

*ISO 19131 Canada Land Inventory (CLI)  
– Data Product Specification*

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Revision: A

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## **Data specification: Canada Land Inventory (CLI)**

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# Data specification: Canada Land Inventory (CLI)

## 1. OVERVIEW

### 1.1 Informal description

These agricultural capability and limitation maps can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land-use plans, and for preparing equitable land assessments.

### 1.2 Data product specification metadata

This section provides metadata about the creation of this data product specification.

Data product specification title:	Canada Land Inventory (CLI)
Data product specification reference date:	January 5, 2013
Data product specification responsible party:	Agriculture and Agri-Food Canada, Government of Canada, Science and Technology Branch
Data product specification language:	English, French
Data product specification topic category:	Farming

### 1.3 Terms and definitions

- **Feature attribute**
  - characteristic of a feature
- **Class**
  - description of a set of objects that share the same attributes, operations, methods, relationships, and semantics [UML Semantics]
  - NOTE: A class does not always have an associated geometry (e.g. the metadata class).
- **Feature**
  - abstraction of real world phenomena
- **Object**
  - entity with a well-defined boundary and identity that encapsulates state and behaviour [UML Semantics]
  - NOTE: An object is an instance of a class.
- **Package**
  - grouping of a set of classes, relationships, and even other packages with a view to organizing the model into more abstract structures

### 1.4 Abbreviations

AAFC	Agriculture and Agri-Food Canada
CLI	Canadian Land Inventory

## **2. SPECIFICATION SCOPE**

This data specification has only one scope, the general scope.

NOTE: The term 'specification scope' originates from the International Standard ISO19131. 'Specification scope' does not express the purpose for the creation of a data specification or the potential use of data, but identifies partitions of the data specification where specific requirements apply.

### 3. DATA PRODUCT IDENTIFICATION

#### 3.1 Data Series Identification

Title	Canada Land Inventory (CLI)
Alternate Title	
Abstract	This product contains the Canada Land Inventory (CLI) - Multiple scales of Land Capability / Limitation for Agriculture.
Purpose	These agricultural capability and limitation maps can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land use plans, and for preparing equitable land assessments.
Topic Category	Farming
Spatial Reference Type	vector
Spatial Resolution	Range from 1:50,000 to 1:1,000,000
Geographic Description	North Bounding Coordinate: 60 West Bounding Coordinate: -132 East Bounding Coordinate: -52. South Bounding Coordinate: 36
Supplemental Information	The Canada Land Inventory is a comprehensive multi-disciplinary land inventory of rural Canada, covering over 2.5 million square kilometers of land and water. Land capability for agriculture, forestry, wildlife, recreation, wildlife (ungulates and waterfowl) was mapped.
Constraints	<p>Anyone may use these data free of charge, provided they acknowledge Agriculture and Agri-food Canada's authorship. AAFC retains exclusive rights, title, and ownership of this data. Copying and redistribution of part or all of this dataset is acceptable, provided that the contents of this file are included with the redistribution. AAFC may be unable to answer queries about these data if they were obtained through a third party.</p> <p>Data are subject to the Government of Canada Open Data License Agreement: <a href="https://open.canada.ca/en/open-government-licence-canada">https://open.canada.ca/en/open-government-licence-canada</a></p>
Keywords	<p>Thesaurus: Government of Canada Core Subject Thesaurus (<a href="https://canada.multites.net/cst/index.htm">https://canada.multites.net/cst/index.htm</a>)</p> <p>Date: February 1, 2000</p> <p>Keywords: Agriculture, Biomass, Earth Science, Land Inventory, Land Management, Landscape Management, Soil, Vegetation Atlantic provinces, Western provinces</p>
Scope identification	series

