

September 29, 2022

RECEIVED

OCT - 3 2022

Ms. Joan Breiner
Assistant Director
Abandoned Mine Lands Division
Public Service Commission
600 East Boulevard Avenue
Dept 408
Bismarck, ND 58505-0408

NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Subject: 2022 Proposed Mine Reclamation Projects

Ms. Breiner,

The North Dakota Department of Environmental Quality has reviewed the proposed sinkhole filling reclamation projects summarized in your September 2, 2022, letter. The reclamation areas where sinkholes occur have been mapped in relation to aquifers, wellhead protection areas, and existing wells (maps attached).

It is our understanding that you plan on using borrowed material to fill the sinkholes. Reclamation activities should be conducted in a manner that minimizes potential impacts to water supply wells located in the vicinity of the sites.

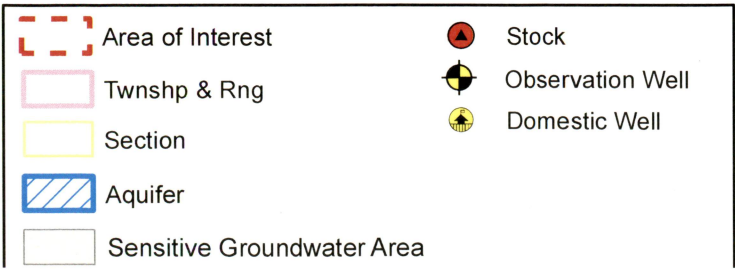
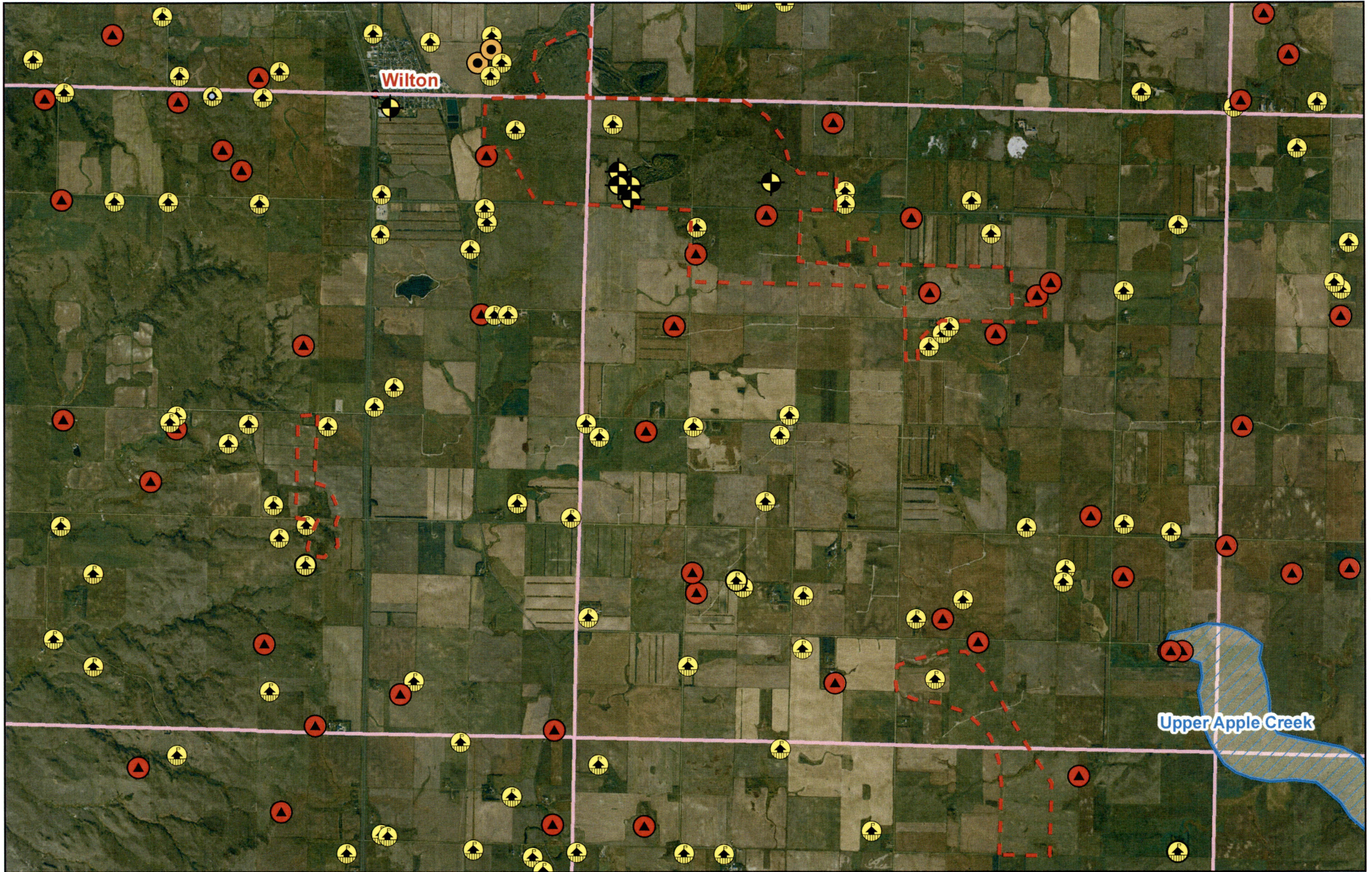
We appreciate the opportunity to review the planned reclamation activities. If you have any questions, please contact me at 701-328-5213.

Sincerely,

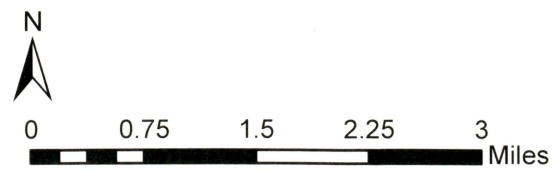


Carl Anderson
Groundwater Protection Manager
NDDEQ – Division of Water Quality

31 AM-21-143 Filed 09/29/2022 Pages: 34
Response to Request for Auth. to Proceed for Sinkhole Filling Projects - electronic only
North Dakota Department of Environmental Quality (DEQ)
Carl Anderson

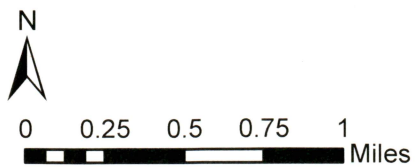


2022 Sinkhole Filling Project
Wilton (ND001)
Multiple TRS
Burleigh
ND PSC AML Division



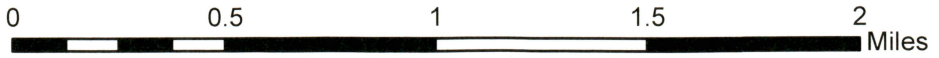
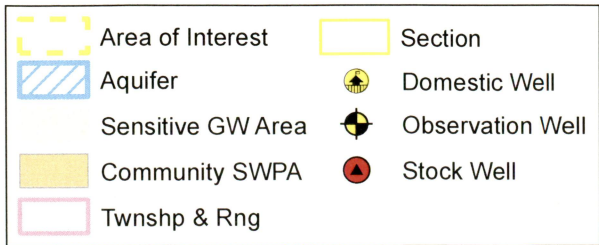


- Area of Interest
- Twnshp & Rng
- Section
- Domestic Well
- Stock
- Observation Well



**2022 Sinkhole Filling Project
Buechler (ND004)**

T151N R81W, T152N R81W, T152N R82W
Ward
ND PSC AML Division

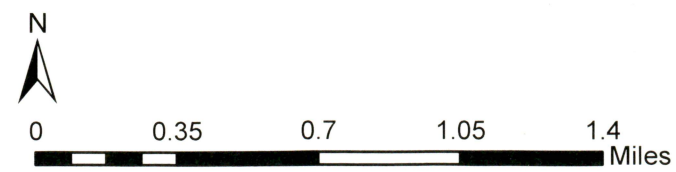


2005-2016 Sinkholes

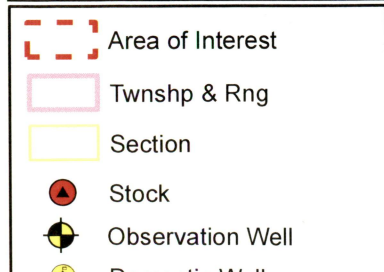
West of Washburn, ND
 McLean County
 ND PSC AML Division



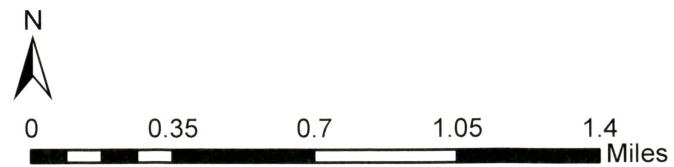
- Area of Interest
- Twnshp & Rng
- Section
- ▲ Stock
- Observation Well
- Domestic Well

