2019 Actual Use Agricultural Land Valuation – It's here!

After much work, detailed review, technical updates and more, the new Actual Use Agricultural Land Valuation process is in place and will be rolled out for the 2019 assessment year.

As part of the agricultural land valuation law that was put in place in 2011, counties that have not implemented soils valuation, funds have been withheld from the county as incentive to value land under the new law. By the time Mountrail County is certified by the State Tax Department, sometime late fall of 2019, the funds withheld will be approximately \$512,000 which will be returned to Mountrail County.

In 2017 the Mountrail County Tax Equalization Department utilized the ND State Approved "Breakpoint" method in valuing Ag Land. This method utilizes detailed soil types from the NRCS; soil types above a certain Productivity Index, or "PI" were deemed to be cropland, soil types below that PI were deemed noncropland regardless of how the land was actually used. At the 2017 County Board of Equalization, the board voted to return to the previous year Ag land valuations for the future of implementing actual land use in Ag Land valuations.

Hence, "Project Back to the Future" was born!

There is much to keep track of when utilizing Actual Land use within Mountrail County – for instance, Mountrail County is comprised of just over a million Ag related acres, roughly 8900 Ag related parcels, 2200 Ag related parcel owners and 147 Soils Codes.

Along with what Mountrail County is comprised of listed above, for equalized valuation, the Assessor's office needs to know how each parcel is actually being used whether it is cropland, non cropland, commercial, residential, gravel pits, oil well sites, etc.

With this much information to keep track of it is necessary to utilize advanced computing systems to perform this work. A GIS – 'Geographic Information System' has been developed and utilized within Mountrail County to keep track of all this information. ArcMap, an Industry Standard solution has been installed and configured, and Sidwell Company, our selected GIS vendor has drawn in the actual land use layer information. Sidwell is also our parcel and mapping vendor that keeps all of the county parceling information up to date.

A Soils Committee was formed to provide input into the overall Ag Land valuation process developed within Mountrail County. Certain items, methods, and processes were brought forward to the Mountrail County Commissioners for approval, which included the Actual Land Use drawing ruleset, valuation ruleset, and the historical assessment concept of "Once Cropped, Always Cropped" to mean a rolling 20 year window for cropland. This means that if the land was cropped within the last 20 years it is considered cropland, otherwise if in the last 20 years it was not cropped, it will be considered noncropland. Any CRP land and hay land is considered cropland.

Century code states that agricultural land that has an oil well site on it will retain an agricultural land value. As agreed by the Soils Committee and the Board of County Commissioners, oil well sites will be valued at the noncrop values based on the soil types underneath. This is regardless how the land was used previously.

For 2019 actual use valuation, each soil type has two valuation schedules which are computed. For cropland, a valuation schedule for each NRCS soil type is based off the productivity index (PI) rating. For noncropland, the valuation schedule for each NRCS soil type is based off the Animal Unit Month (AUM)

calculation. In general, cropland values for the soil code are higher than the values for noncrop areas with the same soil code.

The graphic shows maps generated from the GIS system. The map on the left is the actual land use layer drawn in. Green is cropland, beige or brown are noncropland, the pink colors are non-ag or exempt lands. Other land use types are drawn in, but because of the map scale are not necessarily viewable (oil well sites, residences, etc.).





Figure 1-Actual Land Use Mapping

The map in the center is the NRCS Soils Layer for Mountrail County based off of "10-step PI" colorization. In other words, the top PIs are darker green (meaning better productivity), and varying shades of green down to PI of 50. At below 50 the coloring goes to yellows, oranges, and to red which represents the lowest productive soils.

When comparing the maps there is an uncanny correlation between the first two. Cropland areas in green on the actual use drawing match very closely with the greens on the NRCS Soils Layer map. The noncropland areas in beige match very closely with the lower PI soils on the NRCS map represented in yellow, orange, and red.