## 3.2 Data product identification

### 3.2.1 Canada Land Inventory (CLI) 1:1,000,000 - Land Capability for Agriculture

Title	Canada Land Inventory (CLI) 1:1,000,000 - Land Capability for Agriculture
Alternate Title	
Abstract	The Canada Land Inventory (CLI), 1:000,000, Land Capability for Agriculture dataset illustrates the varying potential of a specific area for agricultural production. Classes of land capability for agriculture are based on mineral soils grouped according to their potential and limitations for agricultural use. The classes indicate the degree of limitation imposed by the soil in its use for mechanized agriculture.
Purpose	The Canada Land Inventory (CLI), Land Capability for Agriculture dataset can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land use plans, and for preparing equitable land assessments.
Topic Category	Farming
Spatial Reference Type	vector
Spatial Resolution	1:1,000,000
Geographic Description	North Bounding Coordinate: 60 West Bounding Coordinate: -132 East Bounding Coordinate: -52. South Bounding Coordinate: 36
Constraints	Anyone may use these data free of charge, provided they acknowledge Agriculture and Agri-food Canada's authorship. AAFC retains exclusive rights, title, and ownership of this data. Copying and redistribution of part or all of this dataset is acceptable, provided that the contents of this file are included with the redistribution. AAFC may be unable to answer queries about these data if they were obtained through a third party.  Data are subject to the Government of Canada Open Data License Agreement: <a href="https://open.canada.ca/en/open-government-licence-canada">https://open.canada.ca/en/open-government-licence-canada</a>
Keywords	Thesaurus: Government of Canada Core Subject Thesaurus ( <a href="https://canada.multites.net/cst/index.htm">https://canada.multites.net/cst/index.htm</a> ) Date: February 1, 2000 Keywords: Agriculture, Biomass, Earth Science, Land Inventory, Land Management, Landscape Management, Soil, Vegetation Atlantic provinces, Western provinces
Scope Identification	dataset
Feature Attribute Names	MAJOR1, MINOR1, DESC_EN, DESC_FR

### 3.2.2 Canada Land Inventory (CLI) 1:250,000 - Land Capability for Agriculture

Title	Canada Land Inventory (CLI) 1:250,000 - Land Capability for Agriculture
Alternate Title	

Abstract	The Canada Land Inventory (CLI), 1:250,000, Land Capability for Agriculture dataset illustrates the varying potential of a specific area for agricultural production. Classes of land capability for agriculture are based on mineral soils grouped according to their potential and limitations for agricultural use. The classes indicate the degree of limitation imposed by the soil in its use for mechanized agriculture. The subclasses indicate the kinds of limitations that individually or in combination with others, are affecting agricultural land use. Classes are based on characteristics of the soil as determined by soil surveys.
Purpose	The Canada Land Inventory (CLI), Land Capability for Agriculture dataset can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land-use plans, and for preparing equitable land assessments.
Topic Category	Farming
Spatial Reference Type	vector
Spatial Resolution	1:250,000
Geographic Description	North Bounding Coordinate: 60 West Bounding Coordinate: -132 East Bounding Coordinate: -52. South Bounding Coordinate: 36
Constraints	Anyone may use these data free of charge, provided they acknowledge Agriculture and Agri-food Canada's authorship. AAFC retains exclusive rights, title, and ownership of this data. Copying and redistribution of part or all of this dataset is acceptable, provided that the contents of this file are included with the redistribution. AAFC may be unable to answer queries about these data if they were obtained through a third party.  Data are subject to the Government of Canada Open Data License Agreement: <a href="https://open.canada.ca/en/open-government-licence-canada">https://open.canada.ca/en/open-government-licence-canada</a>
Keywords	Thesaurus: Government of Canada Core Subject Thesaurus ( <a href="https://canada.multitites.net/cst/index.htm">https://canada.multitites.net/cst/index.htm</a> ) Date: February 1, 2000 Keywords: Agriculture, Biomass, Earth Science, Land Inventory, Land Management, Landscape Management, Soil, Vegetation Atlantic provinces, Western provinces
Scope Identification	dataset
Feature Attribute Names	CLASS A,PERCENT A,SUBCLASS A1,SUBCLASS A2,CLASS B, PERCENT B, SUBCLASS B1,SUBCLASS B2,CLASS C ,PERCENT C, SUBCLASS C1,SUBCLASS C2, CLASS D, PERCENT D, SUBCLASS D1, SUBCLASS D2, CLASS E, PERCENT E, SUBCLASS E1, SUBCLASS E2, CLASS F, PERCENT F, SUBCLASS F1, SUBCLASS F2, IRRIGATED, DESC_EN, DESC_FR