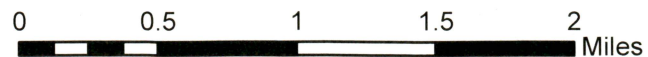
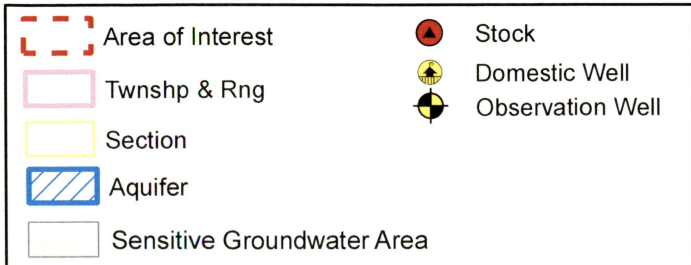


2005-2016 Sinkholes
 South of Beach, ND
 Golden Valley County
 ND PSC AML Division
 T138N R106W Sec. 14



2005-2016 Sinkholes
South of Beach, ND
Golden Valley County
ND PSC AML Division
T138N R106W Sec. 14





2022 Sinkhole Filling Project Coal Lake (ND012)

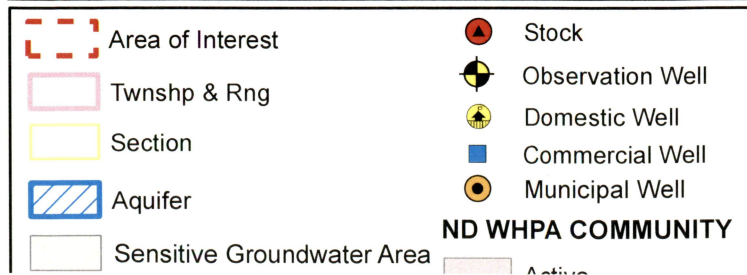
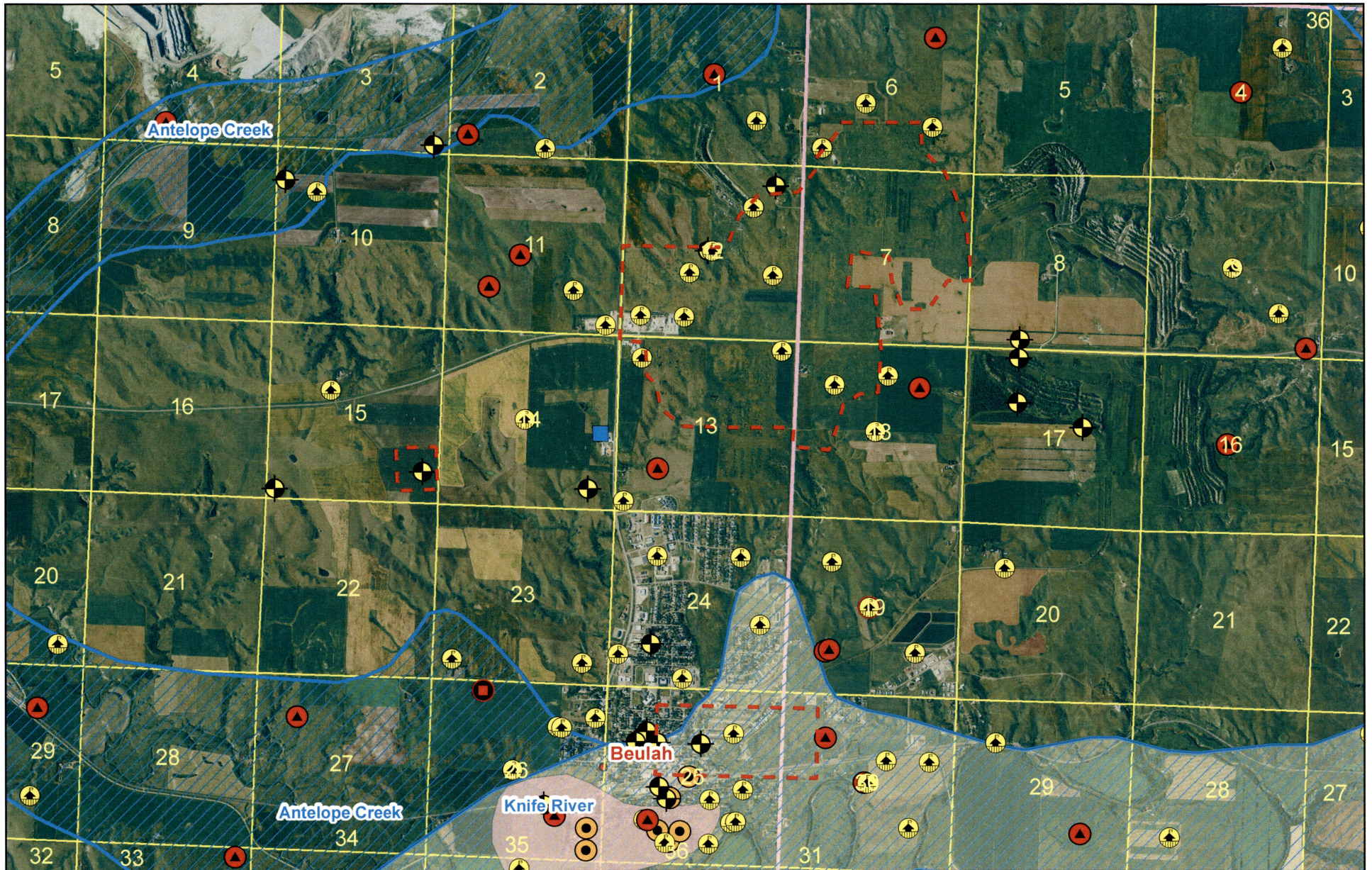
T147N R81W Sec. 34, T146N R82W Sec 13

