

# United States Department of the Interior

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

MAY 1 1 2010



IN REPLY REFER TO: DESCRM MC-208

# **MEMORANDUM**

TO: Superintendent, Fort Berthold Agency

FROM: Regional Director, Great Plains Region

SUBJECT: Environmental Assessment and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, for the proposed development and construction of Oil, Gas and Water Pipelines and Electrical Utilities by Questar on the Fort Berthold Reservation, an Environmental Assessment (EA) has been completed and a Finding of No Significant Impact (FONSI) has been issued.

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

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

Attachment

 cc: Marcus Levings, Chairman, Three Affiliated Tribes (with attachment) Perry "No Tears" Brady, THPO (with attachment) Tracy Opp, Questar (with attachment) Roy Swalling, Bureau of Land Management (with attachment) Jonathon Shelman, Corps of Engineers (with attachment)

# **Environmental Assessment**

Prepared for:

# **United States Bureau of Indian Affairs**

Great Plains Regional Office Aberdeen, South Dakota



# **Questar Exploration and Production Company**

# **MHA Gathering System**

# Development and Construction of Oil, Gas, and Water Pipelines and Electrical Utility

# **Fort Berthold Indian Reservation**

# May 2010

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

# Finding of No Significant Impact Questar Exploration and Production Company MHA Gathering System in T150N-R90W, T149N-R90W and T151N, R90W Development and Construction of Oil, Gas, and Water Pipelines and Electrical Utility

#### Fort Berthold Indian Reservation, North Dakota

The U.S. Bureau of Indian Affairs (BIA) has received a proposal for multiple +/- 11.75 mile pipelines; natural gas, crude oil, produced water, and an electrical utility line at the same location, on the Fort Berthold Indian Reservation. The pipelines and utility are proposed to begin in Section 5, T149N, R90W and continue northward where it would terminate in Sections 32 and 33, T151N, R90W. Lateral gathering pipelines would extend off the main line connecting nearby wells. Associated federal actions by the BIA include determinations of effect regarding cultural resources and approval of rights-of-way and easements. All construction would take place within a 100-foot Right of Way (ROW). It is tentatively proposed for the gas pipeline to be constructed first; the oil, water and utilities would be constructed at a later date.

Potential of the proposed action to impact the human environment was analyzed in the attached Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the recently completed EA, I have determined the proposed project would not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

- 1. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed action and the No Action alternative.
- 2. The proposed actions are designed to avoid adverse effects to historic, archeological, cultural and traditional properties, sites and practices. The Tribal Historic Preservation Officer has concurred with BIA's determination that no historic properties would be affected.
- 3. Environmental justice was fully considered.
- 4. Cumulative effects to the environment are either mitigated or minimal.
- 5. No regulatory requirements have been waived or require compensatory mitigation measures.
- 6. The proposed projects would improve the socio-economic condition of the affected Indian community.

5/10/10

**Regional Director** 

1.	Purpose and Need for the Proposed Action	1
2.	Proposed Action and Alternatives	3
2.1	System Design and Relation to Other Pipelines	
2.2	Construction Plan and Specifications	
2.3	Directional Drilling	
2.4	Reclamation	/
2.5	Operation and Maintenance	
2.6	Preferred Alternative	
2.0	Freieneu Alternative	8
3.	The Affected Environment and Potential Impacts	0
3.1	No Action Alternative	0
3.2	Land Use	
	2.1 Land Use Impacts: Avoidance. Minimization and Mitigation	9
3.3		9
	Air Quality	
	3.1 Air Quality Impacts; Avoidance, Minimization, and Mitigation	
3.4	Public Health and Safety	
	4.1 Public Health and Safety Impacts; Avoidance, Minimization, and Mitigation	
3.5		15
	5.1 Socioeconomic Impacts; Avoidance, Minimization, and Mitigation	
3.6	Environmental Justice	16
	6.1 Environmental Justice Impacts; Avoidance, Minimization, and Mitigation	
3.7	Infrastructure and Utilities	
	7.1 Infrastructure and Utilities Impacts; Avoidance, Minimization, and Mitigation	
3.8		18
3.8	3.1 Cultural Resources Impacts; Avoidance, Minimization, and Mitigation	
3.9	Wildlife	
	9.1 Threatened, Endangered, and Candidate Species	19
Th	reatened and Endangered Species Impacts/Mitigation	22
3.10	Big Game Species	23
3.1	10.1 Big Game Species Impacts; Avoidance, Minimization, and Mitigation	23
3.11	Small Game and Waterfowl Species	23
3.1	11.1 Small Game and Waterfowl Species Impacts; Avoidance, Minimization, and	
Miti	gation	24
3.12		24
3.1	12.1 Raptor Species Impacts; Avoidance, Minimization, and Mitigation	24
3.13	Non-Game Wildlife	25
3.1	13.1 Non-Game and Furbearer Impacts; Avoidance, Minimization, and Mitigation	25
3.14	Soils	25
3.1	14.1 Soils Impacts; Avoidance, Minimization, and Mitigation	27
3.15	Water Resources.	28
3.1	15.1 Surface Water	
	15.1.1 Surface Water Impacts; Avoidance, Minimization, and Mitigation	
3	15.2 Groundwater	
	15.2.1 Groundwater Impacts; Avoidance, Minimization, and Mitigation	
	Wetlands	
	6.1 Wetlands Impacts; Avoidance, Minimization, and Mitigation	
3.17	Vegetation and Invasive Species	31
Questa	r Exploration and Production Company: MHA Gathering System	
T150N	-R90W & T149N-R90W ii   P a	qе
	nmental Assessment	<b>.</b> –
May 20	010	

3.1	17.1 Vegetation and Invasive Species Impacts; Avoidance, Minimization,	
and	Mitigation	27
	Mitigation and Monitoring	
3.19	Irreversible and Irretrievable Commitment of Resources	27
	Short-term Use of the Environment versus Long-term Productivity	
3.21	Cumulative Impacts	27
3.2	21.1 Past Present and Reasonably Foreseeable Actions	28
3.2	21.2 Cumulative Impact Assessment	
3.22	Permits	29
4.	Consultation and Coordination	30
5.	List of Preparers	33
6.	References and Acronyms	35

#### Figures

Figure 1: Project Location Map	2
Figure 2: Typical Right-of-way Cross Section	
Figure 3: View of the Project Corridor-North End	
Figure 4: View of Project Corridor—South End	
Figure 5: Blast Overview Map	
Figure 6: Water Resources	
Figure 7: Dominant Plant Species	
Toc256524846	

#### Tables

Tables	
Table 1: Questar MHA Gathering System Well Status	5
Table 2: Federal and State Air Quality Standards and AAQM Station Data	
Table 3: Employment and Income	
Table 4: Demographic Trends	
Table 5: Soil Mapping Units and Attributes	
Table 6: Acres of Disturbance by Soil Mapping Unit	27
Table 8: McLean and Mountrail Counties Noxious Weed Distribution	
Table 9: Preparers and Reviewers	
•	

	Appendices
Appendix A	Agency Scoping Materials
Appendix B	Agency Scoping Responses

.

# 1. Purpose and Need for the Proposed Action

Questar Exploration and Production Company (Questar) is proposing to construct approximately 11.75 miles of natural gas, crude oil, and produced water pipelines plus an electrical utility line on the Fort Berthold Indian Reservation. These pipelines are proposed to connect 9 well sites, operated by Questar, to a gathering pipeline operated by Questar, that will connect to the EOG mainline.

Development has been proposed in tribal land held in trust by the United States in Mountrail and McLean Counties, North Dakota. The U.S Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The proposed project would cross and utilize lands owned in fee simple title. As shown in **Figure 1**, **Project Location Map**, under this proposal Questar would connect 9 existing and proposed well sites along the corridor to proposed pipeline connections in the Section 32 and 33, Township 151 North, Range 90 West in Mountrail County.

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

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



Figure 1: Project Location Map

#### 2. **Proposed Action and Alternatives**

The <u>No Action</u> alternative must be considered with an EA. If this alternative is selected, BIA would not approve the proposed ROW acquisition and construction of the proposed pipelines and utility line. Flaring of gas would continue at the existing and proposed well pads as it has in the past, with greater environmental impact (air emissions) than if the heavy hydrocarbons are recovered. Valuable natural resources would continue to be lost through flaring rather than being brought to market, and corresponding royalty payments would be lost.

Other alternatives to flaring include installing a cross country pipeline and gathering system to move produced gas and liquids to a suitable processing location. This alternative is very expensive, would take a long period of time to complete, and would need to be done in phases due to the complexity of a workable system and distance to a suitable processing facility. The proposed action would be incorporated into the trunk lines of a cross country gathering pipeline system. The benefit of a cross country gathering pipeline system is that all the gas and liquids would be moved to a processing facility more efficiently and with decreased impacts to the environment,

An on-site assessment of the well pad and access road was conducted on November 24, 2009 by representatives from the BIA (Environmental Protection Specialist), Three Affiliated Tribes Tribal Historic Preservation Office, Questar, and Kadrmas, Lee & Jackson. The purpose of this visit was to evaluate the suitability of the proposed pipelines alignment for construction with respect to topography, drainage, erosion control, stock piling, and other surface issues. Cultural, biological, and botanical resources surveys were also conducted following the on-site evaluation. The pipeline alignment would be finalized in consideration of these issues.

During the surveys of the proposed locations, a detailed analysis of biological, botanical, soil and water resources was conducted. Site specific information was recorded and photographs were taken during the investigations. The study area included a 150-foot corridor along the surveyed pipeline alignment.

#### 2.1 System Design and Relation to Other Pipelines

The proposed project would consist of three approximate 11.75 mile pipelines and one electrical transmission line within a 50-foot corridor. The new gathering system would consist of 4-inch FlexSteel crude oil laterals connecting eight Questar production leases to a new Questar 8-inch steel mainline transporting crude oil to Questar's storage tankage (10,000 barrel nominal size with internal floating roof) and injection facility for delivery to Belle Fourche's crude oil system. The gas production from the eight leases would be transported via 4-inch HDPE, DR-11 pipe to an 8-inch steel mainline to EOG's LCS Facility.

The proposed project would be constructed in phases, with the first phase consisting of the installation of a crude oil and natural gas pipeline. Since this project is a gathering system, a produced water pipeline would be installed within the same corridor to provide permanent transport of oil, gas and produced water from each of the well sites if needed.

When the electrical transmission line is warranted, it would be constructed within the same corridor to provide power for the wells and compressor stations.

The MHA Gathering System would be designed and constructed in accordance with the latest edition of the Code of Federal Regulations Title 49, Part 192 "Transportation of Natural and other Gases by Pipeline" and Part 195 "Transportation of Hazardous Liquids by Pipeline" as well as the latest additions of applicable industry codes and standards. The proposed gas pipeline would initially be operated at low pressure (no more than 150 psi).

The crude oil laterals would be constructed using 4-inch Flexsteel or Flexpipe 600# ANSI pipe with scraper launcher and receiver. The laterals would connect to Questar's 8-inch crude oil pipeline. The total footage of crude oil 4-inch laterals would be 50,886 feet. The 8-inch crude oil line would be Carbon Steel 8.625" wt., API 5IX-52, ERW and approximately 23,760 feet in length. The maximum allowable operating pressure (MAOP) for these types of pipe would be 1440 psi.

The gas pipeline would consist of 4"HDPE, DR11 pipe (18,480 feet) and 8.625"O.D., 0.322" wt., API 5LX-52 steel pipe (28,960 feet). A scraper launcher and receiver would be installed on the 4" gas laterals and on the 8-inch pipeline. The MAOP for the 4" HDPE DR11 pipe would be 150 psi.

Electrical power requirements would be available from the existing facility (lease), this power would be 480 V-3 phase. Auxiliary equipment and lighting would require transformation down to 208V/120V. All field mounted controls motor starters, PLC, communications and telemetry would be mounted in weather protected enclosures, in areas removed from hazardous atmospheres, where unavoidable, these devices would be enclosed in NEMA 7 explosion proof enclosures.

No above ground structures are part of this pipeline system except for the electric transmission line and pipeline identification markers along the route and at road crossings and at tie-in locations. All above ground equipment would be installed on the existing well pad.

This EA discloses the impacts of the acquisition of 50 feet of temporary ROW, 50 feet of permanent ROW, and the installation of three pipelines and an underground electrical transmission line within this ROW.

The proposed gathering line would tie three currently producing wells, and an additional six proposed wells to an existing interstate pipeline system. **Table 2.1** describes the status of the wells that are to be connected to this proposed pipeline.

2

Well Name	Location de Calendaria en	Status	APD
MHA-1-08H-149-90	Sec 8, T149N, R90W	Producing	NDIC permit approved
MHA-1-18H-150-90	Sec 18, T150N,R90W	Producing	NDIC permit approved
MHA-1-13-14H-150-91	Sec 18,T150N, R90W	Producing	NDIC permit approved
Rupple-1-04H-150-90	Sec 4, T150N,R90W	Fee Surface/Mineral	NDIC permit approved
MHA-1-19H-150-90	Sec 18, T150N,R90W	FONSI approved	NDIC permit pending
MHA-1-12-11H-150-91	Sec 18, T150N,R90W	FONSI approved	NDIC permit pending
MHA-1-29-30H-150-90	Sec 29, T150N,R90W	EA SOV period	NDIC permit pending
MHA-1-32-31H-150-90	Sec 32, T150N, R90W	EA SOV period	NDIC permit pending
MHA-1-30H-150-90	Sec 30, T150N,R90W	EA SOV period	NDIC permit pending

e Web, Galhering System acced be designed and constructed in accordance with the lates

#### 2.2 Construction Plan and Specifications

As previously discussed, construction of the produced water pipelines, and the electrical transmission line, are dependent on future development and the potential to incorporate this section of pipeline into a gathering trunk line. As such, the first phase of the project would consist of constructing the gas and crude oil pipelines; with the other facilities being constructed in future phases.

Construction of the gas line is expected to take one month or less and would be confined within a 100-foot wide ROW, 50 feet of which would be temporary, adjacent to the proposed line as shown in **Figure 1**, **Project Location Map**, **on page 2**. Pipeline materials would be staged at existing well pads or trucked directly to the temporary ROW corridor on existing federal, state, county and private roads. Access to the ROW would be made at the well pad and existing roadway crossing points only. Traffic at access points is expected to be heavy during brief periods at the beginning and end of shift and heavy at various times during the day when equipment and materials are delivered to the site. Traffic would be confined to the pipeline ROW corridor. Vehicle and personnel travel off the pipeline ROW would be strictly prohibited. Signs would be installed at access points to remind operators that access or travel off the pipeline ROW is not permitted.

Installation of the gas pipeline may require clearing and grading of 100-foot wide sections at locations within the ROW along the entire pipeline corridor.

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



Figure 2: Typical Right-of-way Cross Section

Provisions have been made to install all pipelines within the agreed respective offsets to other lines. Fort Berthold Rural Water (FBRW) authority requested 15 feet maintained clearance except in constricted areas. In those areas, separation would be maintained at a mutually agreed upon minimum distance. No constrictions are expected in this section of line. No lines would be installed at conflict with other utility lines. At junctions where the gas line crosses the FBRW pipeline, vacuum or hand excavation would be used.

Because of the normal 84-inch burial depth of the water line, the proposed gas and crude oil pipelines would pass over the installed water line to achieve no impact on depth or functionality of either line. Five feet of lateral distance would be maintained from all telephone and cable lines. Any line crossing conflicts would be worked out individually at each location with the respective utility.

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

After the trench is backfilled, disturbed areas would be re-graded to original contours, stockpiled topsoil reset over the ROW, pipeline marking signs would be installed, reclamation would be finalized, and the ROW would be reduced to 50 feet.

# 2.3 Directional Drilling

Directional drilling, also known as boring, is often used to cross sensitive areas such as wetlands and stream beds where the disturbance of ditch excavation may be prohibitive or cause unwarranted stress on the environment. Two wetland related bores (Sections 5 and 32) are planned along the alignment for the pipeline. Directional drilling is also used to cross roadways where traffic should not be disrupted and disturbance of compacted substrate is an issue with open trenches. Three roadway locations would be bored. The approximate length of this bore is 200 feet. A staging area would be constructed on either side of county roadways in these locations within the established pipeline ROW. To construct, a hole is drilled under the identified area at a radius suitable for pulling straight pipe.

# 2.4 Reclamation

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

Regrading, contouring and reseeding of disturbed areas would occur as soon as practical after construction but no later than the next appropriate planting season. The ROW would be reseeded with certified seed mixtures approved by the BIA.

All reseeding and planting would comply with BIA directions to ensure successful reclamation. Further, the ROW would be monitored for areas of excessive erosion and subsidence. Periodic monitoring would be performed and repeated reclamation efforts would be undertaken in problem areas until the ROW is certified as reclaimed.

Decommissioning of pipelines would result in mandatory final reclamation of the corridor. All surface facilities would be removed. Foundations, if any, would be hauled to an approved disposal site. Gravel pad would be buried on site or hauled to a disposal site. Compacted areas would be scarified, ripped and re-contoured. Stockpiled topsoil would be redistributed and re-vegetated. Long-term monitoring would be required to ensure successful reclamation and implementation of any necessary remedial efforts. The pipeline would be purged with water to remove hydrocarbons, capped and abandoned in place.

# 2.5 Operation and Maintenance

After construction is complete, maintenance of the ROW would be confined to the 50-foot ROW width. Access to the pipeline would be confined to county roadways and access roads to connecting well pads.

Excessive rutting or other surface disturbances, such as installing additional lines, would be immediately repaired and reclaimed under guidelines from the previous section. Should any surface damage occur that affects crops or other surface activities, repairs would be made immediately following the incident. Landowners would be compensated for damages accordingly.

Repair, replacement, inspection or additional lines that require extensive excavation may require ROW increased to 100 feet on a temporary basis. In that event, the BIA would be notified immediately. In the case of an emergency, the BIA may be notified during or after repairs have begun. In all cases, BIA would be consulted as soon as possible. All applicable regulations and best management practices would be followed.

#### 2.6 Preferred Alternative

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

#### 3. The Affected Environment and Potential Impacts

Located in west-central North Dakota, the Fort Berthold Indian Reservation is home of the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara nations. With the completion of the Garrison Dam in 1945 and the subsequent creation of Lake Sakakawea, the reservation was separated into three sections. Today, the reservation occupies sections of six counties (Dunn, McKenzie, McLean, Mercer, Mountrail, and Ward) and encompasses approximately 988,000 acres. About half of the reservation land is held in trust by the United States for the Three Affiliated Tribes or individual allottees. The majority of land within the reservation is owned by non-Indians.

Land surface within McLean and Mountrail Counties primarily consists of the Missouri Coteau Slope Ecoregion, which is where the proposed project is located. The Missouri Coteau Slope Ecoregion consists of glaciated uplands, river breaks, valley wall site and footslopes, coulees, alluvial terraces, and floodplains. The floodplains are primarily located in the bottomlands of the Missouri River. Annual precipitation on the plateau averages between 15 and 17 inches.

Mean temperatures fluctuate between -3° and 21° F in January and between 55° and 83° F in July, with 95 to 130 frost-free days each year.

According to data collected by the Natural Resources Conservation Service from 1971–2000 at Dunn Center in Dunn County and at Keene in McKenzie County, temperatures in excess of 80°F are common in summer months. The area receives approximately 16.0 to 16.5 inches of rain annually, predominantly during spring and summer. Winters in this region are cold, with temperatures often falling below zero degrees Fahrenheit.

Snow generally remains on the ground from November to March, and approximately 32.0 to 38.5 inches of snow are received annually.

The following sections address the positive and negative environmental impacts of the proposed project alternatives. The inventory and evaluation of the existing environment provide the necessary baseline from which to determine the impacts of the proposed project alternatives. The potential direct, indirect, and cumulative effects of the proposed project to the environment are discussed below.

The following sections address the positive and negative environmental impacts of the proposed project alternatives. The inventory and evaluation of the existing environment provides the necessary baseline from which to determine the impacts of the proposed project alternatives. The potential direct, indirect, and cumulative effects of the proposed project to the environment are discussed below.

# 3.1 No Action Alternative

Under the No Action Alternative, the proposed project would not be constructed or operated. Existing conditions would not be impacted for the following critical elements: public health and safety, water resources, wetland/riparian habitat, threatened and endangered species, soils, vegetation and invasive species, cultural resources, and environmental justice.

# 3.2 Land Use

The proposed project is located within a predominantly rural area. Land within the pipeline corridor is primarily cultivated land (63%) with the remainder consisting of grasslands (34%), shrubland (1%), wetlands (1%) and water (1%). See Figure 3: View of Project Corridor— North End, and Figure 4: View of Project Corridor—South End. The pipeline crosses native rangeland that is currently used to graze livestock along with several fields used for agricultural production. In addition, the landscape has been previously disturbed by dirt trails and gravel roadways. There are six residences within one mile of the project corridor. Mountrail County has a zoning ordinance in place for new utilities within the county. KL&J requested an opinion as to whether this ordinance applied within the reservation boundary. If so, a conditional use permit may be required. McLean County indicated that a road crossing permit would be required for property within the reservation boundaries but asked for coordination prior to construction related to traffic and road usage.

# 3.2.1 Land Use Impacts; Avoidance, Minimization and Mitigation

Construction of the proposed pipeline will temporarily impact the current land use within the corridor; however, installation of the pipeline will have no permanent impact on land use. Mitigation for destruction of crops during pipeline installation will be coordinated with the landowner. Native rangeland will be promptly reseeded with a native grass seed mixture.



Providence

Figure 3: View of the Project Corridor—North End



Surface disturbance, deposition of potentially harmful biological material, trucking, and other traffic would not change from present levels once the pipeline would be completed.