### 3.2.3 Canada Land Inventory (CLI) 1:50,000 - Land Capability for Agriculture

Title	Canada Land Inventory (CLI) 1:50,000 - Land Capability for Agriculture
Alternate Title	
Abstract	The Canada Land Inventory (CLI), 1:50,000, Land Capability for Agriculture dataset illustrates the varying potential of a specific area for agricultural production. Classes of land capability for agriculture are based on mineral soils grouped according to their potential and



	limitations for agricultural use. The classes indicate the degree of limitation imposed by the soil in its use for mechanized agriculture. The subclasses indicate the kinds of limitations that individually or in combination with others are affecting agricultural land use. Classes are based on characteristics of the soil as determined by soil surveys.
Purpose	The Canada Land Inventory (CLI), Land Capability for Agriculture dataset can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land-use plans, and for preparing equitable land assessments.
Topic Category	Farming
Spatial Reference Type	vector
Spatial Resolution	1:50,000
Geographic Description	North Bounding Coordinate: 60 West Bounding Coordinate: -132 East Bounding Coordinate: -52. South Bounding Coordinate: 36
Constraints	Anyone may use these data free of charge, provided they acknowledge Agriculture and Agri-food Canada's authorship. AAFC retains exclusive rights, title, and ownership of this data. Copying and redistribution of part or all of this dataset is acceptable, provided that the contents of this file are included with the redistribution. AAFC may be unable to answer queries about these data if they were obtained through a third party.  Data are subject to the Government of Canada Open Data License Agreement: <a href="https://open.canada.ca/en/open-government-licence-canada">https://open.canada.ca/en/open-government-licence-canada</a>
Keywords	Thesaurus: Government of Canada Core Subject Thesaurus ( <a href="https://canada.multitites.net/cst/index.htm">https://canada.multitites.net/cst/index.htm</a> ) Date: February 1, 2000 Keywords: Agriculture, Biomass, Earth Science, Land Inventory, Land Management, Landscape Management, Soil, Vegetation Atlantic provinces, Western provinces
Scope Identification	Dataset
Feature Attribute Names	CLASS A,PERCENT A,SUBCLASS A1,SUBCLASS A2,CLASS B, PERCENT B, SUBCLASS B1,SUBCLASS B2,CLASS C ,PERCENT C, SUBCLASS C1,SUBCLASS C2

### 3.2.4 Canada Land Inventory (CLI) 1:1,000,000 - Land Capability and Limitation for Agriculture

Title	Canada Land Inventory (CLI) 1:1,000,000 - Land Capability and Limitation for Agriculture
Alternate Title	
Abstract	The Canada Land Inventory (CLI), 1:1,000,000, Land Capability and Limitation for Agriculture dataset is a combination of land capabilities and limitations primarily to define prime and marginal lands. Further classifications define limitations that individually or in combination with others are affecting agricultural land use. Classes are based on characteristics of the soil as determined by soil surveys.
Purpose	The Canada Land Inventory (CLI), Land Capability and Limitation for Agriculture dataset can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land use plans, and for preparing equitable land assessments.

