



# Public Service Commission

## State of North Dakota

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### COMMISSIONERS

Brian P. Kalk  
Randy Christmann  
Julie Fedorchak

Executive Secretary  
Darrell Nitschke

600 East Boulevard, Dept. 408  
Bismarck, North Dakota 58505-0480  
Web: [www.psc.nd.gov](http://www.psc.nd.gov)  
E-mail: [ndpsc@nd.gov](mailto:ndpsc@nd.gov)  
Phone: 701-328-2400  
ND Toll Free: 1-877-245-6685  
Fax: 701-328-2410  
TDD: 800-366-6888 or 711

January 21, 2015

Mr. Jeff Fleischman, Chief  
Denver Field Division  
Office of Surface Mining  
P.O. Box 11018  
Casper WY 82602-5004

**RE: Request for Authorization to Proceed for 2015 Columbus and Wilton Projects and Request for Concurrence for 2015 Scranton/Bowman and Sinkhole Filling Projects in North Dakota.**

Dear Mr. Fleischman:

Please find enclosed documentation to support our Request for Authorization to Proceed with the 2015 Columbus Phase 15 and Wilton Projects. Environmental assessments for these proposed projects, an eligibility determination letter and other data are attached.

We are also planning an additional phase (Phase 3) for the Scranton/Bowman Project and another sinkhole filling project. The scope of work and project locations for the Scranton/Bowman project will be generally unchanged from those approved in 2013 and 2014. The scope of work and locations for the 2015 Sinkhole Filling Project will depend on where dangerous abandoned underground mine subsidence occurs; but we anticipate subsidence will occur mainly in locations where previous reclamation has been approved.

We believe no formal requests for authorization to proceed are needed to continue work on the 2015 Scranton Bowman Phase 3 and 2015 Sinkhole Filling Projects but request your concurrence that we are already authorized to proceed with them. We will continue to consult with your office on any emergency projects or other projects that require rapid response.

We have requested concurrence for our proposed 2015 projects from the State Historical Society of North Dakota, U.S. Fish and Wildlife Service, North Dakota Parks

Mr. Jeffrey Fleischman  
January 21, 2015  
Page 2 of 3

and Recreation Department, and the North Dakota Department of Health. Copies of our letters and their responses are attached. Since no off-site pit dewatering is planned and all runoff from areas to be affected at the Columbus project site will flow into abandoned mine pits, consultation with the Army Corps of Engineers is not needed.

Public meetings are scheduled January 15, 2015, at Wilton and January 27, 2015, at Bowman to discuss those projects. All affected property owners or controllers for our proposed 2015 AML projects have been contacted and consents for right-of-entry will be executed before any work begins.

AMLIS Problem Area Descriptions for the sites are also attached. If additional information is needed or you have any questions, feel free to call Bill Dodd at 701-328-4101 or me at 701-328-2251.

Sincerely,

A handwritten signature in black ink, appearing to read "James R. Deutsch", written in a cursive style.

James R. Deutsch  
Director  
Reclamation and AML Divisions

Enclosures

## List of Attachments

1. Brief Narratives About the Proposed 2015 Projects
2. Project Location Maps for 2015 Columbus, Scranton/Bowman and Wilton AML Projects.
3. Standardized Environmental Assessment for 2015 Columbus and Wilton AML Projects.
4. Requests for Concurrence for proposed 2015 AML Projects and responses received to date
  - ND State Historical Society (with response)
  - ND Department of Health (with response)
  - ND Parks & Recreation Department (with response)
  - U.S. Fish and Wildlife Service (no response received to date)
5. Eligibility Determination for 2015 Columbus and Wilton Projects.
6. AMLIS PAD Summaries for Proposed 2015 Project Sites.

<b>PAD No.</b>	<b>Location</b>	<b>Project</b>
ND031	Columbus	Columbus Phase 15
ND001	Wilton	Wilton
ND003	South Scranton	Scranton/Bowman Phase 3
ND033	Bowman	Scranton/Bowman Phase 3
ND140	Reeder	Scranton/Bowman Phase 3

2015 North Dakota AML Project Narratives  
Excerpt from the draft North Dakota AML grant application

The following projects are proposed for reclamation during the 2015 construction season:

**Columbus Phase 15:** This 65 acre project will eliminate about 5,000 feet of hazardous highwalls at abandoned surface mine sites located south of Columbus and southwest of Larson, ND. These AML sites are characterized by steep highwalls that are approximately 25 feet high. The proposed reclamation work involves backfilling the highwalls with earthen material from adjacent spoil piles. About 250,000 cubic yards of spoil material will need to be moved in the reclamation process. The estimated project cost is \$500,000.

**Scranton/Bowman Phase 3:** This project involves drilling and pumping pressurized grout into collapsed underground mine workings. The sites are under public roads near Scranton and Bowman and at an occupied farmstead near Reeder, all in southwestern North Dakota. This project will include rotary drilling, casing drill holes where voids are found, pumping of grout, and grout testing. It is estimated that 3,000 cubic yards of grout will be pumped into mine voids and about 10,000 feet of drilling will be needed in these areas. The estimated project cost is \$850,000.

**Wilton Phase 1:** This project also involves drilling and pumping pressurized grout into collapsed underground mine workings. The sites are under public roads southeast of Wilton, North Dakota. This project will include rotary drilling, casing drill holes where voids are found, pumping of grout, and grout testing. It is estimated that 5,000 cubic yards of grout will be pumped into mine voids and about 15,000 feet of drilling will be needed in these areas. The estimated project cost is \$950,000.

**Sinkhole Filling and Construction Maintenance:** Some of the available construction funds, about \$125,000, will be used for a maintenance project to backfill hazardous sinkholes that have been caused by underground mines. These funds may also be used to repair erosion and conduct other maintenance on reclaimed surface mine sites. If necessary, some of these funds will be used for emergency projects.

