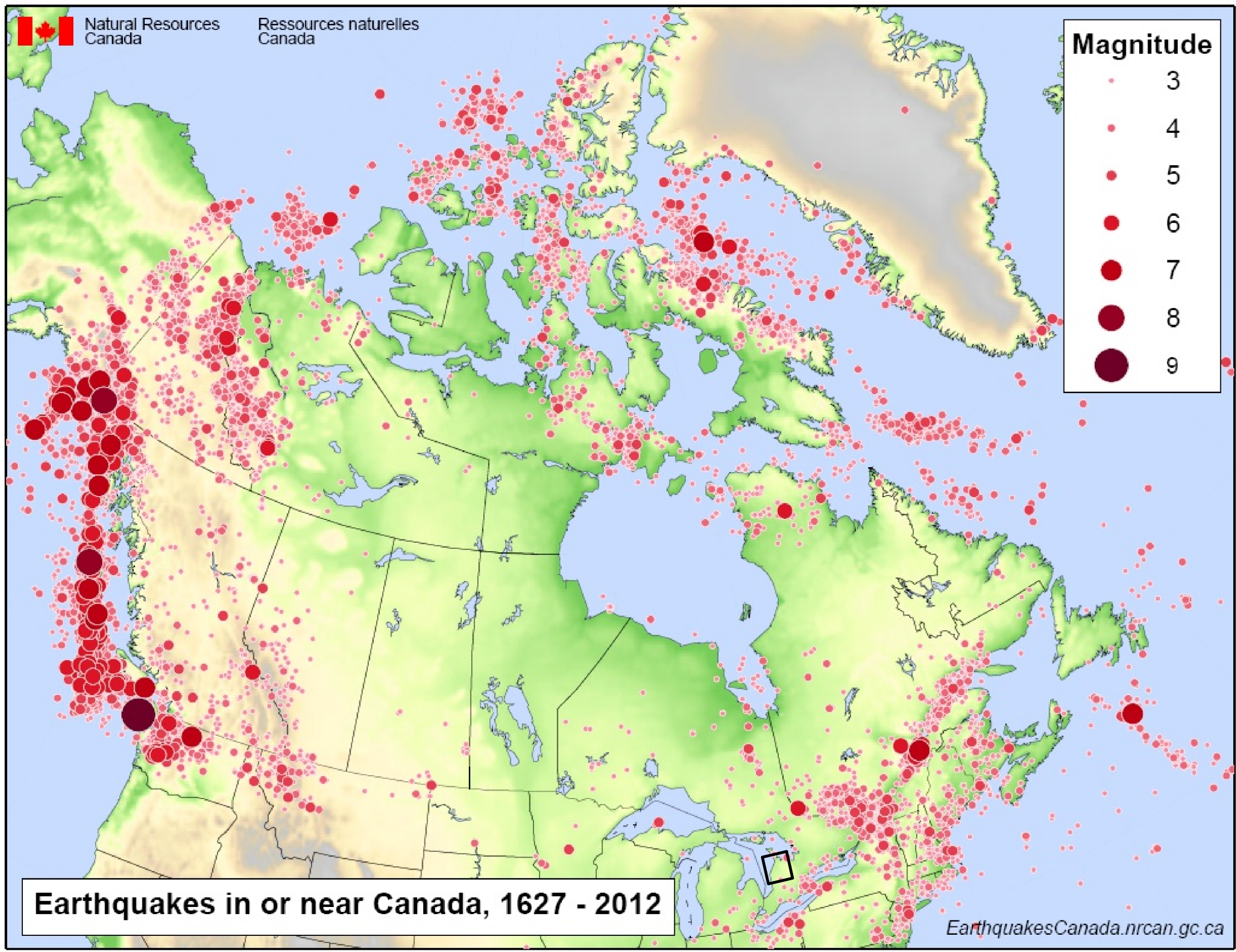


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Earthquakes in or near Canada, 1627 - 2012

