

NORTH DAKOTA PUBLIC SERVICE COMMISSION

Application for Route Permit

Bear Paw Energy, LLC
Garden Creek Natural Gas Liquids Pipeline
Project

Prepared by E3 Environmental, LLC

June 2011

TABLE OF CONTENTS

INTRODUCTION 1

SECTION 1: Type, Size and Design 3

 1.1 Type 3

 1.2 Approximate Length of Facility 3

 1.3 Size and Design of Pipeline Facility 3

 1.3.1 Pipe Size 3

 1.3.2 Maximum Design of Operating Pressure, Flow Rate and Temperature 3

 1.4 Aboveground Facilities 3

 1.4.1 Valve Specifications 4

 1.5 Width of Right-of-Way 4

 1.6 Location 4

 1.7 Project Schedule 4

 1.7.1 Route Permit 4

 1.7.2 Certificate of Corridor Compatibility 4

 1.7.3 Construction Schedule 4

SECTION 2: Studies 6

 2.1 Pipeline Route 6

 2.2 Environmental Survey 6

 2.2.1 Tree/Sapling/Shrub Survey 6

 2.2.2 Wetland and Waterbodies Survey 6

 2.2.2.1 Wetland Survey 7

 2.2.2.2 Waterbodies Survey 7

 2.2.3 Wildlife Inventory 7

 2.2.3.1 Federally Protected Species Survey 8

 2.2.4 U.S. Forest Service 9

 2.2.5 North Dakota Game and Fish Department 10

 2.2.6 North Dakota Parks and Recreation Department 10

 2.2.7 North Dakota State Historic Preservation Office 10

 2.2.8 North Dakota State Lands Department 11

SECTION 3: Evaluation of the Proposed Route in Regard to Applicable Considerations in Section 49-22-09 and Criteria Established in Section 49-22-05.1 12

 3.1 Exclusion and Avoidance Areas 12

 3.1.1 12

 3.1.2 Federal Resource Review 12

 3.1.3 State Resource Review 12

 3.1.4 County Resource Review 13

 3.1.5 Areas Critical to the Life Stages of Threatened and Endangered Animal or Plant Species 13

 3.1.6 Areas where Animal or Plant Species that are Unique or Rare to this State would be Irreversibly Damaged 13

 3.2 Avoidance Area Inventory and Analysis 13

 3.2.1 National Resource Review 14

3.2.1.1	Forest Service Review	14
3.2.2	State Resource Review	15
3.2.3	Historical Resources Not Meeting Exclusion Area Criteria.....	15
3.2.4	Areas of Known Geologic Instability.....	15
3.2.5	Areas Within 500-Feet of a Residence, School or Place of Business..	15
3.2.6	Reservoirs and Municipal Water Supplies.....	15
3.2.7	Water Sources for Organized Rural Water Districts	15
3.2.8	Irrigated Land.....	16
3.2.9	Areas of Recreational Significance which are not Designated as Exclusion Areas	16
3.3	Factors to be Considered in Evaluating Applications and Designations of Sites, Corridors and Routes (49-22-09)	16
3.4	Selection Criteria.....	19
3.4.1	Agricultural Impact Assessment.....	19
3.4.2	The Impacts Upon	20
3.5	Policy Criteria.....	22
3.5.1	Policies and Commitments to Limit Environmental Impact	22
3.5.2	Location and Design	22
3.5.3	Training and Utilization of Available Labor in This State for the General and Specialized Skills Required	23
3.5.4	Economies of Construction and Operation	23
3.5.5	Use of Citizen Coordinating Committees.....	23
3.5.6	Commitment of a Portion of the Transmitted Product for Use in this State.....	24
3.5.7	Labor Relations	24
3.5.8	The Coordination of Facilities.....	24
3.5.9	Monitoring of Impacts	24
3.5.10	Utilization of Existing and Proposed ROW and Corridors	24
3.5.11	Other Existing or Proposed Transmission Facilities	24
SECTION 4: Mitigative Measures		25
4.1	Location	25
4.2	Construction	28
4.3	Operation	28
SECTION 5: Description of Right-of-Way Preparation and Reclamation Prodedures		30
SECTION 6: Utility’s Easement Acquisition, Landowner Notificaiton and Easement Compensation Plan		37
6.1	Landowner Information Regarding Easement Acquisition, and Necessary Easement Conditions and Restrictions.....	37
6.2	Compensation Policy	37
SECTION 7: List of Preparers.....		38

APPENDICES

Appendix A: Engineering Documents

Appendix B: Project Maps

Appendix C: Consultations

Appendix D: Natural Resource Report

Appendix E: Cultural Resources Report

Appendix F: 10-Year Plan

Appendix G: Landowner Waivers

Appendix H: U.S. Forest Service Reports

INTRODUCTION

The proposed Garden Creek Pipeline (GCP, Project) would originate at Bear Paw Energy's (Bear Paw) Garden Creek Gas Plant (Plant) near Watford City, North Dakota and would terminate at Bear Paw's Riverview Terminal (Terminal) in Richland County, Montana near Sidney. The proposed Route is approximately 63.2 miles in total length with approximately 54.2 miles to be sited in North Dakota.

The proposed pipeline will provide firm (exclusive) transmission services to the Plant, which is currently under construction, and is, expected to produce up to 31,000 barrels of Y grade NGL per day. The Plant will produce various hydrocarbon products and is dependent upon the pipeline for product transport in order to operate at full capacity. The construction schedules of the Plant and GCP were developed so both assets go into service at approximately the same time. However it would be Bear Paw's preference to complete GCP construction and commissioning on or about November 15, approximately 21 days ahead of the Plant's initial commissioning to ensure that the Pipeline is in service and available for essential Plant activities.

Construction of the 10-inch-outside diameter natural gas liquids (NGL) pipeline will take approximately 90 days, with restoration to immediately follow. The Project will be constructed in three segments or "Spreads" as follows:

- Spread Number 1 (S1) will originate at the Plant (MP 0.0) and end at approximate MP 36.8;
- Spread Number 2 (S2) spans the Grasslands from (MP 36.8) to the North Dakota and Montana border (MP 54.2); and
- Spread Number 3 (S3) is entirely in Montana from the state line (MP 54.2) to the Terminal (MP 63.2).

This approach will allow construction to proceed at multiple locations simultaneously, reducing the overall duration of construction on a project wide basis. This, in turn, will limit the duration of temporary environmental impacts as well as the inconveniences associated with construction activities that may be experienced on a local level.

This construction schedule and spread approach to construction is also designed to allow for a temporary bypass of S2, by interconnecting with existing infrastructure. The proposed GCP is collocated with Bear Paw's Lewis and Clark Pipeline (a gathering line) for approximately 12 miles (from MP 36.8 to MP 49). In the event that the construction of S2 falls behind schedule and threatens to impact Plant commissioning or initial operations, Bear Paw will temporarily bypass S2 and tie-in to the Lewis and Clark Pipeline at MP 37. The bypass shall either flow through existing infrastructure to the Terminal or tie into S3 in order to accommodate critical commissioning and startup procedures of the Plant.

Bear Paw submits to the North Dakota Public Service Commission (PSC) a single consolidated application for a Certificate of Corridor Compatibility and Route Permit for the GCP.

The application provides the requisite information as stipulated by:

- North Dakota Century Code, Energy Conversion and Transmission Facility Siting Act, Chapter 49-22-08.1; and,
- PCS Administrative Code, Chapter 69-06-04, Certificate of Site or Corridor Compatibility.

The information presented in this application is organized according to the format prescribed in the PSC Application Guidelines for a Certificate of Site or Corridor Compatibility, which divides the information into the following categories:

SECTION 1: FACILITY TYPE, SIZE AND DESIGN

SECTION 2: STUDIES

SECTION 3: EVALUATION OF THE PROPOSED ROUTE IN REGARD TO APPLICABLE CONSIDERATIONS IN SECTION 49-22-09 AND CRITERIA ESTABLISHED IN SECTION 49-22-05.1

SECTION 4: MITIGATIVE MEASURES

SECTION 5: DESCRIPTION OF RIGHT-OF-WAY PREPARATION AND RECLAMATION PROCEDURES

SECTION 6: UTILITY'S EASEMENT ACQUISITION, LANDOWNER NOTIFICATION, AND EASEMENT COMPENSATION PLAN

SECTION 7: PREPARERS AND QUALIFICATIONS

SECTION 1: TYPE, SIZE AND DESIGN

1.1 TYPE

The GCP is a transmission pipeline. The pipeline will be constructed of steel and designed to ship NGL products in a liquid phase under pressure.

1.2 APPROXIMATE LENGTH OF FACILITY

The proposed GCP is approximately 63.2 miles in total length, of which approximately 54.2 miles are located in North Dakota.

1.3 SIZE AND DESIGN OF PIPELINE FACILITY

The steel pipeline will meet U.S. Department of Transportation (DOT) regulations, specifically the design criteria outlined in 49 CFR 195.100, constructed per 49 CFR 195.200 operated and maintained per 49 CFR 195.400.

1.3.1 PIPE SIZE

Bear Paw will utilize pipe with the following characteristics.

- 10-inch outside diameter
- 0.219-inch wall thickness (standard)
 - 0.307-inch wall thickness (road crossings)
- API 5XL52
- Steel Pipe

1.3.2 MAXIMUM DESIGN OF OPERATING PRESSURE, FLOW RATE AND TEMPERATURE

Bear Paw has designed the Pipeline with the maximum design parameters listed below.