COLUMBUS, ND

102nd St NW

40

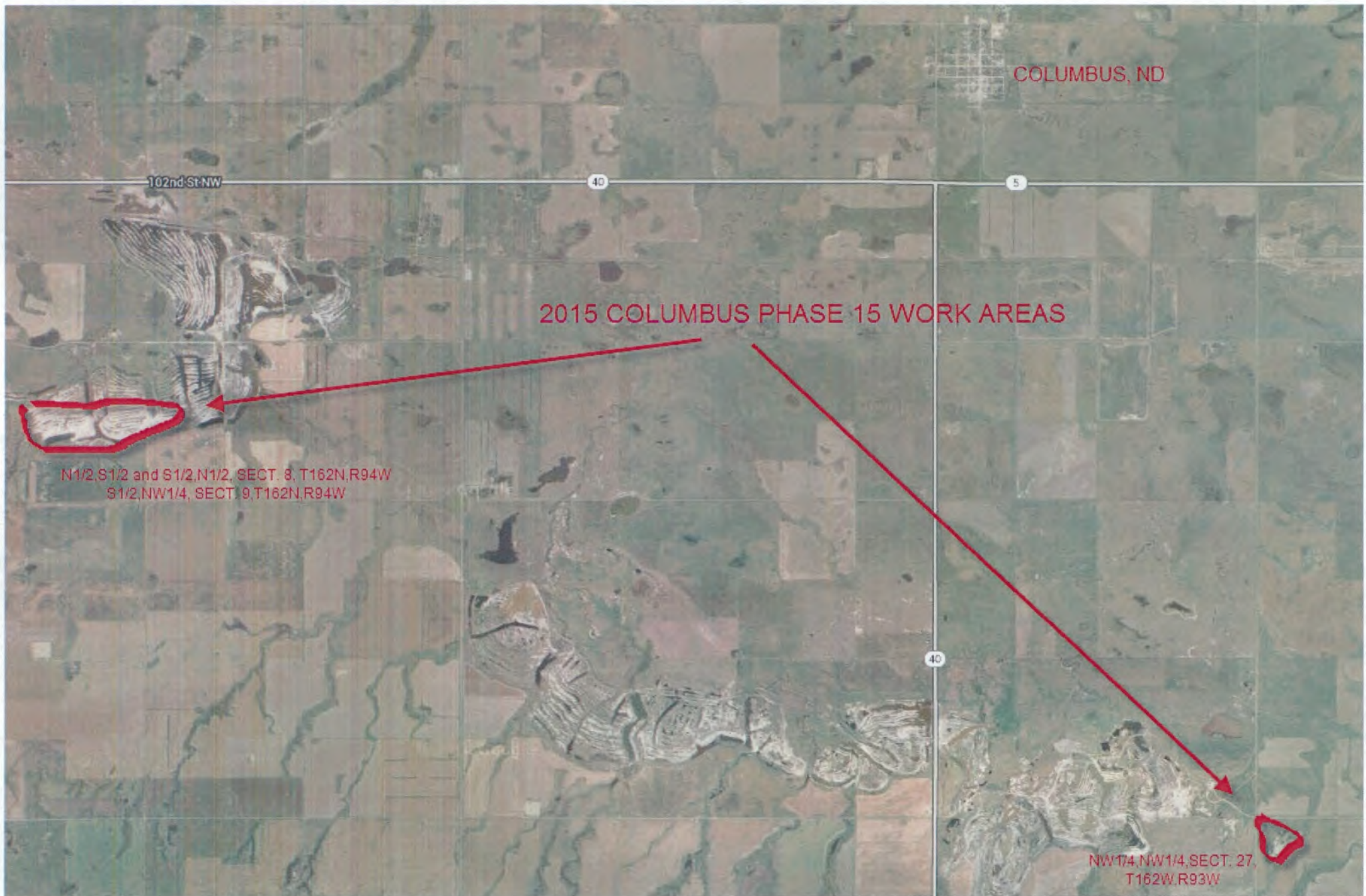
5

2015 COLUMBUS PHASE 15 WORK AREAS

N1/2,S1/2 and S1/2,N1/2, SECT. 8, T162N,R94W  
S1/2,NW1/4, SECT. 9, T162N,R94W

40

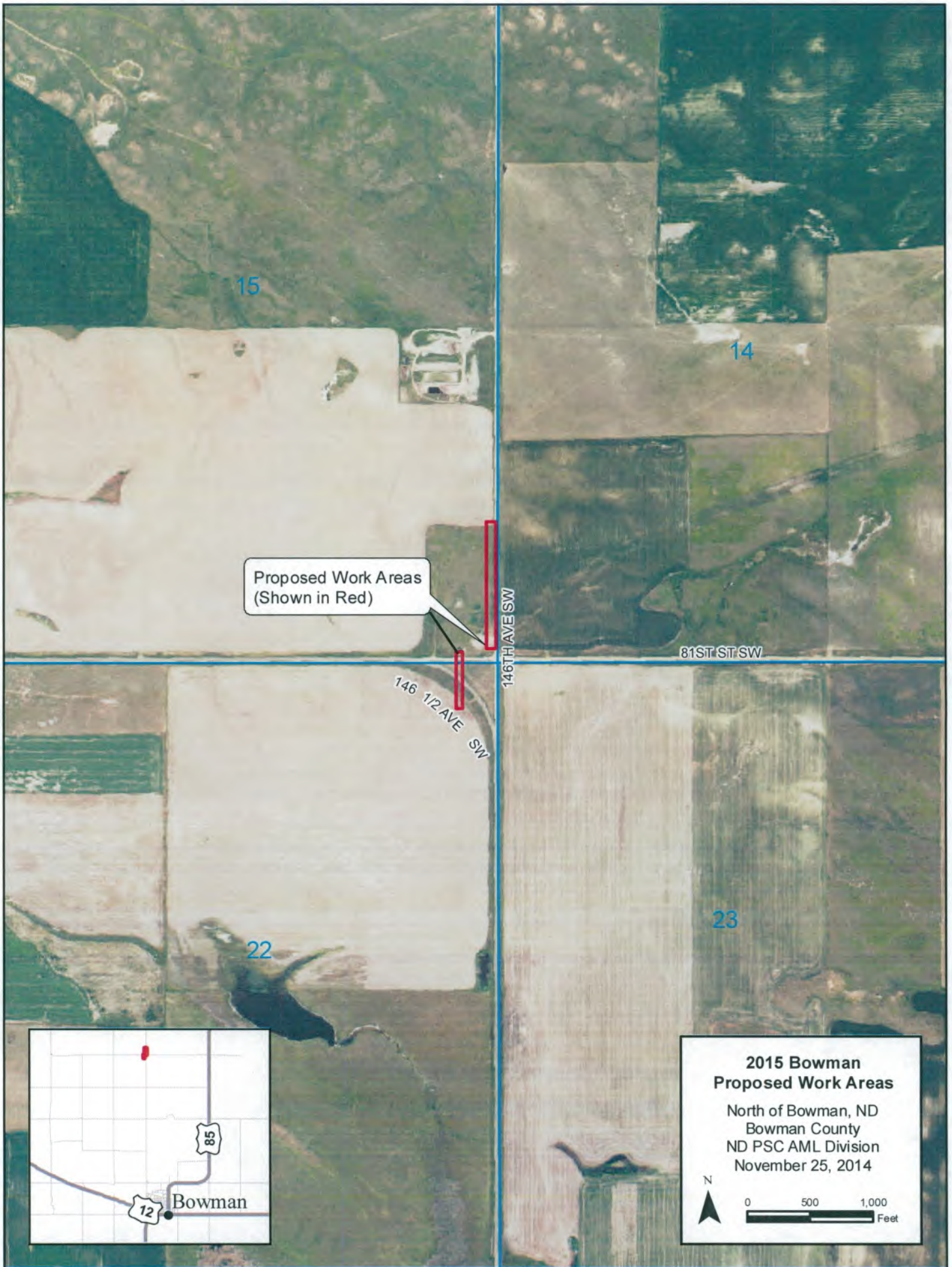
NW1/4,NW1/4,SECT. 27,  
T162W,R93W















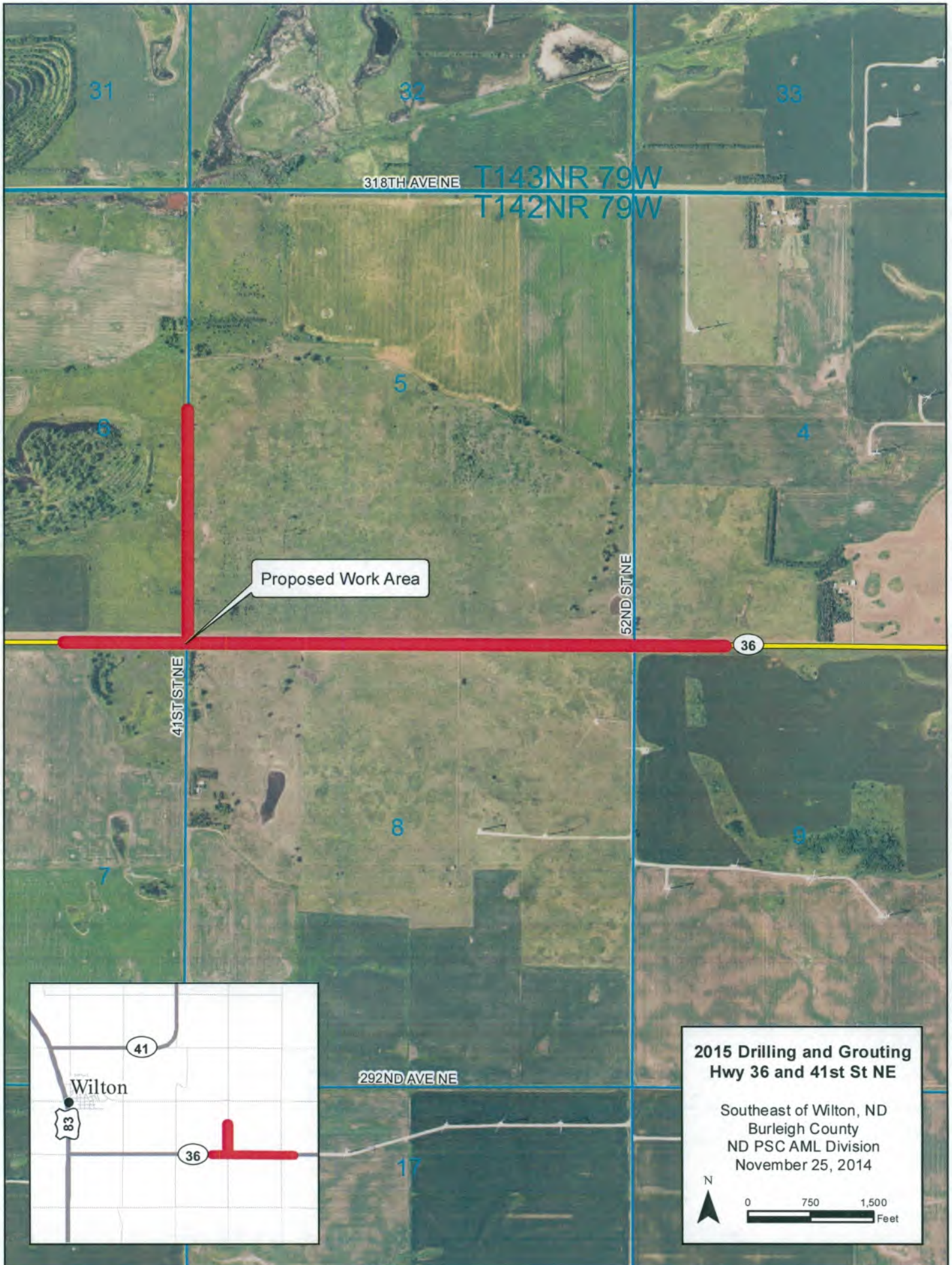
**2015 Reeder  
Proposed Work Area**

South of Reeder, ND  
Adams County  
ND PSC AML Division  
November 25, 2014



0 500 1,000  
Feet









## Public Service Commission State of North Dakota

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Fax: 701-328-2410  
TDD: 800-366-6888 or 711

November 25, 2014

Kathy Duttonhefner  
ND Parks & Recreation Department  
1835 Bismarck Expressway  
Bismarck, ND 58504

Dear Ms. Duttonhefner:

The Public Service Commission is planning reclamation activities in 2015 at the Columbus, Scranton/Bowman and Wilton Abandoned Mine Lands (AML) Sites. We also expect to conduct sinkhole filling projects in western North Dakota. These projects will be conducted by contractors selected through competitive bidding.

The 2015 Columbus Phase 15 Project is a continuation of a project series. Previous phases were conducted between 1988 and 2012. It is located in the NW1/4 of the NW1/4 of Section 27, T162W, R93W and the N1/2 of the S1/2 of Section 8, the S1/2 of the N1/2 of Section 8, and the S1/2 of the NW1/4 of Section 9, T162W, R94W in Burke County, North Dakota (see attached map). These abandoned surface coal mines contain hazardous mine pits with steep highwalls. The plan of action is to backfill and backslope the hazardous highwalls. Total surface area to be affected at this project location will be approximately 65 acres. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. No pit dewatering is planned and all runoff from affected areas will flow into the mine pits.

The 2015 Scranton/Bowman Phase 3 Project is a continuation of previous reclamation work conducted in 2013 and 2014 at locations near Scranton, Bowman and Reeder that have already received concurrence from your office (see attached maps). Residential areas and public roads at these project sites are underlain by abandoned underground mines.

The 2015 Wilton Project is also a continuation of previous reclamation work conducted between 1989 and 1994. Exploratory drilling conducted in 2014 confirmed that public roads at this project site are underlain by underground mines. Work is expected along rights of way of ND Highway 36 and 41<sup>st</sup> Street (see attached map).

The plan of action for the Scranton/Bowman and Wilton projects is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into



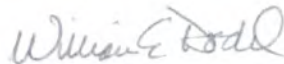
abandoned underground mined workings to help stabilize the surface from future mine collapse. The combined total area affected for 2014 drilling and grouting projects is expected to be ten acres or less at all sites combined and surface disturbance will be very minimal.

The AML Division also expects to conduct sinkhole-filling projects to fill dangerous sinkholes caused by sudden collapse of underground mined workings. Sinkhole-filling projects have been conducted annually in North Dakota for many years. These sinkholes will be filled with earthen materials taken from as near as possible to the sinkholes and surface disturbance is usually less than 5 acres per year. We do not know where these sinkholes will occur or which ones need to be filled because they are usually reported by landowners and the public as they occur. These sinkholes are nearly always on areas where previous AML reclamation projects have been conducted. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. Approximately 180 dangerous sinkholes were filled in western North Dakota at sites near Bowman, Dickinson, Garrison, Haynes, New Salem, Richardton, Scranton, and Wilton in 2014.

As part of the project approval process, our office requests concurrence that the proposed reclamation work will not adversely affect any threatened, endangered or rare plant species. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by December 23, 2014.

Attached are maps showing general locations of the proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at [wdodd@nd.gov](mailto:wdodd@nd.gov) or 701.328.4101.

Sincerely,



William E. Dodd,  
Assistant Director  
Abandoned Mine Lands Division

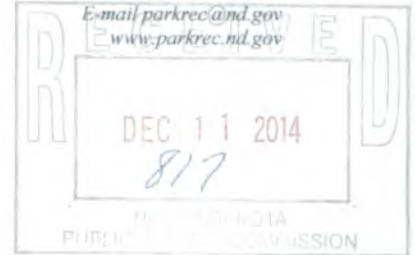
Enclosure



Jack Dalrymple, Governor  
Mark A. Zimmerman, Director

1600 East Century Avenue, Suite 3  
Bismarck, ND 58503-0649  
Phone 701-328-5357  
Fax 701-328-5363

E-mail [parkrec@nd.gov](mailto:parkrec@nd.gov)  
[www.parkrec.nd.gov](http://www.parkrec.nd.gov)



December 10, 2014

Mr. William Dodd  
Public Service Commission  
600 East Blvd.  
Dept 408  
Bismarck, ND 58558

Re: Columbus, Scranton/Bowman and Wilton Abandoned Mine Land Sites

Dear Mr. Dodd,

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced proposal for the reclamation activities at Columbus, Scranton/Bowman and Wilton Abandoned Mine Land Sites

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, there is one significant ecological community documented in our database within or adjacent to project area. Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

The Department recommends that the project be accomplished with minimal impacts and that all efforts be made to ensure that critical habitats not be disturbed in the project area to help secure rare species conservation in North Dakota. Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

We appreciate your commitment to rare plant, animal and ecological community conservation, management and inter-agency cooperation to date. For additional information please contact me at (701-328-5370 or [kgdutton@nd.gov](mailto:kgdutton@nd.gov)). Thank you for the opportunity to comment on this proposed project.