LEGEND

□ Area of the Five Communities

COORDINATE SYSTEM: N/A
 SOURCE:
 Basemap Layers: LIO, MNR, ESRI
 Seismic: NRCAN, Earthquake Map of Canada 1627 -2012
 Produced by Geofirma Engineering Ltd under license from
 Ontario Ministry of Natural Resources, ©Queens Printer 2011

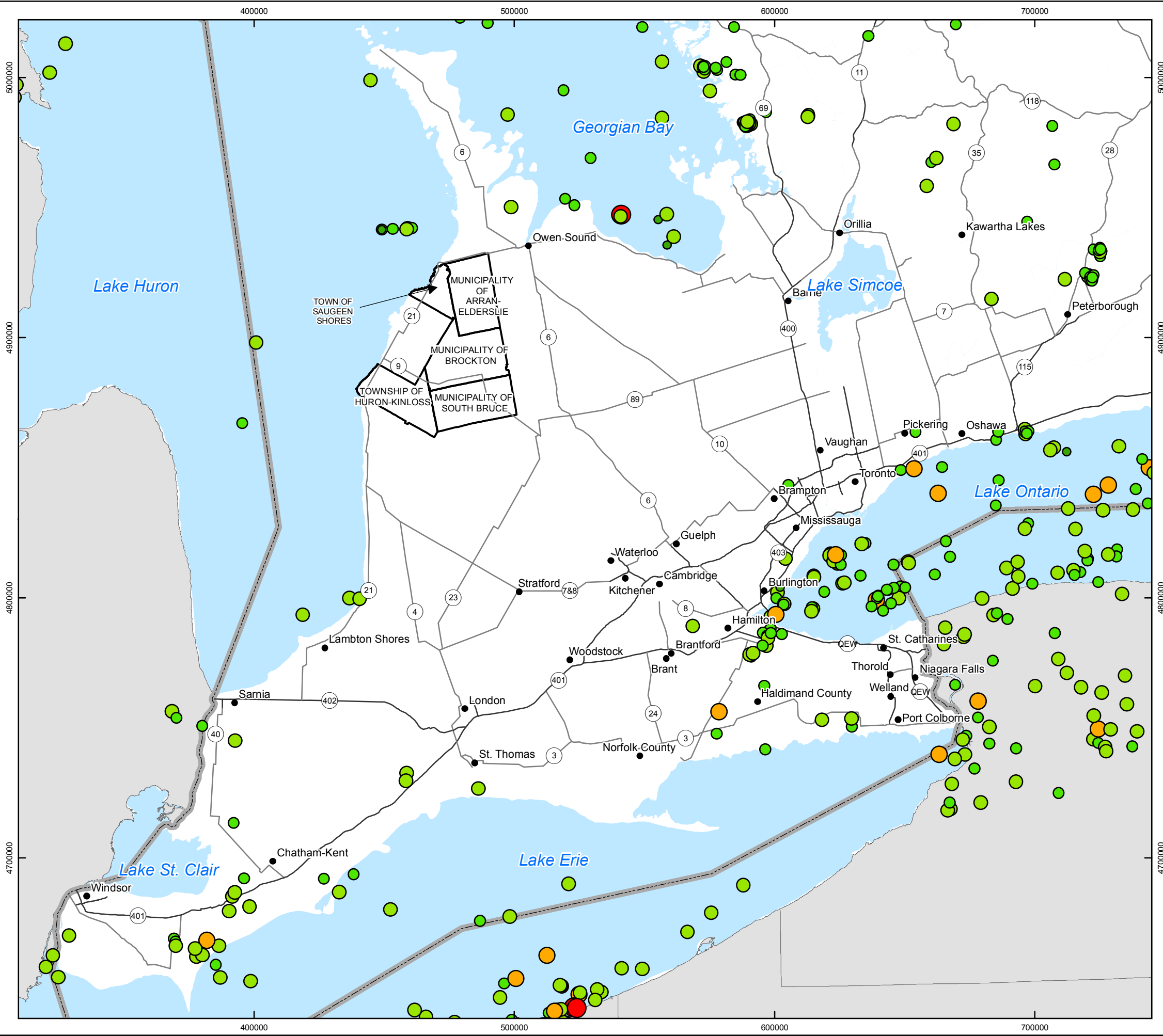
PROJECT No. 10-214-7
 NWMO Phase 1 Geoscientific Desktop Preliminary
 Assessment Study - Sedimentary Sites