Topic Category	Farming
Spatial Reference Type	Vector
Spatial Resolution	1: 1,000,000
Geographic Description	North Bounding Coordinate: 60 West Bounding Coordinate: -132 East Bounding Coordinate: -52. South Bounding Coordinate: 36
Constraints	Anyone may use these data free of charge, provided they acknowledge Agriculture and Agri-food Canada's authorship. AAFC retains exclusive rights, title, and ownership of this data. Copying and redistribution of part or all of this dataset is acceptable, provided that the contents of this file are included with the redistribution. AAFC may be unable to answer queries about these data if they were obtained through a third party.  Data are subject to the Government of Canada Open Data License Agreement: <a href="https://open.canada.ca/en/open-government-licence-canada">https://open.canada.ca/en/open-government-licence-canada</a>
Keywords	Thesaurus: Government of Canada Core Subject Thesaurus ( <a href="https://canada.multites.net/cst/index.htm">https://canada.multites.net/cst/index.htm</a> ) Date: February 1, 2000 Keywords: Agriculture, Biomass, Earth Science, Land Inventory, Land Management, Landscape Management, Soil, Vegetation Atlantic provinces, Western provinces
Scope Identification	dataset
Feature Attribute Names	MAJOR1, MINOR1, DESC_EN, DESC_FR

### 3.2.5 Canada Land Inventory (CLI) 1:1,000,000 - Land Limitation for Agriculture

Title	Canada Land Inventory (CLI) 1:1,000,000 - Land Limitation for Agriculture
Alternate Title	
Abstract	The Canada Land Inventory (CLI), 1:1,000,000, Land Limitation for Agriculture dataset illustrates the limiting characteristics of a specific area for agricultural production. Classes indicate the kinds of limitations that individually or in combination with others are affecting agricultural land use. Classes are based on characteristics of the soil as determined by soil surveys.
Purpose	The Canada Land Inventory (CLI), Land Limitation for Agriculture dataset can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land-use plans, and for preparing equitable land assessments.
Topic Category	Farming
Spatial Reference Type	Vector
Spatial Resolution	1: 1,000,000

Geographic Description	<p>North Bounding Coordinate: 60</p> <p>West Bounding Coordinate: -132</p> <p>East Bounding Coordinate: -52.</p> <p>South Bounding Coordinate: 36</p>
Constraints	<p>Anyone may use these data free of charge, provided they acknowledge Agriculture and Agri-food Canada's authorship. AAFC retains exclusive rights, title, and ownership of this data. Copying and redistribution of part or all of this dataset is acceptable, provided that the contents of this file are included with the redistribution. AAFC may be unable to answer queries about these data if they were obtained through a third party.</p> <p>Data are subject to the Government of Canada Open Data License Agreement: <a href="https://open.canada.ca/en/open-government-licence-canada">https://open.canada.ca/en/open-government-licence-canada</a></p>
Keywords	<p>Thesaurus: Government of Canada Core Subject Thesaurus (<a href="https://canada.multites.net/cst/index.htm">https://canada.multites.net/cst/index.htm</a>)</p> <p>Date: February 1, 2000</p> <p>Keywords: Agriculture, Biomass, Earth Science, Land Inventory, Land Management, Landscape Management, Soil, Vegetation Atlantic provinces, Western provinces</p>
Scope Identification	dataset
Feature Attribute Names	MAJOR1, MINOR1, DESC_EN, DESC_FR

## **4. DATA CONTENT AND STRUCTURE**

### **4.1 Feature-based application schema**

**TO BE INSERTED**

## 4.2 Feature catalogue – Canada Land Inventory (CLI) – Land Capability

Title	Canada Land Inventory (CLI) - Land Capability for Agriculture
Scope	Applies to the Canadian Land Inventory capability datasets that can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land-use plans, and for preparing equitable land assessments.
Version Number	1
Version Date	January 5, 2013
Producer	Agriculture and Agri-Food Canada, Science and Technology Branch

System-generated attributes (for example, OBJECTID, Shape, Shape Length and Area) are not defined in the feature catalog.