Sincerely,

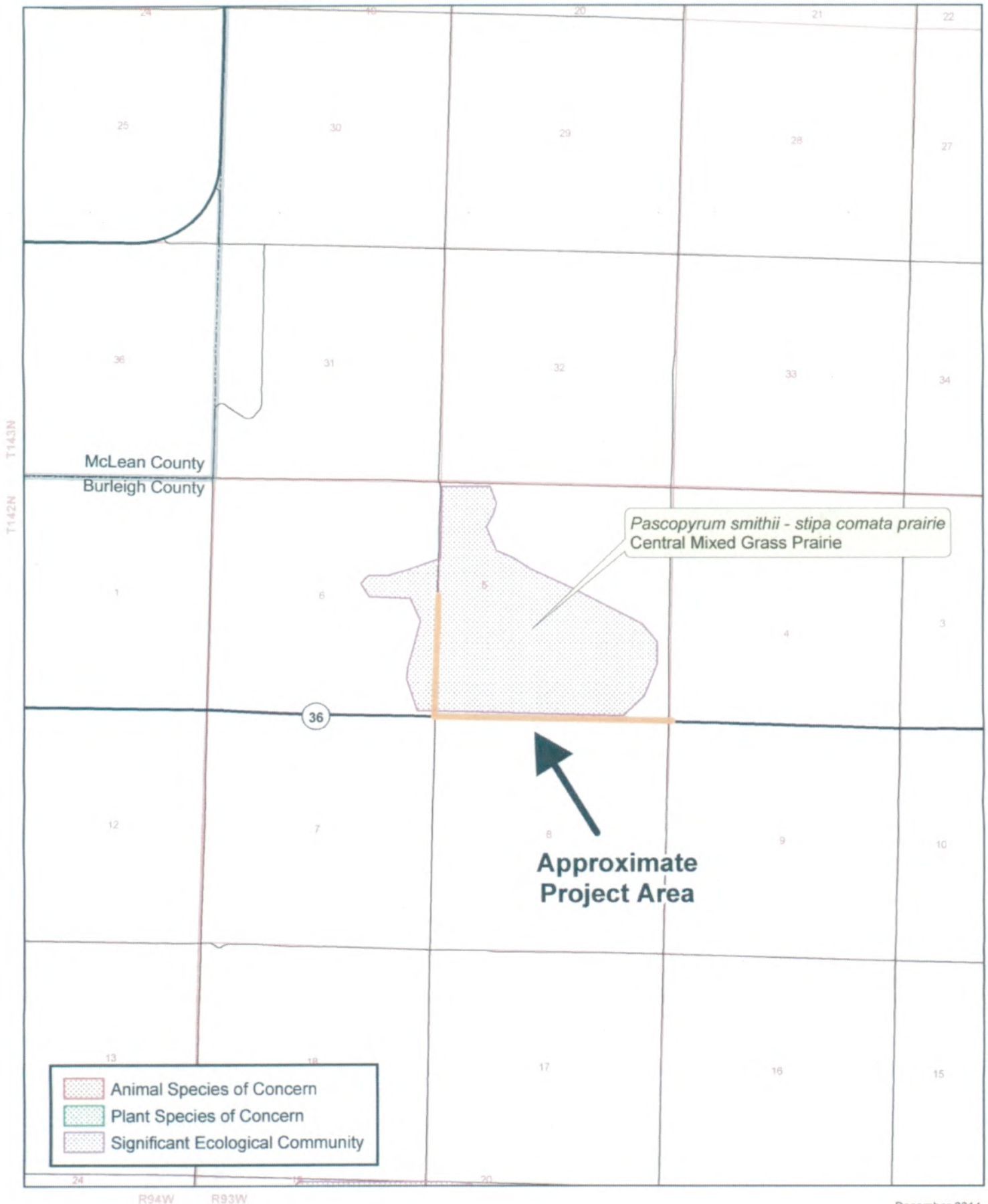
  
Kathy Dutton-Hefner, Coordinator  
Natural Resources Division

R.USNDNHI\*2014\_207KD12/10/2014DL12.23.2014

.....  
*Play in our backyard!*



North Dakota Parks and Recreation Department  
North Dakota Natural Heritage Inventory



### **North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer**

The quantity and quality of data collected by the North Dakota Natural Heritage Inventory are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in North Dakota have never been thoroughly surveyed, and new species are still being discovered. For these reasons, the Natural Heritage Inventory cannot provide a definite statement on the presence, absence, or condition of biological elements in any part of North Dakota. Natural Heritage data summarize the existing information known at the time of the request. Our data are continually upgraded and information is continually being added to the database. This data should never be regarded as final statements on the elements or areas that are being considered, nor should they be substituted for on-site surveys.

### **Estimated Representation Accuracy**

Value that indicates the approximate percentage of the Element Occurrence Representation (EO Rep) that was observed to be occupied by the species or community (versus buffer area added for locational uncertainty). Use of estimated representation accuracy provides a common index for the consistent comparison of EO reps, thus helping to ensure that aggregated data are correctly analyzed and interpreted.

Very high (>95%)

High (>80%, <= 95%)

Medium (>20%, <= 80%)

Low (>0%, <= 20%)

Unknown

(null) - Not assessed

### **Precision**

A single-letter code for the precision used to map the Element Occurrence (EO) on a U.S. Geological Survey (USGS) 7.5' (or 15') topographic quadrangle map, based on the previous Heritage methodology in which EOs were located on paper maps using dots.

S - Seconds: accuracy of locality mappable within a three-second radius; 100 meters from the centerpoint

M - Minute: accuracy of locality mappable within a one-minute radius; 2 km from the centerpoint

G - General: accuracy of locality mappable to map or place name precision only; 8 km from centerpoint

U - Unmappable



North Dakota Natural Heritage Inventory  
Rare Animal and Plant Species and Significant Ecological Communities

State Scientific Name	State Common Name	State Rank	Global Rank	Federal Status	Township Range Section	County	Last Observation	Estimated Representation Accuracy	Precision
<i>Pascopyrum smithii</i> - stipa comata prairie	Central Mixed Grass Prairie	S2	GNR		142N079W - 05; 142N079W - 06	Burleigh	2010-08-10	Low	



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TDD: 800-366-6888 or 711

November 25, 2014

Susan Quinnell  
State Historical Society of North Dakota  
612 East Boulevard Avenue  
Bismarck, ND 58505-0830

Dear Ms. Quinnell:

The Public Service Commission is planning reclamation activities in 2015 at the Columbus, Scranton/Bowman and Wilton Abandoned Mine Lands (AML) Sites. We also expect to conduct sinkhole filling projects in western North Dakota. These projects will be conducted by contractors selected through competitive bidding.

The 2015 Columbus Phase 15 Project is a continuation of a project series. Previous phases were conducted between 1988 and 2012. It is located in the NW1/4 of the NW1/4 of Section 27, T162W, R93W and the N1/2 of the S1/2 of Section 8, the S1/2 of the N1/2 of Section 8, and the S1/2 of the NW1/4 of Section 9, T162W, R94W in Burke County, North Dakota (see attached map). These abandoned surface coal mines contain hazardous mine pits with steep highwalls. The plan of action is to backfill and backslope the hazardous highwalls. Total surface area to be affected at this project location will be approximately 65 acres. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. No pit dewatering is planned and all runoff from affected areas will flow into the mine pits.

The 2015 Scranton/Bowman Phase 3 Project is a continuation of previous reclamation work conducted in 2013 and 2014 at locations near Scranton, Bowman and Reeder that have already received concurrence from your office (see attached maps). Residential areas and public roads at these project sites are underlain by abandoned underground mines.

The 2015 Wilton Project is also a continuation of previous reclamation work conducted between 1989 and 1994. Exploratory drilling conducted in 2014 confirmed that public roads at this project site are underlain by underground mines. Work is expected along rights of way of ND Highway 36 and 41st Street (see attached map).

The plan of action for the Scranton/Bowman and Wilton projects is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into abandoned underground mined workings to help stabilize the surface from future mine collapse.



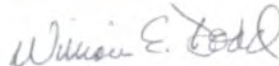
The combined total area affected for 2014 drilling and grouting projects is expected to be ten acres or less at all sites combined and surface disturbance will be very minimal.

The AML Division also expects to conduct sinkhole-filling projects to fill dangerous sinkholes caused by sudden collapse of underground mined workings. Sinkhole-filling projects have been conducted annually in North Dakota for many years. These sinkholes will be filled with earthen materials taken from as near as possible to the sinkholes and surface disturbance is usually less than 5 acres per year. We do not know where these sinkholes will occur or which ones need to be filled because they are usually reported by landowners and the public as they occur. These sinkholes are nearly always on areas where previous AML reclamation projects have been conducted. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. Approximately 180 dangerous sinkholes were filled in western North Dakota at sites near Bowman, Dickinson, Garrison, Haynes, New Salem, Richardton, Scranton, and Wilton in 2014.

As part of the project approval process, our office requests concurrence that the proposed reclamation work will not adversely affect any historical or archaeological resources. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by December 23, 2014.

Attached are maps showing general locations of the proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at [wdodd@nd.gov](mailto:wdodd@nd.gov) or 701.328.4101.

Sincerely,

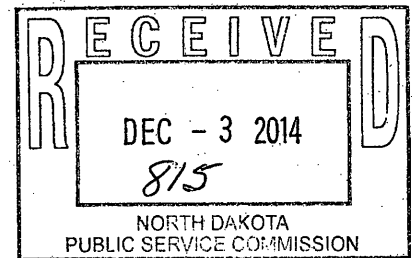
A handwritten signature in dark ink, appearing to read "William E. Dodd". The signature is fluid and cursive, with the first name "William" and last name "Dodd" clearly legible.

