a summary of the land cover analysis within one-quarter mile of the proposed route is presented in Table 3.3-2.

Table 3.3-2
Existing Land Cover within a Quarter Mile of Alignment

Habitat and Land Use Type	Approximate Acres*	Land Area
Cropland	3,230	62%
Developed	170	3%
Roads	105	<1%
Grassland	1,430	1%

Habitat and Land Use Type	Approximate Acres*	Land Area
Developed-residence (homes and farmsteads)	50	28%
Developed-energy (oil and gas)	25	3%
Wetland	25	2%
Riparian	100	<1%
Total	**5,170**	**100%**

* *Land use types were identified based on 2011 site visits, 2010 NAIP aerial photos, hydric soils maps, and USGS 1:24.000 topographic maps. Acreage calculated by overlaying 1/2-mile-wide corridor (centered on transmission line) over land use types.*

The major crops in the area are wheat, lentils, and peas (USDA 2009). Within a quarter mile of the study area, 62 percent of land is considered row crop. Based on field visits and aerial imagery analysis, no centerpoint or other irrigation appears to be in use within a quarter mile of the route.

Wetlands and streams compose a minor portion of the land in the study area. Woodlands typically consist of scattered trees and wind shelters.

Environmental Consequences

Consequences from the change in land use would pertain to physical and operational effects of the Proposed Action on existing and future land use. In the study area, these impacts are primarily related to agricultural practices and residents.

A significant impact to land use would occur under the following conditions:

- Uncompensated loss of crop production; or
- Foreclosure of future land uses.

Proposed Action

Construction Impacts

The Proposed Action would result in permanent and temporary impacts to farmland. Temporary and short-term impacts would occur from construction activities because of removal of existing agricultural land from crop or forage production. During construction, temporary impacts such as soil compaction and crop damage are likely within the working ROW and along any temporary work space such as access roads. MWEC would compensate landowners for crop damages that may occur as the result of the Proposed Action. This compensation may be by either providing financial compensation to landowners, or by using contractors to chisel plow the disturbed area.

Operation Impacts

Permanent impacts would result from the construction of the transmission line, the MWEC distribution substation, as well as at transmission line structure locations. Long-term impacts would include:

- Loss of pasture land under the substation site and a small amount of pasture land and row crop area immediately around structures;
- Modified farming operations around transmission structures; and
- Modified aerial application of herbicides and fertilizers to avoid transmission structures.

Permanent impacts to cropland would be localized to pole placement, with 0.002 acres of impact per pole structure and three acres for the MWEC distribution substation location. The total impact to agricultural land for both the transmission line and the MWEC distribution substation would equal approximately 2.5 acres. The proposed route segments minimize impacts to farmland by paralleling existing road section lines, quarter section lines, and property lines wherever possible. The locations for the transmission line were selected based on landowner preference to minimize loss of farmland and help ensure access to the land near the poles.

No-Action (No-Build)

Under the No-Action Alternative, (although current development in the area may result in land use changes) a change in land use or conversion of agricultural land would not occur. The overall impacts to land use would be less under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

Almost all of the past, present, and reasonably foreseeable projects involve temporary or permanent loss of land use. These losses are not expected to contribute to a measurable change to long-term land uses in the study area. In most cases, except where permanent disturbance is located, current uses have continued. The total land removed from agricultural production under the Proposed Action would be a very small fraction of the total land currently in production. The total acreage removed from agricultural production under the No-Action Alternative would vary depending on the drilling methods uses and the current demand for oil and gas resources, however, the overall land use in the area is expected to remain agricultural.

No substantive direct, indirect, or cumulative impacts to land use would result from the Proposed Action or the No-Action Alternative.

3.3.4 TRANSPORTATION

Regional transportation facilities, largely consisting of highways and rural roads, would be used to transport construction and maintenance workers, equipment, and materials to transmission line sites. Established roads would be used to the greatest extent practicable. Construction equipment and materials would be transported on overland trails that would be within the ROW to structure sites. Overland trails would generally not be graded.

Existing Environment

County and township (section line) roads characterize the existing roadway infrastructure in and around the Corridor. The entire project Corridor is located north of Hwy 2, originating near the intersection of Hwy 2 and 141st Avenue NW. Traveling East from the Western Williston Substation, the transmission line will cross 142nd Avenue NW before arriving at the proposed Judson Substation location east of 143rd Avenue NW. From the Judson Substation, the transmission line corridor will continue within the rights-of-way of the following county roads: 143rd Avenue NW, 52nd Street NW, 144th Avenue NW, 54th Street NW, 150th Avenue NW, and 56th Street NW. There are several privately owned roads located within the Corridor, used to access agricultural land. Interstate 94 is located approximately 115 miles south of the project Corridor.

Major roadways in the Project area include US Highway 2, US Highway 85, and State Route 1804. All of the highways and state routes in the Project area are located south of the Project corridor and will not be crossed by the transmission line. The existing traffic volumes on the area's county highways are documented in Table 3.3-3. Determining the specific capacity of any highway is a complex process; however, general estimates are used for planning purposes. For purposes of comparison, the functional capacity of a two-lane paved rural highway is approximately 5,000 vehicles per day, or Average Daily Traffic (ADT). In general, the state highways in and near the Corridor and Route carry higher levels of traffic than what is average for rural North Dakota, but represent only a fraction of the capacity of the roadway.

Table 3.3-3
Existing Daily Traffic Levels

Roadway Segment	2010 Average Annual Daily Traffic (AADT)	2010 Commercial Truck Traffic
State Highway 2 east at State Highway 85	4450	735
State Highway 2 east of Williston	1700	235

Source: 2010 Traffic Volumes from NDDOT, Bismarck

Additional county and township roads run through the Corridor, but have no count data available. In general, the North Dakota Department of Transportation (NDDOT) provides traffic counts for designated U.S. and State Highways. As per NDDOT, the routes with no counts are likely lower than those with count data.

Environmental Consequences

Proposed Action

Construction Impacts

Constructing the transmission line will require temporary access along the Route, which is approximately 3.8 miles in length. The access path will be approximately 10-12 feet wide; no

major grading or filling is anticipated since the access road will only be needed during construction.

The maximum transmission line construction workforce is expected to generate an approximate average of 20-30 additional vehicle trips per day. Using any combination of state and county highways and other township roads throughout the Project site, the traffic impacts are considered negligible. Since many of the area roadways have minimal ADT currently, the addition of 20-30 vehicle trips represents a large percentage increase (and likely would be perceptible), but would still be less than seasonal variations such as autumn harvest. The capacity of any route and Level-of-Service to the traveling public would not be impacted.

Operation Impacts

Increased traffic resulting from operation of the project will be limited to those required for service and maintenance of the transmission line. The addition of maintenance vehicles on local roads would not be noticeable, and would result in adverse impacts to transportation facilities or traffic.

No-Action (No-Build)

Under the No-Action Alternative, (although current development in the area may result in changes in traffic volumes) a change in transportation facilities or traffic would not occur. The overall impacts to transportation would be the same under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

Almost all of the past, present, and reasonably foreseeable projects would involve long term transportation impacts. Construction and operation of facilities associated with oil and gas development would increase traffic on roads in the Project area. State, county, and local officials would have the appropriate jurisdiction to regulate transportation impacts to manage cumulative effects. While the cumulative effects would result in a noticeable change to traffic volumes in the area, traffic volumes on regional highways and roads would continue to be well below the current capacity of the roadways.

No substantive direct, indirect, or cumulative impacts to visual resources would result from the Proposed Action or the No-Action Alternative.

3.3.5 VISUAL

The study area for visual resources includes the foreground, middleground, and background along the route. Scenic quality is determined by evaluating the overall character and diversity of landform, vegetation, color, water, and cultural or manmade features in a landscape. Typically,

more complex or diverse landscapes are considered to be higher scenic quality than those landscapes with less complex or diverse landscape features.

Existing Environment

The topography in the study area is mostly flat with some rolling hills. The landscape is characterized by short grass prairie containing a mixture of native grasses interspersed with crop fields. Large portions of the study area are used for grazing livestock and hay production. Small wooded areas, mostly associated with wind breaks and shelterbelts, and wetlands are scattered throughout the study area.

Existing electric infrastructure, such as transmission lines, distribution lines, and substations are scattered throughout the landscape, especially along Highway 2. Oil and gas facilities are becoming more frequent in the Project area, such as the proposed Bear Paw Gas Plant that will be located near the Stateline Substation. Land around the proposed gas plant location has been cleared of vegetation and consists mostly of gravel and industrial structures. The settlements in the study area are residences and farm buildings (inhabited and uninhabited) scattered along the county roads. These structures are focal points in the dominant open space character of the vicinity. Typically, the farmsteads and residences are located at lower elevations and/or are surrounded by wind-breaks to avoid winds common to the area. Roads generally follow along section lines following the topography.

Environmental Consequences

Visual resources in the landscape are viewed by both local residents and motorists using Highway 2. A significant impact to visual resources would occur under the following condition:

- Visual interruption that would dominate a unique viewshed or scenic view.

Proposed Action

Construction Impacts

During construction there would be temporary visual impacts associated with seeing equipment and construction crews along the transmission line and at the substation. However, these crews would only be at a particular location along the transmission line for a few days at a time, while poles are being delivered, set, or strung with wire. Minimal clearing of trees or grasslands would be needed and the landscape and the vegetation would be reseeded upon completion of the transmission line construction, minimizing visual changes in the landscape. The equipment in the area and amount of vegetation clearing would be comparable to or less than the oil and gas drilling activities already taking place in the area.

Operation Impacts

The proposed MWEC distribution substation would occupy approximately 3 acres. It would be visible to travelers along 143rd Avenue Northwest. One residence would be located across the road from the new substation.

Between the Williston Substation and proposed MWEC distribution substation (Township 154N, Range 102W, Sections 23 and 24) and north of the MWEC distribution substation through Township 154N, Range 102W, Section 15, MWEC is proposing to use single-pole steel structures that would accommodate a double-circuit transmission line build-out. The structures would be placed approximately 800 feet apart (with a maximum span of 850 feet). The height of the new structures would vary from 100 to 115 feet above ground, depending on terrain and structure type. A photo of the 230/115-kV double-circuit is shown in Chapter two Figure 2.3-1. A typical 345/115-kV is shown in Chapter two Figure 2.3-5. Only the 115-kV line would be placed on the structures and energized as part of this project. However, future lines are being planned in the area and MWEC is coordinating with BEPC to reduce environmental impacts by double-circuiting where feasible. The transmission line structures would be designed with the davit arms for the second circuit now; however, the second circuit would not be strung and energized until BEPC receives applicable state and federal approvals. Near Township 155N, Range 103W Section 36, two-pole wooden H-frame structures or a three-pole wooden structure with H-frame structures on each end are proposed to span a sensitive wetland and wildlife area. The spans for these structures would be between 600 and 700 feet apart.

The Proposed Action would be visible (in the middle and foreground) to those traveling on highways and county and township roads. Trees would be removed in T154N, R102W, Section 5 and in T155N, R103W, Section 34. but large-scale tree clearing would not be required. For most of the route, the visual impact from the proposed transmission line would be negligible or only incremental compared to existing conditions.

Overall the Proposed Action would not dominate the viewshed or visual resources in the area.

No-Action (No-Build)

Under the No-Action Alternative, changes in the viewshed due to construction of the transmission line would not occur. The overall impacts to visual resources would be less under the No-Action Alternative.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

Almost all of the past, present, and reasonably foreseeable projects would involve long term visual impacts. State, county, and local officials would have the appropriate jurisdiction to regulate visual impacts to manage cumulative effects. While the cumulative effects would result in a noticeable change to the visual setting, the change is not considered adverse.

No substantive direct, indirect, or cumulative impacts to visual resources would result from the Proposed Action or the No-Action Alternative.

3.3.6 NOISE

The study area for noise was limited to the residential receptors nearest to the Project area.

Existing Environment

Noise is defined as unwanted sound. Conductors on transmission lines and transformers at substations produce noise under certain conditions. The level of noise, or its loudness, depends on conductor conditions, voltage levels, and weather conditions.

Noise is measured in units of decibels (dB) on a logarithmic scale. Because human hearing is not equally sensitive to all frequencies of sound, certain frequencies are given more "weight." The A-weighted (dBA) scale corresponds to the sensitivity range for human hearing. A 10 dBA change in noise levels is perceived as a doubling of loudness.

Noise levels decrease with increasing distance from the source. From a point source, such as a substation, noise levels decrease by 6 dBA for every doubling of distance; for a line source, such as a transmission line, noise levels decrease between 3 and 4.5 dBA, depending on ground cover, with every doubling of distance. If the noise emitted from a source is doubled, there is a 3 dBA increase in noise, which is barely discernible to the human ear. When looking at multiple sources of noise of different magnitudes, the rule of thumb is that if there is a difference of greater than 10 dBA between noise sources, there will be no additive effect (only the louder source will be heard and the quieter source will not contribute audibly to the noise levels). Table 3.3-4 shows noise levels associated with common, everyday sources, and places the magnitude of noise levels discussed here in context.

Table 3.3-4
Common Noise Sources and Levels

Sound Pressure Level (dB)	Typical Sources
120	Jet aircraft takeoff at 100 feet
110	Same aircraft at 400 feet
90	Motorcycle at 25 feet
80	Garbage disposal
70	City street corner
60	Conversational speech
50	Typical office
40	Living room (without TV)
30	Quiet bedroom at night

Source: Environmental Impact Analysis Handbook, ed. by Rau and Wooten 1980

The Proposed Action is in a rural area. Ambient noise in rural areas is commonly made up of wind and rustling vegetation, intermittent farm equipment operation, and infrequent vehicle pass-bys.

Noise levels in agricultural areas are typically in the 40 dBA range, which is considered acceptable for residential land use activities. Ambient noise levels of 40 to 55 dBA are expected near rural roadways, such as Highway 2, during peak traffic hours. Due to the prevalence of wind-induced noise and traffic noise, it is expected that the current, average, background noise levels in the vicinity of the proposed MWEC distribution substation are higher than typical background noise levels in agricultural areas. Existing background noise levels of 40 to 55 dBA would be expected at these properties due to the presence of Highway 2. Noise levels associated with the transmission line will generally be lower than background noise levels.