### 4.2.1 Feature Attributes

#### 4.2.1.1 MAJOR1

Name	MAJOR1		
Definition	Agriculture Land Capability Sub-Class		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Integer		
Value Domain Type	1 (enumerated)		
Value Domain	0-9		
	Feature Attribute Value		
	Label	Code	Definition
	0		Unclassified
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	8		Organic Soils
	9		Unclassified

#### 4.2.1.2 MINOR1

Name	MINOR1
Definition	Agriculture Land Capability Sub-Class
Aliases	
Producer	GeoGratis
Value Data Type	Integer
Value Domain Type	1 (enumerated)
Value Domain	0-9

	Feature Attribute Value		
	Label	Code	Definition
	0		Unclassified
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops – Improvement practices feasible
	6		Forage Crops – Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	8		Organic Soils
	9		Unclassified

**4.2.1.3 CLASS\_A**

Name	CLASS_A		
Definition	The primary and/or dominant CLI class		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	CHARACTER		
Value Domain Type	1 (enumerated)		
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	0		Organic Soils
	8		Unclassified areas
	W		Water

**4.2.1.4 PERCENT\_A**

Name	PERCENT_A
Definition	The proportion (% base 10) of the polygon in Class_A (blank = 0%)

Aliases			
Producer	GeoGratis		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	0		Organic Soils
	8		Unclassified areas
	W		Water

**4.2.1.5 SUBCLASS\_A1**

Name	SUBCLASS_A1		
Definition	The primary limitation for the proportion of the polygon in Class_A		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics
	B		Unknown

**4.2.1.6 SUBCLASS\_A2**

Name	SUBCLASS_A2		
Definition	The secondary limitation for the proportion of the polygon in Class_A		
Aliases			
Producer	GeoGratis		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics

**4.2.1.7 CLASS\_B**

Name	CLASS_B		
Definition	The secondary CLI class		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	0		Organic Soils



	8		Unclassified areas
	W		Water

**4.2.1.8 PERCENT\_B**

<i>Name</i>	<i>PERCENT_B</i>		
<i>Definition</i>	<i>The proportion (% base 10) of the polygon in Class_B (blank = 0%)</i>		
<i>Aliases</i>			
<i>Producer</i>	<i>GeoGratis</i>		
<i>Value Data Type</i>	<i>Character</i>		
<i>Value Domain Type</i>			
<i>Value Domain</i>			
	<i>Feature Attribute Value</i>		
	<i>Label</i>	<i>Code</i>	<i>Definition</i>
	1		<i>No Significant Limitations</i>
	2		<i>Moderate Limitations; moderate conservation practices required.</i>
	3		<i>Moderately Severe Limitations; range of crops restricted or special conservation practices required.</i>
	4		<i>Severe Limitations</i>
	5		<i>Forage Crops - Improvement practices feasible</i>
	6		<i>Forage Crops - Improvement practices not feasible</i>
	7		<i>No Capability for arable culture or permanent pasture</i>

**4.2.1.9 SUBCLASS\_B1**

<i>Name</i>	<i>SUBCLASS_B1</i>		
<i>Definition</i>	<i>The primary limitation for the proportion of the polygon in Class_B</i>		
<i>Aliases</i>			
<i>Producer</i>	<i>Agriculture and Agri-Food Canada</i>		
<i>Value Data Type</i>	<i>character</i>		
<i>Value Domain Type</i>			
<i>Value Domain</i>	<i>A-Z</i>		
	<i>Feature Attribute Value</i>		
	<i>Label</i>	<i>Code</i>	<i>Definition</i>
	C		<i>Adverse Climate</i>
	D		<i>Undesirable soil structure and/or low permeability</i>
	E		<i>Erosion</i>
	F		<i>Low fertility</i>
	I		<i>Inundation by streams or lakes</i>
	M		<i>Moisture limitation</i>
	N		<i>Salinity</i>
	P		<i>Stoniness</i>
	R		<i>Consolidated Rock</i>
	S		<i>Cumulative adverse soil characteristics</i>
	T		<i>Topography limitation</i>
	W		<i>Excess water</i>

