

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF NORTH DAKOTA**

**IN RE: NORTH DAKOTA PIPELINE
COMPANY LLC**

Case No. PU-13-848

**Pursuant to North Dakota Century
Code Chapter 49-22, Consolidated
Application for a Certificate of
Corridor Compatibility and Route
Permit for the Sandpiper Pipeline
Project in Mountrail, Ward,
McHenry, Pierce, Towner, Ramsey,
Nelson, Grand Forks and Williams
Counties, North Dakota hereinafter
called the Consolidated
Application**

**Pre-Filed Testimony
of
Sara Ploetz**

February 14, 2014

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2

1 **Q. Please state your name, employer and business address.**

2 A. My name is Sara Ploetz. I am employed by Enbridge Employee Services Inc., which is
3 located at 1409 Hammond Avenue, Superior, Wisconsin 54880.

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6 **Q. Please briefly describe your position with Enbridge, your qualifications, and your
7 involvement in the preparation of the application for Route Permit, Certificate of
8 Corridor Compatibility, and survey reports.**

9 A. I am currently an Environmental Analyst II in our U.S. Projects Environment Group, primarily
10 supporting our major projects business unit. I have a Bachelor of Arts degree in
11 environmental studies from the University of Minnesota-Duluth. I have over seven years of
12 environmental permitting, compliance, and construction oversight experience with numerous
13 projects across the Midwest.

14

15 Also, in the past three years I have been responsible for managing internal and external
16 resources in the environmental review, surveys and permitting efforts for four other major
17 expansion projects for which the North Dakota Public Service Commission ("ND-PSC") has
18 approved.

19

20 As the Environment Project Lead in North Dakota and Minnesota, I am responsible for
21 leading the resources that North Dakota Pipeline Company LLC engaged to do the
22 environmental review, environmental surveys, and permitting effort for the Sandpiper
23 Pipeline Project. I have been involved in the planning and development phases of the
24 Project for the past 19 months. The evaluation of environmental impacts for the Project was
25 performed under my supervision by a team of qualified experts in their respective fields,
26 including wetland and wildlife scientists, archaeologists, and environmental specialists hired
27 through Merjent, Inc. (Merjent) our environmental consultant on the Project.

28

29

30 **Q. Please briefly describe the qualifications of the environmental consultant hired to
31 assist with environmental review, and permitting of Sandpiper.**

32 A. Merjent is a leading environmental consultant specializing in pipeline permitting services
33 and field survey management in the U.S. Merjent project managers for the Sandpiper
34 Pipeline Project have decades of experience managing and preparing permit applications

1 associated with pipeline projects in the Midwest, specifically North Dakota, and conducting
2 environmental and cultural resource surveys in accordance with federal and North Dakota
3 standards and guidelines.
4
5

6 **Q. What is the purpose of your testimony?**

7 A. The purpose of my testimony is to support the environmental analysis, studies and
8 mitigation measures that were prepared for the Sandpiper Pipeline Project, as presented in
9 the consolidated Application filed by North Dakota Pipeline Company LLC, which I shall
10 refer to as NDPL in my written testimony. I will also sponsor certain exhibits in support of
11 the Application, which are related to the environmental activities of this Project.
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13

14 **Q. Please identify which sections of the Application you are sponsoring for the record.**

15 A. I am offering testimony in support of Sections B and D.1 through D.5 including all related
16 tables, figures and exhibits of the application for a Certificate of Corridor Compatibility and
17 Sections B.1 through B.7 including all related tables, figures, and exhibits of the application
18 for a Route Permit. I am also co-supporting, along with Mr. Mark Curwin, Mr. Barry
19 Simonson and Mr. Art Haskins, Section B.9, including any tables, figures, and exhibits of the
20 application for a Route Permit, as it may relate to such environmental aspects of this Project.
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22

23 **Q. What environmental and cultural studies were conducted?**

24 A. Wetland, biological and cultural resources surveys were conducted, specifically:
25

- 26 • Wetland and waterbody delineations;
- 27 • Piping plover habitat assessment;
- 28 • Sprague's pipit habitat assessment (conducted via a grassland habitat assessment);
- 29 • Dakota skipper habitat assessment (conducted via a grassland habitat assessment); and
- 30 • Cultural resources surveys, specifically archaeological and historic structure
31 reconnaissance and evaluation studies.
32

