

GRANT APPLICATION TRANSMITTAL

**This page indicates university endorsement of the referenced proposal
and is intended to be submitted to the sponsor organization.**

Sponsor Organization: North Dakota Industrial Commission

Project Title: *Effects of Cropping Sequence, Ripping, and Manure on Pipeline Reclamation in Western North Dakota*

Project Director: Austin Link

Department: Willison Research Extension Center

Project Budget:

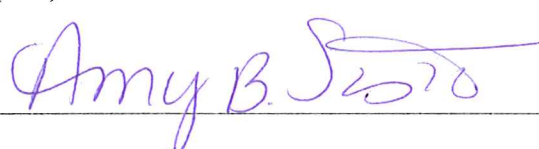
Total Direct Costs	\$ 517,968
F&A/In-direct Costs	\$ 134,672
F&A/IDC Rate	26%
Total Requested	\$ <u>652,640</u>

Authorized University Representative: Amy Scott

Title: Assistant Director for Sponsored Programs Administration

Address: North Dakota State University
NDSU Dept. 4000, PO Box 6050
Fargo ND 58108-6050

Phone: (701) 231-8045

Signature:  _____

Date: 11-1-16

**Any future notifications regarding this proposal, including award notices, should be directed to
the authorized university representative at the address listed above.**

Thank you.

Oil and Gas Research Program

North Dakota

Industrial Commission

Application

Project Title: Effects of Cropping Sequence, Ripping, and Manure on Pipeline Reclamation in Western North Dakota

Applicant: North Dakota State University – Williston Research Extension Center

Co-Principal Investigators: Austin Link, Chris Augustin, Kevin Sedivec, Thomas DeSutter, James Staricka, and Jerald Bergman

Date of Application: 10/31/16

Amount of Request: \$652,640

Total Amount of Proposed Project: \$1,305,280

Duration of Project: January 2017- Dec 2020

Point of Contact (POC): Austin Link

POC Telephone: 701-774-4315

POC E-Mail Address: austin.t.link@ndsu.edu

POC Address:

**14120 Hwy 2
Williston, ND 58801**

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ABSTRACT

Soil disturbance during the construction of pipelines, roadways, and well pads has become a serious issue in western North Dakota. Mixing of topsoil and subsoil and heavy equipment traffic often results in varying degrees of increased compaction, decreased water infiltration and holding capacity, erosion, reduced beneficial soil organisms, and subsidence. Reclamation of pipelines in a cropland setting has not been extensively researched and little is known about the best management practices for restoring soil fertility and crop performance. During the spring of the 2015, installation of a water pipeline was completed at the North Dakota State University, Williston-Research Extension Center. We took advantage of this opportunity by planting a long-term experiment with five annual crop rotations and two perennial covers in pipeline, roadway (parallel to pipeline), and undisturbed (control) areas. We would like to determine best cropping sequences under dryland no-till conditions that reclaim severely disturbed cropland. Penetrometer readings and soil fertility tests will be recorded to assess changes in physical and chemical soil properties. Crop performance data for all annual cropping sequences and perennial sequences. Data will be collected annually and results will be available after each cropping sequence has been completed (1, 2, and 4 years). Upon the completion of the 4-year sequence, all sequences will be cropped as wheat for 2 years, which will be used as one measurement of reclamation success. If soil health and crop performance has not improved after one 4-year sequence, the study will repeat the sequences a second time. In addition to cropping sequence, ripping/manure will be tested as the subplot in a split plot design. The results of this study will help improve long-term reclamation strategies for landowners dealing with reduced crop performance due to pipeline installations. The total project cost for 2017-2018 is \$641,772 (Request & NDSU Match) and for 2019-2020 is \$663,506 (Request & NDSU Match). The total four-year project cost is \$1,305,280 (Request & NDSU Match) which includes direct and indirect costs.

