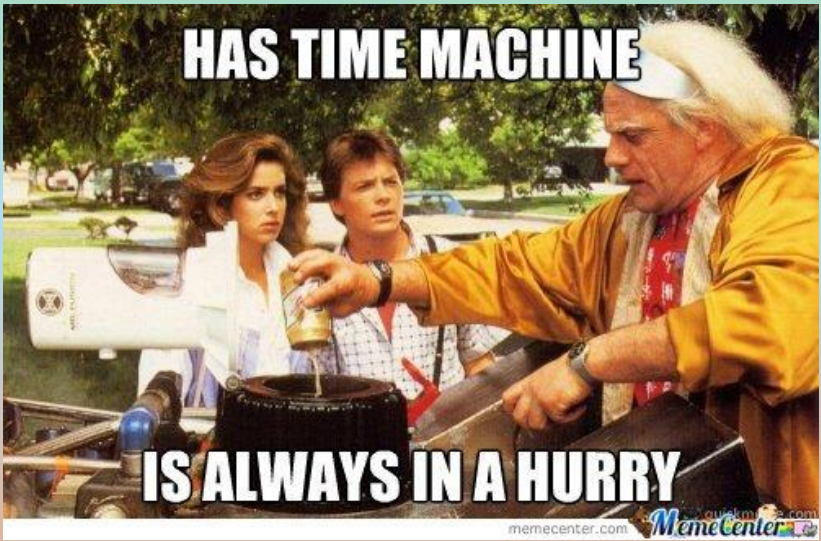


PROJECT BACK TO THE FUTURE

2019 Ag Land Valuation in Mountrail County



ND Century Code – “the Law”

- North Dakota Century Code (N.D.C.C.) §57-02-27.2(8)(a) in part provides: In determining the relative value of each assessment parcel, the local assessor shall apply **the following considerations**, which are listed in **descending order of significance** to the assessment determination:
 - **Soil type** and **soil classification** data from detailed or general soil surveys
 - **The schedule of modifiers** that must be used to adjust agricultural property assessments within the county as approved by the state supervisor of assessments under subsection 9
 - **Actual use of the property** for cropland or non-cropland purposes by the owner of the parcel.



Ag Land Valuation Basically Two Methods

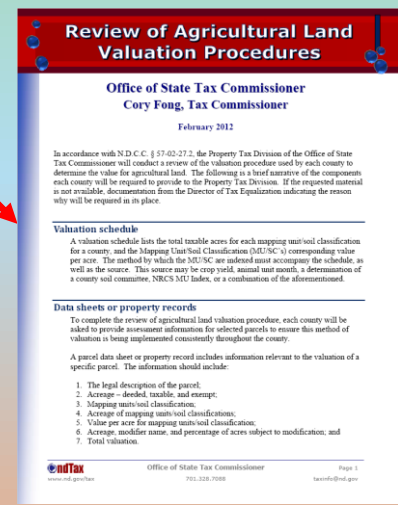
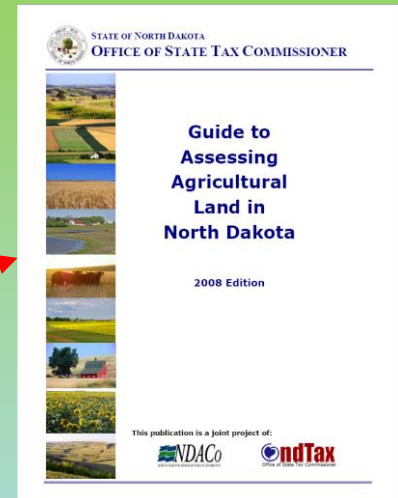
- **Must be based on soil type – detailed or general**
 - Soils information from **NRCS** – *National Resources Conservation Service* – US Dept. of Agriculture
 - Implement NDSU average values by NRCS soil type for Agricultural land valuation
 - State Tax Dept. Ag Land valuation guide & Certification guide

1. **“Breakpoint”** – generalized use **“Productivity Index”**

- Better quality soils considered “cropland”
- Lower quality soils considered “non cropland”
- Much Simpler to implement

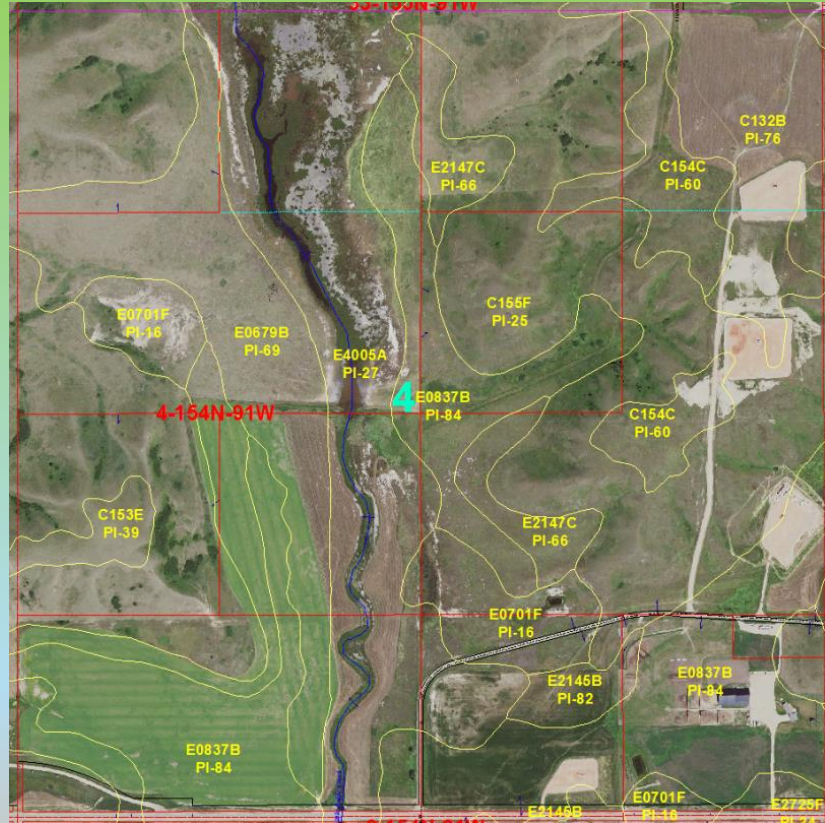
2. **“Actual Ag Land Use”** – use a GIS - Geographic Information System to map land use acres

- More complex and time consuming to implement – most precise



Quick recap - Ag Land Valuation

Simplified version!