- Maximum Operating Pressure: 1440 pounds per square inch gauge (psig)
- Maximum Flow Rate: 31,000 barrels per day (Bpd)
- Maximum Operating Temperature: 120 °F
- Normal Operating Conditions 90 °F at 1100 psig

1.4 ABOVEGROUND FACILITIES

The proposed pipeline will include 15 block valves of which 11 will be located in North Dakota. These valves will be installed to meet DOT regulations and will allow for the isolation of select segments of the pipeline for inspection and maintenance purposes as well as in the event of a system failure. See Appendix A for valve locations and standard drawings.

There will be a single pumping station for the GCP. It is located in the Plant and will be powered from the Plan electrical purchase supply and operated by Plant personnel.

The GCP supervisory control and data acquisition (SCADA) system will report pipeline operations and signals to both the Plant control room and the pipeline operations control center in Tulsa, OK.

1.4.1 VALVE SPECIFICATIONS

Bear Paw will utilize valves with the following characteristics.

- 10-inch outside diameter
 - Flange end by flange end, full port, quarter turn ball valves
- 10-inch outside diameter
 - Flange end by flange end, swing check valves
- API Standard 6D
- ANSI 600
- Maximum Operating Pressure: 1440 psig

1.5 WIDTH OF RIGHT-OF-WAY

- Construction Right-of-Way (ROW) Width:
 - 95-foot wide standard
 - 100-foot wide where conditions require.
- Temporary Extra Workspace
 - None all work to be completed within construction corridor.
- Permanent ROW Width:
 - 50-foot wide

1.6 LOCATION

The proposed GCP is approximately 63.2 miles in total length, of which approximately 54.2 miles are located in McKenzie County, North Dakota.

1.7 PROJECT SCHEDULE

1.7.1 ROUTE PERMIT

Bear Paw seeks a Route Permit by July 30, 2011.

1.7.2 CERTIFICATE OF CORRIDOR COMPATIBILITY

Bear Paw submitted a request for Certificate of Corridor Compatibility in June 2011 as part of this consolidated Application for a Certificate for Corridor Compatibility and Route Permit.

1.7.3 CONSTRUCTION SCHEDULE

Bear Paw plans to commence construction immediately upon receipt of required permits and approvals; project initiation is projected to be as early as August 2, 2011 with an estimated completion date of November 15, 2011

Spread 1 (S1): Bear Paw seeks to initiate construction of the 37 mile Spread on August 2, 2011 with an anticipated in-service date on or about November 15, 2011.

Spread 2 (S2): Bear Paw anticipates construction of S2 will begin on or about September 15, 2011, with an anticipated in service date on or about November 15, 2011.

Spread 3 (S3): Construction of Spread 3, which is located entirely in Montana, will begin in July and shall be commissioned and available for service by September.

SECTION 2: STUDIES

2.1 PIPELINE ROUTE

Bear Paw has conducted a thorough analysis of the proposed Corridor (a 1-mile corridor centered upon the proposed route, i.e., one-half mile on either side of the proposed route) as reported in the application for a Certificate of Corridor Compatibility. This analysis was a broad based analysis conducted to confirm that the proposed pipeline corridor was suitable and that it would cause minimal environmental impacts thus conforming to the PSC siting criteria.

In conjunction with these efforts, Bear Paw studied routing alternatives and developed the proposed pipeline alignment (Route) which meets the Project's objectives while conforming to the PSC's siting requirements for a transmission route. In support of Bear Paw's route selection, the analytical studies from the Corridor were refined and augmented with field studies. Field studies were conducted along the entire length of the Project by trained natural and cultural resource specialists. The environmental survey corridor is a 250-foot wide corridor centered upon the Route. The purpose of these field studies was to definitively identify any potential resource issues (e.g., wetlands, waterbodies, protected species, critical habitats, or cultural resources) that may intersect the proposed pipeline alignment and to collect the baseline field data necessary to prescribe alternative routing or mitigation to minimize environmental impacts. The results of these field surveys are discussed in the following sections while full Natural Resources and Wetland Determination Report (Natural Resource Survey Report) is contained in Appendix D and the Class I and Class III Cultural Resource Inventory Report is located in Appendix E.

2.2 ENVIRONMENTAL SURVEY

All field surveys were conducted based upon a minimum 250-foot wide corridor, centered upon the proposed pipeline alignment or route.

2.2.1 TREE/SAPLING/SHRUB SURVEY

The Route was surveyed in April and May 2011. The natural resource surveys included a tree/shrub inventory. This inventory recorded the pre-construction status of this resource and shall form a baseline for restoration and mitigation reconciliation. Please see Appendix D for complete survey report.

2.2.2 WETLAND AND WATERBODIES SURVEY

The proposed alignment was inventoried for wetland and waterbody features. Field crews identified features, characterized the feature as wetland or waterbody and recorded feature boundaries relative to the proposed centerline.

2.2.2.1 WETLAND SURVEY

On April 20 through the 28th and from May 17, 18 and 27, 2011 field crews documented the wetlands that were present within the survey corridor. The location of each recorded feature included reference of proximity relative to the proposed centerline to facilitate avoidance mitigation where practicable. A total of 14 wetlands were recorded in S1, and one was recorded in S2. Based upon the current alignment 12 wetlands will occur within the proposed construction right of way. Bear Paw will implement appropriate mitigation at each of these features which may include avoidance (e.g. workspace modification or horizontal directional drill) or use of construction mats and other best management practices to minimize impacts when working in or around wetlands.

Please see Appendix B (See Figures SC 01 through SC 13) for the mapped location of each feature and Appendix D for a detailed survey report.

2.2.2.2 WATERBODIES SURVEY

Bear Paw commissioned field studies of the proposed Route. On April 20 through the 28th and from May 17, 18 and 27, 2011 field crews documented the waterbodies that occurred within the survey corridor. The location of each recorded feature included reference of proximity relative to the proposed centerline to facilitate avoidance mitigation where practicable. A total of 25 waterbodies were recorded, of which 12 are located in S1 and 13 were recorded in S2. Bear Paw's preferred mitigation for waterbody crossing is a low impact (e.g.; horizontal directional drill) crossing technique to avoid direct impacts associated with pipeline construction. To facilitate the most efficient means of pipeline construction, Bear Paw will install temporary bridges at select locations to facilitate full access to the right of way for equipment during construction. In the event that a low impact crossing cannot be completed at a feature crossing, Bear Paw will employ an alternative that may involve direct impacts to facilitate the installation (e.g.; open cut); these alternatives will be determined on site specific basis. Bear Paw shall implement best management practices during construction and installation of waterbody crossings to minimize and avoid where practicable direct impacts to these the features.

Please see Appendix B (See Figures SC 01 through SC 13) for the mapped location of each feature and Appendix D for a detailed survey report.

2.2.3 WILDLIFE INVENTORY

Approximately 160 wildlife species are resident or seasonal visitors to the project area. These include common mammals (white-tailed and mule deer; raccoon, and pronghorn antelope); various song birds (western meadowlark, LeConte's sparrow, and horned lark); eagles and raptors (bald and golden eagles, red-tailed and rough-legged hawks) and numerous other fauna. A total of 12 different bird species, four mammals, and one amphibian were observed during field studies. The proposed alignment was

inventoried for sensitive species' and their critical habitat. No threatened or endangered species were observed by field biologists. Please see Appendix D for complete survey report.

To satisfy U.S Forest Service (FS) siting requirements, Bear Paw conducted additional surveys along S2 for those concerns expressed by, and unique to the FS. Bear Paw, commissioned these studies, the results can be found in Appendix H and related mitigation plans can be found in Section 4 Mitigation later in this application.

2.2.3.1 FEDERALLY PROTECTED SPECIES SURVEY

Under authority of the Endangered Species Act (ESA), the U.S. Fish and Wildlife Service (FWS) and NOAA Fisheries Service have identified and maintain a list of species and critical habitats that have been afforded protection under the ESA. The ESA also provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they inhabit. A field survey was conducted for federally listed species and their habitats. There were no federally listed species identified by survey on private lands in North Dakota.

The FWS, in their response of March 18, 2011, expressed specific concerns regarding species protected by ESA, in response Bear Paw commissioned field studies to confirm presence or absence of these species or their critical habitats. The results of the assessment are provided below:

Least tern: No suitable habitat in North Dakota was identified during survey.

Whooping crane: The Whooping crane is present in North Dakota on semi-annual basis during the spring and fall migration between breeding grounds in Canada and winter grounds in the Gulf of Mexico. The FWS noted that the proposed project was located within the migration corridor of the Whooping Crane. The FWS also noted that the cranes are vulnerable to power line strikes during migration. Due to the variety of habitats utilized during migration, potential habitat was identified along the proposed Route.

Please refer to Appendix C for related agency consultations, Appendix D for Natural Resource Survey Results and Section 4 Mitigation of this application for proposed mitigation measures.

Piping plover: No suitable habitat in North Dakota was identified during survey.

Pallid sturgeon: No suitable habitat in North Dakota was identified during survey.

Prairie falcon: Field biologist recorded a sighting of a prairie falcon in suitable breeding habitat between MP 49.5 and 50.1 on FS lands. This location occurs on FS

lands and the FS is the responsible agency for evaluating potential impacts and mitigation plans.

Please refer to Appendix C for related agency consultations, Appendix D for Natural Resource Survey Results and refer to both Section 4 of this document for proposed mitigation measures and those detailed in the FS Biological Evaluation (BE) which can be found in Appendix H.

Sprague's Pipit: Field biologist recorded an occurrence of a single Sprague's Pipit at MP 39.9 on FS lands. The siting was single individual (i.e. singing male) so it is unclear if it was a seasonal resident or migratory transient.

