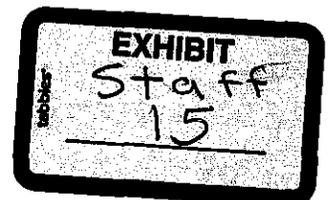


BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET NO. HP14-002

**IN THE MATTER OF THE APPLICATION OF DAKOTA ACCESS, LLC FOR AN
ENERGY FACILITY PERMIT TO CONSTRUCT THE DAKOTA ACCESS PIPELINE**

**Direct Testimony of Cameron Young
On Behalf of the Staff of the South Dakota Public Utilities Commission
July 6, 2015**



Q: Please state your name and business address.

A: Cameron Young, Natural Resource Group, LLC, 1675 Larimer Street, Suite 600, Denver, CO 80202

Q: Describe your educational background.

A: I have a bachelor's degree in Biology from Earlham College. I also have post-baccalaureate/graduate school experience at both the University of South Florida and the University of Georgia where I studied biology and ecology.

Q: By whom are you now employed?

A: Natural Resource Group, LLC, an ERM Group Company.

Q: What work experience have you had that is relevant to your involvement on this project?

A: I have worked the last 16 years as a threatened and endangered species/wildlife biologist for the oil and gas industry helping clients comply with rules and laws such as the Endangered Species act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and National Environmental Policy Act. I have conducted field surveys for threatened and endangered species across the country and written numerous biological assessments as well as other reviews and impact analyses.

Q: What Professional Credentials do you hold?

A: None.

Q: What is the purpose of your testimony?

A: To provide an assessment of the completeness and adequacy of the threatened and endangered species impact analysis contained in the Revised Application. My testimony contains my professional opinion and includes recommendations regarding additional review and assessments that Dakota Access may conduct so that the impact analysis may be considered to be complete.

Q: What methodology did you employ?

A: I reviewed and compared the species lists contained in the Revised Application with the lists publically available from the US Fish and Wildlife Service for the counties crossed by the proposed project. I compared these lists to the habitat types crossed by the project (as provided in the Revised Application and on aerial maps) to determine if the conclusions reported in the Revised Application were correct. I then provided my professional opinion that based on the

evidence provided (please note that no documentation of agency consultations or survey reports were available for review), the Revised Application was not adequate.

Q: Did you review section 17.4 of the Revised Application that discusses sensitive, threatened and endangered species and the potential impacts the project could have on those species?

A: Yes.

Q: In your opinion, do you agree with Dakota Access's conclusion that the project has the potential to impact only one listed species, the Topeka shiner?

A: Not based on the information available at the time of our review. In addition to the Topeka shiner, the data presented and analyses in the Revised Application are not adequate to show that there will be no effect to the following species: northern long-eared bat; Sprague's pipit; whooping crane; pallid sturgeon; Dakota skipper; and western prairie fringed orchid. Each species is discussed further below. The Revised Application and its appendices refer to NatureServe as a source for Dakota Access's determinations. NatureServe recommends that data obtained from their site only be used for planning purposes. Site specific projects and ground disturbing activities should be reviewed by appropriate state and federal agencies. It is recommended that a survey report be provided and reviewed from the baseline studies that were completed for the project as well as copies of all agency correspondence (phone logs, letters, emails, meeting minutes).

Northern long-eared bat – The northern long-eared bat is a federally listed species in every county crossed by the proposed pipeline. Its presence is likely not just limited to the forested areas in Bix Sioux River as reported. These bats can occur in any live or dead tree with crevices within 100 miles of a hibernaculum during their active season (April 15 through October 15). It is unclear when tree clearing for the project will occur or if a right-of-way will be cleared over the HDD sections at the Big Sioux River. The maps provided are not at an adequate scale to review for trees within the construction right-of-way.