33 Prior to conducting surveys, protocols were prepared based on state or federal agency
34 criteria, methods, existing information data sources and agency communications. Protocols

1 describe the process for conducting desktop evaluations and completing subsequent on-the-
2 ground field studies. The desktop evaluations were completed by reviewing existing records
3 of known locations of cultural resource sites or protected species, and examining existing
4 land use and vegetation information from maps and aerial photos. The desktop evaluations
5 reviewed the entire environmental survey corridor to identify locations of high probability of
6 finding sensitive environmental resources to examine in detail during field studies. The
7 wetland and waterbody, and cultural resource field surveys identified and quantified site
8 specific locations of target resources. The piping plover, Sprague's pipit and Dakota skipper
9 field surveys identified and quantified ecological community information to determine where
10 potentially suitable habitat for a species may be found, which would inform decisions on
11 where to conduct field surveys for individual species.

12
13 A multi-tiered quality assurance and quality control process was established and utilized to
14 verify field data. Results were reviewed by field leads and technical leads on a daily basis as
15 data were collected, and then again during preparation of survey reports before being
16 reviewed by project managers.

17
18
19 **Q. What is the difference between the study area and the environmental survey corridor?**

20 A. The 2-mile-wide study area informs desktop evaluations and provides a starting point by
21 which environmental data may be requested from agencies. The environmental survey
22 corridor falls entirely within this study area. The environmental survey corridor ultimately
23 forms the designated corridor that the ND-PSC order will approve work within and where
24 field surveys are conducted.

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26
27 **Q. How does NDPL determine the width of the environmental survey corridor?**

28 A. The environmental survey corridor takes into consideration the needs for construction
29 workspace, permanent right-of-way requirements and special environmental features.
30 NDPL identified the dimensions of the environmental survey corridor to be generally 250 to
31 450 feet wide within the 2-mile wide study area. A narrower environmental survey corridor,
32 such as the 250 feet referenced above, is generally established in areas of collocation with
33 existing NDPL lines or utilities and areas with sensitive environmental features, such as
34 wetlands. The environmental survey corridor is widened up to the 450 feet in greenfield

1 areas and where the table top exercises identified areas where flexibility in routing may be
2 necessary. In areas where larger workspaces were anticipated or known to be necessary,
3 NDPL expanded the survey corridor wider than 450 feet to accommodate the necessary
4 construction workspaces, such as Horizontal Directional Drill pull-back areas, soil storage,
5 pipe welding, or construction equipment traffic.

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8 **Q. Does the purpose of your testimony today include describing the Environmental and**
9 **Cultural Resource matters pertaining to the proposed Sandpiper Pipeline Project?**

10 A. Yes.

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13 **Q. Has a cultural resource investigation been initiated for the Sandpiper Pipeline project**
14 **and what is the status?**

15 A. Yes. NDPL completed a Class II/Class III cultural resource inventory covering 89% of the
16 survey corridor, totaling 13,164 acres of land evaluated. The decision of where to employ a
17 Class III pedestrian inventory was based on both the results of the site and manuscript files
18 search, a Class I assessment, and the Class II assessment of the likelihood of encountering
19 cultural resources along the environmental survey corridor. Areas subjected only to a Class
20 II visual assessment were those for which the likelihood of encountering cultural resources,
21 especially Precontact resources, was minimal. These areas include lowland plains, flat
22 croplands, wetlands, and areas away from water sources and overlooks. The Class III
23 inventory covered areas with a moderate to high likelihood for cultural resources.

24
25 In addition to completing the Class II/Class III inventory, NDPL completed evaluations at
26 three sites to assess if they were eligible for inclusion on the National Register of Historic
27 Places. The 2013 cultural resource survey report was submitted to the North Dakota State
28 Historic Preservation Office (NDSHPO) on January 30, 2014. A copy of the survey report
29 abstract and the cover letter to the NDSHPO were filed with the PSC in NDPL's
30 supplemental filing.

