

# 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

JUL 2 8 2010

#### **MEMORANDUM**

TO:

Superintendent, Fort Berthold Agency

FROM: Acting 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 two proposed exploratory drilling wells by Marathon Oil Company named TAT-USA #13-23H and Jones 14-14H 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, Tribal Historic Preservation Officer (with attachment) Roy Swalling, Bureau of Land Management (with attachment) Jonathon Shelman, Corps of Engineers (with attachment) Dawn Charging, Virtual One Stop Shop, Fort Berthold Agency Jeffrey Towner, Field Supervisor, U.S. Fish and Wildlife Service

# **ENVIRONMENTAL ASSESSMENT**

#### **United States Bureau of Indian Affairs**

Great Plains Regional Office Aberdeen, South Dakota



# **Marathon Oil Company**

Drilling of TAT – USA #13-23H & Jones – USA #14-14H Exploratory Oil & Gas Wells

**Fort Berthold Indian Reservation** 

**July 2010** 

For information contact:
Bureau of Indian Affairs, Great Plains Regional Office
Division of Environment, Safety and Cultural Resources
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#### **Finding of No Significant Impact**

#### Marathon Oil Company (Marathon)

# Environmental Assessment for Drilling of TAT – USA #13-23H & Jones – USA #14-14H Exploratory Oil & Gas Wells

# Fort Berthold Indian Reservation McKenzie County, North Dakota

The U.S. Bureau of Indian Affairs (BIA) has received a proposal to drill two oil and gas wells located atop two well pads as follows:

- TAT USA #13-23H located in T151N, R94W, 5<sup>th</sup> P.M., Section 22
- Jones USA #14-14H located in T151N, R94W, 5<sup>th</sup> P.M., Section 14

Associated federal actions by BIA include determinations of effect regarding environmental resources and positive recommendations to the Bureau of Land Management regarding the Applications for Permit to Drill.

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

This determination is based on the following factors:

- 1. Agency and public involvement solicited for the preceding NEPA document was sufficient to ascertain potential environmental concerns associated with the currently proposed project.
- Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed action and the No Action alternatives.
- 3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species.
- 4. The proposed action is designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
- 5. Environmental justice was fully considered.

- 6. Cumulative effects to the environment are either mitigated or minimal.
- 7. No regulatory requirements have been waived or require compensatory mitigation measures.
- 8. The proposed project will improve the socio-economic condition of the affected Indian community.

Acting

Regional Director

Date

# Chapter 1 Purpose and Need for Action

#### 1.1 Introduction

This EA (Environmental Assessment) was prepared in accordance with NEPA (the National Environmental Policy Act) of 1969, as amended, and the regulations of the CEQ (Council on Environmental Quality), 40 CFR parts 1500 through 1508. An EA is an informational document intended for use by both decision-makers and the public. It discloses relevant environmental information concerning the proposed action and the no-action alternative.

#### 1.2 Description of the Proposed Action

The Fort Berthold Reservation encompasses 988,000 acres, 457,837 of which are in tribal and individual Indian ownership by the Three Affiliated Tribes (Mandan, Hidatsa, and Arikara) and its members. The reservation is located in west central North Dakota and is split into three areas by Lake Sakakawea, which traverses the center of the reservation. It occupies sections of six counties: Dunn, McKenzie, McLean, Mercer, Mountrail, and Ward.

The proposed action includes approval by the BIA (United States Bureau of Indian Affairs) and BLM (Bureau of Land Management) for Marathon Oil Company (Marathon) to drill and complete two exploratory oil and gas wells on the Fort Berthold Reservation. These well sites are proposed to be positioned in the following locations:

- TAT USA #13-23H located in T151N, R94W, 5<sup>th</sup> P.M., Section 22
- Jones USA #14-14H<sup>1</sup> located in T151N, R94W, 5<sup>th</sup> P.M., Section 14

**Please refer to Figure 1-1, Project Location Map.** Each well site would include a drilling unit in which the minerals to be developed by each well are located. Completion activities include acquisition of rights-of-way, infrastructure for the proposed wells, and roadway improvements.

#### 1.3 Need for the Proposed Action

The Tribes own their mineral resources, which are held in trust by the United States government through the BIA. The BIA's approval to drill the two exploratory wells would provide important benefits to the Three Affiliated Tribes, including revenue that could contribute to the Tribal budgets, satisfy Tribal obligations, and fund land purchase programs to stabilize its land base. It would also provide individual members of the Tribes with needed employment and income.

Furthermore, the proposed action gives the United States an opportunity to reduce its dependence on foreign oil and gas by exploring for domestic sources of oil and gas.

<sup>&</sup>lt;sup>1</sup> Please note that this well was formerly named the Jones-USA #13-14H well in the public scoping letter.

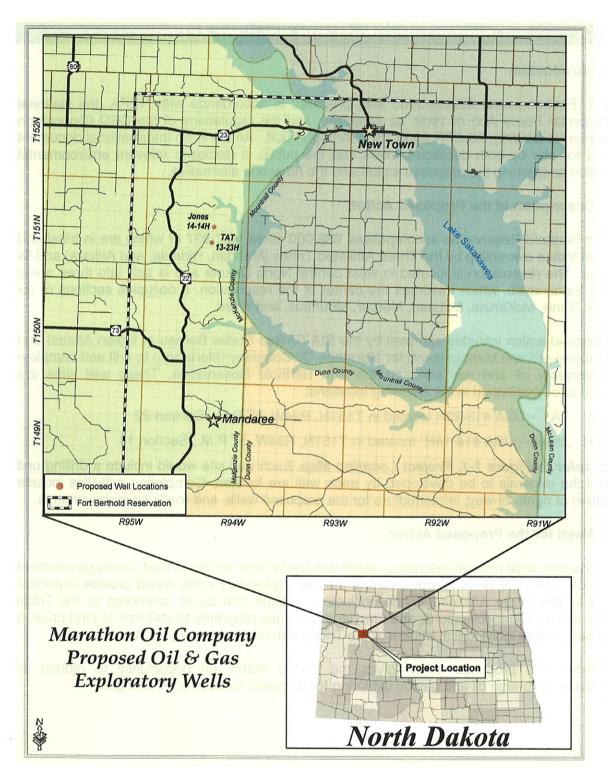


Figure 1-1, Project Location Map

#### 1.4 Purpose of the Proposed Action

The purpose of the proposed action is to allow the Three Affiliated Tribes to provide for oil and gas development on the identified lands on the Fort Berthold Reservation. Additionally, the purpose is to determine if there are commercially recoverable oil and gas resources on the lands subject to Marathon's lease areas by drilling two wells at the identified locations.

#### 1.5 Regulations that Apply to Oil and Gas Development Activities

The BIA must comply with NEPA before it issues a determination of effect regarding environmental resources and provides a positive recommendation to the Bureau of Land Management regarding the Application for Permit to Drill. Therefore, an EA for the proposed wells is necessary to analyze the direct, indirect, and cumulative impacts of the proposed project.

Oil and gas development activities on Indian lands are subject to a variety of federal environmental regulations and policies under authority of the BIA and 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. Under the BIA's regulations at 25 CFR Part 225, the BLM exercises authority over oil and gas development on Tribal lands under its implementing regulations at 43 CFR Part 3160 and its internal supplemental regulations and policies. The BLM's authority includes the inspection of oil and gas operations to determine compliance with applicable statutes, regulations, and all applicable orders. These include, but are not limited to, conducting operations in a manner which ensures the proper handling, measurement, disposition, and site security of leasehold production; and protecting other natural resources, environmental quality, life, and property.

# **Chapter 2 Alternatives**

#### 2.1 Introduction

This chapter provides information on the development and evaluation of project alternatives. The development of alternatives is directly related to the purpose and need for the project. Two alternatives are being considered for this project: a no action alternative and a proposed action alternative.

#### 2.2 Alternative A: No Action

Under the no action alternative (Alternative A), the BIA and BLM would not authorize the development of the two proposed exploratory wells. There would be no environmental impacts associated with Alternative A. However, the Three Affiliated Tribes would not receive potential royalties on production, or other economic benefits from oil and gas development on the Reservation, and the potential for commercially recoverable deposits of oil and gas would not be evaluated.

#### 2.3 Alternative B: Proposed Action

The proposed action (Alternative B) includes authorization by the BIA and BLM to drill two wells and complete the associated rights-of-way acquisition, roadway improvements, and infrastructure for the wells. Infrastructure may include oil and gas gathering pipelines and buried electrical lines, both of which would be located within the access road rights-of-way.

Each exploratory well would consist of a well pad, access road, associated infrastructure, and a spacing unit. The well pad is where the actual surface disturbance caused by drilling activities would occur. The spacing unit is the location of the minerals that are to be developed. The location of the proposed well sites, access roads, and proposed horizontal drilling techniques were chosen to minimize surface disturbance.

Each well location could require new right-of-way for access points, supporting electrical lines, and pipelines associated with oil and gas production. Rights-of-way would be located to avoid sensitive surface resources and any cultural resources identified in site surveys. Access roads would be improved as necessary to eliminate overly steep grades, maintain current drainage patterns, and provide all-weather driving surfaces.

A preliminary resource survey on-site of each well pad and access road was conducted on November 24, 2009 with the Three Affiliated Tribes Tribal Historic Preservation Office, BIA, Marathon Oil Company (Marathon), and KL&J (Kadrmas, Lee & Jackson) present. During this visit, preliminary pad and access road siting locations were identified.

Intensive cultural resources and biological/botanical surveys for each well pad were conducted on April 6, 2010. The purpose of the cultural resources survey was to ensure the wells and roads had been appropriately sited with respect to cultural resources. The purpose of the biological survey was to gather site-specific data and photos with regards to biological, botanical, soil, and water resources. A study area of 10 acres centered on the well pad center point, a 200-foot wide access road corridor, and a 0.25 mile wide corridor in areas of wooded draws were evaluated during these visits.

An EA on-site assessment of the well pads and access roads was conducted on April 23, 2010. The BIA Environmental Protection Specialist, as well as representatives from the Three Affiliated Tribes Tribal Historic Preservation Office, BLM, Marathon, and Kadrmas, Lee & Jackson were present during this visit. During this visit, construction suitability with respect to topography, stockpiling, drainage, erosion control, and other surface issues were considered. Analysis of site-specific mitigation measures to be incorporated into the final APDs and right-of-way information were discussed as well. Well pad and access road locations were adjusted, as appropriate, to avoid conflicts with identified environmental areas of concern. Upon the conclusion of the EA on-site, the well pad and access road locations were finalized and BIA gathered information needed to develop site-specific mitigation measures and BMPs to be incorporated into the final APDs. Those present at the on-site assessment agreed that the chosen location, along with the minimization measures Marathon plans to implement, is positioned in an area which would minimize impacts to sensitive wildlife and botanical resources. In addition, comments received from the USFWS (United States Fish and Wildlife Service) have been considered in the development of this project.

#### 2.3.1 TAT Well

The TAT – USA #13-23H well would be located in the NE¼SE¼ of Section 22, Township 151 North, Range 94 West, 5<sup>th</sup> P.M. to access potential oil and gas resources within the spacing unit consisting of Sections 23 and 24, Township 151 North, Range 94 West, 5<sup>th</sup> P.M. and the west half of Section 19, Township 151 North, Range 93 West, 5<sup>th</sup> P.M. *Please refer to Figure 2-1, TAT-USA #13-23H Well Overview.* 



Figure 2-1, TAT Well Overview

The TAT well site would be accessed from the north. A new access road approximately 0.76 miles long would be constructed to connect the TAT well to an existing access road south of the TAT site, which would connect the site to North Dakota Highway 22. Minor spot grading may be needed to flatten existing landscape grades along the proposed access road alignment. Culverts and cattle guards would be installed as needed along this new access road.

#### 2.3.2 Jones Well

The Jones-USA #14-14H well would be located in the NW¼SW¼ of Section 14, Township 151 North, Range 94 West, 5<sup>th</sup> P.M. to access potential oil and gas resources within the spacing unit consisting of Sections 13 and 14, Township 151 North, Range 94 West, 5<sup>th</sup> P.M. and the west half of Section 18, Township 151 North, Range 93 West, 5<sup>th</sup> P.M. *Please refer to Figure 2-2, Jones-USA #14-14H Well Overview.* 



Figure 2-2, Jones-USA #14-14H Well Overview

The Jones well would be accessed from the south. A new access road approximately 1.15 miles long would be constructed to connect the Jones well to TAT well's access road, which would provide access to North Dakota Highway 22. Minor spot grading may be needed to flatten existing landscape grades along the proposed access road alignment. Culverts and cattle guards would be installed as needed along this new access road.

#### 2.3.3 Activities that Apply to Development of All Wells

The following includes a discussion of items that would be consistent for construction of the two proposed well locations:

#### 2.3.3.1 Field Camps

Self-contained trailers may temporarily house key personnel on-site during drilling operations. No long-term residential camps are proposed. Sewage would be collected in standard portable chemical toilets or service trailers on-site and then transported off-site to a state-approved wastewater treatment facility. Other solid waste would be collected in enclosed containers and disposed of at a state-approved facility.

#### 2.3.3.2 Access Roads

Existing roadways would be used to the extent possible to access the proposed wells; however, the improvement of existing roadways and construction of new access roads would also be required. The running surface of access roads would be surfaced with crushed gravel or scoria from a previously approved location, and erosion control measures would be installed as necessary. A maximum right-of-way width of 66 feet would be disturbed, consisting of a 20 to 28-foot wide roadway with the remainder of the disturbed area due to borrow ditches and construction slopes. The outslope portions of constructed access roads would be re-seeded upon completion of construction to reduce access road related disturbance. Access road construction shall follow road design standards outlined in the BLM's Gold Book.

All construction activities shall begin after July 15 in order to avoid impacts to migratory birds during the breeding/nesting season. Pre-construction surveys for migratory birds or their nests would be conducted within five days prior to the initiation of access road construction activities. In addition, if any migratory bird is found on-site during construction, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.

#### 2.3.3.3 Well Pads

The proposed well pads would consist of a leveled area surfaced with several inches of gravel or crushed scoria. The pad would be used for the drilling rig and related equipment, as well as an excavated, reinforced lined (with a minimum of thickness of 20mm) pit to store drill cuttings. A closed loop system would be used during drilling. All liquids from drilling would be transported off-site. The drill cuttings pit would be reclaimed to BLM and North Dakota Industrial Commission (NDIC) standards immediately upon finishing completion operations. The level well pad, plus cut and fill slope areas, required for drilling and completing operations (including reserve pit for drill cuttings) would each be approximately 400x450 feet (approximately 5 acres). Cut and fill slopes on the edge of the well pad would be 2:1 where less than 8 feet and 3:1 where 8 feet or greater. Information obtained from the on-site investigation of the TAT well site identified a need to round the southeast corner of the pad as to avoid a steep drainageway.

