

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

**Annual Evaluation Summary Report
For the**

North Dakota Public Service Commission

Abandoned Mine Land Reclamation Program



**Evaluation Year 2018
(July 1, 2017 – June 30, 2018)**

**Produced by the Denver Field Division
Casper Area Office**

EXECUTIVE SUMMARY

The following is a summary of the Evaluation Year (EY) 2018 Oversight Report for the North Dakota Abandoned Mine Lands (AML) Program. This report covers the period of July 1, 2017 to June 30, 2018.

OSMRE has completed its evaluation of topics specified in the Performance Agreement between the North Dakota AML Division and the OSMRE. Assessment of the state's performance for the 2017 evaluation year includes reviews of selected topics, including: 1) Overall Reclamation Success, 2) AML Emergency Investigations and Abatement Efforts, 3) AML Grant Fiscal and Administrative Controls, 4) AMLIS, and 5) Public Outreach.

Site visits were jointly conducted by the OSMRE and state personnel at various AML reclamation project sites to help assess overall reclamation success on October 12th, 2017 and May 24th, 2018. It was agreed that all projects met their goals, abatement and reclamation measures were deemed intact and functional, and no problems compromising those measures were apparent.

The North Dakota AML program received \$2,802,000 in grant funding during EY2018. This includes administrative and construction sub-grants that fund 4.5 Full Time Employees (FTEs) and is intended to fund, in whole or in part, three projects that are considered construction ready. A total of four non-emergency projects were completed during EY2018.

OSMRE has determined that North Dakota has a system in place that is adequate to ensure accurate data is entered into e-AMLIS. The CAO has reviewed a random sample of PADs and is satisfied that all information entered into e-AMLIS agrees with the information in the PADs.

The NDPSC encourages public participation and outreach through public meetings, public service announcements, press contacts, project meetings, the NDPSC website, and by responding to public inquiries.

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Cover Page Photograph: Photo shows a steep highwall at a former surface mine near New Salem, ND. This feature will be reclaimed as part of the 2018 Morton County Project.

I. GENERAL

A. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) in the Department of the Interior. SMCRA provides authority to OSMRE to oversee the implementation of and provide federal funding for the state abandoned mine land programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. In addition to conducting oversight of approved state programs, OSMRE provides technical assistance, staff training, financial grants and assistance, as well as management assistance to each state program. This report contains summary information regarding the North Dakota Abandoned Mine Land Reclamation (AMLR) Program and the effectiveness of the program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the 2018 Evaluation Year (EY) July 1, 2017 to June 30, 2018.

On December 23, 1981, the Secretary of the Department of Interior approved North Dakota's AMLR Plan under Title IV of SMCRA. With that approval, the State of North Dakota through the North Dakota Public Service Commission (NDPSC) has exclusive responsibility and authority to operate and administer the Abandoned Mine Reclamation Program.

The OSMRE's evaluation methods are based upon OSMRE Directive AML-22 (Evaluation of State and Tribal Abandoned Mine Lands Programs) and a Performance Agreement (PA) between the NDPSC and the OSMRE. The PA establishes a commitment between the NDPSC and the OSMRE to identify topics for review, methodologies for enhancement and evaluation of performance reviews, and assistance in the preparation of the final report. Assessment of the NDPSC's performance includes reviews of selected topics such as fiscal and administrative controls, progress in coal mine reclamation, overall reclamation success, public interaction and outreach, and integration with the OSMRE Abandoned Mine Land Inventory System (AMLIS) database. Reclamation site visits were conducted jointly by NDPSC project managers and OSMRE staff.

Detailed background information and comprehensive reports for the program elements evaluated during the EY are available for review and copying at the OSMRE, Denver Field Division (DFD), Casper Area Office (CAO), 150 East B St., Room 1018, Casper, WY 82602. To arrange an appointment time, contact Jeff Fleischman via telephone (307) 261-6550 or email jfleischman@osmre.gov.

The reports are also available at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. Adobe Acrobat Reader® is needed to view these documents. Acrobat Reader® is free and can be downloaded at <http://get.adobe.com/reader/>.

Follow these steps to gain access to the document of interest:

1. Select North Dakota from the drop down box labeled “State”. Also select 2018 as the “Evaluation Year”, and then click “Submit”. The search can be narrowed by choosing selections under the “Keyword” or “Category” headings.
2. The oversight documents and reports matching the selected state and evaluation year will appear at the bottom of the page.
3. Select “View” for the document that is of interest and the report will appear for viewing, saving, and/or printing.

The following acronyms are used in this report:

AML	Abandoned Mine Land
AML-1	OSMRE Directive AML-1
AML-22	OSMRE Directive AML-22
AMLIS	Abandoned Mine Land Inventory System
AMLR	Abandoned Mine Land Reclamation
AMLD	Abandoned Mine Land Division
ATP	Authorization to Proceed
CAO	OSMRE’s Casper Area Office
CE	Categorical Exclusion
DFD	OSMRE’s Denver Field Division
EA	Environmental Assessment
EIS	Environmental Impact Statement
EY	Evaluation Year
FAM	OSMRE’s Federal Assistance Manual
FONSI	Finding of No Significant Impact
GIS	Geographic Information System
GPS	Global Positioning System
NDCC	North Dakota Century Code (Law)
NDAC	North Dakota Administrative Code (Rules)
NDPSC	North Dakota Public Service Commission
NEPA	National Environmental Policy Act
NTTP	National Technical Training Program
OSMRE	Office of Surface Mining Reclamation and Enforcement
PAD	Problem Area Description
SMCRA	Surface Mining Control and Reclamation Act of 1977
SPGM	Suitable Plant Growth Material
TIPS	Technical Innovation and Professional Services
WR	OSMRE Western Region

B. Program Administration

The North Dakota AMLR program continues to operate under the guidelines of SMCRA, the approved State Reclamation Plan, the Federal Assistance Manual, and associated rules, regulations and policy decisions. The State administers an excellent AMLR program in full compliance with their approved AMLR Plan.

The Casper Area Office (CAO) continues to enjoy an excellent working relationship with the staff of the North Dakota AMLD. Their personnel are experienced, knowledgeable, and dedicated to the goals of the program. The AMLD also maintains a good relationship with other State and Federal agencies that must be contacted during the course of preparing projects for reclamation. The North Dakota AMLD maintains a program staff of 4.5 full time employees.

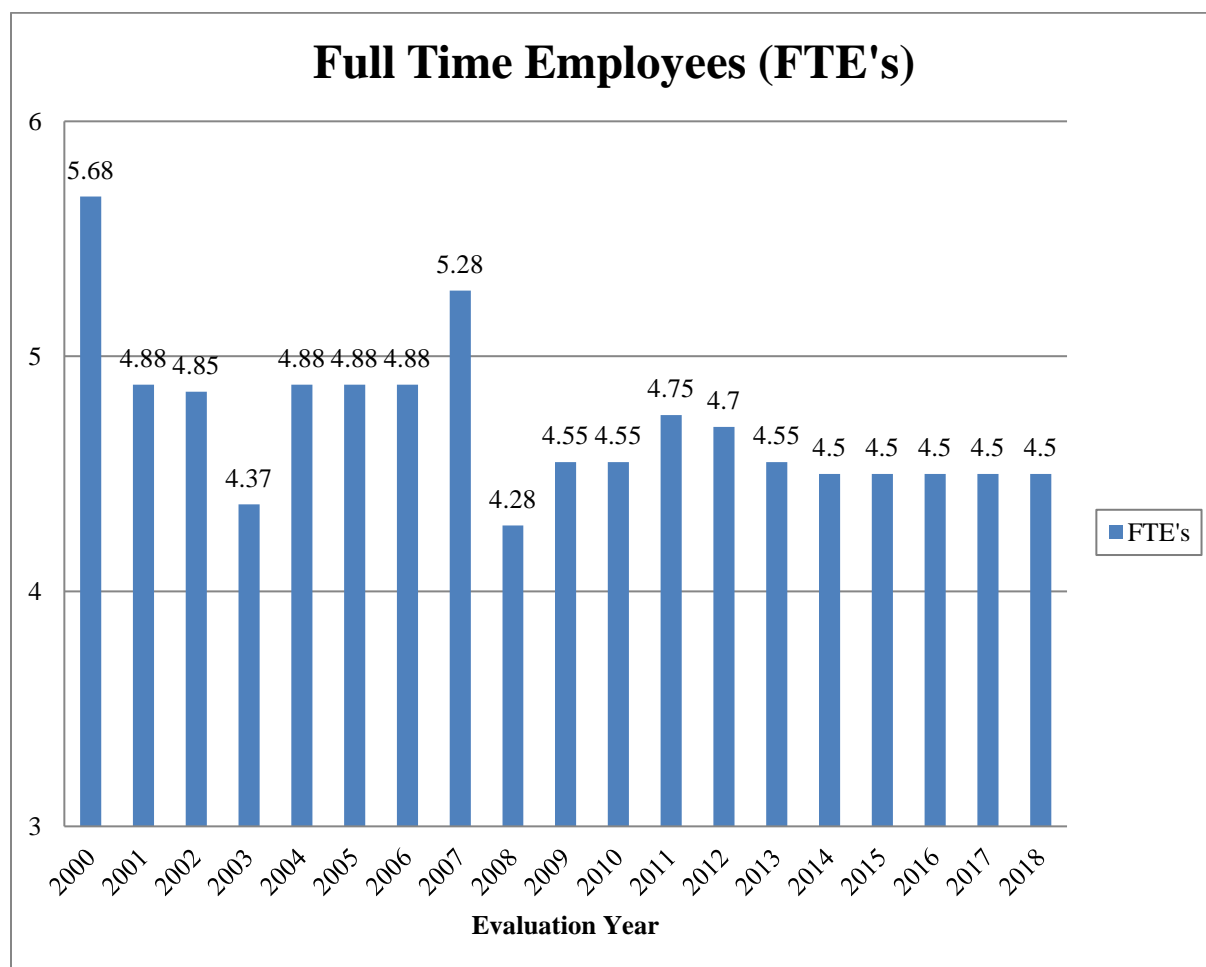


Figure 1: Number of Full Time Employees

The North Dakota AMLD initiates reclamation activities each spring as soon as weather conditions allow. Many rural sites are accessible only by dirt and gravel roads, which must be allowed to dry sufficiently before heavy equipment can travel on them. Work may start as much as two months earlier on sites located near paved roads, and then continues until halted by the

severe weather conditions usually encountered in North Dakota during the winter. However, this is generally the time of the year when future projects are designed, and coordination necessary to get projects ready for the next construction season takes place. All of the reclamation completed in North Dakota to date has been on abandoned coal mines, and no non-coal work is planned.