Please refer to Appendix C for related agency consultations, Appendix D for Natural Resource Survey Results and refer to both Section 4 Mitigation of this application for proposed mitigation measures and those detailed in the FS BE which can be found in Appendix H.

Townsend Daisy: Field botanists recorded the location of three individual Townsend Daisy (Daisy) plants MP 52.9 on FS lands.

Please refer to Appendix C for related agency consultations, Appendix D for Natural Resource Survey Results and refer to both Section 4 Mitigation of this application for proposed mitigation measures and those detailed in the FS BE which can be found in Appendix H.

Dakota Buckwheat: The FS and North Dakota Parks and Recreation Department (PRD) both noted that potential habitat for Dakota Buckwheat may occur along the proposed route. No plants were identified during survey though suitable habitat was found in S2.

Bald and Golden Eagles:

The FS and PRD both noted that potential breeding habitat for the Bald and Golden Eagle in McKenzie County, North Dakota. Field surveys, utilizing a ½ mile corridor were conducted. The survey confirmed the absence of eagles or eagle nests within ½ mile of the proposed alignment.

2.2.4 U.S. FOREST SERVICE

Comprehensive survey and analysis of the potential impacts associated with the project was completed to satisfy the FS siting process. This analysis was based upon field studies conducted over the entire Area of Potential Effect (APE) of the BE for National Environmental Policy Act (NEPA) included additional field studies of access roads and temporary extra workspace areas. Please see Appendix H for survey reports and Section 4 of this application for proposed mitigation measures.

2.2.5 NORTH DAKOTA GAME AND FISH DEPARTMENT

The North Dakota Game and Fish Department (GFD) identified Cherry Creek as a Class III fishery. The boundaries of Cherry Creek were identified and recorded during survey.

Please refer to Appendix C for related agency consultations, Appendix D for Natural Resource Survey Results and Section 4 Mitigation of this application for proposed mitigation measures.

2.2.6 NORTH DAKOTA PARKS AND RECREATION DEPARTMENT

See Section 2.2.3.1 for a complete discussion of the scope survey efforts including PRD concern species; and Section 3.1.4 for a summary of the survey results.

2.2.7 NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICE

Bear Paw commissioned, SWCA, Inc. (SWCA) to conduct Class I Cultural Resource Inventory of the Corridor, this was completed on November 17 and 18, 2010, January 18, 2011 and June 2, 2011. The results of this inventory concluded that 57 previously recorded cultural resources occurred within the proposed Corridor. These results were used to assess Corridor compatibility for routing and later for route refinement and preparation for field studies.

The ensuing Class III Cultural Resource Inventory of the Route was completed between April 20 and May 27, 2011 by SWCA. Field studies identified 10 newly recorded cultural resources; these features have been characterized as prehistoric resources including isolated prehistoric chipped stone finds (32MZX1131, 32MZX1132, and 32MZX1133) and stone features (32MZZ204 and 32MZZ201); or historic resources including foundation remnant (32MZZ200), farm equipment (32MZZ202), two isolated finds (32MZX1129 and 32MZX1130), and a trash dump (32MZZ203).

Several sites that were identified by the Class III Inventory are located outside the proposed alignment and anticipated construction right of way and as such are not at risk to impact from the proposed GCP. Provided Bear Paw implements the proposed mitigation for the remaining sites containing potentially significant cultural resource materials, the project will have no deleterious effect to historic properties or sites. Consultation with the ND SHPO has been initiated, reports and recommendations submitted and agency response is pending.

Please refer to Appendix C for related agency consultations, Appendix E for cultural resource survey reports and Section 4 Mitigation of this application for proposed mitigation measures.

2.2.8 NORTH DAKOTA STATE LANDS DEPARTMENT

The North Dakota State Lands Department (SLD) is in charge of managing surface acres and mineral interests held in trust for various schools and institutions. Consultations with SLD were initiated in April, 2011 and completed on June 20, 2011. Bear Paw has confirmed no surface or mineral interests held by the state will be affected by the project. See Appendix C for a copy of the correspondence.

SECTION 3: EVALUATION OF THE PROPOSED ROUTE IN REGARD TO APPLICABLE CONSIDERATIONS IN SECTION 49-22-09 AND CRITERIA ESTABLISHED IN SECTION 49-22-05.1

3.1 EXCLUSION AND AVOIDANCE AREAS

Exclusion areas are geographic areas that should be excluded from consideration when siting an energy transmission facility. The following table and text identify and discuss exclusion areas identified along the proposed Route.

Exclusion Area	Along Proposed Route
Federal	
National Parks or Memorial Parks	No
Historic Sites or Landmarks	No
Natural Landmarks or Monuments	No
Wilderness Areas	No
State	
Historic Sites, Monuments, or Historical Markers	No
Archaeological Sites	Yes
Parks	No
Nature Preserves	No
County	
Parks	No
Recreation Areas	No
Municipal Parks	No
Other	
Areas Critical to the Life Stages of Threatened and Endangered Animal or Plant Species	No
Areas where Animal or Plant Species that are Unique or Rare to this State would be Irreversibly Damaged	No

3.1.1

3.1.2 FEDERAL RESOURCE REVIEW

Bear Paw has initiated consultations with various other Federal agencies and has conducted a comprehensive review of published information; Bear Paw has concluded that no national parks or memorial parks; historic sites or landmarks; natural landmarks or monuments; or wilderness areas will be affected by the GCP.

Please see Appendix C for related agency consultations.

3.1.3 STATE RESOURCE REVIEW

Bear Paw has confirmed through a combination of agency consultations, review of publically available information and field studies the absence of state parks, historic sites, monuments, historical markers, or nature preserves within the proposed Route.

Bear Paw commissioned Class I Cultural Resource Inventory of the proposed Corridor and augmented that effort with a Class III Cultural Resource Inventory of the Route. The results of the Class III effort are summarized in Section 2.27. Bear Paw has developed site specific mitigation plans for culturally sensitive areas that intersect the proposed alignment; these plans have been submitted to SHPO for review and approval; once approved they shall be fully implemented. Provided the proposed mitigation is fully implemented, there shall be no impact to state cultural resources.

Please see Appendix C for related consultations, Appendix E for survey reports and Section 4 Mitigation for detailed discussion of proposed mitigation at the archaeological sites identified during Class III survey.

3.1.4 COUNTY RESOURCE REVIEW

Bear Paw has confirmed through a combination of agency consultations, review of publicly available information and field studies the absence of county parks, recreation areas, municipal parks, or parks owned by other subdivisions of government bodies within the proposed Route. See Section 2 for a comprehensive discussion of Bear Paw's efforts.

3.1.5 AREAS CRITICAL TO THE LIFE STAGES OF THREATENED AND ENDANGERED ANIMAL OR PLANT SPECIES

Bear Paw commissioned surveys of the proposed Route. The scope of the surveys included documentation of listed species identified during field surveys or evident of their critical habitats. Emphasis was placed on those species indentified through project consultations for the Corridor analysis that agencies indicate had the potential to occur within the Corridor and therefore the Route. The results of these field efforts are detailed in Section 2.2.3 and planned mitigative measures are discussed in Section 4.

3.1.6 AREAS WHERE ANIMAL OR PLANT SPECIES THAT ARE UNIQUE OR RARE TO THIS STATE WOULD BE IRREVERSIBLY DAMAGED

Based upon agency consultations and subsequent field surveys the proposed project would not result in irreversible impacts that are detrimental to species or their habitats. The implementation of the proposed mitigation plans and full compliance with environmental permits will fully mitigate the potential for irreversible damage.

3.2 AVOIDANCE AREA INVENTORY AND ANALYSIS

Avoidance Area	Within Route
National	
Historic Districts	No
Wildlife Areas	No
Wild, Scenic or Recreational Rivers	No
Wildlife Refuges	No

Avoidance Area	Within Route
Grasslands	Yes
State	
Wild, Scenic, or Recreational Rivers	No
Game Refuges or Game Management Areas	No
Forests or Forest Management Areas	No
Grasslands	No
Other	
Other Historic Resources not meeting Exclusion Areas criteria	No
Areas of Known Geologic Instability	No
Areas within 500-Feet of a Residence, School, or Place of Business	Yes
Reservoirs and Municipal Water Supplies	No
Water Sources for Organized Rural Water Districts	No
Irrigated Land (does not apply to underground facilities)	NA
Areas of Recreational Significance which are not designated as Exclusion Areas	No

3.2.1 NATIONAL RESOURCE REVIEW

A review of publicly available information was conducted, and Bear Paw has concluded that there are no registered national parks, memorial parks, historic sites and landmarks, natural landmarks, monuments or wilderness areas along the Route.

3.2.1.1 FOREST SERVICE REVIEW

The proposed Route would cross approximately 12.8 miles of Little Missouri National Grasslands (LMNG), which are FS managed lands. On April 11, 2011 the FS accepted Bear Paw’s application to site the Project in the LMNG along the route described within this application. Precedent for the route has been previously established and Bear Paw holds utility easement with FS for 12.8 miles of the proposed Route and if authorized would locate the proposed GCP within the existing utility easement. Bear Paw and FS explored various route alternatives within the FS boundaries and the proposed Route reflects FS preferred alignment. The FS has initiated a comprehensive review of the LMNG portion of the Project and will complete an Environmental Assessment (EA) under the guidelines of NEPA to support its decision to issue a Special Use Permit (SUP) to Bear Paw to construct the Project. Bear Paw is supporting this process by providing comprehensive natural resource and cultural resource field studies and reports of the proposed Project. The EA produced by this NEPA analysis is anticipated to be completed in late-August 2011 and a SUP would then follow.