Questar Exploration and Production Company: MHA Gathering System T150N-R90W & T149N-R90W Environmental Assessment May 2010

#### 3.3 Air Quality

The Clean Air Act, as amended, requires the Environmental Protection Agency (EPA) to establish air quality standards, known as National Ambient Air Quality Standards (NAAQS), for pollutants considered harmful to public health and the environment. There are six criteria pollutants that require NAAQS: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub>), and sulfur dioxide (SO<sub>2</sub>). The nearest North Dakota Department of Health Ambient Air Quality Monitoring station is located at Dunn Center, ND in Dunn County. This station does not monitor Pb (lead) or CO (carbon monoxide). **See Table 1: Federal and State Air Quality Standards and AAQM Station Data.** 

Tab	Table 2: Federal and State Air Quality Standards and AAQM Station Data								
Pollutant	Averaging Period	EPA Air Quality Standard	NDDH Air Quality Standard	Dunn Center Air Quality Data					
22	24-Hour	0.14 ppm	0.099 ppm	0.003 ppm					
SO <sub>2</sub>	Annual Mean	0.030 ppm	0.000 ppm	0.000 ppm					
DM	24-Hour	150 μg/m³	150 μg/m³	53 μg/m³					
PM <sub>10</sub>	Annual Mean	50 μg/m³	53 μg/m³	15 μg/m³					
	24-Hour	35 μg/m³	35 μg/m³						
PM <sub>2.5</sub>	Weighted Annual Mean	15 μg/m³	15 μg/m³						
NO <sub>2</sub>	Annual Mean	0.053 ppm	0.053 ppm	0.002 ppm					
	1-Hour	35 ppm	35 ppm						
CO	8-Hour	9 ppm	9 ppm						
Pb	3-Month	1.5 μg/m³	1.5 μg/m³						
00	1-Hour	0.12 ppm	0.12 ppm	0.065 ppm					
O3	8-Hour	0.08 ppm	0.08 ppm	0.060 ppm					

According to the North Dakota Department of Health (NDDH), North Dakota is one of thirteen states in attainment for all of the criteria pollutants (NDDH 2009). McLean and Mountrail Counties and the Fort Berthold Reservation also comply with NAAQS.

Questar Exploration and Production Company: MHA Gathering System T150N-R90W & T149N-R90W Environmental Assessment May 2010 In addition the Clean Air Act affords additional air quality protection near Class I areas. Class I areas include national parks greater than 6,000 acres in size, national monuments, national seashores, and federally designated wilderness areas larger than 5,000 acres designated prior to 1977. The nearest Class I area to the project corridor is the Theodore Roosevelt National Park (North Unit), which is located approximately 49 miles southwest of the proposed project at its nearest point. The proposed project is located within a Class II attainment area.

#### 3.3.1 Air Quality Impacts; Avoidance, Minimization, and Mitigation

On the Fort Berthold Reservation, the EPA enforces the Clean Air Act standards. Construction of the project would result in temporary emissions of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, and volatile organic compounds. These temporary air emissions during construction are not anticipated to cause or contribute to a violation of NAAQS or to adversely affect the Theodore Roosevelt National Park. The proposed project is anticipated to have a long-term benefit to air quality in the project area because it would reduce emissions associated with gas flaring at the existing and proposed well locations along the pipeline route. In addition, the pipeline would alleviate the need for trucks having to travel to the well site for collection of oil, gas, and possibly produced water.,. In the long-term, this may improve air quality in the area by reducing mobile source air toxics associated with trucking operations. No mitigation or monitoring measures are recommended.

# 3.4 Public Health and Safety

Health and safety are key concerns on any construction project, and one objective in designing a pipeline is to minimize the risk to public health and safety. Typically, the highest probability of accident occurs during the construction phase due to the variety of equipment, number of personnel and types of activity which are present during this period.

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

It is equally important to remember that combustion and explosive hazards, although an extremely unlikely possibility in and around operating pipelines, are a consideration when evaluating public health and safety for any project. The risk and extent of negative impact from system operation is much more difficult to predict than the impact from construction due to the many variables involved.

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

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

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

The proposed 4-inch HDPE, DR11 and 8-inch API 5LX-52 steel gas pipeline proposed for this project is to be buried a minimum of 4 feet below the ground surface. Soil conditions found along the pipeline corridor vary from sandy to clay. The initial normal operating pressure is expected to be less than 150 psi for the 4-inch HDPE DR11 pipe and 1440 psi for the 4-inch FlexSteel and 8-inch steel pipe. The products being conveyed within the pipelines are natural gas and crude oil, which can be highly flammable. The topography is variable, ranging from flat with nearly no slope to gently rolling hills. Vegetative communities range from native uplands and hardwood draws to farmed agricultural fields. Historical wind direction is from the northwest and velocity varies from 0 mph to >40 mph.

An explosion, although extremely unlikely, is possible; therefore, human safety and structural damage is potentially at risk. A pipeline rupture under normal operating pressure could, depending on soil conditions and exact location, create a crater 10–20 feet in diameter to the depth of the buried pipeline. If a fire resulted, temperatures could reach well in excess of 1,000 degrees Fahrenheit at the point of rupture and decrease outward, depending upon wind speed and direction as well as ambient temperatures in the area. This could cause structural damage in an area in excess of 2,000 feet downwind of the point of the blast. **See Figure 5: Blast Overview Map.** In addition, a pipeline blast has the potential to cause a grass fire. Grass fires in rural areas can grow to be very large in size depending upon their location and weather conditions. A fire caused by a blast has the potential to impact areas well outside the blast impact area. Aerial view imagery shows three residences located within this 1-mile wide corridor. This corridor also includes approximately 14 miles of additional roads and trails which could be utilized at various times of the year.

# 3.4.1 Public Health and Safety Impacts; Avoidance, Minimization, and Mitigation

There are no known local, state or federal regulations for an established "set-back" from occupied dwellings. Pipeline operations would conform to instructions from BIA and Tribal fire management staff. Negative impacts from this project are anticipated to be minimal based upon the proposed route selected and design parameters. No waivers to laws, regulations or other requirements have been requested or issued and no compensatory mitigation measures are required based upon the available information utilized herein.



Figure 5: Blast Overview Map

Equipment used for construction of the pipeline should be well maintained to reduce the potential for injuries to construction workers and impacts to the public. All equipment shall be equipped with the proper safety shields, mufflers, first aid kits and spill cleanup kits to minimize public health and safety impacts.

#### 3.5 Socioeconomics

Socioeconomic conditions depend on the character, habits, and economic conditions of people living within the proposed action area. The proposed action's effects on businesses, employment, transportation, utilities, etc., are factors that affect the social climate of a community.

Six major communities are located within the Fort Berthold Reservation boundary. Four Bears, Mandaree and Twin Buttes are located west of the Missouri River, and New Town, Parshall and White Shield are located on the east side.

These communities are home to several small businesses such as restaurants, grocery stores and gas stations, however they lack the larger shopping centers found in the larger cities located in northwestern North Dakota like Minot and Williston. Agriculture is the major industry and employer on the Fort Berthold Reservation. The Four Bears Casino, Convenience Store and Recreation area are also major employers, with over 320 employees; 90% of which are tribal members. Bureau of Indian Affairs Offices are located in New Town and Parshall and employ numerous tribal members. Several industries are located on the Fort Berthold Reservation including Northrup Manufacturing, Mandaree Electric Cooperative, Three Affilliated Tribes Lumber Construction Manufacturing Corporation and Uniband. In addition, several oil and gas companies have opened local offices in New Town, and these businesses offer employment to tribal members and other local residents.

Several paved two-lane highways provide access to the Fort Berthold Reservation including ND Highways 22, 23, 37 and 1804. These routes also provide access to the larger communities in northwestern North Dakota like Minot and Williston.

#### 3.5.1 Socioeconomic Impacts; Avoidance, Minimization, and Mitigation

The proposed project is not anticipated to substantially impact the socioeconomic conditions in the project areas, but it does have the potential to yield beneficial impacts on Tribal employment and income. Qualified individual tribal members may find employment through oil and gas development and increase their individual incomes. Employment opportunities related to oil and gas development may lessen the unemployment rate and increase income levels on the Fort Berthold Reservation. Additionally, the proposed action may result in indirect economic benefits to tribal business owners resulting from construction workers expending money on food, lodging, and other necessities.

Construction of the proposed pipeline may negatively impact roadways from hauling of heavy loads to the construction areas which may cause unsafe driving conditions due to roadway degradation. Surrounding counties have expressed concern regarding degradation of their roadway infrastructure.

Oil and gas producers have decided to work with BIA and the County and State Highway officials to find a solution to the problem. The increased traffic during the construction phase may cause more hazardous driving conditions for residents. Construction personnel should follow laws pertaining to overload limits and obey traffic laws to help alleviate potential hazards for residents.

# 3.6 Environmental Justice

Per Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, measures must be taken to avoid disproportionately high adverse impacts on minority or low-income communities.

The Three Affiliated Tribes qualify for environmental justice consideration as both a minority and low-income population. The population of North Dakota is predominantly Caucasian. Tribal members comprise only 5% of North Dakota residents and 64% of the population of McLean and 30% of Mountrail County. Even in a state with relatively low per capita and household income, Native American individuals and households are distinctly disadvantaged.

The Fort Berthold Reservation, McLean and Mountrail Counties have lower than statewide averages of per capita income and median household income. In addition, the Ft. Berthold Reservation has higher rates of unemployment and individuals living below poverty level than the state. McLean and Mountrail Counties statistics show a higher rate for individuals below poverty levels, and a lower unemployment rate than the State averages. **See Table 2: Employment and Income.** 

Location	Per Capita Income	Median Household Income	Unemployment Rate	Individuals Below Poverty Level
McLean County	\$16,220	\$32,337	3.2%	13.5%
Mountrail County	\$13,422	\$27,098	3.4%	18.7%
Fort Berthold Reservation	\$10,291	\$26,274	11.1%	28.1%
Statewide	\$17,769	\$34,604	3.0%	11.9%

Population decline in rural areas of North Dakota has been a growing trend as individuals move toward metropolitan areas of the state, such as Bismarck and Fargo. While McLean and Mountrail County's populations have been slowly declining, the Fort Berthold Reservation has witnessed a steady increase in population. American Indians are the majority population on the Fort Berthold Reservation but are the minority population in McLean and Mountrail Counties and the state of North Dakota. **See Table 3: Demographic Trends.** 

Location	Population in 2000	% of State Population	% Change 1990–2000	Predominant Race	Predominant Minority
McLean County	9,311	1.5%	-11%	White	American Indian (5.9%)
Mountrail County	6,631	1.03%	-5.6%	White	American Indian (30%)
Fort Berthold Reservation	5,915	0.9%	+9.8%	American Indian <sup>1</sup>	White (26.9%)
Statewide	642,200	ali o tra colo nanco <del>-</del> concil	+0.5%	White	American Indian (5.3%)

#### 3.6.1 Environmental Justice Impacts; Avoidance, Minimization, and Mitigation

Construction of the proposed pipeline would not require relocation of homes or businesses, cause community disruptions or cause disproportionately adverse impacts to the Fort Berthold Reservation. In addition, the proposed project has not been found to pose significant impacts to any other critical element— public health and safety, water, wetlands, wildlife, soils or vegetation— within the human environment, other than the potential to improve air quality within the area. The proposed project is not anticipated to result in disproportionately adverse impacts to minority or low-income populations. No laws, regulations or other requirements have been waived; no compensatory mitigation measures are required.

The proposed project is not expected to have measurable impacts on demographic distributions, but short-term construction employment may have a beneficial economic impact by easing unemployment.

The surface owners would be compensated for any productive acreage lost through ROW acquisition or inadvertent damage to crops during construction. Tribal members without surface rights within the project area would not receive any direct benefits. Six residences do occur within the project area; however, only three would be impacted by boring under access roads to their residences. This impact would be temporary, and the developer would be required to maintain access to the residence. Potential impacts to tribes and tribal members also include disturbance of cultural resources. This potential may be reduced pending the determination by the BIA that there would be no effect to historic properties.

 <sup>1</sup> According to the Fort Berthold Library, there are 9,500 enrolled members of the Three Affiliated Tribes. Questar Exploration and Production Company: MHA Gathering System
T150N-R90W & T149N-R90W
T7 | P a g e
Environmental Assessment
May 2010

# 3.7 Infrastructure and Utilities

The Fort Berthold Reservation's infrastructure consists of roads, bridges and access points, utilities, and facilities for water, wastewater, and solid waste. The proposed pipeline would only cross county gravel roads and section lines. The crossings would be in Sections 5, T149N, R90W, and in Sections 5, 8, 17, and 32, T150N, R90W.

The Fort Berthold Rural Water (FBRW) pipeline serves residences near the project area. The FBRW pipeline parallels ND Highway 37 as well as the rural gravel roadways extending west of ND Highway 37 including the proposed project area.

# 3.7.1 Infrastructure and Utilities Impacts; Avoidance, Minimization, and Mitigation

Directional drilling (boring) is planned to cross the gravel roadways and section line roads. The approximate length of these bores is 200 feet. A staging area would be constructed on either side of gravel roadway location within the established pipeline ROW. Temporary impacts to traffic using these roadways may be encountered. A temporary bypass would be constructed if the current roadway is impassible due to construction.

The proposed pipeline corridor crosses the FBRW pipeline in Sections 5, 17, 20, 32, T150N, R90W. The FBRW pipeline is typically buried to a depth greater than the 48-inch depth of the proposed pipeline. The FBRW pipeline would be located at the crossing locations to ensure construction of the proposed pipeline would not impact the water pipeline.

#### 3.8 Cultural Resources

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

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

Questar Exploration and Production Company: MHA Gathering System T150N-R90W & T149N-R90W Environmental Assessment May 2010 Whatever the nature of the cultural resource addressed by a particular statute or tradition, implementing procedures invariably include consultation requirements at various stages of a federal undertaking. The MHA Nation has designated a Tribal Historic Preservation Officer (THPO) by Tribal Council resolution, whose office and functions are certified by the National Park Service. The THPO operates with the same authority exercised in most of the rest of North Dakota by the State Historic Preservation Officer (SHPO). Thus, BIA consults and corresponds with the THPO regarding cultural resources on all projects proposed within the exterior boundaries of the Fort Berthold Reservation.

A cultural resource inventory of these pipeline routes was conducted by personnel of Kadrmas, Lee & Jackson, Inc., using a pedestrian methodology. Approximately 263.6 acres were intensively inventoried on November 23-24, 2009 (Ó Donnchadha 2010). No historic properties were located within any of these project areas that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of **no historic properties affected** for this undertaking. This determination was communicated to the THPO on March 25, 2010 (see Part 4); however, no response was received from the THPO within the allotted 30-day comment period.

#### 3.8.1 Cultural Resources Impacts; Avoidance, Minimization, and Mitigation

The proposed pipeline route would have no impact to cultural resources. If cultural resources are discovered during construction or operation, work would immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery, work would not resume until written authorization to proceed has been received from the BIA. All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.

#### 3.9 Wildlife

#### 3.9.1 Threatened, Endangered, and Candidate Species

In accordance with Section 7 of the Endangered Species Act of 1973, 50 CFR Part 402 as amended, each federal agency is required to ensure the following two criteria. First, any action funded or carried out by such agency must not be likely to jeopardize the continued existence of any federally-listed endangered or threatened species or species proposed to be listed. Second, no such action can result in the destruction or adverse modification of habitat of such species that is determined to be critical by the Secretary. An endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future. A candidate species is one which may warrant listing as an endangered or threatened species, but the data are inconclusive. While candidate species are not legally protected under the Endangered Species Act, it is within the spirit of the Endangered Species Act to consider these species as having significant value and worth protecting.

According to the United States Fish and Wildlife Service (USFWS) North Dakota field office website, endangered species that may be found within McLean and Mountrail Counties are the interior least tern, whooping crane, pallid sturgeon, and gray wolf. The piping plover is listed as a threatened species for McLean and Mountrail Counties and the counties contains designated critical habitat for the piping plover. In addition, the Dakota skipper is listed as a candidate species for McLean and Mountrail Counties. A field survey conducted on November 24, 2009. No threatened or endangered species were identified within the study area on the day of the

survey.

3

#### Endangered Species

#### Gray Wolf (Canis lupus)

The gray wolf is the largest wild canine species in North America. In North America, the gray wolf is found throughout northern Canada, Alaska, and the forested areas of Northern Michigan, Minnesota, and Wisconsin. They have been re-introduced to Yellowstone National Park in Wyoming. While the gray wolf is not common in North Dakota, occasionally individual wolves do pass through the state. Given poor habitat, unreliable food supplies, nearby human inhabitation and the distance to known populations in Canada, Montana, Minnesota, and Wyoming, colonization of this species would be unlikely in North Dakota. Historically, its preferred habitat includes biomes such as boreal forest, temperate deciduous forest, and temperate grassland. Gray wolves live in packs of up to 21 members, although some individuals would roam alone. The proposed project areas are located far from other known wolf populations and do not contain preferred habitat for suitable prey to sustain a population.

#### Interior Least Tern (Sterna antillarum)

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

The Missouri River (Lake Sakakawea) ranges in distance from 0.31 miles to 2.94 miles from the proposed pipeline. Migrating or foraging terns may travel unimpeded through the project area year-around. No wetland areas would be impacted as a result of the proposed project.

#### Pallid Sturgeon (Scaphirhynchus albus)

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

The Missouri River (Lake Sakakawea) ranges in distance from 0.31 miles to 2.94 miles from the proposed pipeline. The Yellowstone River is about 52.6 miles to the northwest corner of the proposed pipeline location. The proposed project is not expected to affect the water quality or quantity in the Missouri or Yellowstone Rivers.

#### Whooping Crane (Grus americana)

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

Currently there are three wild populations of whooping cranes, yielding a total species population of about 365. Of these groups, only one is self-sustaining.

The proposed project is located in the Central Flyway where 75% of confirmed whooping crane sightings have occurred. Several cropland fields were found along the pipeline corridor which may provide feeding habitat and stopover areas by migrating cranes. No whooping cranes were sighted during the field surveys.

#### **Threatened Species**

#### Piping Plover (Charadrius melodus)

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

There is no potential piping plover habitat within the project area. The nearest piping plover habitat along Lake Sakakawea would be approximately 0.31 miles away from the project areas at the nearest point.

#### Candidate Species

#### Dakota Skipper (Hesperia dacotae)

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

Upland prairies were noted along the project corridor however, these areas have been grazed and disturbed by human activity and, therefore, it is unlikely that these areas contain the high quality prairie necessary for Dakota skipper.

Lake Sakakawea and associated Missouri River habitat is located 0.31 miles from the proposed pipeline project. Both wet and dry prairie ecosystems are found within the corridor. Dakota skippers were not observed during the field survey; however, timely field surveys when the Dakota Skipper would have been visible were not completed.

#### Threatened and Endangered Species Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact threatened or endangered species or designated critical habitat.

Alternative B (Proposed Action)– Lake Sakakawea provides suitable habitat for the least tern and piping plover; however, the pipeline would be located a minimum of 0.31 miles from the lake, and would not cause impacts to their habitat. Due to a lack of potential habitat within the proposed disturbed areas or the observance of species within the project areas, the proposed project may affect, but is unlikely to adversely affect, the interior least tern, pallid sturgeon, gray wolf, and piping plover. The proposed project is not likely to jeopardize the continued existence of these species and is not likely to destroy or adversely modify critical habitat.

Lake Sakakawea and adjacent wetlands provide suitable habitat for whooping cranes; however, the pipeline will be bored under or trenched around wetland areas and will not cause impacts to these areas. Due to a large percentage of the project area being located on cropland fields and being located within the corridor which 75% of all whooping cranes migrate through, the proposed project may temporarily impact whooping crane feeding and roosting areas during construction. No permanent impacts to whooping cranes or their habitat are expected from the proposed project. If whooping cranes would be sighted within 1-mile of the construction crews, construction would be suspended until the cranes continued their migration from the area.

Due to the pipeline corridor being planned to cross native rangeland with a wide diversity of wildflowers and grasses, it was determined that construction of the proposed pipeline may affect the Dakota skipper or its habitat. These potential impacts would be temporary in nature and include a very small percentage of total Dakota skipper habitat throughout its range. Reclamation of disturbed areas with a native grass seed mixture shall take place after construction is complete.

# 3.10 Big Game Species

No big game species were observed during the field survey. The proposed corridor contains suitable habitat for antelope (*Antilocapra americana*), mule deer (*Odocoileus hemionus*) and whitetail deer (*Odocoileus virginianus*).

#### 3.10.1 Big Game Species Impacts; Avoidance, Minimization, and Mitigation

Due to the occurrence of suitable habitat for mule deer, whitetail deer and pronghorn antelope within the project corridor, noise from construction of the proposed project may cause a temporary disturbance to big game wildlife species during construction. In addition, construction of the project may impact big game habitat. Following construction, habitat for these species would be restored. The proposed project would have no permanent affect on big game wildlife species. No mitigation would be necessary for the temporary impacts.

# 3.11 Small Game and Waterfowl Species

Twenty Canada geese (*Branta canadensis*), 11 ring-necked pheasant (*Phanianus colchicus*), and 8 sharp-tail grouse (*Tympanuchus phasianellus*) were observed along the proposed route during the field survey. In addition, the proposed project corridor contains suitable habitat for cottontail rabbit (*Sylvilagus floridanus*), turkey (*Meleagris gallopavo*), Hungarian partridge (Perdix perdix), and numerous waterfowl species. No cottontail rabbits, turkeys, Hungarian partridge, or additional waterfowl species were observed in the field. In addition, no grouse leks were observed within the corridor; however, a timely survey for the presence of sharp-tailed grouse leks was not completed. To complete a timely survey for grouse leks, the survey would need to be completed in the spring when the grouse are actively using the leks for mating purposes.

# 3.11.1 Small Game and Waterfowl Species Impacts; Avoidance, Minimization, and Mitigation

Due to the sighting of waterfowl and small game during the field survey, and the occurrence of suitable habitat within the project corridor, the proposed project may cause a temporary disturbance to small game and waterfowl species during construction. Following construction, potential habitat for these species would be restored. The proposed project would have no permanent effect on small game or waterfowl species. No mitigation would be necessary for the temporary impacts.