Well pad areas would be cleared of vegetation, stripped of topsoil, and graded to specifications in the APDs (Applications for Permit to Drill) submitted to the BLM and would comply with the standards and guidelines prescribed in the BLM's "Gold Book." Topsoil would be stockpiled and stabilized until disturbed areas are reclaimed and re-vegetated. Excavated subsoils would be used in pad construction, with each finished well pad graded to ensure water drains away from the drill site. Erosion control at the site would be maintained through the use of BMPs (best management practices), which may include, but are not limited to, water bars, bar ditches, biologs, silt fences, and re-vegetation of disturbed areas. Sorbent booms will be placed in select locations down-gradient of each well pad in order to prevent materials from entering surface drainageways in the event of an accidental release.

All construction activities shall begin after July 15 in order to avoid impacts to migratory birds during the breeding/nesting season. Pre-construction surveys for migratory birds or their nests would be conducted within five days prior to the initiation of well pad construction activities. In addition, if any migratory bird is found on-site during construction, construction activities shall cease and the USFWS (United States Fish and Wildlife Service) shall be notified for advice on how to proceed.

#### 2.3.3.4 Drilling

Following the access road construction and well pad preparation, a drilling rig would be rigged up at each well site. The time for rigging up, drilling the well, and rigging down the well is anticipated to be about 60 days. During this phase, vehicles and equipment would access the site several times a day.

Initial drilling would be vertical to a depth of approximately 10,200 feet, at which it would angle to become horizontal at 11,200 feet and then drill horizontally to an approximate measured depth of about 23,000 feet, targeting the Middle Bakken. This horizontal drilling technique would minimize surface disturbance.

For the first 2,200 feet drilled at each well, a fresh water based mud system with non-hazardous additives would be used to minimize contaminant concerns. Water would be obtained from a commercial source for this drilling stage. About 8 gallons of water would be used per foot of hole drilled, for a total of about 40,000 gallons (20,000 gallons in the hole and 20,000 gallons as working volume at the surface). After setting and cementing the surface casing, an oil-based mud system consisting of about 80% diesel fuel and 20% saltwater would be used to drill the remainder of the vertical hole and curve. Once seven-inch production casing is set and cemented through the curve (into the lateral), a saltwater based drilling mud would be utilized for the horizontal portion of the wellbore.

Drilling fluids would be separated from cuttings and contained in steel tanks placed on liners until they were ready for re-use. Any minimal fluids remaining in each site's drill cuttings pit would be removed and disposed of in accordance with BLM and NDIC rules and regulations. Cuttings generated from drilling would be deposited in the cuttings pit on the well pad. The pit would be lined to prevent seepage and contamination of underlying soil. Prior to their use, the pit would be fenced on the non-working sides. The access side would be fenced and netted immediately following drilling and completions operations in order to prevent wildlife and livestock from accessing the pit. In accordance with NDIC and BLM regulations and guidelines, drill cuttings would be solidified into an inert, solid mass by chemical means.

#### 2.3.3.5 Casing and Cementing

Casing and cementing methods would be used to isolate all near-surface aquifers and hydrocarbon zones encountered during drilling.

#### 2.3.3.6 Completion and Evaluation

Once each well is drilled and cased, approximately 30 additional days would be required to complete and evaluate it. Completion and evaluation activities include cleaning out the well bore, pressure testing the casing, perforating and fracturing to stimulate the horizontal portion of the well, and running production tubing for potential future commercial production. Fluids utilized in the completion process would be captured in tanks and would be disposed of in accordance with BLM and NDIC rules and regulations. Once the well is completed, site activity and vehicle access would be reduced. If the well is determined to be successful, tank trucks (and, if appropriate, natural gas gathering lines) would transport the product to market.

#### 2.3.3.7 Commercial Production

If commercially recoverable oil and gas resources are found at either of the proposed well sites, the sites would become established as production facilities. Production equipment, including a well pumping unit, vertical heater/treater, storage tanks (typically four 400 barrel steel oil tanks and one 400 barrel fiberglass saltwater tank) and a flare with associated piping would be installed. The tanks would be connected by a pipe and valve near the top of each tank, which would allow for overflow into the next tank. The storage tanks and heater/treater would be surrounded by an impermeable berm that would act as secondary containment to guard against possible spills. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. Sorbent booms will be placed in select locations downgradient of each well pad in order to prevent materials from entering surface drainageways in the event of an accidental release. All permanent above ground production facilities would be painted to blend into the surrounding landscape, as determined by the BIA, based on standard colors recommended by the BLM.

Oil would be collected in the storage tanks and periodically trucked to an existing oil terminal to be sold. Produced water would also be captured in storage tanks and periodically trucked to an approved disposal site. The frequency of trucking activities for both oil resources and produced water would be dependent upon volumes and rates of production. It is expected that oil would be trucked via existing oil field, and BIA or county roads to Highway 22 west of New Town and then west on BIA Route 4, west approximately 8 miles off of the Fort Berthold Reservation to a regional oil terminal. All haul routes used would be either private roads or roads that are approved for this type of transportation use by the local governing tribal, township, county, and/or state entities. All associated applicable permits would be obtained and restrictions complied with. Should regional oil, gas, and/or saltwater pipelines be installed, every attempt to tie production facilities at these sites to these pipelines would be made, thereby minimizing truck traffic. Any future oil, gas, or saltwater transportation pipelines would be constructed within the existing right-of-way or additional NEPA analysis and approval from the BIA would be undertaken.

When either of the proposed wells cease to flow naturally, a pump jack would be installed. After production ceases, the well would be plugged and abandoned, and the land would be fully reclaimed in accordance with BIA and BLM requirements.

Marathon would mitigate the effects of these two wells by incorporating applicable conditions, mitigation measures, and BMPs from the BLM's regulations, BLM's Gold Book (4<sup>th</sup> Edition, 2006), and applicable BLM Onshore Oil and Gas Orders, including Numbers 1, 2, and 7.

#### 2.3.3.8 Reclamation

The drill cuttings would be dried during drilling operations and placed into a reserve pit. Additional treatment of the cuttings, including stabilization, would be completed, and then the pit would be backfilled and buried as soon as possible upon well completion. Other interim reclamation measures to be implemented upon well completion include reduction of cut and fill slopes where necessary, redistribution of stockpiled topsoil, and re-seeding of the disturbed areas. If commercial production equipment is installed, the well site would be reduced in size to accommodate the production facilities, while leaving adequate room to conduct normal well maintenance and potential recompletion operations, with the remainder of the well pad reclaimed. Reclamation activities would include leveling, re-contouring, treating, backfill, and reseeding. Erosion control measures would be installed as appropriate. Stockpiled topsoil would be redistributed and reseeded as recommended by the BIA.

If no commercial production developed from one or both of the proposed wells, or upon final abandonment of commercial operations, all disturbed areas would be promptly reclaimed. As part of the final reclamation process, all well facilities would be removed, well bores would be plugged with cement, and dry hole markers would be set in accordance with NDIC and BLM requirements. The access roads and well pad areas would be re-contoured to match topography of the original landscape, and reseeded with a native grass seed mixture that is consistent with surrounding native species to ensure a healthy and diverse vegetative community that is free of noxious weeds. Erosion control measures would be installed as appropriate. Maintenance of the grass seeding would continue until such time that the productivity of the stand is consistent with surrounding undisturbed vegetation and is free of noxious weeds. An exception to these reclamation measures may occur if the BIA approves assignment of an access road either to the BIA roads inventory or to concurring surface allottees.

#### 2.3.4 Potential for Future Development

Development beyond the TAT – USA #13-23H and Jones – USA #14-14H wells discussed in this document is not included with this proposal. Further development would be subject to applicable regulations, including 43 CFR Part 3160, and the BLM's Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, as would be subject to review under NEPA, as appropriate.

# **Chapter 3 Description of the Affected Environment and Impacts**

#### 3.1 Introduction

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

#### 3.2 Climate, Geologic Setting, and Land Use

The proposed wells and access roads are situated geologically within the Williston basin, where the shallow stratigraphy consists of sandstones, silts and shales dating to the Tertiary Period (65 to 2 million years ago), including the Sentinel Butte and Golden Valley Formations. The underlying Bakken Formation is a well-known source of hydrocarbons; its middle member is targeted by the proposed projects. Although earlier oil and gas exploration activity within the Fort Berthold Reservation was limited and commercially unproductive, recent advances in drilling technologies, including horizontal drilling techniques, now make accessing oil in the Bakken Formation feasible.

According to Great Plains Regional Climate Center data collected at the Keene weather station from 1971-2000, temperatures in excess of 80 degrees Fahrenheit are common in summer months. The area receives approximately 16.0 inches of rain annually, predominantly during spring and summer. Winters in this region are cold, with temperatures often falling near zero degrees Fahrenheit. Snow generally remains on the ground from November to March, and about 32.4 inches of snow are received annually.

The topography within the project areas is primarily identified as part of the Missouri Coteau ecoregion, which consists of glaciated uplands, river breaks, valley wall side and footslopes, coulees, alluvial terraces and floodplains. The floodplains are primarily located in the bottomlands of the Missouri River.

The western and southern portions of the Fort Berthold Reservation consist of prairie grasslands and buttes. The northern and eastern areas of the Reservation provide fertile farmland. The proposed project areas are located within a predominately rural area. Land within the proposed project areas predominantly grassland (95%) and shrubland (5%). *Please refer to Figure 3-1, Land Use.* 



Figure 3-1, Land Use

#### Climate, Geologic Setting and Land Use Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact land use.

Alternative B (Proposed Action) - Alternative B would result in the conversion of approximately 21.55 acres of land from present use to part of an exploratory oil and gas network. Please refer to Table 3.1. Summary of Land Use Conversion.

Table 3.1 Summary of Land Use Conversion				
Well Site	Well Pad Acres	Access Road Acres	Total Acres	
TAT-USA #13-23H	4.35	4.64	8.99	
Jones-USA #14-14H	5.60	6.96	12.56	
		Total	21.55	

Mineral resources would be impacted through the development of oil and gas resources at the proposed well sites, as is the nature of this project. Impacts to the geologic setting and paleontological resources are not anticipated.

#### 3.3 Soils

The NRCS (Natural Resource Conservation Service) Soil Survey of McKenzie County dates from 2006, with updated information available online through the NRCS Web Soil Survey indicated that there are twelve soil types identified within the project impact areas. Location and characteristics of these soils are identified in Table 3.2, Soils.

Table 3.2 Soils								
Map Unit	Symbol Soil Name Percent (in		Composition (in upper 60 inches)			Erosion Factor <sup>1</sup>		Hydrologic Soil
Symbol			% sand	% silt	% clay	٢	Kf	Group <sup>2</sup>
24	Arnegard loam	0 to 2	40.3	36.9	22.8	5	.24	В
38F	Dogtooth-Janesburg-Cabba complex	6 to 30	4.5	47.1	48.4	2	.28	D
41B	Williams-Bowbells loams	3 to 6	34.8	35.2	30.0	5	.28	В
42C	Williams Ioam	6 to 9	34.8	35.2	30.0	5	.28	В
43C	Williams-Zahl loams	6 to 9	35.0	35.2	30.6	5	.28	В
44D	Zahl-Williams loams	9 to 15	35.0	34.3	30.6	5	.28	В
44E	Zahl-Williams loams	15 to 25	35.0	34.3	30.6	5	.28	В
61F	Beisigl-Flasher-Tally complex	9 to 50	81.1	13.7	5.2	3	.17	Α
63C	Vebar-Flasher complex	6 to 9	75.4	14.8	9.8	3	.20	В
145F	Zahl-Cabba-Arikara complex	9 to 70	35.0	34.3	30.6	5	.28	В
341C	Noonan-Williams loams	6 to 9	34.6	34.2	31.2	5	.28	В
442F	Zahl-Williams loams	15 to 45	35.0	34.3	30.6	5	.28	В

<sup>1</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 will not affect crop productivity. Tons/acre/year range from 1 for shallow soils to 5 for very deep soils. Soils with higher T values can tolerate higher rates of erosion without loss of

<sup>&</sup>lt;sup>2</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).

Most of the soils listed have low to moderate susceptibility to sheet and rill erosion and can tolerate high to moderate levels of erosion without loss of productivity. The productivity of map unit 38F is more prone to loss of productivity from erosion than the others. Each of these soils is well drained. Depth to the water table is generally recorded at greater than six feet for each of these soil types. None of the soils listed within the project impact areas are susceptible to flooding or ponding.

#### 3.3.1 Soil Impacts/Mitigation

Alternative A (No Action) - Alternative A would not impact soils.

Alternative B (Proposed Action) – Construction activities associated with the proposed well sites and associated access roads would result in soil disturbances, though impacts to soils associated with the proposed action are not anticipated to be significant. Stockpile quantities for each location were calculated using an assumption of six-inches of existing topsoil. The following identifies topsoil requirements for each site:

- TAT A minimum of 3,503 cubic yards of topsoil would be stockpiled on site.
- Jones A minimum of 4,500 cubic yards of topsoil would be stockpiled on site.

Based on NRCS soil data, topsoil exists in excess of 12 inches at each of the well sites, yielding sufficient quantity of topsoil for construction and reclamation activities. Topsoil stockpiles are proposed to be located on the west side of the TAT well and the east side of the Jones well. The stockpiles have been positioned to assist in diverting runoff away from the disturbed area, thus minimizing erosion.

Soil impacts would be localized, and BMPs would be implemented to minimize these impacts. Surface disturbance caused by well development, road improvements, and facilities construction would result in the removal of vegetation from the soil surface. This can damage soil crusts and destabilize the soil. 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, ensuring the road gradient fits closely with the natural terrain, and maintaining proper drainage. According to discussions at the field on-site assessment and standard industry practices, BMPs identified in the BLM Gold Book shall be utilized to further minimize site erosion.

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.

Contamination of soils from various chemicals and other pollutants used during oil development activities is not anticipated. In the rare event that such contamination may occur, the event shall be immediately reported to the BLM, the NDIC, and where appropriate the North Dakota Department of Health, and the procedures of the surface management agency shall be followed to contain spills and leaks.

#### 3.4 Water Resources

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, provides the authority to EPA (Environmental Protection Agency) and USACE (United States Army Corps of Engineers) 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). Within the Fort Berthold Reservation, the Missouri River and Lake Sakakawea are both considered navigable waters and are therefore subject to Section 10 of the Rivers and Harbors Act of 1899.