Sprague's pipit – The Sprague's pipit is a federally listed species in Campbell and McPherson Counties, South Dakota. Pipit distribution can vary annually and previous surveys or lack of documented occurrences do not necessarily warrant a "no effect" determination. However, pipits require large tracts of grasslands (greater than 71.6 acres) void of trees and shrubs for nesting. In addition, it is unclear if land clearing operations may overlap with pipit nesting season (April 15 through September 15). It is our recommendation that a GIS exercise to identify grassland patches greater than 71.6 acres in area, and preconstruction nest

surveys, be conducted if construction and/or maintenance activities occur within the Sprague's pipit nesting season.

Whooping Crane – The whooping crane is a federally listed species in every county crossed by the proposed pipeline. While this species is mobile and only potentially present during spring and fall migration, no analysis was conducted to locate potential stopover habitat for cranes. In addition, no mitigation is proposed if a crane chooses to occupy a wetland or field in the project area during construction or if construction will occur during migration.

Pallid sturgeon – While HDD is appropriate mitigation to avoid impacts during construction to the pallid sturgeon, no analysis was conducted to determine the potential impacts caused by a leak. Mitigation could include block valve location and SCADA leak detection systems.

Dakota skipper – The U.S. Fish and Wildlife Service (USFWS) indicates the Dakota skipper as having potential presence in Edmunds and McPherson Counties, South Dakota. The Dakota skipper is an obligate of high- to medium-quality prairie habitat that is dominated by native species and is untilled. They can be found in isolated or remnant patches of prairie within pastureland. No surveys were conducted to determine if this species or its habitat occurs in the project area.

Western prairie fringed orchid – The USFWS lists the western prairie fringed orchid as having potential presence in Lake, Lincoln, McCook, Miner, Minnehaha, and Turner Counties, South Dakota. No surveys were conducted to determine if this species or its habitat occurs in the project area.

Q: In your opinion, does Dakota Access properly mitigate the potential impacts the project could have on the Topeka shiner?

A: Not based on the information available at the time of our review. According to the Revised Application, there are eight waterbodies that may contain Topeka shiners. Of these, six will be open-cut, thereby directly impacting fish habitat and potentially altering water quality, all of which may directly and indirectly affect Topeka shiners. Implementing HDD technology to cross all waterbodies that may contain Topeka shiners would eliminate direct impacts to fish habitat. In addition, the locations of block valves is unclear in relation to the eight waterbodies that contain Topeka shiners. Block valves on both sides of these waterbodies and a SCADA or similar leak detection system should be used to reduce oil spill quantities in the event of a leak.

Q: Do you have any additional recommended mitigation measures that Dakota Access should implement in order to protect sensitive, threatened, or endangered species?

A: Yes. The following additional measures are recommended to avoid and minimize impacts to habitat and to protect sensitive species:

The construction right-of-way and permanent easement width should be reduced in sensitive areas and listed species habitats;

Seasonal timing restrictions should be implemented as appropriate to protect critical time periods such as migration and breeding for listed species;

A Migratory Bird Assessment, Mitigation, and Compliance Plan should be developed to protect bird nests along or adjacent to the project. This Plan should be developed to promote project compliance with the Migratory Bird Treaty Act as well as the Endangered Species Act;

Environmental inspectors should be trained in the identification and habitat requirements of all listed species that may occur in the project area;

If a whooping crane is observed within one mile of the Project area the USFWS should be immediately contacted and construction within one mile of the sighting should be curtailed until the whooping crane has left the area or additional protection measures could be determined in consultation with the USFWS;

Erosion control structures should be installed to protect the integrity of sensitive resources downstream of the project where listed fish may be located;

Temporary construction bridges should be installed across waterbodies in all construction areas prior to right-of-way grading and should be removed once construction and restoration has been completed;

Waterbodies with the potential for listed species should not be used as sources for hydrostatic test water;

There should be no use of mulch, lime or fertilizers in wetlands;

To avoid excessive disruption of wetland soils and the native seed and rootstock within the wetland soils, stump removal, grading, topsoil segregation (if soils are not saturated), and excavation should be limited to the area immediately over the trenchline;

Construction vehicles should be properly muffled to minimize noise;

Placement of signage should be posted along the construction right-of-way to identify sensitive resource areas and to alert construction personnel of restrictions that apply, and fencing should be used if required to protect specific resources;

