



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
3425 Miriam Avenue  
Bismarck, North Dakota 58501



SEP 21 2011

Ms. Kristi Eng, Staff Biology Consultant  
Keitu Engineers & Consultants, Inc.  
2610 Old Red Trail Ste. C  
Mandan, North Dakota 58554-1447

Re: Hiland Operating, LLC Proposed  
Pipeline Project, McKenzie County,  
North Dakota

Dear Ms. Eng:

This is in response to the letter dated February 10, 2011, from Heather Jandt of your office, and subsequent email correspondence between you and Heidi Riddle of my staff, regarding the proposed construction of a 12.6-mile petroleum pipeline in McKenzie County, North Dakota. The proposed pipeline would be constructed by Hiland Operating, LLC (Hiland) and within a 110-foot construction corridor.

We offer the following comments under the authority of and in accordance with the Endangered Species Act, as amended (16 U.S.C. 1531 *et seq.*) (ESA), Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*) (MBTA), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA).

### **Threatened and Endangered Species**

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

The pallid sturgeon is an ancient fish that evolved in turbid, free-flowing, large rivers with braided channels, sandbars and extensive backwater habitats, and was listed in 1990 as an endangered species. Historically pallid sturgeon were found in the lower 200 miles of the Yellowstone River; the Missouri River from Fort Benton, Montana to St. Louis, Missouri; the Mississippi River from St. Louis to its mouth; the lower reaches of larger tributaries such as the Platte, Kansas, St. Francis, Ohio, Arkansas, and Yazoo/Big Sunflower Rivers; and the Atchafalaya River. The species is now found only in fragmented segments of free-flowing river within the historic range, as well as upstream portions of impoundments.

The proposed pipeline route crosses the Yellowstone River in an area that is heavily used by pallid sturgeon and in close proximity to an area where spawning has been known to occur (S. Krentz, USFWS, personal communication). The Service recommends completing a geological assessment and soil profile for the area to determine appropriate bore depth and setbacks. We recommend referencing the erosion study of the Yellowstone River completed by the Yellowstone River Conservation District Council, *Yellowstone River Channel Migration Zone*, to support your assessment. The Service recommends that all work in this area be completed outside of the spawning period, which is April 12-June 30.

The Aransas Wood Buffalo Population (AWBP) of endangered whooping cranes is the only self-sustaining migratory population of whooping cranes remaining in the wild. These birds breed in the wetlands of Wood Buffalo National Park in Alberta and the Northwest Territories of northern Canada, and overwinter on the Texas coast. Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations. They make numerous stops along their migration route to feed and roost before moving on.

Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations. The proposed project lies within a corridor that includes approximately 95 percent of all reported whooping crane sightings in the State (enclosure). The presence of suitable roosting and feeding habitat for whooping cranes document the potential for whooping crane presence in the proposed project area. Whooping cranes are unlikely to spend more than a few days in any one spot during migration. The Service recommends that if a whooping crane is sighted within 1 mile of a pipeline or associated facilities while it is under construction, that all work cease within 1 mile of that part of the project and the Service be contacted immediately. In coordination with the Service, work may resume after the bird(s) leave the area.

Section 10(a)(1)(B) of the ESA allows non-Federal parties planning activities that have no Federal nexus, but which could result in the incidental taking of listed animals, to apply for an incidental take permit (ITP). (A Federal nexus exists whenever an activity is conducted, funded, or licensed or permitted by a Federal agency). The application must include a habitat conservation plan (HCP) laying out the proposed actions, determining the effects of those actions on federally-listed plant and wildlife species and their habitats (and may include proposed or candidate species), and defining measures to minimize and mitigate adverse effects. If Hiland believes that take of listed species is likely to occur at any point in the life of the Hiland Yellowstone pipeline project, the options available for ESA coverage of anticipated take include the development of a project specific HCP and application for an ITP prior to project construction. If Hiland believes that take of any listed species in the action area is not likely to occur as a result of the proposed project, and therefore no take authorization is needed, we recommend that this be clearly stated in, and supported by, an analysis of effects for each affected species, and that you share this analysis with the Service.

Potential habitat for the Dakota skipper exists in McKenzie County. In 1995, the Dakota skipper was listed as a candidate species under the ESA. No legal requirement exists to protect candidate species; however, it is within the spirit of the ESA to consider these species as having significant value and worth protecting. The Dakota skipper is a small-to-medium sized hesperiine butterfly associated with high-quality prairie ranging from wet-mesic tallgrass prairie to dry-mesic mixed grass prairie. The first type of habitat is relatively flat and moist native bluestem prairie. Three species of wildflowers are usually present; wood lily (*Lilium philadelphicum*), harebell (*Campanula rotundifolia*), and smooth camas (*Zygadenus elegans*). The second habitat type is upland (dry) prairie that is often on ridges and hillsides. Bluestem grasses and needlegrasses dominate these habitats. On this habitat type, three wildflowers are typically present in high-quality sites that are suitable for Dakota skipper: pale purple (*Echinacea pallida*) and upright (*E. angustifolia*) coneflowers and blanketflower (*Gaillardia sp.*). Because of the difficulty of surveying for Dakota skippers and a short survey window, we recommend that the project avoid any impacts to potential Dakota skipper habitat. If Dakota skipper habitat is present near the proposed project and you intend to take precautions to avoid impacts to skipper habitat, please notify the Service for further direction.