#### 3.4.1 Surface Water

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

The proposed well sites are located in the Lake Sakakawea basin, meaning surface waters within this basin drain to Lake Sakakawea. In addition, the proposed wells are located in the Sanish Bay Watershed and the Clarks Creek Sub-Watershed. *Please refer to Figure 3-2, Surface Water Resources.* Runoff throughout the study area is by sheetflow until collected by ephemeral and perennial streams/drainages draining to Lake Sakakawea. Surface runoff for each well site would typically travel to Lake Sakakawea via drainage patterns as follows:

- TAT Runoff from the well pad would flow northwest approximately 0.4 miles into an unnamed coulee, then continue to flow northwest approximately 1.2 miles to Rough Coulee. From there, it then would flow northeast approximately 1.8 miles to Hunts Along Bay of Lake Sakakawea, for a total traveled distance of 3.4 miles.
- Jones Presently the pad has a ridge running northeast to southwest which divides the pad into two sections. Runoff from the southeast section of the pad would drain southeast approximately 0.3 miles to Whitebody Coulee, which would then flow northeast approximately 0.9 miles to Hunts Along Bay and into Lake Sakakawea, for a total traveled distance of 1.2 miles. Runoff from the northwest portion of the pad would flow north then northeast in an unnamed coulee 1.2 miles to Hunts Along Bay of Lake Sakakawea.

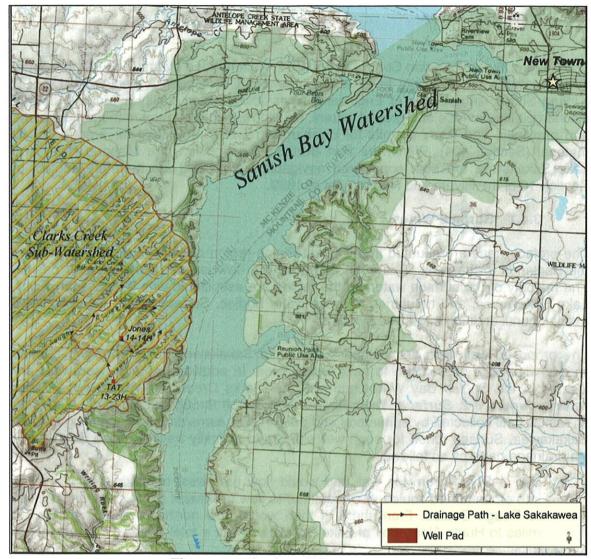


Figure 3-2, Surface Water Resources

#### 3.4.1.1 Surface Water Impacts/Mitigation

Alternative A (No Action) - Alternative A would not impact surface water.

Alternative B (Proposed Action) – No significant impacts to surface water are expected to result from Alternative B. The proposed projects have been sited to avoid direct impacts to surface waters and to minimize the disruption of drainage patterns across the landscape. Construction site plans should contain measures to divert surface runoff around the well pad. Roadway engineering and the implementation of BMPs to control erosion would minimize runoff of sediment downhill or downstream. Sorbent booms will be placed in select locations down-gradient of each well pad in order to prevent materials from entering surface drainageways in the event of an accidental release. Alternative B is not anticipated to result in measurable increases in runoff or impacts to surface waters.

#### 3.4.2 Ground Water

The North Dakota State Water Commission's electronic records reveal that there are no active or permitted groundwater wells within one-mile of either of the proposed oil and gas well pads or access road areas. The nearest groundwater well is located more than 3.5 miles east of the proposed sites. The New Town aquifer is located east of the proposed well sites, and the Fort Union Aquifer is located south of the sites; however, no sole source aquifers have been identified within the state of North Dakota. *Please refer to Figure 3-3, Aquifers and Groundwater Wells.* 

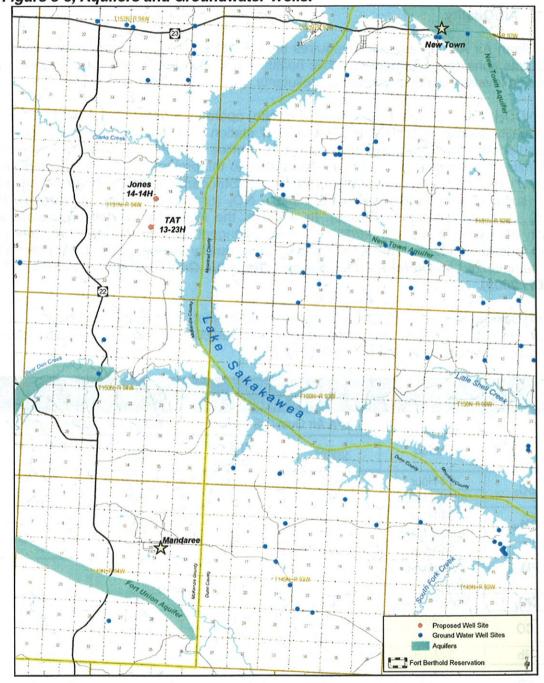


Figure 3-3, Aquifers and Groundwater Wells

#### 3.4.2.1 Ground Water Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact groundwater.

Alternative B (Proposed Action) – No significant impacts to groundwater are expected to result from Alternative B. As required by applicable law, all proposed wells would be cemented and cased to isolate aquifers from potentially productive hydrocarbon and disposal/injection zones.

#### 3.5 Air Quality

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

The NDDH (North Dakota Department of Health) operates a network of AAQM (Ambient Air Quality Monitoring) stations. The AAQM station in Dunn Center, North Dakota located south of the proposed wells, about 36.8 miles from the proposed TAT well and 37.9 miles from Jones well, is the closest station to the project areas. Criteria pollutants tracked under EPA's National Ambient Air Quality Standards in the Clean Air Act include SO<sub>2</sub> (sulfur dioxide), PM (particulate matter), NO<sub>2</sub> (nitrogen dioxide), O<sub>3</sub> (ozone), Pb (lead), and CO (carbon monoxide). In addition, the NDDH has established state air quality standards. State standards must be as stringent as (but may be more stringent than) federal standards. The federal and state air quality standards for these pollutants are summarized in *Table 3.3, Federal and State Air Quality Standards (EPA 2006, NDDH 2009)*.

North Dakota was one of thirteen states in 2008 that met standards for all criteria pollutants. The state also met standards for fine particulates and the eight-hour ozone standards established by the EPA (NDDH 2009).

Table 3.3 Federal and State Air Quality Standards						
	Averaging	EPA Air Quality Standard		NDDH Air Quality Standard		
Pollutant	Period	μg/m³	parts per million	μg/m³	parts per million	
SO <sub>2</sub>	24-Hour	365	0.14	260	0.099	
<b>30</b> 2	Annual Mean	80	0.030	60	0.023	
PM <sub>10</sub>	24-Hour	150	***	150		
FIVI10	Annual Mean	50		50		
	24-Hour	35	**	35	**	
PM <sub>2.5</sub>	Weighted Annual Mean	15	**	15		
NO <sub>2</sub>	Annual Mean	100	0.053	100	0.053	
СО	1-Hour	40,000	35	40,000	35	
CO	8-Hour	10,000	9	10,000	9	
Pb	3-Month	1.5		1.5		
O3	1-Hour	240	0.12	235	0.12	
US	8-Hour		0.08		0.08	

In addition, the Fort Berthold Reservation complies with the North Dakota National Ambient Air Quality Standards and visibility protection. The Clean Air Act affords additional air quality protection near Class I areas. Class I areas include national parks greater than 6,000 acres in size, national monuments, national seashores, and federally designated wilderness areas larger than 5,000 acres designated prior to 1977. There are no Federal Class I areas³ within the project area. The Theodore Roosevelt National Park is the nearest Class I area, located west of the proposed sites, approximately 32.0 miles from the TAT site and 32.6 miles from the Jones site.

#### 3.5.1 Air Quality Impacts/Mitigation

Alternative A (No Action) - Alternative A would not impact air quality.

Alternative B (Proposed Action) – The Fort Berthold Reservation complies with North Dakota National Ambient Air Quality Standards and visibility protection. Alternative B would not include any major sources of air pollutants. Construction activities would temporarily generate minor amounts of dust and gaseous emissions of PM, SO<sub>2</sub>, NO<sub>2</sub>, CO, and volatile organic compounds. Emissions would be limited to the immediate project areas and are not anticipated to cause or contribute to a violation of National Ambient Air Quality Standards. No detectable or long-term impacts to air quality or visibility are expected within the airsheds of the Fort Berthold Reservation, State, or Theodore Roosevelt National Park. No mitigation or monitoring measures are recommended.

#### 3.6 Threatened and Endangered 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.

Intensive cultural resources and biological/botanical surveys for each well pad were conducted on April 6, 2010<sup>4</sup>. The purpose of the cultural resources survey was to ensure the wells and roads had been appropriately sited with respect to cultural resources. The purpose of the biological survey was to gather site-specific data and photos with regards to biological, botanical, soil, and water resources. A study area of 10 acres centered on the well pad center point, a 200-foot wide access road corridor, and a 0.25 mile wide corridor in areas of wooded draws were evaluated during these visits.

<sup>&</sup>lt;sup>3</sup> Federal Class I areas are generally national parks and wilderness areas.

<sup>&</sup>lt;sup>4</sup>The information contained in this section is accurate as of the dates of the site inventories. It is acknowledged that wildlife and vegetation characteristics may vary seasonally across the study area.

An EA on-site assessment of the well pads and access roads was conducted on April 23, 2010. The BIA Environmental Protection Specialist, as well as representatives from the Three Affiliated Tribes Tribal Historic Preservation Office, BLM, Marathon, and Kadrmas, Lee & Jackson were present during this visit. During this visit, construction suitability with respect to topography, stockpiling, drainage, erosion control, and other surface issues were considered. Analysis of site-specific mitigation measures to be incorporated into the final APDs and right-of-way information were discussed as well. Well pad and access road locations were adjusted, as appropriate, to avoid conflicts with identified environmental areas of concern. Upon the conclusion of the EA on-site, the well pad and access road locations were finalized and BIA gathered information needed to develop site-specific mitigation measures and BMPs to be incorporated into the final APDs. Those present at the on-site assessment agreed that the chosen location, along with the minimization measures Marathon plans to implement, is positioned in an area which would minimize impacts to sensitive wildlife and botanical resources. In addition, comments received from the USFWS (United States Fish and Wildlife Service) have been considered in the development of this project.

A pick-up survey for raptors and raptor nests within 0.5 miles (as acquired permission to survey allowed) of project disturbance areas was conducted by Kadrmas, Lee & Jackson on June 11, 2010. This survey consisted of pedestrian transects focusing specifically on potential nesting sites within 0.5 miles of project disturbance areas, including cliffs and wooded draws. Wooded draws were observed both from the upland areas overlooking the draws and from bottomlands within the actual draws.

The proposed action area was evaluated to determine the potential for occurrences of federally-listed threatened, endangered, and candidate species. The USFWS (United States Fish and Wildlife Service) March 2010 Endangered, Threatened, and Candidate Species and Designated Critical Habitat in North Dakota county list has identified the interior least tern, whooping crane, black footed ferret, pallid sturgeon, and gray wolf as endangered species that may be found within McKenzie County. The piping plover is listed as a threatened species for McKenzie County. In addition, McKenzie County contains designated critical habitat for the piping plover adjacent to Lake Sakakawea. The Dakota skipper, a candidate species, is also listed for McKenzie County. None of these species were observed in the field. Habitat requirements, the potential for suitable habitat within the project area, and other information regarding listed species for McKenzie County are as follows:

#### Gray Wolf (Canis lupus)

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

#### Black-footed Ferret (Mustela nigripes)

The black-footed ferret historically could be found throughout the Rocky Mountains and Great Plains. In North Dakota, the black-footed ferret may potentially be present within prairie dog towns. However, they have not been confirmed in North Dakota for over 20 years and are presumed extirpated. Their preferred habitat includes areas around prairie dog towns, as they rely on prairie dogs for food and live in prairie dog burrows. Black-footed ferrets require at least an 80-acre prairie dog town to survive.

No prairie dog towns to provide suitable black-footed ferret habitat were observed within the proposed well pads or access road corridor survey areas.

#### Interior Least Tern (Sterna antillarum)

The interior least tern nests along inland rivers rather than along the coast. The interior least tern is found in isolated areas along the Missouri, Mississippi, Ohio, Red, and Rio Grande Rivers. In North Dakota, it is sighted along the Missouri River during the summer nesting season. The interior least tern nests 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.

There is no existing or potential habitat within project area. Potential habitat in the form of sandy/gravely Lake Sakakawea shoreline exists approximately 0.70 miles away from the proposed sites at the nearest point. The well pads and access roads are located on upland bluffs composed of actively grazed rangeland, with the shoreline located below the bluffs at least 0.70 miles away.

#### Pallid Sturgeon (Scaphirhynchus albus)

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

Potential habitat for pallid sturgeon can be found in Lake Sakakawea approximately 0.70 miles from the project site at the closest point.

#### Whooping Crane (Grus americana)

The whooping crane is the tallest bird in North America. In the United States, this species ranges through the Midwest and Rocky Mountain regions from North Dakota south to Texas and east into Colorado. Whooping cranes migrate through North Dakota along a band running from the south central to the northwest parts of the state. They use shallow, seasonally and semi-permanently flooded palustrine (marshy) wetlands for roosting and various cropland and emergent wetlands for feeding. During migration, whooping cranes are often recorded in riverine habitats, including the Missouri River. Currently there are three wild populations of whooping cranes, yielding a total species population of about 365. Of these flocks, only one is self-sustaining.

The proposed project is located in the Central Flyway where 75 percent of confirmed whooping crane sightings have occurred. Due to the absence of shallow, emergent wetlands in the surveyed project areas, the sites do not contain potential stopover habitat, though suitable cropland food sources can be found nearby.

#### 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 existing or potential piping plover habitat within the project area. Potential habitat in the form of sandy/gravely Lake Sakakawea shoreline exists approximately 0.70 miles away at the closest point. The well pads and access roads are located on an upland bluff composed of actively grazed rangeland, with the shoreline located below the bluffs at least 0.70 miles away.

#### 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 lowa and Illinois. The preferred habitat for the Dakota skipper consists of flat, moist bluestem prairies and upland prairies with an abundance of wildflowers. Dakota Skippers are visible in their butterfly stage from mid June to early July.