Prior to initiating any construction work, the AMLD submits a documentation package to the OSMRE with a request for an Authorization to Proceed (ATP). This package includes 1) a complete Environmental Assessment or Categorical Exclusion, 2) a project eligibility determination pursuant to 30 CFR 874.12 prepared by the Director of the North Dakota Reclamation and AML Divisions, 3) final determination from consultation with the U.S. Fish and Wildlife Service and the North Dakota Parks and Recreation Department regarding threatened and endangered species, 4) final determination from consultation with the State Historic Preservation Office, 5) final determination from consultation with the North Dakota Department of Health regarding the effects on surface and groundwater resources, 6) site maps and photographs, and 7) AMLIS Problem Areas Description (PAD) reports. If acceptable and complete, the CAO issues a Finding of No Significant Impact (FONSI) and an Authorization to Proceed (ATP) pursuant to section 4-160-50D.3 of the FAM to the AMLD prior to reclamation or construction of each project.

II. NOTEWORTHY ACCOMPLISHMENTS

The NDPSC continues to administer an efficient and successful AMLR program as set forth in Section 102 of SMCRA. Since the Program's inception, the North Dakota AMLD has conducted over 164 primary reclamation projects, 32 emergency projects and numerous construction maintenance and sinkhole filling projects, at a total cost of over \$53.4 million of federal funds. Almost 36 linear miles of dangerous surface mine pits and highwalls, and over 1,361 acres of underground mine subsidence have been reclaimed (source e-AMLIS database – Appendix 1, Table 2). These projects have reduced the likelihood of death or injury to property owners and the public.

The following accomplishments by the North Dakota AMLR Program during the 2018 evaluation year are worthy of note:

- North Dakota Reclamation & AML Divisions jointly purchased a drone and are currently utilizing it for aerial photography and surveying. The AML Division is also using the drone to acquire before and after photos and video of project sites.
- The AML Division completed a major revision of data in the eAMLIS database. About 11 new PADs were entered and more than 100 existing PADs were updated. This effort improves data quality, helps the AML Division prioritize future projects, and gives the public a better representation of the volume of high priority AML work remaining in North Dakota.

III. UTILIZATION OF OSMRE TECHNOLOGICAL ASSISTANCE

The OSMRE provides technical assistance and technology support to state AMLR Programs at the individual state level on project specific efforts, and at the national level in the form of national meetings, forums, and national initiatives. The OSMRE provides direct technical assistance in project and problem investigation, design and analysis, permitting assistance, developing technical guidelines, training and support. The OSMRE initiated a regional Technology Transfer Team in 2004 to support and enhance the technical skills needed to operate regulatory and reclamation programs, for which each state, including North Dakota, has a representative.

A. National Technical Training Program (NTTP)

During the evaluation year, one NDPSC AML staff member each, attended the following NTTP classes; AML Design Workshop: Dangerous Highwalls, and AML Design Workshop: Fires, and the Soils and Revegetation Instructors course. Two AML staff attended the course, AML Drilling & Grouting, one as a student and another as an instructor.

B. Technical Innovation and Professional Services (TIPs)

One NDPSC AML staff member attended the class: Introduction to GIS for Mining and Reclamation I.

C. OSMRE Western Region Library

The OSMRE Western Region's library services did not fill any requests from NDPSC for references or article reprints in EY2018.

IV. PUBLIC PARTICIPATION AND OUTREACH

The term "public" includes all stakeholders (i.e. citizenry at large, industry, other federal, state or local agencies, and environmental groups). Opportunities for public participation occur at various points in the North Dakota AML reclamation program.

A. OSMRE

The OSMRE-DFD provides for transparency in the oversight process by conducting outreach to stakeholders and encouraging public participation throughout the OSMRE-DFD's annual oversight activities. The public can find oversight guidance documents and North Dakota's Performance Agreement relating to the OSMRE's oversight of North Dakota's program on the following OSMRE website: <http://odocs.osmre.gov/>.

Each evaluation year, the OSMRE-DFD solicits input from the public and interested parties to comment on oversight and provide suggestions for potential oversight evaluation topics. Sharing of information with the public is highly encouraged by both the OSMRE and the State. The public may include a variety of stakeholders, including, but not limited to; citizenry at large, other federal, state, or local agencies, or environmental groups. OSMRE's public solicitation for

comment on the 2018 evaluation year was distributed on February 27th, 2017. OSMRE's public solicitation for comment on the 2019 evaluation year was distributed on March 5th 2018. To be included in future solicitations, please make the request by contacting the OSMRE, Denver Field Division (DFD), Casper Area Office (CAO), at 150 East B St., Room 1018, Casper, WY 82602.

B. North Dakota

The North Dakota Public Service Commission (NDPSC) is the State agency charged with the responsibility for the permitting and regulation of the coal mining industry and reclamation of abandoned mine lands in North Dakota. North Dakota continues to solicit public comment and input on individual AMLR projects and the AMLR program at large. North Dakota publishes notices for each proposed major reclamation project on North Dakota's procurement website and solicits public comment and requests for public meeting participation. The AMLD has also published a brochure about AML subsidence and routinely sends project completion reports to landowners and other interested parties.

The NDPSC maintains a web site: <http://www.psc.nd.gov/> that includes links to information on current and past AML projects, current construction bidding, project selection, department contacts, state laws and rules, consumer information, and professional procurement information.

The NDPSC encourages public participation through public meetings, public service announcements, press contacts, project meetings, and by responding to public inquiries. The NDPSC commonly hosts, or participates in a variety of public meetings, conferences, and workshops.

During the 2018 evaluation year, the North Dakota AMLR Program participated in the following public meetings, conferences, workshops or other events involving the press or public notification:

- Annual NDSU/DSU Reclamation Workshop (Dickinson)
- Staff participated in several professional related meetings.
- Staff attend and host meetings of the North Dakota Geographic Information Systems Technical Committee.
- Staff attended the NAAMLPS Annual Conference and Winter Business Meeting
- Staff attended the conference, Profitable Agriculture and Abundant Wildlife, by the North Dakota Action Group and gave a presentation entitled: Habitat Reclamation on Coal Mining Landscapes
- The Assistant Director of the North Dakota AMLR Program, was a guest speaker on KFRY radio's talk show, "Energy Matters", where he discussed the state AMLR Program. The show aired July 17th.

Public meetings conducted by NDPSC involving projects completed or started during EY2018 include:

- Jan. 16th, 2018: Public meeting held in Stanley, ND to discuss the 2018 Wilton Phase 4, Shell Lake and Williams County Road 9 Phase 6 AML Project.
- Jan. 17th, 2018: Public meeting held in Williston, ND to discuss the 2018 Wilton Phase 4, Shell Lake and Williams County Road 9 Phase 6 AML Project.
- Feb. 12th, 2018: Public meeting held in New Salem, ND to discuss the 2018 Morton County Project.
- March 27, 2018: A Pre-bid contractors meeting was held on-site for the 2018 Wilton Phase 4, Shell Lake and Williams County Road 9 Phase 6 Project.
- March 29, 2018: A Pre-bid contractors meeting was held on-site for the 2018 Morton County Project.
- April 9, 2018: A public bid opening was held for both the 2018 Wilton Phase 4, Shell Lake and Williams County Road 9 Phase 6 Project and the 2018 Morton County Projects. The event was also simulcast on the PSC webpage.

OSMRE's programmatic reviews of the North Dakota program indicate that the NDPSC is adhering to the State's policies and procedures regarding opportunities for public participation in all phases of their reclamation program.

V. RESULTS OF EVALUATION YEAR 2018 REVIEWS

OSMRE Directive AML-22 Evaluation of State/Tribe AML Programs dictates that OSMRE oversight of State AMLR programs will include a short description of all program elements reviewed during the evaluation year. These topic-specific reviews are identified and agreed to by both the State and the OSMRE in the most recent performance agreement. For the 2018 evaluation year, both parties have agreed that the OSMRE will conduct topic-specific reviews of: 1) Overall Reclamation Success, 2) AML Emergency Investigations and Abatement Efforts, 3) AML Grant Fiscal and Administrative Controls, 4) AMLIS, and 5) Public Outreach. However, since Public Outreach is already addressed in section IV of this report, a topic-specific review of Public Outreach will not be included in this section.