Lastly, the map on the right shows the 2019 Actual Land use valuation showing each parcel and its average acre value for that parcel. This "normalizes" the data and allows for comparison of the areas. Using the "10-step" concept, higher values per acre are in green and moving to lower values per acre in yellow, orange, and red being the lowest range of values per acre.

In comparing all the maps – the correlation between them is quite striking – i.e. each map "tells the same story", albeit each of them are based on separate sets of data. This simply confirms that the methodology used by the county is sound.

The final goal of the project, in addition to the new valuations is to provide the GIS and valuation information online in an easily searchable and reporting format for the landowner and other users of the GIS system.

This goal has been achieved in time for the 2019 equalization year. The GIS and ag land valuations can be accessed online for each parcel - acreage information, the 2017 NRCS soils layer is available and various years of aerial photography. Each of these items are found under the "layers" tab in the GIS.

The valuation report can be found under the "Farms Soils Report" hyperlink when looking at a selected parcel. This report displays the parcel, actual land use and each soil under the land use, acres, and the rate or per acre value, and the extended value. For inclusion to the county tax system, these values are rounded to the nearest \$100. Do note – this tool values Agricultural Land only – other land use types (residences, commercial, gravel pits, etc.) are valued separately within the Tax Equalization department.

		Mountrail			
	Final Calculation Report				
LAND USE	SOIL CODE	SOIL NAME	NET ACRES	RATE	VALUE
AG					
	C132B	Williams-Zahl loams,	3.74	779	2,914.54
	C132C C135D	Williams-Zahl-Zahill Zahl-Williams loams,	24.43 3.08	623 438	15,230.39 1,350.12
	C135D	Zahl-Williams loams, Zahl-Max-Arnegard	0.14	430 253	35.46
	CIUJF	Zani-max-Amegaru	31.39	200	
NCR			31.39		19,530.51
NGR	C132B	Williams-Zahl loams,	2.04	156	317.71
	C132C	Williams-Zahl-Zahill	37.72	156	5,874.51
	C135D	Zahl-Williams loams,	62.94	152	9,563.73
	C155F	Zahl-Max-Arnegard	6.34	141	891.09
			109.04		16,647.04
OS					
	C132B	Williams-Zahl loams,	2.63	156	409.60
	C132C	Williams-Zahl-Zahill	4.88	156	760.01
	C135D	Zahl-Williams loams,	12.06	152	1,832.52
			19.57		3,002.13
			160.00		39,179.68
			160.00		39,179.68

Figure 2 - example "Farms Soils Report" found on the Mountrail County GIS website

We encourage landowners to take time and explore the GIS toolsets provided since much information is available.

We have updated the county website to be very current with a plethora of information for the Ag Land Valuation project. You can find various PDF documents for the Ag Land Use, Maps, Soils Committee Minutes, and other information on the Tax Equalization Tab.

For changes in values, notices of increase will be sent out for those parcels changing in value by a minimum of \$3,000 **and** 10% or more from previous year. Notices of Increase will be sent out soon to meet the 15 day notification requirement for the Township Board of Equalization meeting dates. By North Dakota law, a notice is not required for parcels decreasing in value or that do not meet the valuation change requirements listed above.

There may be instances where owners of land get a notice of increase, or several notices for several parcels, yet their overall land value would go down in total. There are 265 landowners whom will receive notices of increase on certain parcels, yet the total valuation of all their Ag Land parcels will go down.

If there are questions concerning the mapping of parcels within your land, the land owner may utilize the "Request for Property Ag Land Use Review Form" found on the site. As agreed by the Soils

Committee and County Commissioners, a minimum of 5 acres disparity to what is currently drawn in would have to be identified and validated with evidence before action is taken. Our intent is to be very precise with the maps, and the use of this form helps us document those disparities so we can make the appropriate corrections.

If you have questions or concerns, please do not hesitate to call Mountrail County Tax Department and talk with any of the assessors. We can be reached at 701.628.2425. For access to the GIS system, Soils Committee minutes, and other Ag Land valuation documentation, please access the Tax Department website: <u>http://www.co.mountrail.nd.us/pages/tax-equalization</u>