The proposed project area consists of actively grazed upland prairies; however the sites lack the abundance of wildflowers needed to provide suitable Dakota skipper habitat. Additionally, the project areas are being actively grazed by livestock. Due to the absence of wildflowers and human induced grazing activity, it is unlikely that the sites contain the high quality prairie necessary to provide suitable Dakota skipper habitat. No Dakota skippers were observed during the field visits<sup>5</sup>.

#### 3.6.1 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) – Potential habitat for the interior least tern, pallid sturgeon, and piping plover occurs in Lake Sakakawea and its adjacent habitat which is located approximately 0.70 miles away from the proposed well sites, at the nearest

<sup>&</sup>lt;sup>5</sup> Though the field survey did not take place during the time when the Dakota skipper is most visible, the proposed project area has been highly disturbed by grazing activity and does not contain suitable Dakota skipper habitat.

point. The proposed well sites are located on upland bluffs that are at a considerable higher elevation than the Lake Sakakawea shoreline. The topographic features of the area and distance from the shoreline should assist in providing sight and sound buffers that should avoid disturbing shoreline-nesting birds. In the event of an accidental release, released fluids would travel via surface runoff connections approximately 1.2 miles (Jones site) to 3.4 miles (TAT site) to Lake Sakakawea and its associated habitats. Storage tanks and the heater/treater would be surrounded by an impermeable berm that would act as secondary containment to guard against accidental release of fluids from the site. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. As a tertiary containment measure, sorbent booms will be placed in select locations down-gradient of each well pad in order to prevent materials from entering surface drainageways in the event of an accidental release. Due to the distance of the proposed wells from Lake Sakakawea and the implementation of secondary and tertiary containment measures, the transfer of accidentally released fluids to Lake Sakakawea and its associated habitats is unlikely. Therefore, the proposed project would have no effect to the interior least tern, pallid sturgeon, and piping ployer.

Due to a lack of preferred habitat characteristics and/or known populations, the proposed project is anticipated to have no effect to the gray wolf, black-footed ferret, or Dakota skipper.

The proposed project is located within the Central Flyway where 75 percent of confirmed whooping crane sightings have occurred and suitable cropland food sources can be found nearby. Per USFWS recommendations, if a whooping crane is sighted within one-mile of a well site or associated facilities while under construction, that all work cease within one-mile of that part of the project and the USFWS be contacted immediately. In coordination with USFWS, work may resume after the bird(s) leave the area. Therefore, the proposed project may affect, but is not likely to adversely affect the whooping crane. The proposed project is not likely to jeopardize the continued existence of this species and is not likely to destroy or adversely modify critical habitat.

On the account of the potential effect of this project, Marathon has developed avoidance and minimization measures for the proposed project. *Please refer to section 3.17 Environmental Commitments/ Mitigation.* In addition, pedestrian surveys of the project site took place prior to final site selection to identify potential habitat in an effort to minimize impacts to these species.

Per USFWS recommendations, projects located within 0.5 mile of designated piping plover habitat should be designed so that neither construction nor ongoing operations of the wells and pipelines, including potential spills, will impact critical habitat. Though the proposed sites are located more than 0.5 miles from designated piping plover habitat, they will be designed with both secondary and tertiary containment measures. The storage tanks and heater/treater would be surrounded by an impermeable berm that would act as secondary containment to guard against possible spills. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. BMPs would be implemented to minimize wind and water erosion of soil resources and a closed loop system would be used during drilling.

#### 3.7 Wetlands, Raptors, Other Wildlife, and Vegetation

Intensive cultural resources and biological/botanical surveys for each well pad were conducted on April 6, 2010. The purpose of the cultural resources survey was to ensure the wells and roads had been appropriately sited with respect to cultural resources. The purpose of the biological survey was to gather site-specific data and photos with regards to biological, botanical, soil, and water resources. A study area of 10 acres centered on the well pad center point, a 200-foot wide access road corridor, and a 0.25 mile wide corridor in areas of wooded draws were evaluated during these visits.

An EA on-site assessment of the well pads and access roads was conducted on April 23. 2010. The BIA Environmental Protection Specialist, as well as representatives from the Three Affiliated Tribes Tribal Historic Preservation Office, BLM, Marathon, and Kadrmas, Lee & Jackson were present during this visit. During this visit, construction suitability with respect to topography, stockpiling, drainage, erosion control, and other surface issues were considered. Analysis of site-specific mitigation measures to be incorporated into the final APDs and right-of-way information were discussed as well. Well pad and access road locations were adjusted, as appropriate, to avoid conflicts with identified environmental areas of concern. Upon the conclusion of the EA on-site, the well pad and access road locations were finalized and BIA gathered information needed to develop site-specific mitigation measures and BMPs to be incorporated into the final APDs. Those present at the on-site assessment agreed that the chosen location, along with the minimization measures Marathon plans to implement, is positioned in an area which would minimize impacts to sensitive wildlife and botanical resources. In addition, comments received from the USFWS (United States Fish and Wildlife Service) have been considered in the development of this project.

A pick-up survey for raptors and raptor nests within 0.5 miles (as acquired permission to survey allowed) of project disturbance areas was conducted by Kadrmas, Lee & Jackson on June 11, 2010. This survey consisted of pedestrian transects focusing specifically on potential nesting sites within 0.5 miles of project disturbance areas, including cliffs and wooded draws. Wooded draws were observed both from the upland areas overlooking the draws and from bottomlands within the actual draws.

Data gathered from these surveys, as well as through coordination with the USFWS, North Dakota Parks and Recreation Department, and North Dakota Game and Fish Department, are summarized below. The Three Affiliated Tribes Game and Fish Department was also contacted as part of project scoping; however, a response from the agency was not received.

#### 3.7.1 Wetlands

Wetlands are defined in both the 1997 Executive Order 11990, Protection of Wetlands, and in Section 404 of the Clean Water Act of 1986, as those areas that are inundated by surface or groundwater with a frequency to support and under normal circumstances do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Three parameters that define a wetland, as outlined in the Federal Manual for Delineating Jurisdictional Wetlands (US Army Corps of Engineers, 1987) are hydric soils, hydrophytic vegetation, and hydrology. Wetlands are an important natural resource serving many functions, such

as providing habitat for wildlife, storing floodwaters, recharging groundwater, and improving water quality through purification.

No wetlands or riparian areas were identified within the study area for the proposed well pads or access road areas during the field surveys.

#### 3.7.1.1 Wetland Impacts/Mitigation

Alternative A (No Action) - Alternative A would not impact wetlands.

Alternative B (Proposed Action) – Due to the absence of wetlands within the proposed project areas, Alternative B would not impact wetlands.

#### 3.7.2 Raptors

Protection is provided for the bald and golden eagle, as well as other migratory birds, through the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act (MBTA). The BGEPA 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. The MBTA (916 U.S.C. 703–711) regulates impacts to these species such as direct mortality, habitat degradation, and/or displacement of individual birds. The MBTA defines taking to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof, except when specifically permitted by regulations. The BGEPA affords additional protection to all bald and golden eagles. Under the BGEPA, take includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb, wherein "disturb" means to agitate or bother a bald or golden eagle to the degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, causing injury, death, or nest abandonment.

The bald eagle (*Haliaeetus leucocephalus*) is not common in North Dakota, but is sighted along the Missouri River during spring and fall migration periods and periodically in other places in the state such as the Devils Lake and Red River areas. In addition, ND Game and Fish Department in 2009 estimated that 66 nests were occupied by bald eagles, though not all eagle nests were visited and verified<sup>6</sup>. 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. No bald eagles or eagle nests were observed within 0.5 miles of proposed project disturbance areas during pick-up field surveys conducted on June 11, 2010.

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. No golden eagle nests were observed within 0.5 miles of proposed project disturbance areas during the pick-up field survey conducted on June 11, 2010.

<sup>&</sup>lt;sup>6</sup> Source: "Nesting in Numbers." ND Outdoors February 2010 issue.

The USGS (United States Geological Survey) Northern Prairie Wildlife Research Center maintains information on bald eagle and golden eagle habitat within the state of North Dakota. According to the USGS data, the proposed 0.5 mile buffered survey area does contain recorded habitat for both the bald eagle and the golden eagle. In addition, Dr. Anne Marguerite Coyle of Dickinson State University has completed focused research on golden eagles and maintains a database of golden eagle nest sightings. According to Dr. Coyle's information, the closest recorded golden eagle nest is located southeast of both sites, approximately 2.8 miles from the TAT site and 3.8 miles from the Jones site. Records indicate this nest was unoccupied but in good condition at the time of Dr. Coyle's survey. *Please refer to Figure 3-4, Bald and Golden Eagle Habitat and Nest Sightings.* 

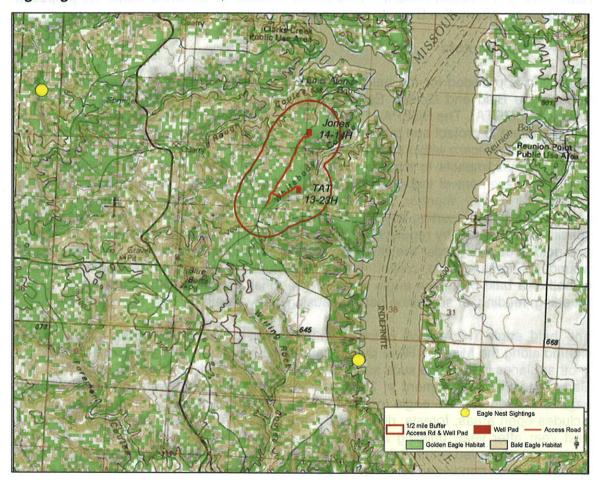


Figure 3-4, Bald and Golden Eagle Habitat and Nest Sightings

#### 3.7.2.1 Raptor Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact raptors.

Alternative B (Proposed Action) – No evidence of eagle nests was found within 0.5 miles of the project area. If a bald or golden eagle or eagle nest is sighted within 0.5 miles of the project construction area, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.

#### 3.7.3 Other Wildlife

The study area lies in the prairie pothole region of North Dakota and the Central Flyway of North America. As such, this area is used as resting grounds for many birds on their spring and fall migrations, as well as nesting and breeding grounds for many waterfowl species. Other non-game bird species are known to fly through and inhabit this region. In total, 1,007 species of migratory birds are protected by the Migratory Bird Treaty Act, 58 of which are currently legally hunted.

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

- TAT Field sparrow (Spizella pusilla), northern pocket gopher mound (Thomomys talpoides), and mountain bluebird (Sialia currocoides). Please refer to Figure 3-5, Mountain Bluebird and Figure 3-6, Pocket Gopher Mound.
- Jones Field sparrow (Spizella pusilla) and North American porcupine (Erethizon dorsatum).







Figure 3-6, Pocket Gopher Mound-TAT Site

#### 3.7.3.1 Other Wildlife Impacts/Mitigation

Alternative A (No Action) - Alternative A would not impact wildlife.

Alternative B (Proposed Action) – Due to the presence of suitable habitat at the project sites for many wildlife and avian species, there is the potential that ground clearing activities associated with the proposed project may impact individuals or suitable habitat

for the wildlife species discussed above; however, no avian nests would be impacted by construction of the proposed project. While wildlife may use the project areas for breeding and feeding, wildlife are generally expected to adapt to changing conditions and continue to thrive. In addition, avian species that may frequent the project areas are transitory in nature and are also generally expected to adapt to changing conditions and continue to thrive. Therefore, the proposed project may affect individuals within these wildlife species, but is not likely to adversely affect any populations or to result in a trend towards listing of any of the species identified. As no grouse leks were observed in project areas, timing restrictions for construction are not required.

The proposed well sites are located on upland bluffs that are at a considerable higher elevation than the Lake Sakakawea shoreline. The topographic features of the area and distance from the shoreline should assist in providing sight and sound buffers that should avoid disturbing shoreline-nesting birds.

During drilling activities, the noise, movements, and lights associated with having a drilling rig on-site should be sufficient to deter wildlife from entering the area. In addition, the reserve pit would only be used primarily for solid material storage, and it is expected that very minimal free fluid will be present in the pit. The absence of exposed liquids in the pit would minimize their attractiveness to wildlife. Immediately after the drilling rig leaves the location, reserve pits would be netted with State and Federal approved nets. These would remain in place until the closure of the reserve pits.

In addition, design considerations will be implemented to further protect against potential habitat degradation. The storage tanks and heater/treater would be surrounded by an impermeable berm that would act as secondary containment to guard against possible spills. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. BMPs to minimize wind and water erosion of soil resources, as well as implementing a closed loop system during drilling would also be put into practice.

All construction activities shall begin after July 15 in order to avoid impacts to migratory birds during the breeding/nesting season. Pre-construction surveys for migratory birds or their nests would be conducted within five days prior to the initiation of all construction activities. In addition, if any migratory bird is found on-site during construction, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.

Additionally, all reasonable, prudent, and effective measures to avoid the taking of migratory bird species will be implemented during the construction and operation phases. These measures will include: the use of suitable mufflers on all internal combustion engines; certain compressor components to mitigate noise; only utilizing approved roadways; placing wire mesh or grate covers over barrels or buckets placed under valves and spigots to collect dripped oil; maintaining open pits and ponds that are free from oil, and netting cuttings pits with netting that has a maximum mesh size of 1.5 inches.

#### 3.7.4 Vegetation

Botanical resources were evaluated using visual inspection. The project areas were also investigated for the presence of invasive plant species. All project areas were located on upland sites dominated by short mixed-grass prairie. The short-grass prairie area at all sites was very similar and consisted mainly of Western wheatgrass (*Pascopyrum smithii*), Junegrass (*Koeleria macrantha*), little bluestem (Schizachyrium scoparium), green needle grass (*Stipa viridula*), blue grama (*Bouteloua gracilis*), and Prairie sandreed (*Calamovilifa longifolia*). Dominant forbs found at the project sites include cudweed sagewort (*Artemesia ludoviciana*), fringed sagewort (*Artemisia frigid*), Western sagewort (*Artemisia campestris*), common yarrow (*Achillea millefolium*), soapweed yucca (*Yucca glauca*), and broom snakeweed (*Guitierrezia sarothrae*). Hardwood draws were noted in and around the project areas; the hardwood draws consisted mainly of green ash (*Fraxinus pennsylvanica*), chokecherry (*Prunus virginiana*), and silver buffalo berry (*Shepherdia argentea*).

At both sites, five main plant communities were identified. The most dominant plant community was short-grass prairie. Additional plant communities included hard wood draws, Western snowberry (Symphoricarpos occidentalis), little bluestem (Schizachyrium scoparium) and silver buffalo berry (Shepherdia argentea). These communities were intermixed with short-grass prairie species. Please refer to Figure 3-7, Short-Grass Prairie Dominated Community-TAT Site; Figure 3-8, Silver Buffalo Berry Dominated Community-TAT Site; Figure 3-9, Short-Grass Prairie Dominated Community-Jones Site; Figure 3-10, Western Snowberry Dominated Community-Jones Site; and Figure 3-11, Wooded Draw-Jones Site.