The North Dakota AML Performance Agreement (PA) for EY2018 was signed on June 13, 2017. The PA describes the team's purpose and the topics selected for review to evaluate the performance of the AML program. On-the-ground, performance-based results were the principal focus of program evaluation and documentation.

Results of the EY2018 evaluations are summarized below. The evaluations included field visits to AML projects, interviews with NDPSC-AMLD staff, and reviews of the AMLR Program's project specifications, grant applications and reports, and internal state and AMLIS inventories.

A. Overall Reclamation Success

Our EY2018 evaluation of overall reclamation success determined if the NDPSC-AMLD's reclamation met project goals. We compared NDPSC-AMLD's reclamation to project specifications, results of interagency consultation, and other information. Our evaluation focused on determining whether reclamation met project goals by implementing the scope of work to abate original hazards, complying with conditions (if any) resulting from interagency consultation, and improving overall site conditions compared to pre-reclamation conditions. Generally, we agreed that projects met their goals if abatement and reclamation measures are intact and functional, and no problems compromising those measures were apparent. We consider site conditions improved overall if hazards to public health and safety are abated and associated reclamation reduced environmental problems such as erosion and sedimentation while promoting re-vegetation.

We concluded that the projects we visited met their respective goals. NDPSC-AMLD met the goals of abating hazards and improving site conditions at all projects conducted during EY2018. Highwalls associated with abandoned surface coal mines were properly eliminated and the re-graded areas were re-vegetated. Underground mine voids were backfilled remotely with injection of pressurized grout through drilled injection holes to eliminate the threat of subsidence. The injection holes were properly reclaimed. Sinkholes associated with underground mine voids were properly eliminated and the backfilled areas were re-vegetated.

OSMRE conducted on-site visits of select AML projects on October 12th, 2017 and May 24th, 2018. The following completed projects were visited: the Parshall, Foxholm and Burlington Sites from the 2017 Exploratory Drilling Project, the 2017 Columbus Phase 16 Project, the Wilton Phase 3 Project, and select sinkholes from the 2017 Sinkhole Filling and Maintenance Project. The two 2018 Morton County Project sites were also visited and pre-construction conditions were recorded.

Four non-emergency AML projects were completed during EY2018. No emergency projects were conducted during EY2018.

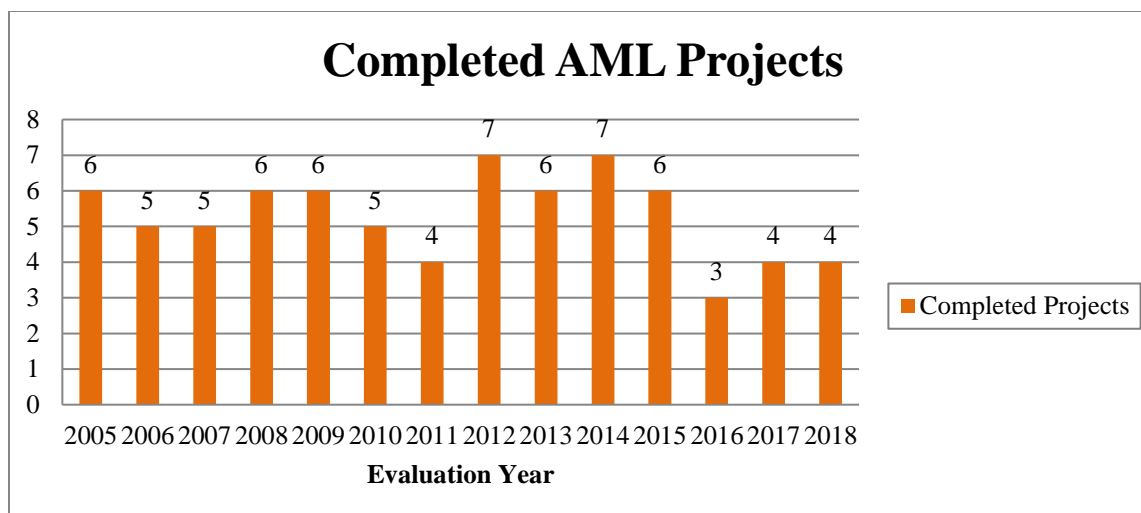


Figure 2: Number of Completed AML Projects

The following is a summary of major non-emergency AMLD Projects completed during EY2018:

2017 Wilton Phase 3 AML Project

Begin Date: 6/19/2017

End Date: 9/11/2017

AMLIS Key: ND000001

Contract Cost: \$1,283,123

NEPA Action: EA revised December 2016, ATP & FONSI issued Jan. 26, 2017

e-AMLIS Closeout: 9/11/2017

Project Summary: The 2017 Wilton Phase 3 AML Project involved drilling and pumping pressurized grout into collapsed underground mine workings in Burleigh County near Wilton, ND. During the early 1900s, this area was part of the Wilton Coal Mine, the largest underground lignite mine in the world at the time. Project areas included the right-of-way of ND State Highway 36 and a farmstead southeast of Wilton. This project was conducted from June 19th through September 11th, 2017. This project completed 25,863 feet of drilling, while using 10,650 feet of casing, and 7,868 cubic yards of grout. There were two contracts for this project, one for construction and one for material testing and the combined contract costs were \$1,283,123. Completion data for this project was entered into e-AMLIS on September 12, 2017. Contracts for this project were closed September 21, 2017.

This is a continuation of work in the Wilton area that began with the 2015 Wilton Phase 1 Project in 2015. A fourth phase of this project is scheduled to continue through the summer of 2018 as part of the Wilton Phase 4, Shell Lake, and Williams County Road 9 Phase 7 Project. For more information, NDAML produced a project summary report for this project that can be accessed at <https://psc.nd.gov/jurisdiction/aml/projects/2017.php>.



Photo 1: 2017 Wilton Phase 3 AML Project – drilling and grouting site along north side of Highway 36, facing east.

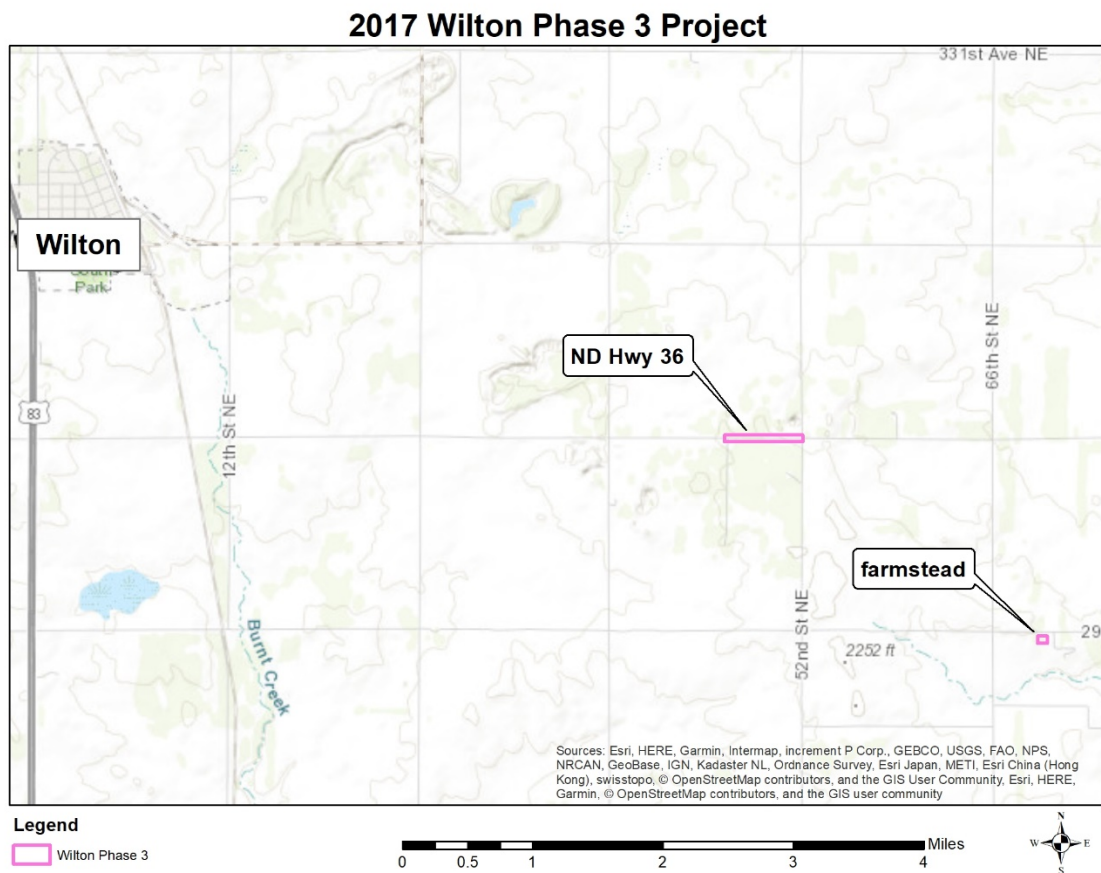


Figure 3: Location of 2017 Wilton Phase 3 AML Project

2017 Columbus Phase 16 AML Project

Begin Date: 6/19/2017

End Date: 10/4/2017

AMLIS Key: ND000031

Contract Cost: \$359,070

NEPA Action: EA revised December 2016, ATP & FONSI issued Jan. 26, 2017

e-AMLIS Closeout: 9/24/2017

Project Summary: This project involved the elimination of 5,000 feet of highwalls at three abandoned surface mines in Burke County, south of Columbus. Approximately 236,736 cubic yards of spoil material were used to backfill the highwalls and reclaim approximately 45 acres at this site. The contract cost for this project was \$359,070. Final mulching and seeding for this project took place on October 20-22, 2017 at Site 3. For more information, NDAML produced a project summary report for this project that can be accessed at

<https://psc.nd.gov/jurisdiction/aml/projects/2017.php>.