On September 15, 2010, the Sprague's pipit was added to the candidate species list. Migratory bird species such as the Sprague's pipit that are candidates are still protected under the MBTA. Sprague's pipits require grassland habitat for both breeding and wintering. During the breeding season, Sprague's pipits prefer large patches of native grassland. Preferred grass height varies between 4 and 12 inches. The species prefers to breed in well-drained, open grasslands and avoids grasslands with excessive shrubs. They can be found in lightly-to-heavily grazed areas. They avoid intrusive human features on the landscape, so the impact of a development can be much larger than the actual footprint of the feature. If Sprague's pipit habitat is present within the proposed project area, the Service requests that you document any steps taken to avoid and minimize disturbance of this habitat.

### **Migratory Birds**

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

measures to avoid that take. Companies are encouraged to work closely with Service biologists to identify available protective measures when developing project plans and/or avian protection plans, and to implement those measures prior to/during construction or similar activities.

To the extent practicable, schedule construction for late summer or fall/early winter so as not to disrupt waterfowl or other wildlife during the breeding season (February 1 to July 15). If work is proposed to take place during the breeding season or at any other time which may result in the take of migratory birds, their eggs, or active nests, the Service recommends that the project proponent implement all practicable measures to avoid all take, such as suspending construction where necessary and/or maintaining adequate buffers to protect the birds until the young have fledged. The Service further recommends that if you choose to conduct field surveys for nesting birds with the intent of avoiding take, that you maintain any documentation of the presence of migratory birds, eggs, and active nests, along with information regarding the qualifications of the biologist(s) performing the survey(s), and any avoidance measures implemented at the project site. Should surveys or other available information indicate a potential for take of migratory birds, their eggs, or active nests, the Service requests that you contact this office for further coordination on the extent of the impact and the long-term implications of the intended use of the project on eagles or other migratory bird populations.

### **Bald and Golden Eagles**

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

Bald and/or golden eagles are known to use the project area where the pipeline will be located. Golden eagles inhabit a wide variety of habitat types, including open grassland areas. They are known to nest on cliffs, in trees, manmade structures, and on the ground (Kochert et al. 2002). While the bald eagle tends to be more closely associated with forested areas near water (Buehler 2000), they have been found nesting in single trees

several miles from the nearest water body. Therefore, there may also be potential habitat for the bald eagle at the proposed project site. Especially early in the nesting season, eagles can be very sensitive to disturbance near the nest site and may abandon their nest as a result of low disturbance levels, even from foot traffic. A buffer of at least 0.5 mile should be maintained for golden and bald eagle nests. A permit is required for any take of bald or golden eagles or their nests. Permits to take golden eagles or their nests are available only for legitimate emergencies and as part of a program to protect golden eagles.

The Service recommends that eagle nest surveys be conducted prior to any on-the-ground activities. The Service recommends that an aerial nest survey (preferably by helicopter) be conducted within the 1-mile-wide evaluation corridor to identify occupied and unoccupied eagle nest sites near the proposed project area and associated facilities. The aerial surveys should include surveys for any proposed new roads. Aerial surveys should be conducted between March 1 and May 15, before leaf-out so that nests are visible.

Aerial surveys should include the following:

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

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

According to the Service's National Wetland Inventory maps, the corridor and the study area intersect several wetlands. Wetlands are important for water quality, as well as for a variety of wildlife species. The Service suggests that Hiland include a detailed plan to avoid or mitigate for unavoidable impacts to wetlands. If your project will result in unavoidable impacts to wetlands, we request to review a mitigation plan to compensate for all wetland losses. If a 404 permit is required, the Service will provide recommendations on this project to the Corps.

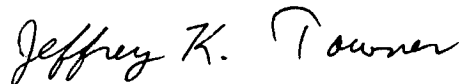
Construction activities should be conducted in a manner that will avoid/minimize impacts to the existing habitat in the project area. The following recommendations are intended to reduce construction related impacts:

- Make no stream channel alterations or changes in drainage patterns.
- Install and maintain appropriate erosion control measures to reduce sediment transport to adjacent wetlands and stream channels.