Figure 3-7, Short-Grass Prairie Dominated Community-TAT Site



Figure 3-8, Silver Buffalo Berry Dominated Community-TAT Site



Figure 3-9, Short-Grass Prairie Dominated Community -Jones Site



Figure 3-10, Western Snowberry Dominated Community-Jones Site



Figure 3-11, Wooded Draw-Jones Site

The project areas were also surveyed for the presence of noxious weeds. Of the 11 species declared noxious under the North Dakota Century Code (Chapter 63-01.0), seven are known to occur in McKenzie County. *Please refer to Table 3.4, Noxious Weed Species.* In addition, counties and cities have the option to add species to the list to be enforced only in their jurisdiction. McKenzie County has added black henbane, common burdock, houndstongue, halogeton, baby's breath.

Table 3.4 Noxious Weed Species				
Common Name	Scientific Name	2009 McKenzie County Reported Acres		
Absinth wormwood	Artemesia absinthium L.	15		
Baby's breath	Gypsophila paniculata	_		
Black henbane	Hyoscyamus niger	-		
Canada thistle	Cirsium arvense (L.) Scop	33,600		
Common burdock	Arctium minus			
Dalmation toadflax	Linaria genistifolia ssp. Dalmatica			
Diffuse knapweed	Centaurea diffusa Lam			
Halogeton	Halogeton glomeratus	PARAMETER STATE OF THE STATE OF		
Houndstongue	Cynoglossum officinale	<del></del>		
Leafy spurge	Euphorbia esula L.	26,200		
Musk thistle	Carduus nutans L.	<del></del>		
Purple loosestrife	Lythrum salicaria			
Russian knapweed	Acroptilon repens (L) DC.	1		
Salt cedar (tamarisk)	Tamarix ramosissima	2,400		
Spotted knapweed	Centaurea maculosa Lam.	5		
Yellow toadflax	Linaria vulgaris			

#### 3.7.4.1 Vegetation Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact vegetation.

Alternative B (Proposed Action) – Ground clearing activities associated with construction of the proposed wells and access road would result in vegetation disturbance; however, the areas of proposed surface disturbances are minimal in the context of the setting, and these impacts would be further minimized in accord with the BLM Gold Book standards for well reclamation. Following construction, interim reclamation measures to be implemented include reduction of cut and fill slopes, redistribution of stockpiled topsoil, and reseeding of disturbed areas with a native grass seed mixture consistent with surrounding vegetation. If commercial production equipment is installed at one or both sites, the well pad would be reduced in size to accommodate the production facilities, while leaving adequate room to conduct normal well maintenance and potential recompletion operations, with the remainder of the well pad reclaimed. Reclamation activities would include leveling, re-contouring, treating, backfill, and reseeding with a native grass seed mixture from a BIA/BLM-approved source. Erosion control measures would be installed as appropriate. Stockpiled topsoil would be redistributed and reseeded as recommended by the BIA.

If no commercial production developed from one or both of the proposed wells, or upon final abandonment of commercial operations, all disturbed areas would be promptly reclaimed. Both access roads and well pad areas would be re-contoured to match topography of the original landscape as close as possible, and reseeded with vegetation consistent with surrounding native species to ensure a healthy and diverse mix that is free of noxious weeds. Seed will be obtained from a BIA/BLM-approved source. Revegetation of the site would be consistent with the BLM Gold Book standards. Erosion control measures would be installed, as appropriate in a manner that is consistent with the BLM Gold Book standards. Maintenance of the revegetated site would continue until such time that the stand is consistent with the surrounding undisturbed vegetation and the site is free of noxious weeds. The surface management agency will provide final inspection of the site to deem the reclamation effort complete.

#### 3.8 Cultural Resources

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

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

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

Cultural resource inventories of these well pads and access roads were conducted by personnel of Kadrmas, Lee & Jackson, Inc., using an intensive pedestrian methodology. For the TAT USA #13-23H project approximately 18.8 acres were inventoried between November 24, 2009 and April 9, 2010 (Ó Donnchadha 2010a) and for the Jones USA #14-14H (formerly Jones USA #13-14H) project approximately 26.5 acres were inventoried on April 6, 2010 (Ó Donnchadha 2010b). No historic properties were located within either 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 determinations of no historic properties affected for these undertakings. This determination was communicated to the THPO for the TAT USA #13-23H project on April 21, 2010 and for the Jones USA #13-14H project on May 5, 2010 (see Chapter 4); however, no response was received from the THPO within the allotted 30-day comment period for either of these project areas.

#### 3.8.1 Cultural Resources Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact cultural resources.

Alternative B (Proposed Action) - No cultural resources were identified within the proposed well sites and access roads. As such, cultural resources impacts are not anticipated. A determination of effect is pending from BIA. If cultural resources are discovered during construction or operation, work shall immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery, work shall not resume until written authorization to proceed has been received from the BIA. All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.

#### 3.9 **Socioeconomic Conditions**

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

The Fort Berthold Reservation is home to six major communities, consisting of New Town, White Shield, Mandaree, Four Bears, Twin Buttes, and Parshall. These communities provide small business amenities such as restaurants, grocery stores, and gas stations; however, they lack the larger shopping centers that are typically found in larger cities of the region such as Minot and Bismarck. According to 2000 US Census data, educational/health/social services is the largest industry on the Reservation, followed by the entertainment/recreation/accommodation/food industry. The Four Bears Casino, Convenience Store, and Recreation Park are also major employers with over 320 employees, 90% of which are tribal members. In addition, several industries are located on the Reservation, including Northrop Manufacturing, Mandaree Electrical

<sup>7</sup> It should be noted that the most recent US Census data dates from 2000. Since 2000, there has been an increasing focus on oil and gas development on the Fort Berthold Reservation. As such, it is anticipated that these trends have likely shifted; however, no new data is available until the 2010 US Census is completed and published.

Cooperative, Three Affiliated Tribes Lumber Construction Manufacturing Corporation, and Uniband.

Several paved state highways provide access to the Reservation including ND Highways 22 and 23, and Highway 1804. These highways provide access to larger communities such as Bismarck, Minot and Williston. Paved and gravel BIA Route roadways serve as primary connector routes within the Reservation. In addition, networks of rural gravel roadways are located throughout Reservation boundaries providing access to residences, oil and gas developments, and agricultural land. Major commercial air service is provided out of Bismarck and Minot, with small-scale regional air service provided out of New Town and Williston.

#### 3.9.1 Socioeconomic Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact the socioeconomic conditions in the project areas. However, Alternative A would not permit the development of oil and gas resources, which could have positive effects on employment and income through the creation of jobs and payment of leases, easement, and/or royalties to Tribal members.

Alternative B (Proposed Action) — Alternative B 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. 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. In addition, the increased traffic during construction may create more hazardous conditions for residents. Marathon will follow McKenzie County, BIA, and North Dakota Department of Transportation rules and regulations regarding rig moves and oversize/overweight loads on state and county roads used as haul roads in order to maintain safe driving conditions.

#### 3.10 Environmental Justice

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

Generally, members of 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 compromise only 5% of North Dakota's population and 21% of the population of McKenzie County. Even in a state with relatively low per capita and household income, Native American individuals and households are distinctively disadvantaged.

The Fort Berthold Reservation and McKenzie County have lower than statewide averages of per capita income and median household income. In addition, they have higher rates of unemployment and individuals living below poverty level than the State average. *Please refer to Table 3.5, Employment and Income.* 

Table 3.5 Employment and Income				
Location	Per Capita Income	Median Household Income	Unemployment Rate	Individuals Living Below Poverty Level
McKenzie County	\$14,732	\$29,342	4.1%	17.2%
Fort Berthold Reservation	\$10,291	\$26,274	11.1%	28.1%
Statewide	\$17,769	\$34,604	4.6%	11.9%

Source: U.S. Census Bureau of the Census, Census 2000.

Population decline in rural areas of North Dakota has been a growing trend as individuals move toward metropolitan areas of the state, such as Bismarck and Fargo. While McKenzie County's population has 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 McKenzie County and the state of North Dakota. *Please refer to Table 3.6*, *Demographic Trends*.

Table 3.6 Demographic Trends					
Location	Population in 2000	% of State Population	% Change 1990–2000	Predominant Race	Predominant Minority
McKenzie County	5,737	0.89%	-10.1%	White	American Indian (21.2%)
Fort Berthold Reservation	5,915	0.92%	+9.8%	American Indian <sup>8</sup>	White (26.9%)
Statewide	642,200	99 Nr	+0.5%	White	American Indian (5%)

Source: U.S. Census Bureau of the Census, Census 2000.

#### 3.10.1 Environmental Justice Impacts/Mitigation

Alternative A (No Action) - Alternative A would not result in environmental justice impacts.

Alternative B (Proposed Action) – Alternative B would not require relocation of homes or businesses, cause community disruptions, or cause disproportionately adverse impacts to members of the Three Affiliated Tribes. 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. The proposed project is not anticipated to result in disproportionately adverse impacts to minority or low-income populations. Oil and gas development is occurring in the surrounding areas off the Fort Berthold Reservation as well. Employment opportunities

According to the North Dakota Tourism Division, there are 10,400 enrolled members of the Three Affiliated Tribes.

related to oil and gas development may provide a positive impact by lowering the unemployment rate and increasing the income levels at the Fort Berthold Reservation. In addition, the Three Affiliated Tribes and allotted owners of mineral interests may receive income from oil and gas development on the Fort Berthold Reservation in the form of royalties, if drilling and production are successful, as well as from TERO (Tribal Employee Rights Office) taxes on construction of drilling facilities.

#### 3.11 Infrastructure and Utilities

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

Known utilities and infrastructure within the vicinity of the proposed projects include paved and gravel roadways. The nearest water pipeline is approximately 2 miles northwest of the TAT site and approximately 1.5 miles northwest of the Jones site.

#### 3.11.1 Infrastructure and Utility Impacts/Mitigation

Alternative A (No Action) – Alternative A would not impact infrastructure or utilities.

Alternative B (Proposed Action) – Alternative B would require improvements to existing roadways, as well as construction of new roadway segments. All haul routes used would either be private roads or are roads that are approved for this type of transportation use by the local governing tribal, township, county, and/or state entities. Marathon will follow McKenzie County, BIA, and North Dakota Department of Transportation rules and regulations regarding rig moves and oversize/overweight loads on state and county roads used as haul roads. All contractors are required to permit their oversize/overweight loads through these entities. Marathon's contractors will be required to adhere to all local, county, tribal, and state regulations regarding rig moves, oversize/overweight loads, and frost restrictions.

Each well site may also require the installation of supporting electrical lines. In addition, if commercially recoverable oil and gas are discovered at the well sites, a natural gas gathering system may need to be installed. It is expected that electric lines and other pipelines would be constructed within the existing right-of-way, or additional NEPA analysis and BIA approval will be completed prior to construction of these utilities. Other utility modifications would be identified during design and coordinated with the appropriate utility company.

Drilling operations at the proposed well site may generate produced water. In accordance with the BLM Gold Book and BLM Onshore Oil and Gas Order Number 7, produced water would be disposed of via subsurface injection, or other appropriate methods that would prevent spills or seepage. Produced water may be trucked to nearby oil fields where injection wells are available.

Safety hazards posed from increased traffic during the drilling phase are anticipated to be short-term and minimal. It is anticipated that approximately 30 to 40 trips, over the course of several days, would be required to transport the drilling rig and associated equipment to each proposed well site. If commercial operations are established following drilling activities, the pump would be checked daily and oil and water hauling activities would commence. Oil would be hauled using a semi tanker trailer, typically capable of

hauling 140 barrels of oil per load. Traffic to and from the well site would depend upon the productivity of the well. A 1,000 barrel per day well would require approximately seven tanker visits per day, while a 300 barrel per day well would require approximately two visits per day9. Produced water would also be hauled from the site using a tanker, which would typically haul 110 barrels of water per load. The number of visits would be dependent upon daily water production 10. Established load restrictions for state and BIA roadways would be followed and haul permits would be acquired as appropriate.

#### 3.12 **Public Health and Safety**

Health and safety concerns include hydrogen sulfide (H<sub>2</sub>S) gas<sup>11</sup>, hazardous materials used or generated during well installation or production, and traffic hazards associated with heavy drill rigs and tankers.

#### 3.12.1 Public Health and Safety Impacts/Mitigation

Alternative A (No Action) - Alternative A would not impact public health and safety.

Alternative B (Proposed Action) - Project design and operational precautions would minimize the likelihood of impacts from H<sub>2</sub>S gases, hazardous materials, and traffic, as described below.

H<sub>2</sub>S Gases. It is unlikely that the proposed action would result in release of H<sub>2</sub>S at dangerous concentrations; however, Marathon will submit H<sub>2</sub>S Contingency Plans to the BLM as part of the site APDs. These plans establish safety measures to be implemented throughout the drilling process to prevent accidental release of H<sub>2</sub>S into the atmosphere. The Contingency Plans are designed to protect persons living and/or working within 3,000 feet of each well location and include emergency response procedures and safety precautions to minimize the potential for an H<sub>2</sub>S gas leak during drilling activities. Satellite imagery revealed that there are no residences within 3,000 feet of any of the proposed well sites.

Hazardous Materials. The EPA (Environmental Protection Agency) specifies chemical reporting requirements under the Superfund Amendments and Reauthorization Act of 1986, as amended. No materials used or generated by this project for production, use, storage, transport, or disposal are on either the Superfund list or on the EPA's list of extremely hazardous substances in 40 CFR 355.

The SPCC (Spill Prevention, Control, and Countermeasure) rule includes EPA requirements for oil spill prevention, preparedness, and response to prevent oil

<sup>9</sup> A typical Bakken oil well initially produces at a high rate and then declines rapidly over the next several months to a more moderate rate. In the vicinity of the proposed project areas, initial rates of 500 to 1,000 BOPD (barrels of oil per day) could be expected, dropping to 200 to 400 BOPD after several months.

<sup>10</sup> A typical Bakken oil well initially produces water at 200 bbls per day and then declines rapidly over the next several months to a more moderate rate. In the vicinity of the proposed project areas, initial rated of 200 BWPD (barrels of water per day) could be expected, dropping to 30 to 70 BWPD after several months.