Photo 2: 2017 Columbus Phase 16 AML Project – Site 1. Facing west, shows a scraper levelling topsoil where the former pit meets active farmland.



Photo 3: 2017 Columbus Phase 16 AML Project – Site 2. Facing northeast, shows a small water feature that was incorporated into the north edge of the site.



Photo 4: 2017 Columbus Phase 16 AML Project – Site 3. Facing southwest, shows the former highwall as it grades into undisturbed land.

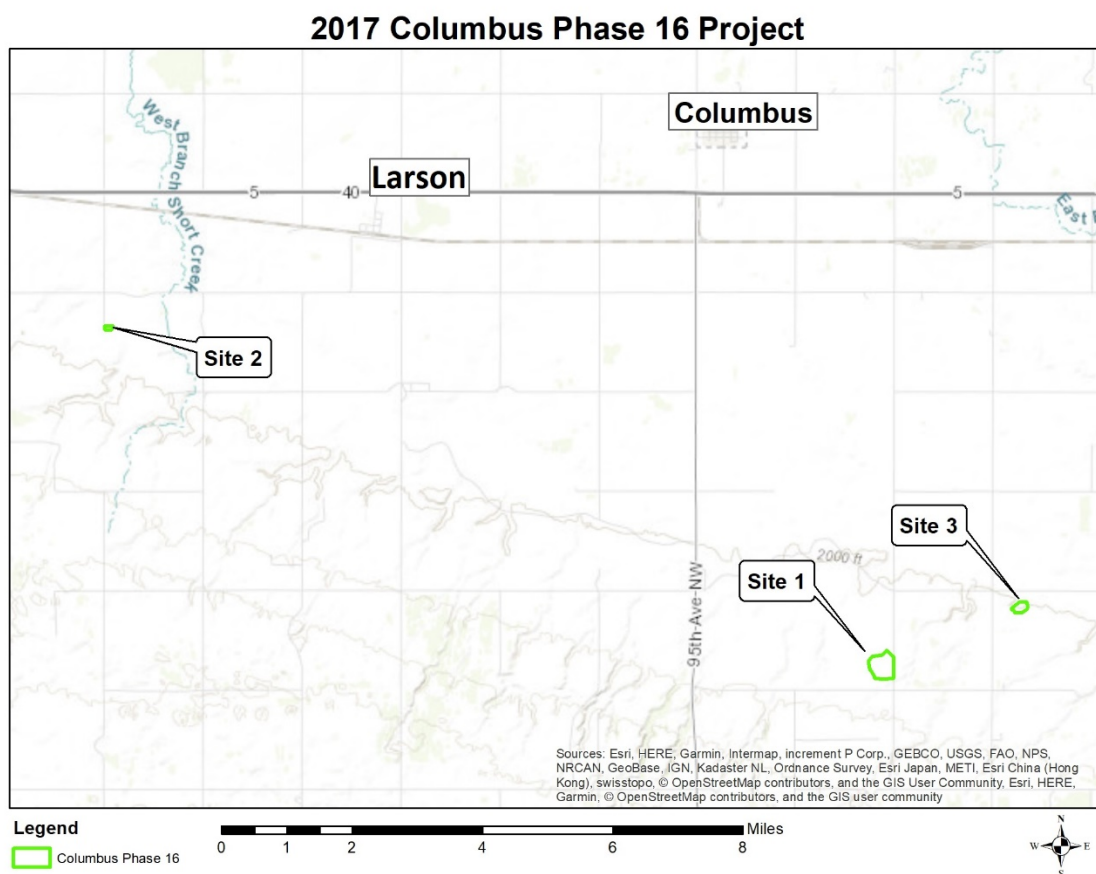


Figure 4: Location of 2017 Columbus Phase 16 AML Project

2017 Sinkhole Filling AML Project

Begin Date: 7/21/2017

End Date: 11/21/2017

AMLIS Keys: ND001, ND004, ND014, ND024, ND029, ND033, ND124

Contract Cost: \$103,990.50 during EY2018

NEPA Action: EA completed September 2016, ATP& FONSI issued February 10, 2017

e-AMLIS Closeout: Final site closed out 11/21/2017

Project Summary: This is the first year of a two-year project involving the surface backfilling of dangerous sinkholes caused by subsidence of underground mines, and re-spreading topsoil and seeding areas at a reclaimed surface mine. Construction work for the 2017 field season took place during the summer of 2017, which falls within the OSMRE 2018 evaluation year. Site locations included sixteen properties near the cities of Bowman, Williston, Hanks, Noonan, Velva, Garrison, Wilton, New Salem and Beulah, North Dakota. Approximately 163 non-emergency sinkholes were filled at these sites. The contract cost for work conducted during EY2018 was \$103,990.50. Completion data for each of the PADs where work occurred was entered into e-AMLIS October 9-November 21, 2017. For more information, NDAML produced

a project summary report for this project that can be accessed at <https://psc.nd.gov/jurisdiction/aml/projects/2017.php>.

Summary of 2017 Sinkhole Filling AML Project (EY2018)						
Sites	Dates	Twp.	Rng.	Sec	# of sinkholes	Cost
Bowman	July 21-Aug 1	132	102	15	1	\$6,237.50
Williston	Oct 11-12	154	100	17	2	\$1,875.00
Hanks	Oct 12	159	102	12	3	\$1,875.00
Noonan	Oct 12-18	162	95	9	13	\$2,870.00
Velva	Oct 16-Nov 6	152	81	28	31	\$9,750.00
Garrison	Oct 19	148	84	17	13	\$1,995.00
Wilton	Oct 24-26	142	79	5	9	\$1,463.75
				6	6	\$687.50
				15	2	\$1,125
		143	80	36	5	\$906.25
New Salem	Oct 27	139	85	15	8	\$2,093.75
Beulah	Nov 7-21	144	87	18	42	\$43,096.5
				7	28	\$30,015.25
TOTAL					163	\$103,990.50

Figure 5: Summary of the 2017 Sinkhole Filling AML Project.



Photo 5: Sinkhole filled at a site near Wilton.

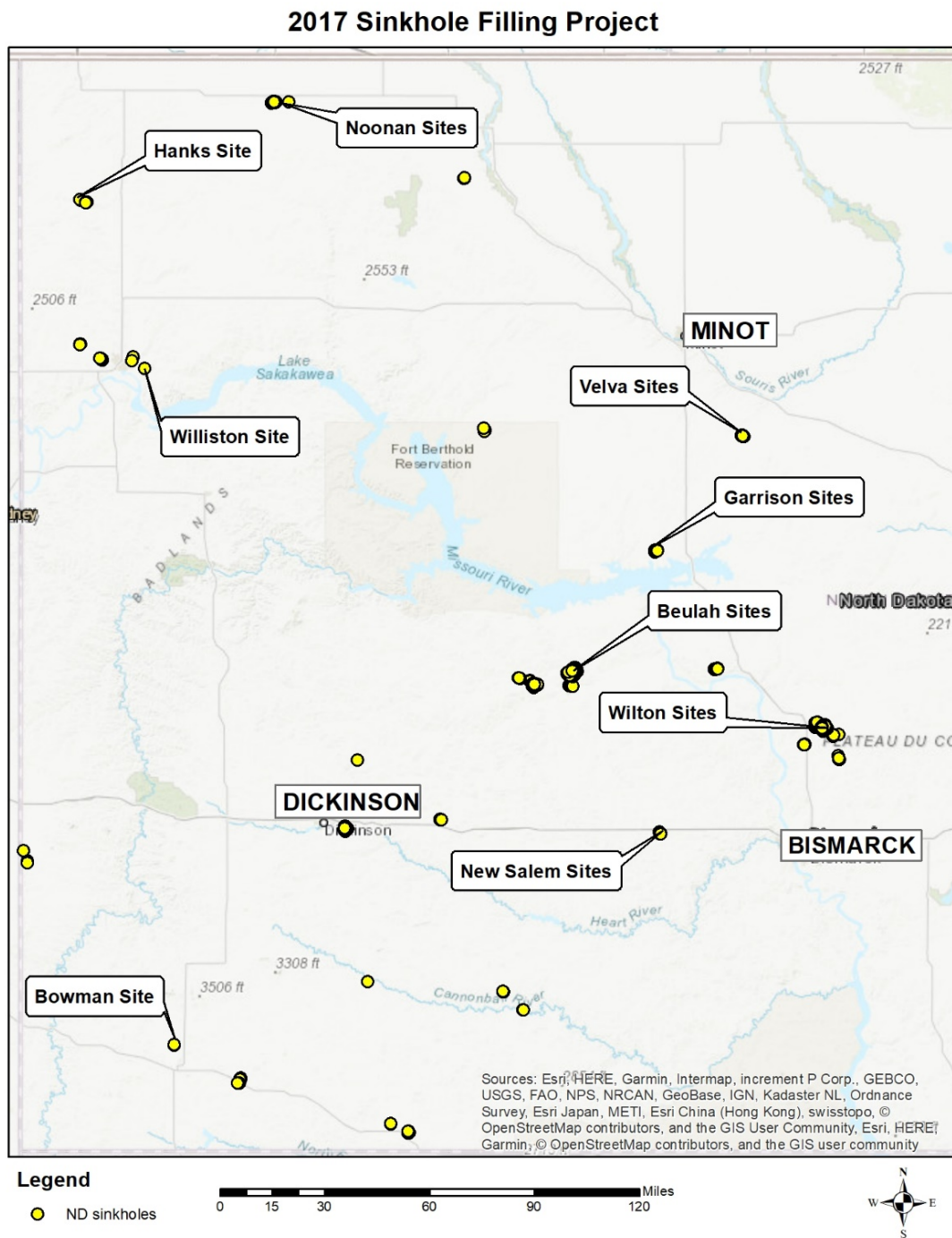


Figure 6: Location of Historic Sinkhole Filling Sites in North Dakota. Labelled sites indicate sinkholes filled as part of the 2017 Sinkhole Filling AML Project.