- Each parcel has various soil types within it
- Each soil type has a “Productivity index” (PI) associated
- Higher PI’s = better soil
- Higher PI’s have higher \$ value applied, lower PI’s have a lower \$ value applied
- **2017 Mountrail used ND State approved ‘breakpoint method’ in setting values – did not use actual use**
- June 2017 - County Board of equalization voted to utilize actual land use for valuation

WENT BACK TO 2016 LAND VALUES FOR THE FUTURE OF ACTUAL LAND USE

BACK ←
TO THE FUTURE → **PART I**

Valuation in Mountrail – 2018 Values

Assessment

Code*	Description	Parcels	Parcel %	True & Full Value	Value %
-------	-------------	---------	----------	-------------------	---------

101	Agricultural	8,946	59.3%	\$462,571,200	29.3%
-----	--------------	-------	-------	---------------	-------

201	Residential	3,331	22.1%	\$385,144,700	24.4%
-----	-------------	-------	-------	---------------	-------

233	Commercial	880	5.8%	\$694,445,700	44.0%
-----	------------	-----	------	---------------	-------

250	Vacant Land	<u>1,931</u>	12.8%	<u>\$37,875,100</u>	2.4%
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Total	<u>15,088</u>			<u>\$1,580,036,700</u>	
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**NOTE: Centrally assessed properties are not included in the list*

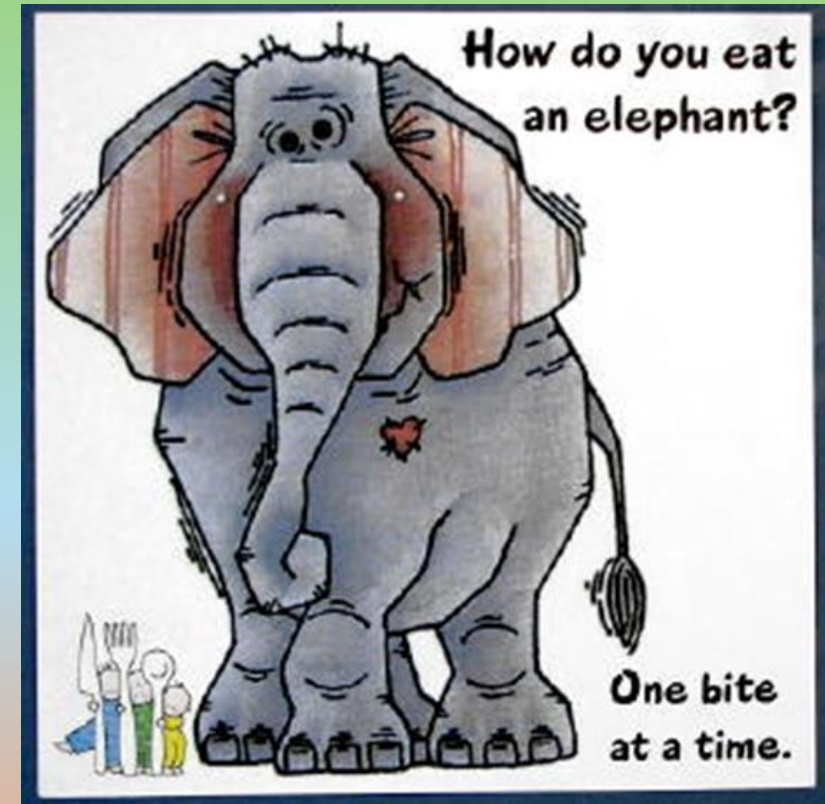
Actual Land Use – Bounding the Problem

Much to keep track of:

- Mountrail County Comprised of
 - 55 Townships – 7 cities
 - 1,803 Sections
 - 1,048,451.07 Ag related acres
 - 8,946 Ag related parcels
 - 2,200 Ag related parcel owners
 - 147 Soils Codes - \$ values applied
 - Where are those soils?
- How is each parcel being used?
 - Cropland
 - Non-Cropland
 - Farmstead
 - Commercial
 - Gravel Pit
 - Roads
 - Oilwell Sites
 - Saltwater disposal

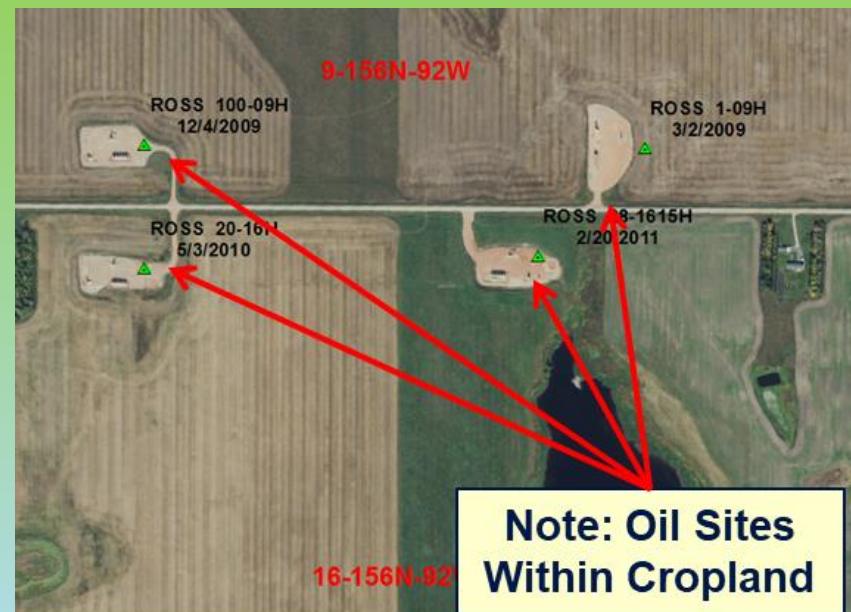


Answer? – utilize a GIS system



Drawing Ruleset Example – Oilwell Sites

- ND Century Code – “Ag property used for oil, natural gas, or subsurface minerals must continue to be assessed as Ag property for the remainder....”
- **Challenge: Was it cropland or noncropland before?**
 - Some parcels found oil sites partially on crop land, partially on non-cropland
 - Very difficult to manage acres
- **Simplified Approved Decision** – all oil site acreage will be valued as non-cropland based off soil types underneath oil site (includes road leading to oil site)



Land Used for Extraction of Oil, Natural Gas, or Subsurface Minerals

Land that was assessed as agricultural property at the time the land was put to use for extraction of oil, natural gas, or subsurface minerals as defined in N.D.C.C. § 38-12-01 must continue to be assessed as agricultural property if the remainder of the surface owner's parcel of property on which the subsurface mineral activity is occurring continues to qualify for assessment as agricultural property under subsection 1 of N.D.C.C. § 57-02-01.