William E. Dodd,  
Assistant Director  
Abandoned Mine Lands Division

Enclosure



**STATE  
HISTORICAL  
SOCIETY  
OF NORTH DAKOTA**



Jack Dalrymple  
*Governor of North Dakota*

December 1, 2014

North Dakota  
State Historical Board

Calvin Grinnell  
*New Town - President*

A. Ruric Todd III  
*Jamestown - Vice President*

Margaret Puetz  
*Bismarck - Secretary*

Albert I. Berger  
*Grand Forks*

Gereld Gernholz  
*Valley City*

Diane K. Larson  
*Bismarck*

Chester E Nelson, Jr.  
*Bismarck*

Sara Otte Coleman  
*Director  
Tourism Division*

Kelly Schmidt  
*State Treasurer*

Alvin A. Jaeger  
*Secretary of State*

Mark Zimmermann  
*Director  
Parks and Recreation  
Department*

Grant Levi  
*Director  
Department of Transportation*

Claudia J. Berg  
*Director*

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American Alliance  
of Museums since 1986

Mr. William E. Dodd  
Assistant Director  
Abandoned Mine Lands Division  
Public Service Commission  
600 East Boulevard, Dept. 408  
Bismarck, ND 58505-0480

NDSHPO REF.: 15-0219 - 0223 PSC Abandoned Mine Lands Division 2014 Work area at the Columbus, Scranton/Bowman, and Wilton Abandoned Mine Lands (AML) in portions of [Scranton T131N R100W Section 26] Bowman County [Wilton T142N R79W Sections 5,6, and 8] Burleigh County [Reeder T130N R98W Section 9] Verkalk Farm, Adams County [Columbus T162N R94W Sections 7 & 8 and T162N R93W Section 27] Divide County, North Dakota

Dear Mr. Dodd,

We reviewed NDSHPO REF.: 15-0219 - 0223 PSC Abandoned Mine Lands Division 2014 Work area at the Columbus, Scranton/Bowman, and Wilton Abandoned Mine Lands (AML), submitted in your November 25, 2014 letter. We concur with "No Historic Properties Affected" and "No Significant Sites" determinations for the projects as described and mapped in your November 25, 2014 letter.

Thank you for the opportunity to review these projects. If you have questions please contact Susan Quinnell at [squinnell@nd.gov](mailto:squinnell@nd.gov) or (701) 328-3576.

Sincerely,

Claudia J. Berg  
State Historic Preservation Officer (North Dakota)  
and  
Director, State Historical Society of North Dakota





## Public Service Commission State of North Dakota

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### COMMISSIONERS

Brian P. Kalk  
Randy Christmann  
Julie Fedorchak

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Darrell Nitschke

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ND Toll Free: 1-877-245-6685  
Fax: 701-328-2410  
TDD: 800-366-6888 or 711

November 25, 2014

Mr. Karl Rockeman, P.E.,  
Director of Water Quality  
North Dakota Department of Health  
Gold Seal Center  
918 East Divide Avenue  
Bismarck, ND 58501-1947

Dear Mr. Rockeman:

The Public Service Commission is planning reclamation activities in 2015 at the Columbus, Scranton/Bowman and Wilton Abandoned Mine Lands (AML) Sites. We also expect to conduct sinkhole filling projects in western North Dakota. These projects will be conducted by contractors selected through competitive bidding.

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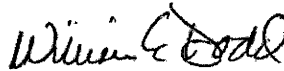
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Sincerely,



William E. Dodd,  
Assistant Director  
Abandoned Mine Lands Division

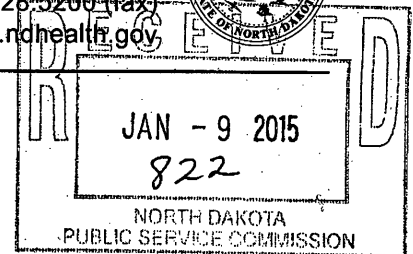
Enclosure





**NORTH DAKOTA**  
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION  
Gold Seal Center, 918 E. Divide Ave.  
Bismarck, ND 58501-1947  
701.328.5200 (fax)  
www.ndhealth.gov



January 7, 2015

William Dodd, Assistance Director  
Abandoned Mine Lands Division  
Public Service Commission  
600 East Boulevard Ave.  
Bismarck, ND 58505

Re: 2015 Reclamation at Columbus, Scranton/Bowman and Wilton Abandoned Mine Lands Sites

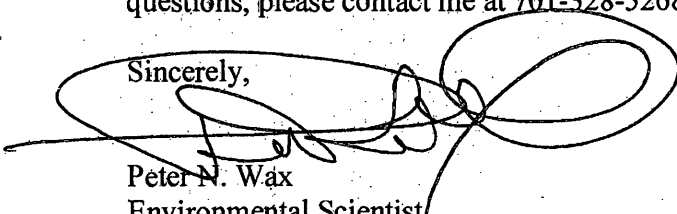
Dear Mr. Dodd:

The North Dakota Department of Health (department) has reviewed the mine reclamation activities planned for 2015. The department believes that the planned activities are not likely to adversely affect surface or groundwater resources provided:

- 1) All work be conducted in a manner that minimizes potential impacts to groundwater resources and to municipal and private water supply wells,
- 2) Our Construction and Environmental Disturbance Requirements (attached) are adhered to, and
- 3) The contractor for projects that will disturb  $\geq 1$  acre obtains a Construction General Permit from the department. The link to the CGP is:  
<http://www.ndhealth.gov/WQ/Storm/StormWaterHome.htm>

We appreciate the opportunity to review the planned reclamation projects. Should you have any questions, please contact me at 701-328-5268.

Sincerely,

  
Peter N. Wax  
Environmental Scientist  
Division of Water Quality

PNW: dlp  
Encl.



## **Construction and Environmental Disturbance Requirements**

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

### **Soils**

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

### **Surface Waters**

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

### **Fill Material**

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.





## Public Service Commission State of North Dakota

### COMMISSIONERS

Brian P. Kalk  
Randy Christmann  
Julie Fedorchak

Executive Secretary  
Darrell Nitschke

*note: called Kevin Shelley 1-6-14.  
He returned my call 1-8 @ 10:00 a  
Terry Ensworth is doing review & is out of  
office right now - will reply asap*

600 East Boulevard, Dept. 408  
Bismarck, North Dakota 58505-0480  
Web: [www.psc.nd.gov](http://www.psc.nd.gov)  
E-mail: [ndpsc@nd.gov](mailto:ndpsc@nd.gov)  
Phone: 701-328-2400  
ND Toll Free: 1-877-245-6685  
Fax: 701-328-2410  
TDD: 800-366-6888 or 711

November 25, 2014

Mr. Kevin Shelley, Acting Field Supervisor  
U.S. Fish and Wildlife Service  
3425 Miriam Avenue  
Bismarck, ND 58501-7926

Dear Mr. Shelley:

The Public Service Commission is planning reclamation activities in 2015 at the Columbus, Scranton/Bowman and Wilton Abandoned Mine Lands (AML) Sites. We also expect to conduct sinkhole filling projects in western North Dakota. These projects will be conducted by contractors selected through competitive bidding.

The 2015 Columbus Phase 15 Project is a continuation of a project series. Previous phases were conducted between 1988 and 2012. It is located in the NW1/4 of the NW1/4 of Section 27, T162W, R93W and the N1/2 of the S1/2 of Section 8, the S1/2 of the N1/2 of Section 8, and the S1/2 of the NW1/4 of Section 9, T162W, R94W in Burke County, North Dakota (see attached map). These abandoned surface coal mines contain hazardous mine pits with steep highwalls. The plan of action is to backfill and backslope the hazardous highwalls. Total surface area to be affected at this project location will be approximately 65 acres. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. No pit dewatering is planned and all runoff from affected areas will flow into the mine pits.

The 2015 Scranton/Bowman Phase 3 Project is a continuation of previous reclamation work conducted in 2013 and 2014 at locations near Scranton, Bowman and Reeder that have already received concurrence from your office (see attached maps). Residential areas and public roads at these project sites are underlain by abandoned underground mines.

The 2015 Wilton Project is also a continuation of previous reclamation work conducted between 1989 and 1994. Exploratory drilling conducted in 2014 confirmed that public roads at this project site are underlain by underground mines. Work is expected along rights of way of ND Highway 36 and 41st Street (see attached map).

The plan of action for the Scranton/Bowman and Wilton projects is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into

abandoned underground mined workings to help stabilize the surface from future mine collapse. The combined total area affected for 2014 drilling and grouting projects is expected to be ten acres or less at all sites combined and surface disturbance will be very minimal.

The AML Division also expects to conduct sinkhole-filling projects to fill dangerous sinkholes caused by sudden collapse of underground mined workings. Sinkhole-filling projects have been conducted annually in North Dakota for many years. These sinkholes will be filled with earthen materials taken from as near as possible to the sinkholes and surface disturbance is usually less than 5 acres per year. We do not know where these sinkholes will occur or which ones need to be filled because they are usually reported by landowners and the public as they occur. These sinkholes are nearly always on areas where previous AML reclamation projects have been conducted. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. Approximately 180 dangerous sinkholes were filled in western North Dakota at sites near Bowman, Dickinson, Garrison, Haynes, New Salem, Richardton, Scranton, and Wilton in 2014.

As part of the project approval process, our office requests concurrence that the proposed reclamation work will not adversely affect any threatened, endangered or rare animal species. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by December 22, 2014.

Attached are maps showing general locations of the proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at [wdodd@nd.gov](mailto:wdodd@nd.gov) or 701.328.4101.

Sincerely,



William E. Dodd,  
Assistant Director  
Abandoned Mine Lands Division

Enclosure



# **STANDARDIZED ENVIRONMENTAL ASSESSMENT**

**Columbus  
Abandoned Mine Lands Project  
ND031  
Burke County, North Dakota**

**Prepared by**

**North Dakota Public Service Commission**

**In Cooperation With**

**United States Department of Interior  
Office of Surface Mining Reclamation and Enforcement  
Casper Field Office**

**(January 2015)**

## **Section 1 Introduction**

### **A. Need for the Action**

The principal objective of the Public Service Commission is to reclaim potentially hazardous portions of surface coal mines located within Section 27, T162N, R93W and Sections 8 and 9, T162N, R94W. These sites are approximately five miles south of Columbus, North Dakota, population 133 and two miles southwest of Larson, North Dakota, Population 12. One of the surface mines contains dangerous highwalls near roads. About 65 acres of the surface mine will be reclaimed with the Columbus Phase 15 Project, but the entire mine site is much larger.

To our knowledge, there have been two instances of death attributable to the abandoned mines. The first occurred in the late 1960s when a vehicle went off an abandoned haul road killing the driver. The second happened in the late 1970s when a person drowned in a water-filled abandoned surface mine pit after falling off a steep highwall. The potential for additional deaths or injuries is inherent due to the location of the abandoned mine.

### **B. Project Background**

The Columbus Problem Area is composed of a series of extensive surface coal mines located in Burke County, Sections 19, 20, 21, 22, 27, 28 and 29, T162N, R93W, and Sections 8, 9, 14, 23 and 24, T162N, R94W. This AML site is characterized by dangerous highwalls near roads and other AML hazards.

Within Burke County, homesteaders' hands and shovels were disturbing the land in search of coal for heating source as early as 1902. The Gille-Miller Mine was one of the first of several small "Wagon Mines" established south of the future Columbus town site to supply coal to farmers. Other coal mines opened in the area included Kielhock and Wixom Mine, Greenup Mine, Meade and Sims Mine, Sunlight Mine, and Whittier-Crockett Mine. The Truax brothers, Elmer and Harold, opened the Kincaid Mine south of Columbus in 1918, and the Bonsness Mine began operating nearby around the same time. By 1923, the Truax mine was producing 100,000 tons per year. Truax consolidated with the Traer Railroad in 1926 and formed Truax-Traer Coal Company. The coal company would become a dominant coal producer in North Dakota. In 1962, the Consolidation Coal Company bought the Kincaid Mine from Truax-Traer. In its 42 years of operation, the mine produced over 12 million tons of lignite. The Kincaid Mine closed in 1968. The Bonsness Mine closed in 1973 ending an era of lignite mining near Columbus. These mining operations resulted in approximately 1,280 acres of abandoned mine lands south of Columbus. Over 1,050 acres which included



27,000 feet of dangerous highwalls have been reclaimed on this portion of the site. Approximately 1,500 feet of dangerous highwalls remain to be reclaimed on this portion of the Columbus AML Site. This 15 acre area that needs reclamation is located within Section 27, T162N, R93W.