	X		<i>Cumulative minor adverse characteristics</i>
	B		<i>Unknown</i>

**4.2.1.10 SUBCLASS\_B2**

Name	SUBCLASS_B2		
Definition	The secondary limitation for the proportion of the polygon in Class_B		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics

**4.2.1.11 CLASS\_C**

Name	CLASS_C		
Definition	The secondary CLI class		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible

	7		No Capability for arable culture or permanent pasture
	0		Organic Soils
	8		Unclassified areas
	<i>W</i>		<i>Water</i>

**4.2.1.12 PERCENT\_C**

Name	PERCENT_C		
Definition	The proportion (% base 10) of the polygon in Class_C (blank = 0%)		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture

**4.2.1.13 SUBCLASS\_C1**

Name	SUBCLASS_C1		
Definition	The primary limitation for the proportion of the polygon in Class_C		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock

	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics
	B		Unknown

**1.1.1.1 SUBCLASS\_C2**

Name	SUBCLASS_C2		
Definition	The secondary limitation for the proportion of the polygon in Class_C		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics

**4.2.1.14 CLASS\_D**

Name	CLASS_D		
Definition	The primary CLI class for irrigated regions within the polygon.		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.

	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	0		Organic Soils
	8		Unclassified areas
	W		Water

**4.2.1.15 PERCENT\_D**

Name	PERCENT_D		
Definition	The proportion (% base 10) of the polygon in Class_D (blank = 0%)		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture

**4.2.1.16 SUBCLASS\_D1**

Name	SUBCLASS_D1		
Definition	The primary limitation for the proportion of the polygon in Class_D		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation

	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics
	B		Unknown

**4.2.1.17 SUBCLASS\_D2**

Name	SUBCLASS_D2		
Definition	The secondary limitation for the proportion of the polygon in Class_D		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics

**4.2.1.18 CLASS\_E**

Name	CLASS_E		
Definition	The secondary CLI class for irrigated regions within the polygon.		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		

			Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	0		Organic Soils
	8		Unclassified areas
	W		Water

**4.2.1.19 PERCENT\_E**

Name	PERCENT_E		
Definition	The proportion (% base 10) of the polygon in Class_E (blank = 0%)		
Aliases			
Producer	GeoGratis		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture

**4.2.1.20 SUBCLASS\_E1**

Name	SUBCLASS_E1
Definition	The primary limitation for the proportion of the polygon in Class_E

Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics
	B		Unknown

**4.2.1.21 SUBCLASS\_E2**

Name	SUBCLASS_E2		
Definition	The secondary limitation for the proportion of the polygon in Class_E		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics



**4.2.1.22 CLASS\_F**

Name	CLASS_F		
Definition	The tertiary CLI class for irrigated regions within the polygon.		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture
	0		Organic Soils
	8		Unclassified areas
	<i>W</i>		<i>Water</i>

**4.2.1.23 PERCENT\_F**

Name	PERCENT_F		
Definition	The proportion (% base 10) of the polygon in Class_F (blank = 0%)		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Character		
Value Domain Type			
Value Domain			
	Feature Attribute Value		
	Label	Code	Definition
	1		No Significant Limitations
	2		Moderate Limitations; moderate conservation practices required.
	3		Moderately Severe Limitations; range of crops restricted or special conservation practices required.
	4		Severe Limitations
	5		Forage Crops - Improvement practices feasible
	6		Forage Crops - Improvement practices not feasible
	7		No Capability for arable culture or permanent pasture

**4.2.1.24 SUBCLASS\_F1**

Name	SUBCLASS_F1		
Definition	The primary limitation for the proportion of the polygon in Class_F.		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation
	W		Excess water
	X		Cumulative minor adverse characteristics
	B		Unknown