Farmsteads and Modifiers

- Farmsteads are considered 'non-crop' and are valued at non-cropland value based off soils under farmstead
- With Actual Land use – modifiers are **not** necessary and are **not used**
 - With breakpoint method, modifiers could be considered and are used for cropland areas only



Examples of Modifiers from ND State List

Rocky*	Very Rocky*	Salinity*
Non-Productive	Obstacles	Multiple Factors
Irregular Field	Trees	Inaccessibility
Electrical Transmission Lines	Public Road	Brush & Ponding
Abandoned Railroad	Oil Well Site	Non-Tilled
Pasture	Non-Cropland	Drain Ditch
Marsh	Land Use (?)	Easements

*Items handled By NRCS Soil Survey

Land Valuation Ruleset Summary

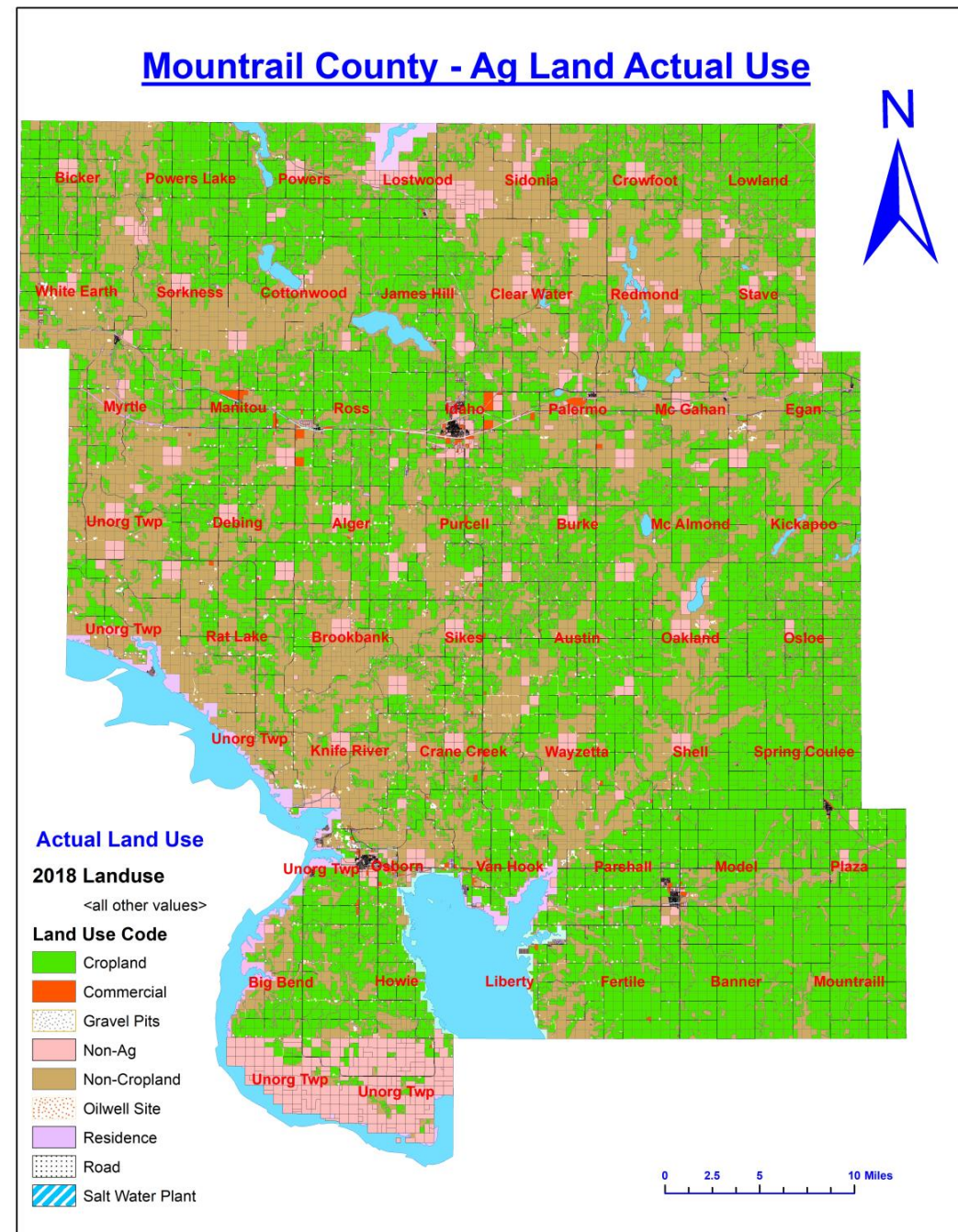
GIS Item	Valuation Method
Cropland	Cropland values - Productivity Index (PI)
Non Cropland	Noncrop values – based off AUM (Animal Unit Month) calculation
Farmsteads	Noncrop values
Oilwell Sites	Noncrop values
Salt Water Wells	1) Commercial wells @ Commercial Values (Tax Dept) 2) Private Wells @ Noncrop values
<u>Taxable</u> Rural Residence	2 Acres at \$2,000 / acre
Roads	\$0 for Right-of-Way acreage of TWP Certified Roads, County Roads, State Highways
Commercial Land / Structures	Commercial Values (Tax Dept)
Gravel Pits	Commercial Values (Tax Dept)
Non-Ag (vacant land)	Vacant Land Values (Tax Dept)