Southwest of Larson, North Dakota, the Baukol-Noonan Lignite, Inc. opened in 1930. In its heyday in the 1960s, the lignite mine near Larson produced about 600,000 tons of lignite a year. But dwindling reserves, aging equipment and decreased demand for lignite spelled the end of Baukol-Noonan's mining in northwestern North Dakota in 1986. The lignite mining near Larson left approximately 720 acres of pre-1977 abandoned mine lands. Approximately 3,500 feet of dangerous highwalls remain to be reclaimed on this portion of the Columbus AML Site. This 50 acre area that needs reclamation is located within Sections 8 and 9, T162N, R94W.

## **Section II**

### **Description of the Proposed Project and Alternatives**

The proposed reclamation project for this site will be beneficial to the general public and meets the requirements of federal and state law for reclamation. Besides the elimination of a hazard to the general public, as well as the landowners, parameters with other beneficial effects are improvements for land use, vegetation, wildlife and topography.

The plan of action for the proposed reclamation activity will be to backfill hazardous highwalls with material from adjacent spoil piles. Erosional gullies and washouts will be repaired and reestablished to nonerosive slopes.

To the degree possible, topsoil will be salvaged from the disturbed areas and respread once the earthwork has been completed. Approximately 5,000 feet of hazardous highwalls would be eliminated through proposed reclamation operations in 2015. The reclaimed areas will be seeded. Revegetation will be done with a seed mixture compatible to the quality of available plant growth material.

Options or alternatives include backfilling, fencing of hazard areas, or no action. Backfilling is the preferred option. The no action option does not solve the AML problems at the site and fencing is not considered as a long term viable option. The proposed reclamation activities should have no long term adverse effects on the environment. Any temporary disruption of wildlife habitat will be a short term effect.

The approved North Dakota Abandoned Mine Lands State Reclamation Plan identifies backfilling as an effective reclamation technique.



### **Section III Existing Environmental Documents**

OSM-EIS-11. Approval of State and Indian Reclamation Program Grants under Title IV of the Surface Mining Control and Reclamation Act of 1977 was published by the Office of Surface Mining in November 1983. This EIS describes and analyzes the environmental impacts that were expected to result from approval of State or Tribal Grants. It focuses on the adverse and/or beneficial impacts and standard reclamation activities associated with eight major categories of abandoned coal mine problems in the United States.

The environmental concerns of the proposed project are addressed in an Environmental Impact Statement (EIS) prepared by the Office of Surface Mining Reclamation and Enforcement entitled "Approval of State and Indian Reclamation Program Grants Under Title IV of the Surface Mining Control and Reclamation Act of 1977": (OSM-EIS-11, November 1983). Please reference the following documents for further information:

Chapter III, Affected Environmental Rocky Mountain/Northern Great Plains Region:

Section 3.5.2.2, Adverse Impacts Related to Highwalls, pp. III-24, Subsections 3.5.2.2.1, 3.5.2.2.12, pp. III-24 to III-26.

Chapter IV, Environmental Consequences Rocky Mountain/Northern Great Plains Region:

Section 4.2.2, Impact Common to Remedial Actions, pp. IV-3 to IV-7; and,

Section 4.3.2 Reclamation of Highwalls, pp. IV-11, Subsection 4.3.2.1, pp. IV-11 to IV-12.



## **Section IV Site Specific Review**

- A. Cultural or historic resource values (the Archaeological Resources Protection Act of 1979; the Archaeological and Historic Preservation Act of 1974; the National Historic Preservation Act of 1986, as amended; the Antiquities Act of 1906, Executive Order 11593, concerning the protection and enhancement of the cultural environment; the American Indian Religious Freedom Act of 1978; the Historic Sites Act of 1978; and OMB Circular A-102).**

Reclamation activities will be conducted in a manner that should have no significant effect on cultural or historic resources. A letter was sent to the State Historical Society of North Dakota on November 25, 2014, requesting concurrence for proposed 2015 Columbus AML Project. The response dated December 1, 2014, concurred with a "No Historic Properties Affected" and "No Significant Sites Affected" determination for the project.

- B. Water quality values (Clean Water Act, as amended)**

Reclamation will be conducted in a manner that should have no significant effect on surface or ground water quality or quantity. A letter was sent to the North Dakota Department of Health on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. The response dated January 9, 2014, indicated that planned activities are not likely to adversely affect surface or groundwater resources and included several provisions to help minimize any potential effects.

- C. Wetlands values (Clean Water Act, Executive Order 11990, and Army/EPA Memorandum of Agreement (MOA) Concerning the Determination of Mitigation under the Section 404(b) (1) Guidelines)**

No reclamation activities are planned on or near wetlands within the Columbus AML Project area.

- D. Flood values (Executive Order 11988)**

No reclamation activities are within an identified floodplain.

- E. Wildlife (Endangered Species Act and Fish and Wildlife Coordination Act)**

Reclamation activities will be conducted in a manner that should have no significant effect on wildlife. A letter was sent to the U.S. Fish and Wildlife Service on November 25, 2014, requesting concurrence for proposed 2015



Columbus AML Project. No response had been received at the time of this report.

**F. Prime and unique farmland values (Farmland Protection Policy Act)**

There has been no prime farmland identified on the proposed project site.

**G. Recreational resource values (Wild and Scenic Rivers Act, Clean Air Act)**

There are no lands in the proposed project area classified as wilderness area or lands being studied for wilderness designation.

There are no lands in the proposed project area identified as areas of critical environmental concern.

There are no lands in the proposed project area included in the wild and scenic river category.

There are no parks or areas of critical ecological or aesthetic concern found in the proposed project area.

**H. Air quality (Clean Air Act)**

The proposed project area is not in or near a Class I air quality region.

There are no conditions on the existing site of the proposed project that affect air quality of the nearby area.

**I. Socioeconomic factors**

There will be no adverse socioeconomic effect from the reclamation of this site.

**J. Political factors**

Meetings between the North Dakota Public Service Commission and local governing entities are ongoing and will continue throughout project completion. County officials and landowners have expressed interest in reclamation of the proposed areas. A public meeting was held on January 13, 2011, in Columbus, ND and only one person attended. The general public was notified in advance of the meeting by newspaper notice.



#### **K. Existing Vegetative Cover**

The highly sodic and clayey nature of the spoil precludes the growth of most graminoid species. A few areas of saltgrass, brome grass and crested wheatgrass are found in the low areas between spoil piles.

#### **L. Threatened and Endangered Plant Species**

To the best of our knowledge, no threatened or endangered plant species have been identified within the project area. The only federally-listed threatened or endangered plant in North Dakota is the Western Prairie Fringed Orchid (*Platanthera praeclara*). Known locations of this plant are within moist, tall grass prairie and sedge meadows of the Sheyenne National Grasslands in the southeastern corner of the state. This plant has not been seen and is not likely to inhabit the proposed project areas. A letter was sent to the Natural Heritage Program of the North Dakota Parks and Recreation Department on November 25, 2014, requesting concurrence for proposed 2015 Columbus AML Project. The response dated December 10, 2014, indicated no presence of ecological community within or nearby the project area.

#### **M. Anticipated date of Reclamation**

Reclamation work for Columbus (1) began in June 1988 and was completed in September 1988.

Reclamation work for Columbus (2) began in May 1995 and was completed in October 1995.

Reclamation work for Columbus (3) began in May 1997 and was completed in September 1997.

Reclamation work for Columbus (4) began in June 2000 and was completed in October 2000.

Reclamation work for Columbus (5) began in June 2003 and was completed in September 2003.

Reclamation work for Columbus (6) began in August 2004 and was completed in October 2004.

Reclamation work for Columbus (7) began in June 2006 and was completed in August 2006.

Reclamation work for Columbus (8) began in June 2007 and was completed in September 2007.

Reclamation work for Columbus (9) began in June 2008 and was completed in May 2009.

Reclamation work for Columbus (10) began in October 2009 and was completed in November 2009.

Reclamation work for Columbus (11) began in August 2011 and was completed in May 2012.

Reclamation work for Columbus (12) began in August 2011 and was completed in October 2011.



Reclamation work for Columbus (13) and Columbus (14) both began in July 2012 and were completed in October 2012.

Reclamation performance period for Columbus Phase 15 is scheduled to begin in June 2015 and be completed in August 2015.

#### **N. Estimated Construction Cost**

The construction cost for the Columbus (1) project was \$113,630.08.  
The construction cost for the Columbus (2) project was \$270,868.80.  
The construction cost for the Columbus (3) project was \$325,474.50.  
The construction cost for the Columbus (4) project was \$187,499.86.  
The construction cost for the Columbus (5) project was \$174,469.02.  
The construction cost for the Columbus (6) project was \$162,556.00.  
The construction cost for the Columbus (7) project was \$238,050.00.  
The construction cost for the Columbus (8) project was \$249,638.14.  
The construction cost for the Columbus (9) project was \$1,197,998.47.  
The construction cost for the Columbus (10) project was \$70,003.01.  
The construction cost for the Columbus (11) project was \$1,737,940.20.  
The construction cost for the Columbus (12) project was \$922,416.00.  
The construction cost for the Columbus (13) project was \$625,693.80.  
The construction cost for the Columbus (14) project was \$757,829.75.

It is estimated that construction cost for the Columbus Phase 15 project will be \$500,000.

#### **O. Off-site Borrow and Disposal Areas**

There will be no off-site borrow or disposal area concerns relative to this project. If off-site borrow or disposal issues arise, applicable environmental regulations will be addressed through the North Dakota Department of Health.

#### **P. Noise Pollution**

Project work will be conducted no closer than 5,000 feet from the nearest residential or commercial population. Noise pollution problems are not anticipated; however, if problems arise, remedial action measures will be addressed through the North Dakota Department of Health.

#### **Q. Environmental Justice Policy**

Construction work may result in a slight increase in employment and revenues, but no significant direct or indirect impact on minority or low-income populations is expected.

## Section V Consultations

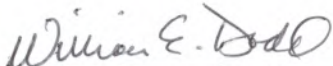
The State Historical Preservation Officer has been contacted with reference to any cultural or historical values present at or near the project site.

The United States Fish and Wildlife Service has been contacted with reference to identification of threatened or endangered animal species on the proposed project site.

The Planning and Natural Resources Division of the North Dakota Parks and Recreation Department has been contacted with reference to identification of threatened, endangered or rare plant species or communities.

A letter was also sent to the North Dakota Department of Health requesting concurrence for this project.