Project Summary: \$158,047 was used for an exploratory drilling project to locate and characterize suspected abandoned underground coal mines. This investigatory project was conducted at locations near the cities of Burlington, Foxholm, Noonan, Parshall, and Roseglen, North Dakota. An amended Categorical Exclusion Determination was issued May 16, 2017 to add an additional site in Williston. Drilling was conducted along road rights-of-way, in residential areas and near farmsteads.

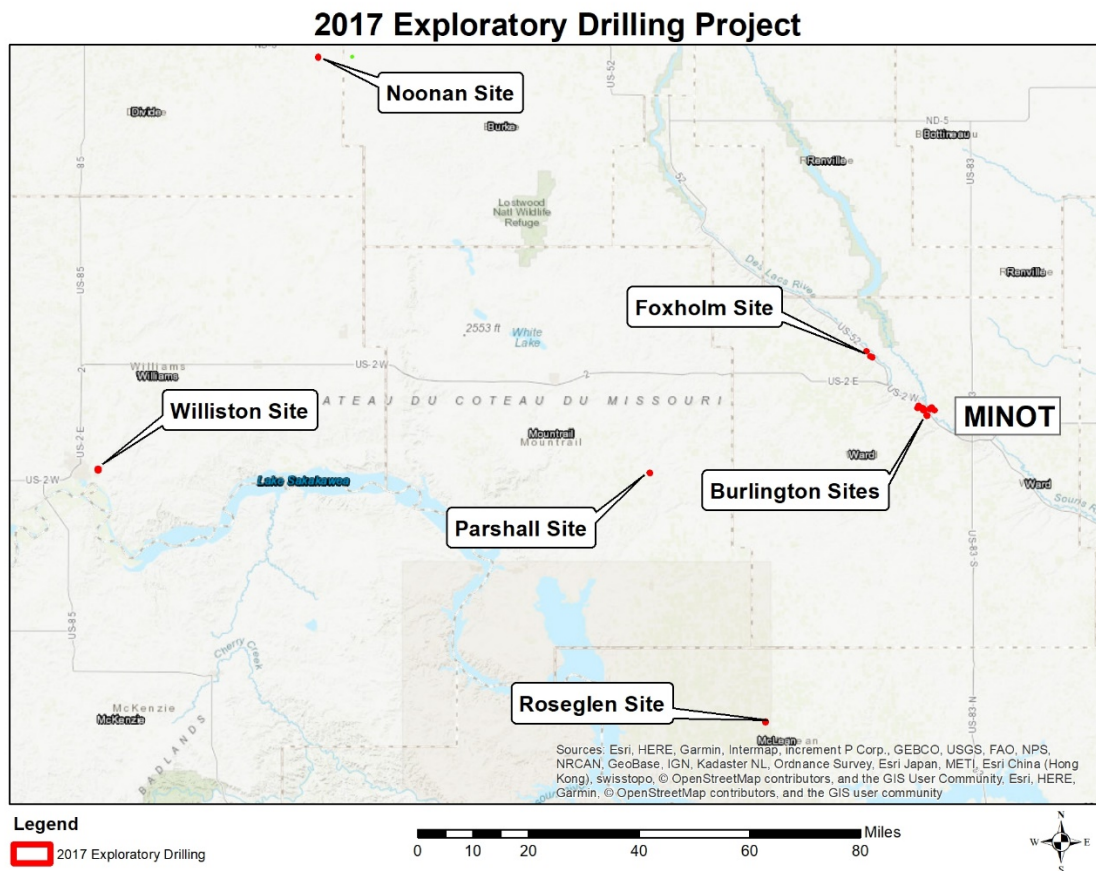


Figure 7: Location of 2017 Exploratory Drilling AML Project Sites



Photo 6: 2017 Exploratory Drilling Project – Roseglen Farm Site. Facing east, shows recently drilled boreholes along the north edge of 23rd St NW, south of Roseglen.



Photo 7: 2017 Exploratory Drilling Project – Foxholm Site #3. A properly sealed borehole near Foxholm.



Photo 8: 2017 Exploratory Drilling Project – Burlington Site # 4.

2018 Construction Ready Projects

The following is a summary of construction ready projects. These are estimates of project areas for which information is available for preliminary project design. Field construction is expected to be carried out over the summer of 2018, and completion data will be reported in OSMRE's EY2019 oversight evaluation report.

Project Site	Estimated Project Cost
2018 Wilton – Phase 4, Shell Lake and Williams Co. Rd. 9 Phase 7	\$1,600,000
2018 Morton County	\$300,000
2017-2018 Sinkhole Filling & Construction Maintenance	\$100,000
TOTAL	\$2,000,000

Figure 8: Construction Ready Projects planned for the summer of 2018 (EY2019).

2018 Wilton Phase 4, Shell Lake and Williams County Road 9, Phase 7 Project

Begin Date: June 5, 2018

Estimated End Date: October 2018

AMLIS Key: ND0000001 (Wilton), ND000210 (Shell Lake), ND000111 (Williams Co Rd 9)

Estimated Contract Cost: \$1.55 million

NEPA Action: EA for Wilton site revised January 2018, EA for Shell Lake site revised January 2018, EA for Williams Co Rd 9 site revised January 2018, ATP& FONSI issued Jan. 29, 2018

Project Summary: This project combines sites from Phase 4 of the Wilton projects, Phase 7 of the Williams County Road 9 projects and a farmstead near Shell Lake, approximately 14 miles north of Parshall, ND. These sites were combined into a single project in order to make the project more economically attractive and encourage competitive bidding among contractors. Project work involves drilling and grouting to stabilize collapsing underground mine workings. It is estimated that approximately 35,000 feet of rotary drilling, 5,000 feet of casing and 7,000 cubic feet of grout will be required. Field work is scheduled for June through October 2018.



Photo 9 (WP27): Photo shows the edge of the Wilton Phase 3 Project (Photo 1). The Wilton Phase 4 portion of this project will extend eastward along Hwy 36.

2018 Wilton Phase 4, Shell Lake, Williams County Road 9 Phase 7 Project

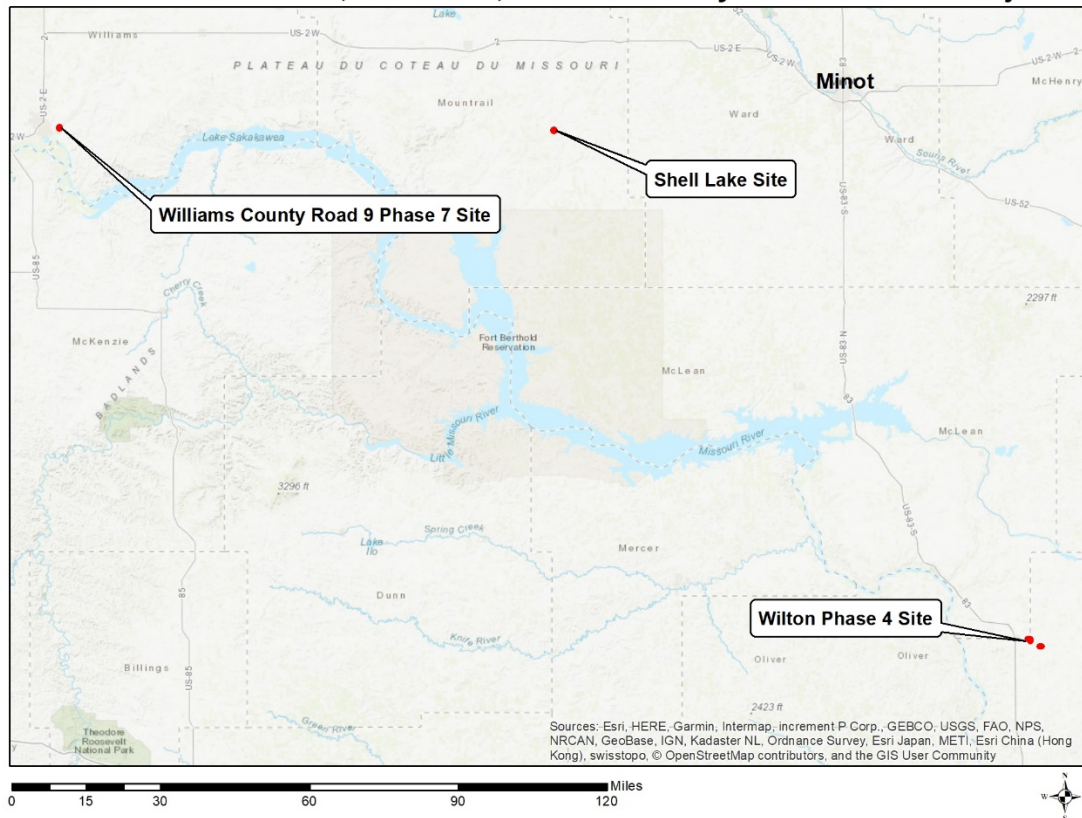


Figure 9: Location of 2018 Wilton Phase 4, Shell Lake and Williams County Road 9, Phase 7 Project

2018 Morton County Project

Begin Date: June 11, 2018

Estimated End Date: September 14, 2018

AMLIS Key: ND000212 (Morton Co – Carrick Site) ND000213 (Morton Co – Nilles Site)

Estimated Contract Cost: \$400,000

NEPA Action: EA for Morton Co- Carrick site revised January 2018, EA for Morton Co- Nilles site revised January 2018, ATP & FONSI issued 1/26/2018.