Project Drawing and Review

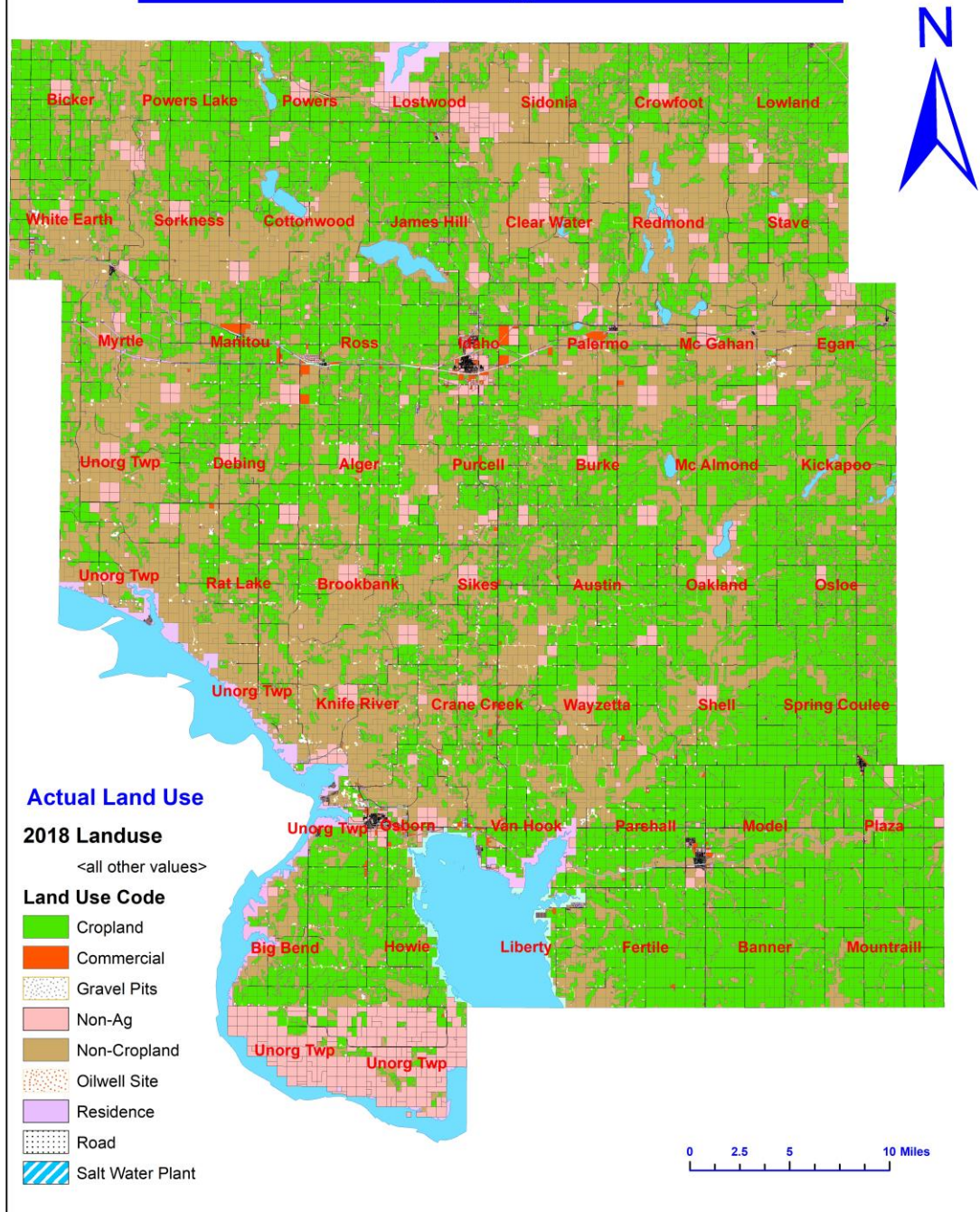
- All phases start – July 2017
 - 3 Sections – “Pre-Pilot”
 - Pilot Section
 - Drawing by Tier
- Tier Deliveries Started Fall 2017
 - Department Review section by section
 - Township Reviews Started late Fall 2017
 - Section by Section
- Total Tier county delivery – Feb 2018
 - Township by Township Reviews ongoing
 - Final Township Review September 2018
- 2017 Aerial Photography Reviews-Update
 - Completed December 2018

