

GROUNDWATER RESOURCES STUDY (GRS) 17 METADATA

GENERAL INFORMATION

Official Name of the Data Set or Information Holding:

Geospatial Distribution of Selected Chemical, Bacteriological and Gas Parameters Related to Groundwater in Southern Ontario

Acronyms are Used to Identify the Data Set or Information Holding: GRS017

Describe the Data Set or Information Holding:

Colgrove, L.M., Hamilton, S.M. (authors)

This publication can be downloaded from GeologyOntario: see Distribution Information section.

Recent regional mapping of the chemical composition of ambient groundwater in Ontario has led to the characterization of large-scale geological influences on groundwater quality and dissolved constituents. This Groundwater Resources Study uses data from the Ontario Geological Survey's Ambient Groundwater Geochemistry database to spatially map discrete areas of southern Ontario where groundwater has a natural tendency toward elevated concentrations of specific geochemical and bacteriological constituents. The chemical parameters included are arsenic, barium, boron, fluoride, nuisance gases (methane, hydrogen sulphide, hypoxic gas), iodide, nitrate, chloride, selenium and uranium. A set of bacteriological maps are also included, which delineate karstic aquifer conditions that facilitate widespread coliform in groundwater. For each parameter, individual maps convey 1) geological associations, 2) chemical concentration distribution and 3) simplified versions of the maps show discrete regions with elevated concentrations. Geological features and geochemical mechanisms controlling regional hydrochemical trends are briefly discussed. The characterization of background concentrations of constituents that affect groundwater utility can aid in effective resource management in Ontario. The maps, descriptions and discussion are presented in a report, provided as 1 portable document format (pdf) file, available in this digital release.

Additional information and metadata are found within a readme file provided with the product.

The Intended Use and Purpose for Collecting the Data Set or Information Holding:

The purpose of this study was to reveal regional patterns of groundwater constituents that are mediated by geology and that may affect groundwater utility in southern Ontario.

The objective of this product is to collect and disseminate geoscience information for Ontario.

CONSTRAINTS FOR USING THE DATA SET

Describe any Restrictions and Legal Prerequisites for Accessing the Data Set (Data Privacy/Security):

Abbreviated Terms of Use.

'Content' and/or 'Electronic Information Product' (EIP) and its Content: This Content and/or EIP and its Content is offered by the Province of Ontario's Ministry of Energy, Northern Development and Mines (ENDM) as a public service, on an 'as-is' basis. Recommendations and statements of opinions expressed are those of the author or authors and are not to be construed as statement of government policy. You are solely responsible for your use of the Content and/or EIP and its Content. You should not rely on the Content for legal advice nor as authoritative in your particular circumstances. Users should verify the accuracy and applicability of any Content before acting on it. ENDM does not guarantee, or make any warranty express or implied, that the Content is current, accurate, complete or reliable or that the EIP is free from viruses or other harmful components. ENDM is not responsible for any damage however caused, which results, directly or indirectly, from your use of the Content and/or the EIP and its Content. ENDM assumes no legal liability or responsibility for the Content and/or the EIP and its Content whatsoever.

Copyright: Canadian and international intellectual property laws protect the Content and the EIP and its Content. Unless otherwise indicated, copyright is held by the Queen's Printer for Ontario.

It is recommended that reference to the Content be made in the following form:

Colgrove, L.M. and Hamilton, S.M. 2018. Geospatial distribution of selected chemical, bacteriological and gas parameters related to groundwater in southern Ontario; Ontario Geological Survey, Groundwater Resources Study 17.

ISBN 978-1-4868-2393-2 (CD) ISBN 978-1-4868-2394-9 (zip file)

Use and Reproduction of Content: The Content and/or the EIP and its Content may be used and reproduced only in accordance with applicable intellectual property laws. Non-commercial use of unsubstantial excerpts of the Content is permitted provided that appropriate credit is given and Crown copyright is acknowledged. Any substantial reproduction of the Content or any commercial use of all or part of the Content is prohibited without the prior written permission of ENDM. Substantial reproduction includes the reproduction of any illustration or figure, such as, but not limited to graphs, charts and maps. Commercial use includes commercial distribution of the Content, the reproduction of multiple copies of the Content for any purpose whether or not

commercial, use of the Content in commercial publications, and the creation of value-added products using the Content.

The complete and entire Terms of Use Agreement may be viewed at http://www.geologyontario.mndm.gov.on.ca/terms_of_use.html

Describe any Legislated or Legal Authority for Collecting the Data Set: N/A

Select the Level of Privacy for this Metadata Information: Public

Time Coverage: October 16, 2018

Time Coverage Comments: Date of Publication.