Project Summary: This project includes two sites, on approximately 36 acres, each of which is a former surface mine operation. Both sites have steep highwalls ranging from 15 to 40 feet in height that are relatively near public roads. Reclamation at these sites will require backsloping and backfilling with material from adjacent spoil piles. The project calls for the abatement of approximately 2,850 feet of highwall, requiring the movement of approximately 120,000 cubic yards of spoil. A tree planting is planned for the Carrick site to be conducted in 2019.



Photo 10: Highwalls at the Carrick site.



Photo 11: Top of highwall overlooking the Nilles site.

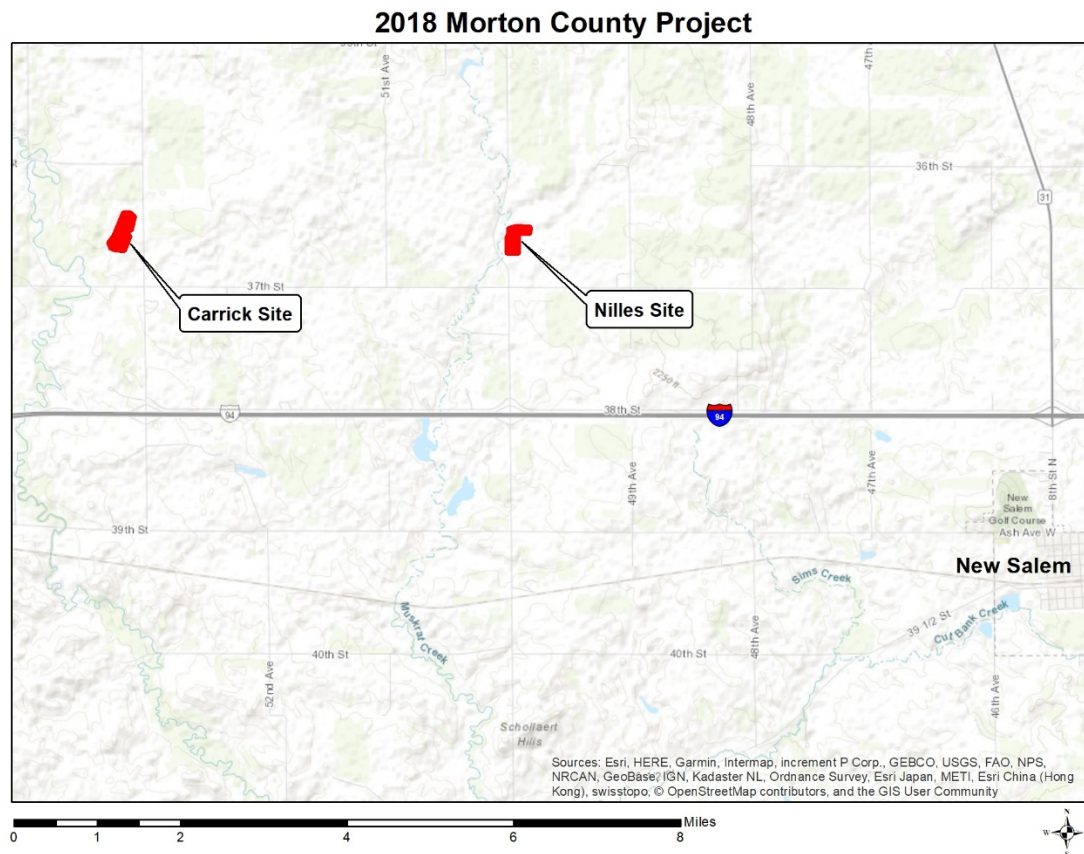


Figure 10: 2018 Morton County Project

2018 Sinkhole Filling AML Project

Begin Date: June 17, 2018

Estimated End Date: November 2018

AMLIS Keys: ND001, ND003, ND004, ND006, ND009, ND014, ND019, ND023, ND024, ND025, ND026, ND029, ND030, ND033, ND046, ND053, ND054, ND090, ND111, NS124, ND147, ND147, ND528, ND938106

Estimated Contract Cost: \$100,000

NEPA Action: EA completed September 2016, ATP& FONSI issued February 10, 2017, concurrence letter for 2018 work issued January 26, 2018

Project Summary: This is the second year of a two-year project that involves the surface backfilling of dangerous sinkholes caused by subsidence of underground mines, and re-spreading topsoil and seeding areas at a reclaimed surface mine. Construction work for the 2018 Sinkhole Filling Project will take place during the summer and fall of 2018, which falls within the OSMRE 2019 evaluation year. While it is impossible to predict exactly when and where sinkholes will occur, the EA for this project evaluates potential sites within historic mining districts, and includes areas where sinkholes have been documented in the past. Occasional

maintenance work may be required. Historic mining districts occur near the towns of Beach, Beulah, Bowman, Dickinson, Hanks, Haynes, New Salem, New Leipzig, Niobe, Noonan, Parshall, Regent, Richardton, Scranton, Velva, Washburn, Williston, Zap,

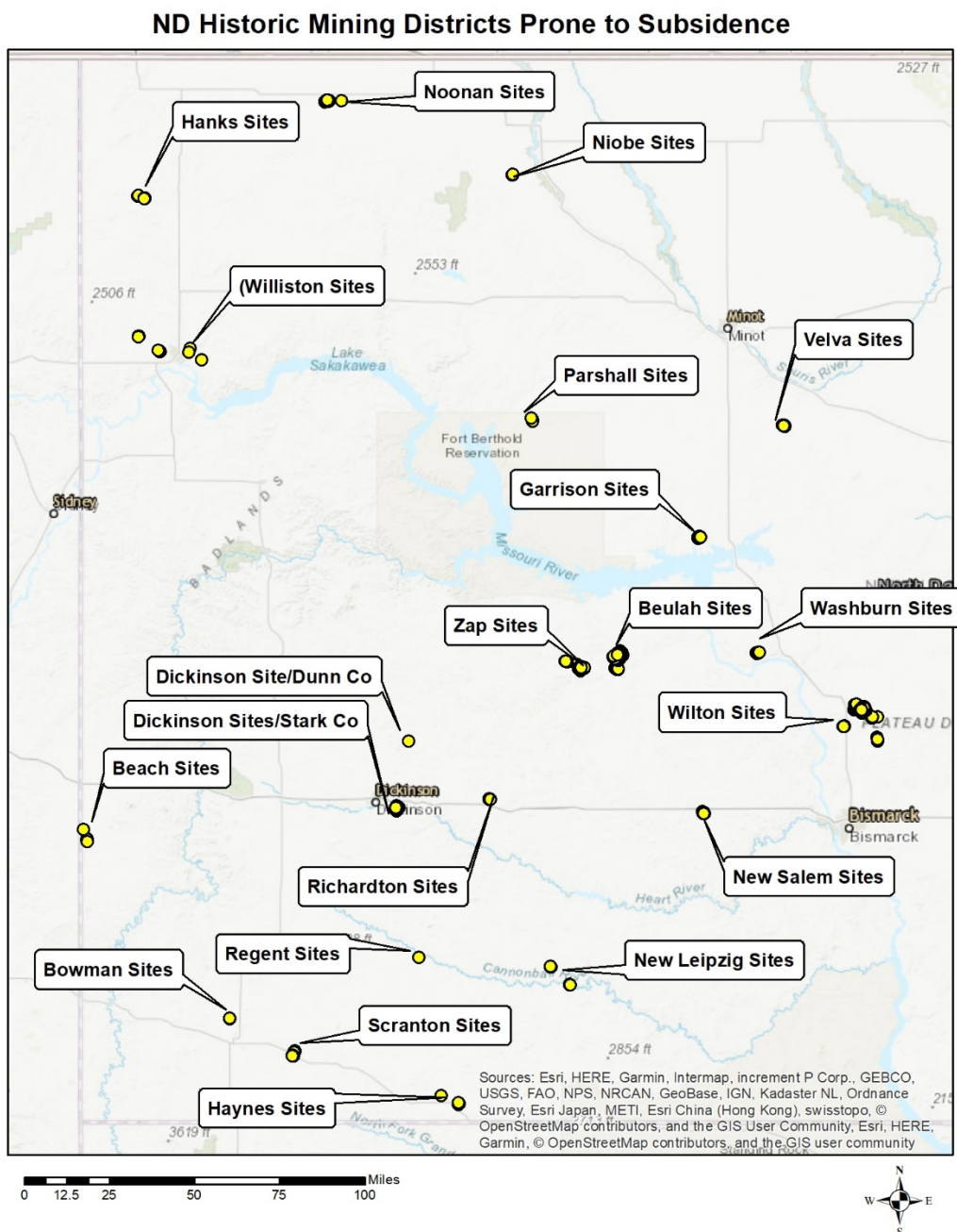


Figure 11: Location of Historic Sinkhole Filling Sites in North Dakota.