Cropland Green

NonCropland Beige

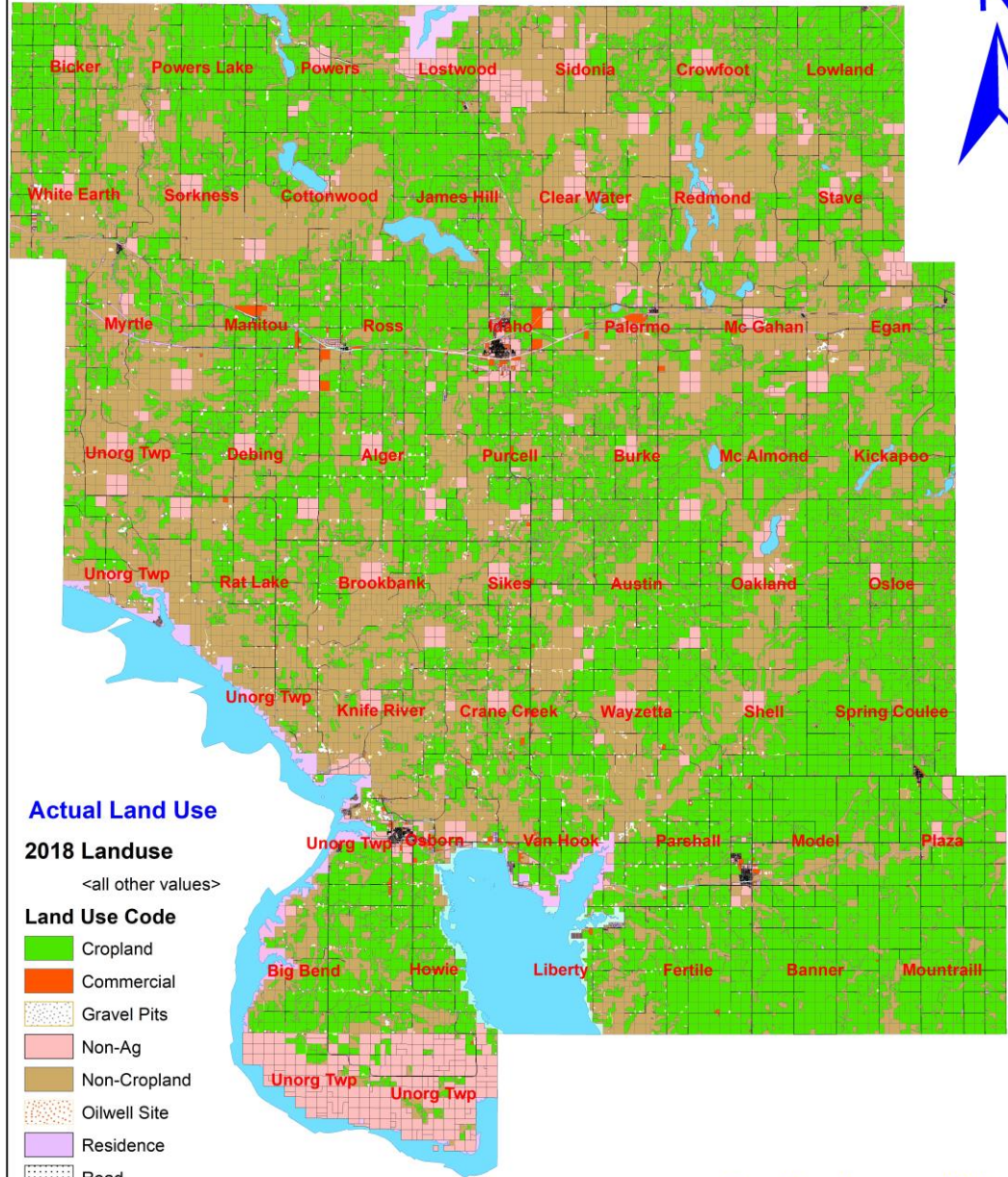


Mountrail County - Ag Land Actual Use



- Compare to NRCS Soils

Mountrail County - Ag Land Actual Use



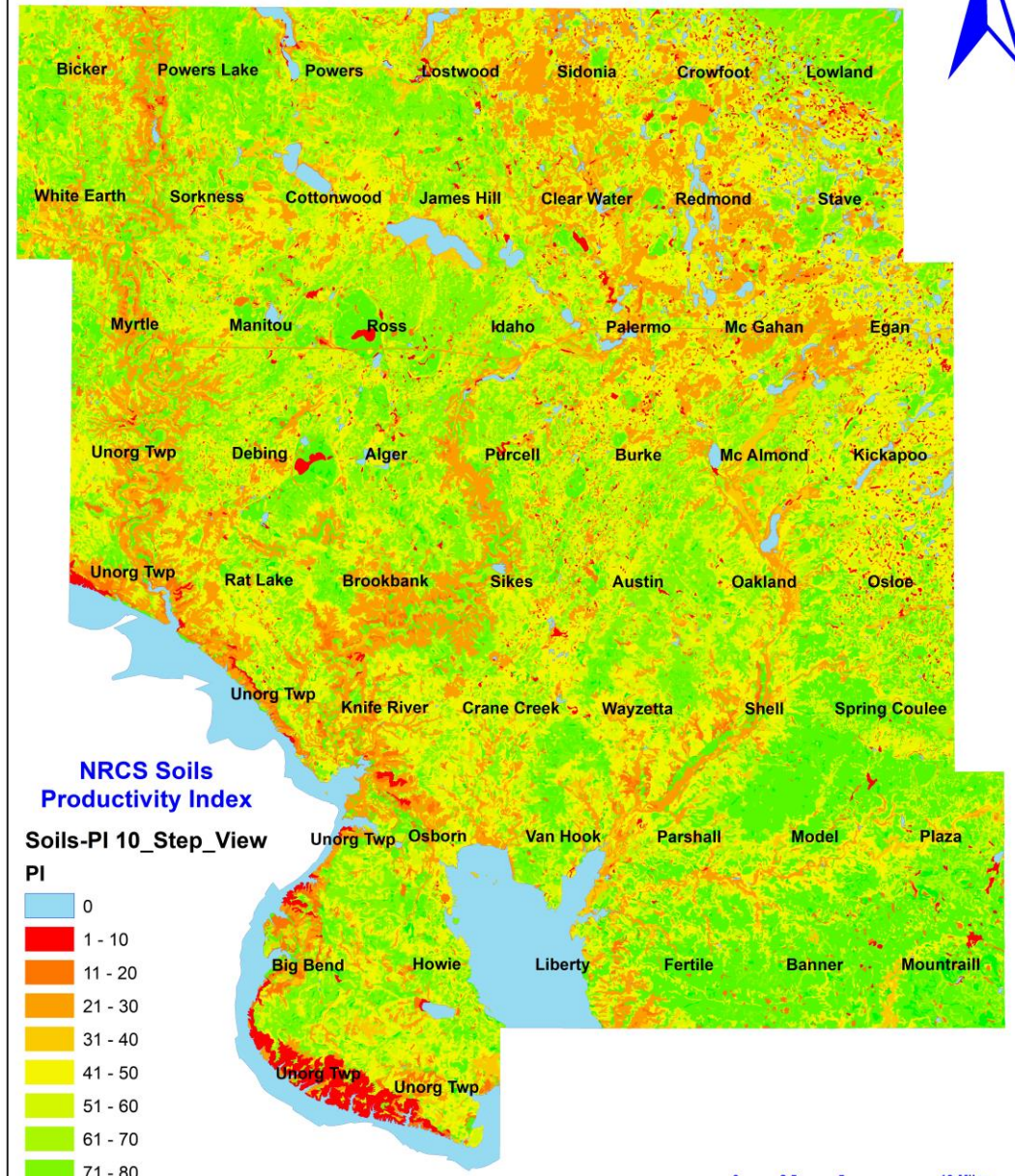
Actual Land Use

2018 Landuse

- <all other values>
- Land Use Code**
- Cropland
- Commercial
- Gravel Pits
- Non-Ag
- Non-Cropland
- Oilwell Site
- Residence
- Road
- Salt Water Plant



Mountrail County - NRCS Soils



NRCS Soils Productivity Index

Soils-PI 10_Step_View

PI

- 0
- 1 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- 91 - 95



Ag

Soils Valuation Actual Land use – 2019 Values

Better Soils



Poorer Soils

Productivity Index (PI) or AUM	Land Valuation – Cropland	Non-Crop AUM
95	\$974	\$380
90	\$872	\$342
80	\$818	\$295
70	\$720	\$270
60	\$614	\$228
50	\$516	\$192
40	\$409	\$152
30	\$312	\$114
20	\$205	\$76
10	\$93	\$38
0 (Water)	\$16	\$16

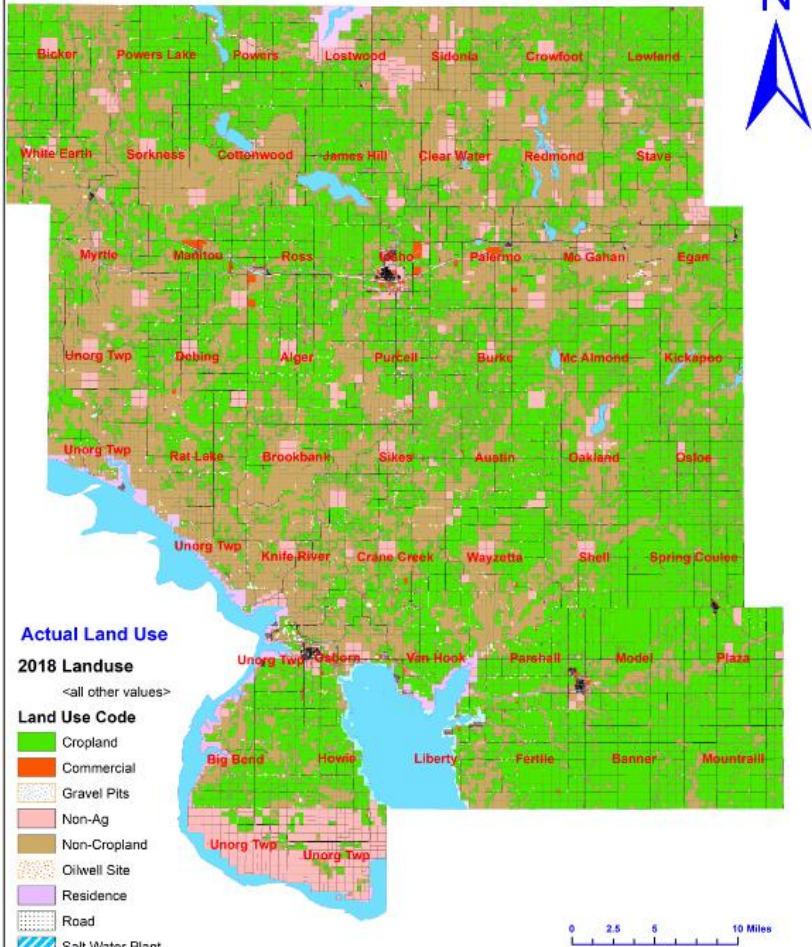
2019 Values

NDSU Ag Land
Production Value
Average Ag - \$454.62
Cropland - \$692.46
NonCrop - \$156.54