3.2.2 STATE RESOURCE REVIEW

Bear Paw conducted a review of publically available resources and has concluded that there are no wild scenic or recreational rivers; game refuges or game management areas; forests or forest management areas; and grasslands along the proposed Route.

3.2.3 HISTORICAL RESOURCES NOT MEETING EXCLUSION AREA CRITERIA

Bear Paw conducted a Class I Cultural Resource Inventory, the results of this effort are discussed in the Certificate of Corridor Compatibility application; a Class III Cultural Resource Inventory of the proposed pipeline route was conducted, these studies confirmed the absence of historical resources. Bear Paw has submitted survey results to the SHPO for review and comments seeking concurrence with this conclusion. No additional historical resources have been identified.

3.2.4 AREAS OF KNOWN GEOLOGIC INSTABILITY

There are no known areas of geological instability along the proposed Route. North Dakota has not experienced an earthquake of sufficient magnitude to damage welded steel piping or structural steel in recorded history. Sink holes are known to occur in North Dakota but are more closely related to mining activities and no evidence of mining or sink holes were identified. Finally, the potential for landslides was evaluated; earth movement of this nature is closely associated with areas of great topographic relief, high gradient slopes, recent deposits that have yet to reach a stable angle of repose, or where underground water movement may create a slurry of rock and mud resulting in a subsidence. There are no locations along the proposed Route that can be characterized as instable.

3.2.5 AREAS WITHIN 500-FEET OF A RESIDENCE, SCHOOL OR PLACE OF BUSINESS

Bear Paw utilized aerial photography to identify structures located within 500 feet of the proposed pipeline alignment. Field surveys were conducted of each structure to characterize the structure as rural residence, school or place of business. Bear Paw has identified two potential locations where there are occupied structures located within 500 feet of the proposed alignment. Bear Paw modified the proposed alignment to avoid encroaching on one structure and is in the process of seeking waivers from the one remaining landowner with an affected residence. Please refer to Appendix G for documentation related to these efforts.

3.2.6 RESERVOIRS AND MUNICIPAL WATER SUPPLIES

Bear Paw has confirmed that the Route does not contain reservoirs or municipal water supply sources.

3.2.7 WATER SOURCES FOR ORGANIZED RURAL WATER DISTRICTS

Bear Paw has confirmed that the Route does not contain water sources that are utilized by organized rural water districts.

3.2.8 IRRIGATED LAND

This criterion does not apply to underground transmission facilities; as such it is not applicable to this Project.

3.2.9 AREAS OF RECREATIONAL SIGNIFICANCE WHICH ARE NOT DESIGNATED AS EXCLUSION AREAS

Bear Paw has confirmed that the Route does not contain areas of Recreational Significance.

3.3 FACTORS TO BE CONSIDERED IN EVALUATING APPLICATIONS AND DESIGNATIONS OF SITES, CORRIDORS AND ROUTES (49-22-09)

Available Research and Investigation Relating to the Effects of the Location, Construction, and Operation of the Proposed Facility on Public Health and Welfare, Natural Resources and the Environment:

The proposed project is designed to provide delivery throughput from the Plant to markets nationwide; as such all routing was anchored from the Plant to potential destinations. Bear Paw owns and operates the Terminal, an existing shipping facility that currently handles NGL products produced in the region. The Terminal was determined to be the preferred destination for Plant products due to its proximity to the Plant and its existing capacity to handle NGL products combined with existing rail infrastructure providing greater access to markets

Route selection between the Plant and Terminal identified and evaluated several options for routing this project. These studies were designed to define a preferred route that achieves project objectives, is technologically and economically feasible to construct, and minimizes impacts on landowners and the environment. The key logistical considerations included a) identifying an acceptable route through the Little Missouri National Grasslands, b) the location of the Yellowstone River crossing (which is in Montana), c) identification of existing utility corridors for collocation, and d) acquisition of pipeline rights of way (ROW) from area landowners. FS was consulted with and assisted with the routing of the proposed pipeline on LMNG lands; the proposed route represents the FS preferred route.

Field studies were conducted to identify environmental, biological, and cultural resources along the Route; the results of this effort are discussed in Section 2 and full reports are provided in Appendices D and E. Sections 3.4 and 3.5 below discuss possible effects on the public health and welfare.

The Effects of New Energy Conversion and Transmission Technologies and Systems Designed to Minimize Adverse Environmental Effects:

The Project does not include energy conversion or transmission technologies and systems that are specifically designed to minimize adverse environmental impacts. The proposed Project will have a beneficial effect to local air quality by converting

approximately 31,000 barrels of the hydrocarbon currently flared to the atmosphere at the well head. The Plant combined with the shipping capacity provided by GCP, have the effect of converting these air emissions to products for a more complete utilization of the resource.

The Project will be constructed in compliance with environmental permits; the conditions of these permits are designed to minimize adverse environmental impacts. Refer to Section 4 for a full description of the mitigation measures Bear Paw has planned to minimize impacts resulting from the Project's location, construction, and operation.

Adverse Direct and Indirect Environmental Effects which cannot be Avoided Should the Proposed Site or Route be Designated:

Unavoidable adverse direct and indirect environmental effects will be temporary and shall be minimized through compliance with environmental permits. The potential impacts to resources including vegetation, wildlife, agricultural operations, transportation, and noise levels associated with construction as discussed in Section 3.5. Bear Paw will mitigate these temporary impacts to the maximum extent possible.

The Project will be constructed in compliance with environmental permits; the conditions of these permits are designed to minimize adverse environmental impacts. Refer to Section 4 for a full description of the mitigative measures planned to minimize impacts resulting from the Project's location, construction, and operation.

Alternatives to the proposed corridor or route which are developed during the hearing process and which minimize adverse effects:

No hearings have been held at the time of filing.

Irreversible and irretrievable commitments of natural resources should the proposed corridor and route be designated:

Bear Paw is not aware of any of any irreversible or irretrievable commitments of natural resources that would result from the requested approvals.

Direct and Indirect Economic Impacts of the Proposed Facility:

Construction of this Project will provide firm, reliable service for 31,000 Bpd of NGL products and provide a critical transportation link between the Garden Creek Gas Plant and Riverview Terminal. This will capture hydrocarbon resources currently lost to flaring due to a lack of infrastructure and shall convert it into a potential revenue stream for producers and shippers, with the state benefiting as well through royalties, tariffs and taxes.

Existing Plans of the State, Local Government, and Private Entities for Other Developments at or in the Vicinity of the Proposed Route:

Bear Paw conducted a series of community outreach meetings to provide local government officials and the general public information regarding this Project. In

addition to a general information exchange, Bear Paw expressed an interest in learning about future developments in the area. There were no future development plans expressed at these meetings. See Appendix C for public outreach meeting minutes.

The Effect of the Proposed Route on Existing Scenic Areas, Historic Sites and Structures and Paleontological or Archaeological Sites:

Bear Paw has commissioned Class I and Class III cultural resource surveys of the Route. Bear Paw developed mitigation plans for registered or eligible sites that encroach into the proposed construction corridor. The proposed mitigation is detailed in Section 4. All related correspondence can be found in Appendix C and supporting documentation of field studies can be found in Appendix E.

Project specific consultation with various Federal, state and local agencies did not identify any scenic areas within the Route. SWCA on behalf of Bear Paw initiated a project review with paleontological experts who possess knowledge of North Dakota's resources; these consultations concluded that there are no known resources within the proposed Corridor or Route.

The Effect of the Proposed Route on Areas Which are Unique Because of Biological Wealth or Because they are Habitats for Rare and Endangered Species:

The proposed route is not anticipated to result in permanent detrimental impact to the environment. Please see Section 2 for comprehensive discussion of Bear Paw's effort to identify sensitive environmental resources along the proposed Route; also see Section 4 for a comprehensive discussion of proposed mitigation. Bear Paw has worked with agencies to develop a route that avoids or minimizes environmental impacts. Provided the mitigation plans are fully implemented and environmental permit conditions are faithfully executed, the project will not result in impacts to listed or sensitive species or their habitats. See Appendix C for complete Federal and state agency consultations, detailed survey results can be found in Appendix D, while issues of interest to the FS are included in Appendix H.

Problems Raised by Federal Agencies, Other State Agencies and Local Entities:

Bear Paw consulted with several Federal and state agencies to identify possible environmental resources within the Corridor and any related agency concerns. Resource issues raised by agencies included:

- FWS - threatened and endangered species and critical habitat protection, migratory bird habitat and wetland protection, erosion control and restoration/reseeding procedures.
- FS- special concern species and critical habitat protection, erosion control and restoration/reseeding procedures.
- GFD – Cherry Creek crossing a Class III fishery
- PRD - North Dakota special concern species

Bear Paw incorporated this feedback into the route selection process and as appropriate into field survey protocols. When field studies confirmed the presence of these items, Bear Paw refined the proposed alignment or developed mitigation strategies to avoid or minimize direct impacts. Further discussion on agency consultations and concerns can be found in the Application for Certificate of Corridor Compatibility and discussions of avoidance and mitigation measures are found in Section 4 of this application. See Appendix C for complete Federal and state agency consultations, detailed survey results can be found in Appendix D, while issues of interest to the FS are included in Appendix H.

Bear Paw received the following comments from local government representatives during the public outreach campaign, complete notes from these public meetings can be found in Appendix C:

- Arnegard City Council – US 85 highway expansion, and
- Alexander City Council – Bear Paw pipe yard culverts, soil compaction and erosion control

Bear Paw has made commitments to follow through with these concerns at the appropriate point in time with the Project.