# 3.12 Raptor Species

The Bald and Golden Eagle Protection Act of 1940, 16 U.S.C. 668–668d, as amended, was written with the intent to protect and preserve bald and golden eagles, both of which are treated as species of concern within the Department of the Interior. In addition, the Migratory Bird Treaty Act (916 U.S.C. 703–711) regulates impacts to these species such as direct mortality, habitat degradation, and/or displacement of individual birds.

The bald eagle (*Haliaeetus leucocephalus*) is sighted along the Missouri River during spring and fall migration periods and periodically in other places in the state such as the Devils Lake and Red River areas. There were at least 20 breeding pairs of bald eagles in North Dakota at the time of their delisting in 2007, most of which nest along the Missouri River. Its preferred habitat includes open areas, forests, rivers, and large lakes. Bald eagles tend to use the same nest year after year, building atop the previous year's nest. The project area contains large ash and elm trees suitable for nesting and roosting/perching for bald eagles. In addition, a bay of Lake Sakakawea is located 0.31 miles to the west of the proposed pipeline corridor. While suitable habitat for bald eagles is found within the project area, no bald eagles or their nests were observed the day of field survey.

The golden eagle (*Aquila chrysaetos*) can be spotted in North Dakota throughout the badlands and along the upper reaches of the Missouri River in the western part of the state. Golden eagle pairs maintain territories that can be as large as 60 square miles and nest in high places including cliffs, trees, and human-made structures. They perch on ledges and rocky outcrops and use soaring to search for prey. Golden eagle preferred habitat includes open prairie, plains, and forested areas. The project area contains large ash and elm trees suitable for nesting and roosting/perching for golden eagles. In addition, a bay of Lake Sakakawea is located 0.64 miles to the northwest of the proposed corridor. While suitable habitat for golden eagles is found within the project area, no golden eagles or their nests were observed the day of field survey.

Additional raptor species, including red tail hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*), may be found in the surrounding area. However, no indicators of either species were observed during the on-site visits. No raptor nests were observed during the field survey. Raptor species frequenting the project area are transitory in nature and are generally expected to adapt to changing conditions and continue to thrive.

# 3.12.1 Raptor Species Impacts; Avoidance, Minimization, and Mitigation

While suitable habitat for raptor species is found within the project area and several trees will be removed due to construction, no bald eagles, golden eagles or their nests were observed the day of the field survey. In addition, a very limited number of trees are expected to be impacted in relation to the total number of trees located in the surrounding area.

Limited preferred habitat was noted along the pipeline route, and no nests or observations of raptors were made during the field survey.

Due to the lack of potential habitat and no observations of raptors during the field surveys conducted, additional aerial surveys of the project area would probably not be warranted The proposed project may affect raptor species or their habitat during construction. Impacts to raptors from permanent removal of trees are expected to be minimal due to the small percentage of trees removed in the area. No mitigation would be required for the potential impacts to raptor species.

#### 3.13 Non-Game Wildlife

No non-game wildlife was observed during the field survey. A variety of non-game wildlife species, including song birds, coyote, fox, badger, and jackrabbit may traverse the project area. Other non-game wildlife may use the area for feeding

# 3.13.1 Non-Game and Furbearer Impacts; Avoidance, Minimization, and Mitigation

Many of the non-game and furbearer species are transitory in nature. These species are generally expected to adapt to changing conditions and continue to thrive. Disturbance to these species would be temporary in nature and, following construction, habitat for these species would be restored. The proposed project would have no permanent effect on non-game and furbearer species. No mitigation would be necessary for temporary impacts to non-game and furbearer species.

#### 3.14 Soils

The published soil survey for McLean and Mountrail Counties dates from 1979 and 1991 respectively. Updated information is available online from the Natural Resources Conservation Service at the NRCS Web Soil Survey. Soils encountered in the project area are identified in **Table 4: Soil Mapping Units and Attributes** 

Tab	le 5: Soil I	Mapping Un	its an	d Attril	butes			
Soil Type	Map Unit	Slope (%)	1. 1. 1. 1. 1. 1.	Composition (in upper 60 inches)		Eros Fact		Hydrologi c Soil
Son Type	Symbol		% sa nd	% silt	% clay	Kf	т	Group <sup>3</sup>
Bowdle loam	BwA	0 to 3	63	25	12	.24	4	в
Falkirk loam	FaA	0 to 3	38	36	26	.32	5	В
Falkirk- Max loam	FbB	3 to 6	38	36	26	.32	5	В
Mandan silt loam	MdB	3 to 6	21	65	14	.32	5	В
Max-Zahl loam	MID	9 to15	36	35	29	.28	5	В
Roseglen silt loam	Ro	0 to 3	26	52	22	.28	5	В
Williams-Bowbells loam	WoA	0 to 3	28	35	37	.28	5	В
Wilton-silt loam	WsA	0 to 3	20	53	27	.28	5	В
Wilton-Temvik silt loam	WtB	3 to 6	22	11	67	.28	5	В
Wilton-Williams silt loam	WwC	6 to 9	20	53	27	.28	5	В
Zahl-Cabba complex	ZcE	15 to 35	29	35	36	.28	5	В
Zahl-Max loams	ZmE	9 to 35	35	34	31	.28	5	В
Williams-Zahl	24C	6 to 9	35	35	30	.28	5	В
Zahl-Williams	24E	9 to 25	35	35	30	.28	5	В

;

<sup>&</sup>lt;sup>2</sup> Erosion Factors indicate susceptibility of a soil to sheet and rill erosion by water. Kf indicates the erodibility of material less than two millimeters in size. Values of K range from 0.02 to 0.69. Higher values indicate greater susceptibility. T Factors estimate maximum average annual rates of erosion by wind and water that would not affect crop productivity. Tons/acre/year range from 1 for shallow soils to 5 for very deep soils. Soils with higher T values can tolerate higher rates of erosion without loss of productivity.

<sup>&</sup>lt;sup>3</sup> Hydrologic Soil Groups (A, B, C, and D) are based on estimates of runoff potential according to the rate of water infiltration under the following conditions: soils are not protected by vegetation, soils are thoroughly wet, and soils receive precipitation from long-duration storms. The rate of infiltration decreases from Group A (high infiltration, low runoff) to D (low infiltration, high runoff).

Soil Type	Temporary ROW	Permanent ROW	Tota
Bowdle loam	0.2	0.3	0.5
Falkirk loam	1.9	1.9	3.8
Falkirk- Max loam	1.3	1.3	2.6
Mandan silt loam	4.8	2.7	7.5
Max-Zahl loam	3.3	1.7	5.0
Roseglen silt loam	1.8	1.8	3.6
Williams-Bowbells loam	32.2	27.9	60.1
Wilton-silt loam	2.5	1.6	4.1
Wilton-Temvik silt loam	7.0	6.1	13.1
Wilton-Williams silt loam	2.6	1.2	3.8
Zahl-Cabba complex	0.3	0.7	1.0
Zahl-Max loams	11.6	10.6	22.2
Williams-Zahl	0.7	0.6	1.3
Zahl-Williams	0.9	0.3	1.2
Total	mpacts		129.8

#### 3.14.1 Soils Impacts; Avoidance, Minimization, and Mitigation

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

Another soil resources issue is soil compaction, which can occur by use of heavy equipment. When soil is compacted, it decreases permeability and increases surface runoff. This is especially evident in silt and clay soils. In addition, soils may be impacted by mixing of soil horizons. Soil compaction and mixing of soil horizons would be minimized by the previously discussed topsoil segregation.

Disturbed areas would be reseeded following construction. No mitigation for soil impacts is anticipated.

#### 3.15 Water Resources

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, provides Federal authority to establish water quality standards, control discharges into surface and ground waters, develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404).

#### 3.15.1 Surface Water

The proposed project is located in the Deep Water Creek and Van Hook SWMA watersheds and the Deep Water Creek Bay, Lucky Mound Creek Bay and Lower Van hook Arm subwatersheds. Surface water runoff within the project area occurs as sheet-flow before entering grassed waterways and intermittent streams. These waterways and intermittent streams generally flow to the south and west where they eventually discharge water into Lake Sakakawea. The proposed project area is located within one mile of a tributary that flows to Lake Sakakawea. **See Figure 7: Water Resources.** 

#### 3.15.1.1 Surface Water Impacts; Avoidance, Minimization, and Mitigation

The proposed project has been sited to minimize direct impacts to surface water and disruption of drainages. Directional drilling would be use to install the pipeline under areas with surface water present and intermittent streams to minimize erosion from surface runoff. No identified floodplains exist within the area of proposed surface disturbance in the proposed corridor. Erosion control measures should be used to mitigate migration of sediment downhill or downstream. No measurable increase in runoff or impacts to surface waters is expected.

Due to the close proximity of the project area to Lake Sakakawea, equipment used for construction of the pipeline should be well maintained to avoid leaks and spills of hazardous materials. Hazardous materials such as oils, chemicals and fuels should be kept in approved containers and in a secure location when not in use. Spill clean-up kits should be located at the construction site and at staging areas in case of accidental spills. All spills shall be cleaned up immediately to the point that contamination of soils or water is no longer evident, and contaminated materials shall be disposed of at an approved location.

#### 3.15.2 Groundwater

Review of the electronic records of the North Dakota State Water Commission revealed that there are no permitted water wells or surface water impoundments in the project corridor. Within five miles of the project corridor, there are 27 permitted water wells. The pipeline corridor traverses the White Shield Aquifer. **See Figure 6: Water Resources.** 

#### 3.15.2.1 Groundwater Impacts; Avoidance, Minimization, and Mitigation

Construction of the proposed project would have no impact to groundwater resources. No mitigation for ground water impacts would be required.



**Figure 6: Water Resources** 

Questar Exploration and Production Company: MHA Gathering System T150N-R90W & T149N-R90W Environmental Assessment May 2010

#### 3.16 Wetlands

Wetlands are defined in Executive Order 11990, Protection of Wetlands, as those areas that are inundated by surface or groundwater with a frequency to support, and under normal circumstances do or would support, a prevalence of vegetation or aquatic life that requires saturated soil conditions for growth and reproduction. Three parameters that define a wetland, as outlined in the Federal Manual for Delineating Jurisdictional Wetlands (US Army Corps of Engineers, 1987), are hydrophytic vegetation, hydrology, and hydric soils. The term "wetlands" generally includes lakes, ponds, rivers, streams, sloughs, prairie potholes, and wet meadows. Wetlands are an important natural resource serving many functions, such as providing habitat for wildlife, storing floodwaters, recharging groundwater, and improving water quality through purification.

A field wetlands delineation was conducted by Kadrmas, Lee & Jackson on November 24, 2009. Results of the field delineation indicated four areas with positive wetland indicators present. **See Table 6: Wetlands Summary.** 

Table 7: Wetlands Summary							
na story alim Serenia (*1) son, alici, a nel d. Milli, a	Wet #1	Wet #2	Wet #3	Wet #4			
Location	SE/NE¼ of Section 5, T150N, R90W	SE/SE¼ of Section 29 T150N, R90W	SE/NE¼ of Section32 T150N, R90W	SE/NW ¼ of Section 32 T150N, R90W			
Latitude/Longitude	102°12'54.054"W 47°50'30.01"N	102°13'8.31"W 47°46'8.714"N	102°13'8.06"W 47°46'8.67"N	102°13'44.16"W 47°46'6.489"N			
Cowardin Classification	PEMA	РЕМА	PEMC	PEMA			
Wetland Type	Intermittent stream	Shallow pond	Shallow pond	Shallow Pond			
Wetland Feature	Natural	Natural	Natural	Natural			
Wetland Size (Acres)	143	105	129	45			
Wetland Protected Under E.O. 11990	-	- "	-	-			
Likely USACE Jurisdictional Wetland			-				
Permanent ROW Impacted Wetland Acres	-	-	-	-			
Temporary ROW Impacted Wetland Acres	-	-	-	-			
TOTAL IMPACTED ACRES				0.0			

Questar Exploration and Production Company: MHA Gathering System T150N-R90W & T149N-R90W Environmental Assessment May 2010

#### 3.16.1 Wetlands Impacts; Avoidance, Minimization, and Mitigation

Questar plans to bore under three locations and re-route the alignment around the remaining wetland areas. Poles associated with the electric transmission line would be sited to avoid wetlands within the project corridor. No wetland impacts are anticipated. A United States Army Corps of Engineers (USACE) section 404 permit would not be required if the wetlands were not disturbed. No mitigation or monitoring for wetland impacts would be required.

# 3.17 Vegetation and Invasive Species

Botanical resources were evaluated using visual inspection, GPS data collection, and mapping of dominant plant communities. The project corridor was also investigated for the presence of invasive plant species.

Six distinct vegetative communities were identified and mapped along the project corridor. The six communities include native upland, mixed shrubs/native upland, wooded draws, cropland, hayland and erosion/scattered claypan. The native upland community was dominated by western wheatgrass (*Pascopyrum smithil*), green needlegrass (*Nassella viridula*) and blue grama (*Bouteloua gracilis*) with distinct patches of little bluestem (*Schizachyrium scoparium*) occurring throughout the corridor. The mixed shrubs/native upland community included the same native vegetation as the upland community with the additions of silver buffaloberry (*Shepherdia argentea*) and western snowberry (*Symphoricarpos occidentalis*). Wooded draws included distinct mixtures of green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus Americana*), and chokecherry (*Prunus virginiana*). Cropland was assigned to the tillable acres in the corridor. The hayland community included smooth bromegrass (*Bromus inermus*) and Kentucky Bluegrass (*Poa pretensis*). The erosion/scattered claypan community consisted of barren ground with scattered blue grama and western wheatgrass plants. **See Figure 8: Dominant Plant Species Distribution.**


Figure 7: Dominant Plant Species

Noxious weeds can easily spread to the detriment of public health, crops, livestock and recreation. Of twelve species declared noxious under the North Dakota Century Code (Chapter 63-01.1) 9 of the State listed species are known to occur in McLean County: Absinth wormwood, Canada thistle, Field bindweed, Leafy spurge, Musk thistle, Russian knapweed, Saltcedar, and Spotted knapweed, Yellow starthistle, and 7 of the State listed species are present in Mountrail County: Absinth wormwood, Canada thistle, Saltcedar and Spotted knapweed. See Table 7: McLean and Mountrail Counties Noxious Weed Distribution. In addition, counties and cities have the option to add species to a list to be enforced only in their jurisdiction. McLean County has not added any species to the list. Mountrail County has added common tansy, yellow toadflax and houndstongue to the county species list for enforcement. Single plants of Canada thistle were noted along the edges of agricultural fields along the corridor.

Tab	le 8: McLean and Mountrail	Counties Noxious	Weed Distribution	
Common Name	Scientific Name	McLean County Acres	Mountrail County Acres	Present in the Study Area
Absinth wormwood	Artemesia abinthium L.	1,500	1,200	No
Canada thistle	Cirsium arvense (L.) Scop	4,800	20,100	Yes
Common Tansy	Tanacetum vulgare		_	No
Dalmation toadflax	Linaria genistifolia ssp. Dalmatica	-	—	No
Diffuse knapweed	Centaurea diffusa Lam	- E.F.		No
Field bindweed	Convolvulus arvensis L.	1,100	900	No
Hound's tongue	Cynoglossum officinale	_		No
Leafy spurge	Euphorbia esula L.	1,300	12,300	No
Musk thistle	Carduus nutans L.	200	2	No
Purple loosestrife	Lythrum salicaria	_	-	No
Russian knapweed	Acroptilon repens (L.) DC.	9		No
Saltcedar (tamarisk)	Tamarix ramosissima	21	1,100	No
Spotted knapweed	Centaurea maculosa Lam.	6	300	No
Yellow starthistle	Centaurea solstitalis L.	1	_	No
Yellow toadflax	Linaria vulgaris	i inunhaol <u>i⊐</u> tomini l		No

# 3.17.1 Vegetation and Invasive Species Impacts; Avoidance, Minimization, and Mitigation

Construction of the proposed project would disturb vegetation within the project corridor. Disturbed areas would be re-vegetated following construction. Careless construction of the proposed project could introduce undesirable species to the area. Infestations within the project area could spread to neighboring tracts, causing reductions in the quality or quantity of forage or crop production. Reclamation of the disturbed area should include monitoring of the project corridor to identify and help coordinate the control of noxious weeds. The USACE requests that all equipment be meticulously cleaned prior to being moved onto the construction site to prevent the possibility of contamination of USACE lands by noxious weeds or any other undesirable vegetation.

# 3.18 Mitigation and Monitoring

Many protective measures and procedures are described in this document. No laws, regulations, or other requirements have been waived; no compensatory mitigation measures are required. Monitoring of cultural resource impacts by qualified personnel is recommended during all ground-disturbing activities. In addition, it is recommended that all areas reclaimed and reseeded are monitored following reclamation efforts to ensure the area is properly reclaimed and the spread of noxious weeds is prevented.

## 3.19 Irreversible and Irretrievable Commitment of Resources

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

# 3.20 Short-term Use of the Environment versus Long-term Productivity

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

## 3.21 Cumulative Impacts

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

2

## 3.21.1 Past Present and Reasonably Foreseeable Actions

At the time this EA was written, there were approximately 4 oil and gas wells existing within 1mile of the proposed project. Current impacts from oil and gas development are still fairly dispersed across the reservation; however, the number of wells has grown to over 200 in the last couple of years and gathering systems continue to be installed. Future development of wells on the Reservation is expected to continue at an all time rate in the near future. The current and future success of oil and gas exploration near the proposed pipeline will likely result in additional oil and gas wells, transport systems, and associated infrastructure on land adjacent to the pipeline. Several gathering systems have been constructed or are in the planning stages to be constructed in the future; information about those in the planning stages remains proprietary. BMPs would be implemented to minimize impacts of the proposed projects.

The proposed project is being constructed in a rural area which is sparsely populated and relatively free of roads and additional infrastructure. Agriculture production has been the main land use and has been the main form of employment in these rural areas. Construction of the proposed pipeline in addition to recently drilled and future oil and gas wells and associated access roads will greatly increase the amount of infrastructure and non agricultural activity in these rural areas.

## 3.21.2 Cumulative Impact Assessment

The proposed pipeline project will have a beneficial impact to wells connected to the gathering system which will utilize this pipeline for oil and gas transportation. Construction of the proposed pipeline is not anticipated to directly impact other oil and gas projects not being considered for inclusion in this pipelines gathering system. The following discussion addresses potential cumulative environmental impacts associated with the proposed project and other past, present, and reasonably foreseeable actions.

**Geological Setting and Land Use** — The proposed project, when added to past, present, or future oil and gas activity, would result in a cumulative impact to land use through the conversion of existing uses, such as grazing or agricultural land, into well pads and access roads. However, well pads and access roads are generally selected to avoid sensitive land uses and to maintain the minimum impact footprint possible.

In addition, the BIA views these developments to be temporary in nature as impacted areas would be restored to original conditions upon completion of oil and gas activity. When added to existing and proposed water distribution lines and/or oil and natural gas gathering systems, no cumulative impacts are anticipated as these lines have, or would, result in a temporary disturbance and would not permanently convert existing land uses. Therefore, cumulative land use impacts are not expected to result in a significant cumulative impact.

**Air Quality** — Air emissions related to construction and operation of past, present, or reasonably foreseeable oil and gas wells when added to emissions resulting from the proposed project are anticipated to be a negligible cumulative impact. McLean and Mountrail Counties is currently well below the Ambient Air Quality Standards and it is anticipated that mobile air source emissions from truck traffic for the proposed project and other projects, as well as air emissions related to gas flaring, would be minor; therefore, the contribution of the proposed project to air emissions is not expected to be significant. Once the MHA Gathering line would be operational, the emissions from flaring and truck traffic would provide a cumulative benefit.

Wetlands, Wildlife, and Vegetation — The proposed project, when added to previously constructed and reasonably foreseeable oil and gas wells, may result in a cumulative impact associated with habitat fragmentation if additional access roads are constructed. However, the practice of utilizing existing roadways to the greatest extent practicable, as well as sharing access roads with future developments would minimize the potential impacts. The proposed exploratory wells have also been sited to avoid sensitive areas such as surface water, wetlands, or riparian areas. In addition, the use of BMPs and continued reclamation are anticipated to minimize and mitigate disturbed habitat. Therefore, it is not anticipated that the proposed project, when added to past, present, and reasonably foreseeable oil and gas activity, would result in a significant cumulative impact.

**Infrastructure and Utilities** — The contribution of the proposed project and other projects to stress on local roadways used for hauling materials may result in a cumulative impact to local roadways. However, abiding by permitting requirements and roadway restrictions with the jurisdictional entities are anticipated to offset any cumulative impact that may result from the proposed project and other past, present, or future projects.

This proposed gathering line would serve three producing Questar wells, one fee surface/mineral with an approved NDIC permit which is not drilled, and five wells that have the Federal APD submitted. Three of these wells are entering EA scoping and two the FONSI has been approved. Additional wells would be tied to the gathering system in this area to reduce impacts to the resources.

Electrical utilities are proposed to be placed underground as the preferred alternative reducing impacts to land use and wildlife resources. The aboveground alternative for electrical utilities would be a more expensive plan with greater cumulative impacts to land use and wildlife resources by placing obstructions (poles and highline wires) along the corridor.

The proposed action has been planned to avoid impacts to resources such as wetlands, floodplains, surface water, cultural resources, and threatened and endangered species. Unavoidable impacts to these or other resources would be minimized and/or mitigated in accordance with applicable regulations. No significant cumulative impacts are reasonably foreseen from existing or proposed activities. Future activities in this area would be designed to tie into the proposed gathering system which would further reduce resource impacts.

## 3.22 Permits

Mountrail County has adopted zoning regulations for new utilities on agricultural property. A road crossing permit would need to be obtained from McLean County prior to construction of the pipeline. A Mountrail County conditional use permit may be required because the proposed project is within the reservation boundaries.