TITLE
Earthquakes Map of Canada 1627-2012

FIGURE 3.26	DESIGN: NMP CAD/GIS: NMP CHECK: KGR/SNS REV: 0	
	DATE: 30/05/2014	



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LEGEND

- The Communities
- Expressway
- Highway
- Canada - USA Boundary
- Waterbody

Seismic Events (Magnitude)

- <math>< 1.0</math>
- 1.0 - 2.0
- 2.0 - 3.0
- 3.0 - 4.0
- 4.0 - 5.0

INDEX MAP

SCALE 1:1,500,000

COORDINATE SYSTEM: UTM NAD83 Zone 17N
 SOURCE:
 Basemap Layers: LIO, MNR, ESRI
 Seismic: Earthquakes Canada, GSC, Earthquake Search (On-line Bulletin) May 30, 2013.
 Produced by Geofirma Engineering Ltd under license from Ontario Ministry of Natural Resources, ©Queens Printer 2011

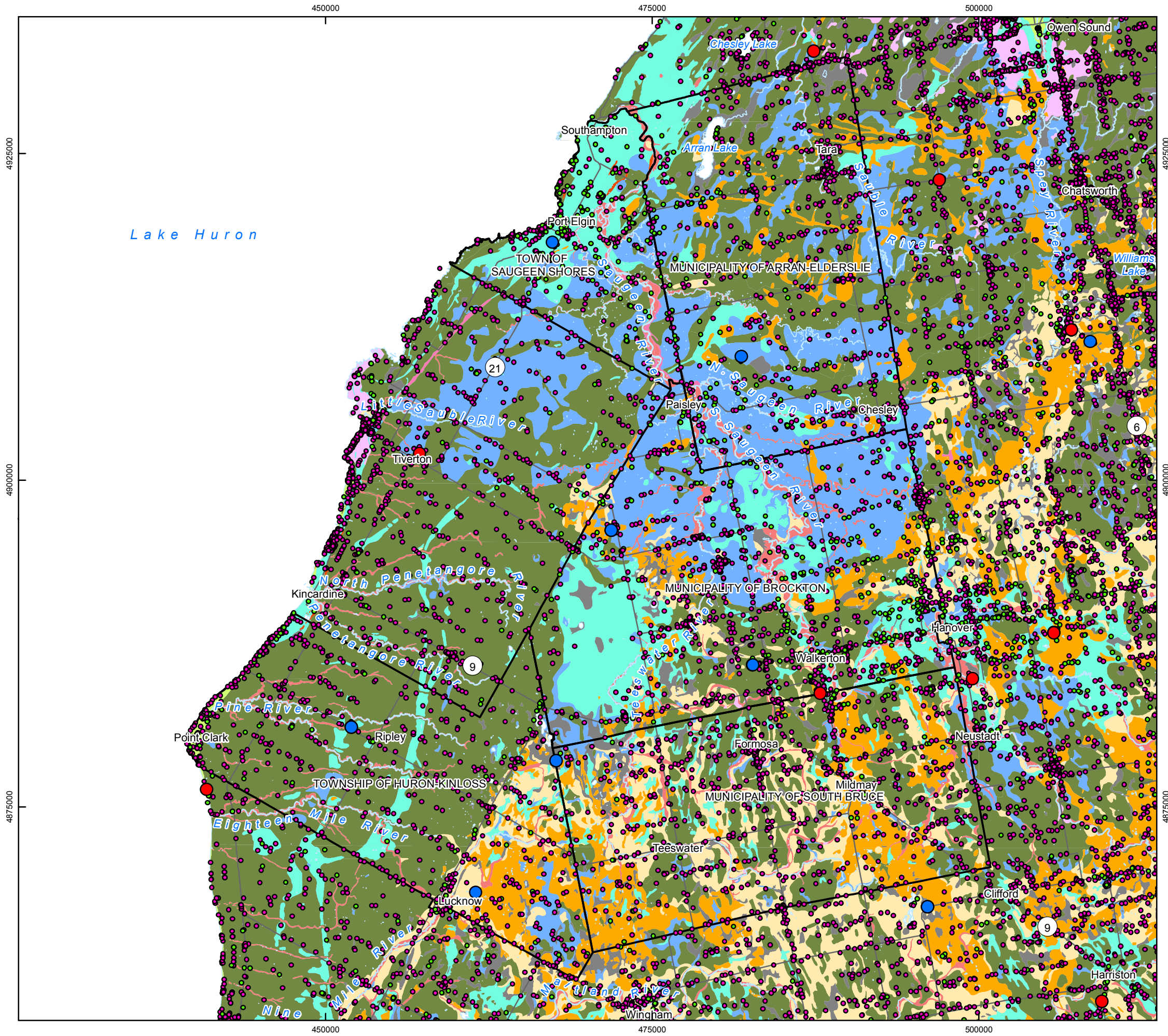
NORTH

PROJECT No. 10-214-7
NWMO Phase 1 Geoscientific Desktop Preliminary Assessment Study - Sedimentary Sites

TITLE
Historical Earthquake Records of Southern Ontario, 1985-2013

FIGURE 3.27	DESIGN: NMP CAD/GIS: NMP/ADG CHECK: KGR/SNS REV: 0 DATE: 11/6/2014	