## Section VI Preparers



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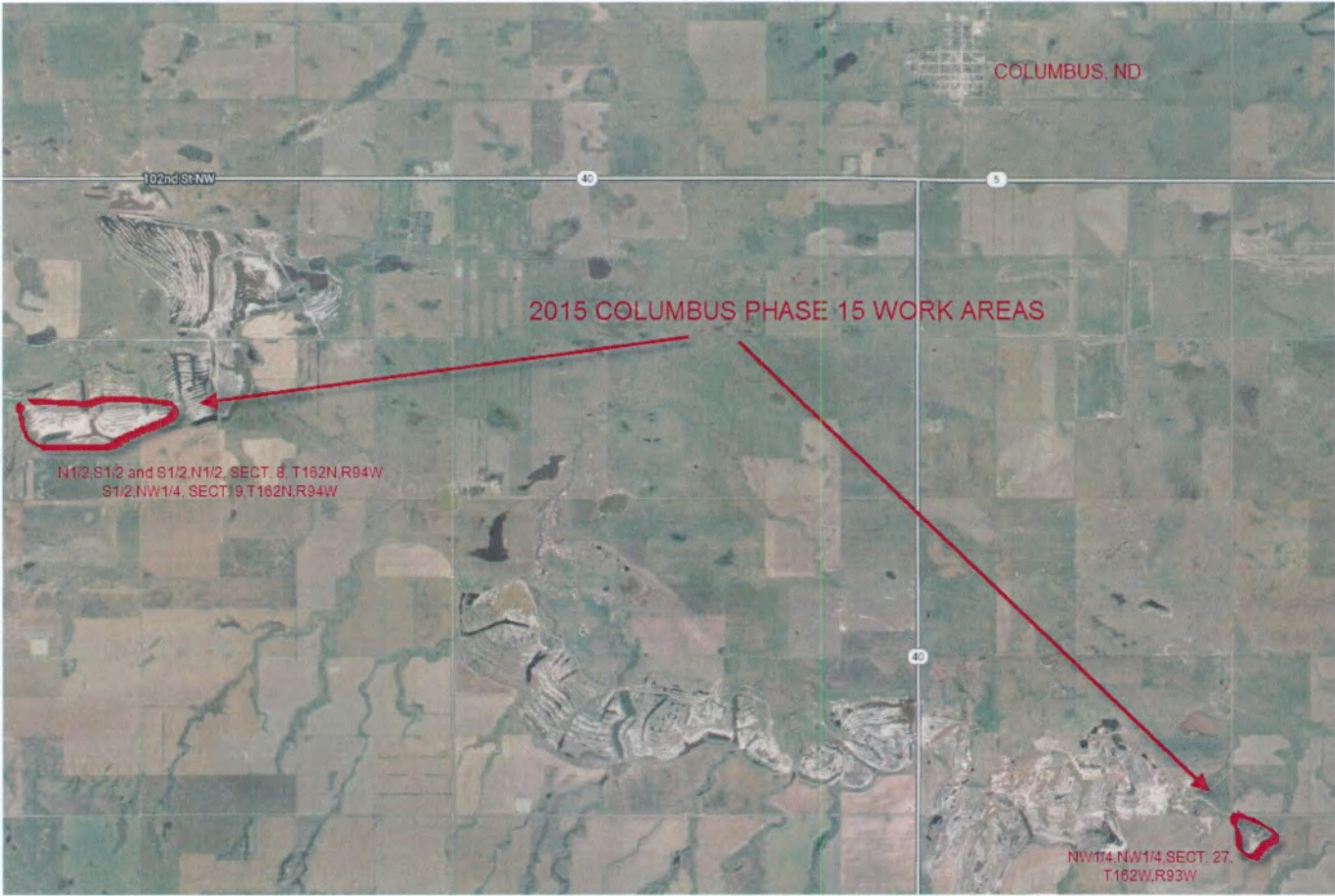
Bill Dodd  
Assistant Director - AML Division  
ND Public Service Commission



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Mark Knell  
Environmental Engineer - AML  
ND Public Service Commission







# **STANDARDIZED ENVIRONMENTAL ASSESSMENT**

**Wilton Mining Area  
ND001  
Burleigh and McLean Counties  
North Dakota**

**Prepared by**

**North Dakota Public Service Commission**

**In Cooperation With**

**United States Department of the Interior  
Office of Surface Mining Reclamation and Enforcement  
Casper Field Office**

**(Revised January 2015)**

## **Section 1 Introduction**

### **A. Need for the Action**

The principal objective of the Public Service Commission is to reclaim potentially hazardous portions of abandoned surface and underground coal mines.

To our knowledge there have been no instances of death or serious personal injury attributable to the abandoned mines in the Wilton Mining Area. However, the presence of abandoned surface and underground mines are a hazard to the public and landowners. Sinkholes have been documented within the Wilton Mining area with several instances of damage to farm equipment and loss of livestock.

### **B. Background**

This Environmental Assessment (EA) for Wilton Mining Area is a consolidation of several previous EA's for individual project sites within the area. It also adds additional acreage where abandoned mine lands present hazards. The Wilton Mining Area includes portions of Townships T142N, R79W; T142N, R80W; T143N, R79W; and T143N, R80W; in Burleigh and McLean Counties, as illustrated on the map at the end of this document. Six major reclamation projects and several emergency and sinkhole filling projects have been conducted by the North Dakota Public Service Commission, Abandoned Mine Lands (AML) Division, within this area. In addition, reclamation projects have been conducted by the U.S. Department of Agriculture, Natural Resource Conservation Service, Rural Abandoned Mine Program (RAMP). These projects have included backsloping abandoned surface mine pits, regrading subsidence features and remote backfilling abandoned underground mine workings. These projects were conducted near roads and farmsteads and on agricultural lands. Although much work has been done to remedy AML problems within this area, there are more AML problems. Consequently, work remains to be done within the Wilton Mining Area.

The Wilton Mining Area is located near the city of Wilton (population 732) and is comprised of at least a dozen abandoned commercial coal mines. There were also several other small local mines in the area. According to Dwight McGinnis (deceased), a long-time resident of the area, coal mining began with the first homesteaders, prior to 1880, and continued through the 1960s. The following table summarizes data about the abandoned mines in this area.



<u>Mine Name</u>	<u>Location</u>	<u>Type</u>	<u>Years</u>
Truax-Traer, aka Washburn, Wilton	Sect. 5&6, T142N,R79W Sect 1, T142N,R80W Sect 31, T143N,R79W , Sect 36, T143N,R80W	Surface & Underground	1900-46
Lind	NE1/4 Sect 6, T142N, R79W	Underground	1909-36
Ecklund	E1/2 Sect. 7, T142N,R79W	Surface	1949-68
Asplund	SW1/4 Sect 10, T142N, R79W	Underground	1931-42
Fosberg	SW1/4 Sect 11, T142N,R79W	Underground	1923-42
Unknown	SE1/4 Sect 14, T142N,R79W	Unknown	Unknown
Engstrom	NW1/4 Sect 15, T142N,R79W	Underground	1923-1950
Anderson	NE1/4 Sect 23, T142N,R79W	Underground	1912-1927
Diamond	E1/2 Sect 34, T142N,R79W	Underground	1930-34
Yiengst	E1/2 Sect 34, T142N,R79W	Underground	Unknown
Peterson	S1/2 Sect 22, T142N,R80W	Underground	1921-34
Rupp	NW1/4 Sect 27, T142N,R80W	Underground	1933-34

Current land uses in the proposed project area include agricultural, residential, and roadways.

Post-construction land uses in the area are not expected to be changed.

A public meeting was held on January 15, 2015 in Wilton to discuss the proposed 2015 drilling and grouting project within the Wilton Mining Area.



## **Section II**

### **Description of the Proposed Project and Alternatives**

AML Reclamation work has been done at several of the abandoned surface and underground mine sites within the Wilton Mining Area. Sinkhole filling and surface grading of subsidence features has been done extensively in the past and is expected to continue in this area for the foreseeable future. It is also possible that some surface mine reclamation may be done within the area. This work would most likely entail backsloping dangerous pit highwalls. The major emphasis in the foreseeable future will be the protection of public roads and occupied farmsteads from the effects of subsidence of underground mine workings. Exploratory drilling conducted in 2014 confirmed the presence of underground mine voids beneath North Dakota State Highway 36 and 41<sup>st</sup> Street Northeast (see map on page 11). Plans for 2015 include drilling and grouting at those locations. There are several other locations within the Wilton Mining Area where drilling (and grouting, if needed) may be conducted in the future.

Drilled holes that intercept mining voids or rubble will be cased from ground surface to about five feet above the top of the void/rubble zone with 3" Inside Diameter (I.D.) Schedule 40 PVC pipe. Casing of the holes allows mine inspection with the borehole camera, and protects the integrity of the borehole from formation failure. Cased void holes may be used as injection holes for pressure grout injection.

The preferred method for reclamation of underground mine working beneath roads and structures is filling mine voids with pressurized grout. Pressure grout backfilling is a method of filling in the mine rooms and tunnels with a grout mixture of cement, flyash, water, sand and various other admixtures. Grout is pumped under pressure, through drilled holes, directly into the mine workings. When injected, this material sets up and stabilizes the overburden to prevent collapse of the mine workings.

Backfilling of the mine voids will commence systematically with injection holes spaced approximately every ten feet depending on mine specific conditions. Drilling rigs with directional drilling capabilities may be utilized for inaccessible areas such as under houses, roadways and miscellaneous utilities. The relatively close spacing of drill holes is essential because accurate mine maps are not available for all areas. Haul tunnels in this mining area were typically ten feet wide. Drill holes spaced any more than ten feet apart may miss the target mined workings. It is anticipated that confirmation holes will be cored between the injection holes.

Pressure grout backfilling is the preferred method because when mine workings have collapsed, pressure is required to penetrate the rubble and differential void levels.

A second option is gravity backfilling. Gravity backfilling consists of pouring a sand and water slurry from cement trucks down drilled holes. This method works well when mine voids are intact at the mine level. However, gravity backfilling will not penetrate the rubble and differential levels of mine workings that were encountered during exploratory drilling at this site.

A third alternative is "daylighting" or excavation of all underground mine workings. This would entail excavating all overburden down to the mined coal seam and backfilling it after all mining voids have been excavated. This method is not considered practical due to the extremely high cost of temporary relocation of roads and structures and of deep excavation over a large area.

Other options include property buy-out, relocation or condemnation by a local political subdivision with demolition or removal of existing structures and utilities and relocation of the roads. Fencing would also be necessary to restrict access by pedestrians. Buyouts and relocations are generally cost prohibitive and would include moving a State highway.

Another option would be no action. These last two options do not solve the inherently dangerous AML problems and therefore, are not considered viable options.



### **Section III**

#### **Existing Environmental Documents**

OSM-EIS-11. Approval of State and Indian Reclamation Program Grants Under Title IV of the Surface Mining Control and Reclamation Act of 1977 was published by the Office of Surface Mining in November 1983. This EIS describes and analyzes the environmental impacts that were expected to result from approval of State or Tribal Grants. It focuses on the adverse and/or beneficial impacts and standard reclamation activities associated with eight major categories of abandoned coal mine problems in the United States.

The environmental concerns of the proposed project are addressed in an environmental impact statement (EIS) prepared by the Office of Surface Mining Reclamation and Enforcement entitled "Approval of State and Indian Reclamation Program Grants Under Title IV of the Surface Mining Control and Reclamation Act of 1977": (OSM-EIS-11, November 1983). Please reference the following documents for further information.