On Indian land in North Dakota the EPA is responsible for permitting SWPPPs through permit NDR1000I using the National Pollutant Discharge Elimination System (NPDES). For NPDES permitting, both the construction and operation activities for oil and gas are subject to permitting if any of three criteria are met:

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

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

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

## 4. Consultation and Coordination

To initiate early communication and coordination, a notification package was distributed on January 14, 2010 to local, state, federal and tribal agencies. This package included information about the proposed project and a project location map. Pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, a solicitation of views was conducted to ensure that social, economic, and environmental effects were considered in the development of this project. *Appendix A contains Agency Scoping Materials.* 

At the conclusion of the 30-day comment period on February 15, 2010, eleven responses were received. The comments were referenced and incorporated where appropriate within the environmental impact categories addressed in this document. *Appendix B contains Agency Scoping Responses.* 



## United States Department of the Interior

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



IN REPLY REFER TO: DESCRM MC-208

#### MAR 2 5 2010

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

Dear Mr. Brady:

We have considered the potential effects on cultural resources of an oil pipeline project in McLean County, North Dakota. Approximately 263.6 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the area depicted in the enclosed report. No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. No properties were located that appear to qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

As the surface management Agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **no historic properties affected** for this undertaking. Catalogued as **BIA Case Number AAO-1756/FB/10**, the proposed undertaking, location, and project dimensions are described in the following report:

Ó Donnchadha, Brian

(2010) MHA Gathering Line: A Class III Cultural Resource Investigation in McLean County, North Dakota. KLJ Cultural Resources for Questar Exploration and Production Company, Denver.

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

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

Sincerely

ACTING Regional Director

Enclosure

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

Questar Exploration and Production Company: MHA Gathering System T150N-R90W & T149N-R90W Environmental Assessment May 2010

31 | Page

#### Questar Exploration and Production Company MHA Gathering Line Fort Berthold Reservation List of Agency Scoping Responses

## **Federal**

- US Department of Agriculture-Natural Resources Conservation Service
- US Department of Defense-Army Corps of Engineers, North Dakota Regulatory Office
- US Department of the Interior-Bureau of Reclamation
- US Department of Transportation-Federal Aviation Administration

### <u>State</u>

- North Dakota Department of Health
- North Dakota Department of Transportation
- North Dakota Game and Fish Department
- North Dakota Parks and Recreation Department
- North Dakota State Water Commission

#### **County**

- McLean County Superintendent of Highways
- Mountrail County Planning and Zoning Board

#### **Agency Recommendations**

#### **US Department of Agriculture Natural Resources Conservation Service**

• Wetland impacts should be avoided if possible. If avoidance is not possible, the following measures shall be taken: 1) disturbance to wetlands must be temporary, 2) no drainage of wetlands, 3) preconstruction contours are maintained, 4) temporary sidecast material must not be placed in the wetland, 5) all trenches must be backfilled to the original wetland bottom elevation.

### United States Army Corps of Engineers (Regulatory Office in Bismarck)

• If during project design, impacts to wetlands cannot be avoided or if work is to take place within, over or under navigable waters of the US, permits would be necessary prior to commencement of construction.

#### United States Department of the Interior Bureau of Reclamation

• The proposed pipelines are located in the vicinity of the Fort Berthold Rural Water Pipeline. Coordination with the director should take place prior to construction.

#### United States Department of Transportation Federal Aviation Administration

 No objection provided the FAA is notified of construction or alterations as required by FAA Regulations, Part 77, Paragraph 77.13 relating to objects affecting navigable airspace.

#### North Dakota Department of Health

- All necessary measures must be taken to minimize fugitive dust emissions created during construction.
- Care is to be taken near any water of the state to minimize adverse affect to 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.

#### North Dakota Department of Transportation

• Any project work that needs to be done on highway ROW would need the appropriate permits and risk management documents from the District Engineer.

#### North Dakota Game and Fish Department

- Avoid destruction of native prairie and woody draws to every extent possible. Disturbed areas should be reclaimed to preconstruction conditions.
- Steps should be taken to avoid wetland disturbances. No alterations should be made to existing drainage patterns.

#### North Dakota Parks and Recreation Department

• The project should be constructed with no impacts to critical habitats listed in the Natural Heritage Database to help secure rare species conservation in North Dakota.

### North Dakota State Water Commission

- The project is not located on a flood plain and it is believed that it will not affect an identified flood plain.
- All waste material associated with the project must be disposed of properly and not placed in identified floodway areas.

### **McLean County Highway Department**

• The zoning ordinance of McLean County requires a road crossing permit be acquired prior to construction taking place.

## Mountrail County Planning and Zoning Board

• The zoning ordinance of Mountrail County may require a conditional use permit be acquired prior to construction taking place.

2

### 5. List of Preparers

Kadrmas, Lee & Jackson, Inc. (KL&J) prepared this EA and conducted field work under a contractual agreement between Questar Exploration and Production Company and KL&J, and under the direction of the BIA, Great Plains Regional Office, Division of Energy and Environment. See Table 9: Preparers and Reviewers.

	Table 9: Preparers and Review	wers
Organization and Title	Name and Title	Role
Bureau of Indian Affairs	Marilyn Bercier Regional Environmental Scientist	Review of Draft EA and recommendation to Regional Director regarding FONSI or EIS
Bureau of Indian Affairs	Mark Herman Environmental Engineer	स्ति अंद्रस्य १९९१ सन्देश-अंद्रस्य १९९१
Questar Exploration and Production Company	Tracy Opp Permit Agent - Contract	Project Development, Document Review
Questar Exploration and Production Company	Debbie Stanberry Supervisor of Regulatory Affairs	n - Constantino porte d' Sistema del Colone e constantino de la constantino de la constantino de la constantino Presenta de la constantino de la consta
Kadrmas, Lee & Jackson, Inc.	Grady Wolf, Environmental Planner	Document Review
Kadrmas, Lee & Jackson, Inc.	Brian ó Donnchadadha, Principal Investigator	Cultural Resource Surveys and Traditional Cultural Property Surveys
Kadrmas, Lee & Jackson, Inc.	Rich Leach Surveyor	Survey Plats
Kadrmas, Lee & Jackson, Inc.	Jerry Reinisch Environmental Planner/Biologist	Agency and Client Coordination Biological and Botanical Surveys Principal Author
Kadrmas, Lee & Jackson, Inc.	Skip Skattum, GIS Analyst	Existing Conditions, Impact Analysis, and Exhibit Creation

Frank Annal Charles Market and Charles Barred

"The months of \$50 metric and the Constant Constant Constant Constant Sector and the sector sector sector secto Sector Constant Communications Sector Calactic Constant Sector and Provide Letter Constant Sector Calactic Cala random sensitivations of the Constant Constant Constant Constant Sector Sector Sector Sector Sector Sector Cala Sector Sector Constant Calactic Constant Constant Constant Constant Sector Sector Sector Sector Sector Sector S

#### 6. References and Acronyms

"Bald Eagle Fact Sheet: Natural History, Ecology, and History of Recovery." U.S. Fish & Wildlife Service. 9 December 2008. U.S. Department of Interior, U.S. Fish & Wildlife Service, Midwest Region. 3 April 2009. <a href="http://www.fws.gov/midwest/eagle/recovery/biologue.html">http://www.fws.gov/midwest/eagle/recovery/biologue.html</a>.

"Bald Eagle Population Size." U.S. Fish & Wildlife Service. 12 November 2008. U.S. Department of Interior, U.S. Fish & Wildlife Service, Midwest Region. 3 April 2009. <a href="http://www.fws.gov/midwest/eagle/population/index.html">http://www.fws.gov/midwest/eagle/population/index.html</a>.

"County Occurrence of Endangered, Threatened, and Candidate Species and Designated Critical Habitat in North Dakota." U.S. Fish & Wildlife Service. 15 May 2009. U.S. Department of Interior, U.S. Fish & Wildlife Service, Mountain-Prairie Region, North Dakota Field Office. 16 May 2009. <a href="http://www.fws.gov/northdakotafieldoffice/county\_list.htm">http://www.fws.gov/northdakotafieldoffice/county\_list.htm</a> >.

"The Cranes Status Survey and Conservation Action Plan Whooping Crane (Grus americana)." U.S. Geological Survey Northern Prairie Wildlife Research Center. 3 August 2006. U.S. Department of Interior, U.S. Geological Survey, Northern Prairie Wildlife Research Center. 2 April 2009. < <u>http://www.npwrc.usgs.gov/resource/birds/cranes/grusamer.htm</u>>.

Crist, Roxy. 2010. Personal Communication. Survey Plats and ROW Plats, for Questar MHA-1-23-24H-149-91. Kadrmas, Lee & Jackson. Survey Practice Area, Dickinson, North Dakota.

Dirk, Christine. 2009. Personal communication. North Dakota Parks and Recreation North Dakota Natural Heritage Inventory. Sensitive plant/animal data and significant ecological community data.

"Fact Sheet: Pallid Sturgeon (*Scaphiryhynchus albus*)." U.S. Fish & Wildlife Service. 14 July 2008. U.S. Department of Interior, U.S. Fish & Wildlife Service, Midwest Region. 3 April 2009. <a href="http://www.fws.gov/midwest/endangered/fishes/palld\_fc.html">http://www.fws.gov/midwest/endangered/fishes/palld\_fc.html</a>.

Federal Highway Administration in cooperation with USEPA and NRCS. Roadside Weed Management. Edited by Bonnie L. Harper-Lore, Maggie Johnson, Mark W. Skinner. Publication No. FHWA-HEP-07-017.

Geological Survey Staff. 2 April 2009. USGS Digital Elevation Models for North Dakota. U.S. Department of Interior, U.S. Geological Survey. Available URL: <a href="http://www.nd.gov/gis/>.....2">http://www.nd.gov/gis/>.....2</a> April 2009. USGS Hydrography Dataset for North Dakota. U.S. Department of Interior, U.S. Geological Survey. Available URL: <a href="http://nterior.com">http://nterior.com</a> (U.S. Geological Survey). Available URL: <a href="http://www.nd.gov/gis/>.....2">http://www.nd.gov/gis/>.....2</a> (April 2009. USGS Hydrography Dataset for North Dakota. U.S. Department of Interior, U.S. Geological Survey. Available URL: <a href="http://www.nd.gov/s.com">http://www.nd.gov/gis/>.....2</a> (April 2009. USGS Hydrography Dataset for North Dakota. U.S. Department of Interior, U.S. Geological Survey. Available URL: <a href="http://nterior.com">http://nterior.com</a> (D.S. Geological Survey).

"GoldenEagle."NationalGeographic.3April2009. <http://animals.nationalgeographic.com/animals/birds/golden-eagle.html>.

"Gray Wolves in the Northern Rocky Mountains." U.S. Fish & Wildlife Service. 4 June 2009. U.S. Department of Interior, U.S. Fish & Wildlife Service, Mountain-Prairie Region. 3 April 2009. <a href="http://www.fws.gov/mountain-prairie/species/mammals/wolf/">http://www.fws.gov/mountain-prairie/species/mammals/wolf/</a>.

Great Plains Flora Association. 1986. Flora of the Great Plains. University Press of Kansas. Lawrence, Kansas.

"Hawks, Eagles, and Falcons of North Dakota." U.S. Geological Survey Northern Prairie Wildlife Research Center. 3 August 2006. U.S. Department of Interior, U.S. Geological Survey, Northern Prairie Wildlife Research Center. 3 April 2009.

<http://www.npwrc.usgs.gov/resource/birds/hawks/intro.htm>.

Questar Exploration and Production Company: MHA Gathering System T150N-R90W & T149N-R90W Environmental Assessment May 2010

35 | Page

"Interior Least Tern (Sterna antillarum athalassos)." Texas Parks and Wildlife. 2 June 2009. Texas Parks and Wildlife. 2 April 2009.

<http://www.tpwd.state.tx.us/huntwild/wild/species/leasttern/>.

Larson, Gary E. and James R. Johnson. 2007. Plants of the black hills and Bear Lodge Mountains: afield guide with color photographs. 2<sup>nd</sup> ed.

"Least Tern (Interior Population)." U.S. Fish & Wildlife Service. 16 April 2008. U.S. Department of Interior, U.S.Fish&WildlifeService,MidwestRegion.2April2009. <http://www.fws.gov/midwest/Endangered/birds/tern.html>.

"Least Tern (Sterna antillarum)." U.S. Fish & Wildlife Service. 18 December 2008. U.S. Department of Interior, U.S. Fish & Wildlife Service, North Dakota Field Office. 2 April 2009. <a href="http://www.fws.gov/northdakotafieldoffice/endspecies/species/least\_tern.htm">http://www.fws.gov/northdakotafieldoffice/endspecies/species/least\_tern.htm</a>.

"Major Research Gives Insight into the Needs of Whooping Cranes." GBRA. 29 April 2009. Guadalupe-Blanco River Authority. 2 April 2009. <http://www.gbra.org/News/2009042901.aspx>.

Munsell Color Company. Munsell Soil Color Chart. 1954. New Windsor, New York: gretagmacbeth, 2000.

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

North Dakota Department of Health. Annual Report: North Dakota Air Quality Monitoring Data Summary 2008. North Dakota Department of Health, Bismarck: 4 February 2010. http://www.ndhealth.gov/AQ/AmbientMonitoring.htm

North Dakota State Water Commission Staff. 2 April 2009. Ground and Survey Water Data Query. State of North Dakota, State Water Commission. Available URL: < http://www.swc.state.nd.us/4dlink2/4dcgi/wellsearchform/Map%20and%20Data%20Resources>

"Noxious Weeds Team." North Dakota Department of Agriculture. North Dakota Department of Agriculture. 2 April 2009.

<http://www.agdepartment.com/Programs/Plant/NoxiousWeeds.html>.

Ó Donnchadha, Brian. 2010. MHA Gathering Line: A Class III Cultural Resource Investigation in McLean County, North Dakota. KLJ Cultural Resources for Questar Exploration and Production Company, Denver.

Opp, Tracy, 2010. Personal Communication. MHA Gathering Line Scope of Work.

"Piping Plover." U.S. Fish & Wildlife Service. U.S. Department of Interior, U.S. Fish & Wildlife Service, Mountain-Prairie Region. 2 April 2009. <a href="http://www.fws.gov/mountain-prairie/species/birds/pipingplover/">http://www.fws.gov/mountain-prairie/species/birds/pipingplover/</a>.

Pyeatte, Jim, 2010. Personal Communication. MHA Gathering Line Construction Specifications.

Sedivec, Kevil K. and Barker, William T. Selected North Dakota and Minnesota Range Plants. NDSU Extension Service at North Dakota State University. Fargo, North Dakota.

Sibley, David Allen. 1961. National Audubon Society the Sibley Guide to birds/written and illustrated by David Allen Sibley. 1<sup>st</sup> edition.

Soil Survey Staff. 2 April 2009. Spatial and Tabular Data of the Soil Survey for McLean and Mountrail Counties, North Dakota. U.S. Department of Agriculture, Natural Resources Conservation Service. Available URL: <a href="http://soildatamartnrcs.usda.gov/">http://soildatamartnrcs.usda.gov/</a>>.

United States. "Whooping Crane Recovery Plan Revised." U.S. Fish & Wildlife Service. 29 May 2007.<http://www.fws.gov/mountainprairie/pressrel/WO\_717\_Whooping\_crane\_recovery planpr.pdf >.

U.S. Census Bureau. 17 February 2010. http://www.census.gov

United States Department of Agriculture-Forest Service. 1999. Dakota Prairie Grasslands: Proposed Land and Resource Management Plan- Revision. U.S. Government Printing Office.

Van Bruggen, Theodore. Wildflowers, Grasses & Other Plants of the Northern Plains and Black Hills. Fourth Edition. Interior, South Dakota: Badlands Natural History Association, 1992.

Vance, F.R., et. al. Wildflowers of the Northern Great Plains. Third Edition. University of Minnesota Press. Minneapolis, Minnesota, 1999.

Whitaker, John O. 2002. National Audubon Society Field Guide to North American Mammals. 2<sup>nd</sup> edition.

:

Whitson, Tom D., et. al. 1996. Weeds of the West. Fifth Edition. 1996.

## ACRONYMS

APE	Area of Potential Effect
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
со	Carbon Monoxide
EA	Environmental Assessment
FBRW	Fort Berthold Rural Water
FPPA	Farmland Protection Policy Act
FONSI	Finding of No Significant Impact
МАОР	Maximum Allowable Working Pressure
NAAQS	National Ambient Air Quality Standards
NDDH	North Dakota Department of Health
NEPA	National Environmental Policy Act
NO <sub>2</sub>	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
<b>O</b> <sub>3</sub>	Ozone
Pb	Lead
PM <sub>10</sub>	Particulate Matter
ROW	Right-of-way
SO <sub>2</sub>	Sulfur Dioxide

SWPPP	Stormwater Pollution Prevention Plan
тнро	Tribal Historic Preservation Officer
USDA USFWS	United States Department of Agriculture United States Fish and Wildlife Department
WHP	Wellhead Processing Unit

2

# Appendix A

# **Agency Scoping Materials**

January 14, 2010

[Click here and type recipient's address]

Dear Interested Party:

On behalf of Questar Exploratory and Production Company, Kadrmas, Lee & Jackson, Inc. are preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs). The proposed action includes approval by the BIA of the development of three pipelines (oil, gas, and water) and an electric utility line approximately 12 miles long, all within a 150-foot right-of-way, on the Fort Berthold Reservation in McLean and Mountrail Counties. The oil and gas pipelines would likely be installed first, with the water pipeline and utility line added at a later date.

The proposed action would provide infrastructure to collect oil and gas from 8 wells operated by Questar Exploration and Production Company, and transport it to a pipelines operated by EOG, located at the north end of the proposed project. *Please refer to the enclosed project location map.* Construction of the proposed pipeline is scheduled to begin as early as spring 2010.

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

Please provide your comments by **February 15, 2010**. We request your comments by that date to ensure that we would have ample time to review them and incorporate them into the EA.

If you would like further information regarding this project, please contact Tracy Opp, Questar Exploration and Production Company Permit Agent-Contracts, at (303) 308-3630 or me at (701) 355-8705. Thank you for your cooperation.

Sincerely,

Kadrmas, Lee & Jackson, Inc.

Jerry D. Reinisch Environmental Planner III

Enclosure (Location Map)



**43** | Page

CTable	First	Luck	Trike / 2010	Depertment	Aguicy	Address	City	State	dī2
		or Market	Chief Modie Eng neer	1 CERCECE	Mirot M. Force Base	S20 Fearsheeper Place	Minal ATO	10	SOULE
	1.Bus	Elsek.	Actine Resided Division		Evenual frais also	1154k Ave SE	Abudean	93	5740M
	Renee	Netco	Crief, Perguise Managersel	Javatas Arra Citico	Euroau of Hostemator	LO Box 1U1 /	shamards.	10	10032-101.
-	Ser.	Upperside:	Manacar	stamatek Aractik Diether Office	Hodoral Avattor Administration	Z01 Unversity Drvs, 64a 203	al dismarch:	02	10004
-	E.	(Jmoreh	Marca	W. Perstmer (hee	LS Arme Cortes of Sho neers	16:35, 124, 9:		10	NCS0S
	Arrive.	Central Contraction	Matter Zurama Special d	のためのような	1.5. June Correct For rever-	FD 3ac 527	Zverble	UN UN	Same
		Quese.	Arten Shan Personality of		II 5 Development of Ambulate	FD The 1459	Terrary	UN	S41-01685
		Contra de la contr	The second s	The second se	1. P. Providence of P. Providence	100 100 100	Taward	u.	Che check
		Lisuan	The section in the section section is the section	ACCORDING TO CONTRACT OF CONTRACTON OF CONTRACT OF CONTRACT OF CONTRACT OF CONTRACTON OF CONTRACT OF C	uto i accontenti di ricenza Literari Core Descri defenio	271 BUE 17-1	THINK	2	11-17034
	T	Contrado.	firmer.	ACDA Channess Descent &	If & Concentration Deduction Streets	These advances in the other	1.1	5	S0215-1120
	T	CANCOUNT	MEDIA	ALTON TO SUID	Le christen Freddy Freddy Freddy	ACTIVE DAMAGE CANCEL CANCEL	- Contraction	20	E0237 1470
mound	10-25-0	1 tax	Methods (2001-4-1	MOUNT PROFE	Conferences investorial con	INCOMPANY CONTRACTOR	MIN.		TI-CTUNINI
	Jetter:	TOWTOT	Field Supervisor	NO REM CIES	LIS FSB & VID'R SENIE	NUCK REDAR	Asne V.	M	LINDOC
	Carl	Pin bas	Executive Director		ind set Pillsi's Commission	X0 - 8 - 2	State of	9	S14683
						1st Hoor, Judda Mag, Rin 17			
		White	Director Director	"Voler Pasouroes Childon	LIG Geological Survey	SCI E Interdate Ava.	Jamend:	01	1001
	L Caric	Gal.	Gist	Environnential Health Bedian An discreteberry	ND Department of Has lit	218 E Divide Asse Als Floor	Consects.	2	111-1685
	when w	Moliman	24	Conservent & Communication (Karaon	VD Garos Hen Cecathor:	100 Bernerde Excression	Distrend.	ND.	50501-5086
		Finites	Discin		ND Parket & Restriction Dent	1600 E. Canter Ave., Stele 2	Terrente	4D	140-10835
		Trink	Stels Chinese		ND State Weber Commission	201 841.246.	Famers	4D	1921-50885
	El	Real	Control Merson		Misself eer Della Connatz	713 Vanctel HAV	Stand	\$D	.0535
T		Law	Create Manazar	Collarde Tariba	Unvione Deputs ( M 455	TO 200 1205	WE SWO	4D	SCILLUDS:
		these of the second sec	Alexandra a second		March Change Cone Los	2m +900	Court Fields	14	SCHOL WI
T		10.0	ingrader .		VOLOR BOOMS WOOD, INC.	COM FUNCT	Carles Carles	NE NE	2545422
I	1	***		(Long Jecontract)	Access Force: Files are reacted by	COULD BE AND A COULD	XLAD Y	ar ar	100100
	10%	C.P.S.Barken	Respond		A DAMINY DOR'N DOWNLOW	Acre ADA. A.	Laboraci.	a.	2000
I	1	Scholoph	CEC		World Fights Electric Coop., Itc.	-0 60X 1.00	Dico12Ct	11	277 7022
I		U.Mauri	l/anjer		Acid Er ung	-1 18W 5/6	R.F.	The second secon	311/11/11/1
-		V (Maters	L'agy		MACHINE - MARKED & LACING TO CONTRACT	SCHWAT OF	LACK LCAT	2n	2012
	1	DUDION	DISTICL ENGINEER	NFG JENT	Nu URIDITIFICI INTERNITICI	THE REPORT AND A REPORT OF	KUN.	10	1.1.100
		Person	Dearthal Engineery	Wilkston District	NO Department of Teacsportage	1915 Lancta Partway Mitst	Unident	20	20212 1000
	Inner	S: leg	Fold Carco Manage	RADE TRIOKE 30 CTCC	BICH & FURNING STOLL	AS MOLENE WE SHOW THE W	INCOME.	35	1 Mar
		Near	Approximation for the Contract Memory of	Endern on Variani Frances	Rinau of Lend Management	TE ZER AND M, SHID A	DIGNISCE	2	1007
	Marsh	Olives	Trice Cleaner		Beseton-Wenpeton Sitoux Tittle	A) RWER	PECOLO I	10	Solution .
-		Person	Tricel Clearing	Ft. Totan Trick Breness Office	Sprid Lake Sour Trite	3 Br. 39	FI Toller	ND	CX N
-	Charles	Murphy	Intral Charman		Glanding Rock Stoue Linte	-V Box U	for Yales	92	8000
	Part	Stady	Tritisi Histrito Reservation Officer		Three Africial Tribes	HIJI BOX 2	New Lown	ND	(SHE)
		CONTUCT CONTUCT	Trits/Carnan		The Allact Titles	HC360(2	Mara Kan	22	58753
	1	ater	Intra Charman		Turtie Mourtein Crippena	PUBox 520	Estaurt -	ND.	36318 090
	-	WESON	Trits Albrer		Three difficient Tripes	404 Fichture Food	New John	ND ND	PANES
	Fred	8	Livector	Ensury Department	Three Alliced Tribes	ADA Faceleos Ecosi	New Texts	CN	SETKS
		shot	Fineschare	Four Exart Serment	Three Afflicted Tribes	(4)4 Finalegie Reset	Mene Town	9	19435
		State	Protexclane	Nercarec scener:	Three Athlated Tribes	P0 Box 021	Nardaeo	2	19130
		2005	Process the Sec	Sr.A Cross Econom	Ince (ditated intes	Ald Hoston Kost	New Ton-	20	08/23
		Parking.	Prove a three	Exercitive's 'Association'	Ince Atholed Inbes	PUBCX4.5	Harral	.2	02280
		Wind.	Personalities	While Shield General d	These Attacked to bes	ALL Fostore Read	New Town	N.	Sare2
		A14-1	Bertashin	Twie Bulles Sammer	These All taked It has	TUSED E AND DUK	-alcar	N.	SMIE
		Pairs		Paras will fee Department	Tings 41 Keled To bes	214 Fundage Road	Nan Town	EN	SETES
	HA-LY	Voundid		Related Reconstant Constituent	Three different Tribes	2014 Frentsse Read	Naw Town	Q	58763
		Hora	Cremiters Nancer		Recryption Telephone Conterstive	Rest	Pasial	ŝ	58770-0063
	1	Cos	Pour Leono-Contracts	a strand and a second	Guestic Exploration and Production Company	cristion 1/th Steet Science)	Const	3	00255
		Kend	Aufar		Mittain Courty	PO BEX 105	Wastburn	2	ALLERS .
	David	「「「「	Chair	Courts Cormission	Intention County	POBuck	Sieky	M	5803-15783
	1	Folishin	Aufin		Activities County	PD R-2 (2)	G-elvo	4D	200072200
					the second second				