Environmental Consequences

A significant noise impact would occur under the following condition:

- Violation of local, state, or federal noise standard or guidance.

Proposed Action

Construction Impacts

The Proposed Action would result in construction noise from equipment such as heavy trucks and bulldozers. Fitting internal combustion engines associated with construction activities with approved mufflers and spark arresters will help avoid and minimize construction noise, as will conforming with any county or other applicable regulations that restrict construction hours.

Operation Impacts

Transmission line conductor noise levels were estimated using the CFIX8 model distributed by Bonneville Power Administration. The maximum conductor noise levels would occur at the conductor itself; noise levels drop off as the distance from the conductor increases. Worst case noise emissions from the proposed 115-kV transmission line are predicted to be approximately 15 dBA in fair conditions directly on the centerline. In foggy, damp, or rainy weather conditions, power lines can create a subtle crackling sound due to the small amount of electricity ionizing the moist air near the wires. During heavy rain the general background noise level is usually greater than the noise from the transmission line. Additionally few people are out near the transmission line during heavy rain. During light rain, dense fog, snow, and other times when there is moisture in the air, the proposed transmission lines would produce audible noise higher than rural background levels but similar to household background levels. During dry weather, audible noise from transmission lines is an imperceptible, sporadic crackling sound.

There are seven sensitive noise receptors with in 500 feet of the proposed transmission line; two of these are within 1,000 feet of the MWEC distribution substation. However, the transmission line and substation noise level at these receptors is expected to be less than the background noise

levels which are influenced by Highway 2. They would not contribute to a change in overall noise levels.

The other five receptors are located further north and in rural areas which may experience low ambient noise levels made by natural sources such as wind and insects. It is typical that quiet rural places experience noise levels from natural sources at approximately 25 to 35 dBA. To determine what additional noise may be introduced into this environment, the CFIX8 coronal noise model was employed using a 115-kV structure to predict noise at varying distances. Figure 3.3-1 details the results of the CFIX8 coronal noise model.

Figure 3.3-1
Coronal Noise Model Distance Graph

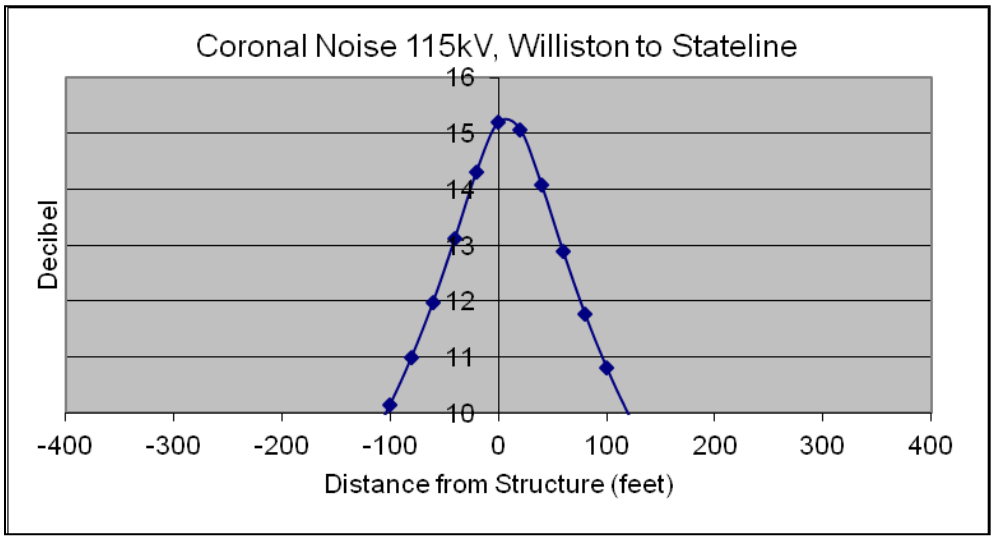


Figure 3.3-1 illustrates that with a 115-kV structure with bundles at a minimum height of 39 feet, maximum coronal noise will be 15 dBA at the base of the structure. This level is predicted to occur at a 0.5 feet above the ground between the center-most pair of conductors during wet conditions. The noise attenuation rate of coronal noise is approximately -4 dB per distance doubled. This rate is typical of noise sources that are characterized as line sources with the propagation path over agricultural lands. The model predicts that noise levels farther than 100 feet from the structure will be 10 dB and below.

As no receptors are within 100 feet of the structures, noise levels beyond this distance will fall well below even the low noise levels found in quiet rural areas. Therefore, no noise impacts at nearby receptors are predicted as a result of the transmission line or substation.

No-Action (No-Build)

Under the No-Action Alternative, increased noise from construction and operation would not occur, but noise levels resulting from operation of the Bear Paw Gas Plant without closed loop service can not be predicted.

The need for the project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

The effects on noise from the Proposed Action, in combination with projects described in Section 3.4, would not be expected to significantly increase noise levels in the Project area. Past, present, and anticipated developments with transmission and distribution lines would increase noise levels similarly to the Proposed Action. It is assumed that all past, present, and anticipated developments would adhere to industry standards for minimizing noise impacts, resulting in no cumulative effects from construction or operation of the Project in combination with other projects.

No substantive direct, indirect, or cumulative noise impacts would result from the Proposed Action or the No-Action Alternative.

3.3.7 HEALTH AND SAFETY

Evaluation of safety and health issues was limited to the study area specifically focused on the construction and maintenance activities associated with the Proposed Action.

Existing Environment

Public and Worker Safety

The predominant activities that currently occur within the study area include agriculture, oil and gas development, and vehicular travel.

Electric and Magnetic Fields

The Proposed Action would create electric and magnetic fields (EMFs) arising from the flow of electricity and the voltage of transmission lines. The voltage of the transmission line, current flow in the conductors, weather conditions, and the design of the transmission line can cause electrical environmental effects.

Electric Fields

Voltage on any wire (conductor), be it home wiring or a transmission line, produces an electric field in the area surrounding the wire. The electric field associated with transmission lines extends from the energized conductors to other nearby objects, such as the ground, towers, vegetation, buildings, and vehicles. The electric field from a transmission line gets weaker with increasing distance from the transmission line. Nearby trees and building material also greatly reduce the strength of transmission line electric fields and act as a shield.

The intensity of electric fields is associated with the voltage of the transmission line and is measured in kilovolts per meter (kV/m). Transmission line electric fields near the ground are designated by the difference in voltage between two points (usually one meter). With respect to

public health and safety, the presence of an electric field is not a predominant concern during normal operations. The electric field is of major concern only during a line to ground fault (a short circuit between a conductor and the ground).

Magnetic Fields

Current passing through any wire conductor produces a magnetic field in the area around the wire. The magnetic field associated with a high voltage transmission line surrounds the conductor and decreases rapidly with increasing distance from the conductor. The magnetic field is expressed in units of magnetic flux density, expressed as gauss (G). The normal magnetic field can interfere with telephone and railroad communications equipment near the line.

The magnetic field associated with transmission line operation can induce currents and voltage in long, parallel conductors such as fences or telephone cables, if they are not properly grounded. The potential induced voltage is dependent on line geometry, the current carried on the line, the distance to the conducting object, the length of parallel structures, the grounding of the conducting object, and the shielding of the conducting object. There are no federal regulations establishing maximum magnetic field levels.

Stray Voltage

Stray voltage is a natural phenomenon that can result in low levels of electrical current between two contact points where electricity is grounded. Electrical systems, including farm systems and utility distribution systems, must be grounded to the earth by code to ensure continuous safety and reliability. Some current flows through the earth at each point where the electrical system is grounded and a small voltage develops. This voltage is called neutral-to-earth voltage (NEV). When a portion of this NEV is measured between two objects that may be simultaneously contacted by an animal, it is frequently called stray voltage. Stray voltage does not cause electrocution and is not related to ground currents, EMFs, or earth currents. Transmission lines have been shown to contribute to stray voltage when the electric distribution system directly serving the farm or wiring from a farm was under and parallel to the transmission line.

Environmental Consequences

A significant impact would occur under the following conditions:

- Design of components causes an increase in the frequency or severity of worker injuries to a level above average;
- Children are disproportionately impacted by adverse human health and environment effects;
- Increase of electric and magnetic fields at or outside the ROW to levels above best industry practice; or
- Increase in risk of injuries or fatalities to the public from construction and operation of the Proposed Action.

Proposed Action

Public and Worker Safety

The Proposed Action would be designed to comply with applicable local, state, and National Electrical Safety Code (NESC) standards regarding worker safety, clearance to ground, clearance to crossing utilities, clearance to buildings, strength of materials, and ROW widths. Construction crews would comply with local, state, NESC, Western regulations and MWEC standards regarding installation of facilities and standard construction practices. Established MWEC and industry safety procedures would be followed during and after installation of the transmission line. This would include clear signage during all construction activities.

The proposed transmission line would be equipped with protective devices to safeguard the public from the transmission line in the unlikely event that an accident occurs and a structure or conductor falls to the ground. The protective devices are breakers and relays located where the line connects to the substation. This protective equipment would de-energize the line in the unlikely event that such a situation occurs. In addition, the substation facility would be fenced and access would be limited to authorized personnel. Therefore, the Proposed Action would not be expected to cause an increase in the frequency or severity of worker injuries to a level above MWEC's average.

Electric and Magnetic Fields

Electric Fields

Electric field levels at electric substations drop off rapidly. At 100 feet away from a substation fence, the electric field levels from the substation equipment are typically at background levels. Any measured fields in that area and beyond would be from transmission and distribution lines entering and exiting the substation, and not from the substation. The nearest residence to any of the Project facilities is located more than 1000 feet from the proposed MWEC distribution substation

The proposed 115-kV transmission line would have a maximum magnitude of electric field density of approximately 0.87 kV per meter underneath the conductors and 1 meter above ground level in a double circuit configuration.

Since the Project is located in a rural area, there are no residences within 500 feet of the proposed facilities, so electric field levels are not anticipated to have a significant effect.

Magnetic Fields

Magnetic field levels at electric substations also drop off rapidly from transformers, which are the main source of magnetic fields from the substation equipment. At 100 feet away from a substation fence, the magnetic field levels from the substation equipment are at background levels. Any measured fields in that area and beyond would be from transmission and distribution

lines entering and exiting the substation, and not substation equipment. The proposed MWEC distribution substation is more than 1,000 feet from the nearest residence.

The maximum calculated ground-level magnetic field produced by the normal operating current for the 115-kV portion of the Proposed Action is 87 milligauss (mG) for the proposed transmission line. This maximum reading would be directly under the conductors at mid-span, where the conductors would be closest to the ground.

The proposed transmission line has been routed to avoid placing the line within 500 feet of occupied residences whenever possible. Maximizing the distance from residences was a primary factor in choosing the preferred route.

Since the location of the Project is in a rural area, and there are no residences nearby, magnetic field level would also not be a concern. No impacts to human health and safety from electric and magnetic fields are anticipated

Stray Voltage

The transmission line construction will avoid paralleling distribution lines directly serving farms. Therefore, no impacts associated with stray voltage issues are anticipated due to the Proposed Action.

Intentional Destructive Acts

Transmission line projects may be the subject of intentional destructive acts ranging from random vandalism and theft to sabotage and acts of terrorism intended to disable a facility. Acts of vandalism and theft are more likely to occur than acts of sabotage and terrorism and most likely to occur in remote areas and at substations. Theft frequently involves equipment and salvageable metal at substations. Vandalism often includes shooting out insulators. Sabotage and terrorism would most likely involve destruction of key transmission line components with the intent of interrupting the electrical grid.

Intentional destructive acts can result in financial and environmental impacts and impacts to consumers and businesses that rely on power. Financial impacts are ultimately passed on to the rate payers. Environmental impacts related to intentional destructive acts could range from electrocution of perpetrators, line crews, or the public; to wildfire ignition from downed lines; and to oil contamination from damaged equipment. Impacts to consumers and business would range from minor annoyance to economic hardship.

Vandalism and theft within the substations would be minimized as equipment would be protected by fencing. Little or no preventive measures are available to protect the transmission line from vandalism or sabotage. However, separation of lines would reduce the potential for two or more lines to be affected as a result of a single act of sabotage.

No-Action (No-Build)

Under the No-Action Alternative, increased risks to health and safety related to construction activities would not occur, but the potential impacts from operation of the Bear Paw Gas Plant without closed loop service can not be predicted.

The need for the Project would still exist if the No-Action alternative is chosen. If this project is not approved it may result in another project being constructed that would not require an interconnect agreement with Western.

Cumulative Effects

The effects on health and safety from the Proposed Action, in combination with projects described in Section 3.4, would not be expected to adversely impact wildlife. Past, present, and anticipated developments with transmission and distribution lines would have health and safety risks similar to those described as part of the Proposed Action. It is assumed that all past, present, and anticipated developments would adhere to industry standards for minimizing health and safety risks, resulting in no cumulative effects from construction or operation of the Project in combination with other projects.

No substantive direct, indirect, or cumulative health and safety impacts would result from the Proposed Action or the No-Action Alternative.

3.3.8 CULTURAL RESOURCES

Archaeological and historic architecture resources represent the visible or otherwise tangible record of human activity on the landscape. These resources vary in size, shape, condition, and importance, among other considerations; some are buried, while others are clearly evident on the landscape. The resources include precontact (Native American) archaeological sites, historic-period (Euroamerican) archaeological sites, and 19th and 20th century buildings, bridges, railroads, and industrial sites. The possible presence of resources in the Project area has triggered Western to request a review of the Project area by a cultural resource professional.

Western and the North Dakota Historic Preservation Office (SHPO) determined that the proposed action triggers federal and state review. The primary legislation that mandates federal management of cultural resources is the National Historic Preservation Act (NHPA) of 1966 (as amended in 1976, 1980, and 1992), specifically Section 106, and its implementing regulations in 36 CFR 800. This action also triggers consideration of state laws such as the Energy Conversion and Transmission Facility Siting Act (ND Century Code 49-22), the Protection Of Unmarked Human Burials Act (ND Century Code 23-06), and the Protection of Historic and Prehistoric Sites (ND Century Code 55-02.07). Western has taken the lead in consulting with SHPO, and has identified tribal groups with a vested interested in the Project area and other interested members of the public as a part of their compliance with Section 106 regulations.