Participants

North Dakota State University

Williston Research Extension Center (Austin Link, James Staricka, and Jerald Bergman)

Extension Service/North Central Research Extension Center (Chris Augustin)

School of Natural Resources Sciences, College of Agriculture, Food Systems and & Natural Resources (Kevin Sedivec and Thomas DeSutter)

PROJECT DESCRIPTION

Objectives

This study will address several agronomic and ecological issues that result from pipeline installation. Mixing of topsoil with subsoil changes texture and other physical and chemical characteristics of the reapplied soil surface. Compaction (bulk density) of topsoil and the underlying matrix restricts root growth and plant development. In addition, soil organic matter and beneficial soil organisms are reduced in disturbed soils. We propose conducting a field-based study at the Williston Research Extension Center on a section of recently installed pipeline. By sampling soil characteristics and crop performance we will evaluate the effectiveness of multiple annual cropping sequences and perennial vegetation covers to improve soil health and crop performance. Because it is not known if aggressive, deep rooted crops can improve severely compacted soils in a reclamation setting, we will also evaluate ripping (deep tillage) and manure incorporation. All cropping sequences, ripping, and manure will be applied across different disturbance areas which commonly exist on pipeline Right-of-Ways. At the WREC we have identified these areas as the pipeline trench, access road (parallel to the trench), and undisturbed area (reference area). Each area exhibits unique soil characteristics that may require different long-term reclamation practices to be sustainably returned to agronomic productivity. Objectives of this study are to: 1) define the reclamation success of a long-term control (no action/continued mono-cropping of wheat, 2) evaluate the effects of five annual and two perennial cropping sequences on soil health and crop performance in three disturbance areas (pipeline, road, undisturbed), and 3) to determine the effects of ripping with and without manure application across severely compacted areas. This study will provide information to develop and deliver 1) a best management practice (BMP) document for reclamation of lands impacted pipeline installation, 2) peer-reviewed publications to help policy makers develop sound guidelines for proper pipeline reclamation, and 3) a final report from all experiments conducted from this study.

Methodology

During the spring of 2015 installation of 1.5 miles of a 36" pipeline was completed at the WREC. Immediately following top soil replacement, minimum-tillage annual and perennial cropping systems were initiated. Cropping sequences will be represented as 45' x 200' main plots (Figure 1). We further propose to initiate ripping, ripping w/manure, and continuous minimum-tillage as 15' x 200' sub plots (Figure 1). Manure will be sourced locally and applied prior to ripping which will be used to incorporate organic matter throughout the rooting zone. Annual cropping sequences will contain crops commonly grown in western North Dakota and a deep-rooted cover crop mix. Alfalfa and a native perennial grass mix will be evaluated for forage performance and effects on soil characteristics.

Undisturbed - Ripped	Road - Ripped	Pipeline - Ripped
Undisturbed - Ripped/Manure	Road - Ripped/Manure	Pipeline - Ripped/Manure
Undisturbed - Min. Tillage	Road - Min. Tillage	Pipeline- Min. Tillage

Figure 1. Cropping sequence treatment (main plot) with ripped, ripped/manure, and minimum tillage treatments (sub plots) across undisturbed, road, and pipeline study areas.

Four replicates of main and sub plots will be established. Compaction will be sampled across all disturbance areas and treatment using a dynamic cone penetrometer. Lack of water infiltration is a characteristic exhibited by compacted soils. One access tube for a neutron soil moisture gauge will be installed in each plot to collect soil moisture data at multiple depths. Neutron tube readings will be taken every month during the growing season to track causes of plant stress. Soil sampling for fertility, biological, and chemical analysis will be conducted at depths of 0-6 and 6-24 inches. Crop performance data, including physiological traits and yield analysis, will be collected throughout the growing season of respective crops. Biomass sampling and plant analysis will be performed on alfalfa and native perennial grass sequences.

Anticipated Results

This proposal is designed to address barriers to successful pipeline reclamation. More specifically, this proposal aims to provide long-term management strategies for landowners to restore productivity to cropland. If economical reclamation options are available to landowners, more effective reclamation plans can be composed and more efficient pipeline installations will be possible.