McLean

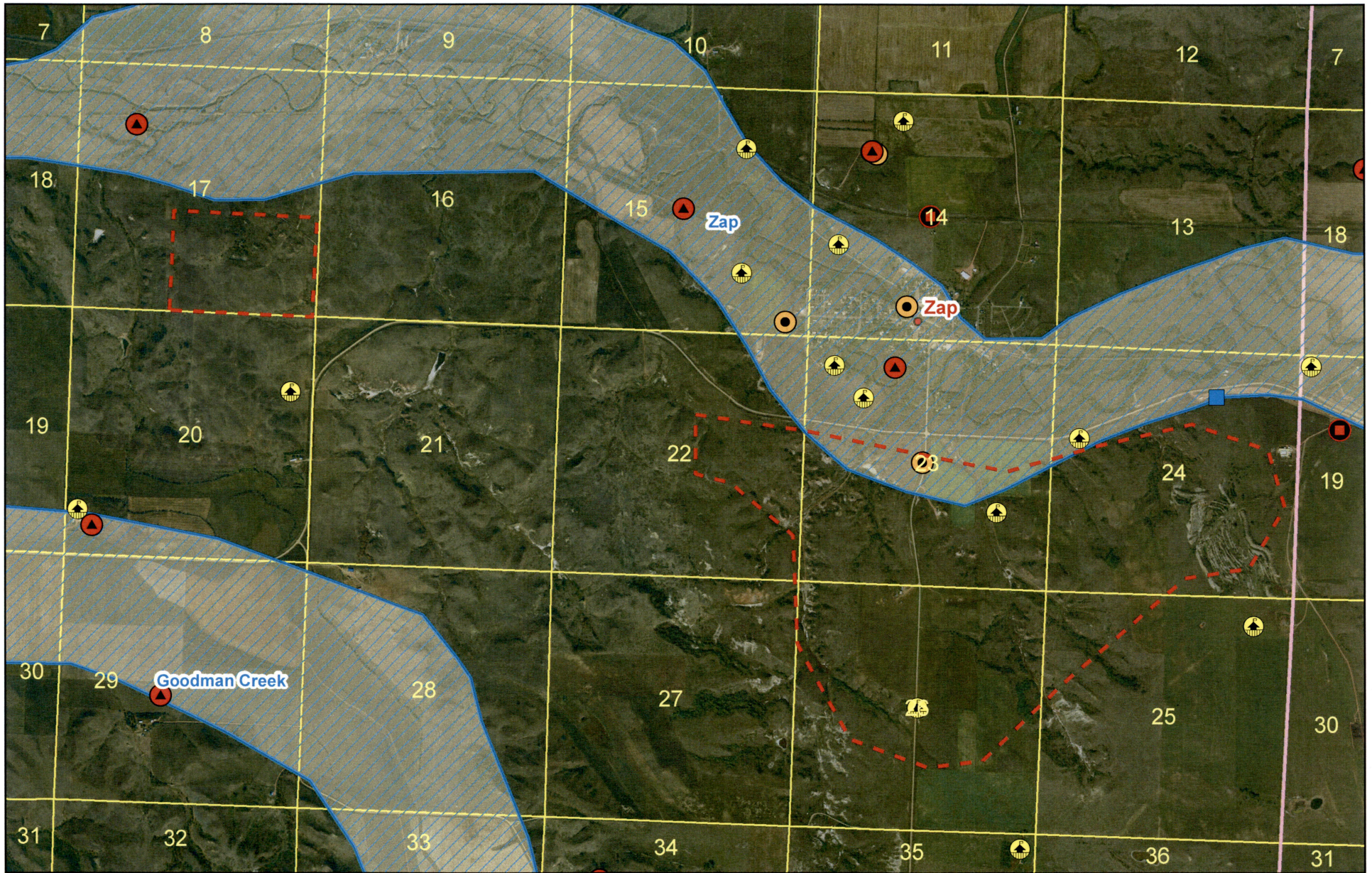
ND PSC AML Division

9/12/2022

P. Olson



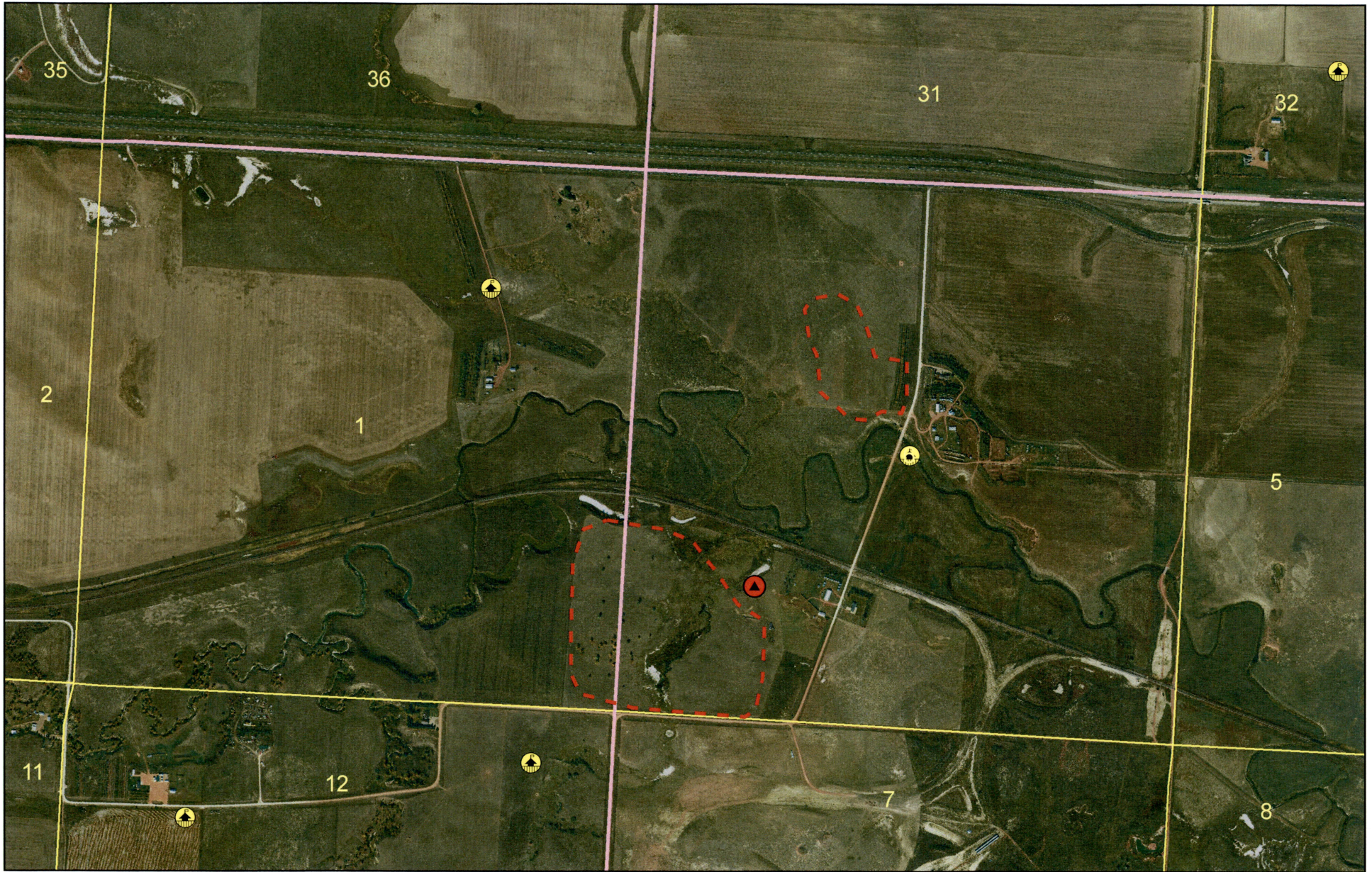
2005-2016 Sinkholes
 Beulah, ND
 Mercer County
 ND PSC AML Division
 T144N R87W, T144N R88W



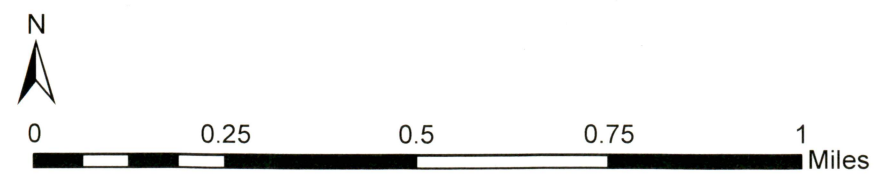
2022 Sinkhole Filling Project Zap (ND014)

T144N R89W Sec. 17,22, 23, 24, 25, 26
Mercer
ND PSC AML Division

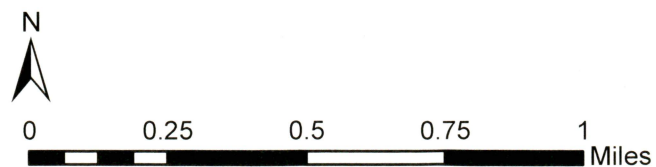
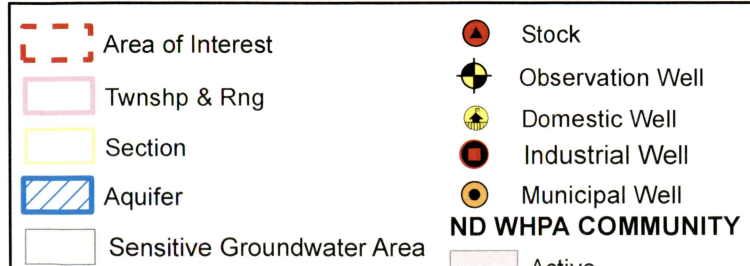
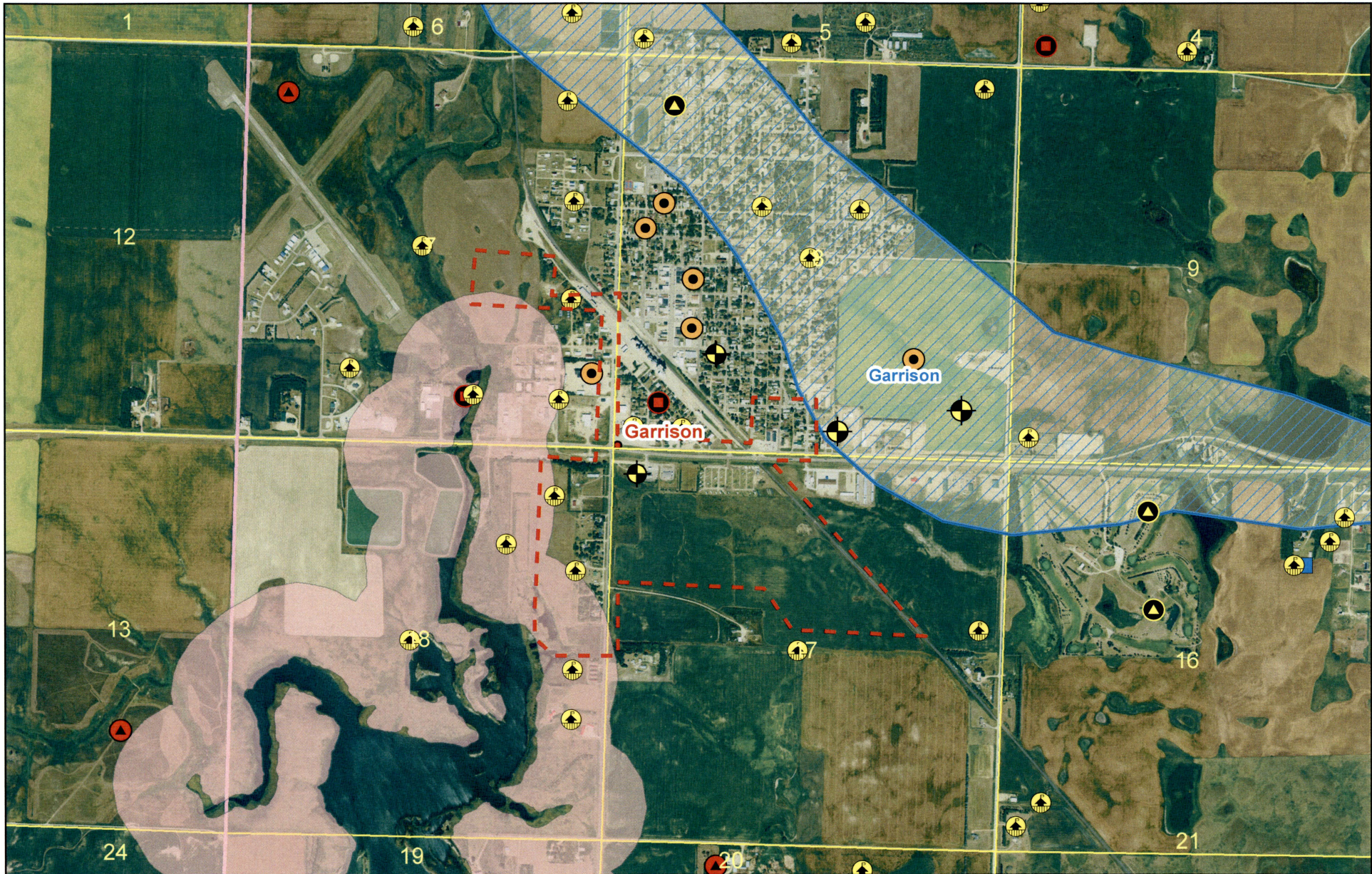
9/12/2022
P. Olson