31
32 Remaining survey work scheduled for spring 2014 includes Class II/Class III cultural
33 resource inventory of the remaining 11% of the environmental survey corridor,
34 geomorphological testing at select locations, and evaluation or avoidance planning at sites

1 where National Register of Historic Place determination could not be reached based on the
2 Class III survey work. Geomorphological testing is a Class III inventory method that entails
3 examining subsurface soils that may have been buried due to geologic processes such as
4 alluvial deposition, and that may contain cultural artifacts.

5
6
7 **Q. What are the results of the 2013 cultural resource investigation?**

8 A. NDPL identified and recorded (including updating previous survey information) 118 cultural
9 resource sites within the environmental survey corridor during the 2013 survey work. Of
10 these resources, two sites were recommended to be eligible for inclusion on the National
11 Register of Historic Places, 81 sites were recommended not eligible, and 35 sites remain
12 unevaluated. NDPL expects to receive confirmation of these recommendations from the
13 NDSHPO upon their review of the survey report.

14
15 NDPL is avoiding the two sites recommended to be eligible on the National Register of
16 Historic Places. The 35 unevaluated sites are a type of site often referred to as stone
17 feature sites (which are stone arrangements or alignments such as circles, piles, lines,
18 effigies, or other symmetrical or asymmetrical designs). Some stone feature sites are small
19 in size and will be avoided by narrowing the construction workspace or by directionally
20 boring the pipeline underneath them.

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22
23 **Q. Has NDPL initiated its wetland delineation survey work for the Sandpiper Pipeline
24 Project and what is the status?**

25 A. Yes. NDPL completed a wetland and waterbody field survey covering 84% of the
26 environmental survey corridor, totaling 11,483 acres of land evaluated. Wetlands were
27 delineated following the U.S. Army Corps of Engineers (COE) criteria and methods.
28 Remaining survey work scheduled for spring 2014 includes wetland and waterbody field
29 survey of the remaining 16% of the environmental survey corridor.

30
31 **Q. What are the results of the 2013 wetland delineation?**

32 A. NDPL delineated 1,312 wetlands and 117 waterbodies within the environmental survey
33 corridor. Wetland acreage within the environmental survey corridor totaled 1,592 acres. Of
34 the 1,592 acres delineated, 1,581 acres were classified as emergent (open or grassy

1 vegetation), 2.84 acres were classified as shrub dominated vegetation, and 1.1 acres were
2 classified as forested wetland. Field survey data collected at each waterbody within the
3 environmental survey corridor included the Cowardin class, flow rate, bank height and width,
4 Ordinary High Water Mark height and width, substrate, and dominate riparian vegetation. Of
5 the 117 waterbodies identified during the field surveys, 47 were classified as a ditch, which
6 was a water drainage feature that appeared to be mechanically channelized and lacked an
7 ordinary high water mark. NDPL's wetland and waterbody field survey report was filed with
8 the PSC in NDPL's supplemental filing.

9
10 NDPL submitted a request for a jurisdictional determination to the U.S. Army Corps of
11 Engineers – Omaha District, North Dakota Regulatory Office in Bismarck on January 24,
12 2014 to determine which of the delineated wetlands and waterbodies will fall within their
13 regulatory jurisdiction. Based on previous project experience in North Dakota, NDPL
14 anticipates the COE Omaha District will determine jurisdiction on a small subset of the total
15 number of delineated wetlands and waterbodies.

16
17 **Q. What studies were completed with regards to biological resources?**

18 **A.** NDPL completed specific biological studies for three species that may occur along the
19 project route, the piping plover, Sprague's pipit and Dakota skipper. The studies were
20 designed to determine if potentially suitable habitat for the species occurs within the
21 environmental survey corridor. A desktop evaluation was conducted to determine locations
22 in the field where biologists would then examine the land use, vegetation or wetland type
23 required to support the species' life cycle. The survey results for the piping plover are
24 presented in a report titled 2013 Piping Plover Habitat Assessment Report, and the survey
25 results for Sprague's pipit and Dakota skipper are presented in a report titled 2013
26 Grassland Habitat Assessment Report which were filed with the ND-PSC in NDPL's
27 supplemental filing.