Facilities

North Dakota State University – Williston Research Extension Center and NDSU – Soils Testing Lab

Resources

Soil neutron gauge access tubes, fertilizer, herbicide, fuel, manure, personal protective equipment, flags/stakes, signage, and postage/printing, dynamic cone penetrometer, soil sampling equipment, mower, field tablet, and camera.

Techniques to Be Used, Their Availability and Capability

The techniques implemented in this study have been commonly used in agronomic field-based experiments for several years. They are also widely expected by the scientific community, which will allow for publishable results. Crop yield samples will be collected using a plot combine. Biomass samples will be collected using a quadrat and clippers. Soil cores will be sampled using a truck-mounted Giddings Soil Probe. A dynamic cone penetrometer will be used to sample compaction. The data we collect will be statistically analyzed and formatted for publication purposes as well as distribution for use by landowners.

Environmental and Economic Impacts while Project is Underway

No negative environmental or economic impacts are anticipated while this project is underway. This experiment has the potential to improve soil stabilization and water quality while it is being conducted.

Technological and Economic Impacts, Needs, and Standard of Success

Dependent upon the effects of cropping sequence, ripping, and ripping/manure treatments, landowners may have reason to change how pipeline Right-Of-Way's (ROW) are cropped. Landowners may also have reason to implement ripping/manure if we find that these treatments are beneficial and economical. In addition to providing landowners with better management options, the oil and gas industry will be able to utilize best management practices we develop for use during initial the backfilling, top soiling, and vegetating of pipeline ROW's. Dependent on the results of this study, these impacts may increase the revenue generated by what is now unproductive cropland, reduce inputs and risks for farmers, and provide benefits to agro-ecosystems through improving soil health and increasing diversification.

A primary concern of landowners and the oil and gas industry is having more consistent, more successful pipeline ROW reclamation. An additional concern is addressing problems with pipeline reclamation that have already been performed. Successful reclamation is not only dependent on sound installation practices, but also on a well-developed long-term management strategy. This proposal will provide answers to these concerns by achieving its objectives:

1. Define the reclamation success of a long-term control (no action/continued mono-cropping of wheat).
2. Evaluate the effects of five annual and two perennial cropping sequences on soil health and crop performance in three disturbance areas (pipeline, road, undisturbed).
3. Determine the effects of ripping with and without manure application across severely compacted areas.

This study will provide the following measurable deliverables to be published and distributed:

1. Best management practice (BMP) document for reclamation of lands impacted by pipeline installation.
2. Peer-reviewed publications to help policy makers develop sound guidelines for proper pipeline reclamation.
3. Final report from all experiments conducted from this study.

BACKGROUND/QUALIFICIATIONS

Co-PI:	Education:
Lead PI: Austin Link, M.S. Agronomy Research Specialist II North Dakota State University Williston Res. Ext. Center	M.S., Range Sciences, NDSU-2014 B.S., Natural Resources, University of Minnesota-2012
Kevin K. Sedivec, Ph.D. Professor Program Leader, Range Science North Dakota State University	Ph.D., Animal and Range Sciences, NDSU -1994 M.S., Animal and Range Sciences, NDSU -1989 B.S., Zoology, NDSU -1987
Thomas DeSutter, Ph.D. Associate Professor Soil Science Program Leader North Dakota State University	Ph.D., Agronomy, Kansas State University-2004 M.S., Agronomy, South Dakota State University-1998 B.S., Geography, South Dakota State University-1994
James Staricka, Ph.D. Associate Experiment Station Soil Scientist and Adjunct Professor of Soil Science. North Dakota State University Williston Res. Ext. Center	Ph.D., Soil Science, University of Minnesota-1990 M.S., Soil Science, University of Minnesota-1985 B.S., Biology, St. John's University (MN)-1982
Jerald Bergman, Ph.D. Director North Dakota State University Williston Res. Ext. Center	Education: Ph.D., Agronomy, NDSU-1972 M.S., Crop Science, Oregon State University-1968 B.S., Agronomy/Vocational Agriculture, NDSU-1966
Chris Augustin, M.S. Area Extension Specialist/Soil Health North Dakota State University Extension Service	M.S., Natural Resources Management, NDSU-2009 B.S., Natural Resources Management, NDSU-2005

Further information can be provided upon request.