3.4 SELECTION CRITERIA

The selection criteria require a study of environmental impacts and changes in land use that may result from the siting of the proposed Project. Through this process, Bear Paw proposes that it has successfully avoided or minimized these effects to the maximum extent practicable, for Commission review and approval.

3.4.1 AGRICULTURAL IMPACT ASSESSMENT

Agricultural Production: The Project will temporarily impact approximately 657 acres of land in North Dakota, of which approximately 51.2% are cultivated. The majority (97%) of the land crossed can be characterized as is either agricultural or natural vegetative cover. Once the construction is complete, the land will be restored to its pre-construction contours and land use. Bear Paw will provide settlements to landowners for crop loss resulting from Project construction.

Family Farms and Ranches: The Project impact to family farms and ranches will be temporary and closely associated with the construction of the pipeline. Once the construction is complete, the land will be restored to its pre-construction contours and land use. Bear Paw will negotiate easements with landowners. The Project will not have permanent impacts to lifestyle or farm/ranch operations once construction has been completed. See Section 4 for mitigation plan for agricultural and range lands.

The location of pipeline markers is defined under 49 CFR 195 for pipelines. Bear Paw works with local landowners and county officials to ensure that pipeline markers are

located where required but also in an acceptable location for these parties. These markers are to be placed in full view so that they are not accidentally damaged nor cause damage to landowner or county equipment.

Lands Suitable for Irrigation: The proposed Route will cross lands that are currently irrigated and others that are potentially suitable for irrigation. The proposed project will not result in permanent impact to these fields. Construction activities will result in temporary impacts that will be short in duration. Standard construction and restoration techniques will mitigate impacts as all disturbed areas will be returned to pre-construction contours and land use.

Surface Drainage: All areas disturbed by construction will be returned to preconstruction contours resulting in no change in surface drainage. Impacts to surface drainage will be temporary and limited to construction activities. During construction, Bear Paw will implement a project specific Storm Water Pollution Prevention Plan approved by the ND DoH to manage stormwater run-off and employ proper erosion and sediment control measures through construction and restoration.

Ground Water: The aquifers that underlay North Dakota are typically associated with two types of geologic formations, specifically bedrock and glacial drift. Bedrock aquifers in the area are known to occur from 3,000 to 5,000 feet below the surface while glacial drift aquifers are known to occur at depths of from a few feet to up to 500 feet below the surface. Ground excavation associated with the Project will generally be limited to depths no greater than 10 feet; as such, it is unlikely that the Project would have significant or permanent impact on groundwater resources.

3.4.2 THE IMPACTS UPON

Noise-Sensitive Land Uses: The GCP is located in a rural setting maintaining a minimum distance of 1.5 miles from Watford City, effectively isolating the project from the majority of sensitive receptors. Once constructed and in-service, normal pipeline operations are not audible.

Bear Paw conducted a survey of in habituated structures that are located within the 500-foot avoidance area of the proposed pipeline alignment. Bear Paw has modified the proposed alignment where practicable to minimize encroaching on inhabited structures and will seek waivers as necessary. Please see Appendices B and G for supporting documentation.

Visual Effect on Adjacent Areas: There will be a total of 15 block valves to be installed, of which 11 will be located in North Dakota. Block valves are small above ground features. Each block valve assembly occupies approximately 0.04 acres with exposed piping and appurtenances that may be up to 4 feet in height. These facilities

are typically enclosed with fences and locked gates to deter vandalism or accidental activation. Each location is clearly marked with a small placard that details ownership and contact information. The visible piping and equipment is maintained with finished white painted surface. These features are common throughout the landscape and are not obtrusive, no other permanent above ground features are to be installed for the Project.

Extractive and Storage Resources: This Project will not impact any extractive or storage resources.

Wetlands, Woodlands, and Wooded Areas: Bear Paw conducted a desktop review of published data which included aerial photography and NWI data of the proposed Corridor. Based upon this analysis, the routing was conducted to minimize direct impacts to these resources where practicable. Bear Paw commissioned field surveys to identify the locations and boundaries of these resources within the proposed route. The results of these field studies will be used to determine a preferred alignment to avoid or minimize impacts to wetlands, woodlands, and wooded areas. Please see Section 4 Mitigation and Appendix D for additional details.

Radio and Television Reception, and other Communication or Electronic Control Facilities: Bear Paw does not anticipate the Project impacting radio, television, or other electronic control facilities.

Human Health and Safety: Bear Paw promotes a safe and healthy workplace during construction and operations of all its assets. A corporate policy that meets or exceeds federal and state laws, rules and regulations is enforced and adhered to by all regular and contract employees. Bear Paw governs operations and construction activities with various safe work procedures designed to protect property, personnel and maintain regulatory compliance. The product transported is a cryogenic fluid which will vaporize when exposed to normal atmospheric pressure. The product will contain no more than 4 ppm hydrogen sulfide and does not pose an exposure risk to environment nor humans, however the product is flammable. The operation of the GCP will be continuously monitored via Bear Paw's Supervisory Control and Data Acquisition (SCADA) system, which is designed to shut in any section that exhibits abnormal operating parameters.

Animal Health and Safety: The wildlife currently inhabiting the Route are common and are generally mobile. The local wildlife inhabitants will be temporarily displaced by the Project without a measurable impact to the viability of these populations. No species of special concern are anticipated to experience direct impacts due to construction or operation of the Project.

Plant Life: The Project will not result in the permanent loss of agricultural or pastureland, construction impacts will be temporary and the restoration will return the fields to their pre-construction condition. No species of special concern will be impacted by the Project.

Surveys of S2 for sensitive species identified one location within the proposed Route inhabited by Townsend Daisy, which has been characterized as Sensitive by the FS. Please see Section 4 Mitigation for site specific plans that will avoid impacting these plants at this location.

3.5 POLICY CRITERIA

3.5.1 POLICIES AND COMMITMENTS TO LIMIT ENVIRONMENTAL IMPACT

Bear Paw is committed to conducting its business in compliance with all applicable environmental laws and regulations. These laws, regulations, and standards are designed to safeguard the environment, human health, wildlife, and natural resources. Our commitment to observe them faithfully is an integral part of our business and our values.

Bear Paw will make environmental considerations contained in the permits and authorizations received for this Project a priority. Bear Paw will conduct its activities with the objectives of providing a healthful and safe workplace for our employees, preventing accidents and environmental incidents, and controlling emissions and wastes to below harmful levels.

Bear Paw will require all persons and firms providing service to it to conduct their work in compliance with environmental conditions, permit authorizations, and regulations, and will hold them accountable for their actions in that regard.

3.5.2 LOCATION AND DESIGN

The proposed Project is designed to provide delivery throughput from the Plant to markets nationwide; as such all routing was anchored from the Plant to potential destinations. Bear Paw owns and operates the Terminal, an existing shipping facility that currently handles NGL products produced in the region. Due to its proximity to the Plant and its existing capacity to handle NGL products combined with existing rail infrastructure providing greater access to more markets, the Terminal was determined to be the preferred destination for Plant products.

Routing between the Plant and Terminal identified and evaluated several alternative alignments. These studies were designed to define a preferred route that achieves project objectives, is technologically and economically feasible to construct, and minimizes impacts on landowners and the environment. The key logistical considerations included a) identifying an acceptable route through the Little Missouri National Grasslands, b) the location of the Yellowstone River crossing (which is in

Montana), c) identification of existing utility corridors for collocation, and d) acquisition of pipeline rights of way (ROW) from area landowners.

Bear Paw will ensure the design of the pipeline to be in full compliance with DOT standards.

3.5.3 TRAINING AND UTILIZATION OF AVAILABLE LABOR IN THIS STATE FOR THE GENERAL AND SPECIALIZED SKILLS REQUIRED

Pipeline construction is a specialized niche construction market and the labor force needed to build the Project will be primarily comprised of a non-local workforce. The primary contractor will be a non-local contractor, supplying specialized skilled labor. Bear Paw will draw upon the local labor force to supply general laborers. Each spread will have up to 30 construction laborers with 5 to 10 third party inspectors. It is possible that as one spread is completed, that crew may rotate to another construction spread once all regulatory approvals have been given for that spread so the peak construction labor force will be no greater than 80 personnel at any point during construction.

3.5.4 ECONOMIES OF CONSTRUCTION AND OPERATION

Bear Paw will invest approximately \$24 million to develop this Project, generating approximately \$350,000 of additional ad valorem tax revenues annually. Once constructed and in-service, the continued costs of maintenance and operation of the proposed pipeline are minimal. While the GCP itself will not generate any direct tariff revenues, it is estimated the gross NGL product value produced at the Plant and transported through the GCP will be in excess of \$100 million annually, generating significant producer, royalty and state tax revenues in the most minimally intrusive and most efficient way possible.

3.5.5 USE OF CITIZEN COORDINATING COMMITTEES

Bear Paw has established and maintained a good relationship with the local residents through its long-term regional presence operating various assets in the area. Through these relationships Bear Paw has maintained several grass roots communication channels to inform local residents regarding the developments associated with the Project.

On May 11 and 12, 2011, Bear Paw conducted a series of informational meetings with the local government leaders in the project area. The purpose of these meetings was twofold, first for Bear Paw to provide first hand project information to the local government officials; and secondly for these officials to express and identify their project specific concerns to Bear Paw. The following meetings were conducted:

- May 11, 2011 – McKenzie County Commissioners;
- May 11, 2011 – Watford City Chamber of Commerce and City Council;
- May 11, 2011 – Alexander City Council; and
- May 12, 2011 – Arnegard City Council.

Please see Appendix C for detailed meeting minutes and topics discussed.