Chapter III, Affected Environmental Rocky Mountain/Northern Great Plains Region

Section 3.5.3.2, Adverse impacts related to subsidence, PP III-29, Subsections 3.5.3.2.1, 3.5.3.2.2, 3.5.3.2.4, 3.5.3.3.3,

Chapter IV, Environmental Consequences Rocky Mountain/Northern Great Plains Region.

Section 4.3.1.1 Impacts of backfilling mine openings.

Section 4.3.3.3, Impacts of deep subsurface reinforcement treatment.



## **Section IV Site Specific Review**

- A. Cultural or historic resource values (the archaeological Resources Protection Act of 1979; the Archaeological and Historic Preservation Act of 1974; the National Historic Preservation Act of 1986, as amended; the Antiquities Act of 1906, Executive Order 11593, concerning the protection and enhancement of the cultural environment; the American Indian Religious Freedom Act of 1978; the Historic Sites Act of 1935; and OMB Circular A-102).**

Reclamation activities will be conducted in a manner that should have no significant effect on cultural or historic resources. A letter was sent to the State Historical Society of North Dakota on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. The response dated December 1, 2014, concurred with a "No Historic Properties Affected" and "No Significant Sites" determination for the project.

- B. Water quality values (Clean Water Act, as amended)**

Reclamation will be conducted in a manner that should have no significant effect on surface water quality or quantity. Groundwater can be affected by pressurized grout remote backfilling; however, water contained in abandoned underground coal mines and coal seams is of poor quality and is not generally used for home consumption. Several domestic, production and observation water wells that are listed on the North Dakota State Water Commission Ground Water Database are within one mile of the proposed project sites. The AML Division remains in continual consultation with the North Dakota Department of Health to monitor the performance and environmental aspects of the use of flyash-grout, especially as it concerns groundwater. A letter was sent to the North Dakota Department of Health on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. The response dated January 9, 2014, indicated that planned activities are not likely to adversely affect surface or groundwater resources and included several provisions to help minimize any potential effects.

- C. Wetlands values (Clean Water Act, Executive Order 11990, and Army/EPA Memorandum of Agreement (MOA) Concerning the Determination of Mitigation under the Section 404(b) (1) Guidelines)**

No reclamation activities are planned on or near wetlands within the Wilton Mining Area.



**D. Floor values (Executive Order 11988)**

No reclamation activities within the Wilton Mining Area are within an identified floodplain.

**E. Wildlife (Endangered Species Act and Fish and Wildlife Coordination Act)**

Reclamation activities will be conducted in a manner that should have no significant effect on wildlife. Threatened or Endangered Candidate species identified by the US Fish and Wildlife Service, Bismarck, ND include the Dakota skipper (*Hesperia dacotae*), Greater sage-grouse (*Centrocercus urophasianus*), Sprague's Pipit (*Anthus spragueii*) and the Poweschiek skipperling (*Oarisma poweshiek*). None of these species are likely to be found or disturbed by the 2015 Wilton AML Project. A letter was sent to the U.S Fish and Wildlife Service on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. No response had been received at the time of this report.

**F. Prime and unique farmland values (Farmland Protection Policy Act)**

Reclamation within the Wilton Mining Area is expected to be conducted primarily along public road rights of way and occupied farmsteads and should not affect the integrity or utility of prime farmlands.

**G. Recreational resource values (Wild and Scenic Rivers Act, Clean Air Act)**

There are no lands in the Wilton Mining Area classified as Wilderness Areas or lands being studied for wilderness designation.

There are no lands in this area identified as areas of critical environmental concern.

There are no lands in this area included in the Wild and Scenic Rivers category.

There are no parks or areas of critical ecological or aesthetic concern in this area.

**H. Air quality (Clean Air Act)**

The Wilton Mining Area is not in or near a Class I air quality region and this project should not adversely affect air quality.



## **I. Socioeconomic factors**

Factors such as noise, traffic control and dust suppression will be addressed in the Information for Bidders packages and may be a contingency bid item.

Farming and ranching operations are prominent proximal to the project sites. Reclamation will not impact these socioeconomic factors.

## **J. Political factors**

Portions of the Wilton Mining Area are under zoning jurisdictions of Burleigh and McLean Counties, several township authorities, and the State of North Dakota, as well as private ownership. Meetings between the North Dakota Public Service Commission and all governing and private entities are ongoing and will continue throughout project(s) completion.

## **K. Existing Vegetative Cover**

Existing vegetation varies with land use within the Wilton Mining Area AML Area. This project will be conducted in road rights-of-way, where vegetation typically consists of introduced species such as Fairway crested wheatgrass, smooth brome grass and yellow sweet clover. Long term effects of the project on vegetation should be minimal.

## **L. Threatened and Endangered Plant Species**

To the best of our knowledge, no threatened or endangered plant species have been identified within the project area. The only federally-listed threatened or endangered plant in North Dakota is the Western Prairie Fringed Orchid (*Platanthera praeclara*). Known locations of this plant are within moist, tall grass prairie and sedge meadows of the Sheyenne National Grasslands in the southeastern corner of the state. This plant has not been seen and is not likely to inhabit the proposed project areas. A letter was sent to the Natural Heritage Program of the North Dakota Parks and Recreation Department on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. The response dated December 10, 2014, indicated the presence of one significant ecological community nearby the project area. It is a central mixed grass prairie consisting of common native grasses including Western Wheatgrass (*Pascopyrum Smithii*) and Needle and Thread Grass (*Stipa comata*). This project will have no effect on that community. If seeding is required at this project area it will be with regionally adapted native grass species.



**M. Anticipated dates of Reclamation**

The reclamation performance period for the 2015 Wilton Project is expected to be approximately 50 days between July and September 2015. Previous major reclamation projects were conducted at the Wilton Mining area in 1984, 1985, 1989 (2 projects), 1992 and 1994. In addition, several emergency, sinkhole-filling, and exploratory drilling projects have been conducted. The most recent exploratory drilling and sinkhole-filling projects were completed in November 2014.

**N. Estimated Construction Cost**

The estimated cost for the 2015 Wilton AML Project is \$950,000. Over \$2 million of reclamation work has been completed within the Wilton Mining Area and it is anticipated that the remaining work may require an additional \$2 million or more.

**O. Offsite Borrow and Disposal Areas**

If offsite borrow or disposal issues arise, applicable environmental regulations will be addressed through the North Dakota Department of Health and Consolidated Laboratories. Aggregate used for this project will be taken only from locations that comply with NDDOT material source requirement. Material Source Certificates of Approval may be found at on the NDDOT website at:

<https://www.dot.nd.gov/dotnet2/materialsource/certificatesofapproval.aspx>

**P. Noise Pollution**

Noise Pollution is not anticipated. Should noise pollution problems arise, the North Dakota Health Department will be consulted for remedial action.

**Q. Environmental Justice Policy**

Construction work may result in a slight increase in employment and revenues, but no significant direct or indirect impact on minority or low-income populations is expected.

## Section V Consultations

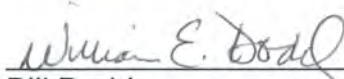
A letter was sent to the U.S Fish and Wildlife Service on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. No response had been received at the time of this report.

A letter was sent to the State Historical Society of North Dakota on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. The response dated December 1, 2014, concurred with a "No Historic Properties Affected" and "No Significant Sites" determination for the project.

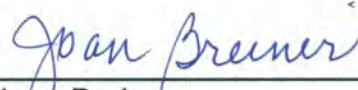
A letter was sent to the Natural Heritage Program of the North Dakota Parks and Recreation Department on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. The response dated December 10, 2014, indicated the presence of one significant ecological community nearby the project area. It is a central mixed grass prairie consisting of common native grasses including Western Wheatgrass (*Pascopyrum Smithii*) and Needle and Thread Grass (*Stipa comata*). The department also recommended that the project be accomplished with minimal impacts, all efforts be made to ensure critical habitats are not disturbed, and any impacted areas be revegetated with species native to the project area.

A letter was sent to the North Dakota Department of Health on November 25, 2014, requesting concurrence for proposed 2015 Wilton AML Project. The response dated January 9, 2014, indicated that planned activities are not likely to adversely affect surface or groundwater resources and included several provisions to help minimize any potential effects. The AML Division will remain in consultation with NDDOH and will provide them with a copy of the Invitation for Bids for this project and any follow-up reports that are requested.

## Section VI Preparers

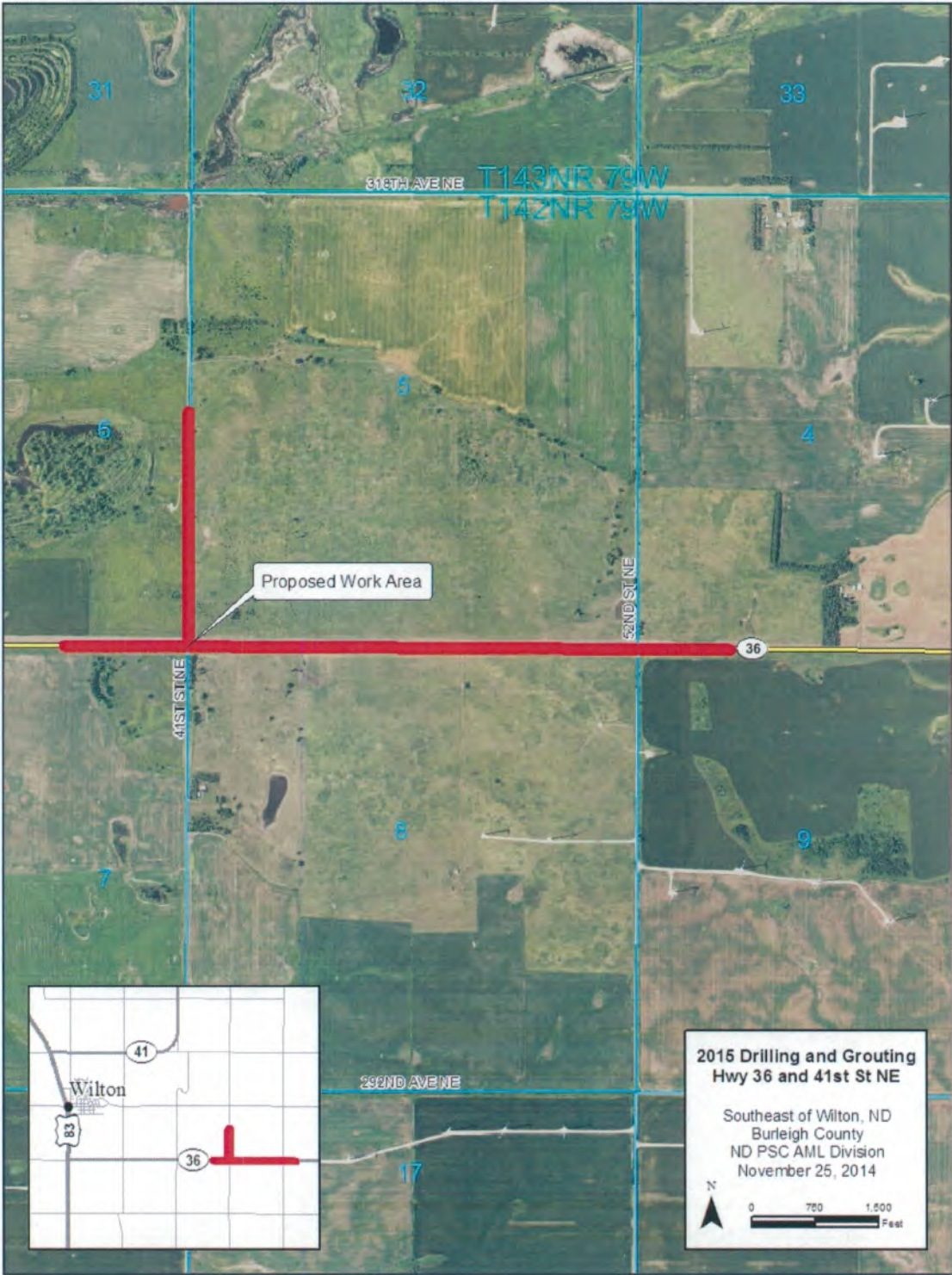


Bill Dodd  
Assistant Director - AML Division  
ND Public Service Commission



Joan Breiner  
Environmental Scientist - AML  
ND Public Service Commission







## Public Service Commission State of North Dakota

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### COMMISSIONERS

Brian P. Kalk  
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Executive Secretary  
Darrell Nitschke

