

Department of Revenue Use of Soil Survey for Agricultural Land Evaluation

Natural Resources Conservation Service

Fact Sheet

April 2011

Montana Dept. of Revenue (DOR) has been working closely with the NRCS for several years to effectively incorporate soil survey information into the upcoming re-appraisal of agricultural land in Montana. A statewide re-appraisal has not been done for many decades.

The near completeness of Montana's Soil inventory and the use in Montana of a statewide crop yield model for small grains greatly facilitated consideration of utilizing soils data as a foundation for this mandated DOR re-appraisal.

The DOR agricultural land re-appraisal is in the final stages, with maps and DOR generated productivity values recently being mailed to producers/landowners. The productivity values they will be receiving are for irrigated crops (alfalfa hay based), dry land crops (spring wheat based), AUM data for grazing lands (component range production based), and forestlands (Univ. of Montana Model used). The productivity values are based on map unit weighted averages, considering all contributing soil components.

It is very important to note that yield data used from the NRCS certified soils data is not used verbatim, but is significantly post modified in the process of estimating productivity for land evaluation. One reason for this is to obtain regional pertinence and balance in the context of county wide yield averages as well as the use of proxy values where the certified soils data is lacking (primarily irrigated yields and areas of Denied Access). As a result, the

productivity values on the DOR provided production maps will not match the NRCS certified soils yield data. They may be lower, or higher depending on several variables in DOR's process.

The agreement and associated process established between the State Soil Scientist and the DOR for addressing landowner queries as to productivity is as follows: The county assessor will gather information provided by landowners relative to yields being low (not likely an issue) or high for a particular agricultural land use (irr. cropland, dry cropland or grazing). This information is entered into DOR's computer system and aggregated for analysis at the county level and broader. Based on how widespread or local the identified productivity anomalies end up being, after viewing all issues in a broad geographic context, the DOR has the option of tweaking their post processing of the NRCS data, or providing NRCS Soils Staff a list of map units for NRCS to investigate.

NRCS Resource Soil Scientists or Field Office Staff that are approached with DOR provided soil productivity issues relative to their re-appraisal process are to refer them to the appropriate DOR county assessor. This will ensure that the productivity issues work their way properly through the system and any needed adjustments are made appropriately, whether to the DOR application of the NRCS Certified Soil Data, or investigated on a map unit basis by NRCS Soils Staff.



"The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD)."

Helping People Help the Land

An Equal Opportunity Provider and Employer