3.5.6 COMMITMENT OF A PORTION OF THE TRANSMITTED PRODUCT FOR USE IN THIS STATE.

The proposed Project will provide firm shipping capacity for the Plant and will utilize rail shipping infrastructure at the Terminal. The products that will be transported, transferred, and shipped from these facilities are currently shall be delivered to out of state destinations.

3.5.7 LABOR RELATIONS

Bear Paw does not anticipate encountering any adverse labor relations on this Project. The labor market in the Project area is supportive of the oil and gas industry.

3.5.8 THE COORDINATION OF FACILITIES

Bear Paw owns and operates the affected facilities, and operations will be coordinated by its management.

3.5.9 MONITORING OF IMPACTS

Bear Paw's primary contractor shall be contracted to provide, among other duties, the oversight responsibilities for construction activities throughout the Project. Bear Paw will contract and coordinate environmental responsibilities in the same manner.

3.5.10 UTILIZATION OF EXISTING AND PROPOSED ROW AND CORRIDORS

As discussed in detail in Section 4.1 of the Corridor Certificate application and depicted on maps provided in Appendix B, approximately 31% of the 63.2 mile route will be collocated within existing utility corridors.

3.5.11 OTHER EXISTING OR PROPOSED TRANSMISSION FACILITIES

Bear Paw anticipates construction of a transmission pipeline in 2012 as detailed in Bear Paw's 10-Year Plan (see Appendix F).

SECTION 4: MITIGATIVE MEASURES

4.1 LOCATION

The location of the proposed route is a function of location of the Plant, Terminal and suitable routing. Bear Paw commissioned field surveys of the proposed Route to address specific agency concerns expressed during consultations, inventory the resources along the Route, define the location and boundaries of resources that intersect the proposed alignment, identify potential impacts to natural resources and identify avoidance or other mitigation opportunities to further minimize the impacts of the Project.

Trees and Shrubs: Bear Paw shall comply with the Commission's tree and shrub mitigation specifications. Field surveys included a pre-construction tree and shrub inventory. The clearing or removal of trees or shrubs will be done selectively, in a manner that minimizes the disturbance to woody vegetation and in compliance with the Commission's specifications. The replacement of trees and shrubs will be based upon actual impacts due to construction and shall meet the 2:1 ratio specified and shall be fully documented.

Wetlands and Waterbodies: Bear Paw will use a low impact crossing technique for all waterbodies crossed by the Project.

Cherry Creek Mitigation (S1) : The GCP will cross Cherry Creek. The GFD requested that Bear Paw install the pipeline at this location utilizing a low impact method (e.g.; horizontal directional drill) or observe their suggested timing restriction (i.e.; complete the crossing prior to April 15 or after June 1) to avoid impacts to the fishery. Bear Paw has agreed to cross this waterbody via a low impact (e.g.; Horizontal Directional Drill) as requested by the agency.

Migratory Bird Treaty Act – S1, S2: In the April 20, 2011 consultation response from FWS, the agency noted that a July construction schedule may not completely mitigate all potential impacts to migratory birds that may be present during the breeding season. Bear Paw's proposed schedule for S1 and S2 conform to the FWS preferred construction window and Project timing will fully mitigate the FWS concerns.

Whooping crane - S2: The Whooping crane is federally listed as Endangered and is present in North Dakota on semi-annual basis during the spring and fall migration between breeding grounds in Canada and winter grounds in the Gulf of Mexico. The FWS noted that the proposed Project was located within the migration corridor of the Whooping Crane. Whooping cranes may utilize a variety of habitats across a vast landscape during migration. Field surveys identified potential migratory feeding habitat on S2; Bear Paw has proposed the following mitigation to avoid impacts to the whooping crane.

Bear Paw proposes to suspend heavy equipment operations upon confirmation of a whooping crane(s) within 0.5 miles of the construction right-of-way. Suspended activities shall resume in the absence of whooping cranes. Please see Appendix H for a comprehensive analysis of habitat and potential impacts.

Prairie Falcon – S2: The prairie falcon was identified by both the FS and the ND PRD as a species of federal and state special concern status. On May 18, 2011, field biologist recorded a prairie falcon at approximate MP 49.8; the area adjacent to this location was described as potentially suitable breeding habitat.

Bear Paw has proposed avoidance mitigation by restricting construction activities in the area to begin no earlier than September 1, 2011 or Bear Paw will establish a 0.5 mile buffer of limited activities if construction commence prior to August 31, 2011. Please see Appendix D for survey results and Appendix H for a comprehensive analysis of habitat and proposed mitigation. The proposed mitigation is currently under FS review and is pending comment.

Swainson's Hawk – S2: The Swainson's Hawk is a raptor that is afforded protection under the Migratory Bird Treaty Act (MBTA). During the surveys conducted in May 2011, field biologist recorded a Swainson's Hawk nest at MP 39.6.

Bear Paw has proposed avoidance mitigation by restricting construction activities in this area; construction is currently scheduled to begin no earlier than September 1, 2011. If construction activities commence prior to September 1 Bear Paw will establish a 0.5 mile buffer at this location and limit construction activities to avoid impacts. Please see Appendix D for survey results and Appendix H for a comprehensive analysis of habitat and proposed mitigation. The proposed mitigation is currently under FS review and is pending comment.

Townsend Daisy: Field botanists recorded the presence of Townsend Daisy (*Townsendia hookeri*) at MP 52.9, three (3) individual plants were observed, documented, location recorded and reported to the FS botanist. Bear Paw has proposed an avoidance mitigation plan, proposing to establish and maintain a 25 foot disturbance-free-buffer around these individuals. The plants can be completely avoided under the proposed mitigation plan. Please see Appendix D for survey results and Appendix H for a comprehensive analysis of habitat and proposed mitigation. The proposed mitigation is currently under FS review and is pending comment.

Cultural Resources: The following mitigation has been proposed and is pending agency comment.

32MZ2204 – S1 (MP 9.5): This site is a newly discovered prehistoric site of undetermined significance due to potential cultural sensitivity. Field studies recorded

the site boundaries and characterized the site for reporting purposes to the SHPO. Bear Paw shall modify the alignment of the GCP and related construction right of way to afford the site with a 50 foot, no impact, exclusion buffer; fencing shall be installed to visually reinforce the boundaries of the exclusion during construction. Please see Appendix C for related agency correspondence and Appendix E for survey results.

32MZ2202 – S1 (MP 10.6): This is a newly recorded material comprised of historical farm equipment though it was evaluated to be independent of any other material of significance and therefore not thought to be significant. Bear Paw will avoid impacts by moving the equipment outside the construction right of way. Please see Appendix C for related agency correspondence and Appendix E for survey results.

32MZ2201 – S1 (MP 17.2): This site is a newly discovered prehistoric site of undetermined significance due to potential cultural sensitivity. Field studies recorded the site boundaries and characterized the site for reporting purposes to the SHPO. Bear Paw shall modify the alignment of the GCP and related construction right of way to afford the site with a 50 foot, no impact, exclusion buffer; fencing shall be installed to visually reinforce the boundaries of the exclusion during construction. SWCA field survey at this location was expanded to accommodate potential centerline realignment to avoid this site. Please see Appendix C for related agency correspondence and Appendix E for survey results.

32MZ767 – S2 (MP 41.1): This site is comprised of historic and prehistoric cultural material scatter first recorded in 1985 and several subsequent field surveys. During past surveys, the buried prehistoric component of the site was found to be significant, while the surface historic component was found to be not significant. The site was found to be in poor condition and the integrity has been negatively affected by cattle grazing, vehicle traffic and the construction of a pipeline. To avoid impacting this site, Bear Paw has proposed to collocate the GCP within the existing utility corridor, constrain the construction right of way; limiting the proposed construction right of way to the limits of the previous pipeline disturbance. In addition the construction right of way will be fenced to visually reinforce this boundary. Furthermore, it has been recommended that a qualified archeologist monitor construction activities at this location. Please see Appendix C for related agency correspondence and Appendix E for survey results.

32MZ937 – S2 (MP 44.7): This site is comprised of prehistoric lithic scatter and was first recorded in 1988. Several subsequent field surveys for corridor studies have relocated this site and noted the progression of disturbances due to agricultural activities, grazing, erosion, and pipeline construction including related vehicle traffic. Currently, the site was considered to be in “fair” condition, with the most significant deterioration focused on the northern portion of the site. Site boundaries relative to the existing utility corridor and proposed pipeline were recorded for site evaluation

purposes as well as for mitigation planning. The site is thought to be significant; however, due to extensive disturbance by prior pipeline construction, the northern portion of the site is thought to lack integrity. To avoid impacting this site, Bear Paw has proposed to collocate the GCP within the existing utility corridor, constrain the construction right of way; limiting the southern boundary of the proposed construction right of way to the limits of the existing pipeline permanent right of way. This will effectively constrain the disturbance of the proposed GCP to the existing previously disturbed corridor. In addition the southern limit of the construction right of way will be fenced to visually reinforce this boundary and an archaeological monitor will be present during construction adjacent to the site. Please see Appendix C for related agency correspondence and Appendix E for survey results

32MZ69 – S2 (MP 52.3): This site is an historic cultural material scatter and probable homestead first recorded in 1979. Site boundaries relative to the existing utility corridor and proposed pipeline were recorded for site evaluation purposes as well as for mitigation planning. The condition of the site was found to be poor having been adversely affected by road construction, vehicle traffic, cattle grazing, erosion and potential looting; therefore the site is not thought to be significant. The proposed alignment of the pipeline has been rerouted at this location and the current alignment will avoid the site and shall have no impact to this site. Please see Appendix C for related agency correspondence and Appendix E for survey results.