B. AML Emergency Reclamation Success

North Dakota has managed its own Emergency AML Program since OSMRE approval in 1993. OSMRE no longer distributes emergency funding with the annual AML grant allocations. North Dakota funds and operates its Emergency AML Program with in conjunction with non-emergency AML projects.

No emergency AML Project were conducted during EY2018. The 2017 Beulah Hwy 200 Emergency Project was conducted using 2018 funding, however, construction was conducted during the 2017 evaluation year. Details of this project are available in OSMRE's 2017 Oversight Evaluation Report of the North Dakota AML Program, which can be downloaded from the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. For more information, NDAML produced a project summary report for this project that can be accessed at <https://psc.nd.gov/jurisdiction/aml/emergprojects/2017.php>.

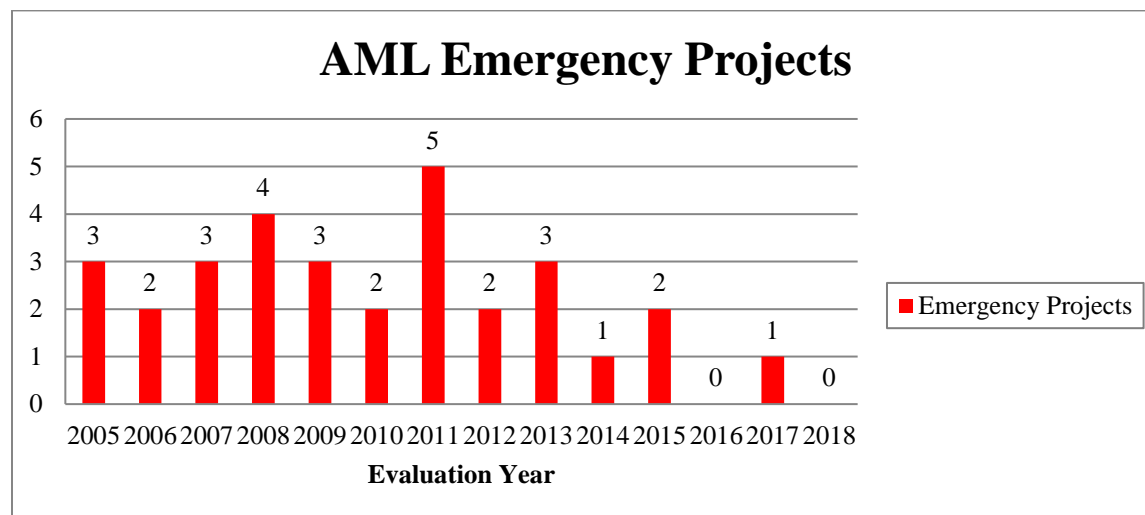


Figure 12: Number of AML Emergency Projects (2005-2018)

C. AML Grant Fiscal and Administrative Reviews

When OSMRE receives a grant application from the North Dakota AMLD, the OSMRE staff review the application package to determine compliance with programmatic requirements. This review ensures that the application meets the requirements set forth in the Federal Assistance Manual (FAM) Part 1-120-30B including the completion of forms SF-242 (Application for Federal Assistance), OSM-51 (or an equivalent program narrative), OSM-47 (or alternative format itemized budget), and Assurances Form SF-424D as appropriate. Prior to approval, the OSMRE must review the application to determine whether the State can accomplish the proposed goals in the manner and timeframe provided, and whether the State can manage the projects in compliance with federal laws and regulations. Section 1-150-30 of the FAM also prescribes how the OSMRE will monitor program performance.

The North Dakota AMLD was allocated \$2,793,000 dollars for their fiscal year 2017 grant period, beginning March 1, 2017. Grant No. GR707380 (S17AF20030) began on March 1, 2017 and is scheduled to end on February 28, 2020.

The North Dakota AMLD was allocated \$2,802,000 dollars for their fiscal year 2018 grant period, beginning March 1, 2018. Grant No. GR807380 (S18AF20032) began on March 1, 2018 and is scheduled to end on February 28, 2021. All projects conducted during the grant periods are anticipated to involve the reclamation of abandoned surface and underground coal mines.

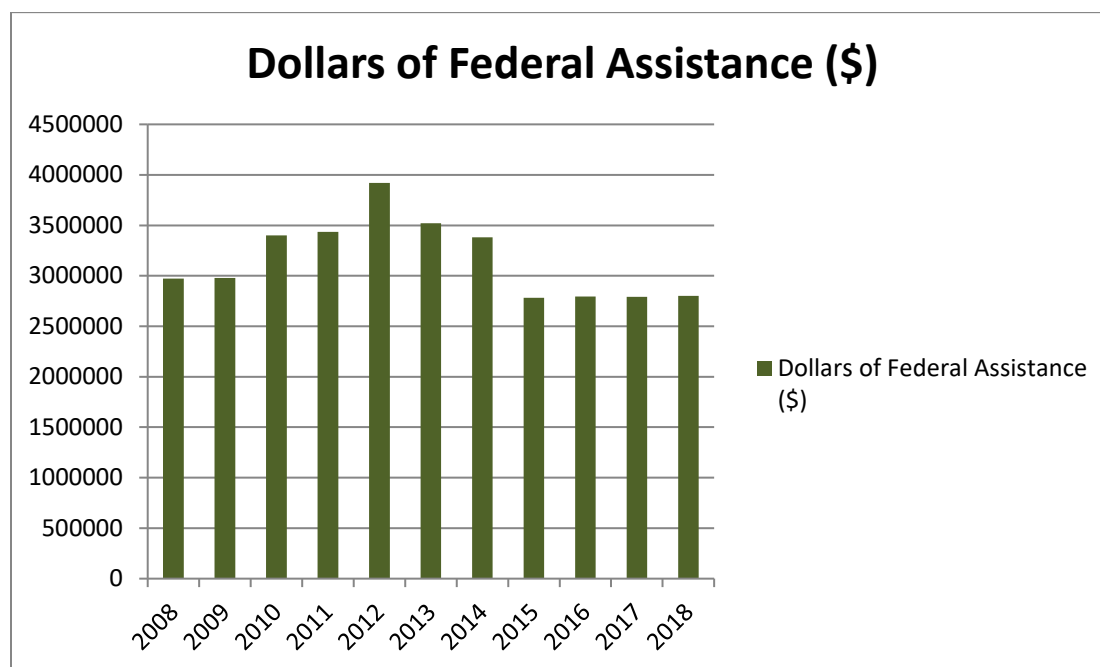


Figure 13: Amount of Federal Assistance Allocated to North Dakota (2008-2018)

The ND PSC maintains a very cost effective program with only 14% of the grant dedicated to Administrative Costs. The remainder of the grant is spent on project design and construction.

The grant funding and expenditures are broken down as follows:

Table 1. AML Consolidated Grant Funding and Expenditures

2017 AML Consolidated Grant (S17AF20030)

Minimum Program Makeup	\$1,361,327
State Share (SS)	\$1,042,668
Historic Coal Funds (HC)	<u>\$389,005</u>
Total	\$2,793,000

Grant Line Item Budgets

Administrative Costs	\$396,226
Project Construction Costs	<u>\$2,399,774</u>
Total	\$2,793,000

2018 AML Consolidated Grant (S18AF20032)

Minimum Program Makeup	\$1,073,641
State Share (SS)	\$1,064,052
Historic Coal Funds (HC)	<u>\$664,307</u>
Total	\$2,802,000

Grant Line Item Budgets

Administrative Costs	\$395,700
Project Construction Costs	<u>\$2,406,300</u>
Total	\$2,802,000

D. e-AMLIS

The North Dakota AMLD compiles data from various sources for input into e-AMLIS. These sources include project information spreadsheets, project diaries, closeout reports to the PSC and PSC-approved payment of contractor invoices. Data pertaining to emergency projects include procurement and contract data compiled in Project Summary Books, site-specific project data and site photographs. Project completion data is tracked on an Excel spreadsheet. Information in the spreadsheet includes the project name, location, contract number, contractor name, year of contract, year of completion, cost and method of reclamation. Designated AMLD Project Managers enter information into e-AMLIS. This information is based on the above-mentioned data sources.

OSMRE's EY2018 evaluation of e-AMLIS determined if the information the State entered into e-AMLIS agrees with information in its files. This topic was mandated for review due to a September 2004 report issued by the Interior's Office of the Inspector General (OIG). The report criticized the accuracy of e-AMLIS data, based on the OIG review of e-AMLIS data for four eastern States' AML programs. The OIG's review concluded that e-AMLIS data did not match data in those States' files and recommended establishing "a quality control system that ensures that States, Tribes, and the OSMRE, as applicable, review and certify the accuracy of data entered into AMLIS." In response to the OIG's recommendation, the OSMRE required its field offices to implement two requirements. The first requirement is to "assure that each State and Indian Tribe AML program has procedures in place to ensure and certify the accuracy of data entered into e-AMLIS" as part of the FY2004 oversight (subsequently changed to FY2005). OSMRE Headquarters subsequently advised field offices to drop the certification requirement. As a result, the focus is to make sure States and Tribes have requisite systems in place. The

CAO has determined that North Dakota has such a system in place that is adequate to ensure accurate data is entered into e-AMLIS.