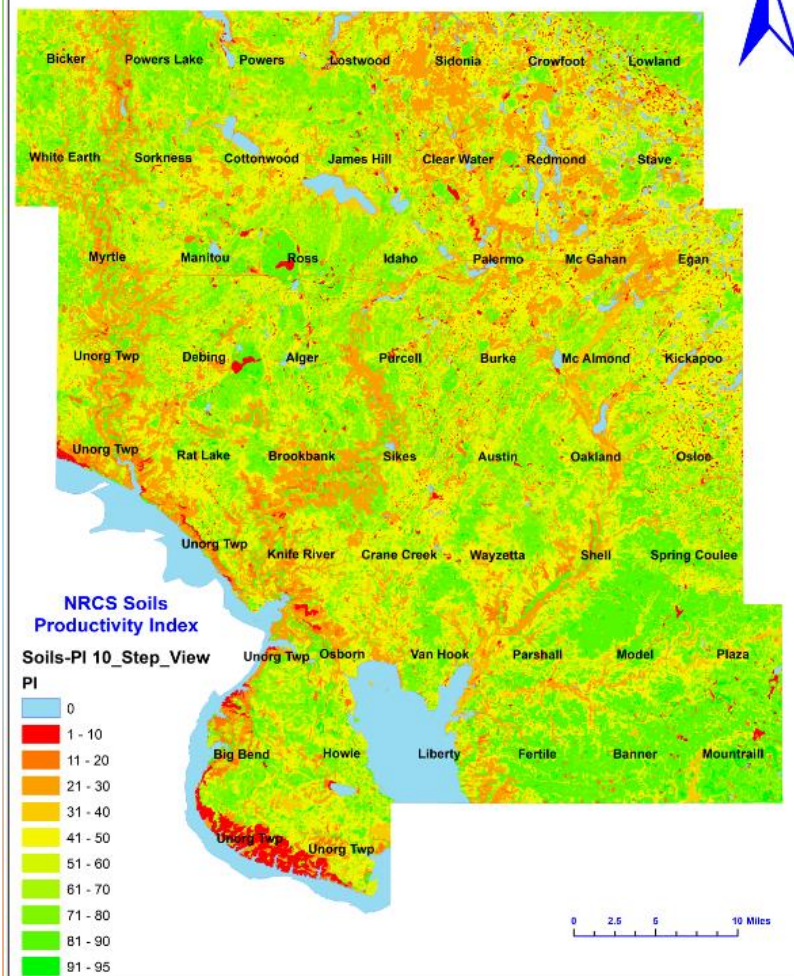
Mountrail County – Actual Land Use

Agricultural Land Valuation

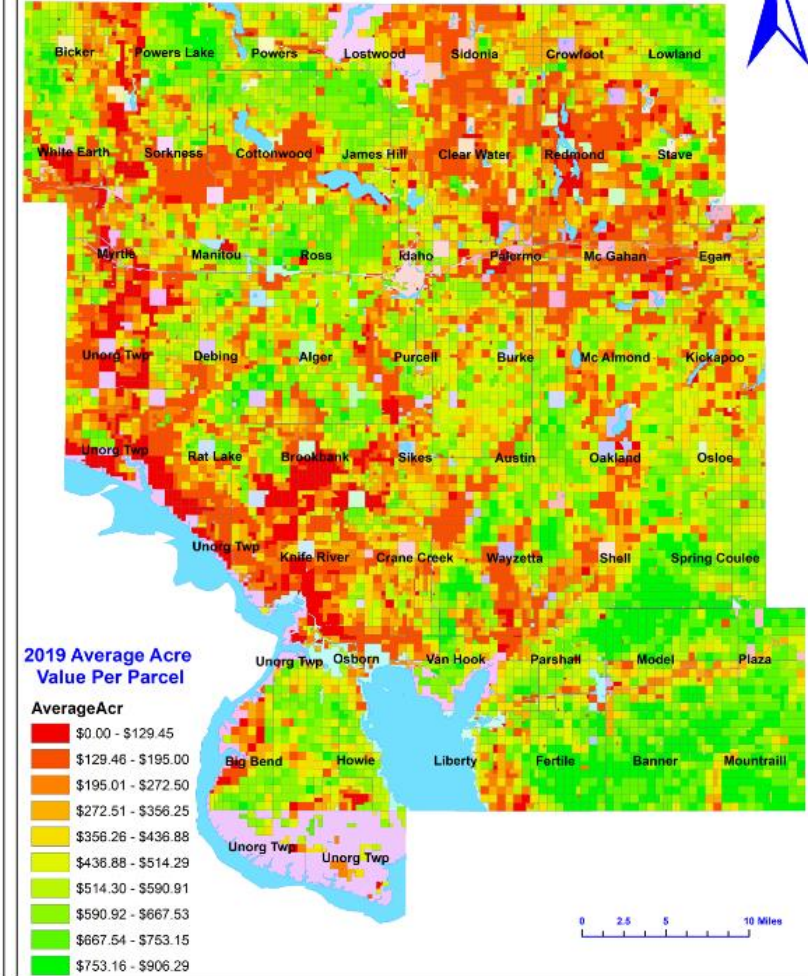
Mountrail County - Ag Land Actual Use



Mountrail County - NRCS Soils



Mountrail County - Average Acre Value



GIS – Public Facing

- <https://portico.mygisonline.com/html5/?viewer=mountrailnd>
- Various search capabilities
- Several NAIP Years Aerial Photography available
- Actual use Layer
- Soils Layer and information
- Valuation Reporting
- GIS linked to Tax Dept Site

www.co.mountrail.nd.us/pages/tax-equalization

Mountrail County North Dakota

Home Contact us Events Documents Extension

911 Communications
Ag Agency/Weed Control
Auditor's Office
Contact Us
Coroner's Office
County Commissioners
District Court
Emergency Management
Events
GIS

Contact Information:

Lori Hanson
PO Box 69
Stanley ND 58784-0069
701-628-2425
lorih@co.mountrail.nd.us

Mountrail County GIS

Helpful Links

ND Property Tax
ND.gov Forms and Applications
Guide to Assessing Agricultural Land in North Dakota
Review of AgLand Valuation
NRCS Web Soil Survey

Parcel: 320015000

Hyperlinks
[Farms Soils Report](#)


Details
Parcel Number
320015000
Acreage
160
Owner
JORGENSEN/ELJOY S & EMOJEAN S
Owner Address
4955 HIGHWAY 8 NEW TOWN ND 58763
Legal Description
NW
Sec Twp Rng
27 15 091
Township
SRES TWP
Lot
N/A
Block
000
Lot
N/A