<sup>11</sup> H<sub>2</sub>S is extremely toxic in concentrations above 500 parts per million. H<sub>2</sub>S has not been found in measurable quantities in the Bakken Formation. However, before reaching the Bakken, drilling would penetrate the Mission Canyon Formation, which is known to contain varying concentrations of H<sub>2</sub>S.

discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

#### 3.13 Cumulative Considerations

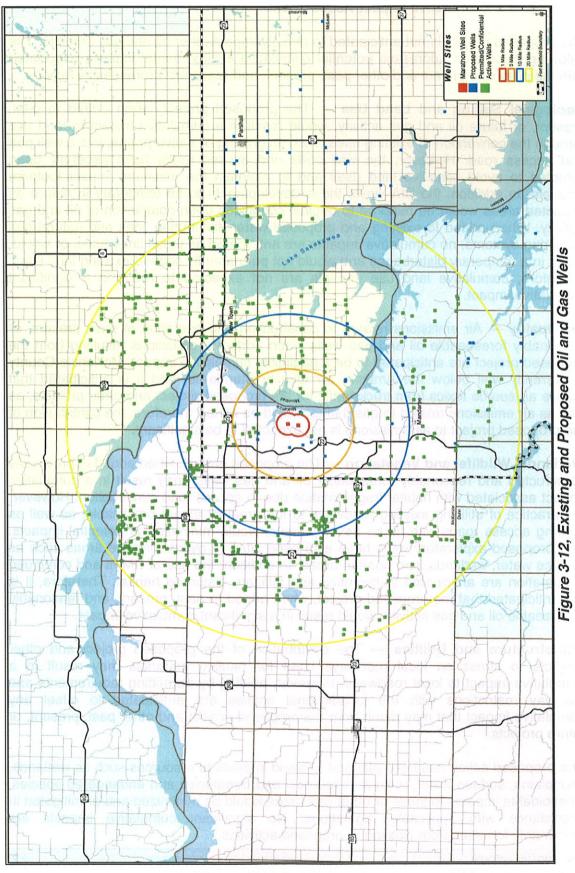
Cumulative impacts result from the incremental consequences of an action "when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). Effects of an action may be minor when evaluated in an individual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

#### 3.13.1 Past, Present, and Reasonably Foreseeable Actions

According to the NDIC, as of April 14, 2010, there were approximately 270 active and/or confidential oil and gas wells within the Fort Berthold Reservation and 1,269 within the 20-mile radius outside the boundaries of the Fort Berthold Reservation. *Please refer to Figure 3-12, Existing and Proposed Oil and Gas Wells.* There is one known oil and gas well (Marathon well) within one mile of the TAT site. No known oil and gas wells currently exist within one mile of the Jones site. *Please refer to Table 3.7, Summary of Active and Proposed Wells.* 

Table 3.7 Summary of Active and Proposed Wells				
Distance from Sites	Number of Active or Proposed Wells			
1 mile radius	0			
5 mile radius	19			
10 mile radius	158			
20 mile radius	640			

BMPs would be implemented to minimize impacts of the proposed project. The TAT and Jones site would share an access road with nearby planned wells which connect with State Highway 22, thus minimizing the extent of access road impacts associated with the proposed project. Commercial success at any new well might result in additional nearby oil/gas exploration proposals, but such developments remain speculative until APDs have been submitted to the BLM or BIA. If commercially recoverable oil and gas are discovered at the well site, a natural gas gathering system may need to be installed. Currently natural gas gathering systems are proposed on the Fort Berthold Reservation but that information remains proprietary.



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Marathon Oil Company
Drilling of Luther – USA 11-16H and Luther – USA 31-16H – Fort Berthold Reservation
Draft Environmental Assessment

#### 3.13.2 Cumulative Impact Assessment

The proposed project is not anticipated to directly impact other oil and gas projects. 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 native prairie, into a well pad and access road. However, the well pads and access roads have generally been 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 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. McKenzie County is currently well below the Ambient Air Quality Standards, and it is anticipated that mobile air source toxics 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.

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 due to access road construction. 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, and 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.

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.

#### 3.14 Irreversible and Irretrievable Commitment of Resources

Removal and consumption of oil or gas from the Bakken Formation would be an irreversible and irretrievable commitment of resources. Other potential resource commitments include acreage devoted to disposal of cuttings, soil lost through wind and water erosion, cultural resources inadvertently destroyed, wildlife killed during earthmoving operations or in collisions with vehicles, and energy expended during construction and operation. None of these impacts are expected to be significant.

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

Short-term activities would not significantly detract from long-term productivity of the project area. The area dedicated to the access roads and well pads would be unavailable for livestock grazing, wildlife habitat, or other uses. However, allottees with surface rights would be compensated for loss of productive acreage and project footprints would shrink considerably once the wells were drilled and non-working areas reclaimed and reseeded. Successful and ongoing reclamation of the landscape would reestablish the land's use for wildlife and livestock grazing, stabilize the soil, and reduce the potential for erosion and sedimentation. The primary long-term resource loss would be the extraction of oil and gas resources from the Bakken Formation, which is the purpose of this project.

#### 3.16 **Permits**

Marathon will be required to acquire the following permits prior to construction:

- Application for Permit to Drill Bureau of Land Management
- Application for Permit to Drill North Dakota Industrial Commission
- Section 10 Permit United States Army Corps of Engineers

#### 3.17 **Environmental Commitments/Mitigation**

The following commitments have been made by Marathon Oil Company:

- Topsoil will be segregated and stored on-site to be used in the reclamation process. All disturbed areas would be re-contoured to original elevations as close as possible as part of the reclamation process.
- BMPs (specifically, erosion mats and biologs) will be implemented to minimize wind and water erosion of soil resources. Soil stockpiles will be positioned to help divert runoff around the well pad.
- Well sites and access roads will avoid surface waters. The proposed project will not alter stream channels or change drainage patterns.
- The drill cuttings pits will be located on the cut side of the locations and away from areas of shallow ground water and have a reinforced synthetic liner to prevent potential leaks. All spills or leaks of chemicals and other pollutants will be reported to the BLM and EPA. The procedures of the surface management agency shall be followed to contain leaks or spills.

- All proposed wells will be cemented and cased to isolate aquifers from potentially productive hydrocarbon and disposal/injection zones.
- Wetlands and riparian areas will be avoided.
- Disturbed vegetation will be re-seeded in kind upon completion of the project, and a noxious weed management plan would be implemented. The reseeded site would be maintained until such time that the vegetation is consistent with surrounding undisturbed areas and the site is free of noxious weeds. Seed will be obtained from a BIA/BLM approved source.
- Well sites and access roads will avoid impacts to cultural resources. If cultural
  resources are discovered during construction or operation, work shall
  immediately be stopped, the affected site secured, and BIA and THPO notified.
  In the event of a discovery, work shall not resume until written authorization to
  proceed has been received from the BIA.
- Access roads will be located at least 50 feet away from identified cultural resources. The boundaries of these 50-foot "exclusion zones" would be pinflagged as an extra measure to ensure that inadvertent impacts to cultural resources are avoided.
- All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.
- Marathon will ensure all contractors working for the company will adhere to all local, county, tribal, and state regulations and ordinances regarding rig moves, oversize/overweight loads, and frost law restrictions.
- Utility modifications will be identified during design and coordinated with the appropriate utility company
- Disposal areas would be properly fenced to prevent human or animal access.
- H<sub>2</sub>S Contingency Plans for each well site will be submitted to the BLM as part of the APD
- Established load restrictions for state and BIA roadways will be followed and haul permits would be acquired as appropriate.
- Suitable mufflers will be put on all internal combustion engines and certain compressor components to mitigate noise levels.
- Well sites and associated facilities will be painted in colors to allow them to better blend in with the natural background color of the surrounding landscape.
- BMPs will be used during construction to ensure contaminants do not move off site.
- The cuttings pit will be netted while not actively being used.
- A closed loop system will be used during drilling. Liquids from drilling will be transported off site and dry cuttings will be stabilized in place.
- If a whooping crane is sighted within one-mile of the well site or associated facilities while it is under construction, all work will cease within one-mile of that

- part of the project and the USFWS will be contacted immediately. In coordination with USFWS, work may resume after the bird(s) leave the area.
- All construction activities shall begin after July 15 in order to avoid impacts to migratory birds during the breeding/nesting season. Pre-construction surveys for migratory birds or their nests would be conducted within five days prior to the initiation of all construction activities. In addition, if any migratory bird is found onsite during construction, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.
- Pre-construction surveys for migratory birds or their nests would be conducted within five days prior to the initiation of all construction activities.
- If a bald or golden eagle or eagle nest is sighted within 0.5 miles of the project construction area, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.
- Wire mesh or grate covers will be placed over barrels or buckets placed under valves and spigots to collect dripped oil.
- Netting, with a maximum mesh size of 1.5 inches will be used to keep birds and other small animals out of open pits.

# **Chapter 4 Preparers and Agency Coordination**

#### 4.1 Introduction

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

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

#### 4.2 Preparers

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

		Table 4.1 Preparers	
Affiliation	Name	Title	Project Role
Bureau of Indian Affairs	Marilyn Bercier	Regional Environmental Scientist	Review of Draft EA and recommendation to Regional
Alialis	Mark Herman	Environmental Engineer	Director regarding FONSI or EIS
Marathon Oil	Luke Franklin	Senior HES Professional	Project development, alternatives, document review
Company	Darrell Nodland	Coordinator	Project development, alternatives, document review
	Shanna Braun	Environmental Scientist	Client and agency coordination, senior review
	Steve Czeczok	Environmental Scientist	Field resources surveys, impact assessment, principal author
Kadrmas, Lee & Jackson, Inc.	Brian O'Donnchadha	Archaeologist	Cultural resources surveys
	Amy Leuchtmann	Archaeologist	Cultural resources surveys
	Jerry Reinisch	Environmental Planner	Field resources surveys
	Skip Skattum	GIS Analyst	Impact assessment, exhibit creation

#### 4.3 Agency Coordination

To initiate early communication and coordination, an early notification package to tribal, federal, state, and local agencies and other interested parties was distributed on April 13, 2010. This scoping package included a brief description of the proposed project, as well as a location map. Pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, a solicitation of views was requested to ensure that social, economic, and environmental effects were considered in the development of this project.

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

#### 4.4 Public Involvement

Provided the BIA approves this document, a FONSI (Finding of No Significant Impact) will be issued. The FONSI is followed by a 30-day public appeal period. BIA will advertise the FONSI and public appeal period by posting notices in public locations throughout the Reservation. No construction activities may commence until the 30-day public appeal period has expired.



### 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

APR 2 1 2010

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

Dear Mr. Brady:

We have considered the potential effects on cultural resources of an oil well pad and access road in McKenzie County, North Dakota. Approximately 18.8 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 which appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. 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-1707/FB/10, the proposed undertaking, location, and project dimensions are described in the following report:

Ó Donnchadha, Brian

(2010) TAT USA #13-23H Well Pad and Access Road: A Class III Cultural Resource Investigation in McKenzie County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND.

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

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

Sincerely,

Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes

Superintendent, Fort Berthold Agency



### 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 SERVE TO: DESCRM MC-208 MAY 0 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 two oil well pads and access roads in McKenzie County, North Dakota. Approximately 37.7 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed reports. No historic properties were located which appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. 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 these undertakings. Catalogued as BIA Case Number AAO-1707/FB/10, the proposed undertakings, locations, and project dimensions are described in the following reports:

Ó Donnchadha, Brian

(2010) Jones USA 13-14H Well Pad and Access Road: A Class III Cultural Resource Investigation in McKenzie County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND.

Ó Donnchadha, Brian, and Miguel Espinoza

(2010) Quale USA 31-20H Well Pad and Access Road: A Class III Cultural Resource Investigation in McKenzie County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND.

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

Enclosures

cc: Chairman, Three Affiliated Tribes

Superintendent, Fort Berthold Agency

# **Chapter 5 References**

#### 5.1 References

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# Appendix A Agency Scoping Materials

April 13, 2010

<<NAME>> <<ADDRESS>> <<CITY>><<STATE>><<ZIP>>

> Re: Two Proposed Oil and Gas Exploratory Wells Fort Berthold Reservation McKenzie County, North Dakota

Dear <<NAME>>.

On behalf of Marathon Oil Company, Kadrmas, Lee & Jackson, Inc. is preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM of the drilling and completion of two exploratory oil and gas wells on the Fort Berthold Reservation. These well sites are proposed to be positioned in the following locations:

- Jones USA #13-14H located in the SW ¼ of Section 14, T151N, R94W, 5<sup>th</sup> P.M.
- TAT USA #13-23H located in the SE ¼ of Section 22, T151N, R94W, 5<sup>th</sup> P.M.

#### Please refer to the enclosed project location map.

The well sites have been positioned to utilize existing roadways for access to the extent possible. The drilling of these well sites is proposed to begin as early as summer 2010.

To ensure that social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed development of this project, pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property that your department may own, or have an interest in, located within the project area. We would also appreciate being made aware of any proposed development your department may be contemplating in the area of the proposed project. Any information that might help us in our study would be appreciated.

It is requested that any comments or information be forwarded to our office on or before **May 14, 2010**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the necessary environmental documentation.

If you would like further information regarding this project, please contact Darrell Nodland, Marathon Coordinator, at (701) 456-7546 or myself at (218) 790-4476. Thank you for your cooperation.