Western provided SHPO with a Project area map and information pertaining to the scope and route of the Project in a letter dated August 2011. SHPO responded to Western with a letter on September 2, 2011, stating that they recommend a background file search and investigation of the Project area that identifies and considers archaeological and architectural resources. SHPO assigned the Project state identification number ND SHPO Ref: 11-1758.

A Class I Cultural Resources Literature Search was completed by HDR Engineering, Inc., (HDR) in June and July 2011, to review and contextualize any previous surveys and reports conducted within one mile of the proposed transmission line. The records search included a review of existing cultural resources documentation on file at SHPO, and a review of Government Land Office (GLO) records and maps. This report will be included as a part of the larger Class III report.

A Class III Intensive Cultural Resource Inventory was completed for the direct Area of Potential Effect (APE). The inventory included a pedestrian survey of a 100-foot-wide corridor centered on the transmission line (50 feet on either side of the Project centerline) and an architectural inventory of a one-half-mile visual effects APE. This inventory was completed in mid-September 2011.

The archaeological inventory was completed by archaeologists qualified under Secretary of Interior Professional Standards to review the ROW. Two archaeologists, spaced at a 15 meter transect, performed a pedestrian survey to examine the direct effects APE and covered the ROW in a single pass. No shovel tests were completed at the time of inventory. All areas within the ROW that exhibit enhanced surface exposure via rodent burrow dirt piles, ditch back slopes, cutbank exposures, etc., were examined. All archaeological properties identified during the inventory were recorded on SHPO archaeological site forms. The results of the pedestrian survey have been summarized in a report that meets Western and SHPO standards.

The architectural inventory was completed by an architectural historian qualified under Secretary of Interior Professional Standards to review the buildings and structures within one-half-mile of the proposed transmission line. Buildings and structures that appeared to be 45-years old or older were documented. The survey took place only from the public ROW; no private property was directly accessed to document standing structures. The survey methodology used the following standards:

- Standing buildings/structures within the APE that appeared to meet a minimum age of 45 years or older (constructed 1966 or earlier) were photographed from the public right of way with at least one digital image. View and scale depended on local conditions such as surrounding vegetation and distance from the right of way.
- Notes and digital images taken of some standing buildings/structures that were less than 45-years-old, containing information regarding why the location is not considered to meet the minimum age requirement, will be retained in HDR files and not presented in report.

Information sufficient to complete the North Dakota Cultural Resource architectural forms was gathered for locations with standing structures considered to meet the 45-year minimum age requirement based on field observation. This age requirement was confirmed by research in the Williams County Courthouse, City of Williston Public Library, and other archival sources.

Existing Environment

Archaeological and Historic Resources

Nineteen previously recorded surveys or investigations fall within one mile of the APE in Williams County. The SHPO files indicate that there are 10 previously recorded cultural resources within one mile of the Project. These cultural resources are composed of one archaeological site, eight isolated finds, and one architectural structure. The cultural resources are represented by: lithic scatters, a transmission line, two historic archaeological sites, and one farmstead location. The Class I literature search revealed that two of the previously recorded sites are located adjacent to the 100-foot ROW These two sites were reviewed in the field during a survey of the transmission line and particular attention was paid to assess if any cultural material was present along or within the proposed Project boundary. However, HDR did not extend survey in these locations outside of the 100-foot ROW as the sites identified have been determined as site leads only. A third previously recorded site is located partially within ½ mile of the 100 foot ROW. This site was not reviewed by survey crews as it will not be physically impacted. The sixteen remaining sites exceed the ½ mile visual effects APE, but do not extend beyond the one mile study area.

Nine Native American tribes or communities have historical affiliation to the general study area. Consultation with these tribes was initiated by Western in August 2011. The tribes or communities contacted are identified in Appendix D. At this time no traditional cultural properties (TCP) have been identified within the APE and no Native American Religious Concerns have been identified.

Inventory of the 100-foot ROW was completed from September 12 to 16, 2011. During the inventory one dispersed historic scatter and six surface features were identified. A brief description of each location is given below.

- The dispersed historic scatter is located in Section 34, T155N, R103W, in a harvested soybean field. The field had 90 percent visibility. Just across the road from this location is a small shelter belt and four metal grain bins. Items associated with this find are, metal, glass, a whiteware fragment, and a white porcelain doorknob. Less than 30 artifacts in total were observed at the site. The artifacts are dispersed over approximately a 5 meter by 5 meter area. The artifacts appear to lack integrity due to intensive farming and are probably associated with the shelter belt and grain bins across the road. HDR feels the site does not warrant further investigation. HDR recommends this site as not eligible for listing on the NRHP.

- The ten surface features are located in Section 15, T154N, R102W, in range land. The field had 5 to 10 percent visibility. The ten stone features found in this section are represented by three stone alignments and seven stone cairns. No obvious signs of cultivation could be identified in this field. Three of the surface features are no longer located within the current proposed ROW. All of these features are well sodden suggesting they have been in place for some time and that they have integrity. It is possible these features are associated with prehistoric time periods, but further investigation would be needed to confirm this. Four additional cairns are located in this section, but are no longer located within the project corridor. At this time the NRHP eligibility of these sites remains unresolved. Resolution of these sites would be completed before the project is finalized.
- Inventory of the ½ mile visual APE was complete for further study. The architectural resources are represented by five farms, one agricultural experimental station, and one residence. All of these properties were associated with early 20th century farming. HDR recommends all of the architectural properties as not eligible for listing on the NRHP as the properties no longer retain integrity to their significant time period.

Environmental Consequences

An impact to a historic property would occur under the following condition:

- Impacts to historic properties can occur from ground disturbing activity and/or through visual intrusion during preconstruction, construction, operation, or maintenance.

The Proposed Action is not anticipated to result in an adverse impact to historic properties as the applicant will strive to identify all significant resources before construction and avoid impact where necessary. HDR anticipates that historic properties would be marked in the field prior to construction so that those identified areas would be avoided by construction crews. In addition, structures will be spaced to avoid direct impact to the identified surface features. In the event that an unanticipated discovery of a resource occurs during construction, MWEC would stop construction, secure the area, notify SHPO and Western's archaeologist, and then, through consultation with appropriate parties, determine the significance of the find. In the event an impact would occur, MWEC would consult with SHPO and Western to develop an appropriate treatment plan to address any impacts.

At this time no traditional cultural properties or areas of Native American Religious Concerns have been identified in the APE that would be affected by the Proposed Action. A final determination will be made by Western following consultation with the appropriate parties.

No-Action (No-Build)

Under the No-Action Alternative, Western would not approve the MWEC's interconnection request. As a result it is anticipated that no impacts to cultural properties would occur as MWEC

would take No-Action that could harm these types of resources. It is anticipated that other actions taken to accomplish MWEC's goal would receive review before preconstruction, construction, or operation occurred.

Cumulative Impacts

The Proposed Action is not likely to cause significant direct, indirect, or cumulative impacts to cultural resources as standard industry construction standards strive to avoid resources when identified.

3.4 CUMULATIVE EFFECTS

The Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) defines cumulative impacts as:

> … the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7).

Cumulative impacts are considered direct effects, which are "caused by the action and occur at the same time and place" (40 CFR 1508.8). The CEQ regulations require a discussion of cumulative actions and connected actions in the scope of the environmental review. These terms are defined as follows:

- Cumulative actions are those "which, when viewed with other Proposed Actions have cumulatively significant impacts and should therefore be discussed in the same [environmental review]" [40 CFR 1508.25(a) (2)].
- Connected actions are those that are closely related. "Actions are connected if they: (i) automatically trigger other actions which may require environmental review; (ii) cannot or will not proceed unless other actions are taken previously or simultaneously; or (iii) are interdependent parts of a larger action and depend on that larger action for their justification" [40 CFR 1508.25(a) (1)].

Indirect effects, also termed secondary effects, are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR 1508.8).

Cumulative impact analyses are based on the existing conditions and consider those issues identified in individual resource sections. Discussions focus on critical resources. The past, present, and reasonably foreseeable future projects are analyzed according to incremental impacts in combination with the Proposed Action.

3.4.1 PAST AND PRESENT

Agricultural practices, oil and gas development, vehicle travel along gravel and paved township, county, state, and federal roadways, and operation of existing electric transmission facilities are the primary activities that have occurred and are presently occurring in the study area and more generally in Williams County.

3.4.2 REASONABLY FORESEEABLE FUTURE

Reasonably foreseeable development activities and projects have been identified that may impact resources common to this Project. Projects considered as part of this analysis include:

- Oil and Gas Development – Oil and gas development is ongoing in the study area. According to the North Dakota Department of Mineral Resources, more than 1.8 million barrels of oil have been produced in Williams County. Currently, there are 43 rigs actively drilling in Williams County (NDDMR 2011). Williams County is located in a prime location of the Bakken formation. In 2010, the Bakken formation was the highest producing formation, outputting more than 85 millions barrels of oil.
- As indicated above, oil and gas development is occurring and, based on the current demand for new energy supplies and fluctuating price for crude oil (between $115 and $75 a barrel (oilprice.net 2011)), is likely to continue occurring for the foreseeable future. Information about the exact locations and scope of future developments was not available as this information is generally confidential and proprietary. As a result, the exact well locations, the number of new wells, and associated impacts are not known at this time.
- In general, it is anticipated that the oil and gas industry would have to comply with existing state and federal regulations. The primary surface impacts of oil and gas development typically include ground disturbing impacts at each drill site, totaling about 2 acres. There may also be access roads and utility lines of various lengths, and tanks and other site facilities to stockpile and house equipment and supplies. These facilities would convert existing land use and vegetation to industrial purposes. In addition, transportation system impacts would occur related to vehicles transporting water, salt water, and site personnel. Noise is expected to increase depending on the number of wells and types of motors powering the wells. The viewshed of the area would also change as the number of oil rigs increase across the landscape.
- To accommodate increased oil and gas development, several new transmission lines are planned in the vicinity of the Project. BEPC is proposing to construct a 345-kV Transmission Line and associated Judson Substation that is planned to double circuit the Project for approximately 4 miles from the existing Williston Substation to 52nd Street NW in the Judson Township and continue north into Mont County. The Judson Substation will be adjacent to the proposed MWEC distribution substation near 143rd

Avenue NW. Double circuiting the BEPC transmission line with the Project will reduce the overall cost and environmental impact of each transmission line.

- MWEC is projected approximately 60 miles of new transmission line within their service area to accommodate the increased oil and gas development. The new transmission line will be built over the course of the next two years.
- The Bear Paw Energy, LLC, a unit of Oneok Partners LP of Tulsa, Oklahoma, is currently constructing a new 60 MVA natural gas processing plant northwest of Williston, at the northern terminus of the project. The natural gas processing plant will help reduce the amount of gas that is burned off and wasted due to flaring at pump sites. The Bear Paw Gas Plant request for power included a closed loop service for system reliability.
- The current extraterritorial area (ETA) for the city of Williston includes a one-mile area surrounding the city limits, where the City has subdivision and zoning rights. As part of its Comprehensive Plan issued in August 2010, the city of Williston plans to expand its ETA from one mile to two miles. Expansion of the ETA is intended to accommodate the City's population, and requires joint review by the applicable townships. The proposed ETA boundary is approximately one mile east of the Proposed Action.

The potential cumulative impacts of these past, present, and reasonably foreseeable projects evaluated as part of this environmental assessment are addressed in chapter 3.0 for each resource area.

4.0 REFERENCES

Avian Power Line Interaction Committee (APLIC). 2006. Suggested practices for avian protection on power lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission, Washington, DC and Sacramento, CA. 207 pp.

Atkinson, S. J. and A.R. Dood. 2006. Montana Interior Least Tern Management Plan. Montana Fish, Wildlife and Parks, Bozeman, Montana. 47 pp.

Bluemle, John P. 1991. The Face of North Dakota, Revised Edition. North Dakota Geological Survey, Bismarck, North Dakota.

Canadian Wildlife Service (CWS) and U.S. Fish and Wildlife Service. 2007. International recovery plan for the whooping crane. Ottawa: Recovery of Nationally Endangered Wildlife (RENEW), and U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 162 pp.

Grant, T.S., E. Madden, and G.B. Berkey. 2004. Tree and shrub invasion in northern mixed-grass prairie: implications for breeding grassland birds. Widlife Society Bulletin 32:807-818.

Hagen , Sandra K., Patrick T. Isakson, and Steve R. Dyke. 2005. Comprehensive Conservation Strategy (aka Wildlife Action Plan). North Dakota Game and Fish Department. Bismarck, ND.

Isakson, Patrick. 2008. Personal communication between Patrick Isakson, North Dakota Game and Fish and Laura Lutz-Zimmerman, HDR Engineering. December 2, 2008.

Johnson, D.H., and M.D. Schwartz. 1993. The Conservation Reserve Program: habitat for grassland birds. Great Plains Research 3:273-295.

Jones, S. L. 2010. Sprague's Pipit (Anthus spragueii) Conservation Plan. U.S. Department of Interior, Fish and Wildlife Service, Washington, D.C.

Madden, E.M., R.K. Murphy, A.J. Hansen, and L. Murray. 2000. Models for guiding management of prairie bird habitat in northwestern North Dakota. American Midland Naturalist 144:377-392

National Institute of Environmental Health Sciences (NIEHS). 2002. "Your EMF Environment." EMF Research and Public Dissemination Program. http://www.niehs.nih.gov/emfrapid/booklet/youremf2.htm#strong. (retrieved 2011).

National Park Service (NPS). 1991 How to apply the National Register Criteria for Evaluation. National Register Bulletin 15. National Register Branch, Interagency Resources Division, National Park Service. U.S. Government Printing Office, Washington D.C.

North Dakota Century Code chapter 63-0 1.1 *North Dakota Noxious Weeds List.*

[NDDA] North Dakota Department of Agriculture. 2003. Noxious Weed Team. Available at: http://www.agdepartment.com/Programs/Plant/NoxiousWeeds.html accessed September 2011

———. 2008. North Dakota County and City Listed Noxious Weeds. Available at: http://www.agdepartment.com/PDFFiles/CountyCityListedNoxWeeds.pdf accessed September 2011.