The second requirement implemented by the OSMRE in response to the OIG's recommendation stated, "once these State and Indian Tribe procedures are in place, the OSMRE will annually review a random sample of [PADs] to see if the information entered into e-AMLIS agrees with the information in the PAD." The CAO has reviewed a random sample of PADs and is satisfied that all information entered into e-AMLIS agrees with the information in the PAD.

APPENDIX 1: SUMMARY OF CORE DATA TO CHARACTERIZE THE AML PROGRAM

North Dakota Annual Evaluation Report

Evaluation Year 2018

The following tables present summary data pertinent to abandoned mine land activities under the North Dakota AML program. Unless otherwise specified, the reporting period for the data contained in the tables is the Evaluation Year. Other data and information used by OSMRE in its evaluation of North Dakota performance are available for review in the evaluation file maintained by the DFD-CAO.

Because of the enormous variations from state to state and the differences between state programs, the summary data should not be used to compare one state to another.

List of Tables

Table 1	Status of AML Inventory All Priority 1, 2, and 3 Hazards
Table 2	Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 1 and 2 Hazards
Table 3	Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 3 and SMCRA Section 403(b) Hazards
Table 4	Public Well-Being Enhancement
Table 5	Partnership Financial Resources Dedicated to Protecting the Public from Adverse Effects of Past Mining
Table 6	Reclamation Projects Started and/or Completed
Table 7	AML Program Grant Awards and Staffing

Table 1 – North Dakota Status of AML Inventory all Priority 1, 2, and 3 Hazards on June 30, 2018

	High Priority		Elevated Priority 3	Stand-Alone Priority 3 (Not adjacent or in conjunction w/ P1&2)	Total
	Priority 1	Priority 2			
UNFUNDED					
GPRA Acres	0	7151.6	N/A	2986	10137.6
Dollars	0	40754374	N/A	105000	40859374
FUNDED					
GPRA Acres	0	35.8	0	0	35.8
Dollars	0	252400	0	0	252400
COMPLETED					
GPRA Acres	253	4341.46	0	1379	5973.46
Dollars	3219087.5	50220646	0	5	53439738.5

Table 2 - North Dakota Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 1 and 2 Hazards (As of June 30, 2018)

PROBLEM TYPE (keyword)																		
	Clogged Stream (CS) (miles)	Clogged Stream Lands (CSL) (acres)	Dangerous Pile or Embankment (DPE)(acres)	Dangerous Highwall (DH) (feet)	Dangerous Impoundment (DI) (count)	Dangerous Slide (DS) (acres)	Gases: Hazardous /Explosive (GHE) (count)	Hazardous Equip. /Facilities (HEF) (count)	Hazardous Water Body (HWB) (count)	Industrial/Residential Waste (IRW) (acres)	Portal (P) (count)	Polluted Water:Agri/Industrial (PWA)(count)	Polluted Water: Human Consumption (PWHC)(count)	Subsidence (S) (acres)	Surface Burning (SB) (acres)	Underground Mine Fire (UMF) (acres)	Vertical Opening (VO) (count)	TOTAL
UNRECLAIMED/REMAINING HAZARDS (Unfunded)																		
Units			0	124850	0	0		5	25	14	1	1	1	5196.9				N/A
GPRA Acres			0	1805.1	0	0		0.5	125	14	0.1	5	5	5196.9				0
Dollars			0	1.8E+07	0	0		25000	20000	35000	10000	208700	7500	22162336				0
ANNUAL RECLAMATION - EY2018 only (Completed)																		
Units				5000										5.4				N/A
GPRA Acres				71.4										5.4				76.8
Dollars				359070										1502726				1861796
HISTORICAL RECLAMATION - EY1978 - 2018 (Completed)																		
Units			317	190003	4	35		14	18	2	13	6	0	1361.35				N/A
GPRA Acres			317	2714.34	20	35		1.4	90	2	1.3	36	0	1355.15				0
Dollars			972048	1.8E+07	33629	122500		74861	278558	2	16003	746144	0	32655792				0

Table 3 - North Dakota Accomplishments in Eliminating Environmental Problems Related to Past Mining Priority 3 and SMCRA section 403(b) Hazards (As of June 30, 2018)

PROBLEM TYPE (keyword)														
	Bench , Solid Bench, Fill Bench (BE) (acres)	Industrial/Residential Waste Dump (DP) (acres)	Equipment and Facilities (EF) (count)	Gob (GO) (acres)	Highwall (H) (feet)	Haul Road (HR) (acres)	Mine Opening (MO) (count)	Pit, Open Pit, Strip Pit (PI) (acres)	Spoil, Spoil Bank (SA) (acres)	Slurry (SL) (acres)	Slump (SP) (acres)	Water (WA) (gallons)	Other (specify)	Water Supplies (WS) – Section 403(b) (count)
														TOTAL
UNRECLAIMED/REMAINING HAZARDS (Unfunded)														
Units				1					2975			10		N/A
GPRA Acres				1					2975			10		0
Dollars				5000					70000			105000		0
ANNUAL RECLAMATION - EY2018 only (Completed)														
Units														N/A
GPRA Acres														0
Dollars														0
HISTORICAL RECLAMATION - EY1978 - 2018 (Completed)														
Units				0					1379			0		N/A
GPRA Acres				0					1379			0		0
Dollars				0					5			0		0

**Table 4 – North Dakota Public Well-Being Enhancement
(All Priority 1, 2, and 3 AML projects completed during EY 2018)**

#	PAD Number	Project Name	Problem Type(s) Reclaimed	GPRA Acres	Cost	Number of People with Reduced Exposure Potential (State Estimated /or/ Census Data)
1	ND000031	2017 Columbus Phase 16 AML Project	Dangerous Highwal (DF	71.4	359070	95
2	ND000001	2017 Wilton Phase 3 AML Project	Subsidence (S)	3.1	1240688	840
3	ND000008	2017 Exploratory Drilling AML Project-Roseglen Site	Subsidence (S)	0	34198	13
4	ND000029	2017 Exploratory Drilling AML Project-Noonan Site	Subsidence (S)	0	25043	7
5	ND000088	2017 Exploratory Drilling AML Project-Burlington Sites	Subsidence (S)	0	37805	51
6	ND000111	2017 Exploratory Drilling AML Project-Williston Site	Subsidence (S)	0	29960	15
7	ND000210	2017 Exploratory Drilling AML Project-Parshall Site	Subsidence (S)	0	22313	11
8	ND000211	2017 Exploratory Drilling AML Project-Foxholm Sites	Subsidence (S)	0	8727	18
9	ND000001	2017-2018 Sinkhole Filling AML Project-Wilton Site	Subsidence (S)	0.1	4183	5
10	ND000004	2017-2018 Sinkhole Filling AML Project-Velva Site	Subsidence (S)	0.6	9750	5
11	ND000014	2017-2018 Sinkhole Filling AML Project-Beulah Site	Subsidence (S)	1	73112	5
12	ND000019	2017-2018 Sinkhole Filling AML Project-Garrison Site	Subsidence (S)	0.1	1995	5
13	ND000029	2017-2018 Sinkhole Filling AML Project-Noonan Site	Subsidence (S)	0.1	2870	5
14	ND000033	2017-2018 Sinkhole Filling AML Project-Bowman Site	Subsidence (S)	0.1	6238	5
15	ND000054	2017-2018 Sinkhole Filling AML Project-New Salem Site	Subsidence (S)	0.1	2094	5
16	ND000111	2017-2018 Sinkhole Filling AML Project-Williston Site	Subsidence (S)	0.1	1875	5
17	ND000147	2017-2018 Sinkhole Filling AML Project-Hanks Site	Subsidence (S)	0.1	1875	5
TOTAL				76.8	1861796	1095

Table 5 – North Dakota – Partnership Financial Resources Dedicated to Protecting the Public from Adverse Effects of Past Mining (AML projects completed during EY 2018)

#	PAD Number	Project Name	SMCRA Program Funding Source	Total SMCRA funding	Alternate Non-SMCRA Funding Source	Total non-SMCRA Funding	In-Kind Services	Total Project Funding	Comments
1	NA								
TOTAL				0		0	0	0	

**Table 6 – North Dakota – Reclamation Projects Started and/or Completed
During EY 2018**

Project Type	Projects Started	Projects Completed
State/Tribe (EY 2018):	4	4
Federal (EY 2018):	0	0
Total (EY 2018):	4	4

**Table 7 – AML Program Grant Awards and Staffing
North Dakota
AML Program Grant Awards and Staffing
(During EY 2018)**

AML Program Costs	
Administration	\$395,700
Construction	\$2,406,300
Water Supply Construction	0
AMD Set-Aside	0
Other(s) (Specify)	0
Total AML Funding	\$2,802,000
AML Program Staffing (full-time equivalents on June 30, 2018):	4.5

APPENDIX 2: COMMENTS FROM STATE OF NORTH DAKOTA ON THE REPORT

North Dakota Annual Evaluation Report

Evaluation Year 2018

North Dakota had the following comments on the EY2018 Report:

The North Dakota AML Division responded via email with comments and suggestions for improvement on Sept. 25, 2018. Aside from suggested corrections to spelling and grammar, the following comments have been incorporated into the final report:

- Updates were suggested for the “Noteworthy Accomplishments” listed on Page 4.
- Minor corrections, including updated volumes were included for two project summaries and a one construction ready project.

The OSMRE Casper Area Office would like to thank the staff of the North Dakota AML Division for their assistance and cooperation in gathering the information required to produce this report.