28
29 **Q. What were the results of the 2013 biological resources studies?**

30 **A.** Suitable piping plover habitat must contain a specific combination of appropriate wetland
31 acreage size, wetland shoreline vegetation, beach substrate material and absence of nearby
32 trees. NDPL examined 53 wetlands in the field that met minimum necessary habitat
33 requirements based on map and aerial photo review of the environmental survey corridor,
34 and determined that 2 wetlands contained the characteristics necessary to be suitable

1 habitat for the piping plover. No observations of individual piping plover were noted during
2 the survey.

3
4 Suitable habitat for the Sprague's pipit are grasslands of an adequate size with a limited
5 amount or absence of trees, shrubs, and bare ground. The Dakota skipper requires untilled
6 grassland dominated by native species including species that provide food for adults and
7 larvae. NDPL used GIS geospatial databases and aerial imagery to determine the locations
8 and sizes of grasslands within the environmental survey corridor. This desktop evaluation
9 identified 2,994 acres of potential grassland habitat, which upon completing field survey
10 verification was refined to 2,147 acres of potentially suitable grassland that were examined
11 in detail for habitat characteristics.

12
13 Based on survey data collected and definition of suitable habitat, NDPL determined that 25
14 grasslands that intersect the environmental survey corridor may serve as suitable habitat for
15 the Sprague's pipit.

16
17 Twenty-five (25) discrete areas of suitable habitat for the Dakota skipper were located and
18 recorded during the survey. These areas were distinctive, often small, isolated grassland
19 pockets typically found on a hill slope or depression in grasslands otherwise dominated by
20 both native and non-native species. Most of these areas were located entirely within the
21 environmental survey corridor, but some were partially within the environmental survey
22 corridor. Dakota skipper suitable habitat totaled 9.2 acres within the environmental survey
23 corridor and ranged in size from 0.025 to 2.4 acres.

24
25 No observations of individual Sprague's pipit or Dakota skipper were noted during the
26 surveys.

27
28
29 **Q. What biological studies remain to be completed and when will they be finished?**

30 A. NDPL will conduct aerial surveys by helicopter of eagle nests along the route in mid-March
31 2014. Aerial surveys are conducted in mid-March in an effort to not only locate nests but
32 also observe whether those nests are active or inactive. On-the-ground field surveys may be
33 conducted at specific locations if nests are observed during the aerial survey within the bald
34 eagle disturbance distance of pipeline construction.

1 NDPL and the U.S. Fish and Wildlife Service which I will refer to in my testimony as USFWS
2 are currently discussing the results of NDPL's 2013 Piping Plover Habitat Assessment
3 Report and 2013 Grassland Habitat Assessment Report. Discussions focus on confirming
4 the suitable habitat documented during surveys and evaluating the potential impacts of the
5 project on the piping plover, Sprague's pipit and Dakota skipper. NDPL and USFWS are
6 also discussing the potential impacts of the project on migratory birds and the northern long-
7 eared bat which is a recently proposed endangered species that has the potential to occur
8 within the project area. Pending the results of these discussions, NDPL may conduct the
9 following additional field surveys in spring/summer 2014:

- 10
- 11 • Piping plover – habitat assessment in areas without survey access in 2013 and
12 possible survey for individual birds;
- 13 • Dakota skipper – habitat assessment in areas without survey access in 2013 and
14 possible survey for individual butterflies;
- 15 • Sprague's pipit – habitat assessment in areas without survey access in 2013; and
16 • Northern long-eared bat – possible survey for individual bats.
- 17

18 **Q. Are there any exclusion areas described in North Dakota law and regulations that will**
19 **be affected by the proposed Sandpiper Pipeline Project?**

20 A. Yes. The pipeline route crosses cables associated with the U.S. Air Force's intercontinental
21 ballistic missile launch and launch control facility. NDPL consulted with U.S. Air Force Cable
22 Affairs representatives who said no areas of the pipeline encroach on Restricted Easement
23 areas surrounding their missile sites and that crossing angles meet U.S. Air Force
24 specifications. This correspondence is included as Exhibit H.15 in the ND-PSC application
25 filing.