4.2 CONSTRUCTION

The proposed construction of the pipeline will be conducted in an orderly sequence designed to complete the Project in the minimum amount of time required to safely prepare the site, install the pipeline and restore the areas disturbed by construction.

Construction is estimated to require approximately 90 days with restoration to immediately follow. Construction techniques will be employed that minimize the area of ground disturbance, off site deposition of sediments and long-term impacts to agricultural productivity.

Restoration will immediately follow pipeline construction. Final grading will restore the original contours of the land. Disturbed areas will be prepared for re-seeding and restoration will be coordinated to meet landowner specifications.

4.3 OPERATION

Once constructed and put into service, the proposed pipeline will operate continuously delivering hydrocarbons from the Plant to the Terminal. Normal pipeline operations are imperceptible to the general public as they are silent, buried and therefore not visible, and require only minimal above ground activity. Standard operating procedures will conform to DOT standards and requirements, as such periodic

inspection, and maintenance of the right way will likely be required to remain in compliance.

SECTION 5: DESCRIPTION OF RIGHT-OF-WAY PREPARATION AND RECLAMATION PROCEDURES

Construction will be an assembly-line process and will include the following general tasks: surveying and staking, clearing and grading, trenching, pipe stringing, pipe bending, welding, coating, hydrostatic testing, lowering in, tie-ins, backfilling, rough grading, and final restoration (*e.g.*, topsoil replacement, final grading, seeding and mulching, where required). The pipeline may be placed into service before final restoration has been completed in all areas.

At any location in the project area, construction activities will require approximately eight to ten weeks to complete from start to finish, except when weather-related delays affect the schedule. Yet, construction activity at any location is not continual but occurs in distinct phases with several days or weeks between each phase. For example, clearing and grading may require 10 hours to progress for one mile along the pipeline right-of-way, but trenching may not follow in that area for several weeks. During the interim, activity in the area may be completely lacking or limited to occasional vehicular or pedestrian traffic.

Surveying and Staking

Prior to construction activities, Bear Paw will stake the centerline and establish the boundaries of the approved work areas (*e.g.*, the construction right-of-way boundaries and temporary extra workspace areas), and flag the location of approved access roads and foreign utility lines. Wetland boundaries and other environmentally sensitive areas will also be marked or fenced for protection at this time.

Clearing and Grading

Prior to clearing, landowner fences will be braced and cut, and temporary gates and fences will be installed to control livestock where necessary. A clearing crew will clear the work area of vegetation and obstacles that may be encountered (*e.g.*, remaining trees, stumps, logs, brush, and rocks) in the work area.

The right-of-way will be graded, where necessary, to provide a reasonably level work surface and to segregate topsoil. Topsoil will be carefully removed and stored along the edge(s) of the right-of-way in a manner that allows for a haul road and trench line. The topsoil depth in the area is variable, but generally the topsoil is between 2-9 inches deep with the deepest topsoil in valleys and the thinnest topsoil on the hill sides and hill tops. The topsoil depth and the layer removed will be determined in the field; upon completion of pipeline construction, the trench will be backfilled and topsoil will to be returned to the upper soil horizon. All disturbed areas shall be graded to restore the original contours.

Where steep slopes or side slopes are encountered, the construction contractor may grade the slope to reduce the grade, or in areas of side slopes, two-tone the area to

create level working surface. At these locations, excess spoil will be pushed to the side of the construction right-of-way, distributed over working area and travel lane, or stored in alternative temporary work space (ATWS.) This material will be returned to the original location and preconstruction contours reestablished during restoration.

Concurrent with grading, erosion and sediment control devices will be installed as required by state stormwater permit conditions. Water bodies will be bored using horizontal directional drilling to place pipe under the water body without disturbing the water body. The pipeline will be placed such that adequate cover from the bottom of the water body is in place. This is individual to the water body but is to be no closer than 5 feet to the bottom of the water body. Construction mats will also be installed across saturated wetlands to prevent rutting as equipment travels the right-of-way. Erosion and sediment control devices, which may include silt fences, straw wattles, straw bales, and road access pads, will be installed where necessary to prevent soil and sediment from leaving the construction work area.

Following installation of the pipe and backfilling of subsoil in the trench, the right-of-way will be returned to the original grade and the topsoil will be redistributed over the work area.

Trenching

The trench will be excavated by using track-mounted backhoes to a depth that provides sufficient cover over the pipeline after backfilling. The bottom width of the trench will be sufficient to accommodate the 10-inch-diameter pipeline. Typically, the trench will be excavated to a depth of about five feet deep to allow for a minimum of four feet of cover after construction. In cultivated areas, the depth of cover will be sufficient to be safely below the maximum tillage depth. Additional cover requirements may be applicable at public road crossings.

Trench spoil will be stored adjacent to but will not be mixed with topsoil on the non-working side of the right-of-way. In some cases, however, where sufficient space is lacking on the non-working side, trench spoil may be side cast on the travel lane and spread over the working side of the right-of-way.

Pipe Stringing, Bending, and Welding

Sections of externally coated pipe up to 80 feet long (*e.g.*, joints) will be transported over public roads to the right-of-way by truck and placed or “strung” along the right-of-way parallel to the trench in a continuous line. After the pipe sections are strung along the trench and before they are welded together, individual sections of the pipe may be bent, where necessary, so that the finished pipeline sections conform to the natural contours of the land. Typically, a track-mounted, hydraulic pipe-bending machine will be used. Where multiple or complex bends greater than what can be properly bent in the field are required, a factory made “fitting” will be used.

After the pipe sections are bent, the joints will be welded together into sections and placed on temporary supports. Welding will comply with requirements listed in Title 49 CFR Part 195 and API Standard 1104 *Welding of Pipelines and Related Facilities*. Each weld will be tested by using radiographic non-destructive examination (NDE) to ensure that no defective welds are present and that Bear Paw's engineering standards are met. Welds that do not meet standards and specifications will be removed and/or repaired.

A third-party contractor certified in non-destructive inspection will be used and inspections will be performed as outlined in Title 49 CFR Part 195. After the welds are approved, a protective FBE coating will be applied to the welded joints. The pipeline will subsequently be electronically and visually inspected for defects in the epoxy coating. Damage to or defects in the coating will be repaired prior to lowering-in the pipeline. Cathodic protection systems will also be directly bonded to the pipe at this time.

Hydrostatic Testing

Consistent with the three spread construction process, Bear Paw will hydrostatically test each section once the pipeline in that section has been aligned and welded. Hydrostatic testing shall conform to DOT standards and shall establish the maximum allowable operating pressure (MAOP) for the pipeline when it is operational. Testing involves installation of test headers that control the pressure applied and are later removed upon the completion of a successful pressure test. The test procedures are a function of pressure and time, once the desired test pressure has been achieved, the test section must hold the pressure for an 8 hour period, without a significant change in pressure. Once testing is completed, the test water is evacuated from the section, the line is dried, and prepared for commissioning. If the adjacent pipeline sections are ready for hydrostatic testing, the test water will be conserved and transferred to adjacent test sections. If the transfer of test water is not possible, Bear Paw will either procure discharge permit(s) from the ND DoH and the ensuing discharge will conform to the conditions stipulated in the permit; or Bear Paw will capture the water temporarily in tanks for transport and disposal at a licensed waste water treatment facility.

Lowering-in and Backfilling

The trench will be inspected for the presence of rocks and other debris that could damage the pipe or protective coating. If rocks or other obstructions are observed, these will be removed or the pipeline trench bottom will be padded with subsoil or sand prior to the pipeline lowered into the trench.

If the trench bottom is obscured by water, the trench will be dewatered. Where dewatering is required, Bear Paw will pump water from the trench into well-vegetated upland areas or into sediment filtration/energy dissipation devices.

In areas of steep slopes, breakers consisting of sand bags or foam will be installed to prevent ‘piping’ from occurring along the pipe in the trench after the area is backfilled.

The trench will be backfilled using the native material removed and compacted; however, the trench may be slightly crowned to accommodate settling.

Final Tie-in and Commissioning

Following successful pressure testing, test manifolds will be removed and the final pipeline tie-ins will be made. After final tie-ins are complete, the tie-in welds have been inspected and the line is sufficiently dried, the pipeline will be commissioned. Commissioning involves activities to verify that equipment is properly installed and working, the controls and communications systems are functional, and that the pipeline is ready for service. The pipeline will be cleaned and dried using mechanical devices; the line will be purged of air and then loaded with product.

Cleanup and Restoration

Final cleanup will begin after backfilling as soon as weather and site conditions permit. During cleanup, construction debris remaining on the right-of-way will be collected and disposed of properly. Work areas will be graded and restored to preconstruction contours as closely as practical.

During restoration, segregated topsoil will be spread over the surface after final grading and permanent erosion controls will be installed. After permanent erosion control devices are installed, disturbed, non-cultivated areas will be seeded and slopes mulched where required. Seed mixes will be approved in advanced by the landowner, and seeding will occur within the recommended seeding dates for the Project area.

For cultivated areas, no seed or mulch will be applied after the topsoil is replaced unless specifically requested by the landowner.

Every reasonable effort will be made to complete final cleanup (including final grading and installation of erosion control devices) in accordance with landowner requests or permit conditions within 21 days of backfilling.

Markers showing the location of the pipeline will be installed at fence and road crossings in order to identify the owner of the pipeline and convey emergency information in accordance with applicable governmental regulations, including DOT safety requirements. Special markers providing information and guidance to aerial patrol pilots will also be installed.