[NDDH] North Dakota Department of Health. 2011. North Dakota Geographic Targeting System for Groundwater Monitoring.

———. 2011. Annual Report, North Dakota Air Quality Monitoring Data Summary.

[NDGF] North Dakota Game and Fish Department. 2008. PLOTS map.

———. 2011. "Interactive PLOTS Map." PLOTS Guide. Web. Accessed October 2011.

North Dakota Job Service. North Dakota County Unemployment Rates - July. Available at: http://www.jobsnd.com/jsnd/jobsnd/news/news.detail.html?newsId=15403&locationId= Accessed on August 23, 2011..

———. 2008. North Dakota County Unemployment Rates – September http://www.ndworkforceintelligence.com/admin/gsipub/htmlarea/uploads/lmi_maplauscntyunemprate200809.pdf. Accessed September 2011.

Oil-Price.net. 2011. Crude Oil and Commodity Prices..http://oil-price.net/dashboard.php?lang=en. Accessed 2011

Seifert, Laura. 2009. A Basic Analysis of the Bakken Oil Boom: Precautions and Planning. http://www.ndoil.org/image/cache/Bakken_Precautions_and_Planning_-_Seifert.pdf Accessed on September 21, 2011

Sidle, J. G., J. J. Dinan, M. P. Dryer, J. P. Rumancik, Jr., and J. W. Smith. 1988. Distribution of the least tern in interior North America. American Birds 42:195-201.

Stehn, T. and T. Wassenich. 2008. Whooping crane collisions with power lines: an issue paper. 2006 North American Crane Workshop. In press.

U.S. Department of Agriculture, Farm Service Agency, Aerial Photography Field Office. 2006. National Agricultural Imagery Program (NAIP) Digital Orthorectified Images (DOQ), North Dakota, 2006.

U.S. Department of Agriculture, National Agricultural Statistics Service. 2007. http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/North_Dakota/cp38105.pdf

———. 2007. Quick Stats North Dakota County Data – Crops. http://www.nass.usda.gov/QuickStats/Create_County_Indv.jsp. (Accessed August 2011).

———. 2009. http://www.nass.usda.gov/Statistics_by_State/North_Dakota/Publications/Top_Commodities/pub/rank10.pdf Accessed on September 8, 2011

U.S. Department of Agriculture, Soil Conservation Service (SCS). 1982. Soil Survey of Mountrail County, North Dakota

U.S. Census Bureau (USCB). 2000. Census 2000, Summary Tape File 1. Available at: http://www.census.gov/main/www/cen2000.html accessed on October 3, 2011.

———. 2005-9. Population and Economic Characteristics for Williston, North Dakota for 2005-2009.

———. 2008. Housing and Household Economic Statistics Division (HHESD). http://www.census.gov/hhes/www/poverty/threshld/thresh07.html accessed on October 3, 2011.

———. 2010. Population and Housing Occupancy Status: 2010 - State -- Place

United States Department of Labor (USDL). 2011. Bureau of Labor Statistics. Unemployment in States and Local Areas. Available at: http://research.stlouisfed.org/fred2/data/NDWILL5URN.txt. Accessed on August 24

United Stated Environmental Protection Agency (USEPA). 2010. Climate Change – Science; Atmosphere Changes. http://www.epa.gov/climatechange/science/recentac.html accessed on November 18, 2011.

U.S. Fish and Wildlife Service (USFWS). 1988. Recovery Plan for piping plovers (Charadrius melodus) of the Great Lakes and Northern Great Plains. U. S. Fish and Wildlife Service, Twin Cities, MN. http://ecos.fws.gov/docs/recovery_plan/880512.pdf

———. USFWS 2010a. The Whooping Crane: Return from the Brink of Extinction. http://whoopers.usgs.gov/publications/CraneInfoSheet_4pp.pdf. Accessed August 30, 2011

———. USFWS 2010b. Sprague's Pipit Conservation Plan. U.S. Fish and Wildlife Service, Denver, Colorado. http://www.fws.gov/mountain-prairie/species/birds/spraguespipit/75FR56028.pdf

———. USFWS 2011a. North Dakota Endangered Species Homepage.
http://northdakotafieldoffice.fws.gov/endspecies/endangered_species.htm. Website last updated March 14, 2011.

———. USFWS 2011b. Proposal to Remove ESA Protection for Gray Wolves in Western Great Lakes DPS and the National Wolf Strategy.
http://www.fws.gov/midwest/wolf/delisting/index.htm accessed on October 5, 2011.

U.S Geological Survey (USGS). 1996. Ground Water Atlas of the United States: Montana, North Dakota, South Dakota, and Wyoming, HA 730-I.

———. 2005. Annual Average Precipitation Map of Montana.: U.S. Geological Survey, scale undefined, 1 sheet.

———. 2008a. Earthquake Center. Available at:: http://earthquake.usgs.gov/

———. 2008b. Paleontology Portal. Available at: http://www.paleoportal.org/

Appendix A
STANDARD AVOIDANCE AND MITIGATION MEASURES

General Avoidance and Minimization Measures – During Site Selection and Design

- Areas known as major flyways or migratory resting spots should be avoided whenever feasible.
- To minimize the likelihood of bird collisions, the Applicant should coordinate with the USFWS to identify areas where marking of transmission line shield wires and/or alternate structures are appropriate.
- Unless otherwise permitted or approved, sensitive resources (including prairie remnants and threatened and endangered species) should be avoided during siting, construction, maintenance, and operations.
- Wetlands will be spanned, where possible. If necessary, structures should be placed at the edges of wetlands (where avoidance is not feasible) in order to minimize disturbance.

Avoidance and Mitigation Measures – During Construction

EROSION CONTROL MEASURES

PERFORMANCE REQUIREMENTS

- Construction shall not start until affected areas such as wetlands, rivers, and streams are protected by appropriate and effective erosion control devices as identified in any NPDES permits and SWPPP required for certain parts of the project (particularly at substations).
- Erosion control work shall be performed concurrently with earthwork, final grading, and turf establishment operations. In cases involving relatively small site developments, this work shall be completed as soon as practical.
- The Applicant shall establish and complete all permanent erosion control structures required for the site development. All temporary measures shall remain in place to the extent practical, until permanent erosion control structures are effective.
- The Applicant shall establish and complete or rework erosion control items to the extent necessary to correct conditions which develop during the sequence of work on the site. These efforts shall be maintained until permanent turf establishments, drainage facilities or controls incorporated into the grading drawings are complete and operative.

- The Applicant will assign personnel to manage the installation and maintenance of erosion control measures. These personnel will develop plans and work with the crews to ensure the commitments listed in this section are followed. As required, reports will be prepared outlining measures installed, inspections undertaken, and any issue resolution that occurred, such as unanticipated major weather events. These personnel will also be available to work with the crews to install erosion control measures that may be necessary during construction.

TEMPORARY EROSION CONTROL MEASURES

- If there are areas of exposed erodible soil in the course of any earthwork operations associated with substation construction, they shall be shaped to permit storm runoff with minimum erosion.

- In order to maintain sheet flow and minimize rills and/or gullies, there shall be no unbroken slope length of greater than 75 feet for slopes with a grade of 3:1 or steeper.

- Temporary berms, slope drains, diversion mounds, and sedimentation basins shall be required in accordance with the NPDES permits where possibilities for water pollution exist and permanent erosion controls are not completed or operative.

- Sedimentation barriers shall be required around the perimeter of the construction limits of the substation sites, as necessary, to prevent sediment from leaving the site and entering wetlands.

- Temporary erosion control measures also will be installed along the transmission line route where the potential for sediment entering wetlands or waterbodies may occur.

- Where silt fence is installed, one of the three following installation methods may be used:

    (1) Machine-sliced silt fence.

    (2) Hand-installed preassembled silt fence, with the bottom of the fabric anchored in a 6" by 6" trench.

    (3) Geotextiles supported by steel posts with securing pins at the base may be used. The geotextile material shall be a woven pervious plastic yarn

and shall allow water transmission and retention of soils native to the site.

- Where soils are too soft to allow the installation of silt fence, slopes are too steep or surface water is present, staked hay bales may be substituted for silt fence.

- If drainageways are constructed (associated with substations), rock check dams shall be installed at the outlet of the drainageways to stabilize the ditches.

- Where work continues beyond the growing season for turf establishment, all exposed soils on slopes and ditches shall be dormant seeded and mulched.

PERMANENT EROSION CONTROL MEASURES

- Apply seed to disturbed soils until vegetation is re-established. Continue to seed until disturbed areas are revegetated to match the density of vegetation in adjacent, undisturbed areas.

- Once disturbed areas are fully revegetated, remove and dispose of temporary erosion control measures (e.g., silt fence).

- Where construction results in an increase in stormwater runoff, permanent erosion control measures will be installed as required by applicable NPDES stormwater permit requirements. Stormwater runoff shall be managed to protect downstream water quality by promoting on-site infiltration and retention of stormwater to reduce the volume and velocity of discharges to receiving waters or drainageways.

- During operation of the substation site, the permanent stormwater measures shall be periodically inspected and maintained. Where necessary, accumulated sediments shall be removed from downstream drainageways, eroded areas restabilized, or additional measures installed to prevent erosion and downstream sedimentation associated with the substation facilities

CONSTRUCTION NEAR STREAMS

- Clearly identify a buffer on both banks of a stream crossing to prohibit any construction activity, except for the removal of trees necessary for safe operation of the transmission line facilities. Where trees are removed, remove by hand-clearing, if possible.

- When construction operations occur over the waterway, control the operations in a manner to prevent materials from falling into the water body. If materials do enter the water, they should be promptly removed.

- Minimize the removal of riparian vegetation. If vegetation must be removed, mulch disturbed soils and reseed or stabilize soils promptly following construction to prevent erosion of the stream bank.

POLLUTION PREVENTION

Spills: Maintain spill kits (e.g., absorbent rags, shovels, plastic bags) on-site to facilitate prompt containment and clean-up of hazardous materials. All spills should be promptly contained and cleaned up. The Contractor shall collect contaminated soils (e.g., in a drum(s)) for proper disposal off site. Spills of hazardous materials greater than 5 gallons shall be reported to the State Duty Officer, as required.

Trash and Debris: The work site shall be kept clean and trash and debris shall not be buried on site. Construction and demolition debris, debris from clearing and grubbing, trash, and other waste shall be collected at least weekly for disposal off site. No on-site burning is allowed unless necessary permits have been obtained. Federal, state, and local requirements for the disposal of solid waste shall be followed.

Hazardous Materials: Oils, fuels, and hazardous substances must be properly stored, including secondary containment for tanks larger than 55 gallons, to prevent spills. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous materials must be in compliance with federal, state, and local regulations.

Truck Washing: If required, a location shall be set aside for washing concrete trucks. Discharge from the wash will be directed into a sediment trap which will also receive waste concrete. The trap shall be cleaned out to prevent overflow and the material disposed off site.

NOXIOUS WEED PREVENTION

Revegetation: In areas where vegetation has been disturbed, revegetation with regionally native species will occur immediately following construction to prevent the introduction of noxious weeds.

Vehicle Washing: All vehicles would be washed, especially the under carriage, prior to construction start. Vehicles would also be washed before traveling from an area identified as contaminated by noxious weeds to an uncontaminated area.

WETLANDS

In areas where a structure will be placed in a wetland, and/or construction will occur in close proximity to a wetland, the following measures will be followed (in addition to the erosion and sedimentation controls listed above) to avoid or minimize the potential for wetland impacts:

- Access the wetland with the least amount of physical impact to the wetland (i.e., shortest route);
- Assemble structures in upland areas before bringing into a wetland for installation;
- When constructing in or through wetlands, use construction mats, low ground weight equipment, or schedule construction to occur under frozen conditions, as necessary or possible, to minimize rutting and ground disturbance;
- Avoid wetland crossings and close temporary crossings when they are no longer needed for construction, remove mats, and restore disturbed areas as near as practical to its original grade.
- Avoid refueling equipment or the storage of fuel or other hazardous materials within or near wetlands.

INSPECTIONS AND MAINTENANCE

Inspections. Periodic inspections should be conducted of all temporary erosion and sediment controls, infiltration areas, and stabilized areas. Inspections should occur as soon as possible after rainfall events and repairs made as necessary or as specified by applicable NPDES permit requirements. It is the Contractor's responsibility to maintain temporary erosion and sediment controls in working order throughout the project and make repairs as needed. The following inspection and maintenance measures shall be implemented:

- Excess sediment behind silt fences should be removed and properly disposed on- or off-site when sediments reach 1/3 the height of fence
- Damaged or downed silt fence should be repaired or replaced within 24 hours of discovery.
- Tracked sediments should be removed from paved surfaces at the end of each day. Material collected may be disposed of on or off site.
- Remove sediments from trap(s) and/or rock checks when sediments have reduced the available volume by 50 percent.
- Off-site disposal sites for collected sediments shall be determined to be acceptable ahead of time, and shall not be in or adjacent to streams or wetlands. Off-site disposal locations must conform to local, state and Federal regulations, and any necessary permits shall be obtained before disposal. If collected sediments are stored on site (within substation area), measures will be taken to prevent erosion and stabilize the sediments as outlined above.

AIR QUALITY

- Fugitive dust would be controlled by spraying the working area with water, as needed.

AVIAN PROTECTION

- Transmission lines and structures will be constructed according to Avian Power Line Interaction Committee's (APLIC) *2006 Suggested Practices for Avian Protection on Power Lines and Mitigating Bird Collisions with Power Lines: The State of the Art in 2006*.
- Both shield wires of the transmission line will be marked in an alternating pattern with spiral-type visual marking device in compliance with USFWS Region 6 Guidelines dated February 4,2010.
- Ground clearing and tree removal will occur in the fall and winter prior to the nesting season.