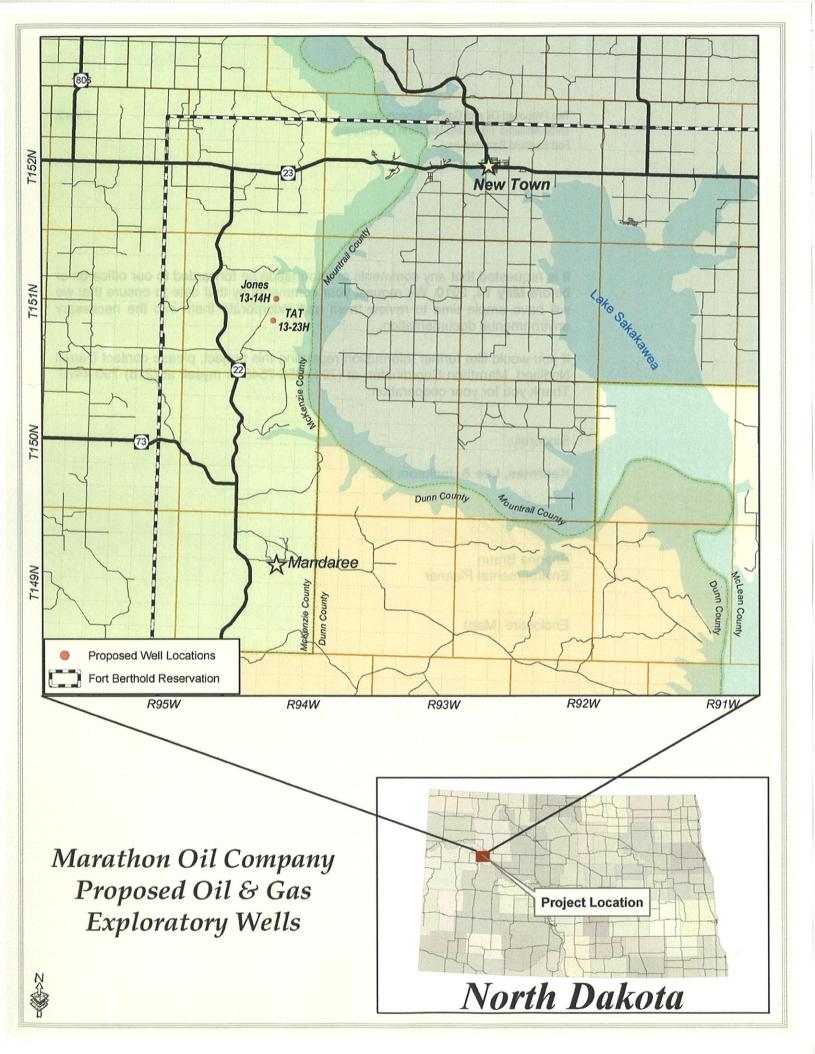
Sincerely,

Kadrmas, Lee & Jackson, Inc.

Shanna Braun

Environmental Planner

Enclosure (Map)



CTitle First	Last	11(16	nepariment	ליומאר	ACE CON	CILY.	Siale	417
Mike	Black	Acting Regional Director		Bureau of Indian Affairs	115 4th Ave. SE	Aberdeen	SD	57401
Jeffrey	Desjarlais	Environmental Protection Specialist		Bureau of Indian Affairs	202 Main Street	New Town	SO	58763
Darryl	Turcotte	Environmental Protection Specialist		Bureau of Indian Affairs	202 Main Street	New Town	Q	58763
Richard	Nelson	Chief, Resource Management	Dakotas Area Office	Bureau of Reclamation	PO Box 1017	Bismarck	S	58502-1017
Steve	Obenauer	Manager	Bismarck Airports District Office	Federal Aviation Administration	2301 University Drive, Bldg 23B	Bismarck	QN	58504
Dan	Cimarosti	Мападег	ND Regulatory Office	US Army Corps of Engineers	1513 S. 12th St.	Bismarck	QN	58504
Charles	Sorensen	Natural Resource Specialist	Riverdale Field Office	US Army Corps of Engineers	PO Box 527	Riverdale	S	58565
Candace	Gorton	Chief, Env., Economics, & Cultural	Omaha District	US Army Corps of Engineers	106 S. 15th St.	Omaha	NE	68102-1618
odol	Glover	Resource Section		1 D Decree of the Control of the Con	00 00 00 14450	- Indiana	C/4	60600 4460
Tion of	Glovei		470	US Department of Agriculture	PU 60x 1458	BISMarck	N.	20207-1428
ceraic ceraic	rauison	Director, Transmission Linest Substations	ND Maintenance Office	US Department of Energy Western Area Power Admin	PO 80x 11/3	Bismarck	2	58502-1173
Larry	Svoboda	Director	NEPA Program, Region 8	US Environment Protection Agency	1595 Wynkoop Street	Denver	00	80202-1129
Jeffrey	Towner	Field Supervisor	ND Field Office	US Fish & Wildlife Service	3425 Minam Ave.	Bismarck	Q	58501
Cheryl	Kulas	Executive Director	***************************************	Indian Affairs Commission	600 E. Blvd. Ave.	Bismarck	QN	58505-0300
Grea	Wiche	Director	Water Resources Division	IIS Geological Strotov	1st Fibor, Judicial Wing, Km 117	Biemarck	CIV	58501
L. David	Glatt	Chief	Environmental Health Section	ND Department of Health	918 E. Divide Ave., 4th floor	Bismarck	QN	58501-1947
Mike	McKenna	Chief	Conservation & Communication Division	ND Game & Fish Department	100 Bismarck Evoneseway	Riemarck	CM	58501,5095
Doing	Probal	Disorbo		ND Darks 2 Decreation Deat	1600 E Control Ave Suite 3	Biomarch	2 5	58503 0849
Dale	Frink	State Engineer		ND State Water Commission	900 F. Blvd. Ave.	Bismarck	CN	58505-0850
Bill	Boyd	Construction Manager		Midcontinent Cable Company	719 Memorial Hwy	Bismarck	QN	58501
Doug	Dixon	General Manager	Badlands Region	Montana Dakota Utilities	PO Box 1406	Williston	Q	58802-1406
George	Berg	Manager		NoDak Electric Coop., Inc.	Box 13000	Grand Forks	QN	58208-3000
Ken	Miller		Land Department	Northern Border Pipeline Company	13710 FNB Parkway	Omaha	NE	68154-5200
Ray	Christenson	Manager/CEO		Southwest Water Authority	4665 2nd St. W.	Dickinson	Q	58601
David C.	Schelkoph	CEO		West Plains Electric Coop., Inc.	PO Box 1038	Dickinson	S	58602-1038
	or Madam	Manager		Xcel Energy	PO Box 2747	Fargo	QN	58108-2747
	or Madam	Manager		Mountrail-Williams Electric Cooperative	355 Main St	New Town	QN	58763
Walt	Peterson	District Engineer	Williston District	ND Department of Transportation	605 Dakota Parkway West	Williston	QN	58802-0698
Lonny	Bagley	Field Office Manager	North Dakota Field Office	Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	QN	58601
MIKe	Nasn	Assistant Freid Office Manager	Division on Mineral Resources	Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	ON I	58601
Michael	Selvage	Inbal Chairman Tribol Chairman	Et Tottan Tabal Business Office	Sisseton-Wahpeton Sioux Tribe	PO Box 509	Sisseton	2 2	5/262-026/
Ron	His Horse Is Thunder	T.	Transport Contracts Contracts	Standing Rock Signs Toba	PO Box D	Fort Yates	Q. C.	58538
Perry	Brady	1		Three Affiliated Tribes	HC3 Box 2	New Town	QN	58763
Marcus	Levings	Tribal Chairman	AND THE PARTY OF T	Three Affiliated Tribes	HC3 Box 2	New Town	QN	58763
David	Brien	Tribal Chairman		Turtle Mountain Chippewa	PO Box 900	Belcourt	QN	58316-0900
Damon	Williams	Tribal Attorney		Three Affiliated Tribes	404 Frontage Road	New Town	QN	58763
Fred	Fox	Director	Energy Department	Three Affiliated Tribes	404 Frontage Road	New Town	QN	58763
V. Judy	Brugh		Four Bears Segment	Three Affiliated Tribes	404 Frontage Road	New Town	GN	58763
Arnold	Strahs	Representative	Mandaree Segment	Three Affiliated Tribes	PO Box 665	Mandaree	ND	58757
Scott	Eagle	Representative	Shell Creek Segment	Three Affiliated Tribes	404 Frontage Road	New Town	QN.	58763
Mervin	Packineau	Representative	Parshall/Lucky Mound Segment	Three Affiliated Tribes	PO Box 468	Parshall	ND	58770
Frank	Whitecalf	Representative	White Shield Segment	Three Affiliated Tribes	404 Frontage Road	New Town	Q	58763
Barry	Benson	Representative	Twin Buttes Segment	Three Affiliated Tribes	70879 E Ave NW	Halliday	QN	58636
Fred	Poitra		Game and Fish Department	Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
ANALISM PROPERTY AND ANALYSM AND	or Madam		Natural Resources Department	Three Affiliated Tribes	404 Frontage Road	New Town	QN	58763
Roger	Hovda	Operations Manager	AAAAAAAAA MAAAAAAAAAAAAAAAAAAAAAAAAAAA	Reservation Telephone Cooperative	PO Box 68	Parshall	QQ	58770-0068
Luke	Franklin	Senior HES Professional		Marathon Oil Company	3172 Highway 22 N	Dickinson	Q	58601
Darrell	Nodland	Coordinator		Marathon Oil Company	3172 Highway 22 N	Dickinson	N O	58601
Francis	Olson	)r		McKenzie County	201 5th Street NW	Watford City	S	58854
30.	Lawlar	Chair	County Commission	McKenzie County	201 5th Street NW	Mottord Chy	Q	58854

# Appendix B Agency Scoping Responses

# List of Scoping Responses Marathon Oil Company EA for Jones and TAT Oil and Gas Well Sites

#### **Federal**

US Department of Agriculture – Natural Resources Conservation Service

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

US Department of the Army - Corps of Engineers, Omaha District Office

US Department of the Army – Corps of Engineers, Riverdale Field Office

US Department of the Interior - Bureau of Reclamation

US Department of the Interior - US Fish and Wildlife Service

#### **State**

North Dakota Department of Health

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



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

April 19, 2010

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

RE: Two Proposed Oil and Gas Exploratory Wells, Fort Berthold Reservation; Jones – USA #13-14H located in the SW ¼ of Section 14, T151N; TAT – USA #13-23H located in the SE ¼ of Section 22, T151N in McKenzie County, ND

Dear Ms. Braun:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated April 13, 2010, concerning two proposed oil and gas exploratory wells on the Fort Berthold Reservation; Jones – USA #13-14H located in the SW ¼ of Section 14, T151N; TAT – USA #13-23H located in the SE ¼ of Section 22, T151N in McKenzie County, North Dakota.

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

The Wetland Conservation Provisions of the 1985 Food Security Act, as amended, provide that if a USDA participant converts a wetland for the purpose of, or to have the effect of, making agricultural production possible, loss of USDA benefits could occur. The NRCS has developed the following guidelines for the installation of permanent structures where wetlands occur. If these guidelines are followed, the impacts to the wetland(s) will be considered minimal allowing USDA participants to continue to receive USDA benefits. Following are the requirements:

1) Disturbance to the wetland(s) must be temporary, 2) no drainage of the wetland(s) is allowed (temporary or permanent), 3) mechanized landscaping necessary for installation is kept to a minimum and preconstruction contours are maintained, 4) temporary side cast material must be placed in such a manner not to be dispersed in the wetland, and 5) all trenches must be backfilled to the original wetland bottom elevation.

Ms. Braun Page 2



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

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

Sincerely,

PAUL J. SWEENEY

State Conservationist

cc:

Virginia Mehlhoff, DC, NRCS, Garrison, ND Terrance Gisvold, ASTC (FO), NRCS, Dickinson, ND



#### DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, OMAHA DISTRICT 1616 CAPITOL AVENUE OMAHA NE 68102-4901

April 30, 2010

Planning, Programs, and Project Management Division

Ms. Shanna Braun 1505 South 30<sup>th</sup> Avenue P.O. Box 96 Moorhead, Minnesota 56561

Dear Ms. Braun:

The U.S. Army Corps of Engineers, Omaha District (Corps) has reviewed your letter dated April 13, 2010, regarding the proposed drilling and completion of up to two exploratory oil and gas wells on the Fort Berthold Reservation in Mountrail and McKenzie Counties, North Dakota. The Corps offers the following comments:

Since the proposed project does not appear to be located within Corps owned or operated lands, we are providing no floodplain or flood risk information. To determine if the proposed project may impact areas designated as a Federal Emergency Management Agency special flood hazard area, please consult the following floodplain management office:

North Dakota State Water Commission Attention: Jeff Klein 900 East Boulevard Avenue Bismarck, North Dakota 58505-0850 jjkein@nd.gov T-701-328-4898 F-701-328-3747

Your plans should be coordinated with the U.S. Environmental Protection Agency, which is currently involved in a program to protect groundwater resources. If you have not already done so, it is recommended you consult with the U.S. Fish and Wildlife Service and the North Dakota Game and Fish Department regarding fish and wildlife resources. In addition, the North Dakota State Historic Preservation Office should be contacted for information and recommendations on potential cultural resources in the project area.

Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. You can visit the Omaha District's Regulatory website for permit applications and related information. Please review the information on the provided web site (https://www.nwo.usace.army.mil/html/od-r/district.htm) to determine if this project requires a 404 permit. For a detailed review of permit requirements, preliminary and final project plans should be sent to:

U.S. Army Corps of Engineers Bismarck Regulatory Office Attention: CENWO-OD-R-ND/Cimarosti 1513 South 12th Street Bismarck, North Dakota 58504

In addition, please update your records with our current mailing address:

U.S. Army Corps of Engineers, Omaha District Planning Branch Attention: CENWO-PM-AC 1616 Capitol Avenue Omaha, Nebraska 68102-4901

Brud Thy

If you have any questions, please contact Mr. John Shelman of my staff at (402) 995-2708.

Sincerely,

**Brad Thompson** 

Chief, Environmental Resources and Missouri Recovery Program and Plan Formulation, Planning Branch Planning, Programs and Project Management Division



#### DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, OMAHA DISTRICT NORTH DAKOTA REGULATORY OFFICE 1513 SOUTH 12<sup>TH</sup> STREET BISMARCK ND 58504-6640 April 15, 2010

North Dakota Regulatory Office

[NWO-2010-0762-BIS NWO-2010-0768-BIS]

Kadrmas Lee & Jackson, Inc. ATTN: Shanna Braun 1505 S 30<sup>th</sup> Avenue PO Box 96 Moorhead, Minnesota 56561-0096

Dear Ms. Braun:

This is in response to your request for comments on behalf of Marathon Oil Company for the preparation of an Environmental Assessment for the Bureau of Indian Affairs and the Bureau of Land Management for proposed construction of two (2) separate exploratory oil and gas wells on the Fort Berthold Reservation. They have been identified as Jones – USA #13-14H and TAT – USA #13-23H. These wells are located in McKenzie County, North Dakota.

The Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. If the work, including the associated facilities, would include a discharge of dredged or fill material in waters of the U.S., even temporarily, a permit would be required. Nationwide Permit No.12 may cover the work proposed provided all the terms and conditions of the nationwide permit, including water quality certification, are met. In certain instances, the current nationwide permit does not require notification to the Corps. Please review the attached Fact Sheet to see if these projects require notification.

If you believe this project will result in a discharge of fill material in waters of the U.S. please fill out the enclosed application and return to our office.

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

Sincerely,

Patsy Chooke Project Manager

North Dakota Regulatory Office

Top Avade

**Enclosures** 



# 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 filted, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identity the authorization, if possible.