44 | Page

1 al 1

# Appendix B

# **Agency Scoping Responses**

:

### Questar Exploration and Production Company MHA Gathering System T150N, R90W and T149N, R90W Fort Berthold Reservation List of Agency Scoping Responses

## **Federal**

US Department of Agriculture-Natural Resources Conservation Service

US Department of Defense-Army Corps of Engineers, North Dakota Regulatory Office

US Department of the Interior-Bureau of Reclamation

US Department of Transportation-Federal Aviation Administration

## State

North Dakota Department of Health North Dakota Department of Transportation North Dakota Game and Fish Department North Dakota Parks and Recreation Department North Dakota State Water Commission

## **County**

McLean County Highway Department Mountrail County Planning and Zoning Board

#### **United States Department of Agriculture**





February 1, 2010

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

RE: Questar Exploration & Production Company MHA Gathering System Environmental Assessment – McLean & Mountrail Counties, ND

Dear Mr. Reinisch:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated January 14, 2010, concerning a proposed action of the development of three pipelines, (oil, gas, and water) and an electric utility line on the Fort Berthold Reservation in McLean and Mountrail Counties, North Dakota.

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

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

> Helping People Help the Land An Equal Opportunity Provider and Employer

> > 100

Mr. Reinisch Page 2

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

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

Sincerely,

(Voo c. H

ACTING PAUL J. SWEENEY State Conservationist

cc:

Joe Bear, DC, NRCS, Stanley, ND Virginia Mehlhoff, DC, NRCS, Garrison, ND Terry Gisvold, ASTC (FO), NRCS, Dickinson, ND Codie Lacina, Acting ASTC (FO), NRCS, Jamestown, ND



DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, OMAHA DISTRICT NORTH DAKOTA REGULATORY OFFICE 1513 SOUTH 12<sup>TH</sup> STREET BISMARCK ND 58504-6640 February 11, 2010

REPLY TO ATTENTION OF

North Dakota Regulatory Office

[NWO-2010-00090-BIS]

Kadrmas Lee & Jackson Attn: Jerry D. Reinisch PO Box 1157 Bismarck, North Dakota 58502-1157



Dear Mr. Reinisch:

This is in response to your solicitation letter, on behalf of **Questar Exploration & Production Company (Questar),** dated January 19, 2010 for Department of the Army (DA), U.S. Army Corps of Engineers (Corps) comments regarding an Environmental Assessment (EA) being prepared by Kadrmas, Lee & Jackson, Inc. for Questar's proposed three pipelines (oil, gas and water) and a electric utility line project. The proposed project is 12 miles in length and within a 150 foot right-of-way on the Ft. Berthold Reservation in McLean and Mountrail Counties.

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 or affecting navigable waters. This would include work over, through, or under Section 10 water. Based on the information provided in the January 19<sup>th</sup> solicitation letter, no Section 10 waters would be affected by the proposed project. 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 includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States. The proposed project appears to involve unnamed tributaries to Lake Sakakawea and/or wetlands.

Enclosed for your information is the fact sheet for Nationwide Permit 12, <u>Utility Line</u> <u>Activities.</u> Pipeline projects are already authorized by Nationwide Permit 12 **provided the utility line can be placed without any change to pre-construction contours and all other proposed construction activities and facilities are in compliance with the Nationwide's permit conditions and 401 Water Quality Certification is obtained.** Please note the preconstruction notification requirements on page 2 of the fact sheet. If a project involves any one of the seven notification requirements, the project proponent must submit a DA application. Furthermore, a project must also be in compliance with the "Regional Conditions for Nationwide Permits within the State of North Dakota", found on pages 12 and 13 of the fact sheet. Please be advised that the United States Environmental Protection Agency (EPA), Region 8 has denied 401 Water Quality Certification for activities in perennial drainages and wetlands. Furthermore, EPA has placed conditions on activities in ephemeral and intermittent drainages. You must contact the U.S. Environmental Protection Agency, Region 8, Attn: Brent Truskowski, 1595

Printed on

**Recycled Paper** 

Wynkoop Street, Denver, Colorado 80202-1129 to obtain 401 Water Quality Certification for this project prior to any construction.

In the event your project requires approval from the U.S. Army Corps of Engineers and cannot be authorized by Nationwide Permit 12, a Standard or Individual Permit will be required. A project that requires a Standard or Individual Permit is intensely reviewed and will require the issuance of a public notice. A Standard or Individual Permit generally requires a minimum of 120 days for processing but based on the project impacts and comments received through the public notice may extend will beyond 120 days.

This correspondence letter **does not approve** Questar's proposed construction work or **does not verify** the proposed project complies with Nationwide Permit 12.

If this project would require a Section 404 permit, please complete and submit the enclosed Department of the Army permit application to the U.S. Army Corps of Engineers, North Dakota Regulatory Office, 1513 South 12<sup>th</sup> Street, Bismarck, North Dakota 58504. If you are unsure if a permit is required, you may submit an application; include a project location map, description of work, and construction methodology.

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 of phone at (701) 255-0015.

Sincerely, mill &. Cumarisi)

Daniel E. Cimarosti Regulatory Program Manager North Dakota

Enclosure

1) Fact Sheet NWP 12

2) ENG Form 4345

CF w/o encl EPA Denver (Brent Truskowski)

#### FACT SHEET NATIONWIDE PERMIT 12 (2007)

<u>UTILITY LINE ACTIVITIES</u>. 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 preconstruction 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.

<u>Utility line substations</u>: 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.

<u>Foundations for overhead utility line towers, poles, and anchors</u>: 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.

<u>Access roads</u>: 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 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)

<u>Note 1</u>: 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. <u>Navigation</u>. (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. <u>Aquatic Life Movements</u>. 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. <u>Spawning Areas</u>. 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. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. <u>Shellfish Beds</u>. 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. <u>Suitable Material</u>. 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. <u>Water Supply Intakes</u>. 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. <u>Adverse Effects From Impoundments</u>. 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. <u>Management of Water Flows</u>. To the maximum extent practicable, the preconstruction 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 preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMAapproved state or local floodplain management requirements.

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

12. <u>Soil Erosion and Sediment Controls</u>. 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. <u>Removal of Temporary Fills</u>. 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. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. <u>Wild and Scenic Rivers</u>. 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. <u>Tribal Rights</u>. 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.

(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. <u>Historic Properties</u>. (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. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAAdesignated 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. <u>Mitigation</u>. 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. <u>Water Quality</u>. 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. <u>Regional and Case-By-Case Conditions</u>. 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. <u>Use of Multiple Nationwide Permits</u>. 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. <u>Transfer of Nationwide Permit Verifications</u>. 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. <u>Compliance Certification</u>. 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. <u>Single and Complete Project</u>. 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) <u>Timing</u>. 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) <u>Contents of Pre-Construction Notification</u>: 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) <u>Agency Coordination</u>: (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 emanaling 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

;



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8 1595 Wynkoop Street DENVER, CO 80202-1129 Phone 800-227-8917 http://www.epa.gov/region08

May 11, 2007

Ref: 8EPR-EP

Colonel Ronald N. Light District Engineer, Sacramento District Attn: Michael S. Jewel, Regulatory Section U.S. Army Corps of Engineers 1325 J Street, 14<sup>th</sup> floor Sacramento, California 95814-2922

Colonel David Press, District Engineer, Omaha District Attn: Martha Chieply, Chief of Regulatory U.S. Army Corps of Engineers 106 S. 15th Street Omaha, Nebraska 68102

Colonel Bruce Estok District Engineer, Albuquerque District Attn: Don Borda, Chief of Regulatory U.S. Army Corps of Engineers 4101 Jefferson Plaza NE, Room 313 Albuquerque, New Mexico 87109-3435

Re: Certification of Nationwide Permits in Indian Country Pursuant to Section 401 of the Clean Water Act

Dear Colonels Light, Press and Estok:

This letter is in response to the US Army Corps of Engineers Final Notice of Issuance of Nationwide Permits (NWPs) listed in the Monday, March 12, 2007, Federal Register for Clean Water Act (CWA) Section 401 water quality certification. This water quality certification applies only to waters of the United States within Environmental Protection Agency (EPA) Region 8 where Tribes have not assumed CWA Section 401 Water Quality Certification and Section 303 Water Quality Standards Programs.

Region 8 has not received any final regional conditions from the USACE. Therefore, if final regional conditions are modified such that changes necessitate a change in 401 certification, Region 8 will modify this certification following receipt of final NWP regional conditions. The USACE and applicants should consider contacting EPA, Region 8 as early as possible for potential permits and actions that may be complicated and when early discussions may be beneficial to all parties. EPA requests notification when the USACE District Engineer intends to exert discretionary authority or waive the acreage, linear feet or cubic yard limits of the 2007 Nationwide Permits. We would like the opportunity to discuss the rationale and finding of minimal impact in these instances.

For NWPs that do require an individual 401 certification application, submission or notification, the information should be sent to the EPA and to the appropriateTribe. Suggested minimum information needed by EPA is enclosed; if minimum information is not included, the request for 401 certification may not be considered complete. The USACE should be aware of tribal trust lands that are outside of commonly known reservation boundaries. A state certification is not valid on these waters; and without a valid 401 certification, a permit would not be valid.

Your staff may contact Ms. Toney Ott at 303-312-6909, <u>ott.toney@epa.gov</u>, or your assigned Region 8 Section 404 staff if there are any questions or if clarification is necessary.

Sincerely,

Original signed by Gene R. Reetz for

Brian Caruso, Unit Chief Wetlands and Watershed Unit Ecosystems Protection Program

## cc: Region 8 Tribal Environmental Directors Cheryl Goldsberry, Omaha District

#### Enclosures:

USEPA Region 8 Water Quality Certification in Accordance with Section 401 of the Clean Water Act for the 2007 Nationwide Permits in Indian Country

Application Checklist for Completeness - - 401 Certifications for USACE NWPs

Tribal Contacts in U.S.E.P.A. Region 8, Current as of May 8, 2007

Region 8 Tribes with Treatment as State Status for CWA Section 303 and Section 401, Current as of May 8, 2007

## **Environmental Protection Agency, Region 8**

## Water Quality Certification in Accordance with Section 401 of the Clean Water Act for the 2007 Nationwide Permits in Indian Country

## May 11, 2007

These requirements apply to permitted activities occurring within "Indian country" as defined at 18 U.S.C. Section 1151, which includes lands located within formal Indian reservations as well as lands held in trust by the United States for Indian tribes and located outside the boundaries of formal Indian reservations. Please be aware that tribal trust lands located outside the boundaries of formal Indian reservations exist in Region 8.

## A. SPECIFIC NATIONWIDE PERMITS CWA Section 401 CERTIFICATION DENIED

USEPA Region 8 is denying CWA Section 401 certification on all waters for the following NWPs: # 16, # 17, # 21, # 33, # 34, # 44, # 45, # 46, # 47, # 49 and # 50. On NWPs that have been "denied" the EPA will review the proposed permit activity and issue a project-specific 401 Certification decision on each permit.

## B. GENERAL CONDITIONS FOR ALL NATIONWIDE PERMITS

1. Project proponent/contractor must have the following on-site:

 a copy of the appropriate USEPA Regional 401 certification general and specific conditions contained in this certification;

in addition, for NWP permits requiring a 401 certification application to USEPA:

- the 401 certification application, and
- EPA Region 8 CWA Section 401 certification document if applicable.

## 2. Certification is denied for any activity affecting fens and springs. Note: EPA adopts the definitions of these aquatic resources as defined by the 2007 Regional Conditions, as defined by the published draft conditions.

3. This certification does not authorize the placement or construction of septic/leach systems or other sewage/waste treatment plants in wetlands.

4. This certification does not authorize the construction of dams, except for stream restoration projects.

5. This certification does not authorize the construction of any portion of a facility for confined animal feeding operations, including, but not limited to, the construction of buildings, holding/detention and sewage lagoons, and/or livestock holding areas.

6. Wetland mitigation under these nationwide permits shall be completed prior to, or concurrent with, the project impacts. Wetland mitigation should be in-kind and on-site replacing native wetland plant communities lost from all project impacts. If the USACE

recommends a mitigation bank or in-lieu fee program and the permittee chooses to utilize the option of a mitigation bank or in-lieu fee program, the applicant must submit the name of the bank or program, and the number and type of credits to be purchased prior to project impacts.

7. For any general or specific nationwide permit conditions requiring notification in accordance with the Preconstruction Notification general condition #27 (72 Fed. Reg. 11092, 11195 (March 12, 2007)), "Agency Coordination" for project activities should include coordination with Native American Tribe or Tribes affected by such project activities.

8. Based on experience with invasive species, infestations of invasive plant species may result in increased erosion and/or pesticide applications, have the potential to reduce water quality, impact aquatic habitat, and impact designated water quality uses. This certification requires the use of certified weed-free hay/straw with any revegetation of project areas for activities authorized under these nationwide permits. This certification requires the use of seed that contain no noxious weed seed and meets certified seed quality. All seed must have a valid seed test within one year of the use date, from a seed analysis lab by a registered seed analyst (Association of Official Seed Analysts). The seed lab results shall show no more than 0.5 percent by weight of other weed seeds; and the seed lot shall contain no noxious, prohibited, or restricted weed seeds according to State seed laws in the respective State(s).

9. This certification requires monitoring for and control of invasive species during project construction if areas are disturbed and not immediately revegetated. This certificate requires monitoring for and immediate control of invasive species after project completion through at least one growing season. A maximum goal of less than 5% weed-species plants should be set, unless local, State, Tribal, or USACE rules, ordinances or permit conditions require more stringent monitoring and response.

10. Vegetation should be protected except where its removal is absolutely necessary for completion of the work. Applicant should revegetate disturbed soil in a manner that optimizes plant establishment for that specific site. Revegetation may include topsoil replacement, planting, seeding, fertilization, liming, and weed-free mulching as necessary. Applicant should use native material where appropriate and feasible. Where practical, stockpile weed-seed-free topsoil and replace it on disturbed areas. All cut and fill slopes that will not be protected with riprap should be revegetated with appropriate species to prevent erosion.

11. The following conditions apply when operating equipment or otherwise undertaking construction in a water of the U.S.

A. This certification requires all equipment to be inspected for oil, gas, diesel, anti-freeze, hydraulic fluid and other petroleum leaks. All such leaks will be properly repaired and equipment cleaned prior to being allowed on the project.

Leaks that occur after the equipment is moved to the project site will be fixed that same day or the next day or removed from the project area. The equipment is not allowed to continue operating once the leak is discovered.

B. Construction equipment should not be operated below the existing water surface except as follows:

a) Fording at one location is acceptable; however, vehicles should not push or pull material along bed or bank below the existing water level. Impacts from fording should be minimized.

b) Work below the waterline which is essential should be done in a manner to minimize impacts to the aquatic system and water quality.

C. All equipment that has been operated in waters of the US, with known invasive species infestation(s) is to be inspected and cleaned before entering waters of the U.S. for this permit. All equipment is to be inspected and cleaned after use.

12. Any temporary crossings, bridge supports, cofferdams or other structures that are necessary during the permit activity should be designed to handle high flows that can be anticipated during permit activity. All temporary structures should be completely removed from the waterbody at the conclusion of the permitted activity and the area restored to a natural appearance.

13. This certification does not authorize any unconfined discharge of liquid cement in waters of the United States. Grouting riprap must occur under dry conditions with no exposure of wet concrete to the waterbody.

14. All discharges must occur during the low flow or no flow period of the season.

## C. ADDITIONAL CONDITIONS FOR SPECIFIC NATIONWIDE PERMITS

In addition to the general conditions for all Nationwide Permits, the following conditions are specific to each listed nationwide permit.

#### Nationwide Permit 3. Maintenance Activities

A. For the repair of low water crossings, this certification is denied for discharges of any fill or dredged material that would result in an increase in land contour height beyond the original dimensions.

B. Silt and sediment removal associated with low water crossings shall be limited to a maximum of 50 linear feet.

C. Silt and sediment removal associated with bridge crossings shall be limited to a maximum of 100 linear feet.

# Nationwide Permit 4. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities

This certification does not allow for the introduction of non-native flora or fauna.

## Nationwide Permit 7. Outfall Structures and Associated Intake Structures

For construction and maintenance activities:

A. Construction of the outfall structure shall be placed at the streambed elevation and, at a minimum; the pipeline should be oversized to prevent high-pressure discharge of stormwater.

B. Certification is denied for construction of the outfall structure in wetlands.

C. Controls shall be put in place to stabilize all areas of the bed and bank around and adjacent to the outfall structure and associated intake structures that may be affected by outfall or stream flows, respectively.

D. This certification does not authorize structures for drainage activities that result in a loss of waters of the U.S., such as tile systems.

#### Nationwide Permit 11. Temporary Recreational Structures

This certification does not allow for the introduction of non-native flora or fauna.

#### Nationwide Permit 12. Utility Line Activities

A. Project proponent/contractor must have a copy of the 401 certification application and the EPA 2007 water-quality-certification-document on-site.

- B. Certification is denied for activities in perennial drainages and wetlands.
- C. Certification is denied for all water intake structures.

D. Activities in ephemeral and intermittent drainages are certified with the following conditions:

a) Crossings must be placed as close to perpendicular to the watercourse as possible.

b) Affected streambanks must be sloped such that the stream bottom width is not reduced and bottom elevations are restored to original elevations.

c) Disturbed stream banks must be reconfigured to mimic a stable naturally vegetated portion of the same stream within ½ mile in either direction of the project and not reduce the bottom width of the stream. If a natural/native stream reach is not available within the adjacent reach, other natural portions of the drainage can serve as a reference condition.

E. USACE General Condition 20. Mitigation, (72 Fed. Reg. 11092, 11193-11194 (March 12, 2007)) requires permittees to avoid and minimize adverse effects to the maximum extent practicable on the project site. A statement or other evidence that General Condition 20 has been met should be submitted.

F. Applications for this NWP water quality 401 certification must include the following detailed information at a minimum and will serve as baseline certification conditions for the project.