Appendix B
NAAQS FOR CRITERIA POLLUTANTS

	Prime Standards		Secondary Standards	
Pollutant	Level	Averaging Time	Level	Averaging Time
Carbon Monoxide	9 ppm (10 mg/m3)	8-hour [1]	None	
	35 ppm (40 mg/m3)	1-hour[1]		
Lead	0.15 µg/m3[2]	Rolling 3-Month Average	Same as Primary	
Nitrogen Dioxide	53 ppb [3]	Annual (Arithmetic Average)	Same as Primary	
	100 ppb	1-hour [4]	None	
Particulate Matter (PM10)	150 µg/m3	24-hour [5]	Same as Primary	
Particulate Matter (PM2.5)	15.0 µg/m3	Annual [6] (Arithmetic Average)	Same as Primary	
	35 µg/m3	24-hour [7]	Same as Primary	
Ozone	0.075 ppm (2008 std)	8-hour [8]	Same as Primary	
	0.08 ppm (1997 std)	8-hour [9]	Same as Primary	
	0.12 ppm	1-hour [10]	Same as Primary	
Sulfur Dioxide	0.03 ppm [11] (1971 std)	Annual (Arithmetic Average)	0.5 ppm	
	0.14 ppm [11] (1971 std)	24-hour [1]		
	75 ppb [12]	1-hour	None	

Source: (EPA 2011)

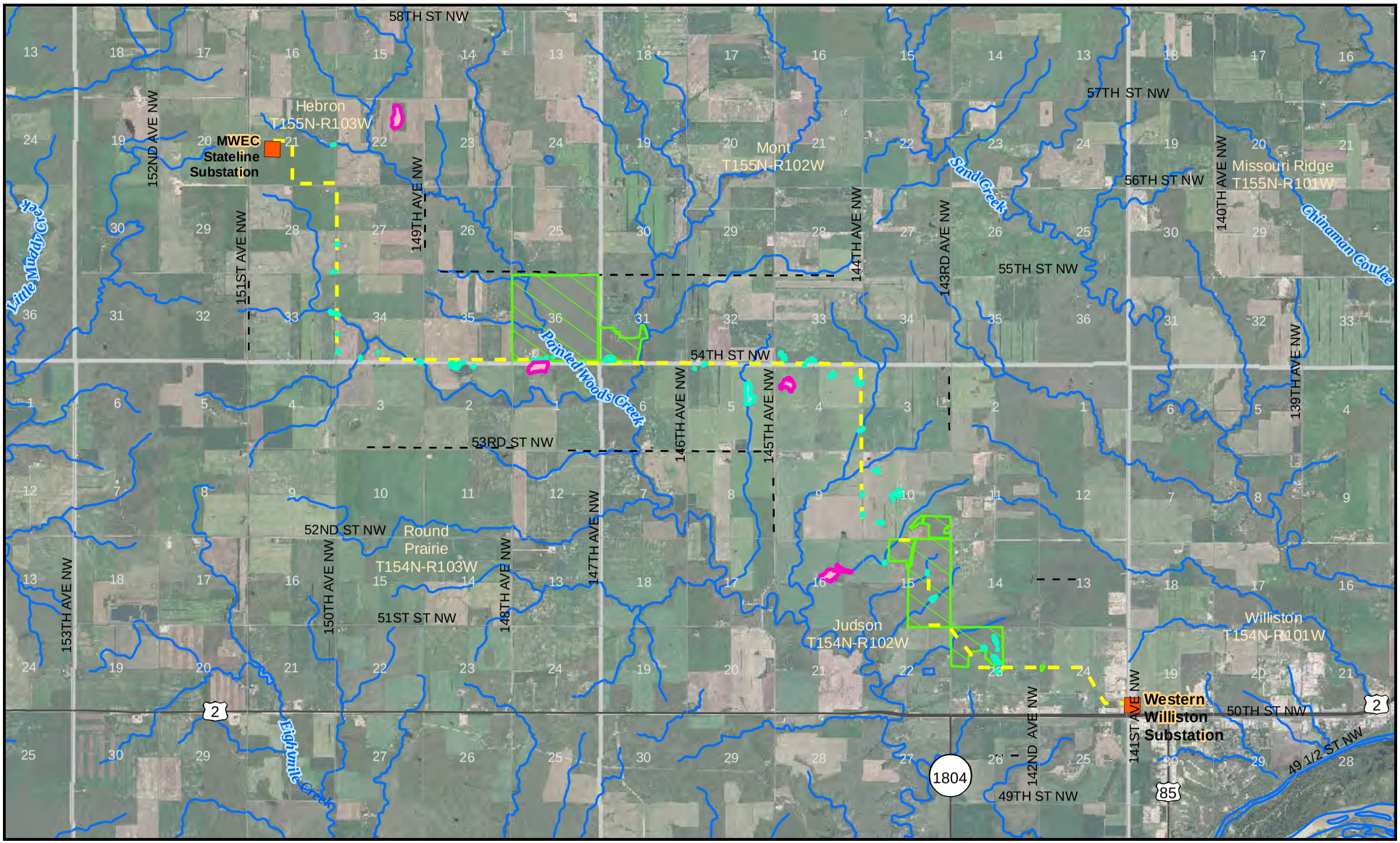
1. *Not to be exceeded more than once per year.*
2. *Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.*
3. *The official level of the annual NO2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard*
4. *To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 100 ppb (effective January 22, 2010).*
5. *Not to be exceeded more than once per year on average over 3 years.*
6. *To attain this standard, the 3-year average of the weighted annual mean PM2.5 concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m3.*
7. *To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 µg/m3 (effective December 17, 2006).*
8. *To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm. (effective May 27, 2008)*
9. *(a) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.*

(b) The 1997 standard—and the implementation rules for that standard—will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition from the 1997 ozone standard to the 2008 ozone standard.

(c) EPA is in the process of reconsidering these standards (set in March 2008).

10. *(a) EPA revoked the 1-hour ozone standard in all areas, although some areas have continuing obligations under that standard ("anti-backsliding").*
    (b) The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is < 1.
11. *The 1971 sulfur dioxide standards remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.*
12. *Final rule signed June 2, 2010. To attain this standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75*

Appendix C
WATER AND LAND USE FIGURES



Miles
0 1

- Proposed 115 kV Route
- Substation
- One-mile Buffer
- Mixed-grass Prairie
- Evaluated Wetland
- Whooping Crane Roosting Habitat
- Stream

Appendix C
Water Resources
Williston to Stateline

Western Area Power Administration

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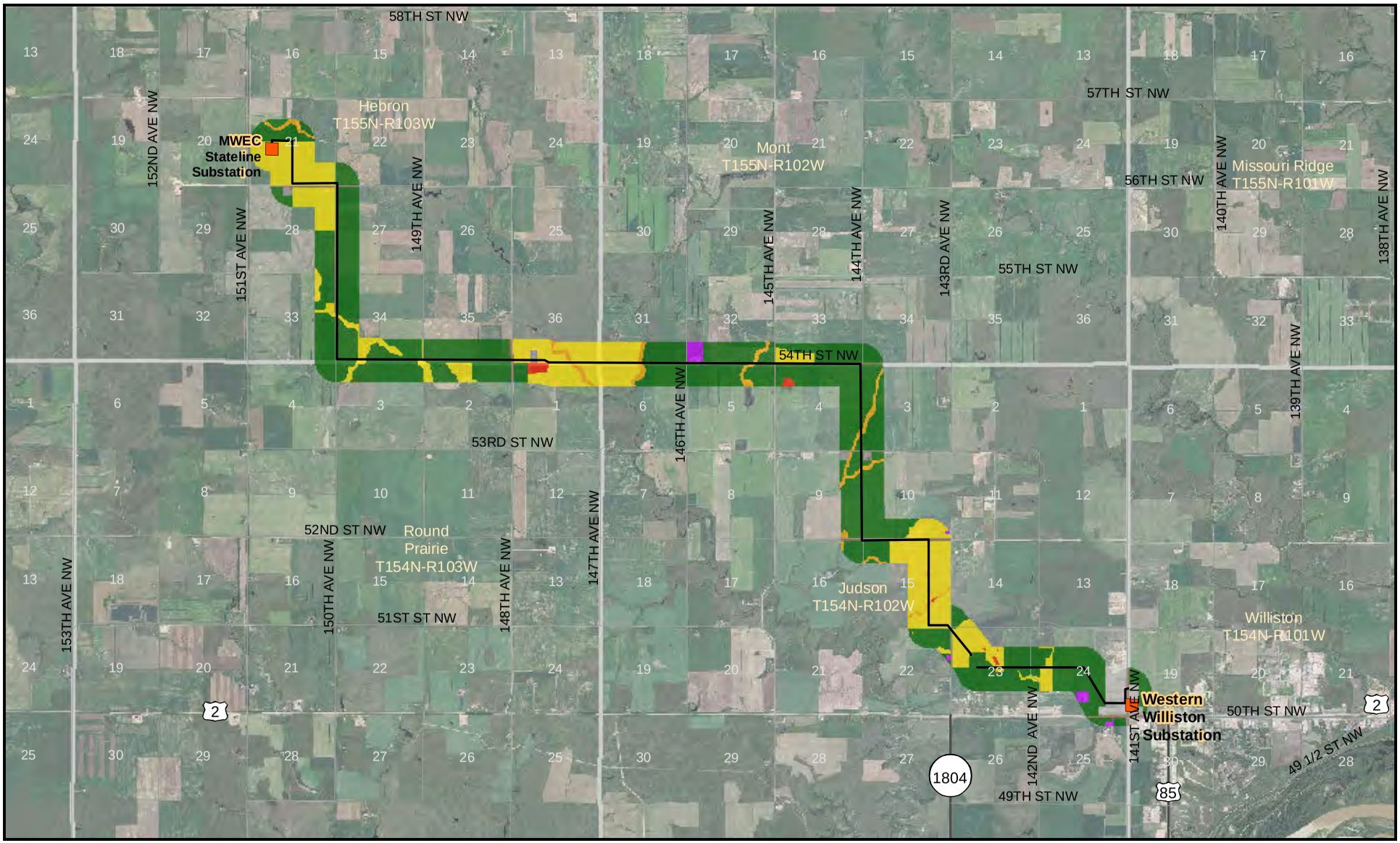

Miles
0 1

- Proposed 115 kV Route
- Substation
- Cropland
- Developed
- Developed-Energy
- Developed-Residence
- Grassland
- Riparian
- Road
- Wetland

Appendix C
Land Cover
Williston to Stateline

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Appendix D
AGENCY CORRESPONDENCE

PUBLIC NOTICE
June 17, 2011

Western Requests Your Help to Consider Environmental Impacts

Mountrail Williams Electric Cooperative (MWEC) is proposing to construct a new 115-kilovolt (kV) transmission line in Williams County, North Dakota. The new transmission line would connect to the existing Western Area Power Administration (Western) Williston substation. The transmission line would be located north of U.S. Highway 2 and would extend approximately 16 miles to the Bear Paw Gas Plant. The intent of this notice is to inform the public about this proposed project and request public input.

Western will be preparing an Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA), and is seeking comments regarding the project. Part of the NEPA process is to solicit comments from interested parties regarding environmental impacts that may be associated with a project. The EA will evaluate potential impacts on environmental resources to determine their level of significance. Your comments on the proposed project will be considered before the EA is completed. Should significant environmental impacts be identified during the EA process that cannot be mitigated to a less-than-significant level, Western would initiate the preparation of an Environmental Impact Statement (EIS).

The transmission line is being proposed in order to serve growth associated with oil and gas developments in this area, particularly the load associated with the gas plant. MWEC has evaluated multiple transmission line routes and determined the proposed route discussed below best serves the increased demand. The new transmission line would help ensure that the area has adequate infrastructure to accommodate growth and provide system reliability.

The route proposed by MWEC for the new transmission line begins at the existing Williston substation. The route would exit the Western Williston substation and proceed diagonally northwest for approximately 2 miles. At 146th Avenue NW the route would turn north for 1 mile to 52nd Street NW, where it would then turns west for 1 mile to 147th Avenue NW, and then continue north for 2 miles where it would intersect 54th Street NW. The line would proceed west along 54th Street NW (and the existing distribution line) for approximately 6 miles to 153rd Avenue NW. (The existing distribution lines in this segment would be underbuilt on the same structure as the proposed transmission line.) The route would continue north for approximately 2 miles and parallel 153rd Avenue NW to 56th Street NW where would turn west for 1 mile. The transmission line would cross mostly agricultural land and would terminate at the Bear Paw Gas Plant, which is currently being constructed at the intersection of 56th Street NW and 154th Avenue NW.

The proposed transmission line would consist of single wood-pole structures placed between 300 and 400 feet apart, depending on underbuild of the existing distribution lines. Near the substation, single steel-pole structures may be used to allow more space between structures and accommodate potential growth. The standard right-of-way width for a single-pole, 115-kV transmission line would be 100 feet. The height of the new structures would vary from 75 to 100 feet above ground, depending on terrain and structure type.

MWEC plans to build the new transmission line upon receiving approval from Western, the lead federal agency responsible for NEPA review of project. Before Western can approve the project, potential environmental impacts must be considered in compliance with NEPA. Part of the NEPA process is to solicit comments from interested parties regarding alternative line routes and environmental impacts that may be associated with the project. Western will use comments received to help define the scope of the EA. Any questions or concerns you have about the NEPA process and your participation in it, and any comments you wish to provide on the project, may be directed to:

Mr. Gregory Liebelt
Environmental Protection Specialist
Western Area Power Administration
P.O. Box 145
Fort Peck Montana 59223
e-mail: liebelt@wapa.gov
fax: (406) 526-8501
telephone: (406)526-8515.

Public Scoping Meeting and Comment Opportunities

A public scoping meeting will be held at the Ernie French Extension Center, 14120 Highway 2, in Williston, North Dakota on Wednesday July 6, 2011 from 5:00 p.m. to 8:00 p.m. Representatives from Western will be available to explain the NEPA process, discuss the proposed project and alternatives, and take public comments to be addressed in the environmental review of the project. MWEC representatives will be available to answer questions about the proposed project and the need to construct it. The comments provided at this meeting, and other comments provided during the comment period, will be considered in developing a Draft EA for the project. Your comments are important, as they help determine the scope of the EA and help focus it on those environmental resources most important to the public.