MANAGEMENT

The North Dakota State University – Williston Research Extension Center will oversee field activities and ensure that appropriate reports are submitted by deadlines. Staff at the WREC will conduct field sampling, analysis, and composition of deliverables with assistance and technical expertise from Kevin Sedivec and Thomas DeSutter.

TIMETABLE

2016

November – December: Perform ripping and manure application

December 31: Update Report

2017

March - May: Apply fertilizer, herbicide, and seed for respective cropping sequences

May 1: Update Report

June 1-August 30: Collect soil parameter data, plant physiological data, biomass data, and yield data.

September 1: Update Report

September 1 – October 31: Analyze physiological, biomass, and yield data.

October 1 – November 1: Analyze soil parameter data.

December 31: Update Report

2018

March - May: Apply fertilizer, herbicide, and seed for respective cropping sequences

May 1: Update Report

June 1-August 30: Collect soil parameter data, plant physiological data, biomass data, and yield data.

September 1: Update Report

September 1 – October 31: Analyze physiological, biomass, and yield data.

October 1 – November 1: Analyze soil parameter data.

December 31: Update Report

2019

January 1: Update Report

January – April: Develop final reports and publication

June 31: Final Report

Co-PI: Austin Link, Chris Augustin, James Staricka, Jeral Bergman, Thomas Desutter, Kevin Sedivec

Requested Funds: ND Oil & Gas Research Program

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		Cumulative Requested Funds
	Requested Funds	Match Funds	Requested Funds	Match Funds	Requested Funds	Match Funds	Requested Funds	Match Funds	
Salaries & Wages									
Full time staff, research specialist	\$27,500		\$28,325		\$29,175		\$30,050		\$115,050
Fringe Benefits	\$13,200		\$13,596		\$14,004		\$14,424		\$55,224
Full time staff, technician	\$17,500		\$18,025		\$18,566		\$19,123		\$73,214
Fringe Benefits	\$10,150		\$10,455		\$10,768		\$11,091		\$42,464
Part time staff	\$23,760		\$23,760		\$23,760		\$23,760		\$95,040
Fringe Benefits	\$2,376		\$2,376		\$2,376		\$2,376		\$9,504
Total Salaries & Fringe Benefits	\$94,486		\$96,537		\$98,649		\$100,824		\$390,496
Operating Expense									
Travel	\$2,128		\$2,128		\$2,128		\$2,128		\$8,512
Material and Supplies	\$4,800		\$1,600		\$1,600		\$1,600		\$9,600
Freight	\$500		\$500		\$500		\$500		\$2,000
Printing	\$400		\$400		\$400		\$400		\$1,600
Repairs	\$2,000		\$2,000		\$2,000		\$2,000		\$8,000
Operating Fees & Services	\$500		\$500		\$500		\$500		\$2,000
Professional Fees & Services	\$23,940		\$23,940		\$23,940		\$23,940		\$95,760
Total Operating Expense	\$34,268		\$31,068		\$31,068		\$31,068		\$127,472
Total Direct Costs	\$128,754		\$127,605		\$129,717		\$131,892		\$517,968
F&A (using NDSU's Negotiated Rate Schedule)	26.00%	IDCs	\$33,476	\$33,177	\$33,726	\$34,292	\$34,292	\$34,292	\$134,672
Total Requested	\$162,230		\$160,782		\$163,443		\$166,184		\$652,640
North Dakota State University Match									
PI, Co-PI, and Support Staff Salaries (NDSU Match)		Match Funds	\$90,566	\$93,285	\$96,083	\$96,633	\$96,633	\$96,633	\$376,567
Fringe Benefits (NDSU Match)		Match Funds	\$34,055	\$35,078	\$36,128	\$36,140	\$36,140	\$36,140	\$141,401
Total Salaries & Fringe Benefits (NDSU Match)			\$124,621	\$128,363	\$132,211	\$132,773	\$132,773	\$132,773	\$517,968
Total Direct NDSU Match			\$124,621	\$128,363	\$132,211	\$132,773	\$132,773	\$132,773	\$517,968
F&A	26.00%	IDCs	\$32,401	\$33,374	\$34,375	\$34,521	\$34,521	\$34,521	\$134,672
Total NDSU Match (26% IDC's)			\$157,022	\$161,737	\$166,586	\$167,294	\$167,294	\$167,294	\$652,640
Total Project Cost:									\$1,305,280

