

## Organic Soils of the Agricultural Area of Alberta

### Description

This map displays the distribution of organic soils in the agricultural region of Alberta. Organic soils consist of layers of material with greater than 30 percent organic matter and a total thickness of greater than 40 cm.

Organic soils are generally saturated with water for most of the year unless drained. Saturation inhibits decomposition and encourages continued accumulation of organic material. Drainage of these soils can result in a rapid increase in decomposition and a reduction in the thickness of the organic material.

The Agricultural Region of Alberta Soil Inventory Database (AGRASID) soil landscape polygons that contained soils belonging to the Organic Order were identified, and the areal extent of these soils was represented as a percentage of the total area using the following classes: greater than 30, 10 to 30 and less than 10.

### Data sources

The data for this map was derived from AGRASID 3.0. AGRASID is a digital database describing the spatial distribution of soils and associated landscapes within the agricultural region of Alberta.

### Potential uses

This map shows where organic soils occur, which is important since special management may be required on these soils. Organic soils may be used for extraction of peat moss, but drainage is necessary first.

Agricultural production is limited on organic soils. They are usually deficient in phosphorous, potassium and many micronutrients. Where cereal crops are grown on organic soils, copper deficiency is commonly seen in the crop. Additions of copper sulfate to the soil can correct this deficiency. Specific soil management techniques such as drainage, using forages in rotation or establishing permanent cover will enhance agricultural production on these soils.

### Limitations

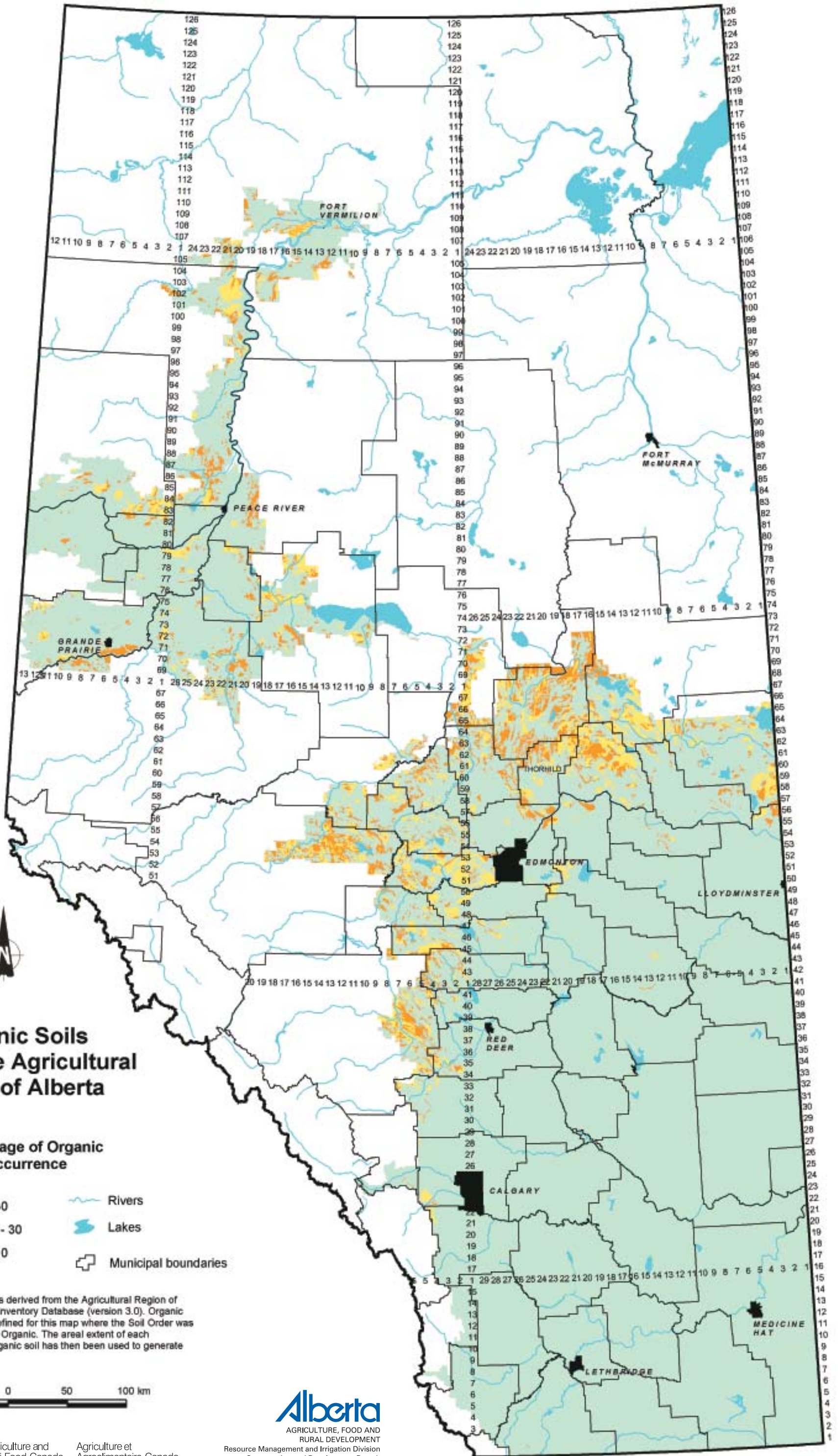
The map shows the areal extent of Organic Order soils. Further investigation of the soil landscape polygons is required to assess the nature of the soils present and the level of their limitations for agricultural production.

### Further information

Canadian Soil Information System (CanSIS) provides soils information and maps for all of Canada. Publications including *The Canadian System of Soil Classification* are available from the website. <http://sis.agr.gc.ca/cansis>

AGRASID provides extensive soil information and is available to download from the Alberta Soil Information Centre at the Alberta Agriculture, Food and Rural Development website. [www.agric.gov.ab.ca/asic](http://www.agric.gov.ab.ca/asic)

Scroll down to view map



## Organic Soils of the Agricultural Area of Alberta

### Percentage of Organic Soils Occurrence

- > 30
- 10 - 30
- < 10
- Rivers
- Lakes
- Municipal boundaries

The data was derived from the Agricultural Region of Alberta Soil Inventory Database (version 3.0). Organic soils were defined for this map where the Soil Order was classified as Organic. The areal extent of each identified Organic soil has then been used to generate this map.