- Area of Interest
- Twnshp & Rng
- Section
- ▲ Stock
- Domestic Well



2022 Sinkhole Filling Project
Zenith (ND016)
 T139N R98W Sec. 6
 Stark
 ND PSC AML Division

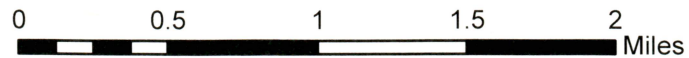
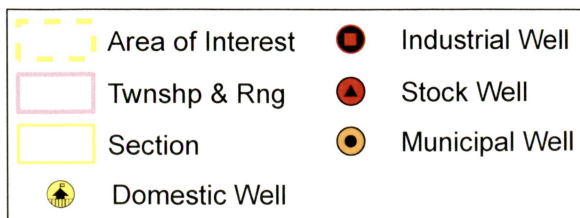


2005-2016 Sinkholes
 Garrison, ND
 McLean County
 ND PSC AML Division
 T148N R84W



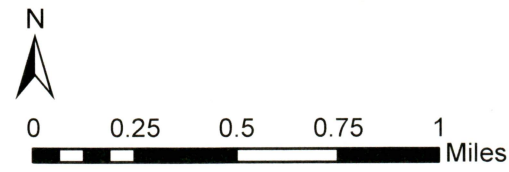
Underground Abandoned Mine Locations

Havelock, ND
 Hettinger County
 ND PSC AML Division

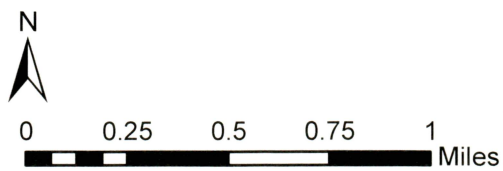
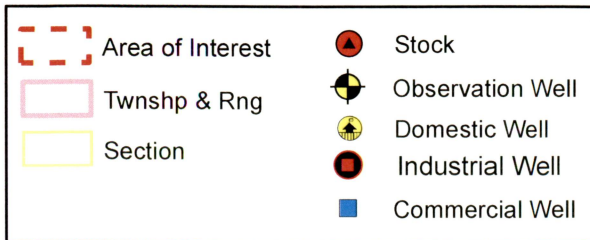




- Area of Interest
- Twnshp & Rng
- Section
- ▲ Domestic Well
- ▲ Stock
- Municipal Well



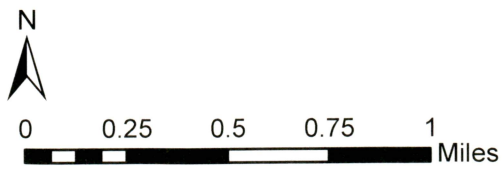
2005-2016 Sinkholes
 West of Regent, ND
 Hettinger County
 ND PSC AML Division
 T134N R95W



2005-2016 Sinkholes
East of Dickinson, ND
Stark County
 ND PSC AML Division
 T139N R95W



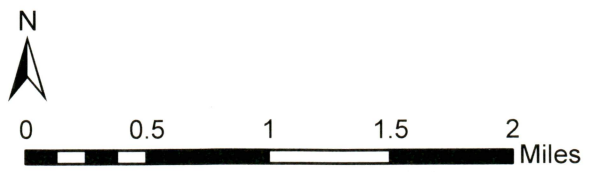
- Area of Interest
- Twnshp & Rng
- Section
- Domestic Well
- Stock
- Municipal Well



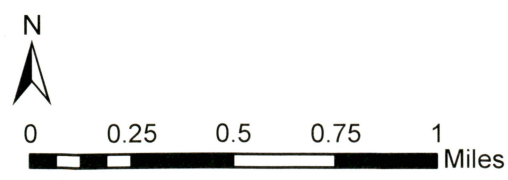
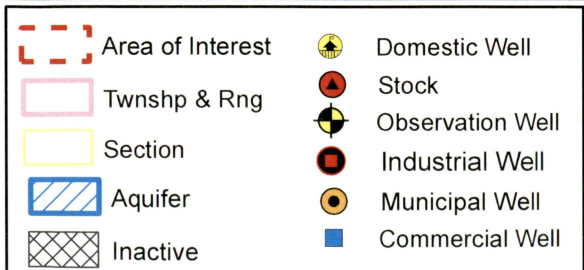
2005-2016 Sinkholes
 North of Richardton, ND
 Stark County
 ND PSC AML Division
 T139N R92W, T140N R92W



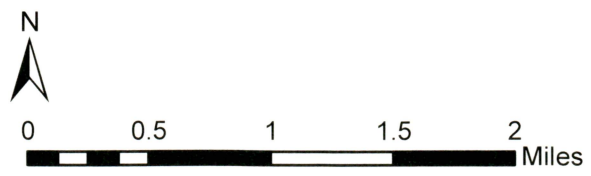
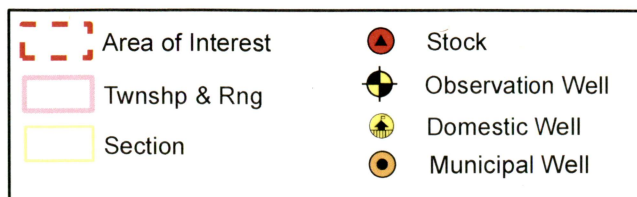
- Area of Interest
- Twnshp & Rng
- Section
- ▲ Stock
- Observation Well
- Domestic Well



2005-2016 Sinkholes
 NW of New Leipzig, ND
 Hettinger and Grant Counties
 ND PSC AML Division
 T134N R91W, T133N R90W



2005-2016 Sinkholes
 South & East of Noonan, ND
 Divide and Burke Counties
 ND PSC AML Division
 T162N R94W, T162N R95W

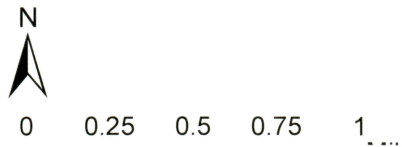


2005-2016 Sinkholes

*South of New Leipzig, ND
Grant County
ND PSC AML Division
T133N R90W*







- Area of Interest
- Twnshp & Rng
- Section
- ▲ Stock
- Observation Well
- Domestic Well



2005-2016 Sinkholes
 North of Bowman, ND
 Bowman County
 ND PSC AML Division
 T132N R102W

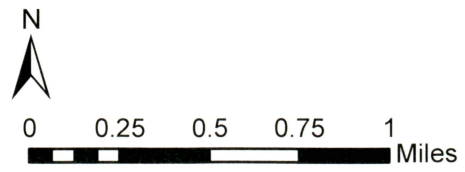
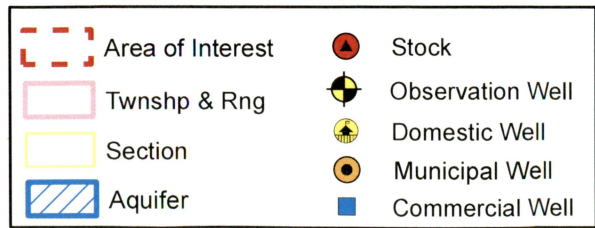