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G:\Data\Project\Sedimentary_Site_NWMO\10-214-7_FS_SedimentarySites\SedimentarySites_Suitability_Report_Maps\10-214-7-110_SedSites_Fig4_1_GroundwaterWells_Community.mxd



LEGEND

- The Communities
- Highway/Major Road
- Waterbody
- Watercourse

PGMN Wells

- Bedrock
- Overburden

MOE Water Wells

- Bedrock
- Overburden

Surficial Geology

- Wetland
- Colluvial
- Lacustrine
- Fluvial
- Aeolian
- Glaciolacustrine (coarse)
- Glaciolacustrine (fine)
- Glaciofluvial (ice-contact)
- Glaciofluvial (outwash)
- Glacial (morainal)
- Bedrock-drift Complex

INDEX MAP

SCALE 1:300,000

0 2.5 5 10 15 20 Kilometres

COORDINATE SYSTEM: UTM NAD83 Zone 17N
 SOURCE: Basemap Layers: LIO, MNR, ESRI
 Geology: OGS MRD128 Surficial Geology of Southern Ontario, 1:50,000, 2003
 Groundwater Wells: Water Wells Information System, MOE, 2013
 PGMN Wells: MOE, 2013
 Produced by Geofirma Engineering Ltd under license from Ontario Ministry of Natural Resources, ©Queens Printer 2011

