

# AgriMaps

*Manitoba's gateway to interactive maps, soil survey data and its interpretations*

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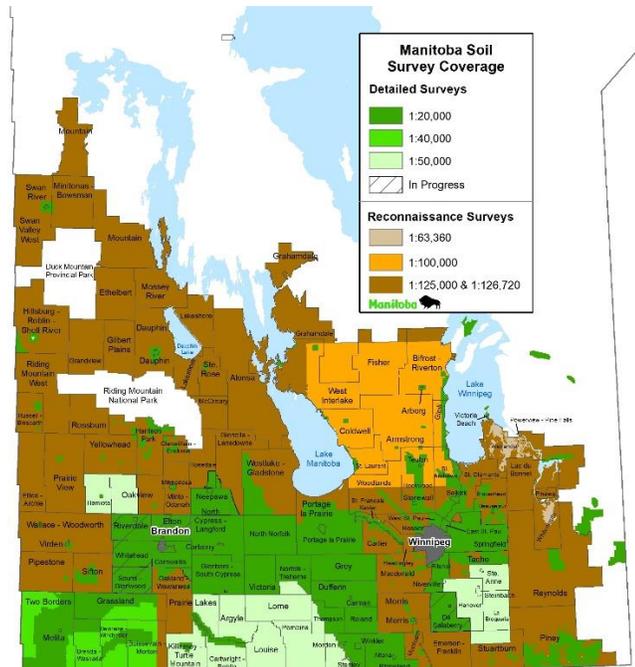
AgriMaps is a Government of Manitoba interactive online map viewer that includes information on Manitoba's soils and its potential uses (Figure 1). Having this data online and free to use benefits not only employees of the Government of Manitoba, but also many stakeholders. Users of AgriMaps include Federal, Provincial and Municipal Government Departments, agri-retailers, consultants, producers, universities and the public. Data from AgriMaps is used in many different areas such as; research trials, manure and nutrient management, land use planning, tax assessment, watershed management, environmental farm planning, and in the implementation of policies and regulations.



**Figure 1:** AgriMaps interactive online map viewer.

Information displayed in AgriMaps is provided by the Government of Manitoba's Soil Survey Unit. A soil survey is an inventory of the properties of the soil (such as texture, internal drainage, parent material, depth to groundwater, topography, degree of erosion, stoniness, pH, and salinity) and their spatial distribution over a landscape. Soils are grouped into similar types and their boundaries are delineated on a map. The information assembled in a soil survey can be used to determine the potential uses and limitations of the soils and provides insight into the kind and intensity of land management that is needed to maintain the productivity of the soil.

Currently the Soil Survey Unit is surveying agro-Manitoba at the detailed level (1:20,000) with approximately 35% of the area completed (Figure 2).



**Figure 2:** Manitoba Soil Survey Unit area surveyed at reconnaissance and detailed scales.

As a web-based program, a user can zoom to a desired location and select between multiple layers that contain information and display it on the screen. These layers include a soil series layer that is displayed in soil map units (Figure 4). Clicking anywhere in the soil polygon will show a description of the soils within that polygon. This can also be done for the other layers provided such as agricultural capability, irrigation suitability, drainage, surface texture as well as selected engineering and recreational suitability uses.

With the AgriMaps application, you can:

- Search for land by legal description
- View soil survey data and agricultural interpretations
- Measure distances and areas in the map
- Mark-up the map with text and shapes
- Save, print or email a customized map