-  Area of Interest
-  Twnshp & Rng
-  Section
-  Stock Well
-  Domestic Well

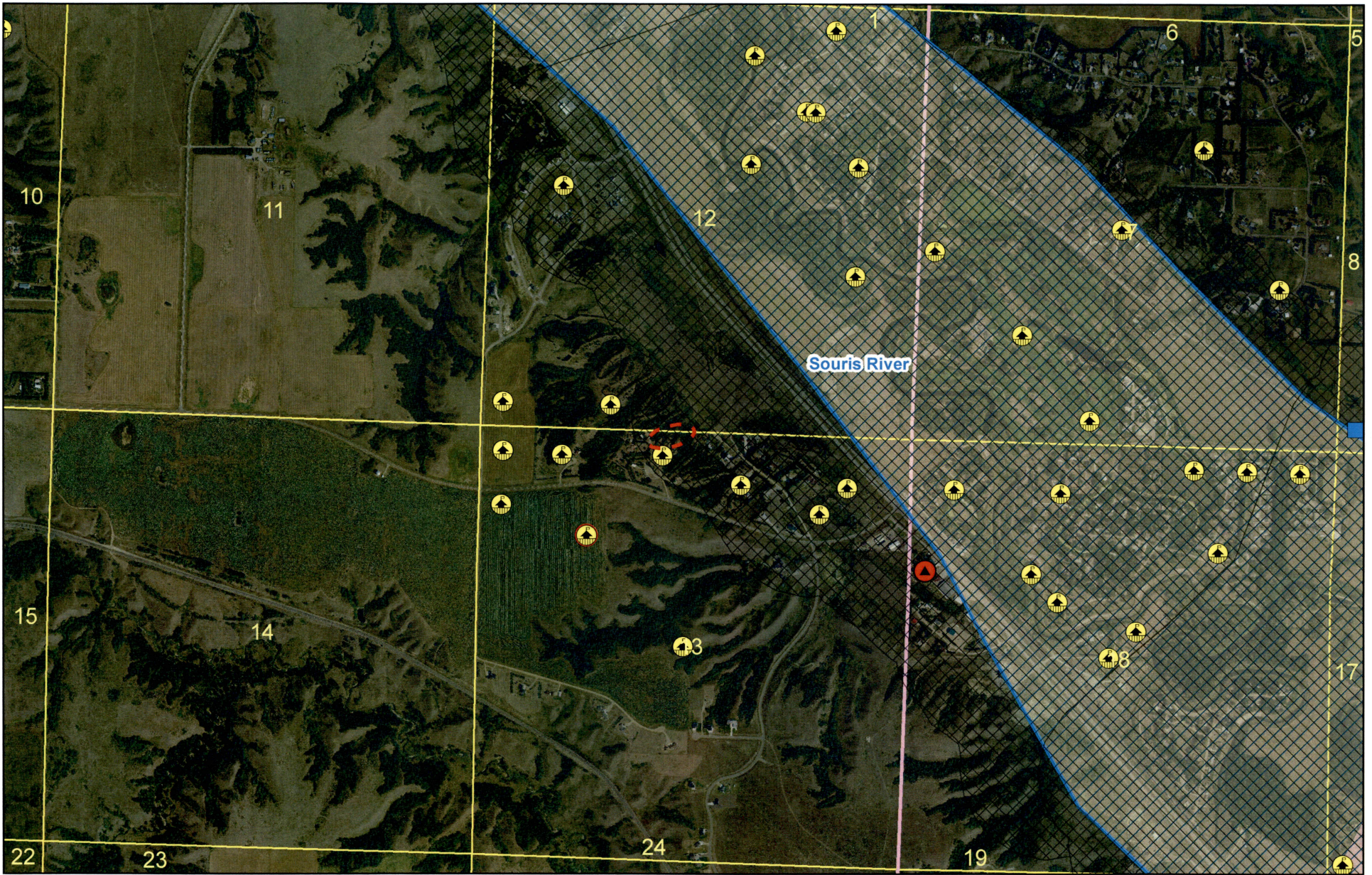










2005-2016 Sinkholes

West of Williston, ND
Williams County
ND PSC AML Division



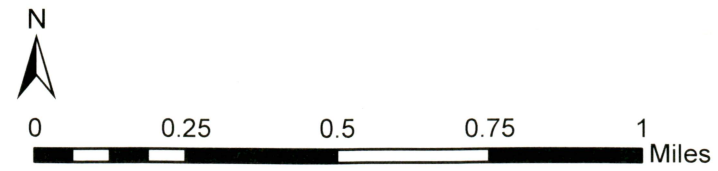
2005-2016 Sinkholes
 New Salem, ND
 Morton County
 ND PSC AML Division
 T139N R85W

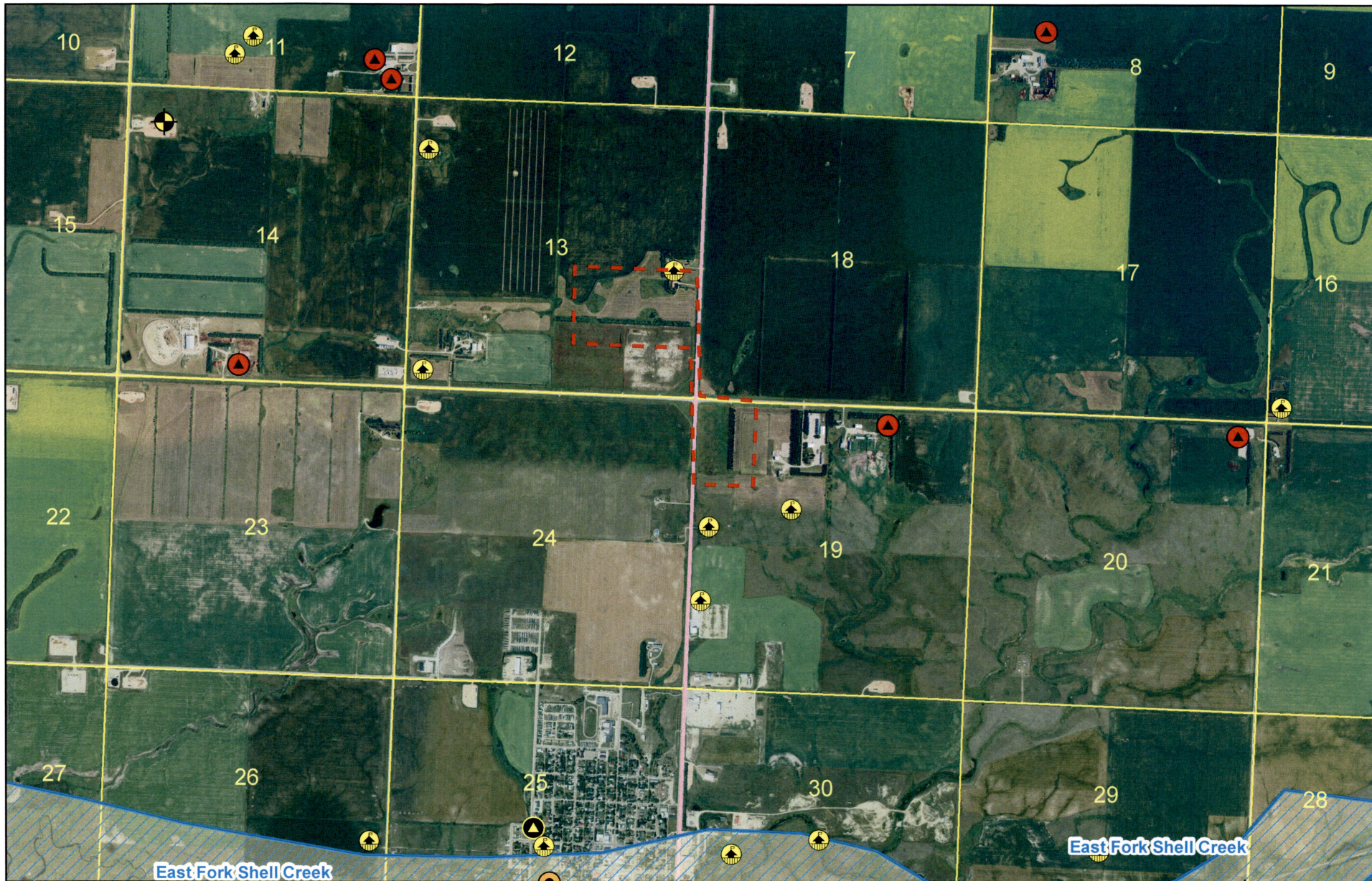


	Area of Interest		Stock
	Twnshp & Rng		Domestic Well
	Section	ND WHPA COMMUNITY	
	Aquifer		Inactive
	Sensitive Groundwater Area		

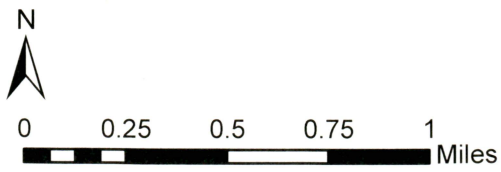
2022 Sinkhole Filling Project Burlington (ND088)