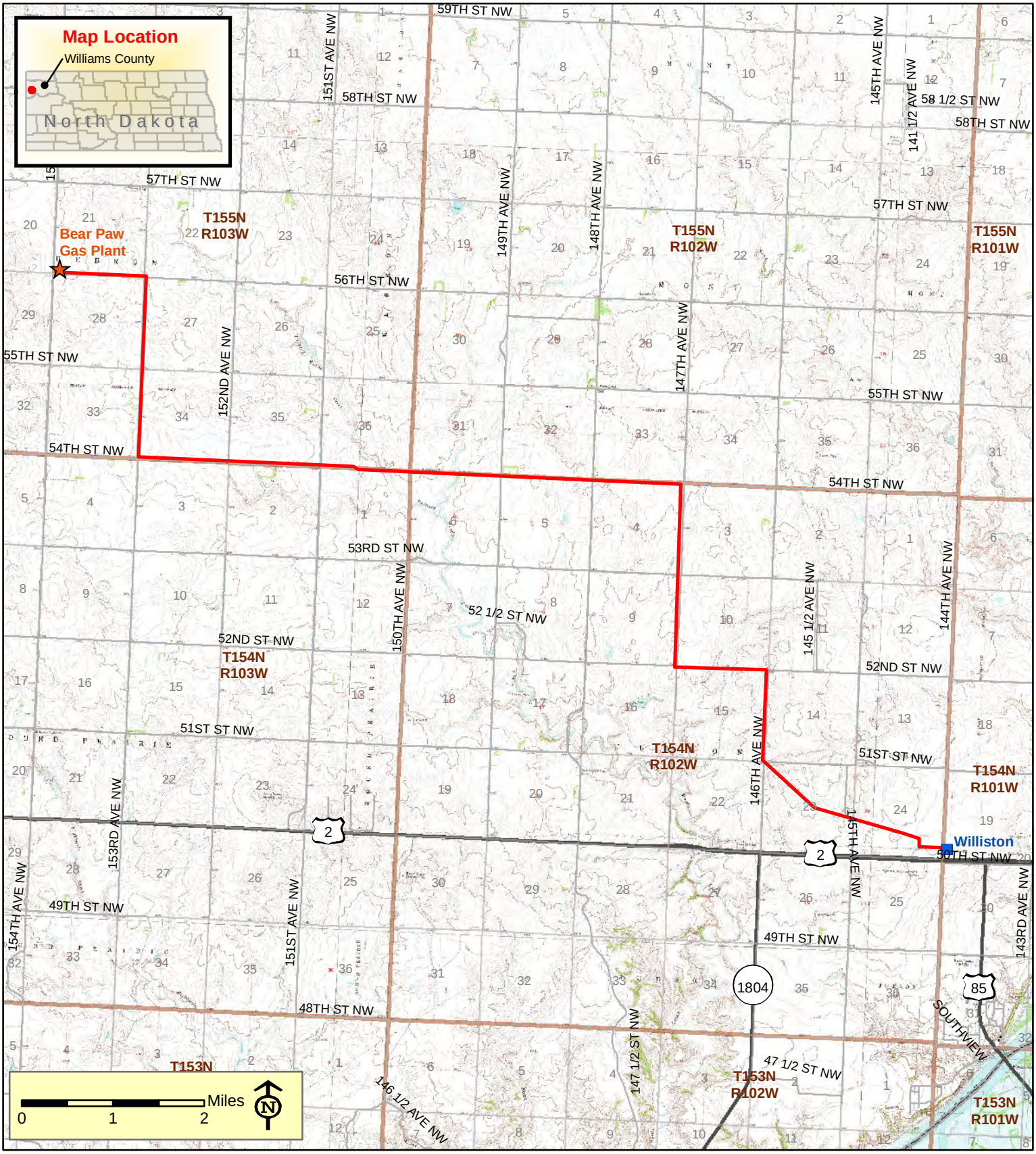
Western will issue a Draft EA for public review and comments. Following a public review period, Western, if applicable, will make a determination of whether or not to prepare an EIS for the project. If an EIS is not required, Western would prepare a "finding of no significant impact" and the project would be permitted to go forward.

Any questions you have for MWEC about the proposed project may be directed to:

Mr. Dale Haugen
MWEC
P.O. Box 1346
218 58th Street West
Williston, North Dakota
e-mail: dhaugen@mwec.com
telephone:(800) 279-2667 telephone .

Proposed Project Schedule

June 21, 2011	-	Public Notice Issued
July 6, 2011	-	Public Scoping Meeting
July 22, 2011	-	Public Comment Period Ends
November 30, 2011	-	Draft EA Available for Public Review
January 6, 2012	-	Draft EA Public Comment Period Ends
March 5, 2012	-	Environmental Review Completed/Construction Starts (subject to approvals)



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Legend

- Substation
- Proposed powerline route
- Gasplant

Overview Map:
Williston to Bear Paw Gas Plant
115-kV transmission line project

Williams County

Mountrail-Williams
Electric Cooperative

Data source: USGS 7.5' quad, MWEC, North Dakota

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

June 20, 2011

North Dakota Regulatory Office

Western Area Power Administration
Attn: Mr. Gregory Liebelt
Environmental Protection Specialist
PO Box 145
Fort Peck, Montana 59223

Dear Mr. Liebelt:

This is in response to your letter on behalf of Mountrail Williams Electric Cooperative, received June 20, 2011, requesting Department of the Army (DA), US Army Corps of Engineers (Corps) comments regarding constructing new transmission line that would connect to the existing Western Area Power Administration (Western) Williston substation in Williams County, North Dakota.

Corps regulatory offices administer Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates work in, over or under navigable waters. The Missouri River (Lake Sakakawea) is considered navigable waters. Section 404 of the Clean Water Act regulates the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material include, 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 the waters of the United States.

Nationwide Permit 12 authorizes activities for the construction of utility lines. A copy of this nationwide permit and conditions is enclosed. **The nationwide permit and conditions are submitted only for informational purposes and in no way is it, or this letter, to confirm that your activity complies with the nationwide permit and conditions.** As explained within Nationwide Permit 12, the permittee is required to submit a pre-construction notification to the Corps of Engineers prior to construction if any of seven criteria are met.

Your proposal will require review by the Corps in accordance with Section 10 of the Rivers and Harbors Act and possibly Section 404 of the Clean Water Act. Please complete and submit the enclosed Corps of Engineers permit application to the U. S. Army Corps of Engineers, North Dakota Regulatory Office, 1513 South 12th Street, Bismarck, North Dakota 58504.

If we can be of further assistance or should you have any questions regarding our program, please do not hesitate to contact this office by letter or phone at (701) 255-0015.

Sincerely,

Daniel E. Cimarosti
Regulatory Program Manager
North Dakota

Enclosures
ENG Form 4345
Fact Sheet NWP 12

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: First - Middle - Last – Company – E-mail Address –	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) 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.

FACT SHEET
NATIONWIDE PERMIT 12
(2007)

UTILITY LINE ACTIVITIES. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2 acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the total discharge from a single and complete project does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or

under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters), copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

General Conditions: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical

habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at http://www.fws.gov/ and http://www.noaa.gov/fisheries.html respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address

documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality. *Specifically in North Dakota, the North Dakota Department of Health has denied certification for projects under this Nationwide Permit proposed to cross **all classified rivers, tributaries and lakes**; individual certification for project in these waterways must be obtained by the project proponent prior to authorization under this Nationwide Permit. For utility line crossings of all other waters, the Department of Health has issued water quality certification provided the attached Construction and Environmental Disturbance Requirements are followed.*

22. Coastal Zone Management. *Not Applicable.*

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:
"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

26. Compliance Certification. Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;

(b) A statement that any required mitigation was completed in accordance with the permit conditions; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. *See attached pages.*

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project.

General Condition 27. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) Forty five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

2007 NATIONWIDE PERMITS
REGIONAL CONDITIONS
STATE OF NORTH DAKOTA
OMAHA DISTRICT – CORPS OF ENGINEERS

The U.S. Army Corps of Engineers has adopted the following regional conditions for activities authorized by nationwide permits within the State of North Dakota. However, the pre-construction notification requirements defined below are not applicable to Nationwide Permit 47.

1. Wetlands Classified as Fens

All Nationwide Permits, with the exception of 3, 5, 20, 32, 38, 45, and 47, are revoked for use in fens in North Dakota. For nationwide permits 3, 5, 20, 32, 38, and 45 permittees must notify the Corps in accordance with General Condition 27 (Notification) prior to initiating any regulated activity impacting fens in North Dakota.

Fens are wetlands that develop where a relatively constant supply of ground water to the plant rooting zone maintains saturated conditions most of the time. The water chemistry of fens reflects the mineralogy of the surrounding and underlying soils and geological materials. The substrate is carbon-accumulating, ranging from muck to peat to carbonates. These wetlands may be acidic to alkaline, have pH ranging from 3.5 to 8.4 and support a range of vegetation types. Fens may occur on slopes, in depressions, or on flats (i.e., in different hydrogeomorphic classes; after: Brinson 1993).

2. Waters Adjacent to Natural Springs

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) for regulated activities located within 100 feet of the water source in natural spring areas in North Dakota. For purposes of this condition, a spring source is defined as any location where there is artesian flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

3. Missouri River, including Lake Sakakawea and Lake Oahe within the State of North Dakota

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) prior to initiating any regulated activity in the Missouri River, including Lake Sakakawea and Lake Oahe, within the State of North Dakota.

4. Historic Properties

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract(s) to complete the work authorized herein, shall cease work and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and in writing within 48 hours. Work shall not resume until the permittee is notified by the North Dakota Regulatory Office.

5. Spawning Condition

That no regulated activity within waters of the United States listed as Class III or higher on the 1978 Stream Evaluation Map for the State of North Dakota or on the North Dakota Game and Fish Department's website as a North Dakota Public Fishing Water shall occur between 15 April and 1 June. No regulated activity within the Red River of the North shall occur between 15 April and 1 July.

Additional Information

Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material.

Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at: https://www.nwo.usace.army.mil/html/od-rnd/ndhome.htm

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.

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

June 22, 2011

Mr. Gregory Liebelt
Environmental Protection Specialist
Western Area Power Administration
P.O. Box 145
Fort Peck. MT 59223

Re: MWEC Williston to Bear Paw Gas Plant 115 kV Transmission Line Project
Williams County, North Dakota

Dear Mr. Liebelt:

This department has reviewed the information concerning the above-referenced project submitted under date of June 17, 2011, 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. 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.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

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)
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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

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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 30, 2011

Gregory Liebelt
Environmental Protection Specialist
Western Area Power Administration
P.O. Box 145
Fort Peck, MT 59223

Dear Mr. Liebelt:

RE: Mountrail Williams Electric Cooperative - 115-kV Transmission Line
Williston Substation to Bear Paw Gas Plant
Williams County, North Dakota

The North Dakota Game and Fish Department has reviewed this project for wildlife concerns.

Our primary concern is the possible disturbance of native prairie and wetland areas during construction of the transmission line. We ask that work within these areas be avoided to the extent possible, above-ground appurtenances not be placed in wetland areas, and disturbed areas be reclaimed to pre-project conditions.

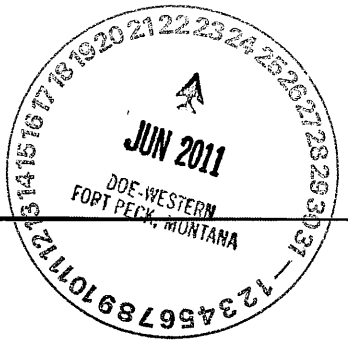
We would appreciate a copy of the Draft Environmental Assessment when it becomes available.

Sincerely,

(for) Paul Schadewald
Chief
Conservation & Communication Division

js

STATE HISTORICAL SOCIETY OF NORTH DAKOTA



June 21, 2011

Mr. Gregory Leibelt
Environmental Protection Specialist
WAPA
PO Box 145
Fort Peck MT 59223

ND SHPO Ref.: 11-1758 WAPA/Mountrail Williams Electric Cooperative new 115kV Transmission line from WAPA Williston substation to the Bear Paw Gas Plant in portions of Williams County, North Dakota

Dear Mr. Leibelt,

We received your Public Notice letter dated June 17, 2011 and recommend a Cultural Resources Inventory at the Class I (file search), Class II (reconnaissance or driving) and Class III (pedestrian) levels of the APE (Area of Potential Effect).

Thank you for the opportunity to review this project to date. We look forward to review of the Cultural Resources Inventory before any ground disturbance takes effect. Please include the ND SHPO reference number listed above in further correspondence for this specific project. If you have any questions, please contact Susan Quinnell at 701-328-3576, or squinnell@nd.gov

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

September 2, 2011

Mr. David W. Kluth
Regional Preservation Officer
WAPA
South Dakota Maintenance Office
200 4th Street SW
Huron SD 57350-2474

ND SHPO Ref.: 11-1758 WAPA/Mountrail Williams Electric Cooperative new 115kV Transmission line from WAPA Williston substation to the Bear Paw Gas Plant in portions of Williams County, North Dakota

Dear Mr. Kluth,

We received your letter dated August 26, 2011, 2011 and recommend a Cultural Resources Inventory at the Class I (file search), Class II (reconnaissance or driving) and Class III (pedestrian) levels of the APE (Area of Potential Effect).

Thank you for the opportunity to review this project to date. We look forward to review of the Cultural Resources Inventory before any ground disturbance takes effect. Please include the ND SHPO reference number listed above in further correspondence for this specific project. If you have any questions, please contact Susan Quinnell at 701-328-3576, or squinnell@nd.gov

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)

North Dakota Heritage Center • 612 East Boulevard Avenue, Bismarck, ND 58505-0830 • Phone: 701-328-2666 • Fax: 701-328-3710
Email: histsoc@nd.gov • Web site: http://history.nd.gov • TTY: 1-800-366-6888

On June 17, 2011, Western Area Power Administration sent out a notification for a public scoping meeting on the Mountrail Williams Electric Cooperative 115 kV transmission line near Williston, North Dakota. The scoping meeting was held on July 6 at the Ernie French Extension Center in Williston. Unfortunately, the notification that was sent to you came back return to sender on Tuesday July 12, 2011. We are resending this notification and requesting that you contact us with comments and concerns you may have by August 5, 2011. There will also be another opportunity to comment once the draft Environmental Assessment is published. If we do not hear back from you we will assume you do not have comments on the project. We apologize for any inconvenience this may have caused. You can send, email, or phone in your comments to Western at the contact information listed on page two of this notification.

