CANADA LAND INVENTORY AGRICULTURAL CAPABILITY

1:50,000

1 0.5 0 1 2 3 4 Kilometers

1 0.5 0 1 2 3 4 Miles

Base map data at the original scale of 1:10,000 was provided to the Ontario Ministry of Agriculture, Food and Rural Affairs under agreement with the Ontario Ministry of Natural Resources. The Ontario Roads Network was provided by Land Information Ontario. The soil mapping data was compiled from the original soil surveys of Ontario.

Disclaimer: The Ontario Ministry of Agriculture, Food and Rural Affairs does not certify the correctness of any information on this map and is not liable for any actions taken or not taken by any person. This map is illustrative only. Do not rely on it as a precise indicator of routes, features, nor as a guide to navigation.

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Canada Land Inventory Rating

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- Organics
- N/A
- Water

- Settlements
- Roads
- Railways
- Waterflow Network
- National Topographic Boundary
- Lot and Concession Boundary
- Municipal Boundaries
- Built Up Areas - circa 2006

N W E S

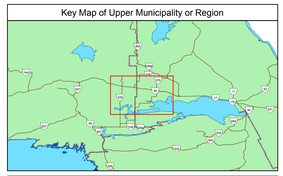
Map Symbol Description

1	Soil Capability Class "1"
6TS	Soil Capability Class "6" with SubClass "T" and "S"
1>3T	Soil Capability Class "1" is greater in area than Soil Capability Class "3" with SubClass "T"
3M=5PT	Soil Capability Class "3" with SubClass "M" is equal in Area to Soil Capability Class "5" with SubClass "T" and "P"

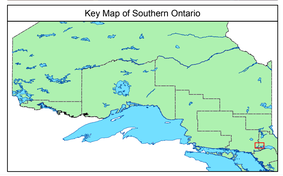
In complex soil landscapes the '>' operator indicates a domainate and significant proportionality between the first, second and in some cases a third soilcode.

Examples: 70%>30%, 70%>15%=15%, 50%=50%

Key Map of Upper Municipality or Region



Key Map of Southern Ontario



Definitions of the Capability Classes

Class 1 - Soils have no significant limitations in use for crops. Soils are level to nearly level, deep, well to imperfectly drained, and have good nutrient and water holding capacity. They can be managed and cropped without difficulty. Under good management they are moderately high to high in productivity for the full range of common field crops.

Class 2 - Soils have moderate limitations that reduce the choice of crops, or require moderate conservation practices. These soils are deep and may not hold moisture and nutrients as well as Class 1 soils. The limitations are moderate and the soils can be managed and cropped with little difficulty. Under good management these soils are fair to moderately high in productivity for a wide range of field crops.

Class 3 - Soils have moderately severe limitations that reduce the choice of crops or require special conservation practices. Limitations are more severe than Class 2 soils. They may affected the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management these soils are fair to moderately high in productivity for a wide range of common field crops.

Class 4 - Soils have severe limitations that restrict the choice of crops, or require special conservation practices and/or very careful management. The limitations severely affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. These soils exhibit low to moderate productivity for a narrow to wide range of common field crops, but may have higher productivity for a specially adapted crop.

Class 5 - Soils have severe limitations that restrict capability to producing perennial forage crops, and improvement practices are feasible. The limitations are so severe that the soils are not capable of use for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants and may be improved through the use of farm machinery. Feasible improvement practices may include clearing of bush, cultivations, seeding, fertilization, or water control.

Class 6 - Soils are unsuited for cultivation, but are capable of use for unimproved permanent pasture. These soils may provide some sustained grazing for farm animals, but the limitations are so severe that improvements through the use of farm machinery is impractical. The terrain may be unsuitable for the use of farm machinery, or the soils may not respond to improvement, or the grazing season may be very short.

Class 7 - Soils have no capability for arable agriculture or permanent pasture. This class includes marsh, rockland and very steep slopes.

Class O - Organic soils (not included in capability classes).

Definitions of the Capability Subclasses:

Subclass C - Adverse climate: Denotes a significant adverse climate for crop production as compared to the "median" climate, which exhibits sufficiently high growing season temperatures to bring common field crops to maturity, and sufficient precipitation to permit crops to be grown annually on the same land without serious risk of crop failure. In Ontario, this subclass is applied to lands averaging less than 2300 Crop Heat Units.

Subclass D - Undesirable soil structure and/or low permeability: Used for soils that are difficult to till, or which absorb or release water very slowly, or in which the depth of the rooting zone is restricted by conditions other than a high water table or consolidated bedrock. In Ontario, this subclass is based on the existence of critical clay contents in the upper soil profile.

Subclass E - Erosion: Loss of topsoil and subsoil has reduced productivity and may cause difficulties in farming the land, such as land with gullies.

Subclass F - Low natural fertility: This subclass is comprised of soils having low fertility that is either correctable with careful management in the use of fertilizers or soil amendments, or is difficult to correct in a feasible way. The limitation may be due to a lack of available plant nutrients, high acidity, low cation exchange capacity, or the presence of toxic compounds.

Subclass I - Inundation by streams or lakes: Flooding by streams or lakes causes crop damage or restricts agricultural use.

Subclass M - Moisture deficiency: Soils in this subclass have low moisture retention capacities and are prone to drought.

Subclass P - Stoniness: Denotes soils that are sufficiently stoney, which hinders tillage, planting, and harvesting operations.

Subclass R - Consolidated bedrock: The occurrence of consolidated bedrock within 100 cm of the surface restricts rooting depth and limits moisture retention. Conversely, in poorly drained soils the presence of bedrock may, depending on depth, make artificial drainage impossible.

Subclass S - Adverse soil characteristics: Denotes a combination of limitations of equal severity. In Ontario, it has been used to denote a combination of F and M when these are present with a third limitation, such as T, E or P.

Subclass T - Topography: Denotes limitations due to slope steepness and length. Such limitations may hinder machinery use, decrease the uniformity of crop growth and maturity, and increase water erosion potential.

Subclass W - Excess water: Indicates the presence of excess soil moisture due to very poor soil drainage. It is distinguished from subclass I (water inundation), which indicates risk of flooding from adjacent bodies of water.

	41I9	
41I7	41I8	31L5
	41I1	