- a) Location and Wetland Map:
  - Narrative describing both the location (i.e., Section, Township Range, and decimal Latitude/Longitude) of the proposed construction project, the affected waters/wetlands, and the type of utility line.
  - An aerial photograph with wetland overlays must be provided with Ordinary High Water Mark delineated.

b) Waters of the U.S. Description:

- A description of the waterbody/wetlands including the dominant plant communities present in the wetlands or riparian areas.
- On-site photographs of the site must be taken during the growing season to include a colored overlay line indicating the alignment of the pipeline across the waterbody/wetlands or other construction features.
- c) Construction Description:
  - A description of the methods by which the utility will be constructed on the site including (but not limited to) the trench size and depth, backfill materials (specifications), construction machinery to be used, cofferdam or road crossing specifications, and best

management practices to be implemented on-site (including invasives controls).

- Access roads must be constructed outside of waters /wetlands where alternatives are available.
- Proposed under drains (tile, french drains, etc.) must be described if proposed with the project.
- Details on pipeline corrosion protection methods must be provided.
- Where a positive gradient exits the wetlands such that drainage along the pipeline may occur, clay blocks, or another suitable method that will protect aquatic resources from inadvertent drainage, are required to prevent said wetland drainage.
- Site-specific cross-sectional drawings should be provided, including a drawing of the clay block or other method used to stop drainage.
- d) Description of Impacts to Waters of the U.S.:
  - A description of the amount (acreage and square feet) of disturbance/loss to waters of the U.S. (including wetlands) must be provided. Loss of waters includes both temporary and permanent impacts to wetlands resources from the construction project, including access roads.
  - The length and width of the crossing and amount of impacts to the dominant plant communities must be provided.
  - All unavoidable temporary sidecasting of materials (dredge or fill material) in wetlands must be placed on landscaping fabric or a weed-free hay/straw layer to mark the existing wetlands elevation.
- e) Mitigation and Restoration Plan:
  - Where proposed construction of the utility results in the conversion of a wetland type (i.e., forested/shrub willow type) to an herbaceous wetland type (i.e., wet meadow type), mitigation of the shrub community must be accomplished on-site to restore designated uses.
  - The top six to 12 inches must be backfilled with topsoil from the trench.
  - Mitigation plans (including road design specifications to minimize adverse impacts to adjacent wetlands) for unavoidable impacts resulting from access roads must be provided.

## Nationwide Permit 13. Bank Stabilization

A. For this certification to be valid, the use of root wads, tree trunks, planting of live vegetation, proper bank sloping or a combination thereof will be used as bank stabilization structures. Native plants shall be planted in all disturbed areas and artificial soil stabilizing material (e.g. mulch, matting, netting etc) shall be used to reduce soil erosion. These materials, to include all plants and plant seed

shall be on site or scheduled for delivery prior to or upon completion of the earth moving activities. Sediment control measures shall be maintained in good working order at all times.

For the purpose of this condition, "proper sloping" is defined as configuring the disturbed bank to mimic a stable portion of the same stream within ½ mile in either direction of the project and not reduce the bottom width of the stream.

B. If flow conditions dictate the use of hardened structures, only appropriately sized angular rock may be used. The use of soil cement, concrete, grouted riprap, etc. is NOT certified.

### Nationwide Permit 14. Linear Transportation Projects

A. Stormwater resulting from both the construction and operation of these authorized projects (including runoff from bridge decks) must be routed into constructed runoff water quality control systems (e.g. sediment basins, wet ponds, etc.) in order to eliminate sediment and other pollutants prior to entry of stormwater into waters of the United States.

B. Affected streambanks must be sloped such that the steam bottom width is not reduced and bottom elevations are restored to original elevations.

C. Crossings must be placed as close to perpendicular to the watercourse as possible.

D. The upland and riparian areas adjacent to all sides of the crossing must be revegetated in all directions from the banks of the tributary with native vegetation that is common to the geographical area. Native plants shall be planted in all disturbed areas and artificial soil stabilizing material (e.g. mulch, matting, netting etc) shall be used to reduce soil erosion. These materials, to include all plants and plant seed shall be on site or scheduled for delivery prior to or upon completion of the earth moving activities.

### Nationwide Permit 15. U.S. Coast Guard Approved Bridges

A. Stormwater resulting from both the construction and operation of these authorized projects (including runoff from bridge decks) must be routed into constructed runoff water quality control systems (e.g. sediment basins, wet ponds, etc.) in order to eliminate sediment and other pollutants prior to entry of stormwater into waters of the United States.

B. Affected streambanks must be sloped such that the steam bottom width is not reduced and bottom elevations are restored to original elevations.

C. Crossings must be placed as close to perpendicular to the watercourse as possible.

D. The upland and riparian areas adjacent to all sides of the crossing must be revegetated in all directions from the banks of the tributary with native vegetation that is common to the geographical area. Native plants shall be planted in all disturbed areas and artificial soil stabilizing material (e.g. mulch, matting, netting etc) shall be used to reduce soil erosion. These materials, to include all plants and plant seed shall be on site or scheduled for delivery prior to or upon completion of the earth moving activities.

E. Bridge decks should be designed such that they do not drain directly into the waterbody.

Nationwide Permit 16. Return Water From Upland Contained Disposal Areas. Certification is denied.

#### Nationwide Permit 17. Hydropower Projects.

Certification is denied.

#### Nationwide Permit 19. Minor Dredging

A. Dredge or fill may **not** be placed on temporary islet, islands, sandbars, landmass or other area of sediment accumulation, within the banks of a stream, shore of lake, edge of wetland or other type of waterbody; unless the vegetation and geomorphology signify a long term stable configuration. (e.g. Areas of accumulation are not formed from temporary situations such as drought conditions or temporary upstream reservoir release conditions).

B. Dredge materials must be placed in an upland and controlled such that it cannot return to waters of the U.S.

# Nationwide Permit 21. Surface Coal Mining Operations. Nationwide Permit 21. Surface Coal Mining Activities

Certification is denied.

## Nationwide Permit 23. Approved Categorical Exclusions

This certification is valid only for Categorical Exclusions listed in RGL 05-07.

## Nationwide Permit 27. Aquatic Habitat Restoration, Establishment, and Enhancement Activities

A. This certification does not allow conversion of one habitat type to another (e.g. wetlands to open water, woody vegetation to herbaceous).

B. This certification does not allow for the introduction of non-native flora or fauna.

#### Nationwide Permit 28. Modifications of Existing Marinas

This certification does not allow for expansion.

#### Nationwide Permit 29. Residential Developments

A. Certification is denied for discharges into wetlands, intermittent or perennial drainages.

B. Subdivisions not authorized under this certification.

C. USACE General Condition 20. Mitigation (72 Fed. Reg. 11092, 11193-11194 (March 12, 2007)) requires permittees to avoid and minimize adverse effects to the maximum extent practicable on the project site. Statement or other evidence that General Condition 20 has been met should be submitted.

#### Nationwide Permit 30. Moist Soil Management for Wildlife

This certification does not allow for the introduction of non-native flora or fauna.

Nationwide Permit 33. Temporary Construction, Access and Dewatering Certification is denied.

## Nationwide Permit 34. Cranberry Production Activities

Certification is denied.

#### Nationwide Permit 37. Emergency Watershed Protection and Rehabilitation

A. In addition to the information specified in USACE General Condition 27 Preconstruction Notification (72 Fed. Reg. 11092, 11188 (March 12, 2007)), the notification to USEPA must include documentation that the work qualifies as an "emergency" situation and that immediate action will be taken if nationwide authorization is verified. In addition, notification must include:

a) A delineation of special aquatic sites;

b) Any spoil must be placed in an upland and controlled such that it cannot return to waters of the U.S.; and

c) A delineation of riparian areas to be cleared and an analysis of alternatives to such clearing.

B. Certification is denied for discharges for which notification is submitted more than one year after the official conclusion of the emergency that caused the situation.

C. Certification is denied for channelization of streams or sloughs or for removal of silt beyond what was deposited by the emergency.

Channelization is defined, for this purpose, as the placement of excess material in a manner that modifies the bank alignment, and subsequently the channel alignment, from its present condition.

D. Certification is denied for a discharge of fill or dredged material into special aquatic sites if a practicable alternative that does not involve discharge into a special aquatic site is available. If discharge into a special aquatic site is unavoidable, discharge must be minimized.

E. The disturbing or clearing of riparian areas shall be minimized to enough space to provide equipment access.

F. Construction of temporary structures or drains for the purpose of reducing or preventing flood damage is certified if the site is returned to pre-flood condition within 60 days following the emergency.

G. Repair of permanent structures damaged by floodwaters is certified to the extent that it returns the structure to pre-flood condition.

#### Nationwide Permit 38. Cleanup of Hazardous and Toxic Waste

For this certification to be valid, notification to USEPA and the Tribe is required.

## Nationwide Permit 39. Commercial and Institutional Developments

A. Certification is denied for discharges into wetlands, intermittent or perennial drainages.

B. Certification is denied for subdivisions

C. USACE General Condition 20. Mitigation, (72 Fed. Reg. 11092, 11193-11194 (March 12, 2007)) requires permittees to avoid and minimize adverse effects to the maximum extent practicable on the project site. Statement or other evidence that general condition 20 has been met should be submitted.

#### Nationwide Permit 40. Agricultural Activities

A. Certification is denied for the construction of new levees, ditches, or drainage activities.

B. Certification is denied for the construction of building pads causing the loss of greater than 1/10 acre of wetlands for both USDA program participants and non-participants.

C. Certification is denied for activities related to tile construction.

## Nationwide Permit 41. Reshaping Existing Drainage Ditches

A. Clearing of riparian corridors must be limited to the minimum necessary for project construction. Clearing limits must be specified in the construction contract.

B. This certification does not authorize stream relocation projects.

#### **Nationwide Permit 42. Recreation Facilities**

A. Certification is denied for the construction of parking lots, golf course, golf course buildings, ponds and reservoirs, ski areas and ski infrastructures, race tracks, and amusement parks.

B. Certification is denied for discharges resulting in the loss of more than 100 linear feet of channel, streambank, and/or wetlands for a single and complete project.

C. Clearing of riparian corridors and wooded and scrub shrub areas must be limited to the minimum necessary for project construction. Clearing limits must be specified in the construction contract on a drawing and/or map, and in narrative format.

## Nationwide Permit 43. Stormwater Management Facilities

Certification is denied for the construction of new stormwater management facilities.

- Nationwide Permit 44. Mining Activities. Nationwide Permit 44. Mining Activities Certification is denied.
- Nationwide Permit 45. Repair of Uplands Damaged by Discrete Events. Certification is denied.

## Nationwide Permit 46. Discharges in Ditches

Certification is denied.

### Nationwide Permit 47. Pipeline Safety Program Designated Time Sensitive Inspections and Repairs

A. Certification is denied, unless there is imminent danger to human health or the health of the environment.

B. Notification and restoration should begin immediately after inspections and repairs are completed. After the fact, notification should be done as soon as possible and include documentation that the work done qualifies as an "emergency" situation and that immediate action was necessary.

# Nationwide Permit 49. Coal Remining Activities. Certification is denied.

.

>

.

# Nationwide Permit 50. Underground Coal Mining Activities Certification is denied.

•

9

3

<del>.</del>....

## APPLICATION CHECKLIST FOR COMPLETENESS 401 CERTIFICATIONS for USACE NWPs

- 1. Application date.
- 2. Applicant's full identity whether individual or corporate.
- 3. Applicant's full mailing address or addresses.
- 4. Signature of the legal applicant is required.
- 5. Telephone number and e-mail address (and FAX, if available) at which the applicant may be reached during normal business hours.
- 6. If the applicant is utilizing the services of a legal agent to apply for certification, items 2, 3, 4 and 5 will be also needed for this agent.
- 7. Full names and addresses of all property owners of the project.
- 8. Full names and addresses of all adjoining property owners to the project.
- 9. Overall project description and range of project. (This includes all phases of work.)
- 10. Purpose of the project (flood control, drainage improvement, erosion control, road construction, etc.).
- 11. Project dimensions (length, width, height) expressed in standard, commonly-used, units of measurement.
- 12. Site maps and engineering drawings for more complex projects are recommended, sketches may suffice for smaller or less complex projects. Maps or aerial photographs should be clear and readable. Aerial photographs should be marked with wetlands, waterbodies or high water mark and areas of activity marked.
- 13. Legal description of the project location (appropriate breakdown into Section(s), Township, Range and County sufficient to locate and define on topographic maps). The notification should also include locational information in decimal degree latitude and longitude.
- 14. General travel directions to the site.
- 15. Name or identity of the water body(s) that the project is expected to impact. If the stream is not permanent flow, the applicant will need to include an evaluation by the Corps of Engineers that the water body is jurisdictional.
- 16. Specifically, state which NWP(s) the applicant is applying for from the USACE. Include measures of impact to waterbody (for example: acreage for surface water impacts, linear feet of bank, shoreline linear feet and acreage) for each NWP.
- 17. A statement of the cubic yards of material or fill proposed to be placed below the ordinary high water mark within the watercourse, in a wetland, or other waterbody and a complete description as to the source and type of material or fill to be used.
- 18. A complete description of all work initiated or completed prior to the application submission at this site and within the vicinity. If there has been recent work done by others, this should be noted also.
- 19. As unavoidable losses to the aquatic resources (including streams and wetlands) must be mitigated, a detailed mitigation plan must be submitted where such losses will be incurred.
- 20. Statement discussing the avoidance and minimization, a presumption of NWPs and required for individual permits.
- 21. Monitoring of site, including photograph of site from marked sites, photograph of site after work is complete.
- 22. Complete copy of USACE application or Checklist (such as the PCN Checklist available from Southern Pacific Division), with supporting material.

#### 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 crosssection). 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.

		MAN DEP	DMIT	OMB APPROVAL NO. 0710-0003				
APPLICATION	FOR DEPARTMENT OF THE AR (33 CFR 325)	SWI I	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.								
Act, Section 103, 33 USC 1413; R form will be used in evaluating the state, and local government agen requested information is voluntary original drawings or good reprodu	Regulatory Programs of the Corps of El application for a permit. Routine Uses cies, and the public and may be made <i>t</i> , however, if information is not provide (cible copies which show the location a	ingineers; es: This In available ed the per and chara	Final Rule 33 CFR 32 nformation may be sha a as part of a public no rmit application cannol icter of the proposed a	1344; Marine Protection, Research, and Sanctuaries 20-332. Principal Purpose: Information provided on this ared with the Department of Justice and other federal, stice as required by Federal law. Submission of t be evaluated nor can a permit be issued. One set of inctivity must be attached to this application (see sample in of the proposed activity. An application that is not				
(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)								
1. APPLICATION NO.			E RECEIVED	4. DATE APPLICATION COMPLETE				
NWO- 2010-00090-BLS (ITEMS BELOW TO BE FILLED BY APPLICANT)								
5. APPLICANT'S NAME: First - Middle - Last			First -	Middle - Last –				
Company			Company -					
E-mail Address			E-mail Address –	enteren et en part de la service de la compacta de 1933.				
6. APPLICANT'S ADDRESS. Address -			9. AGENT'S ADDRESS Address -					
City – State –	Zip – Country –		City-	State – Zip – Country –				
7. APPLICANT'S PHONE NOS. W/AREA CODE.			10. AGENT'S PHONE	NOs. W/AREA CODE				
a. Residence b. Business c. Fax			a. Residence b. Business c. Fax					
	STATE	MENT O	F AUTHORIZATIC	DN				
11. I hereby authorize, supplemental information in suppor		half as my	/ agent in the processin	g of this application and to furnish, upon request,				
APPLICANTS	S SIGNATURE		DATE					
	NAME, LOCATION, AND DE	ESCRIP	TION OF PROJEC	T OR ACTIVITY				
12. PROJECT NAME OR TITLE (s			Section of a					
13. NAME OF WATERBODY, IF KNOWN (if applicable)			14. PROJECT STREET ADDRESS (if applicable) Address					
15. LOCATION OF PROJECT								
Latitude: °N Longitude: °W	unde Audress Australia de Martines en la companya		City -	State – Zip -				
16. OTHER LOCATION DESCRIP State Tax Parcel ID Section – To	TIONS, IF KNOWN (see instructions) Municipality wwnship –	Range -		n and a second secon				
17. DIRECTIONS TO THE SITE								

ENG FORM 4345, SEPT 2009

222200

Proponent: CECW-OR

18. Nature of Activity (Description of project, include all fea	atures)				
19. Project Purpose (Describe the reason or purpose of th	e project, see instructions)				
USE BLOCKS 20-2	23 IF DREDGED AND/OF	R FILL MATERIAL IS TO BE DISCHARGED			
20. Reason(s) for Discharge					
	· · · · · · · · · · · · · · · · · · ·				
21. Type(s) of Material Being Discharged and the A	mount of Each Type in Cubic Ya				
Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards			
22. Surface Area in Acres of Wetlands or Other Wa Acres	ters Filled (see instructions)				
Or Liner Feet					
23. Description of Avoidance, Minimization, and Co	mpensation (see instructions)				
24. Is Any Portion of the Work Already Complete?	Yes 🔲 No 🛄 IF YES, DES	SCRIBE THE COMPLETED WORK			
25. Addresses of Adjoining Property Owners, Less	ces, Etc., Whose Property Adjoin	ns 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 AGENCY TYPE APPROVAL*	Received from other Federal, S IDENTIFICATION NUME	State, or Local Agencies for Work Described in This Application. BER DATE APPLIED DATE APPROVED DATE DEN	IED		
* Would include but is not restricted to zoning, building, and flood plain permits					
<ol> <li>Application is hereby made for a permit or p complete and accurate. I further certify that I po applicant.</li> </ol>	permits to authorize the work d ssess the authority to undertak	described in this application. I certify that the information in this application is the section of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or an acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly authorized agent of the work described herein or am acting as the duly at the work described herein or am acting as the duly at the work described herein or am acting as the duly at the work described herein or am acting as the duly at the work described herein or am acting as the duly at the work described herein or am acting as t	on is of the		
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT DATE			
	who desires to undertake the p	proposed activity (applicant) or it may be signed by a duly authorized ag	ent if the		
18 U.S.C. Section 1001 provides that: Whoever falsifies, conceals, or covers up any trick, sche	r, in any manner within the juris	isdiction of any department or agency of the United States knowingly an act or makes any false, fictilious or fraudulent statements or represent	ations or		
makes or uses any false writing or document \$10,000 or imprisoned not more than five years	knowing same to contain any or both.	false, fictitious or fraudulent statements or entry, shall be fined not m	iore than		

ENG FORM 4345, SEPT 2009



## United States Department of the Interior

BUREAU OF RECLAMATION Dakotas Area Office P.O. Box 1017 Bismarck, North Dakota 58502

JAN 19 2010

JAN 2 0 LUIN

Mr. Jerry D. Reinisch Environmental Planner II Kadrmas, Lee & Jackson, Inc. P.O. Box 1157 Bismarck, ND 58502-1157

Subject: Solicitation for Environmental Assessment for Eight Questar Exploration and Production Company Oil Wells, McLean County, Fort Berthold Reservation, North Dakota

Dear Mr Reinisch:

This letter is written to inform you that your letter was received on January 15, 2010, and the information and map have been reviewed by Bureau of Reclamation staff.

The Oil/Gas well sites located in McLean County could potentially affect Reclamation facilities in the form of the rural water pipelines of the Fort Berthold Rural Water System. Based on the provided map it appears the proposed wells are located in numerous sections in T. 149 N., R. 90 W. and T. 150 N., R. 90 W. Not less than three of the proposed wells are within ½ mile or less of a water pipeline either existing or proposed for construction. However, no consideration was given to the means utilized to access these proposed well sites so others may also be in the vicinity of facilities. Further, due to the scale of the map you have provided it is unclear as to the specific location of the wells within each of the sections listed. Our best efforts to interpret the provided map yield the following well locations:

#### McLean County

Section 6, T. 149 N., R. 90 W. Section 8, T. 149 N., R. 90 W. Section 32, T. 150 N., R. 90 W. Section 30 (two), T. 150 N., R. 90 W. Section 18 (two), T. 150 N., R. 90 W. Section 4, T. 150 N., R. 90 W.

We are providing a map and key depicting the vicinity of the proposed wells that could potentially affect Reclamation facilities. Since Reclamation is the lead Federal agency for the Fort Berthold Rural Water System, we request that any work planned on the reservation be coordinated with Mr. Marvin Danks, Fort Berthold Rural Water Director, Three Affiliated Tribes, 308 4 Bears Complex, New Town, North Dakota 58763.

fining

Thank you for providing the information and opportunity to comment. If you have any further questions, please contact me at 701-221-1287 or Ron Melhouse at 701-221-1288.

Sincerely,

Kelly B. McPhillips Environmental Specialist

and and the late of a spin of a spin of a spin of a spin of a

Enclosures - 3

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

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

> > 1.146

ыны (С.В. Бальба, 1993). 1. Мания (С. 1993) В. 2013. 1. Мания (С. 1993) В. 2013. 1. Канцерска (С. 1995) (В. 1994) 1. Сер (В. 1994), К. 1994 (Б. 2013).

aar waar een madage oo aasa oo bidaa magdetar een Groewees ee mar ku oo maaad wadd whar aadabid waar aaceen oo aasa de Skaar 25 milio aasaan oo finada waart ya Kuuse halaad Cheer (16 maar 2016) waar aa daabad gheend finaan yi'n maget reenere op tinga oo oo oo regeneerad oo haarees werd gedeno wad aar daabad gheend faar yaar oo ay tingad to shekalada di nafarees aa digaarees werd gedeno wad aar di waa Na maraat ee to to ta beed to shekalada di nafaraa oo oo regeneerad oo ta ta ta ta ta ta ta ta t







ORTH N





## United States Department of the Interior

#### FISH AND WILDLIFE SERVICE

Ecological Services 3425 Miriam Avenue Bismarck, North Dakota 58501



MAR 2 2010

Mr. Jerry D. Reinisch Environmental Planner II Kadrmas, Lee & Jackson, Inc. 128 Soo Line Drive P.O. Box 1157 Bismarck, North Dakota 58502

DECEIVE	
MAR 4 2010	IJ
Ву	

Re: Questar Exploration & Production Company, MHA Gathering System

Dear Mr. Reinisch:

This is in response to your January 14, 2010, letter regarding a proposed 12-mile project to install three pipelines (one each for oil, gas, and water) and an electric utility line, all within a 150-foot right-of-way on the Fort Berthold Reservation in McLean and Mountrail Counties. The proposed pipelines would carry oil and gas from eight wells operated by Questar Exploration and Production Company (Questar). We offer the following comments under the authority of and in accordance with the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA), and the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

In an e-mail dated October 13, 2009, the Bureau of Indian Affairs (BIA) designated Kadrmas, Lee & Jackson to represent the BIA for informal Section 7 consultation under the ESA. Therefore, the U.S. Fish and Wildlife Service (Service) is responding to you as the designated non-Federal representative.