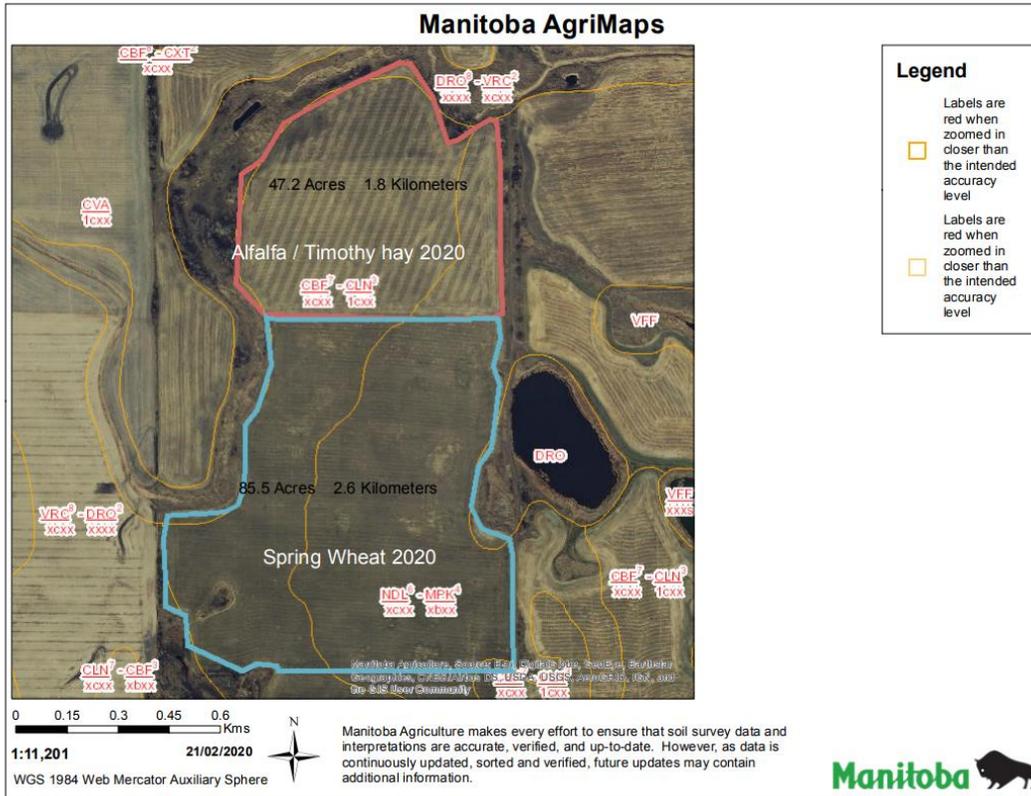


Figure 3: AgriMaps custom maps displaying use of drawing tools.