Filter Layers... Filter

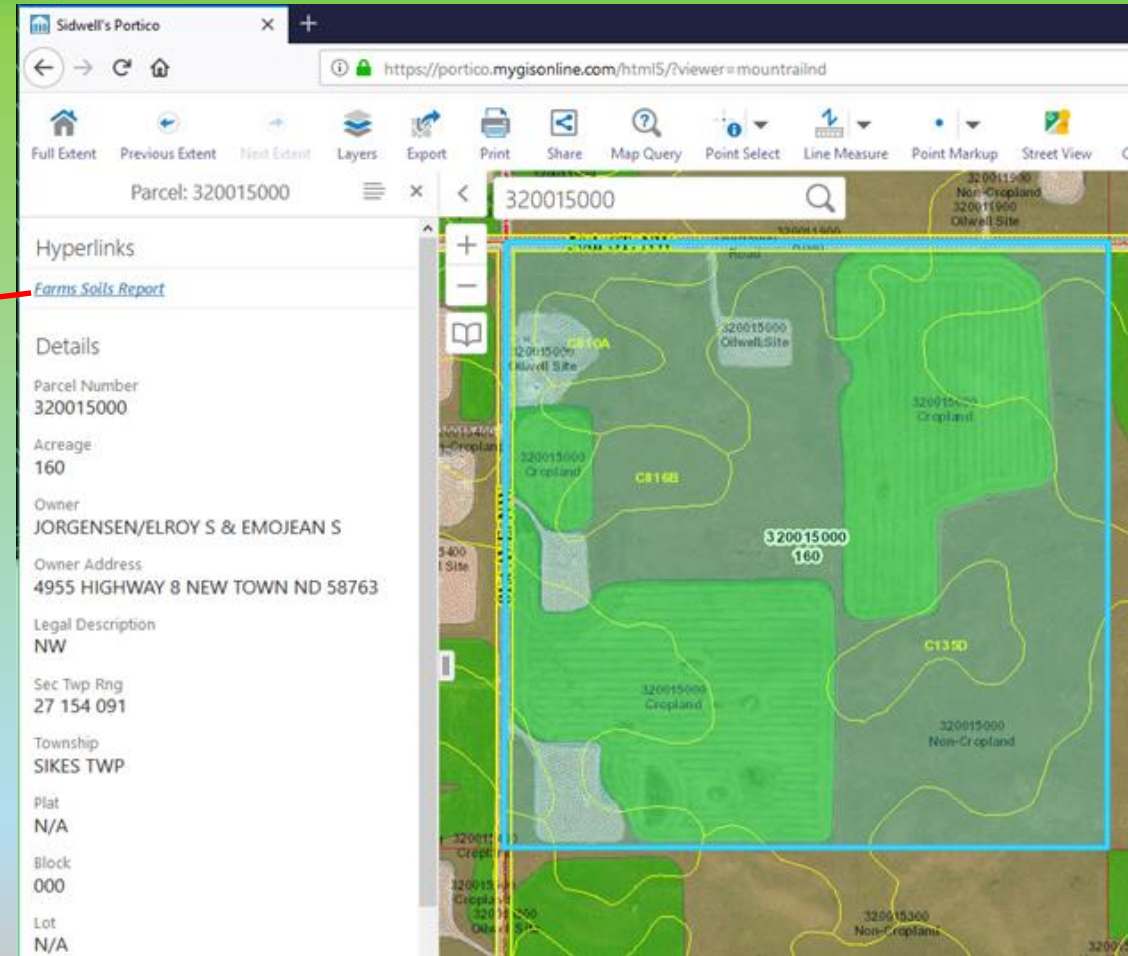
- Soils 2017 (NRCS)
- Land Use
- Zoning
- Cadastral
- Imagery
 - 2017 Aerial (NAIP)
 - 2016 Aerial (NAIP)
 - 2012 Aerial (NAIP)
 - 2010 Aerial (NAIP)
 - 2003 Aerial (NAIP)
- BaseMap
 - World Imagery
 - World Street Map

Valuation Reporting – GIS - Public Facing

Mountrail
Final Calculation Report



PARCELS	CRP NUMBER	LAND USE	SOIL CODE	SOIL NAME	NET ACRES	RATE	VALUE
32-00-150-00							160.00
		AG					
			C132B	Williams-Zahl loams,	11.24	779	8,759.22
			C132C	Williams-Zahl-Zahill	44.12	623	27,505.73
			C135D	Zahl-Williams loams,	7.56	438	3,313.93
			C424A	Nutley west, silty clay,	0.10	847	84.75
			C816B	Lehr loam, 2 to 6	0.74	448	331.59
					<u>63.78</u>		<u>39,995.22</u>
		NCR					
			C132B	Williams-Zahl loams,	0.59	156	91.89
			C132C	Williams-Zahl-Zahill	45.10	156	7,023.87
			C135D	Zahl-Williams loams,	30.09	152	4,572.18
			C424A	Nutley west, silty clay,	0.86	156	133.94
			C810A	Bowdle loam, 0 to 2	2.02	148	299.26
			C816B	Lehr loam, 2 to 6	4.58	114	521.94
					<u>83.24</u>		<u>12,643.08</u>
		OS					
			C132B	Williams-Zahl loams,	3.07	156	478.12
			C132C	Williams-Zahl-Zahill	5.18	156	808.73
			C135D	Zahl-Williams loams,	0.47	152	71.42
			C424A	Nutley west, silty clay,	0.71	156	110.58
			C810A	Bowdle loam, 0 to 2	1.49	148	220.74
			C816B	Lehr loam, 2 to 6	0.08	114	9.12
					<u>11.00</u>		<u>1,698.71</u>
		RD					
			C132C	Williams-Zahl-Zahill	1.28	0	0.00
			C135D	Zahl-Williams loams,	0.74	0	0.00
					<u>2.00</u>		<u>0.00</u>
					<u>160.00</u>		<u>54,335.01</u>
					<u>160.00</u>		<u>54,335.01</u>