Budget Justification

Salaries & Wages

Full time staff, research specialist (includes ann. Adj.): \$115,050

Fringe benefits (48%): \$55,224

The proposal includes funding for one research specialist to allocate 50% of their effort towards the successful completion of this project. The research specialist will work in cooperation with other grant collaborators.

Full time staff, technician (includes ann. Adj.): \$73,214

Fringe benefits (58%): \$42,464

The proposal includes funding for one technician to allocate 50% of their effort towards the successful completion of this project. The technician will work in cooperation with the research specialist other grant collaborators. The technician will assist with field based sampling, site management and maintenance, and organizing data.

Part time staff: \$95,040

Fringe benefits (10%): \$9,504

Three part time staff are proposed to be funded. They will allocate 100%, 75%, and 50% of their respective efforts toward this project. These staff will allow for a rigorous sampling schedule that is required for this project. Seasonal salary is figured at \$16.50 per hour for 16 weeks. 40 hrs/wk*16 wks=640 hours 640 hours*16.50/hr= \$10,560

Operating Expenses

Travel: \$8,512

Trip	Purpose	Type of Expense	Unit of Measure (days, nights, miles)	Number of Units	Cost per Unit	Number of Travelers Claiming Expense	Funds requested
Minot to Williston	Soil Sampling/Presenting	State Fleet	Miles	12 trips @ 264 miles	\$0.54	1	\$1711
Professional Meeting	Presenting Research	Airfare	Roundtrip Ticket	4	\$500	1	\$2000
Professional Meeting	Presenting Research	Registration	Meetings	4	\$200	1	\$800
Professional Meeting	Presenting Research	Hotel	Nights	20	\$150	1	\$3000
Professional Meeting	Presenting Research	Meals	Days	20	\$50	1	\$1000
Travel Subtotal							\$8,511

Funds for travel have been budgeted to allow for the results of this project to be disseminated at one professional meeting each year. The travel budget also includes funds for a collaborator from the North Central Research Extension Center to travel the Williston Research Extension Center to assist with sampling.

Materials and Supplies: \$9,600

Item	Cost/year	Grant Yr 1	Grant Yr 2	Grant Yr 3	Grant Yr 4	Total
Flags/Stakes	\$500	\$500	\$500	\$500	\$500	\$2,000
PPE	\$200	\$200	\$200	\$200	\$200	\$800
Herbicide	\$500	\$500	\$500	\$500	\$500	\$2,000
Fertilizer	\$400	\$400	\$400	\$400	\$400	\$1,600
Neutron Tubes	\$700	\$700	\$0	\$0	\$0	\$700
Signs	\$2,500	\$2,500	\$0	\$0	\$0	\$2,500
	Subtotal	\$4,800	\$1,600	\$1,600	\$1,600	\$9,600

This project will have a total of 252 plots requiring extensive flagging and staking on each year.

Personal Protective Equipment is a required to perform many of tasks associated with this study including herbicide application and operating machinery.

Herbicide and fertilizer costs include standard agronomic practices to best maintain plots and the integrity of data.