26

27

28 **Q. Are there any avoidance areas described in North Dakota law and regulations that will**
29 **be affected by the proposed Sandpiper Pipeline Project?**

30 A. Yes. NDPL identified two municipal water supplies within the environmental survey
31 corridor. One is located at approximate MP 91.5 northeast of the City of Deering. NDPL
32 adjusted the pipeline route to avoid crossing the wellhead protection area with the pipeline;
33 however, the wellhead protection area is partially within the environmental survey corridor.
34 A second wellhead protection area located south of the City of Grand Forks is crossed twice

1 at approximate MPs 297.0 to 298.2 and approximate MPs 299.5 to 299.7. NDPL has
2 engaged in multiple discussions with the City of Grand Forks to discuss Sandpiper's route
3 and identify concerns with crossing this wellhead protection area. Alternatives to avoid the
4 wellhead protection area have been considered, and NDPL has determined no reasonable
5 alternative exists with less environmental impact. When compared with the proposed route,
6 an alternative route would impact more agricultural land (including that which is designated
7 prime farmland) and waterbodies, cross more roadways, and require more construction
8 within greenfield areas. To date, Grand Forks city representatives have not opposed the
9 Project route.

10
11 NDPL identified one waterfowl production area in Pierce County at approximate MP 156,
12 which is a public land managed through the National Wildlife Refuge System. The northern
13 extent of the construction workspace would abut the section line, which forms the southern
14 boundary of the waterfowl production area. Construction activities will not encroach into the
15 waterfowl production area. Thus, the Sandpiper Pipeline Project will not affect the
16 Waterfowl production area despite it being identified under Avoidance Areas as crossed by
17 the environmental survey corridor.

18
19 NDPL also identified historical resources within the environmental survey corridor and those
20 which are crossed by the route. These are discussed on Pages 5 and 6 of this testimony.

21
22 NDPL identified state-managed areas including school trust land and private land open to
23 sportsmen which I will refer to in my testimony as PLOTS parcels. School trust lands are not
24 managed for protection of environmentally-sensitive features. PLOTS parcels are managed
25 for maintaining access for sportsmen. NDPL's construction activities will not impact access
26 or functional values of either school trust lands or PLOTS parcels.

27
28 NDPL identified 38 inhabited structures within 500 feet of the new pipeline. Of those, 33 are
29 residences and 5 are businesses. All of these landowners have signed waivers indicating
30 they do not object to the pipeline's proximity to their structures.

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33 **Q. With respect to the Public Service Commission's selection criteria, please identify**
34 **any potential impacts from the Sandpiper Pipeline Project.**

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A. Agricultural land is the predominant land use along the 2-mile wide study area. Approximately 45 percent of the environmental survey corridor has some classification of prime farmland as determined by the Natural Resources Conservation Service. In areas where crop production will be temporarily disrupted by construction, landowners will be compensated for crop loss or reduced yields caused by construction activities. In addition, the Sandpiper Environmental Protection Plan outlines mitigation measures that will be employed during construction to further minimize impacts to agricultural production.

Some wetlands and waterbodies will also be temporarily impacted by construction of the Sandpiper Pipeline Project. NDPL will obtain appropriate permits to construct in jurisdictional wetlands and waterbodies that cannot be avoided, and all work will be conducted in accordance with permit conditions and mitigation measures outlined in the Environmental Protection Plan.

Approximately 7.5 acres of wooded areas would be temporarily impacted by construction activities. No wooded areas would be permanently impacted by facility construction. Permanent impacts would be limited to the operational right-of way that must be maintained to facilitate aerial patrol of the pipeline.

Q. From an environmental perspective, what other permits or authorizations are necessary for the Sandpiper Pipeline Project, and what is the status of those permits or authorizations?

A. NDPL has begun submitting applications, reports, and requests to agencies to obtain necessary authorizations to construct the Sandpiper Pipeline Project.

The following lists the federal, state, and local permits that will be needed for the Sandpiper Pipeline Project and the respective timelines.

- U.S. Army Corps of Engineers (COE) Omaha District – Request for Jurisdictional Determination and Nationwide Permit (NWP) #12: Request for jurisdictional determination was submitted January 24, 2014; preconstruction notification is anticipated to be filed in May 2014.