Sidwell's Portico
https://portico.mygisonline.com/html5/?viewer=mountrailind

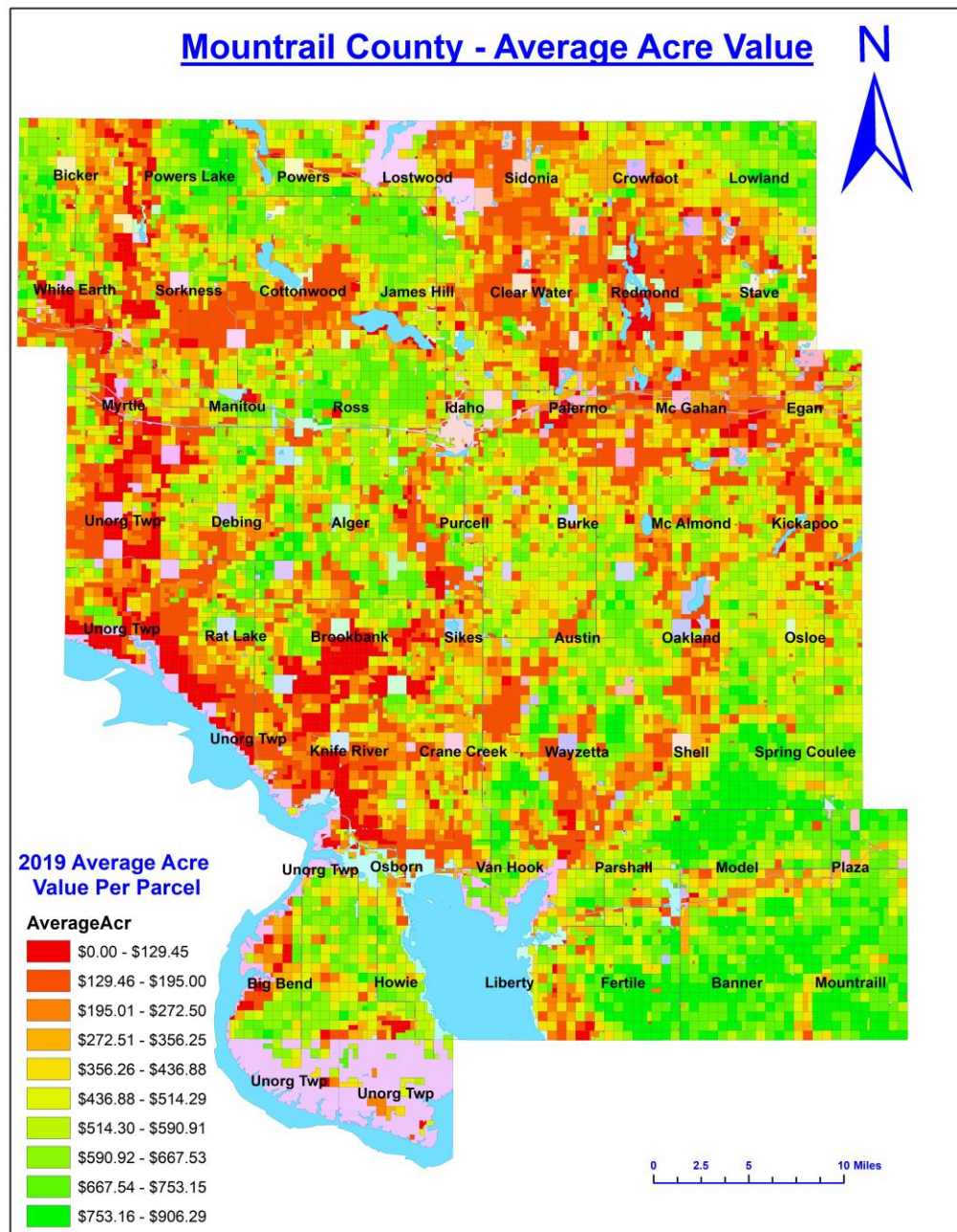
Parcel: 320015000

Hyperlinks
[Farms Soils Report](#)

Details
Parcel Number
320015000
Acreage
160
Owner
JORGENSEN/ELROY S & EMOJEAN S
Owner Address
4955 HIGHWAY 8 NEW TOWN ND 58763
Legal Description
NW
Sec Twp Rng
27 154 091
Township
SIKES TWP
Plat
N/A
Block
000
Lot
N/A

Final Valuations Rounded to nearest \$100 in Tax System. This Parcel is valued at \$54,300.

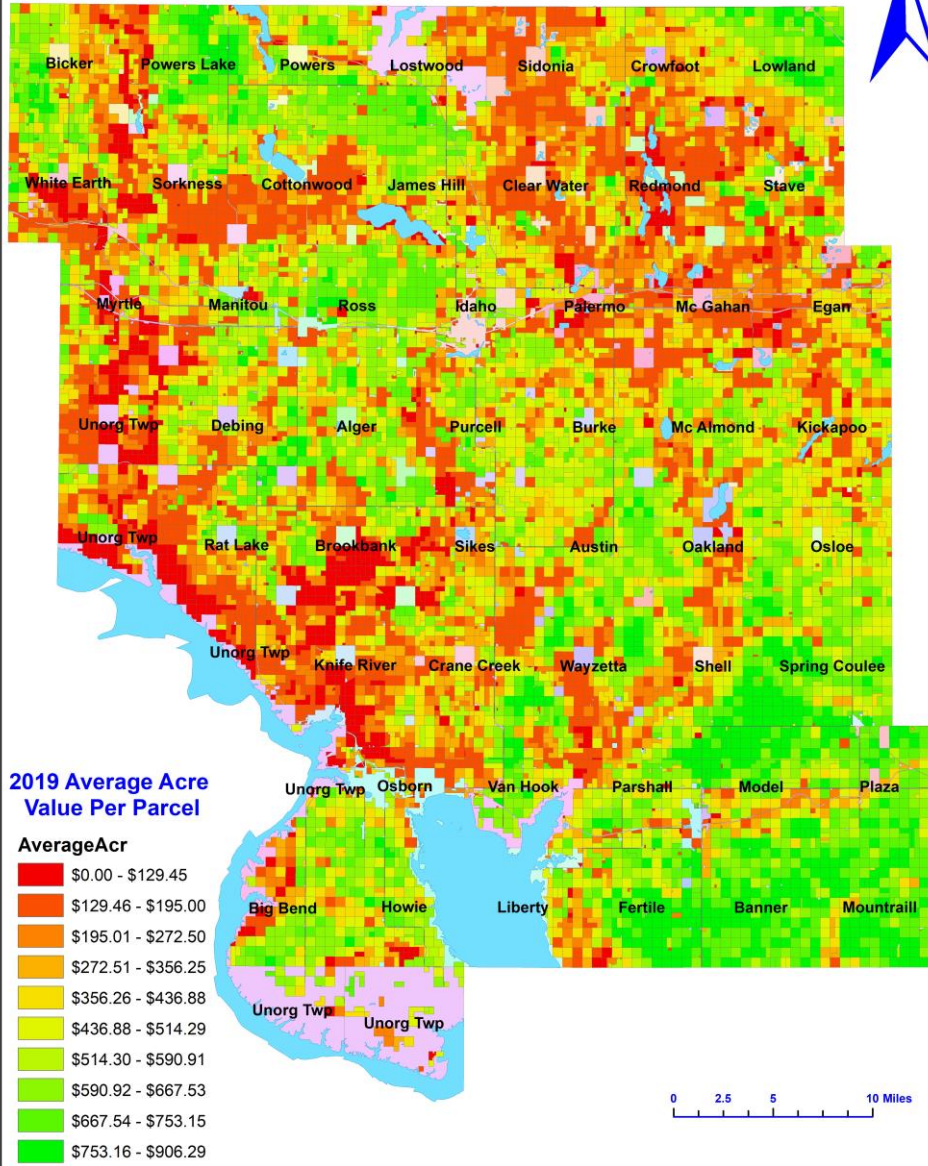
Finally...



- Compare to previous historical Ag Land Valuation

Finally...

Mountrail County - Average Acre Value



Mountrail County - Average Acre Value