**4.2.1.25 SUBCLASS\_C2**

Name	SUBCLASS_F2		
Definition	The secondary limitation for the proportion of the polygon in Class_F		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	character		
Value Domain Type			
Value Domain	A-Z		
	Feature Attribute Value		
	Label	Code	Definition
	C		Adverse Climate
	D		Undesirable soil structure and/or low permeability
	E		Erosion
	F		Low fertility
	I		Inundation by streams or lakes
	M		Moisture limitation
	N		Salinity
	P		Stoniness
	R		Consolidated Rock
	S		Cumulative adverse soil characteristics
	T		Topography limitation

	W		Excess water
	X		Cumulative minor adverse characteristics

**4.2.1.26 IRRIGATED**

Name	IRRIGATED		
Definition	Irrigated status (fully or partially) at time of data collection.		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Integer		
Value Domain Type	1 (enumerated)		
Value Domain	0-8		
	Feature Attribute Value		
	Label	Code	Definition
	1		Fully irrigated
	2		Partially irrigated

**4.3 Feature catalogue – Canada Land Inventory (CLI) – Land Capability and Limitation**

Title	Canada Land Inventory (CLI) - Land Capability and Limitation for Agriculture
Scope	Applies to the Canadian Land Inventory capability datasets that can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land-use plans, and for preparing equitable land assessments.
Version Number	1
Version Date	January 5, 2013
Producer	Agriculture and Agri-Food Canada, Science and Technology Branch

System-generated attributes (for example, OBJECTID, Shape, Shape Length and Area) are not defined in the feature catalog.

**4.3.1 Feature Attributes**

**4.3.1.1 MAJOR1**

Name	MAJOR1		
Definition	Agriculture Potential and Limitation Sub-Class		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Integer		
Value Domain Type	1 (enumerated)		
Value Domain	0-8		
	Feature Attribute Value		
	Label	Code	Definition
	0		Unclassified
	1		Prime Agriculture Lands (CLI Class 1 and 2)
	2		Marginal Agriculture Lands (CLI Class 3 and 4)

	3		Limited by Stoniness
	4		Limited by Adverse Soil
	5		Limited by Topography
	6		Limited by Other Factors
	7		Organic Soils (CLI Class 8)
	8		Unclassified

**4.3.1.2 MINOR1**

Name	MINOR1		
Definition	Agriculture Potential and Limitation Sub-Class		
Aliases			
Producer	GeoGratis		
Value Data Type	Integer		
Value Domain Type	1 (enumerated)		
Value Domain	0-8		
	Feature Attribute Value		
	Label	Code	Definition
	0		Unclassified
	1		Prime Agriculture Lands (CLI Class 1 and 2)
	2		Marginal Agriculture Lands (CLI Class 3 and 4)
	3		Limited by Stoniness
	4		Limited by Adverse Soil
	5		Limited by Topography
	6		Limited by Other Factors
	7		Organic Soils (CLI Class 8)
	8		Unclassified

**4.4 Feature Catalogue - Canada Land Inventory (CLI) - Agricultural Limits**

Title	Canada Land Inventory (CLI) - Land Agricultural Limits
Scope	Applies to the Canadian Land Limitation Dataset that can be used at the regional level for making decisions on land improvement and farm consolidation, for developing land-use plans, and for preparing equitable land assessments.
Version Number	1
Version Date	January 5, 2013
Producer	Agriculture and Agri-Food Canada, Science and Technology Branch

System-generated attributes (for example, OBJECTID, Shape, Shape Length and Area) are not defined in the feature catalog

**4.4.1 Feature Attributes**

**4.4.1.1 MAJOR1**

Name	MAJOR1
Definition	Agriculture Limitation Sub-Class
Aliases	
Producer	Agriculture and Agri-Food Canada
Value Data Type	Integer