- 1 • North Dakota Department of Health (NDDH) – *Air Quality Permits to Construct at*
2 *Berthold, Stanley, and Beaver Lodge stations*: Berthold Station's air permit was
3 submitted January 21, 2014. Stanley and Beaver Lodge are anticipated to be
4 submitted the week of February 17, 2014.
- 5 • NDDH – *Air Quality Permits to Operate at Berthold, Stanley, and Beaver Lodge*
6 *stations*: The North Dakota Department of Health will verify emission sources were
7 constructed according to the Permit to Construct and issue a Permit to Operate from
8 that inspection.
- 9 • NDDH – *Construction Stormwater and Temporary Dewatering General Permit*
10 *(NDR10-0000) and SWPPP – facilities*: Construction stormwater coverage for
11 facilities will be obtained by May of 2014, prior to any ground disturbing activities.
- 12 • NDDH – *Construction Stormwater and Temporary Dewatering General Permit*
13 *(NDR10-0000) and SWPPP – mainline*: Construction stormwater coverage for
14 facilities will be obtained by November of 2014, prior to any ground disturbing
15 activities.
- 16 • NDDH – *Permit(s) to discharge hydrostatic test water (General Permit NDG-070000)*:
17 Anticipated submittal is October 2014, and the anticipated issuance is November
18 2014.
- 19 • North Dakota State Water Commission – *Sovereign Lands Permit*: Anticipated
20 submittal is June 2014, and the anticipated issuance is October 2014.
- 21 • North Dakota Department of Trust Lands – *License to Cross School Trust Lands*:
22 Anticipated submittal is March 2014, and the anticipated issuance is July 2014.
- 23 • County Floodplain Administrators – *Floodplain Permits*: Anticipated submittal is
24 March 2014, and the anticipated issuance is May 2014.

25

1 **Q. Have you engaged with the U.S. Fish and Wildlife Service?**

2 A. Yes. NDPL contacted the USFWS in April 2013 regarding threatened and endangered
3 species, and USFWS Wildlife Refuge staff regarding grassland and wetland easement
4 programs. However, at that time the USFWS indicated the need for a lead federal
5 permitting agency to be identified prior to conducting Endangered Species Act which I will
6 refer to as ESA consultations as that formal communication is conducted Agency to
7 Agency. In November 2013, the U.S. Army Corps of Engineers was designated as the lead
8 federal agency for the Project and discussions between the ACOE and USFWS began in
9 earnest. NDPL supports the ESA process and Agency to Agency consultation by providing
10 information relating to ESA review, survey protocols and results of biological survey work.

11
12 Separate from Section 7 of the Endangered Species Act, NDPL held discussions with the
13 USFWS Wildlife Refuge staff regarding the routing of the pipeline on grassland and wetland
14 easement properties throughout 2013. Between the Beaver Lodge Station and Berthold
15 Station the route crosses four locations of grassland easement properties where NDPL
16 retains easement rights for its existing pipeline that pre-date those of the USFWS. NDPL
17 provided its right-of-way agreements to USFWS in November 2013 to document this. NDPL
18 is planning to cross a fifth grassland easement location in McHenry County by boring
19 underneath the property and USFWS has indicated that this is an acceptable mitigation
20 technique. NDPL is planning to avoid wetlands located on USFWS wetland easement
21 properties and is currently working with USFWS on specific routing avoidance measures.

22
23
24 **Q. Have you consulted with the North Dakota Game and Fish Department?**

25 A. Yes. NDPL initiated consultation with the North Dakota Game and Fish Department which I
26 will refer to in my testimony as North Dakota Game and Fish on April 2, 2013. North Dakota
27 Game and Fish responded in a letter dated May 1, 2013 and recommended steps to be
28 taken to protect wetlands that cannot be avoided, that no alterations be made to existing
29 drainage patterns, and that no above-ground appurtenances be placed in wetland areas.