T155N R84W Sec. 13
Ward
ND PSC AML Division

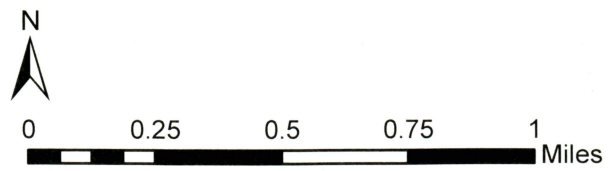
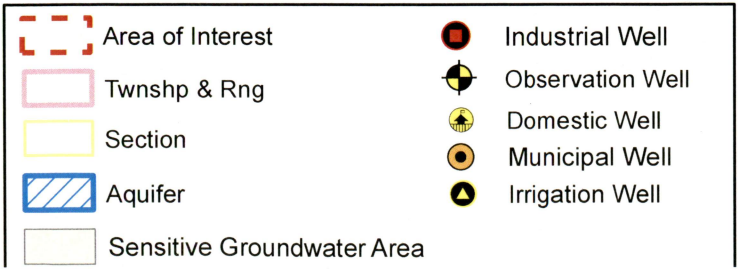




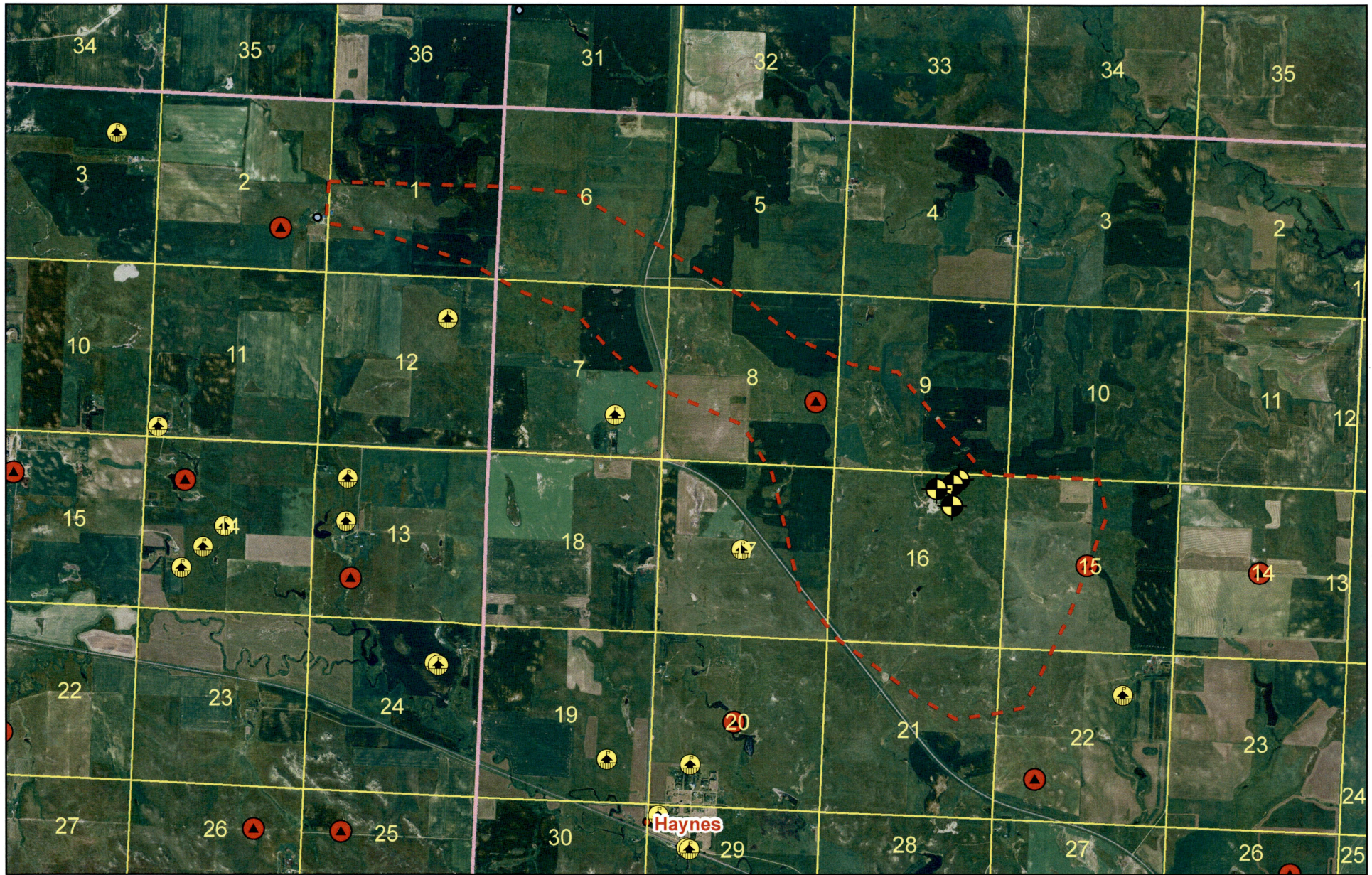
- | | | | |
|---|----------------------------|---|------------------|
|  | Area of Interest |  | Domestic Well |
|  | Township & Rng |  | Stock |
|  | Section |  | Observation Well |
|  | Aquifer |  | Irrigation Well |
|  | Sensitive Groundwater Area |  | Municipal Well |



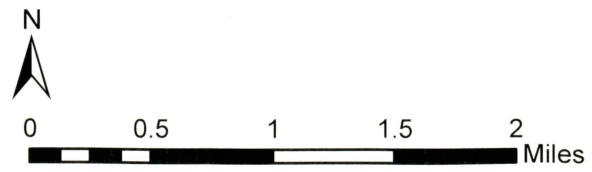
2005-2016 Sinkholes
 North of Parshall, ND
 Mountrail County
 ND PSC AML Division
 T152N R89W, T152N R90W



2022 Sinkhole Filling Project
Williams Co. 9 (ND111)
 T154N R100W Sec. 17, 20, 21
 Williams
 ND PSC AML Division



- Area of Interest
- Twnshp & Rng
- Section
- ▲ Stock
- + Observation Well
- + Domestic Well

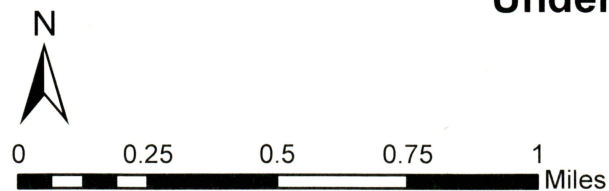
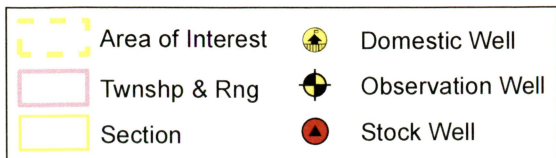


2005-2016 Sinkholes
 North of Haynes, ND
 Adams County
 ND PSC AML Division
 T129N R95W, T129N R94W