Soil neutron tubes are made of a 5' piece of EMT 1.5" steel conduit for which we budgeted to install in each plot in order to measure soil moisture.

Throughout the duration of the study it is important have displays for field days/tours that will communicate information being generated by this project. For this reason, we budgeted funds to purchase a semi-permanent and several easily removable signs to use during demonstrations.

Freight: \$2,000

We have budgeted funds for freight to pay for shipping soil sample to a lab for analysis.

Printing: \$1,600

Funds budgeted for printing will be used to pay for printing handouts and posters for professional meetings and field days/tours.

Repairs: \$8,000

Funds budgeted for repairs will provide annual maintenance to all equipment being used to perform this study.

Operating Fees & Services: \$2,000

Funds have been budgeted for advertising expenses associated with tours and any other events.

Professional Fees & Services: \$95,760

This project will have a very large soil sampling and analysis component. 252 plots will be sampled and a thorough suite of tests will be performed. These tests cost \$95/sample and will be performed each of four years on every plot.

Total Direct Costs: \$517,968

Indirect Costs (26.0%): \$134,672

Total Requested: \$652,640

NDSU Match

Salaries

Full time staff, Lead PI, Agronomy Research Specialist II (includes ann. Adj.): \$89,020

Fringe benefits 44%: \$39,168

Effort: 40% (years 1, 2, and 3) 35.987% (year 4)

The lead PI will coordinate project management and the sampling schedule. They will collaborate with other Co-PI's for best protocols and also coordinate data analysis and publishing of results.

Full time staff, Co-PI, Program Leader, Range Science (includes ann. Adj.): \$ 25,399

Fringe benefits 30%: \$7,619

Effort: 5%

This Co-PI will serve as a source of technical expertise (forages, soils, and reclamation practices) and assist with publishing results.

Full time staff, Co-PI, Program Leader, Soil Science (includes ann. Adj.): \$ 43,487

Fringe benefits 30%: \$ 13,046

Effort: 10%

This Co-PI will serve as a source of technical expertise in soil sampling, testing, and data analysis. They will also assist with publishing results.

Full time staff, Co-PI, Director of Williston REC (includes ann. Adj.): \$ 51,558

Fringe benefits 30%: \$ 15,467

Effort: 10%

This Co-PI will serve as a source of technical expertise in statistical design and management. They will also assist with publishing results and project coordination.

Full time staff, Co-PI Area Extension Specialist/Soil Health (includes ann. Adj.): \$29,008

Fringe benefits 40%: \$11,603

Effort: 10%

This Co-PI will serve as a source of technical expertise in soil sampling, testing, and data analysis. They will also assist with publishing results.

Full time staff, Co-PI Associate Experiment Station Soil Scientist (includes ann. Adj.): \$38,799

Fringe benefits 38%: \$ 14,744

Effort: 10%

This Co-PI will perform soil sampling and prepare samples for testing. They will also assist with data analysis publishing results.

Support Staff Salaries

Full time staff, Farm Manager Williston REC (includes ann. Adj.): \$56,857

Fringe benefits 35%: \$ 19,901

Effort: 15%

The Farm Manager will work in cooperation with the research specialist other grant collaborators to assist in carrying out this project. Assistance with planting, harvesting, spraying, and repairs will be provided by this position.

Full time staff, Research Specialist Williston REC (includes ann. Adj.): \$20,467

Fringe benefits 50%: \$10,234

Effort: 10%

The Research Specialist will work in cooperation with the research specialist other grant collaborators to assist in carrying out this project. Assistance with planting, harvesting, spraying, and repairs will be provided by this position.

Full time staff, Research Technician (includes ann. Adj.): \$11,778

Fringe benefits 44%: \$5,182

Effort: 5%

The Technician will work in cooperation with the Co-PI (Soil Science Program Leader) and other grant collaborators to assist in carrying out this project. Tasks will include sampling, processing, and analysis.