#### **Cumulative Effects Analysis**

The January 14, 2010, letter does not state whether the eight wells that would be serviced by the proposed line have yet been constructed, but it is our understanding from discussions with you on February 22, 2010, and with Marilyn Bercier of the BIA on February 26, 2010, that at least some of them have not yet been permitted or constructed. The Service suggests that the applicant include all of the related projects in the proposal so that the cumulative effects of the project can be analyzed.

#### **Threatened and Endangered Species**

A list of federally 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 ESA. This list remains valid for 90 days. The BIA or designated non-Federal agent should make a determination of the proposed projects' effects on listed species, including whether there is anticipated destruction or adverse modification of designated critical habitat. This determination may be included in the Environmental Assessment (EA). It should state whether or not the BIA plans to incorporate the Service's recommendations to avoid and minimize any adverse effects. If the BIA does not plan to take the recommended measures, the document should explain why not.

Much of the proposed project, including several of the wells shown on the figure provided, is within one-half mile of designated critical habitat for the piping plover. Critical habitat can be viewed on the Service website (http://www.fws.gov /northdakotafieldoffice/endspecies/species/piping\_plover.htm). GIS layers of critical habitat can be obtained by contacting our office at the letterhead address. The Service suggests that Questar relocate the proposed project to maintain a one-half mile buffer from Lake Sakakawea reservoir. If Questar does not relocate the well, the Service requests that you inform us of how the proposed project will be designed so that neither construction nor ongoing operations of the wells and pipelines, including any potential spills, will impact critical habitat.

The Aransas Wood Buffalo Population (AWBP) of endangered whooping cranes 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 coast. Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations. They make numerous stops along their migration route to feed and roost before moving on. The proposed project lies within a 90 mile corridor that includes approximately 75 percent of all reported whooping crane sightings in the State (enclosure).

Whooping cranes are unlikely to spend more than a few days in any one spot during migration. The Service suggests that the EA include a requirement that if a whooping crane is sighted within one mile of a well site or associated facilities while it is under construction, that all work cease within one mile of that part of the project and the Service be contacted immediately. In coordination with the Service, work may resume after the bird(s) leave the area.

Currently, collisions with 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 roost in wetlands overnight, and may take up to a mile to gain altitude when taking off. Therefore, we recommend that the proposed line be buried, if at all possible, if it is within one-mile of suitable habitat. If it is not possible to bury the line, we recommend that it be marked using state-of-the art line marking devices to reduce the likelihood of a whooping crane striking the line. 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 the 75 percent migration corridor within one-mile of suitable habitat. Some of the available marking devices include: aerial marker spheres, swinging plates, spiral vibration dampers, and bird flight diverters.

Potential habitat for the Dakota skipper exists on the Fort Berthold Reservation. In 1995, the Dakota skipper was determined to be a candidate species under the ESA. No legal requirement exists to protect candidate species; however, it is within the spirit of the ESA to consider these species as having significant value and worth protecting.

The Dakota skipper is a small to medium-sized hesperiine butterfly associated with high quality prairie ranging from wet-mesic tallgrass prairie to dry-mesic mixed grass prairie. The first type of habitat is relatively flat and moist native bluestem prairie. Three species of wildflowers are usually present: wood lily (*Lilium philadelphicum*), harebell (*Campanula rotundifolia*), and smooth camas (*Zygadenus elegans*). The second habitat type is upland (dry) prairie that is often on ridges and hillsides. Bluestem grasses and needlegrasses dominate these habitats. On this habitat type, three wildflowers are typically present in high quality sites that are suitable for Dakota skipper: pale purple (*Echinacea pallida*) and upright (*E. angustifolia*) coneflowers and blanketflower (*Gaillardia sp.*). Because of the difficulty of surveying for Dakota skippers and a short survey window, we recommend that the project avoid any impacts to potential Dakota skipper habitat. If Dakota skipper habitat is present near the proposed project, and you intend to take precautions to avoid impacts to skipper habitat, please notify the Service for further direction.

#### **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. While the MBTA has no provision for allowing unintentional 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 (OLE) 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. 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, OLE 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 project construction and operation. Please inform us as to whether you intend to follow the following recommendations to minimize impacts to migratory birds, including bald and golden eagles.

To the extent practicable, construction should be scheduled for late summer or fall/early winter so as not to disrupt waterfowl or other wildlife during the breeding season (February 1 to July 15). 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 take all practicable measures to avoid and minimize take, such as maintaining adequate buffers, to protect the birds until the young have fledged. The Service further recommends that if field surveys for nesting birds are conducted with the intent of avoiding take, that any documentation of the presence of migratory birds, eggs, and active nests, along with information regarding the qualifications of the biologist(s) performing the surveys, and any avoidance measures implemented at the project site be maintained by the project proponent. Should surveys or other available information indicate a significant impact to migratory birds, the Service requests that this office be contacted for further consultation on the extent of the impact and the long-term implications of the intended use of the project on migratory bird

Bald and/or golden eagles may use the project area where the proposed pipelines will be located. Golden eagles inhabit a wide variety of habitat types, including open grassland areas. They are known to nest on cliffs, in trees, manmade structures, and on the ground (Kochert et al. 2002). There are numerous records of golden eagle nests on the Fort Berthold reservation (Pers. Comm. Anne Marguerite Coyle, Dickinson State University). While the bald eagle tends to be more closely associated with forested areas near water (Buehler 2000), they have been found nesting in single trees several miles from the nearest water body. Therefore, there may also be potential habitat for the bald eagle at the proposed project sites. Especially early in the nesting season, eagles can be very sensitive to disturbance near the nest site and may abandon their nest as a result of low disturbance levels, even from foot traffic. A buffer of at least 1/2 mile should be maintained for golden and bald eagle nests. A permit is required for any take of bald or golden eagles or their nests. Permits to take golden eagles or their nests are available only for legitimate emergencies and as part of a program to protect golden eagles.

The Service recommends that aerial raptor surveys be conducted prior to any on-theground activities. The Service recommends that an aerial nest survey (preferably by helicopter) be conducted within one mile of any proposed ground disturbances to identify active and inactive nest sites near the proposed well pad and associated facilities, including proposed new roads. Aerial surveys should be conducted between March 1 and May 15, before leaf-out so that nests are visible. Aerial surveys should include the following:

- 1. Due to the ability to hover and facilitate observations of the ground, helicopters are preferred over fixed wing aircraft, although small aircraft may also be used for the raptor surveys. Whenever possible, two observers should be used to conduct the surveys. Even experienced observers only find approximately 50 percent of nests on a flight (Pers. Comm. Anne Marguerite Coyle, Dickinson State University), so we recommend that two flights be performed prior to any on-theground work, including other biological surveys or other work.
- 2. Observations of raptors and nest sites should be recorded using GPS. The date, location, nest condition, activity status, raptor species, and habitat should be recorded for each sighting.
- 3. We request that you share the qualifications of the biologist(s) conducting the survey, method of survey, and results of the survey with the Service.

## High Value Habitat Avoidance

To minimize disturbance to fish and wildlife habitat in the project area, the Service provides the following recommendations:

- Make no stream channel alterations or changes in drainage patterns.
- Install and maintain appropriate erosion control measures to reduce sediment transport to adjacent wetlands and stream channels.
- Reseed disturbed areas with a mixture of native grass and forb species immediately after construction to reduce erosion.

## **Habitat Fragmentation**

Prairie habitat is increasingly being lost or fragmented because of the large number of wells and associated roads that are being constructed in areas of the State that were formerly relatively undeveloped. Only about 30 percent of native prairie in North Dakota remains from pre-settlement times (Strong et al. 2005), with nearly all native tallgrass prairie converted nationwide (Ricketts et al. 1999). Oil pads, associated roadways, and vehicle traffic can cause fragmentation of the landscape, disrupting wildlife patterns, and making it more likely that non-native plant species may invade an area. The Service recommends placing as few well pads as possible on the landscape and locating pads so as to avoid or minimize the construction of new roads. Many prairie species require large, contiguous blocks of grasslands for their biological needs and may either avoid patchy habitat or experience reduced reproductive success. The Service recommends that impacts to native prairie be avoided or minimized. If native prairie cannot be avoided,

the Service recommends outlining stringent reclamation requirements as described in the "Post-production Phase – Reclamation" section below.

The Service recommends that the BIA incorporate the relevant requirements described in the Dakota Prairie Grasslands Land and Resource Management Plan (USDA 2001). This document includes a number of requirements to avoid sensitive resources. In particular, the Service suggests that the BIA incorporate the relevant portions of Appendix D, Oil and Gas Stipulations.

#### **Post-production Phase – Reclamation**

Each project should include a plan to restore the landscape following project completion, including a bond sufficient to reclaim the area in full. Within one year of a well's closure, the well pads, roads, and associated facilities should be completely removed from the landscape, the land recontoured back to its original profile, and the area reseeded with a native prairie mix. Since native prairie species take some time to establish, and intensive management may be required for several years to ensure that weeds do not infest the area, the Service recommends that the BIA follow the timeline requirements set out in the 2003 North Dakota Public Service Commission, Standards for evaluation of revegetation success and recommended procedures for pre-and postmining vegetation assessments (available on-line at http://www.psc.state.nd.us/jurisdiction/ reclamation/files/revegdocjuly2003final.pdf). This document requires that reclaimed areas be managed for a minimum of ten years, starting in the year when first seeded. Starting in the sixth year, for at least two consecutive years, or three out of the last five, including the last year, the reclaimed area must meet the approved standard as described in the document.

For prairie areas, the Service recommends planting a diverse mixture of native cool and warm season grasses and forbs. While the North Dakota Public Service Commission document requires only five native grass species, 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.

Thank you for the opportunity to comment on this project. If you require further information or the project plans change, please contact me or Carol Aron of my staff at (701) 250-4481 or at the letterhead address.

Sincerely,

Jeffrey R. Nowner

Jeffrey K. Towner Field Supervisor North Dakota Field Office

;

Enclosures

cc: Bureau of Indian Affairs, Aberdeen (Attn: Marilyn Bercier)
Bureau of Land Management, Dickinson U.S. Army Corps if Engineers, Bismarck (Attn: Daniel Cimarosti)
ND Game & Fish Department, Bismarck

#### Literature Cited

- Buehler, David A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/506.
- Esmoil, B. 1995. Wildlife mortality associated with oil pits in Wyoming. Prairie Naturalist 27(2): 81-88.
- Kochert, M. N., K. Steenhof, C. L. Mcintyre and E. H. Craig. 2002. Golden Eagle (Aquila chrysaetos), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Accessed October 13, 2009. Available online at: <u>http://bna.birds.cornell.edu/bna/species/684</u>.
- Morkill, A.E. and S.H. Anderson. 1990. Effectiveness of marking powerlines to reduce sandhill crane collisions. Wyoming Cooperative Fish and Wildlife Research Unit. Laramie, Wyoming. 102 pp.
- Ricketts, T. H., E. Dinerstein, D. M. Olsen, C. J. Loucks, W. Eichbaum, D. DellaSala, K. Kavanagh, P. Hedao, P. T. Hurley, K. M. Carney, R. Abell, and S. Walters. 1999. Terrestrial ecoregions of North America: a conservation assessment. Island Press, Washington, D.C. 485 pages.
- Strong, L. L, T. H. Sklebar, and K. E. Kermes. 2005. The North Dakota Gap Analysis Project – Final Report. U.S. Geological Survey. 451 pages. Available online at http://www.npwrc.usgs.gov/projects/ndgap/NDGAP\_FinalReport\_complete.pdf.
- USDA. 2001. Land and resource management plan for the Dakota Prairie Grasslands Northern Region. Accessed October 13, 2009. Available at http://www.fs.fed.us/ngp/plan/feis\_plan\_dakota\_prairie.htm.

## FEDERAL THREATENED, ENDANGERED, AND CANDIDATE SPECIES AND DESIGNATED CRITICAL HABITAT FOUND IN MCLEAN COUNTY, NORTH DAKOTA March 2010

#### ENDANGERED SPECIES

#### <u>Birds</u>

- Interior least tern (Sterna antillarum): Nests along midstream sandbars of the Missouri and Yellowstone Rivers.
- Whooping crane (<u>Grus Americana</u>): Migrates through west and central counties during spring and fall. Prefers to roost on wetlands and stockdams with good visibility. Young adult summered in North Dakota in 1989, 1990, and 1993. Total population 140-150 birds.

## <u>Fish</u>

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

#### <u>Mammals</u>

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

#### THREATENED SPECIES

#### **Birds**

Piping plover (<u>Charadrius melodus</u>): 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

#### **Invertebrates**

Dakota skipper (<u>Hesperia dacotae</u>): Found in native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: 1) low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas; 2) upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple and upright coneflowers and blanketflower.
# DESIGNATED CRITICAL HABITAT

<u>Birds</u>

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

# FEDERAL THREATENED, ENDANGERED, AND CANDIDATE SPECIES AND DESIGNATED CRITICAL HABITAT FOUND IN MOUNTRAIL COUNTY, NORTH DAKOTA March 2010

### **ENDANGERED SPECIES**

#### <u>Birds</u>

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

Whooping crane (<u>Grus Americana</u>): Migrates through west and central counties during spring and fall. Prefers to roost on wetlands and stockdams with good visibility. Young adult summered in North Dakota in 1989, 1990, and 1993. Total population 140-150 birds.

#### <u>Fish</u>

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

#### <u>Mammals</u>

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

#### THREATENED SPECIES

#### <u>Birds</u>

Piping plover (<u>Charadrius melodus</u>): 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**

#### Invertebrates

Dakota skipper (<u>Hesperia dacotae</u>): Found in native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: 1) low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas; 2) upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple and upright coneflowers and blanketflower.

# DESIGNATED CRITICAL HABITAT

## <u>Birds</u>

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



North Dakota and Montana Whooping Crane Migration Corridor Central Flyway of the United States





W



Produced for Ecological Services Grand Island, NE Current to: 2007



·



# United States Department of the Interior

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



MAR 2 2010

Mr. Jerry D. Reinisch Environmental Planner II Kadrmas, Lee and Jackson 128 Soo Line Drive P.O. Box 1157 Bismarck, North Dakota 58502-1157

Re: Three exploratory oil and gas wells on the Fort Berthold Reservation

Dear Mr. Reinisch:

This is in response to your January 5, 2010, letter regarding proposed exploratory oil and gas wells on the Fort Berthold Reservation. Questar Exploration and Production Company (Questar) has proposed three exploratory oil and gas wells on the Fort Berthold Reservation, McLean County, North Dakota.

Specific locations are:

MHA-1-29-30H-150-90: <u>T. 150 N., R. 90 W.</u>, Section 32, NE1/4NE1/4 MHA-1-32-31H-150-90: <u>T. 150 N., R. 90 W.</u>, Section 32, SE1/4SE1/4 MHC-1-30H-150-90: <u>T. 150 N., R. 90 W.</u>, Section 30, SE1/4SE1/4

We offer the following comments under the authority of and in accordance with the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA), and the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

In an e-mail dated October 13, 2009, the Bureau of Indian Affairs (BIA) designated Kadrmas, Lee & Jackson to represent the BIA for informal Section 7 consultation under the ESA. Therefore, the U.S. Fish and Wildlife Service (Service) is responding to you as the designated non-Federal representative.

#### **Threatened and Endangered Species**

A list of federally 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 ESA. This list remains valid for 90 days. The BIA or designated non-Federal agent should make a determination of the proposed projects' effects on listed species, including whether there is anticipated destruction or adverse modification of designated critical habitat. This determination may be included in the Environmental Assessment (EA). It should state whether or not the BIA plans to incorporate the Service's recommendations to avoid and minimize any adverse effects. If the BIA does not plan to take the recommended measures, the document should explain why not.

There is designated critical habitat for the piping plover in McLean County. We recommend that a buffer of at least one-half mile be maintained from piping plover critical habitat. Critical habitat can be viewed on the Service website (<u>http://www.fws.gov/northdakotafieldoffice/endspecies/species/piping\_plover.htm</u>). GIS layers of critical habitat can be obtained by contacting our office at the letterhead address.

According to our records, well MHC-1-30H-150-90 is within one-half mile of piping plover critical habitat. The Service recommends that Questar relocate the well and associated roads and facilities at least one-half mile away from critical habitat. Our goal is to protect nesting piping plovers and their habitat. If there are topographical features that would protect nesting birds and critical habitat from disturbance and prevent any spills from reaching critical habitat, the well pad could be placed closer, in consultation with the Service. We recommend that the BIA consult with us, as needed, regarding the location of the well.

The Aransas Wood Buffalo Population (AWBP) of endangered whooping cranes 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 coast. Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations. They make numerous stops along their migration route to feed and roost before moving on.

Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations. The proposed project lies within a 90 mile corridor that includes approximately 75 percent of all reported whooping crane sightings in the State (enclosure).

Whooping cranes are unlikely to spend more than a few days in any one spot during migration. The Service suggests that the EA include a requirement that if a whooping crane is sighted within one mile of a well site or associated facilities while it is under construction, that all work cease within one mile of that part of the project and the

Service be contacted immediately. In coordination with the Service, work may resume after the bird(s) leave the area.

Potential habitat for the Dakota skipper exists on the Fort Berthold Reservation. In 1995, the Dakota skipper was determined to be a candidate species under the ESA. No legal requirement exists to protect candidate species; however, it is within the spirit of the ESA to consider these species as having significant value and worth protecting.

The Dakota skipper is a small to medium-sized hesperiine butterfly associated with high quality prairie ranging from wet-mesic tallgrass prairie to dry-mesic mixed grass prairie. The first type of habitat is relatively flat and moist native bluestem prairie. Three species of wildflowers are usually present: wood lily (*Lilium philadelphicum*), harebell (*Campanula rotundifolia*), and smooth camas (*Zygadenus elegans*). The second habitat type is upland (dry) prairie that is often on ridges and hillsides. Bluestem grasses and needlegrasses dominate these habitats. On this habitat type, three wildflowers are typically present in high quality sites that are suitable for Dakota skipper: pale purple (*Echinacea pallida*) and upright (*E. angustifolia*) coneflowers and blanketflower (*Gaillardia sp.*). Because of the difficulty of surveying for Dakota skippers and a short survey window, we recommend that the project avoid any impacts to potential Dakota skipper habitat. If Dakota skipper habitat is present near the proposed project, and you intend to take precautions to avoid impacts to skipper habitat, please notify the Service for further direction.

#### **Migratory Birds**

The MBTA has no provisions for incidental take. Regardless, it is understood that some birds may be killed even if all reasonable conservation measures are implemented. The Service's Office of Law Enforcement carries out its mission to protect migratory birds through investigations and enforcement, and through fostering relationships with individuals and industries seeking to eliminate their impacts to migratory birds. While it is not possible under the MBTA and BGEPA to absolve individuals or companies from liability by following these guidelines, enforcement will be focused on those individuals or companies that take migratory birds with disregard for the law, and where no legitimate conservation measures have been applied. Please inform us as to whether you intend to follow the following recommendations to minimize impacts to migratory birds, including bald and golden eagles.

Schedule construction for late summer or fall/early winter so as not to disrupt migratory birds or other wildlife during the breeding season (February 1 to July 15). 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 arrange to have a qualified biologist conduct a field survey of the affected habitats to determine the presence of nesting migratory birds. If nesting migratory birds, their eggs, or active nests are found, we request you contact this office, suspend construction, or take other measures, such as maintaining adequate buffers, to protect the birds until the young have fledged. The Service further recommends that field surveys for nesting birds, along with information regarding the qualifications of the biologist(s) performing the surveys and any avoidance measures implemented at the project site, be thoroughly documented and that such documentation be shared with the Service and maintained on file by the project proponent.

The Service estimates that 500,000 to 1 million birds are killed nationwide every year from exposed oil at oil drilling and/or production sites. The unauthorized take of migratory birds at oil production facilities can be prevented with a minimum of expense and effort. Wildlife mortalities in North Dakota are most often observed in association with drilling reserve pits, flare pits, and/or drip buckets and barrels. The Service strongly recommends that the pads be constructed as closed-loop systems, without a reserve pit. Regardless of whether the pads are built with reserve pits, we recommend that the BIA include the following measures in the EA so as to ensure compliance with the MBTA.

- Keep Oil Off Open Pits or Ponds. Immediate clean up of oil in open pits is critical to prevent wildlife mortalities.
- Place Covers on Drip Buckets/Barrels Located Under Valves and Spigots. Bird entrapments are common within the small (55 gallon or less) barrels placed under valves and spigots to collect dripped oil. Placing a wire mesh or grate over the top of these barrels is a very practical way of preventing access for wildlife.
- Use Effective and Proven Exclusionary Devices. Netting is the most effective method of keeping birds from entering open pits (reserve and flare pits). Flagging, reflectors, and strobe lights are not effective. Published scientific studies as well as field inspections by Service personnel have documented bird mortalities at oil pits with flagging, reflectors, and strobe lights (e.g. Esmoil 1995). The effectiveness of netting pits to exclude birds and other wildlife depends on its installation. Effective installation requires a design allowing for snow-loading and one that also prevents ground entry by small mammals and birds. A maximum mesh size of 1.5 inches will allow for snow-loading and will exclude most birds. Nets or wire mesh over flare pits can be implemented if the flare tube is high enough to keep flame away from the net. Some examples of both effective and ineffective netting techniques can be found on the Service's website at http://www.fws.gov/mountain%2Dprairie/contaminants/contaminants1c.html.