Enter or Select the Current Status of the Data Set: Complete

Enter or Select the Frequency with which Changes or Additions are Made to the Data Set: Not Planned

Enter the retention schedule number: 9999

Retention period or description: PT

Keywords:

Geological Survey

Geology

Ministry of Northern Development and Mines

MNDM

Ontario Geological Survey

OGS

Groundwater Resources Study

GRS

Groundwater

Hydrogeology

Aquifer

Geochemistry, General

Business Theme:

Geological Survey

Geology

GEOGRAPHIC INFORMATION

Selected geographic type: Bounding Box only

North Bounding Latitude: 45° 41'

South Bounding Latitude: 41° 42'

West Bounding Longitude: -83° 13'

East Bounding Longitude: -74° 19'

Geographic Completeness: irregularly shaped study area - completeness not available

MAPPING INFORMATION

Grid Coordinate System Used: Universal Transverse Mercator

Map Projection: Transverse Mercator

Horizontal Geodetic Datum: NAD83

Vertical Datum: Not Applicable

Horizontal Position Accuracy of Features: +/- 100 m

Vertical Position Accuracy of Features: +/- 100 m

DATA SOURCE INFORMATION

Data Source Type: Includes Bibliographic Information

Describe for the Source Data Contribution: Product includes references to other sources of information

Data Source Type: Compilation

Source Data Set Description: Sampling conducted from April 2007 to June 2014

CONTACT INFORMATION

GENERAL CONTACT:

Position: Publication Sales Representative

Language: English

Organization: Ministry of Energy, Northern Development and Mines

Organization Sub-Unit: Ontario Geological Survey

Business Phone: (705)670-5691

FAX: (705)670-5770

Internet Email Address: pubsales.ndm@ontario.ca

ADDRESS:

Street No: 933

Street Name: Ramsey Lake Road

Municipality: Sudbury

Province/State: ON Ontario

Country: CANADA

Post Code: P3E6B5

Other Contact Method: Toll Free Number (Canada & USA): 1-888-415-9845 x5691

DISTRIBUTOR / PUBLISHER CONTACT:

Position: Publication Sales Representative

Language: English

Organization: Ministry of Energy, Northern Development and Mines

Organization Sub-Unit: Ontario Geological Survey

Business Phone: (705)670-5691

FAX: (705)670-5770

Internet Email Address: pubsales.ndm@ontario.ca

ADDRESS:**Street No:** 933**Street Name:** Ramsey Lake Road**Municipality:** Sudbury**Province/State:** ON Ontario**Country:** CANADA**Post Code:** P3E6B5**Other Contact Method:** Toll Free Number (Canada & USA): 1-888-415-9845 x5691**METADATA CUSTODIAN / CONTACT:****Position:** Publication Sales Representative**Language:** English**Organization:** Ministry of Energy, Northern Development and Mines**Organization Sub-Unit:** Ontario Geological Survey**Business Phone:** (705)670-5691**FAX:** (705)670-5770**Internet Email Address:** pubsales.ndm@ontario.ca**ADDRESS:****Street No:** 933**Street Name:** Ramsey Lake Road**Municipality:** Sudbury**Province/State:** ON Ontario**Country:** CANADA**Post Code:** P3E6B5**Other Contact Method:** Toll Free Number (Canada & USA): 1-888-415-9845 x5691**AUTHOR - ORIGINATOR / DATASET CUSTODIAN:****Position:** Publication Sales Representative**Language:** English**Organization:** Ministry of Energy, Northern Development and Mines**Organization Sub-Unit:** Ontario Geological Survey**Business Phone:** (705)670-5691**FAX:** (705)670-5770**Internet Email Address:** pubsales.ndm@ontario.ca**ADDRESS:****Street No:** 933**Street Name:** Ramsey Lake Road**Municipality:** Sudbury**Province/State:** ON Ontario**Country:** CANADA**Post Code:** P3E6B5**Other Contact Method:** Toll Free Number (Canada & USA): 1-888-415-9845 x5691

METADATA

Date of this Metadata Description/Update: October 3, 2018

Date when Metadata Should be Reviewed: December 31, 2019

DISTRIBUTION INFORMATION

General Distribution Information:

This publication can be downloaded from

http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=GRS017

or ordered from our office at:

Ministry of Energy, Northern Development and Mines Publication Sales,
933 Ramsey Lake Road, Sudbury Ontario, CANADA P3E 6B5

Telephone voice business 705 670-5691; Telephone fax 705 670-5770

Toll Free in Canada and United States 1-888-415-9847

E-mail: pubsales.ndm@ontario.ca

Ordering by mail, fax or E-mail: please call ahead to confirm shipping charge.

Applicable Distribution Fees and Payment Options:

See the Distribution Contact listing and contact the Ministry of Energy, Northern Development and Mines Publication Sales Office regarding the most recent pricing.

The Languages which are Data Distributed in: English