Contractor vehicles and equipment should arrive to the project clean and weed-free;

Air compressors should be used to remove seeds and vegetation of noxious weeds at approved cleaning stations where vehicles leave an infested area along the project;

If straw sediment barriers are used they should be certified weed-free to prevent the further spread of invasive non-native vegetation;

A Weed Management Plan should be developed that identifies weed populations and control measures during and after construction that should be implemented to manage noxious plant species, decreasing the potential source for noxious plants in listed species habitat;

Grasslands should be avoided where practicable, and where grasslands will be impacted by the project they should be restored to pre-construction conditions;

Emergency shut-off block valves are placed along the project right-of-way to meet federal regulations (49 CFR 195) to help reduce the amount of crude oil or produced water that could potentially spill into sensitive areas along the Project; and

A remote leak detection and monitoring systems should be installed to monitor pressures and flow rates at a central location 24 hours a day and 7 days a week. The SCADA or similar system should allow abnormal operating conditions to be discussed immediately and addressed promptly, including shutdown of the system in the event of a leak or other appropriate circumstance.

Q: Does this conclude your testimony?

A: Yes.



an ERM Group company

Cameron Young

Email: cameron.young@NRG-LLC.com

Cameron Young is a Consultant 3 in Natural Resource Group, LLC's (NRG) Denver office. Cameron has been working in the industry since 1999 and has extensive experience conducting biological surveys and state and federal protected species consultations, preparing species mitigation plans, and developing and implementing nationwide survey methodologies for Federal Energy Regulatory (FERC)-regulated natural gas pipeline, Bureau of Land Management (BLM) Right-of-way grant applications, U.S. Forest Service special use permits and facility permitting, and natural gas storage facilities projects across the United States. Cameron has worked as a biologist in 16 states including experience in Oregon, North Dakota, Texas, Georgia, Alabama, and Florida and has completed international work in Kenya, St. Lucia, and the Bahamas. Cameron has recently served as a Project Manager working to navigate a variety of energy clients through endangered species and wetland permitting involving the Endangered Species Act, Migratory Bird Treaty Act, National Environmental Policy Act, and Clean Water Act. Cameron is also experienced using Density, Disturbance Calculation Tools for impacts on greater sage-grouse and lesser prairie chickens as well in the collection and management of survey data for wind power projects throughout the United States.

Selected Project Experience

- 2014 to present ONEOK Rockies Midstream; Converse County Gathering System – over 30 miles of crude oil pipelines North Dakota: Deputy Project Manager and Biological Resources Task Manager responsible for providing technical guidance for biological resource surveys, Greater Sage-Grouse impact analyses, conducting agency consultations, and helping to prepare resource reports and biological assessments.
- 2013-2014 Williams Field Services; Bluegrass Segment 3 Project - 60 miles of natural gas liquid pipeline in Louisiana: Deputy Project Manager and Biological Resources Task Manager responsible for providing technical guidance for biological resource surveys, conducting agency consultations, and helping to prepare resource reports and biological assessments.
- 2012-2014 Enable Bakken Crude Services, LLC; Bear Den Project - 58 miles of 3- to 8-inch diameter crude oil pipeline and produced waterline gathering system in North Dakota: Deputy Project Manager and Biological Resources Task Manager responsible for providing technical guidance for biological resource surveys, conducting agency consultations, and helping to prepare resource reports and biological assessments.
- 2011-2012 Dawson Geophysical Company; Niobrara Shale Seismic Exploration Projects – Wildlife surveys and permitting on BLM lands crossed by the seismic survey areas. Studies included BLM sensitive species and greater sage-grouse impact analyses using the DDCT in Wyoming.
- 2010-2012 Marathon Oil Company, Bridges Project – 25 miles of natural gas gathering and produced water pipelines and development of 12 well pads on the Sabine National Forest in Texas: Biological Resources Task Manager responsible for providing technical guidance for biological resource surveys, conducting agency consultations, and helping to prepare environmental assessments and biological assessments.
- 2010-2012 Encana Oil and Gas Company USA; Brent Miller Phase II Project - 13 miles of natural gas gathering pipelines and development of 18 well pads on the Angelina National Forest in Texas: Biological Resources Task Manager responsible for providing technical