Western Requests Your Help to Consider Environmental Impacts

Mountrail Williams Electric Cooperative (MWEC) is proposing to construct a new 115-kilovolt (kV) transmission line in Williams County, North Dakota. The new transmission line would connect to the existing Western Area Power Administration (Western) Williston substation. The transmission line would be located north of U.S. Highway 2 and would extend approximately 16 miles to the Bear Paw Gas Plant. The intent of this notice is to inform the public about this proposed project and request public input.

Western will be preparing an Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA), and is seeking comments regarding the project. Part of the NEPA process is to solicit comments from interested parties regarding environmental impacts that may be associated with a project. The EA will evaluate potential impacts on environmental resources to determine their level of significance. Your comments on the proposed project will be considered before the EA is completed. Should significant environmental impacts be identified during the EA process that cannot be mitigated to a less-than-significant level, Western would initiate the preparation of an Environmental Impact Statement (EIS).

The transmission line is being proposed in order to serve growth associated with oil and gas developments in this area, particularly the load associated with the gas plant. MWEC has evaluated multiple transmission line routes and determined the proposed route discussed below best serves the increased demand. The new transmission line would help ensure that the area has adequate infrastructure to accommodate growth and provide system reliability.

The route proposed by MWEC for the new transmission line begins at the existing Williston substation. The route would exit the Western Williston substation and proceed diagonally northwest for approximately 2 miles. At 146th Avenue NW the route would turn north for 1 mile to 52nd Street NW, where it would then turns west for 1 mile to 147th Avenue NW, and then continue north for 2 miles where it would intersect 54th Street NW. The line would proceed west along 54th Street NW (and the existing distribution line) for approximately 6 miles to 153rd Avenue NW. (The existing distribution lines in this segment would be underbuilt on the same structure as the proposed transmission line.) The route would continue north for approximately 2 miles and parallel 153rd Avenue NW to 56th Street NW where would turn west for 1 mile. The transmission line would cross mostly agricultural land and would terminate at the Bear Paw Gas Plant, which is currently being constructed at the intersection of 56th Street NW and 154th Avenue NW.

The proposed transmission line would consist of single wood-pole structures placed between 300 and 400 feet apart, depending on underbuild of the existing distribution lines. Near the substation, single steel-pole structures may be used to allow more space between structures and accommodate potential growth. The standard right-of-way width for a single-pole, 115-kV transmission line would be 100 feet. The height of the new structures would vary from 75 to 100 feet above ground, depending on terrain and structure type.

MWEC plans to build the new transmission line upon receiving approval from Western, the lead federal agency responsible for NEPA review of project. Before Western can approve the project, potential environmental impacts must be considered in compliance with NEPA. Part of the NEPA process is to solicit comments from interested parties regarding alternative line routes and environmental impacts that may be associated with the project. Western will use comments received to help define the scope of the EA. Any questions or concerns you have about the NEPA process and your participation in it, and any comments you wish to provide on the project, may be directed to:

Mr. Gregory Liebelt
Environmental Protection Specialist
Western Area Power Administration
P.O. Box 145
Fort Peck Montana 59223
e-mail: liebelt@wapa.gov
fax: (406) 526-8501
telephone: (406)526-8515.

Any questions you have for MWEC about the proposed project may be directed to:

Mr. Dale Haugen
MWEC
P.O. Box 1346
218 58th Street West
Williston, North Dakota
e-mail: dhaugen@mwec.com
telephone:(800) 279-2667 telephone .

Proposed Project Schedule

November 30, 2011 - Draft EA Available for Public Review
January 6, 2012 - Draft EA Public Comment Period Ends
March 5, 2012 - Environmental Review Completed/Construction Starts (subject to approvals)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
3425 Miriam Avenue
Bismarck, North Dakota 58501

AUG - 3 2011

Mr. Gregory Liebelt
Environmental Protection Specialist
Western Area Power Administration
P.O. Box 145
Fort Peck, Montana 59223

Re: Mountrail Williams Electric Cooperative 115 kV Transmission Line near Williston, North Dakota

Dear Mr. Liebelt:

The U.S. Fish and Wildlife Service (Service) has reviewed Mountrail Williams Electric Cooperative's (MWEC) proposed new overhead 115-kilovolt (kV) transmission line, described in a letter we received July 15, 2011. The proposed project would occur in Williams County. The new transmission line would connect the Bear Paw Gas Plant to an existing Western Area Power Administration (Western) Williston substation, a distance of approximately 16 miles. We offer the following comments under the authority of and in accordance with Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA), the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), the the National Environmental Policy Act (42 U.S.C. 4321 et seq.) (NEPA), and in accordance with Executive Order 11990 "Protection of Wetlands" (E.O. 11990) and Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds" (E.O. 13186).]

Threatened, Endangered and Candidate Species

If a Federal agency authorizes, funds, or carries out a proposed action, the responsible Federal agency, or its designated agent, is required to evaluate whether the action "may affect" listed species and critical habitat. If the Federal agency determines the action "may affect, is likely to adversely affect" listed species and/or critical habitat, then the responsible Federal agency shall request formal section 7 consultation with this office, or work with this office to remove the likely adverse effects before proceeding. If the evaluation shows a "no effect" determination on listed species or critical habitat, further consultation is not necessary. If a non-Federal entity receives Federal funding for an activity, or if a Federal permit or license is required, the Federal funding, licensing, or permitting agency may designate in writing the fund recipient or permittee as its agent for purposes of informal section 7 consultation. The Federal action agency is

responsible to ensure that its actions comply with the ESA, including obtaining concurrence from the Service for any action that may affect a threatened or endangered species or designated critical habitat prior to carrying out the activity, funding, permitting or licensing the activity.

A list of federally listed endangered and threatened species that may be present within the proposed project's area of influence is enclosed. This list fulfills requirements of the Service under Section 7 of the Endangered Species Act. This list remains valid for 90 days.

The Aransas Wood Buffalo Population (AWBP) of the whooping crane is the only self-sustaining migratory population of whooping cranes remaining in the wild. These birds breed in the wetlands of Wood Buffalo National Park in Alberta and the Northwest Territories of northern Canada, and overwinter on the Texas Gulf Coast. Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations. Currently, collisions with power lines are the greatest known source of mortality for fledged whooping cranes, and have accounted for the death or serious injury of at least 46 whooping cranes since 1956.

Whooping cranes normally migrate from 1,000 to 6,000 feet above the ground (Kuyt 1992) and well above the height of power lines, but stop every night to roost in shallow wetlands (Howe 1989). Potentially suitable migratory stopover roosting habitat for whooping cranes includes wetlands with areas of shallow water (approximately 18 inches or less) without visual obstructions (i.e., high or dense vegetation) (Austin and Richert 2001; Johns et al. 1997; Lingle et al. 1991; Howe 1987) and submerged sandbars in wide, unobstructed river channels that are isolated from human disturbance (Armbruster 1990). Roosting wetlands are often located within 1 mile of grain fields.

The proposed project area is located within the whooping crane migration corridor that includes 95% of all confirmed whooping crane sightings in North Dakota (enclosure). Conservation measures to avoid or reduce potential impacts to whooping cranes include, but are not limited to: burying all new electrical transmission lines; if new transmission lines cannot be buried, mark all new overhead transmission lines within 1 mile of suitable whooping crane stopover habitat with visual marking devices such as aviation marker balls, swinging plates, spiral vibration dampeners, or swan flight diverters to make the lines more visible, reducing the potential for avian collision. However, marking devices only reduce the risk of a whooping crane strike by between 50 and 80 percent (Morkill and Anderson 1990). To further reduce the increased risk of a strike from proposed new overhead lines, additional existing lines will need to be marked. The Service suggests that in addition to marking the new line, an equal amount of existing line be marked within 1 mile of suitable wetlands in the 95 percent migration corridor.

In addition to marking line, the Service requests that if a whooping crane is seen within 1 mile of a portion of the project under construction, construction be halted on that portion of the project and the Service be notified immediately. In consultation with the Service, work may resume once birds have left the area.

Sprague's pipit was added to the candidate species list in 2010. Migratory bird species such as the Sprague's pipit that are candidates are not protected under the ESA, but are still protected under the MBTA. Sprague's pipits require large patches of grassland habitat for breeding, with preferred grass height between 4 and 12 inches. The species prefers to breed in well-drained, open grasslands and avoids grasslands with excessive shrubs. They can be found in lightly-to-heavily grazed areas. They avoid intrusive human features on the landscape, so the impact of a development can be much larger than the actual footprint of the feature. If Sprague's pipit habitat is present within your proposed project area, the Service requests that you document any steps taken to avoid and minimize disturbance of this habitat, and that you share this information with our office.

For candidate species such as the Sprague's pipit, Federal agencies and non-Federal applicants have the option of requesting a conference with the Service to ensure that their actions minimize and mitigate effects to candidate species. Western has previously indicated that they wish to provide protection for the Sprague's pipit as if the species has been proposed for Federal listing.

Migratory Birds

The MBTA prohibits the taking, killing, possession, and transportation (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. While the MBTA has no provision for allowing unauthorized take, the Service realizes that some birds may be killed during project construction and operation even if all known reasonable and effective measures to protect birds are used. The Service Office of Law Enforcement carries out its mission to protect migratory birds through investigations and enforcement, as well as by fostering relationships with individuals, companies, and industries that have taken effective steps to avoid take of migratory birds, and by encouraging others to implement measures to avoid take of migratory birds. It is not possible to absolve individuals, companies, or agencies from liability even if they implement bird mortality avoidance or other similar protective measures. However, the Office of Law Enforcement focuses its resources on investigating and prosecuting individuals and companies that take migratory birds without identifying and implementing all reasonable, prudent, and effective measures to avoid that take. Companies are encouraged to work closely with Service biologists to identify available protective measures when developing project plans and/or avian protection plans, and to implement those measures prior to/during construction or similar activities.

To the extent practicable, schedule construction for late summer or fall/early winter so as not to disrupt migratory birds during the breeding season (February 1 to July). If work is proposed to take place during the breeding season or at any other time which may result in the take of migratory birds, their eggs, or active nests, the Service recommends that the project proponent implement all practicable measures to avoid all take, such as suspending construction where necessary, and/or maintaining adequate buffers to protect the birds until the young have fledged. The Service further recommends that if you choose to conduct field surveys for nesting birds with the intent of avoiding take, that you maintain any documentation of the presence of

migratory birds, eggs, and active nests, along with information regarding the qualifications of the biologist(s) performing the survey(s), and any avoidance measures implemented at the project site. Should surveys or other available information indicate a potential for take of migratory birds, their eggs, or active nests, the Service requests that you contact this office for further coordination on the extent of the impact and the long-term implications of the intended use of the project on migratory bird populations. Marking lines to prevent whooping crane strikes would also protect other migratory and resident birds against line strikes.

Bald and Golden Eagles

The BGEPA prohibits anyone without a permit issued by the Secretary of the Interior from taking bald eagles, including their parts, nests, or eggs. The Act provides criminal and civil penalties for persons who take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald or golden eagle, alive or dead, or any part, nest, or egg thereof. The Act defines take as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb. "Disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagles return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

The Service recommends surveying ½ mile out from the proposed project areas to determine the presence of any eagle nests. If an eagle nest is observed within ½ mile of the proposed project areas, the Service requests that the location be documented and the Service be contacted for further coordination.

Executive Order 11990

Our review of the National Wetland Inventory (NWI) maps and photographs indicate the proposed planning area includes several wetland basins. You may access the NWI data directly through their website (wetlands.fws.gov). Wetland impacts can be avoided by spanning them so that poles are placed in the upland habitat.

High Value Habitat Avoidance

- Avoid construction in native prairie, if possible, and reseed disturbed native prairie with a comparable native grass/forb seed mixture. The Service recommends planting a diverse mixture of native cool and warm season grasses and forbs. Recent research has

suggested that a more diverse mix, including numerous forb species, is not only ecologically beneficial but is also more weed resistant, allowing for less intensive management and chemical use. In essence, the more species included in a mixture, the higher the probability of providing competition to resist invasion by non-native plants. The seed source should be as local as possible, preferably collected from the nearby native prairie. Obtain seed stock from nurseries within 250 miles of the project area to ensure the particular cultivars are well adapted to the local climate. The Natural Resources Conservation Service (NRCS) compiles a list of vendors in North Dakota that supply conservation seed and plants (http://www.plant-materials.nrcs.usda.gov/pubs/ndpmcmt8152.pdf). Additional information on native grasses and forbs may be found at the NRCS Bismarck Plant Materials Center (http://www.plant-materials.nrcs.usda.gov/ndpmc/).

- Make no changes in drainage patterns.

- Install and maintain appropriate erosion control measures to reduce sediment transport to adjacent wetlands and stream channels.

Thank you for the opportunity to comment on this project. If additional information is required, please have your staff contact Carol Aron of my staff, or contact me directly at (701) 250-4481 or at the letterhead address.

Sincerely,

Jeffrey K. Towner

Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

Enclosures

FEDERAL THREATENED, ENDANGERED, AND CANDIDATE SPECIES AND DESIGNATED CRITICAL HABITAT FOUND IN WILLIAMS COUNTY, NORTH DAKOTA

ENDANGERED SPECIES

Birds

Interior least tern (Sterna antillarum): Nests along midstream sandbars of the Missouri and Yellowstone Rivers.

Whooping crane (Grus Americana): Aransas-Wood Buffalo Population (264 birds) occurs in North Dakota counties during spring and fall migration between breeding and wintering areas. Whooping cranes prefer to roost overnight in shallow open water wetland habitat with good visibility during migration stopovers.

Fish

Pallid sturgeon (Scaphirhynchus albus): Known only from the Missouri and Yellowstone Rivers. No reproduction has been documented in 15 years.

Mammals

Gray wolf (Canis lupus): Occasional visitor in North Dakota. Most frequently observed in the Turtle Mountains area.

THREATENED SPECIES

Birds

Piping plover (Charadrius melodus): Nests on midstream sandbars of the Missouri and Yellowstone Rivers and along shorelines of saline wetlands. More nest in North Dakota than any other state.