30
31 North Dakota Game and Fish identified White Earth and Des Lacs rivers, Little Deep and
32 Cut Bank creeks, and Mauvais Coulee as waterbodies classified as valuable fisheries that
33 would be crossed by the proposed pipeline. North Dakota Game and Fish noted that
34 appropriate controls should be implemented to minimize erosion and sedimentation and

1 recommended these waterbodies be crossed by directional boring. Where directional boring
2 was not possible, North Dakota Game and Fish requested construction not occur within the
3 waterway between April 15 and June 1. The pipeline will be installed via horizontal
4 directional drilling (“HDD”) at the Mauvais Coulee. The pipeline will be installed via boring
5 technique at the Des Lacs River, Cut Bank Creek and one of two crossings of the Little
6 Deep Creek. The remaining crossing of Little Deep Creek and White Earth River will be
7 open cut; however, NDPL will not construct within the April 15 to June 1 timeframe per North
8 Dakota Game and Fish recommendations.

9 North Dakota Game and Fish also identified the Turtle River as a valuable fishery; however,
10 the Sandpiper Pipeline does not cross this river.

11 NDPL will construct in accordance with its Environmental Protection Plan, which includes
12 measures to minimize erosion and sedimentation at waterbody and wetland crossings (the
13 Environmental Protection Plan is included as Exhibit J in the PSC filing).
14
15

16 **Q. To date, have any state or federal agencies objected to this project?**

17 A. No.
18
19

20 **Q. Please discuss NDPL’s mitigation measures.**

21 A. NDPL developed an Environmental Protection Plan, which outlines construction-related
22 environmental policies, procedures, and general mitigation measures for construction of the
23 Sandpiper Pipeline Project. The Environmental Protection Plan was developed based on
24 NDPL’s experience implementing best management practices during construction as well as
25 the Federal Energy Regulatory Commission’s Upland Erosion Control, Revegetation, and
26 Maintenance Plan and Wetland and Waterbody Construction and Mitigation Procedures.
27

28 The project will require a Construction Stormwater General Permit from the North Dakota
29 Department of Health. NDPL will obtain this permit prior to the initiation of ground disturbing
30 activities. In accordance with the General Permit conditions, NDPL will develop a
31 Stormwater Pollution Prevention Plan that outlines project activities and effective best
32 management practices for erosion and sediment control and stormwater management.
33

1 The Environmental Protection Plan also includes spill prevention, containment and control
2 measures that address the planning, prevention and control measures to minimize the
3 likelihood of a construction related spill, and to quickly and successfully conduct cleanup
4 activities. The Environmental Protection Plan and Stormwater Pollution Prevention Plan are
5 comprehensive, controlling documents that will be included in contract specifications.

6
7
8 **Q. Please describe NDPL's environmental monitoring for the Sandpiper Pipeline Project.**

9 A. Environmental monitoring, in the form of ongoing site inspection, will be conducted during
10 and following construction. Contract specifications will incorporate environmental protection
11 and mitigation measures required by regulation, NDPL specifications or environmental
12 permits. NDPL's contractors will be obligated to implement these measures in the field.
13 NDPL will also provide training and project orientation to contractors and their personnel, as
14 applicable.

15
16 NDPL assigns designated Environmental Inspectors to each project. The Environmental
17 Inspectors will act as a resource for construction personnel and a liaison between the
18 contractor and NDPL's Project Management and agency officials. The Environmental
19 Inspectors will be responsible for assisting with pre-construction field tasks such as marking
20 wetland and waterbody boundaries, clarifying environmental requirements, identifying
21 possible issues and challenges ahead of construction, conducting environmental training of
22 construction staff, offering advice and consultation to NDPL's contractors, and conducting
23 inspections/monitoring in accordance with applicable laws, permits and/or project plans.

24
25 NDPL's designated Environmental Inspectors will document environmental compliance
26 throughout the duration of the project and will be responsible for monitoring construction
27 activities to ensure compliance with all applicable environmental laws, regulations, permits,
28 and NDPL's project specific plans.

29
30
31 **Q. In your opinion, if the proposed Sandpiper Pipeline Project is constructed as set forth
32 in the Application, and as discussed at this hearing, will there be any significant long-
33 term irreversible effects to the environment or to cultural resources?**

34 A. No.

1 **Q. Does this conclude your testimony?**

2 A. Yes, it does.