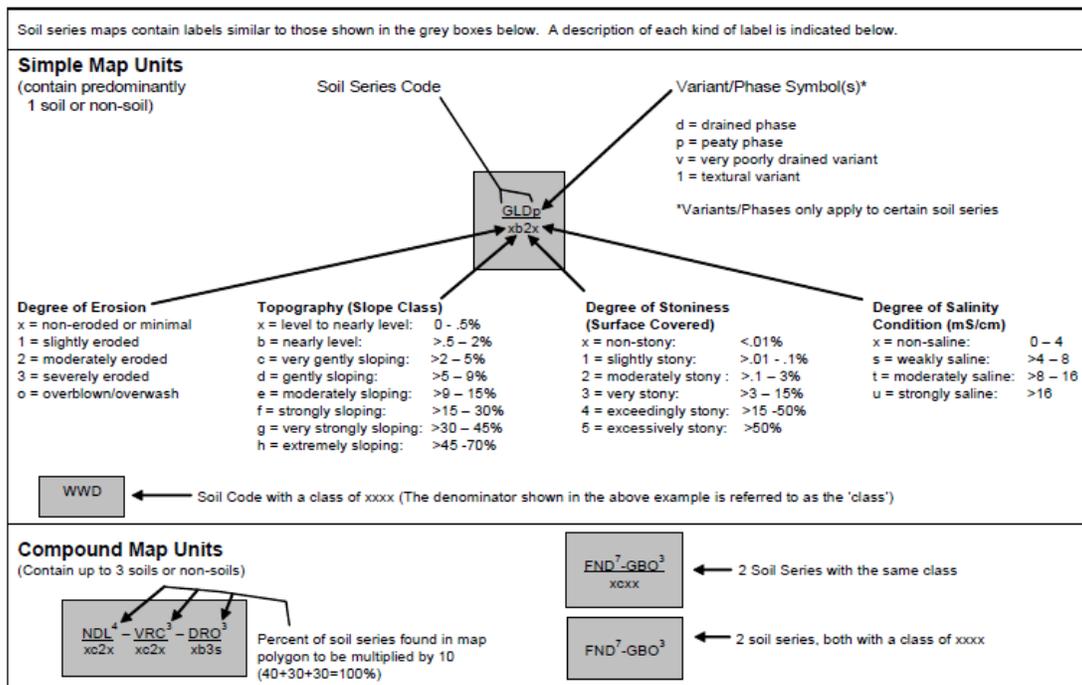
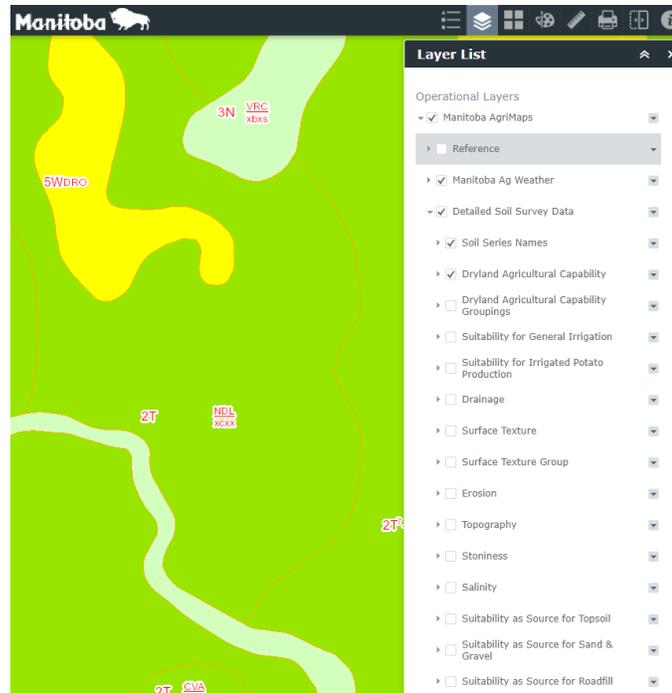


Figure 4: How to interpret a soil map unit.





**Figure 6:** Agrimaps displaying agricultural capability layer.

Did you know that detailed soil survey data and its interpretations are used in many regulations and programs here in Manitoba? There are legislations such as the Manitoba Livestock Manure and Mortality Management Regulation and Nutrient Management Regulation. Both legislations use the agricultural capability interpretation to evaluate the land's ability to handle manure or nutrient applications. Detailed soil survey interpretations is also utilised in many other applications such as land use planning, property assessment, and crop insurance.

From the name- AgriMaps, it may lead you to think that only agricultural information is provided. However, this is not the case. Part of our soil interpretations does include suitability for engineering and recreational uses. These uses include suitability as a source for top soil, sand and gravel, road fill, as well as suitability for roads and streets. There are also layers providing information on MB's watersheds, aquifers and watercourses.

Information displayed on AgriMaps is available to download in formats for multiple computer programs such as Google Earth and ArcGIS. This data is located on the Manitoba Land Initiative website. Manitoba soils data is also displayed on the Government of Manitoba's Soils Viewer interactive map where you can explore soil data, its related application to agriculture and easily link guidelines and additional resources available on the web.

AgriMaps and other Manitoba soil related information can be found at the following websites:

- Government of Manitoba's Soil Survey Website  
<https://www.gov.mb.ca/agriculture/soil/soil-survey/>
- AgriMaps  
<https://agrimaps.gov.mb.ca/agrimaps/>
- Manitoba Land Initiative  
<http://mli2.gov.mb.ca/soils/>
- Soils Viewer  
<https://manitoba.maps.arcgis.com/apps/MapSeries/index.html?appid=68ec07ca9da241e4a3d0e9cfb5ec87cf>