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

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

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

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

#### DRAWINGS AND ILLUSTRATIONS

#### General Information.

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

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

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

## APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

(33 CFR 325)

OMB APPROVAL NO. 0710-0003

EXPIRES: 31 August 2012

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

#### PRIVACY ACT STATEMENT

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

completed in full will be returned.				
(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)				
1, APPLICATION NO. 2, FIELD OFFICE CODE 3, t	NATE RECEIVED	4. DATE APPLICATION	N COMPLETE	
(ITEMS BELOW TO B	E FILLED BY APPLI	CANT)		
5 APPLICANT'S NAME	8. AUTHORIZED AGI	ENT'S NAME AND TITLE	(an agent is not required)	
First - Middle - Last -	First -	Middle -	Last –	
Company –	Company –			
E-mail Address –	E-mail Address –			
8. AFPLICANT'S ACORESS Address -	8 AGENT'S ADDRES Address -	68		
City State Zip Country	City -	State ~	Zip – Country –	
7. APPLICANT'S PHONE NOs. W/AREA CODE	10. AGENT'S PHONE	NOs, WAREA COCE		
a, Residence b. Business c. Fax	a. Residence	b Business	c.Fax	
	Anna Anna Anna Anna Anna Anna Anna Anna			
STATEMENT OF AUTHORIZATION				
11. I hereby authorize,	my agent in the processin	g of this application and to	furnish, upon request,	
supplemental information in support of this permit application				
APPLICANT'S SIGNATURE		DATE		
SHOTANOE CENADILINA		DATE		
NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY				
12 PROJECT NAME OR TITLE (see instructions)				
13. NAME OF WATERSODY, IF KNOWN (# applicable)	M PROJECT STEER	ET ACORESS (if applicable)		
13. White St. Willes Seeds 1, it will be the Caspelloon	The Mode of Street	Tracorico (a spirolos)		
A CONTINUOS PROGRAM	Address			
15. LOCATION OF PROJECT				
Ealitude: *N Longitude:	City -	State -	Zip -	
18 OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)				
State Tax Parcel ID Municipality Section - Township - Range	?			
17 DIRECTIONS TO THE SITE		47 P M 7 \ \(\) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		

18. Nature of Activity (Description of project, inclu	de all features)		
			•
19. Project Purpose (Describa lhe reason or purpo	ose of the project, see instructions)		
USE BLOCKS	20-23 IF DREDGED AND/O	R FILL MATERIAL IS TO BE D	ISCHARGED
20. Reason(s) for Discharge			
21. Type(s) of Material Being Discharged and	the Amount of Each Type in Cubic Y	arde.	
Type	Type	Туре	
Amount in Cubic Yards	Amount in Cubic Yards	Amount in Cubic Yards	
22. Surface Area in Acres of Wetlands or Oth	er Waters Filled (see instructions)		
Acres Or			
Liner Feet			
23. Description of Avoidance, Minimization, ai	nd Compensation (see instructions)		
24. Is Any Portion of the Work Already Compl	ete? Yes No IF YES, DES	SCRIBE THE COMPLETED WORK	***************************************
25. Addresses of Adjoining Property Owners,	Lessees, Etc., Whose Property Adjoir	ns the Waterbody (If more than can be enfered	here, please attach a supplemental list).
Address –			
City - Sta	ate –	Zip –	
26. List of Other Certifications or Approvals/D AGENCY TYPE APPROV			oed in This Application. ATE APPROVED DATE DENIED
* Would include but is not restricted to zoning,	building, and flood plain permits		
<ol> <li>Application is hereby made for a perm complete and accurate. I further certify that applicant.</li> </ol>			
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE
The application must be signed by the pers statement in block 11 has been filled out an	son who desires to undertake the pr		
18 U.S.C. Section 1001 provides that: Who falsifies, conceals, or covers up any trick, makes or uses any false writing or docum \$10,000 or imprisoned not more than five y	pever, in any manner within the juris scheme, or disguises a material fa tent knowing same to contain any	ict or makes any false, fictitious or fra	audulent statements or representations or



#### 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.

<u>Utility lines</u>: 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.

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

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

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

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

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

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

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

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

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

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

- 1. <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. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
- 3. <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. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the 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 FEMA-approved state or local floodplain management requirements.
- 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <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. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.
- 15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 16. <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 or critical habitat, or until Section 7 consultation has been completed.
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical

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

- 18. <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, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 20. <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. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
  - 22. Coastal Zone Management. Not Applicable.
- 23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 24. <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. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)	
(Date)	

- 26. <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:
- (1) Until 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) If 45 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.

From:

Sorensen, Charles G NWO [Charles.G.

Sorensen@usace.armv.mill

Sent:

Friday, April 16, 2010 4:07 PM

To:

shanna.braun@kljeng.com

Cc:

Brown, Phillip H NWO; Ames, Joel O NWO;

charles.g.sorensen@usace.army.mil

Subject:

Jones USA and TAT USA # 13-14H and 24 H Well

sites

#### Shanna

Marathon Oil Company consider and if at all possible implement the following management practices during the exploration phase of the Jones USA #13-14H and the TAT USA # 13-24H Wells

Due to the close proximity of the well location to lands managed by the U.S. Army Corps of Engineers (USACE) there is a high risk that any storm water runoff from the well location will enter the Missouri River/Lake Sakakawea. As such the USACE would request that Marathon Oil Company consider the construction/establishment of a catch trench located on the down sloping side of the well pad. Said trench would help in containing any hazardous wastes from the well pad. Those fluids that accumulate in the trench should be pumped out and disposed of properly

As previously mentioned the location of the proposed well site is extremely close to lands managed by the USACE and as previously stated the possibility for contamination of the Missouri River/Lake Sakakawea is of great concern to this agency. To aid in the prevention of hazardous wastes from entering the aforementioned bodies of water, the USACE would strongly recommend that a Closed Loop Drilling Method be used in the handling of all drilling fluids

Should living quarters be established onsite it is requested that all sewage collection systems be of a closed design and all holding tanks are to be either double walled or contained in a secondary containment system. All sewage waste removed from the well site location should be disposed of properly.

That all additional fill material required for the construction of the well pad is obtained from a private supplier who's material has been certified as being free of all noxious weeds.

That prior to the drilling rig and associated equipment be placed that said equipment be either pressure washed or air blasted off Tribal lands to prevent the possible transportation of noxious or undesirable vegetation onto Tribal lands as well as USACE managed lands.

That no surface occupancy be allowed within ½ mile of any known Threatened or Endangered Species critical habitat.

If you have any questions regarding the above recommendations please feel free to contact me

Charles Sorensen Natural Resource Specialist U.S. Army Corps of Engineers Riverdale, North Dakota Office (701) 654 7411 ext 232 It is requested that any comments or information be forwarded to our office on or before **May 14, 2010**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the necessary environmental documentation.

If you would like further information regarding this project, please contact Darrell Nodland, Marathon Coordinator, at (701) 456-7546 or myself at (218) 790-4476. Thank you for your cooperation.

Sincerely,

Kadrmas, Lee & Jackson, Inc.

Shanna Braun Environmental Planner

Enclosure (Map)

U.S. Fish & Wildlife Service Ecological Services

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

5-3-10 Date

Jeffrey K. Towner Field Supervisor

Kadrmas Lee & Jackson Engineers Surveyors

Planners



# United States Department of the Interior

#### **BUREAU OF RECLAMATION**

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



APR 2 2 2010

Ms. Shanna Braun Environmental Planner Kadrmas, Lee & Jackson, Inc. P.O. Box 96 Moorhead, MN 56561-0096

Subject: Solicitation for an Environmental Assessment for Drilling and Completion of

Two Proposed Oil and Gas Exploratory Wells on the Fort Berthold Reservation in

McKenzie County, North Dakota

Dear Ms. Braun:

This letter is written to inform you that the letter sent on April 13 was received and the information and map have been reviewed by Bureau of Reclamation staff.

Oil and gas exploratory well sites located in McKenzie County could potentially affect Reclamation facilities in the form of the rural water pipelines of the Fort Berthold Rural Water System.

The following locations were provided:

Jones - USA #13-14H, SW¼ of section 14, T151, R94W TAT - USA #13-23H, SE¼ of section 22, T151N, R94W.

There appear to be no existing or proposed water pipelines for construction in the project areas; however, we are providing a segment of the index map depicting water pipelines for the rural water system in the vicinity. Should you require more detailed maps for more specific locations please notify us. 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.

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

Sincerely.

Ronald D. Melhouse Environmental Specialist

Enclosure

cc: See next page.

2

Subject: Solicitation for an Environmental Assessment for Drilling and Completion of Two Proposed Oil and Gas Exploratory Wells on the Fort Berthold Reservation in McKenzie County, North Dakota

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)

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



April 27, 2010

Ms. Shanna Braun Environmental Planner Kadrmas, Lee & Jackson, Inc. P.O. Box 96 Moorhead, MN 56561-0096

Re: Two Proposed Oil & Gas Exploratory Wells by Marathon Oil Company on the Fort Berthold Reservation McKenzie County, ND

Dear Ms. Braun:

The second state of

This department has reviewed the information concerning the above-referenced project submitted under date of April 13, 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. Development of the production facilities and any access roads or well pads should have a minimal effect on air quality provided measures are taken to minimize fugitive dust. However, operation of the wells has the potential to release air contaminants capable of causing or contributing to air pollution. We encourage the development and operation of the wells in a manner that is consistent with good air pollution control practices for minimizing emissions.
- 2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
- 3. Oil and gas related construction activities located within tribal boundaries within North Dakota may be required to obtain a permit to discharge storm water runoff from the U.S. Environmental Protection Agency. Further information may be obtained from the U.S. EPA's website or by calling the U.S. EPA Region 8 at (303) 312-6312. Also, cities or

counties may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.

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.



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

## Construction and Environmental Disturbance Requirements

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

#### Soils

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

#### **Surface Waters**

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

#### Fill Material

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



# United States Department of the Interior

#### FISH AND WILDLIFE SERVICE

Ecological Services 3425 Miriam Avenue Bismarck, North Dakota 58501



JUL 23 2010

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

> Re: Revised Draft EA for TAT-USA#13-23H and Jones-USA#14-14H oil and gas wells, Fort Berthold Reservation

Dear Ms. Braun:

This is in further reference to the June 25, 2010, memo transmitting a revised draft Environmental Assessment (EA) for the subject project. The U.S. Fish and Wildlife Service (Service) has performed additional review of your June 2010 EA regarding two proposed exploratory oil and gas wells to be drilled from one pad. Marathon Oil Company (Marathon) has proposed these oil and gas wells on the Fort Berthold Reservation, McKenzie County, North Dakota.

The specific pad locations are:

TAT – USA #13-23H located in <u>T. 151 N., R. 94 W.</u>, Section 22 Jones – USA #14-14H located in <u>T. 151 N., R. 94 W.</u>, Section 14

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", and the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA).

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

#### Comments

### 3.6 Threatened and Endangered Species, page 3-9

The document states, "A candidate species is one which may warrant listing as an endangered or threatened species, but the data are inconclusive." This definition is incorrect; candidate species are plants and animals for which the Service has sufficient information on their biological status and threats to propose them as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

The Service acknowledges but does not agree with your determination of "no effect" for interior least tern, piping plover, and pallid sturgeon. When determining if an action may affect a listed species, the Federal agency must include direct and indirect effects, as well as those actions that are interrelated or interdependent. The Service remains concerned about potential contamination of Lake Sakakawea due to surface spills that could result in the transfer of fluids through drainages which empty into the lake, as well as reserve pit leachate. We recognize that potential impacts to listed species have been minimized with the implementation of containment measures and the distance of the proposed wells from Lake Sakakawea. However, the absence of a programmatic review with an adequate cumulative impacts analysis precludes our ability to discount all impacts. The presence of approximately 300 existing and proposed wells on the Fort Berthold Reservation should prompt a programmatic NEPA review which thoroughly examines all direct. indirect, and cumulative impacts associated with this and other wells. Additionally, there are many instances where case law precedent has established the need for a holistic analysis of such impacts. A Federal action agency has the discretion under Section 7 of the ESA to make a "no effect" determination, which does not require concurrence from the Service. Therefore, this guidance serves in an advisory capacity.

The Service concurs with the threatened and endangered species determination of "may affect, but not likely to adversely affect" for whooping cranes predicated on all work stopping within one mile of a whooping crane(s) sighted from the proposed project area, and immediately contacting this office. In coordination with the Service, work may resume once the crane(s) has left the area.

As a matter of policy, the Service does not concur with "no effect" determinations. However, we acknowledge your "no effect" determination for the gray wolf and blackfooted ferret. Since the Dakota skipper is a candidate species, no determination is required.

In a June 10, 2010, telephone conversation between Luke Franklin and myself, the Service made recommendations to demonstrate avoidance, minimization, and mitigation measures for migratory birds, as well as recommending measures to prevent surface contamination in the event of a spill. Marathon has completed and/or committed to:

 Attempt to schedule construction activities after July 15 in order to avoid impacts to migratory birds during the breeding/nesting season;

- If construction is scheduled prior to July 15, pre-construction surveys for migratory birds and nests five days prior to commencement of construction, and report to the Service if migratory birds are encountered during construction; no nests were found during the July 11, 2010, field survey;
- Use sorbent booms in select locations down-gradient of the well pad to prevent materials from entering surface drainage ways in the event of an accidental release;
- A ground survey of raptor nests within ½ mile of all proposed areas of disturbance and a commitment to cease construction activities if bald or golden eagles or their nests are discovered within ½ mile of construction areas; no eagle nests were found within ½ mile of all proposed disturbance areas during the July 11, 2010, field survey.

This concludes the Service's review of the proposed project. Thank you for the opportunity to comment on this project and for Marathon Oil Company's cooperation in addressing our recommendations. If you require further information or the project plans change, please contact me or Heidi Kuska of my staff at (701) 250-4481 or at the letterhead address.

Sincerely,

Vano/1/

Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

cc: Bureau of Indian Affairs, Aberdeen
(Attn: Marilyn Bercier)
Bureau of Land Management, Dickinson
Corps of Engineers, Bismarck
Corps of Engineers, Riverdale
ND Game & Fish Department, Bismarck
ND Oil and Gas Commission, Bismarck
ND Department of Health, Bismarck
Marathon Oil Company, Dickinson
(Attn: Darrell Nodland)
Marathon Oil Company, Dickinson
(Attn: Luke Franklin)

# Notice of Availability and Appeal Rights Marathon: TAT-USA #13-23H and Jones #14-14H

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to two exploratory oil/gas as shown on the attached map. Construction by Marathon Oil and Gas is expected to begin in the Summer 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 August 28, 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 location.