Value Domain Type	1 (enumerated)		
Value Domain	0-15		
	Feature Attribute Value		
	Label	Code	Definition
	0		Unclassified
	1		Adverse Climate
	2		Undesirable Soil
	3		Erosion
	4		Low Fertility
	5		Inundation
	6		Moisture Limitation
	7		Salinity
	8		Stoniness
	9		Consolidated Bedrock
	10		Adverse Soil
	11		Topography
	12		Excess Water
	13		Minor Characteristics
	14		No Limitations
	15		Unclassified

**4.4.1.2 MINOR1**

Name	MINOR1		
Definition	Agriculture Limitation Sub-Class		
Aliases			
Producer	Agriculture and Agri-Food Canada		
Value Data Type	Integer		
Value Domain Type	1 (enumerated)		
Value Domain	0-15		
	Feature Attribute Value		
	Label	Code	Definition
	0		Unclassified
	1		Adverse Climate
	2		Undesirable Soil
	3		Erosion
	4		Low Fertility
	5		Inundation
	6		Moisture Limitation
	7		Salinity
	8		Stoniness
	9		Consolidated Bedrock
	10		Adverse Soil
	11		Topography
	12		Excess Water
	13		Minor Characteristics
	14		No Limitations
	15		Unclassified

## 5. REFERENCE SYSTEM

### 5.1 Spatial reference system

Horizontal coordinate reference system: WGS 84  
 Map projection: Web Mercator Auxiliary Sphere; EPSG: 3857; Version 8.1.4

### 5.2 Temporal reference system

Gregorian calendar

## 6. DATA QUALITY

### 6.1 Completeness

Measure not defined at this time.

### 6.2 Logical consistency

Measure not defined at this time.

### 6.3 Positional accuracy

Measure not defined at this time.

### 6.4 Temporal accuracy

Measure not defined at this time.

### 6.5 Thematic accuracy

Measure not defined at this time.

### 6.6 Lineage statement

Lineage Statement	The Government of Canada developed the Canada Land Inventory (CLI) under the auspices of the Department of Regional and Economic Expansion (1963-1971) and the Department of the Environment (renamed Environment Canada), (1971- 1994). Over 1000 mapsheets at the 1:250,000 scale were created during the 1960's, 70s, and early 80's. Although the information is old, and better information is available for some areas as part of more recent soil surveys, the interpretations are still largely valid, and many jurisdictions still use them for land use planning purposes.
Scope	Series

## 7. DATA CAPTURE

- 1) agrcfins.zip was downloaded from [http://geogratis.cgdi.gc.ca/download/cli\\_1m/e00\\_pro/](http://geogratis.cgdi.gc.ca/download/cli_1m/e00_pro/)
- 2) The file was unzipped and the agrcfins.e00 coverage was imported using the import command
- 3) Coverage was then re-projected using the project command from Lambert Conformal, with parallels at 49 and 77, and an origin at 95 longitude and 60 latitude - to GCS\_North\_American\_1983
- 4) Data was converted into a feature class, renamed - and certain unnecessary fields were dropped (<coverage-id>, <coverage-Area>, <coverage-perimeter>, <coverage#>) 5) New spatial extent was defined and Metadata was created

The data was further conditioned and prepared with metadata for loading and publishing within the AAFC N-GIS enterprise Geodatabase based on the Geodataset Life Cycle (GDLC) guidelines.

## 8. DATA MAINTENANCE

Frequency: As Needed

## 9. PORTRAYAL

Not applicable.

## 10. DATA PRODUCT DELIVERY

File Geodatabase

Format name: Esri Geodatabase (File-based) format version: 10.1

Specification: A collection of various types of GIS datasets held in a file system folder.  
(<https://arcgis.com>)

Languages: eng

Character set: utf8

## 11. METADATA

The metadata requirements follow the Government of Canada's Treasury Board Standard on Geospatial Data (ISO 19115).