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TDD: 800-366-6888 or 711

January 21, 2015

Mr. Jeff Fleischman, Chief  
Denver Field Division  
Office of Surface Mining  
P.O. Box 11018  
Casper WY 82602-5004

**RE: Eligibility Determination for 2015 Columbus Phase 15 and 2015 Wilton AML  
Projects in North Dakota.**

Dear Mr. Fleischman:

This letter is submitted under 30 CFR 874.12 as the required eligibility determination for lands included in the proposed abandoned mine lands reclamation projects. Legal descriptions for these lands are included with the request for authorization to proceed and are summarized below:

**2015 Columbus Phase 15 Project:** NW1/4 of the NW1/4 of Section 27, T162W, R93W and the N1/2 of the S1/2 of Section 8, the S1/2 of the N1/2 of Section 8, and the S1/2 of the NW1/4 of Section 9, T162W, R94W in Burke County, North Dakota.

**2015 Wilton Project:** Along rights-of way of North Dakota State Highway 36 in Sections 4, 5, 6, 7, 8, and 9, T142N, R79W; and 41st Street Northeast in Sections 5 and 6, T142N, R79W in Burleigh County, North Dakota.

Eligibility Determination - 30 CFR 874.12

The requirements of this section of the Abandoned Mine Reclamation Program set forth the following criteria for eligibility for reclamation activities (paraphrased):

- a. Was the real property subjected to coal mining and related processes?




- b. Did the coal mining processes on the real property occur prior to August 3, 1977, and was said real property left or abandoned in an unreclaimed or inadequately reclaimed condition? and,
- c. Is there continuing responsibility for reclamation by the operator, permittee, or agent of the permittee under the statutes of the State of North Dakota or the government of the United States?

Based upon available historical information, I find that the described real properties were mined for coal; that the coal mining activity occurred prior to August 3, 1977; and, that the property has been left in an abandoned and unreclaimed state. I further find that there is no continuing responsibility for reclamation by the operator, permittee or agent of the permittee under statutes of the State of North Dakota or the government of the United States.

Based on these findings, it is my opinion that the described real properties meet the eligibility requirements of 30 CFR 874.12 for abandoned mine reclamation.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. R. Deutsch", is written over a horizontal line.

James R. Deutsch  
Director  
Reclamation and AML Divisions



U.S. Department of the Interior  
Office of Surface Mining Reclamation and Enforcement  
e-AMLIS Report

Date Prepared: **3/2/1993**Prepared By: **William Dodd**

Phone:

Last Modified: **1/10/2013**

Field Contact:

Phone:

AMLIS Key: **ND000031**PA Name: **COLUMBUS**PU Name: **W BRANCH SHORT CREEK**PU Number: **96**Latitude: **48.8430555556**Longitude: **-102.7869**State/Tribe: **North Dakota**County: **BURKE**Cong Dist: **1**FIPS Code: **38013**Watershed: **UPPER SOURIS**HUC Code: **09010001**Quadrangle: **COLUMBUS SE**Mining Type: **S**Surface Owners: **Private 100%**

Ore Types:

## Problem Summary

Problem		Unfunded		Funded		Completed		Total
Prio/Type/Fund	Units	Costs	Units	Costs	Units	Costs	Units	Costs
2 DH SGA	8,000	932,633.00	0	0.00	47,000	7,067,367.00	55,000	8,000,000.00

### Priority Totals

P1 Total	-	0.00	-	0.00	-	0.00	-	0.00
P2 Total	-	932,633.00	-	0.00	-	7,067,367.00	-	8,000,000.00
P3 Total	-	0.00	-	0.00	-	0.00	-	0.00
PAD Total	-	932,633.00	-	0.00	-	7,067,367.00	-	8,000,000.00





U.S. Department of the Interior  
Office of Surface Mining Reclamation and Enforcement  
e-AMLIS Report

Date Prepared: 6/9/2008

Prepared By:

Phone: 701-328-4101

Last Modified: 6/9/2008

Field Contact:

Phone:

AMLIS Key: ND000001

PA Name: WILTON

PU Name: BURNT CREEK

PU Number: 72

Latitude: 47.14836

Longitude: -100.727931

State/Tribe: North Dakota

County: BURLEIGH

Cong Dist: 0

FIPS Code: 38015

Watershed: PAINTED WOODS-SQUARE  
BUTTE

HUC Code: 10130101

Quadrangle: WILTON

Mining Type: B

Surface Owners: Private 80%, State 20%

Ore Types:

## Problem Summary

Problem	Unfunded		Funded		Completed		Total	
Prio/Type/Fund	Units	Costs	Units	Costs	Units	Costs	Units	Costs
1 S SEA	0	0.00	0	0.00	0.1	2,016.00	0	2,016.00
2 DH SGA	15,300	2,264,400.00	0	0.00	2,916	431,586.00	18,216	2,695,986.00
2 P SGA	0	0.00	0	0.00	1	2,000.00	1	2,000.00
2 S SGA	1,200	1,000,000.00	0	0.00	159	1,488,738.00	1,359	2,488,738.00
1 S RUA	0	0.00	0	0.00	6	1,216.00	6	1,216.00

### Priority Totals

P1 Total	-	0.00	-	0.00	-	3,232.00	-	3,232.00
P2 Total	-	3,264,400.00	-	0.00	-	1,922,324.00	-	5,186,724.00
P3 Total	-	0.00	-	0.00	-	0.00	-	0.00
PAD Total	-	3,264,400.00	-	0.00	-	1,925,556.00	-	5,189,956.00



U.S. Department of the Interior  
Office of Surface Mining Reclamation and Enforcement  
e-AMLIS Report

Date Prepared: **11/23/1987**Prepared By: **Bruce Johnson**Phone: **701-328-4094**Last Modified: **1/30/2013**

Field Contact:

Phone:

AMLIS Key: **ND000003**PA Name: **SOUTH SCRANTON**PU Name: **BUFFALO CREEK**PU Number: **16**Latitude: **46.148888888889**Longitude: **-103.15277777778**State/Tribe: **North Dakota**County: **BOWMAN**Cong Dist: **1**FIPS Code: **38011**Watershed: **NORTH FORK GRAND**HUC Code: **10130301**Quadrangle: **SCRANTON**Mining Type: **U**Surface Owners: **Private 100%**

Ore Types:

## Problem Summary

Problem	Unfunded		Funded		Completed		Total	
Prio/Type/Fund	Units	Costs	Units	Costs	Units	Costs	Units	Costs
2 VO SGA	0	0.00	0	0.00	6	41,118.00	6	41,118.00
2 S SGA	5	500,000.00	0	0.00	20	1.00	25	500,001.00

### Priority Totals

P1 Total	-	0.00	-	0.00	-	0.00	-	0.00
P2 Total	-	500,000.00	-	0.00	-	41,119.00	-	541,119.00
P3 Total	-	0.00	-	0.00	-	0.00	-	0.00
PAD Total	-	500,000.00	-	0.00	-	41,119.00	-	541,119.00





U.S. Department of the Interior  
Office of Surface Mining Reclamation and Enforcement  
e-AMLIS Report

Date Prepared: 3/2/1993

Prepared By: **Bruce Johnson**Phone: **701-328-4094**

Last Modified: 1/30/2013

Field Contact:

Phone:

AMLIS Key: **ND000033**PA Name: **ANDREWS LAKE**PU Name: **TWIN BUTTE**PU Number: **4**Latitude: **46.270833333333**Longitude: **-103.4375**State/Tribe: **North Dakota**County: **BOWMAN**Cong Dist: **1**FIPS Code: **38011**Watershed: **MIDDLE LITTLE MISSOURI**HUC Code: **10110203**Quadrangle: **STEWART LAKE**Mining Type: **U**Surface Owners: **Private 30%, State 70%**

Ore Types:

## Problem Summary

Problem	Unfunded		Funded		Completed		Total	
Prio/Type/Fund	Units	Costs	Units	Costs	Units	Costs	Units	Costs
2 S SGA	19	1,000,000.00	0	0.00	6	26,293.00	25	1,026,293.00

### Priority Totals

P1 Total	-	0.00	-	0.00	-	0.00	-	0.00
P2 Total	-	1,000,000.00	-	0.00	-	26,293.00	-	1,026,293.00
P3 Total	-	0.00	-	0.00	-	0.00	-	0.00
PAD Total	-	1,000,000.00	-	0.00	-	26,293.00	-	1,026,293.00



U.S. Department of the Interior  
Office of Surface Mining Reclamation and Enforcement  
e-AMLIS Report

Date Prepared: **11/28/2000**Prepared By: **Bruce Johnson**Phone: **701-328-4094**Last Modified: **1/30/2013**

Field Contact:

Phone:

AMLIS Key: **ND000140**PA Name: **REEDER**PU Name: **BUFFALO CREEK**PU Number: **16**Latitude: **46.083333333333**Longitude: **-102.933333333333**State/Tribe: **North Dakota**County: **ADAMS**Cong Dist: **1**FIPS Code: **38001**Watershed: **NORTH FORK GRAND**HUC Code: **10130301**Quadrangle: **REEDER**Mining Type: **U**Surface Owners: **Private 100%**

Ore Types:

## Problem Summary

Problem		Unfunded		Funded		Completed		Total	
Prio/Type/Fund	Units	Costs	Units	Costs	Units	Costs	Units	Costs	
2 S SGA	2	500,000.00	0	0.00	1	10,000.00	3	510,000.00	

### Priority Totals

P1 Total	-	0.00	-	0.00	-	0.00	-	0.00
P2 Total	-	500,000.00	-	0.00	-	10,000.00	-	510,000.00
P3 Total	-	0.00	-	0.00	-	0.00	-	0.00
PAD Total	-	500,000.00	-	0.00	-	10,000.00	-	510,000.00