CANDIDATE SPECIES

Birds

Sprague's Pipit (Anthus spragueii): Nests in native and planted grassland. Prefers patches of grassland at least 72 acres (29 hectares).

DESIGNATED CRITICAL HABITAT

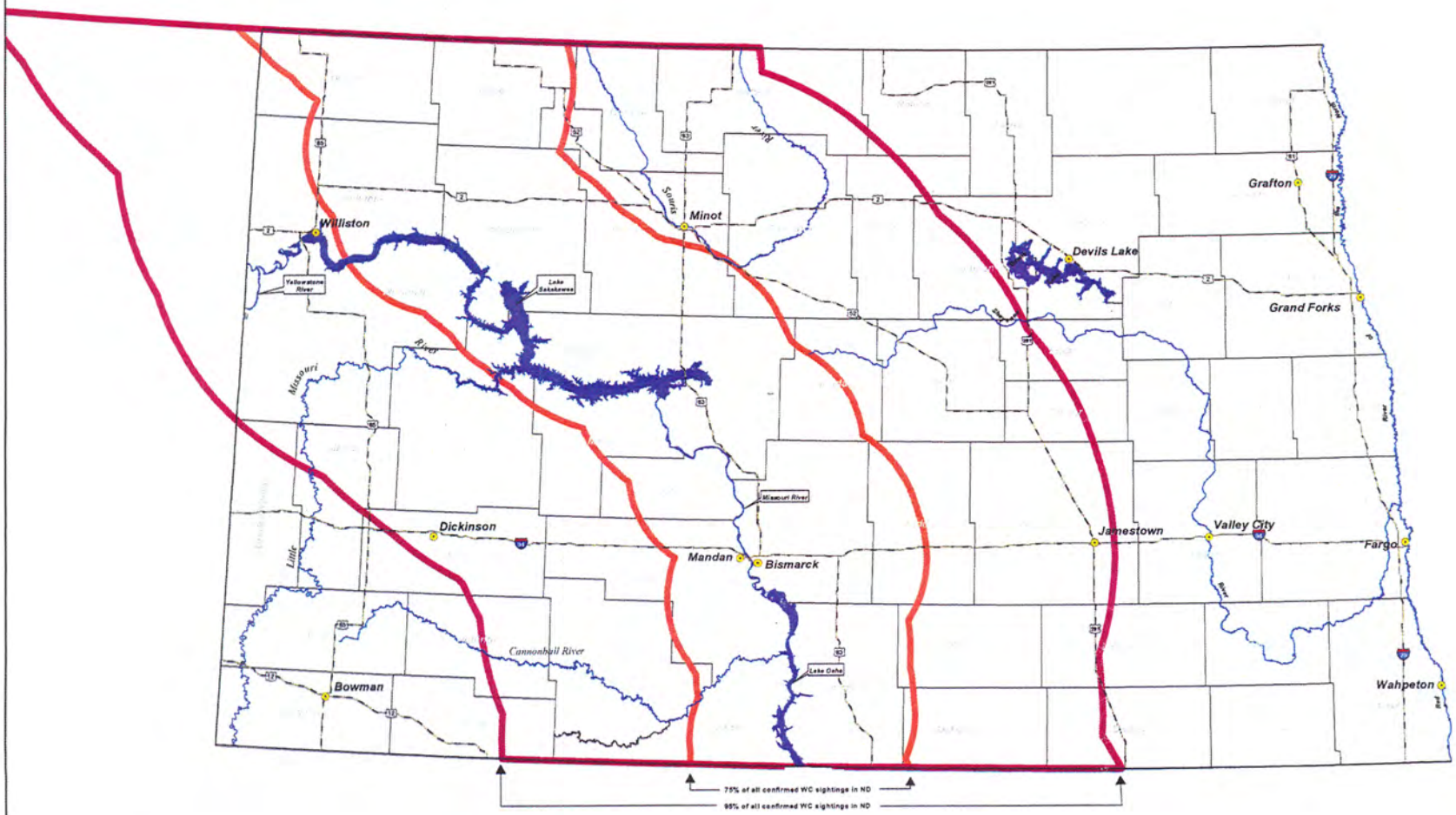
Birds

Piping Plover - Alkali Lakes and Wetlands - Critical habitat includes: (1) shallow, seasonally to permanently flooded, mixosaline to hypersaline wetlands with sandy to gravelly, sparsely vegetated beaches, salt-encrusted mud flats, and/or gravelly salt flats; (2) springs and fens along edges of alkali lakes and wetlands; and (3) adjacent uplands 200 feet (61 meters) above the high water mark of the alkali lake or wetland.

Piping Plover - Missouri River - Critical habitat includes sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and the interface with the river.

Piping Plover - Lake Sakakawea and Oahe - Critical habitat includes sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with the water bodies.

North Dakota
Whooping Crane Migration Corridor



DISCLAIMER:

The USFWS makes no claim as to the accuracy or completeness of the displayed information. Species occurrence and habitat information is provided for illustrative purposes only. Federal action agencies and project proponents should contact the USFWS North Dakota Field Office for more detailed species information and technical assistance in evaluating potential project impacts to fish and wildlife resources.

Map produced 04/21/2010 by USFWS Ecological Services, Bismarck, ND.

75% Whooping Crane Migration Corridor

95% Whooping Crane Migration Corridor

0 12.5 25 50 75 100 Miles

Schneider, Karen

To: Lutz-Zimmerman, Laura R.
Subject: RE: Williston to Stateline Natural Heritage Database Search

AMServiceURLStr: https://Slingshot.hdrinc.com/CFSS/control?view=services/FTService

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From: Chris Brostuen [mailto:brostuen@mwec.com]
Sent: Monday, July 18, 2011 12:45 PM
To: kgduttenhefner@nd.gov
Cc: Lutz-Zimmerman, Laura R.
Subject: FW: Williston to Stateline Natural Heritage Database Search

Ms. Duttenhefner:

Mountrail Williams Electric Cooperative (MWEC) is preparing an environmental assessment for an approximate 16-mile transmission line near Williston ND. The transmission line would start at the Williston substation and connect to the Bear Paw Gas plant that is currently under construction. I would like to request a natural heritage inventory database search of the transmission line project area. I have attached a shapefile of the proposed transmission line right-of-way for your use in completing the search. The coordinate system for the shapefile is North Dakota State Plane, zone 3301. I understand that I can receive the data in an electronic format. Please provide me the necessary data agreement form to receive the data in an electronic format.

If you have any questions, please contact me using the contact information below or contact Laura Lutz-Zimmerman of HDR Engineering, our consultant hired to complete the EA. Her contact information is 303-318-6344 or laura.lutz-zimmerman@hdrinc.com

Thank you.
Chris J. Brostuen
Assistant General Manager
Mountrail-Williams Electric Cooperative
PO Box 1346
Williston, ND 58802-1346
701.577.3765 (Office)
701.770.0773 (Cell)
701.577.3777 (Fax)
Email: brostuen@mwec.com

Jack Dalrymple, 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

August 17, 2011

Laura R. Lutz-Zimmerman
HDR Engineering, Inc.
303 E. 17th Ave., Suite 700
Denver, CO 80203

Re: Williston to State Line Transmission Line

Dear Ms. Lutz-Zimmerman:

Thank you for your interest in the Department's Natural Heritage Inventory biological conservation database. The Department did not conduct an environmental review for this particular project site but only conducted a search in our database which includes data only for species of concern and significant ecological communities. Other lands and projects that are owned or managed by the ND Parks & Recreation Department were not included in this search such as: state parks, state nature preserves, Land and Water Conservation Fund projects, Recreational Trails Program projects, and Scenic Byways and Backways.

The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any current or historical 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, there are no known occurrences within or adjacent to the project area.

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. We recommend also contacting the North Dakota Game and Fish Department and the United States Fish and Wildlife Service regarding animal species.

The ND Parks & Recreation Department would appreciate being consulted during the public scoping and/or environmental assessment phase of the project.

Thank you for the opportunity to provide preliminary data for the project site. Please contact me if additional information is needed.

Sincerely,

Kathy Duttenhefner
Coordinator/Biologist
Natural Resource Program
Natural Areas Registry/Natural Heritage Inventory
701-328-5370 (office)
701-220-3377 (cell)
kgduttenhefner@nd.gov

R.USNDNHI*R11-10

B0401.BL AUG 1 6 2011

Mr. Morris Belgard
Cultural Resource Liason
Fort Belknap Indian Community
R.R. 1 Box 66
Harlem, MT 59526

Dear Mr. Belgard:

Western Area Power Administration (Western), a power-marketing agency with the Department of Energy, has received a request from Mountrail-Williams Electric Cooperative (MWEC) to interconnect a newly proposed 115-kilovolt (kV) transmission line in Williams County, North Dakota, into Western's transmission system (Project). The new transmission line would connect to Western's existing Williston Substation and extend approximately 16 miles to the Bear Paw Gas Plant. The new transmission line would be located north of U.S. Highway 2.

The purpose of this letter is to inform you of this proposed Project, provide notice that Western will prepare an Environmental Assessment (EA) for the proposed Project unless the need for an Environmental Impact Study (EIS) develops, initiate government-to-government consultation, and invite your participation in the environmental review and National Historic Preservation Act Section 106 consultation process. The information presented in this letter includes a brief Project description and map. Additional information will continue to be provided to you and designated tribal departments or staff as it becomes available.

The transmission line is being proposed in order to serve growth associated with oil and gas developments in this area, particularly the load associated with the gas plant. MWEC has evaluated multiple transmission line routes. The new transmission line would ensure that the area has adequate infrastructure to accommodate growth and provide system reliability.

The proposed Project would consist of single wood pole structures placed about 300 to 400 feet apart, depending on underbuild of the existing distribution lines. Near the substation, single steel pole structures may be used to allow farther spacing between structures and accommodate potential future growth. The standard right-of-way width for a single pole 115-kV transmission line would be 100 feet. The height of the new structures would vary from 75 feet above ground to 100 feet above ground, depending on terrain and structure type.

An interconnection with Western is considered a "major Federal action" under the regulations of the National Environmental Policy Act. It is our understanding that there may be important cultural and natural resources, and/or places with traditional cultural significance for your Tribe within the area that may be impacted by the proposed Project. At this time, we would appreciate receiving any information you would be willing to share with us on any unique, special, ethnographic, or archaeological resources or areas in or near the proposed Project.

For questions related to the Project, please contact Western's staff Steve Tromly toll-free at (800) 366-7549, or Greg Liebelt at (406) 526-8515. Steve Tromly's e-mail is tromly@wapa.gov and Greg Liebelt's e-mail is liebelt@wapa.gov.

I am looking forward to working with you as this process moves forward.

Sincerely,

/S/ Matt Marsh

for Nicholas J. Stas
Environmental Manager

Enclosure

bcc:
S. Tromly, A7400, Lakewood, CO
D. Kluth, B0411.HU, Huron, SD
G. Liebelt, B0430.FP, Fort Peck, MT
B0401.BL

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Tribal Consultation

FT BELKNAP INDIAN COMMUNITY

Morris Belgard
Cultural Resource Liaison
R.R. 1 Box 66
Fort Belknap Agency
Harlem, MT 59526
406-353-8433
mbelgarde@yahoo.com

NORTHERN CHEYENNE TRIBE:

Mr. Eugene Littlecoyote, President (Send original here, certified mail)
Northern Cheyenne Tribal Council
P.O. Box 128
Lame Deer, MT 59043
(406) 477-6284

cc:

Mr. Conrad Fisher
Tribal Historic Preservation Officer
P.O. Box 128
Lame Dear, MT 59043
(406) 477-6035

Mr. Steven Brady
Traditional Spokesperson
P.O. Box 542
Lame Deer, MT 59043
(406) 477-8344

OGLALA LAKOTA NATION:

Ms. Cecelia Firethunder, President (Send original here, certified mail)
Oglala Sioux Tribal Council
P.O. Box H
Pine Ridge, SD 57770
(605) 867-5821
Fax (605) 867-5659

ROSEBUD SIOUX TRIBE:

Mr. Rodney Bordeaux President (Send original here, certified mail)
Rosebud Sioux Tribal Council
P.O. Box 430
Rosebud, SD 57570
(605) 747-2381
Fax (605) 747-2243

cc:

Mr. Terry Gray (Primary cultural contact)
Cultural Resource Coordinator

Rosebud Sioux Tribe
Sinte Gleska College
P.O. Box 675
Mission, SD 57555
(605) 856-4901

CHEYENNE RIVER SIOUX TRIBE:

Mr. Herold Frazier, Chairman (Send original here, certified mail)
Cheyenne River Sioux Tribal Council
P.O. Box 590
Eagle Butte, SD 57625
(605) 964-4155
Fax (605) 964-4155

cc:

James Ticotte (Primary cultural contact)
Tribal Historic Preservation Officer
Cheyenne River Sioux Tribe
P.O. Box 590
Eagle Butte, SD 57625
(605) 964-7554

STANDING ROCK SIOUX:

Mr. Ron His-Horse-is-Thunder, Chairman
Standing Rock Sioux Tribal Council
P.O. Box D
Fort Yates, ND 58538
(701)-854-7448

cc:

Mr. Tim Mentz
Tribal Historic Preservation Officer
P.O. Box D
Fort Yates, ND 58538
(701) 854-2120

CROW TRIBE:

Mr. Carl Venne, Chairman (Send original here, certified mail)
Crow Tribal Council
P.O. Box 159
Crow Agency, MT 59022
(406) 638-3708
Fax (406) 638-7283

cc:

Mr. Dale Old Horn (Primary cultural contact)
Tribal Historic Preservation Officer
Crow Tribal Administration
P.O. Box 159
Crow Agency, MT 59022
(406) 638-3793

FT PECK TRIBES:

Mr. A.T. "Rusty" Stafne, Chairman
Ft. Peck Tribes
P.O. Box 836
Poplar, MT 59255

Mr. Curley Youpee, THPO
Ft. Peck Tribes
P.O. Box 836
Poplar, MT 59255

THREE AFFILIATED TRIBES:

Tex Hall, Chairman
Three Affiliated Tribes Business Council
404 Frontage Road
New Town, ND 58763

Mr. Elgin Crows Breast
Cultural Preservation Officer
Three Affiliated Tribes
404 Frontage Road
New Town, ND 58763