- guidance for biological resource surveys, conducting agency consultations, and helping to prepare environmental assessments and biological assessments.
- 2007-2010 Palomar Gas Transmission, LLC, Palomar Gas Transmission Project, 221 miles of 36- and 24-inch-diameter natural gas pipeline in Oregon: Biological Resources Task Manager responsible for providing technical guidance for biological resource surveys, conducting agency consultations, and helping to prepare resource reports and biological assessments.
 - 2005-2010 Enterprise Products Partners Inc.: Biological Resources quality assurance/quality control specialist responsible for providing technical guidance for biological resource surveys, conducting agency consultations, and helping to prepare resource reports and biological assessments for the Petal Gas Storage Project.
 - 2009 CenterPoint Gas Transmission, Alto Compressor Station Project, new compressor station in Louisiana. Biological Task Manager responsible for field surveys and preparation of wetland, wildlife, vegetation, and threatened and endangered species portions of the FERC application.
 - 2009-2010 CenterPoint Energy Field Services, Magnolia Project, 25 miles of 8- and 20-inch-diameter natural gas pipeline in Louisiana. Biological Task Manager responsible for wetland and waterbody surveys and ACOE permitting, vegetation surveys, and threatened and endangered species surveys and FWS consultations.
 - 2007 ONEOK, Overland Pass Pipeline Project, 760 miles of 16- and 14-inch-diameter natural gas liquids pipeline and two pump stations in Colorado, Kansas, and Wyoming: assisted the Biological Resource Lead for the project on T&E tasks; managed and conducted a Midget-faded Rattlesnake survey.
 - 2010 Tri-States Pipeline in Alabama, Mississippi and Louisiana: Biological Resources Task Manager for a 162-mile-long Gopher Tortoise survey.
 - 2005-2006 El Paso/Southern Natural Gas, Elba Express Pipeline Project, Georgia: Biologist negotiated mitigation requirements for state and federally protected species including pondspice, pondberry, flatwoods salamander, eastern indigo snake, and gopher tortoise.
 - 2002-2004 El Paso/Southern Natural Gas, Cypress Pipeline Project, Florida and Georgia: Biological Resources Task Manager - coordinated and obtained federal, state, and local regulatory permits and approvals including Federal Energy Regulatory Commission approval for protected species along the Cypress Pipeline Project in Georgia and Florida.
 - 2002-2004 Williams Partners L.P., Gulfstream Natural Gas System, Florida: Biological Resources Task Manager - negotiated mitigation requirements for state and federally protected species including pygmy fringe tree, sand skink, eastern indigo snake, and gopher tortoise.
 - Williams Partners L.P., Gulfstream Natural Gas System, Florida: Biologist conducted protected species and wetland surveys using approved methodologies for natural pipelines and storage facilities.
 - Biologist; Norcross, Georgia: conducted protected species and wetland surveys using approved methodologies for natural gas pipelines and storage facilities in Georgia, Alabama, Florida, South Carolina, and Mississippi.
 - Biologist/ Field Project Manager; Cheyenne, Wyoming: managed and implemented field operations of a carcass search study at the FPL Meyersdale Wind power Plant in Meyersdale, Pennsylvania.



Cameron Young
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- Biologist/ Field Project Manager; Cheyenne, Wyoming: conducted Phase 1 surveys including raptor migration studies on potential wind power turbine sites in New York and Pennsylvania.
- Biologist; Tampa, Florida: conducted protected species and wetland surveys using approved methodologies for various developments and phosphate mines.

Education and Training

- Master's Program and Post-Baccalaureate Studies, University of Georgia, Athens (1995-2005)
- B.A., Biology, Earlham College, Richmond, Indiana, 1997
- Natural Gas Pipeline Environmental Compliance Workshop, FERC
- Zweig White Project Manager Training