Parts of the proposed project area appear to be grassland habitat. We recommend reducing the construction ROW through native prairie to the greatest extent possible. If trenching is performed in these areas, we recommend post-construction reseeding and development of a monitoring protocol to ensure that the habitat along the pipeline ROW is returned to pre-project condition. The Service suggests that Hiland consider planting a diverse mixture of native cool and warm season grasses and forbs. Research has suggested that a more diverse mix, including numerous forb species, is not only ecologically beneficial, but is also more weed resistant, allowing for less intensive management and chemical use. In essence, the more species included in a mixture, the higher the probability of providing competition to resist invasion by non-native plants. The seed source should be as local as possible, preferably collected from the nearby native prairie. Obtain seed stock from nurseries within 250 miles of the project area to insure the particular cultivars are well adapted to the local climate. Additional information on native grasses and forbs may be found at the NRCS Bismarck Plant Materials Center (<http://www.plant-materials.nrcs.usda.gov/ndpmc/>). Reseeded areas should be monitored to ensure that the area revegetates as expected.

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

Sincerely,



Jeffrey K. Towner  
Field Supervisor  
North Dakota Field Office

cc: Regulatory Office, Army Corps of Engineers, Bismarck  
(Attn: D. Cimarosti)  
ND Game & Fish Department, Bismarck

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

**ENDANGERED SPECIES**

Birds

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

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

Fish

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

Mammals

Black-footed ferret (*Mustela nigripes*): Exclusively associated with prairie dog towns. No records of occurrence in recent years, although there is potential for reintroduction in the future.

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

**THREATENED SPECIES**

Birds

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

## CANDIDATE SPECIES

### Birds

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

### Invertebrates

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

## DESIGNATED CRITICAL HABITAT

### Birds

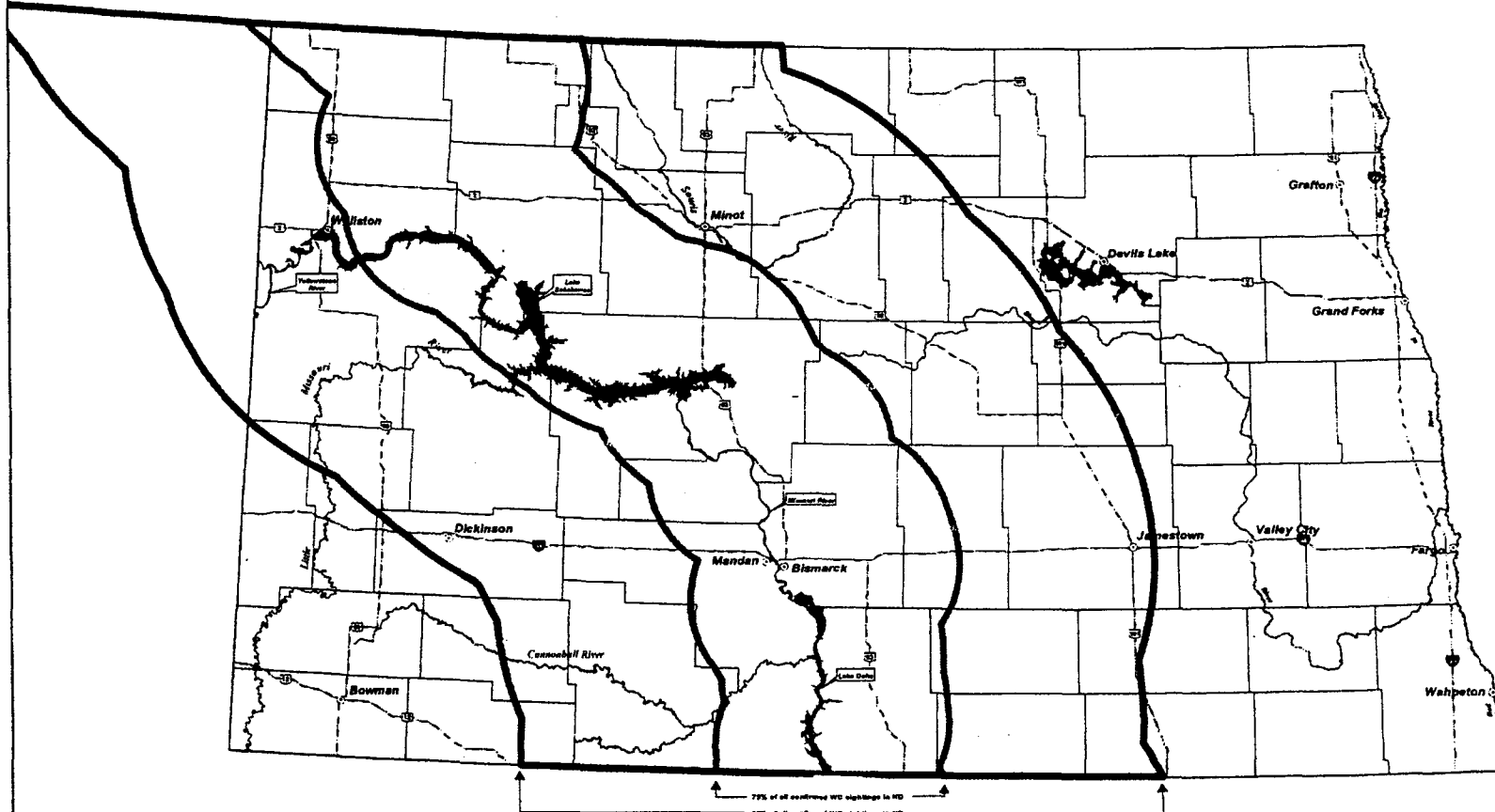
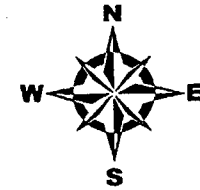
Piping Plover - Alkali Lakes and Wetlands - Critical habitat includes: (1) shallow, seasonally to permanently flooded, mixosaline to hypersaline wetlands with sandy to gravelly, sparsely vegetated beaches, salt-encrusted mud flats, and/or gravelly salt flats; (2) springs and fens along edges of alkali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