Bald and/or golden eagles may use the project area where the proposed wells will be located. Golden eagles inhabit a wide variety of habitat types, including open grassland areas. They are known to nest on cliffs, in trees, manmade structures, and on the ground (Kochert et al. 2002). There are numerous records of golden eagle nests on the Fort Berthold reservation (Pers. Comm. Anne Marguerite Coyle, Dickinson State University). While the bald eagle tends to be more closely associated with forested areas near water (Buehler 2000), they have been found nesting in single trees several miles from the nearest water body. Therefore, there may also be potential habitat for the bald eagle at the proposed project sites. Especially early in the nesting season, eagles can be very sensitive to disturbance near the nest site and may abandon their nest as a result of low disturbance levels, even from foot traffic. A buffer of at least 1/2 mile should be maintained for golden and bald eagle nests. A permit is required for any take of bald or golden eagles or their nests. Permits to take golden eagles or their nests are available only for legitimate emergencies and as part of a program to protect golden eagles.

The Service recommends that aerial raptor surveys be conducted prior to any on-theground activities. The Service recommends that an aerial nest survey (preferably by helicopter) be conducted within one mile of any proposed ground disturbances to identify active and inactive nest sites near the proposed well pad and associated facilities, including proposed new roads. Aerial surveys should be conducted between March 1 and May 15, before leaf-out so that nests are visible.

Aerial surveys should include the following:

- 1. Due to the ability to hover and facilitate observations of the ground, helicopters are preferred over fixed wing aircraft, although small aircraft may also be used for the raptor surveys. Whenever possible, two observers should be used to conduct the surveys. Even experienced observers only find approximately 50 percent of nests on a flight (Pers. Comm. Anne Marguerite Coyle, Dickinson State University), so we recommend that two flights be performed prior to any on-the-ground work, including other biological surveys or other work.
- 2. Observations of raptors and nest sites should be recorded using GPS. The date, location, nest condition, activity status, raptor species, and habitat should be recorded for each sighting.
- 3. We request that you share the qualifications of the biologist(s) conducting the survey, method of survey, and results of the survey with the Service.

#### **High Value Habitat Avoidance**

To minimize disturbance to fish and wildlife habitat in the project area, the Service provides the following recommendations:

- Make no stream channel alterations or changes in drainage patterns.
- Install and maintain appropriate erosion control measures to reduce sediment transport to adjacent wetlands and stream channels.
- Reseed disturbed areas with a mixture of native grass and forb species immediately after construction to reduce erosion.

#### **Cumulative Effects Analysis**

A large number of wells and appurtenant facilities are being constructed in the western portion of North Dakota. The Service is concerned that the wells, and especially the associated roads, are being put in piecemeal without an overarching plan to ensure that the facilities are being constructed to access all new pads most efficiently, while disturbing the least amount of habitat. While we understand that there is still some level of uncertainty regarding the extent of the oil formations, there has been enough drilling in this area that the Service believes that the uncertainty is relatively small and decreasing. It would be appropriate for the EA to include some cumulative effects analysis of the existing and proposed pads, roads, electrical transmission lines, and preferably pipelines to transport the products.

#### **Habitat Fragmentation**

Prairie habitat is increasingly being lost or fragmented because of the large number of wells and associated roads that are being constructed in areas of the State that were formerly relatively undeveloped. Only about 30 percent of native prairie in North Dakota remains from pre-settlement times (Strong et al. 2005), with nearly all native tallgrass prairie converted nationwide (Ricketts et al. 1999). Oil pads, associated roadways, and vehicle traffic can cause fragmentation of the landscape, disrupting wildlife patterns, and making it more likely that non-native plant species may invade an area. The Service recommends placing as few well pads as possible on the landscape and locating pads so as to avoid or minimize the construction of new roads. Many prairie species require large, contiguous blocks of grasslands for their biological needs and may either avoid patchy habitat or experience reduced reproductive success.

- The Service recommends that impacts to native prairie be avoided or minimized. If native prairie cannot be avoided, the Service recommends outlining stringent reclamation requirements, including a bond sufficient to cover the cost of reclamation, as described in the "Post-production Phase – Reclamation" section below.
- The Service recommends that oil wells use existing roads and trails to the greatest extent possible, minimizing all new road construction.
- If a new road is necessary, the Service recommends avoiding native prairie to the greatest extent possible.
- If new roads are constructed, the Service recommends that the disturbed areas along the road be reseeded immediately with a native prairie mix to reduce crosion and prevent invasion by non-native species. Disturbed areas should be monitored regularly throughout the life of the project, and treated with herbicide as necessary to ensure that exotic species are not infesting disturbed areas.

- If multiple companies are developing well pads in the same general area, roads should be shared to the greatest extent possible to minimize disturbance.
- Install and maintain appropriate erosion control measures to reduce sedimentation and water quality degradation of wetlands and streams near the project area.

The Service recommends that the BIA incorporate the relevant requirements described in the Dakota Prairie Grasslands Land and Resource Management Plan (USDA 2001). This document includes a number of requirements to avoid sensitive resources. In particular, the Service suggests that the BIA incorporate the relevant portions of Appendix D, Oil and Gas Stipulations.

Two of the proposed wells (MHA-1-29-30H-150-90) and (MHA-1-32-31H-150-90) are in the same section. In order to minimize disturbance, the Service recommends minimizing roads to the greatest extent possible. This includes drilling from the fewest number of well pads practicable. The Service suggests that the EA should explain why it is necessary to drill using a 340-acre spacing for these wells as opposed to just drilling from a single pad.

#### **Post-production Phase – Reclamation**

Each project should include a plan to restore the landscape following project completion, including a bond sufficient to reclaim the area in full. Within one year of a well's closure, the well pads, roads, and associated facilities should be completely removed from the landscape, the land recontoured back to its original profile, and the area reseeded with a native prairie mix. Since native prairie species take some time to establish, and intensive management may be required for several years to ensure that weeds do not infest the area, the Service recommends that the BIA follow the timeline requirements set out in the 2003 North Dakota Public Service Commission, Standards for evaluation of revegetation success and recommended procedures for pre-and postmining vegetation assessments (available on-line at http://www.psc.state.nd.us/jurisdiction/ reclamation/files/revegdocjuly2003final.pdf). This document requires that reclaimed areas be managed for a minimum of ten years, starting in the year when first seeded. Starting in the sixth year, for at least two consecutive years, or three out of the last five, including the last year, the reclaimed area must meet the approved standard as described in the document.

For prairie areas, the Service recommends planting a diverse mixture of native cool and warm season grasses and forbs. While the North Dakota Public Service Commission document requires only five native grass species, 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.

. .

Thank you for the opportunity to comment on this project. If you require further information or the project plans change, please contact me or Carol Aron of my staff at (701) 250-4481 or at the letterhead address.

Sincerely,

Jeffrez K. 1'ourer

Jeffrey K. Towner Field Supervisor North Dakota Field Office

Enclosures

 cc: Bureau of Indian Affairs, Aberdeen (Attn: Marilyn Bercier)
Bureau of Land Management, Dickinson U.S. Army Corps of Engineers, Bismarck ND Game & Fish Department, Bismarck

(connective lawelessages) if a second subscreece of the control of the control of the mean is the second subscreece of the control of the mean is the control of the con

#### Literature Cited

- Buehler, David A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/506.
- Esmoil, B. 1995. Wildlife mortality associated with oil pits in Wyoming. Prairie Naturalist 27(2): 81-88.
- Kochert, M. N., K. Steenhof, C. L. Mcintyre and E. H. Craig. 2002. Golden Eagle (Aquila chrysaetos), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Accessed October 13, 2009. Available online at: http://bna.birds.cornell.edu/bna/species/684.
- Ricketts, T. H., E. Dinerstein, D. M. Olsen, C. J. Loucks, W. Eichbaum, D. DellaSala, K. Kavanagh, P. Hedao, P. T. Hurley, K. M. Carney, R. Abell, and S. Walters. 1999. Terrestrial ecoregions of North America: a conservation assessment. Island Press, Washington, D.C. 485 pages.
- Strong, L. L, T. H. Sklebar, and K. E. Kermes. 2005. The North Dakota Gap Analysis Project – Final Report. U.S. Geological Survey. 451 pages. Available online at http://www.npwrc.usgs.gov/projects/ndgap/NDGAP FinalReport complete.pdf.
- USDA. 2001. Land and resource management plan for the Dakota Prairie Grasslands Northern Region. Accessed October 13, 2009. Available at http://www.fs.fed.us/ngp/plan/feis plan dakota prairie.htm.

## FEDERAL THREATENED, ENDANGERED, AND CANDIDATE SPECIES AND DESIGNATED CRITICAL HABITAT FOUND IN MCLEAN COUNTY, NORTH DAKOTA March 2010

#### **ENDANGERED SPECIES**

#### <u>Birds</u>

- Interior least tern (<u>Sterna antillarum</u>): Nests along midstream sandbars of the Missouri and Yellowstone Rivers.
- Whooping crane (<u>Grus Americana</u>): Migrates through west and central counties during spring and fall. Prefers to roost on wetlands and stockdams with good visibility. Young adult summered in North Dakota in 1989, 1990, and 1993. Total population 140-150 birds.

#### <u>Fish</u>

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

#### <u>Mammals</u>

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

#### THREATENED SPECIES

#### <u>Birds</u>

Piping plover (<u>Charadrius melodus</u>): 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

#### **Invertebrates**

Dakota skipper (<u>Hesperia dacotae</u>): Found in native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: 1) low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas; 2) upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple and upright coneflowers and blanketflower.

# DESIGNATED CRITICAL HABITAT

<u>Birds</u>

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

;



North Dakota and Montana Whooping Crane Migration Corridor Central Flyway of the United States



HA A

A

%06 95%

z-Ç

Produced for Ecological Services Grand Island, NE Current to: 2007





January 14, 2010

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

Re:

**Ouestar Exploration & Production Company MHA Gathering System** Environmental Assessment-Mclean & Mountrail Counties, ND

Dear Mr. Steve Obenauer:

On behalf of Questar Exploratory and Production Company, Kadrmas, Lee & Jackson, Inc. are preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs). The proposed action includes approval by the BIA of the development of three pipelines (oil, gas, and water) and an electric utility line approximately 12 miles long, all within a 150-foot right-ofway, on the Fort Berthold Reservation in McLean and Mountrail Counties. The oil and gas pipelines would likely be installed first, with the water pipeline and utility line added at a later date.

The proposed action would provide infrastructure to collect oil and gas from 8 wells operated by Questar Exploration and Production Company, and transport it to a pipelines operated by EOG, located at the north end of the proposed project. Please refer to the enclosed project location map. Construction of the proposed pipeline is scheduled to begin as early as spring 2010.

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

Please provide your comments by February 15, 2010. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

If you would like further information regarding this project, please contact Tracy Opp, Questar Exploration and Production Company Permit Agent-Contracts, at (303) 308-3630 or me at (701) 355-8705. Thank you for your cooperation.

Sincerely,

Kadrmas, Lee & Jackson, Inc.

= Q. R.

Jerry D. Reinisch **Environmental Planner II** 

Jdf/ 1709119 BG 18

**Enclosure Location Map** 

c: file

U.S. Department

of Transportation **Federal Aviation** Administration

0/2010

Dear Wh

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

attera

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

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

A KLJ Solutions Company

701 355 8400



#### 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



January 28, 2010

Mr. Jerry D. Reinisch Environmental Planner Kadrmas, Lee & Jackson, Inc. P.O. Box 1157 Bismarck, ND 58502-1157

RECEIVED FEB 0 2 2010

Re: Questar Exploration & Production Company MHA Gathering System on the Fort Berthold Reservation McLean & Mountrail Counties

Dear Mr. Reinisch:

This department has reviewed the information concerning the above-referenced project submitted under date of January 14, 2010, with respect to possible environmental impacts.

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

- 1. All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise are to be dealt with in an efficient and effective manner.
- 2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
- 3. Projects disturbing one or more acres are required to have a permit to discharge storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Projects located within tribal boundaries are required to obtain a permit from the U.S. Environmental Protection Agency. Further information on the storm water permit may be obtained from the U.S. EPA's website or by calling the U.S. EPA Region 8 at (303-312-6312). Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.

Environmental Health Section Chief's Office 701.328.5150 Division of Air Quality 701.328,5188 Division of Municipal Facilities 701.328.5211 Division of Waste Management 701.328.5166 Division of Water Quality 701.328.5210

Printed on recycled paper.

#### Mr. Jerry D. Reinisch

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.

The West Part of the State

2.





# **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.

Environmental Health Section Chief's Office 701.328.5150 Division of Air Quality 701.328.5188 Division of Municipal Facilities 701.328.5211 Division of Waste Management 701.328.5166 Division of Water Quality 701.328.5210

Printed on recycled paper.



# North Dakota Department of Transportation

Francis G. Ziegler, P.E. Director

John Hoeven Governor

January 21, 2010

Jerry D. Reinisch Environmental Planner II Kadrmas Lee & Jackson, Inc. P.O. Box 1157 Bismarck, ND 58502-1157

AN EA TO DEVELOP THREE PIPELINES (OIL, GAS, AND WATER) AND AN ELECTRIC UTILITY LINE ON FORT BERTHOLD RESERVATION, QUESTAR EXPLORATION AND PRODUCTION COMPANY, MCLEAN AND MOUNTRAIL COUNTIES, NORTH DAKOTA

We have reviewed your January 14, 2010, letter.

This project should have no adverse effect on the North Dakota Department of Transportation highways.

However, if because of this project any work needs to be done on highway right-of-way, appropriate permits and risk management documents will need to be obtained from the Department of Transportation District Engineer, Jim Redding at 701-837-7625.

RONALD J. HENKE, P.E., DIRECTOR – OFFICE OF PROJECT DEVELOPMENT

57:rjh:js

c: Jim Redding, Minot District Engineer



February 8, 2010

Jerry D. Reinisch Environmental Planner II Kadrmas, Lee & Jackson, Inc. PO Box 1157 Bismarck, ND 58502-1157

Dear Mr. Reinisch:

RE: MHA Gathering System

Questar Exploration and Production Company is proposing the development of three pipelines (oil, gas and water) and an electric utility line within a 150-foot ROW on the Fort Berthold Reservation in McLean and Mountrail Counties, North Dakota.

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

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

Sincerely,

Steve Dyke

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

js



John Hoeven, Governor Douglass A. Prchal, 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

January 29, 2010

Jerry D. Reinisch Kadrmas, Lee & Jackson PO Box 1157 Bismarck, ND 58502-1157

Re: Questar Exploration & Production Company MHA Gathering System Project Three Pipelines and an Electric Utility Line

Dear Mr. Reinisch:

The North Dakota Parks and Recreation Department (NDPRD) has reviewed the above referenced project proposal to develop three pipelines and an electric utility line located in Sections 5, 6, and 8, T149N, R90W; Sections 4, 5, 7-9, 16-18, 20, 21, and 28-33, T150N, R90W; McLean County; and Sections 32 and 33, T151N, R90W; Mountrail County.

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

The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any current or historic plant or animal species of concern or other significant ecological communities are known to occur within an approximate onemile radius of the project area. Based on this review, we do have records for the occurrence of *Charadrius melodus* (piping plover) and *Sterna antillarum* (least tern) in sections adjacent to the project area indicating that the habitat in the project area may be suited for these species or other rare, threatened, sensitive or endangered species. Please see the attached spreadsheet and map for more information on these occurrences. We defer further comments regarding animal species to the North Dakota Game and Fish Department and the United States Fish and Wildlife Service.

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

Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

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

Sincerely,

esse Hanson, Coordinator Planning and Natural Resources Division

R.USNDNHI\*2010-024

Play in our backyard!



# North Dakota Parks and Recreation Department North Dakota Natural Heritage Inventory

January 2010

North Dakota Natural Heritage Inventory Rare Animal and Plant Species and Significant Ecological Communities

								Estimated	
		State	Global	State Global Federal			Last	Representation	
State Scientific Name	State Common Name	Rank	Rank	Status	Rank Rank Status Township Range Section County Observation	County	Observation	Accuracy	Precision
Charadrius melodus	Piping Plover	S1S2	S1S2 G3	LE, LT	LE, LT   149N090W - 09	McLean 1996	1996		S
Charadríus melodus	Piping Plover	S1S2	63	LE, LT	LE, LT 149N090W - 16	McLean	McLean 2000-05-06	Medium	S
Charadrius melodus	Piping Plover	S1S2	63	LE, LT	LE, LT 149N090W - 18	McLean 1992	1992		S
Sterna antillarum	Least Tern	S1	G4		149N090W - 18	McLean 1992-07	1992-07		S

:

· · · · · · · ·

North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer     The quantity and quality of data collected by the North Dakota Natural Heritage Inventory are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in North Dakota markow part of North Dakota. Natural Heritage Inventory cannot provide a definite statement on the presence, absence, or condition of biological elements in any part of North Dakota. Natural Heritage data sunveys, many natural areas in North Dakota are continually upgraded and information is continually being added to the database. This data should never be regarded as final statements on the elements or areas that are being considered, nor should they be substituted for on-site surveys.     Value that indicates the approximate percentage of the Element Occurrence Representation Accuracy     Value that indicates the approximate percentage of the Element Occurrence Representation Accuracy     Value that indicates the approximate percentage of the Element Occurrence Representation Accuracy     Very high (>50%, <= 35%)     Medium (>20%, <= 80%)     High (>80%, <= 50%)
(null) - Not assessed (null) - Not assessed
A single-letter code for the precision used to map the Element Occurrence (EO) on a U.S. Geological Survey (USGS) 7.5' (or 15') topographic quadrangle map, based on the previous Heritage methodology in which EOs were located on paper maps using dots. S - Seconds: accuracy of locality mappable within a three-second radius; 100 meters from the centerpoint
M - Millute: accuracy of locality mappable to map or place name precision only; 8 km from centerpoint G - General: accuracy of locality mappable to map or place name precision only; 8 km from centerpoint U - Unmappable



February 17, 2010

Jerry Reinisch PO Box 1157 Bismarck, ND 58502-1157



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

Dear Mr. Reinisch:

This is in response to your request for review of environmental impacts associated with the Ouestar Exploration & Production Company MHA Gathering System, McLean and Mountrail Counties, ND.

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

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

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

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

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

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

Sincerely,

Larry Knudtson **Research Analyst** 

LJK:ds/1570



709 6<sup>th</sup> Ave P.O. Box 1108 Washburn, ND 58577-1108 Phone (701) 462-8809 Fax (701) 462-3523 rfwagner@nd.gov

January 20, 2010

Office of

Ron Wagner

Highway Superintendent

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

Re: Questar Exploration & Production Company MHA Gathering System Environmental Assessment – McLean & Mountrail Counties, ND

Questar MHA-1-29-30H-150-90, MHA-1-32-31H-150-90, MHA-1-30H-150-90 Well Pads and Access Roads

Kadrmas Lee & Jackson,

While we welcome the oil activity in western McLean County it also comes with some concerns. As you may well know the roads in the area, although in the reservation have been taken care of by McLean County. It is our concern with the road damages that occur due to heavy traffic as well as safety concerns with the additional traffic. Who bears the costs with these damages? Can agreements be written up so roads are repaired when damaged so the tax payers do not have to bear the expense as well as have safe public travel during this construction?

We realize the pipelines will help for future traffic, but are concerned with the roads during construction.

----- Thank you,

need & Wegner

Ronald F. Wagner McLean County Superintendent of Highways

PLANNING & ZONING BOARD COUNTY OF MOUNTRAIL PO Box 248 Stanley, North Dakota 58784-0248 (701) 628-2909 donl@co.mountrail.nd.us

**Board Members:** 

STANLEY WRIGHT MICHAEL HYNEK LOREN HOFFMAN **ROSEMARIE BIERI** DUANE LINDBERG ARLO BORUD DARRELL SALTER



January 18, 2010

Jerry D. Reinisch **Environmental Planner II** Kadrmas Lee & Jackson P.O. Box 1157 Bismarck, ND 58502-1157

Re: Letter dated January 14, 2010

Dear Mr. Reinisch:

Mountrail County has had a Zoning Ordinance in place since 1982. I call your attention to Article II Section IV and Article V Section II Paragraph 31, an excerpt of which is included. Please note Questar Exploration & Production Company will need to apply for a conditional use permit prior to any oil and gas pipeline construction taking place.

If you have any questions, please contact our office.

Sincerely,

Donald W. Longmuir Jr., AICP

**Zoning Administrator** 

Enclosure

#### Excerpt from the Mountrail County Zoning Ordinance Article II

#### Sec. IV Utilities:

- A. All new utilities shall be considered as a conditional use and, as such, shall conform to all requirements put on them by the Planning Commission.
- B. No conditional use permit shall be issued unless satisfactory provisions for the following has been made:
  - 1. Underground utilities shall be placed a minimum depth of four (4) feet so as not to constitute a hazard to normal farming or general county maintenance.

a. Above ground utilities shall be placed in a manner which will not place undue hardship on normal farming operations.

b. Shall conform with section lines, highway (state and federal) and railroad rightof-ways.

- 1. The activities will not result in undue damage or injury to roads, bridges, rights-of-way in the county or to any county, public, or private property.
- 2. Excavation costs for purposes of construction or maintenance of a utility shall be borne by the contractor or owner of said utility.

#### Article V Section II Definitions:

31. <u>Utilities:</u> For the purpose of this ordinance, the definition of utilities shall be limited to electrical transmission lines, oil pipelines and natural gas pipelines. This definition shall exclude electrical distribution lines as a utility.

If you have any questions please contact the Mountrail County Zoning Administrator's Office. The contact information is:

Zoning Administrator Mountrail County P.O. Box 248 Stanley, ND 58784-0248 Telephone #701.628.2909 donl@co.mountrail.nd.us

# **Notice of Availability and Appeal Rights**

Questar: MHA Gathering System

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals for the development and construction of the MHS Gathering System as shown on the attached map. Construction by Questar is expected to begin in the spring of 2010.

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

The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA's decision to proceed with administrative actions *can* be appealed until June 10, 2010, by contacting:

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

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

## **Project locations.**



11