Waterbody Restoration

Waterbodies affected by construction of the Project are typically narrow, low gradient, meandering streams exhibiting lentic conditions in the late summer and early fall period. Since these waterbodies derive most of the flow from spring runoff (*e.g.*,

snowmelt and rainfall) and summer thunderstorms, the dry period typically extends from August to October resulting in dry channels and pools of standing water only in the deepest reaches and meanders; water may not be flowing between pools. Bear Paw will be using horizontal directional drilling (HDD) bores to cross all streams. This method is preferable to the open-cut method as it does not disturb the stream bed and can allow greater cover under the water body for the pipe.

The horizontal directional drilling bore method involves setting a horizontal drill rig at one or both ends of the bore area. If the drill rig is located on or near the stream bank, erosion countermeasures will be installed to minimize bank disturbance and prevent further erosion during the drilling operation. The drill bores underneath the water body followed instantaneously by a casing pipe which provides drilling fluid to dissipate heat and remove soil spoils. The main pipe, known as the string pipe, will be installed inside the casing pipe once the bore has been completed. The string pipe will be connected to the main pipeline pipe.

Following installation of the casing and drill string pipe, the stream bank will be restored, as necessary. Bear Paw will, compact the banks and install erosion and sediment control blankets on the banks after seeding to prevent scour and a discharge of sediment to the waterbody. In addition, sediment control barriers will be installed on the top of the banks to prevent sediment generated from the right-of-way from entering the waterbody. These barriers will remain in place until the right-of-way approaches are adequately vegetated.

Bear Paw is proposing to cross flowing waterbodies using methods that will minimize the length of time to install and restore the streambank and prevent sediment that enters the waterbody during construction to reduce the impacts on the waterbody. For all ephemeral, intermittent, and perennial crossings, Bear Paw will implement the following mitigative measures:

1. Temporary extra workspaces will be located at least 50 feet from the edges of the waterbody, unless a 10-foot setback is identified for waterbodies located in actively cultivated agricultural fields.
2. Temporary extra workspaces will be limited to the minimum size needed to construct the waterbody crossing.
3. Riparian vegetation will be preserved by limiting clearing of vegetation between temporary extra workspace areas and waterbody edges;
4. Temporary sediment and erosion control devices will be installed across the width of the right-of-way after clearing and before ground disturbance and throughout construction until stream banks and adjacent upland areas are stabilized.
5. Trench spoil placement will be restricted to at least 10 feet from the water's edge on the right-of-way, or in temporary extra workspace areas.

6. Waterbody buffers will be maintained (*e.g.*, temporary extra workspace area setbacks, refueling restrictions) in the field with signs until construction related ground-disturbing activities are complete.
7. The use of equipment operating in the waterbody will be limited to that needed to construct the crossing.
8. Construction will be completed across minor waterbodies (*i.e.*, less than or equal to 10 feet wide) within a single 24-hour time period.
9. Storage and refueling activities will be restricted near surface waters and procedures in the SPCC Plan will be promptly implemented if a spill or leak occurs during construction.
10. Bank stabilization and re-establishment of stream bed and bank contours will be required after construction.
11. A permanent slope breaker will be installed across the right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the water's edge.

Wetland Restoration

Following pipeline installation, the trench will be backfilled with the material excavated and, to the maximum extent possible, restored to pre-construction contours. Replacing the wetland soil and restoring pre-construction hydrology will promote the rapid re-establishment of hydrophilic vegetation.

Bear Paw will also take precautionary measures outside wetland boundaries to prevent construction in uplands from having an impact on wetlands. These measures include:

- Installing sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary where necessary to prevent sediment flow into the wetlands.
- Installing sediment barriers along the edge of the construction work area where wetlands are adjacent to the construction right-of-way and the ground surface slopes toward the wetland.

Following backfilling, topsoil segregated before trenching will be returned to the area from which it was stripped. If timber mats or riprap were used, Bear Paw will remove the supports from the wetland. No lime, mulch, or fertilizer will be used in wetlands, but Bear Paw will apply annual ryegrass in wetlands without standing water

All materials used for equipment crossings in wetlands will be removed in their entirety following construction, and the area will be restored and stabilized according to the relevant permit authorizations.

Agricultural Land Restoration

Extensive portions of the Project will involve heavy construction through agricultural areas. These areas consist of active croplands predominately used to grow durum, hard red spring wheat, winter red winter wheat, barley, sunflowers and canola. Additionally, agricultural lands are also used as range or pasture land used for livestock production. Bear Paw will utilize the following general construction methods in agricultural areas, consistent with the requirements of landowners:

- Prior to construction, landowners will be contacted and irrigation facilities, and wells, waterlines and other and livestock watering systems will be located.
- Water flow will be maintained in supply systems unless shutoff is coordinated with the affected parties.
- Existing fences will be cut and braced along the right-of-way, and temporary gates and fences, if necessary, will be installed to control livestock and limit public access.
- On all active agricultural lands, which include fallow or rotated cropland, hayfields, improved pastures and rangeland, Bear Paw will remove the topsoil removal and segregate the soil from subsoil.
- Bear Paw will decompact the travel lane on the right-of-way if requested by the landowner.
- On all actively cultivated lands free of shallow bedrock, the trench would be excavated to sufficient depth to allow a minimum of 4 feet of soil cover between the top of the pipe and the final land surface after backfilling.
- Restoration and revegetation practices (*i.e.*, seeding) will comply with the requirements outlined in the landowner line list.
- Bear Paw will not plant an annual cover crop on actively cultivated land unless requested by the landowner.
- Weed-free mulch will be used on steep slopes to control erosion unless the landowner requests that mulch not be applied. Mulch will be crimped into the soil.
- Earthen diversion berms will be constructed to reduce runoff on steep slopes only when the landowner approves.
- No erosion control fabric will be used in rangeland without having landowner approval.
- Fences and gates will be replaced in accordance with landowner agreements.
- Private roads will be restored to an equal pre-construction condition.
- Bear Paw will respond promptly to landowner concerns following construction to mitigate areas of subsidence and erosion problems should they occur.
- Bear Paw will require the contractor to thoroughly clean the equipment and materials (*e.g.*, timber mates, bridges, etc) at the contractor yard prior to mobilization to the right-of-way to prevent spread of nuisance weeds.

SECTION 6: UTILITY'S EASEMENT ACQUISITION, LANDOWNER NOTIFICATION AND EASEMENT COMPENSATION PLAN

6.1 LANDOWNER INFORMATION REGARDING EASEMENT ACQUISITION, AND NECESSARY EASEMENT CONDITIONS AND RESTRICTIONS

Once a preliminary route has been established, a title review is conducted of courthouse records for the purpose of identifying the current landowner. Bear Paw initiates contacts with affected landowners via telephone to be followed with personal visits and e-mail correspondence. Contact by surface mail may be used as a last resort if no other means of landowner contact is successful.

The refinement of the Route includes adjustments made per landowner request. Bear Paw, at all times, negotiates in good faith and necessary easement conditions and restrictions are presented and discussed. All fee land easements the proposed Route have been acquired at this time for the portion of the route located in the State of North Dakota.

6.2 COMPENSATION POLICY

Bear Paw practice for determining landowner compensation for easements is based on research of comparable fair market pricing and prior experience negotiating easements locally.

SECTION 7: LIST OF PREPARERS

Russ Clark, P.E.

Project Engineer

ONEOK Partners, 100 W. Fifth Street, Tulsa, OK 74103

B.S. Chemical Engineering, Montana State University - Bozeman

Mr. Clark has worked as an engineer in the petroleum and natural gas industries for 10 years. As a process engineer, he has designed and overseen the implementation of several natural gas projects in the past two years. Mr. Clark is a licensed Professional Engineer by examination in the State of Colorado.

Judith Cooper. Ph.D.

Archaeologist/ Principle Investigator

SWCA, Inc., 116 North 4th Street, Suite 200, Bismarck, ND 58501

Ph.D. and M.A. Anthropology, Southern Methodist University and B.A. Anthropology, Pennsylvania State University. Dr. Cooper has over ten years of experience in North American archaeology and has worked on field (survey, testing, and recovery) and research projects in the northern Great BPE and Rocky Mountains. Dr. Cooper is experienced in federal and state cultural resources law and regulations, including Section 106 of the National Historic Preservation Act. As the Cultural Resources Lead in the SWCA's Bismarck office, she serves as a member of multi-disciplinary project teams to assure cultural resource concerns are appropriately addressed during the regulatory process.

William McCarthy, C.W.B.

Senior Environmental Compliance Analyst

E3 Environmental, LLC, 817 Vandalia Street, St. Paul, MN 55114

M.S. Wildlife Biology, University of Minnesota – Twin Cities; and B.S. Wildlife Biology, Michigan State University. Mr. McCarthy is an environmental compliance analyst with 15 years of environmental consulting experience working with various energy assets and regulatory agencies. As a compliance analyst he has managed the environmental requirements for facility siting, pipeline routing, federal licensing, and various federal, state and local permits. Mr. McCarthy is a certified wildlife biologist and in this role conducts and coordinates field studies, agency consultations, mitigation and avoidance plans.

Katie Schmidt, EIT

Environmental Engineer and Compliance Analyst

E3 Environmental, LLC, 817 Vandalia Street, St. Paul, MN 55114

B.S. Civil Engineering with an emphasis in Environmental Engineering-Iowa State University. Ms. Schmidt has pursued a career focused on regulatory compliance. Her experience includes providing permitting and compliance support associated with maintaining assets for safe and reliable distribution and transmission of energy throughout the continent. Ms. Schmidt has developed a broad working knowledge of NPDES construction stormwater compliance by working with distribution systems located in MN, OK, TX, LA and AR. Ms Schmidt also has extensive experience working with transmission assets involving COE permitting, ESA and SHPO consultations.