Full time staff, Research Technician (includes ann. Adj.): \$ 12,526

Fringe benefits 44%: \$ 5,511

Effort: 5%

The Technician will work in cooperation with the Co-PI (Range Science Program Leader) and other grant collaborators to assist in carrying out this project. Tasks will include sampling, processing, and analysis.

Total Direct Costs: \$517,968

Indirect Costs (26.0%): \$134,672

Total Match: \$652,640

CONFIDENTIAL INFORMATION

*Any information in the application that is entitled to confidentiality and which the applicant wants to be kept confidential should, if possible, be placed in an appendix to allow for administrative ease in protecting the information from public disclosure while allowing public access to the rest of the application. Such information must be clearly labeled as confidential and the applicant must explain why the information is entitled to confidentiality as described in North Dakota Century Code 54-17.6. Oil and gas well data that is a result of financial support of the Council shall be governed by North Dakota Century Code 38-08-04(6). **If there is no confidential information, please note that below.***

There is no confidential information in this application.

PATENTS/RIGHTS TO TECHNICAL DATA

*Any patents or rights that the applicant wishes to reserve must be identified in the application. **If this does not apply to your proposal, please note that below.***

This does not apply.

STATUS OF ONGOING PROJECTS (IF ANY)

If the applicant is a recipient of previous funding from the Commission, a statement must be provided regarding the current status of the project.

This does not apply.



October 28, 2016

North Dakota Oil and Gas Research Council
State Capitol, 14th Floor
600 E. Boulevard Ave. Dept 405
Bismarck ND 58505-0840

Dear members of committee:

Hess takes great care to follow best practices in reclamation and rehabilitation of areas where we operate. We continue to follow all the recommended restorations and state guidelines when performing reclamations, yet we are very interested in the study proposed by the NDSU Williston Research Extension Center. This study could provide potentially significant learnings and future economic benefits which the industry and others could apply to reclamation of oil sites and pipelines.

We are in the process of evaluating our current and future budgets and unable to commit to financial support until we have a clearer view of our budgets. We do look forward to working with the Extension Center and their qualified staff to determine the best management practices for restoring soil fertility and crop performance. Their long term study will examine options which will benefit the environment, land owners and producers.

Sincerely,

A handwritten signature in black ink, appearing to read "SMcNally", written over a diagonal line.

Steve McNally
General Manager

APPLICATION CHECKLIST

Use this checklist as a tool to ensure that you have all of the components of the application package. Please note, this checklist is for your use only and does not need to be included in the package.

<input type="checkbox"/>	Application
<input type="checkbox"/>	Transmittal Letter
<input type="checkbox"/>	\$100 Application Contribution
<input type="checkbox"/>	Tax Liability Statement
<input type="checkbox"/>	Letters of Support (If Applicable)
<input type="checkbox"/>	Other Appendices (If Applicable)

When the package is completed, send an electronic version to Ms. Karlene Fine at kfine@nd.gov, and 2 hard copies by mail to:

Karlene Fine, Executive Director
North Dakota Industrial Commission
State Capitol – 14th Floor
600 East Boulevard Ave Dept 405
Bismarck, ND 58505-0840

For more information on the application process please visit:
<http://www.nd.gov/ndic/ogrp/info/ogrcsubgrant-app.pdf>

Questions can be addressed to Ms. Fine at 701-328-3722 or Brent Brannan at 701-425-1237.

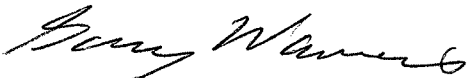
NDSU NORTH DAKOTA
STATE UNIVERSITY

February 29, 2016

To Whom It May Concern,

North Dakota State University regularly pays taxes to the State of North Dakota for state income tax withholding, state sales taxes collected, and unrelated business income taxes. To the best of my knowledge, North Dakota State University is current and paid up on all tax liabilities with the State; with no past due balances.

Sincerely,



Gary Wawers

Controller