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

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



# North Dakota Whooping Crane Migration Corridor

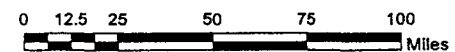


**DISCLAIMER:**

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

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

- 75% Whooping Crane Migration Corridor
- 95% Whooping Crane Migration Corridor



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

From: [Heidi Riddle@fws.gov](mailto:Heidi.Riddle@fws.gov) [mailto:[Heidi Riddle@fws.gov](mailto:Heidi.Riddle@fws.gov)]  
Sent: Thursday, October 13, 2011 7:37 PM  
To: Kristi Eng  
Subject: Re: Hiland Operating - Yellowstone River Crossing

Hi Kristi,

Thanks for the info on the crossing and the soils/geologic assessment - could you send me a copy of that report?

Regarding the raptor nest surveys: we would still recommend doing a nest survey within 0.5-mile of the centerline. Under BGEPA, eagle nests are protected as well as the birds, their eggs and young. Golden eagles, in particular, are susceptible to disturbance, so maintenance activities along the route could still cause disturbance if nesting birds are present.

I can send some additional info on Dakota skipper habitat if you wish. It's difficult to determine habitat based only on aerial photos, which is all I've reviewed. They are known to occur in those counties, but I'm not aware of specific locations within the project area. If you would like to discuss further, please feel free to call.

Thanks!  
Heidi

~~~~~  
Heidi Riddle  
Fish and Wildlife Biologist  
U.S. Fish and Wildlife Service  
North Dakota Ecological Services Field Office  
3425 Miriam Avenue  
Bismarck ND 58501  
Office: 701.250.4481  
Direct Lines: 701.355.8503 or 701.683.6809  
Fax: 701.355.8513  
Email: [heidi.riddle@fws.gov](mailto:heidi.riddle@fws.gov)

"If I had to choose, I would rather have birds than airplanes." - Charles Lindbergh

"Kristi Eng"  
<[keng@keitu.com](mailto:keng@keitu.com)>

10/06/2011 03:46  
PM

<[Heidi.Riddle@fws.gov](mailto:Heidi.Riddle@fws.gov)>

To

cc

Subject

Hiland Operating - Yellowstone  
River Crossing

Hello Heidi!

We received the USFWS recommendation list in the mail, thank you for that!

Hiland Operating, LLC has come to a decision regarding the Yellowstone River crossing. They did complete a soil/geological assessment of the River in July of 2011 which was submitted to the USACE as part of the permit process. They are expecting to bore 50 feet below the bottom of the River.

They also decided to use the western most valve station (Valve Option 2), as it is outside of the channel migration zone.

Also, in regards to the aerial raptor survey, a ground botany and wildlife survey was completed during the spring and summer of 2011. Hiland is planning on constructing this fall and winter. Due to the timing of construction and of breeding birds, is a raptor nest survey still necessary as a precursor to construction?

I noticed in the letter the USFWS sent to Keitu, a mention about the Dakota Skipper.. is there definitive habitat located along the project route where Dakota Skippers have been identified? I want to make sure to pass along to Hiland where the area of concern is and to apply the best practices to lessen the impact as possible.

If there is anything I can help you with, let me know.

Thanks! Have a good day.

Kristi Eng  
Staff Biology Consultant  
Keitu Engineers & Consultants, Inc.  
2610 Old Red Trail Suite C  
Mandan, ND 58554  
701-667-1800 (W)  
701-426-3895 (M)