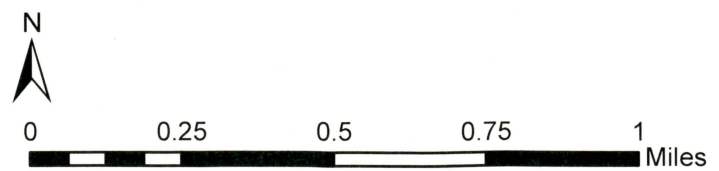
Underground Abandoned Mine Locations

SW of Tioga, ND
 Williams County
 ND PSC AML Division
 T155N R96W Sec. 29

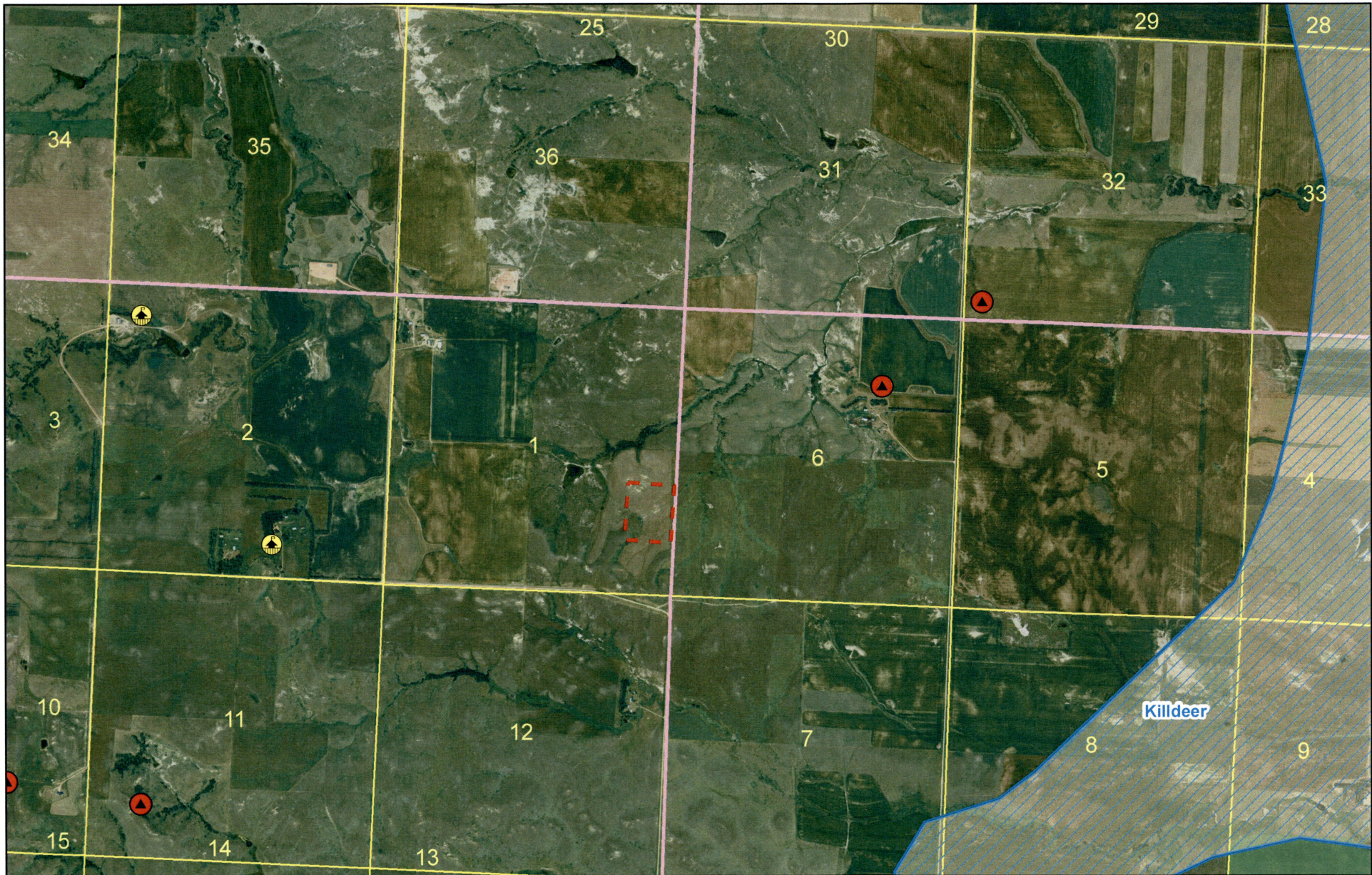




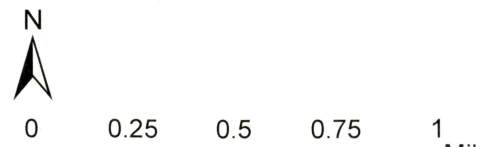
- Area of Interest
- Twnshp & Rng
- Section
- ⬆ Domestic Well
- ▲ Stock



2022 Sinkhole Filling Project
Leith (ND144)
 T133N R87W Sec. 1, 7
 Morton
 ND PSC AML Division



- Area of Interest
- Twnshp & Rng
- Section
- Aquifer
- Sensitive Groundwater Area
- ▲ Stock
- ⊕ Observation Well
- ⊕ Domestic Well



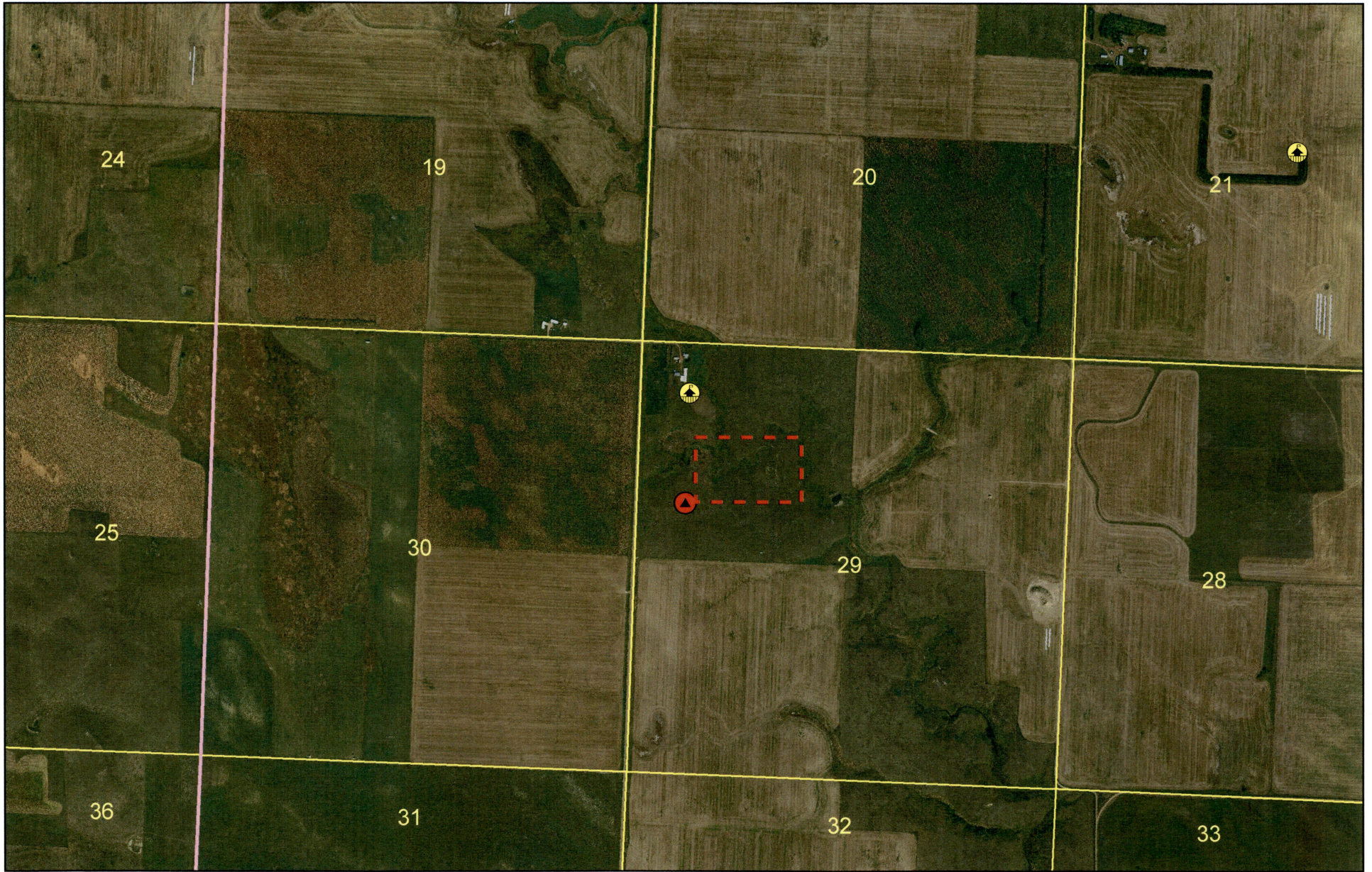
2005-2016 Sinkholes
 NE of Dickinson, ND
 Dunn County
 ND PSC AML Division
 T141N R95W








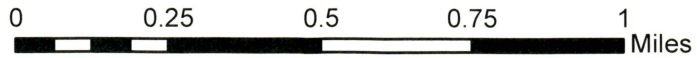
- Area of Interest
- Twnshp & Rng
- Section
- ▲ Stock
- ▲ Observation Well
- Domestic Well



2005-2016 Sinkholes
 North & East of Hanks, ND
 Williams County
 ND PSC AML Division
 T159N R102W, T159N R101W

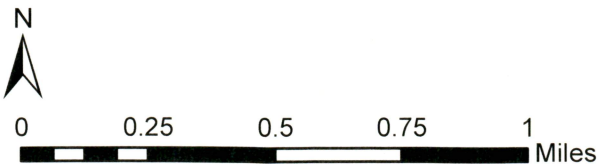
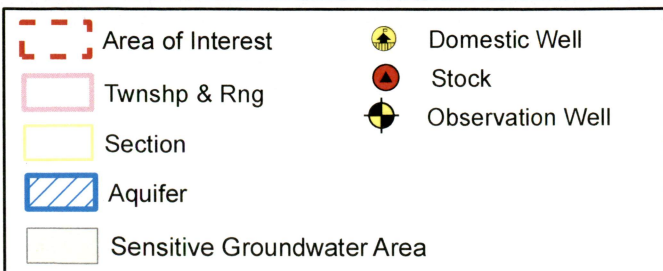
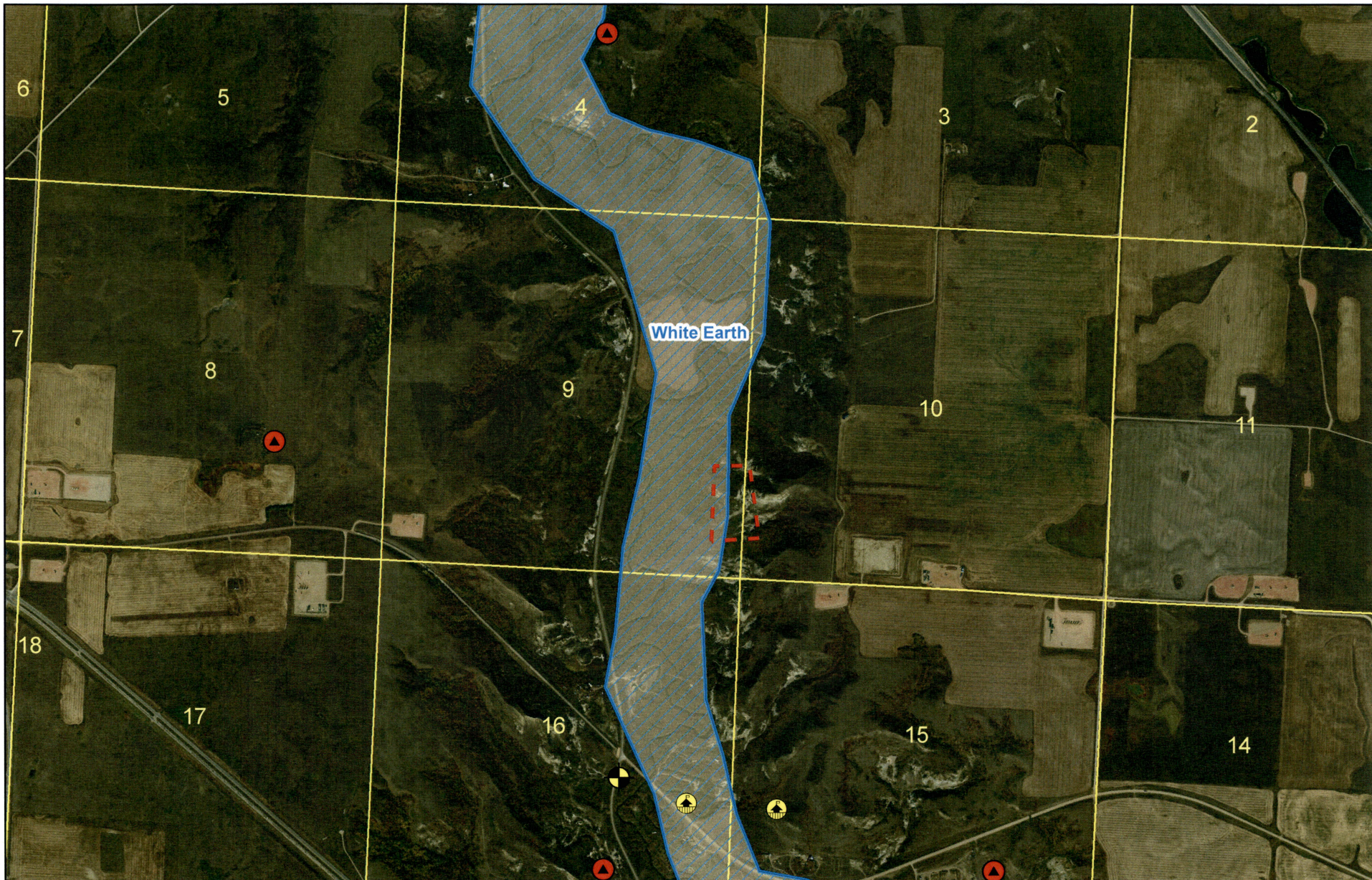


-  Area of Interest
-  Twnshp & Rng
-  Section
-  Domestic Well
-  Stock



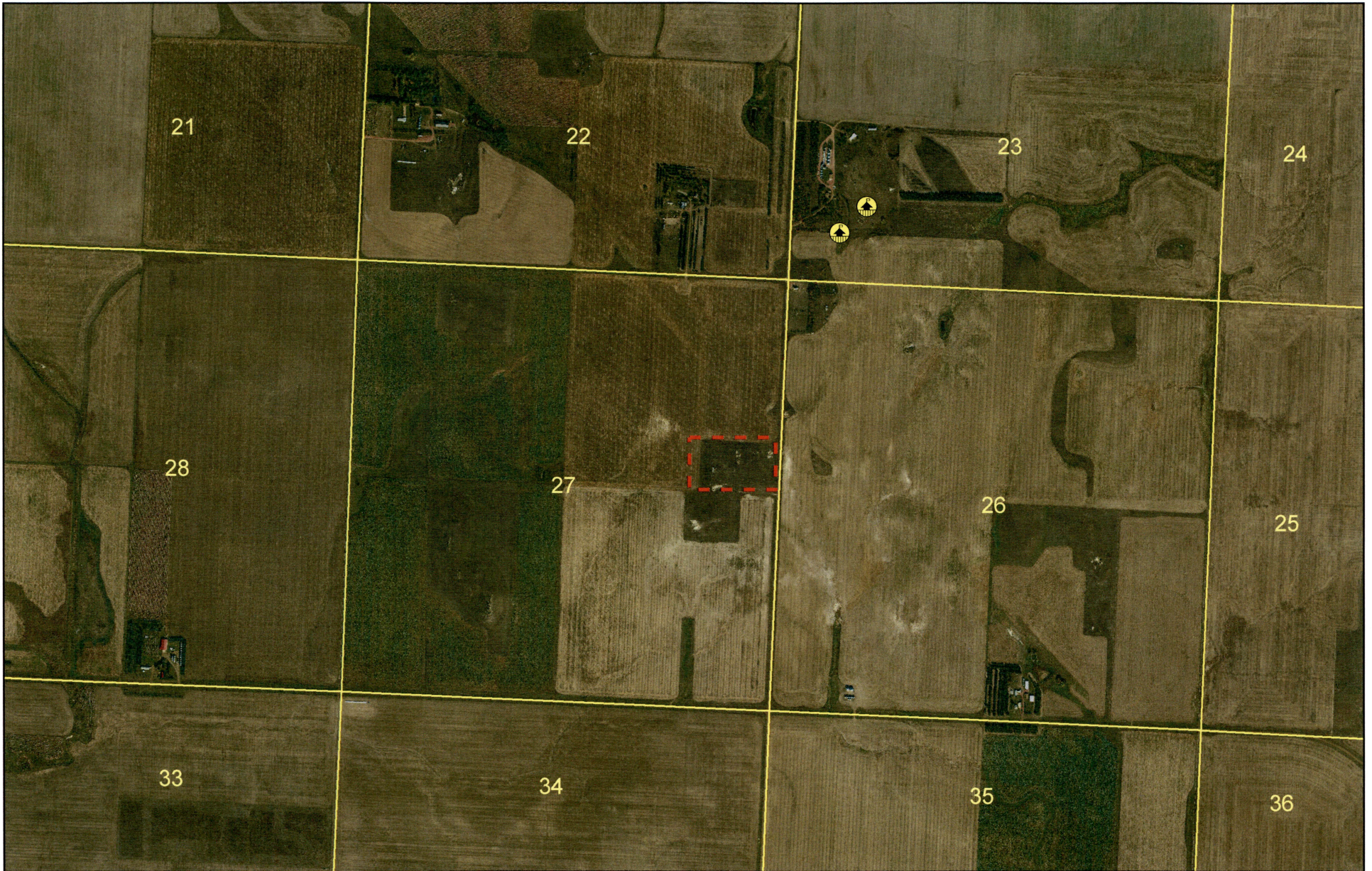
**2022 Sinkhole Filling Project
SW Hebron (ND218)**





*T139N R91W Sec. 29
Stark
ND PSC AML Division*

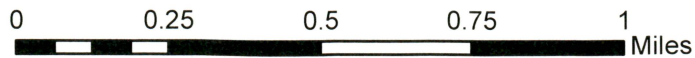


2022 Sinkhole Filling Project
White Earth (ND223)
 T156N R94W Sec 9
 Mountrail
 ND PSC AML Division

9/12/2022
 P. Olson



 Area of Interest
 Twnshp & Rng
 Section
 Domestic Well



2022 Sinkhole Filling Project

Lefor (ND225)

T136N R95W Sec. 27

Stark

ND PSC AML Division

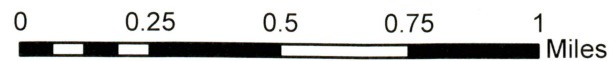
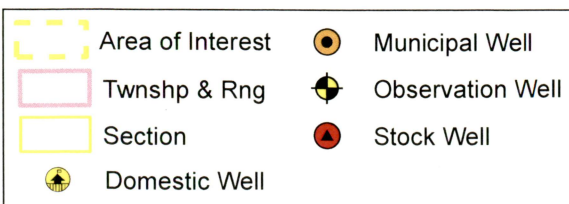
9/12/2022

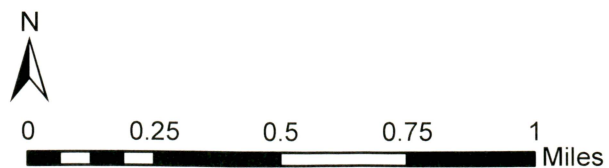
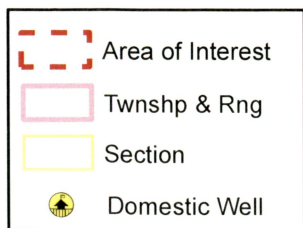
P. Olson



2005-2016 Sinkholes

Scranton, ND
Bowman County
ND PSC AML Division





2005-2016 Sinkholes

*South of Niobe, ND
Ward County
ND PSC AML Division
T160N R89W*