TITLE

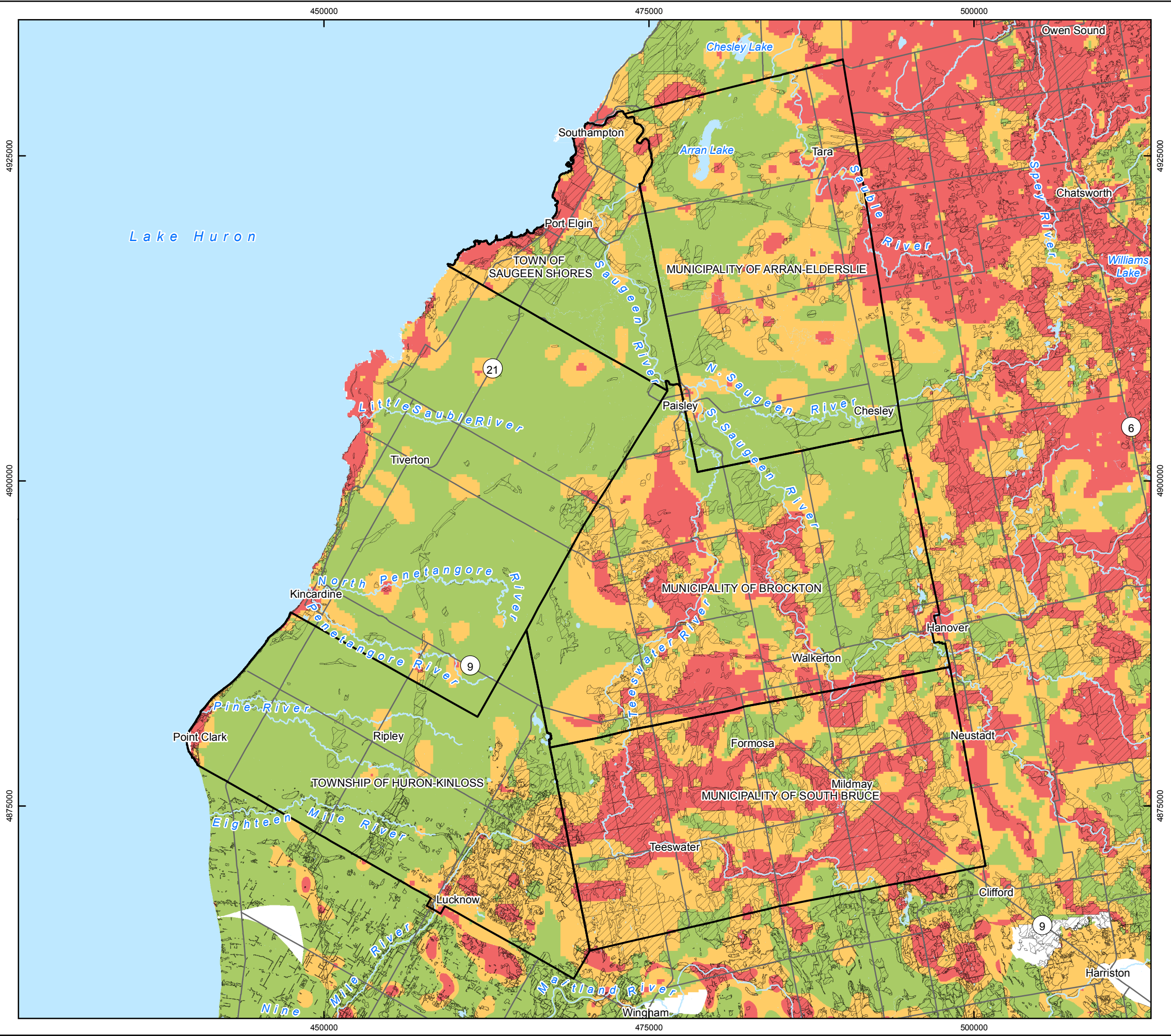
Groundwater Wells within the Area of the Five Communities

FIGURE 4.1

DESIGN: NMP
 CAD/GIS: NMP
 CHECK: KGR/SNS
 REV: 0
 DATE: 04/06/2014

Geofirma Engineering Ltd

G:\Data\Project\Sedimentary_Site_NWMO\10-214-7_FS_SedimentarySites\SedimentarySites_Suitability_Report_Maps\10-214-7-110_SedSites_Fig4.2_AquiferVulnerability_SGRA_Community.mxd



LEGEND

- The Communities
- Highway/Major Road
- Waterbody
- Watercourse
- Significant Groundwater Recharge Area

Intrinsic Susceptibility Index

- High
- Medium
- Low

Note: Areas without Intrinsic Susceptibility Index results are Well Head Protection Areas. Aquifer Vulnerability for these areas was calculated separately by Ausable Bayfield Maitland Valley Source Water Protection Region.

INDEX MAP

SCALE 1:300,000

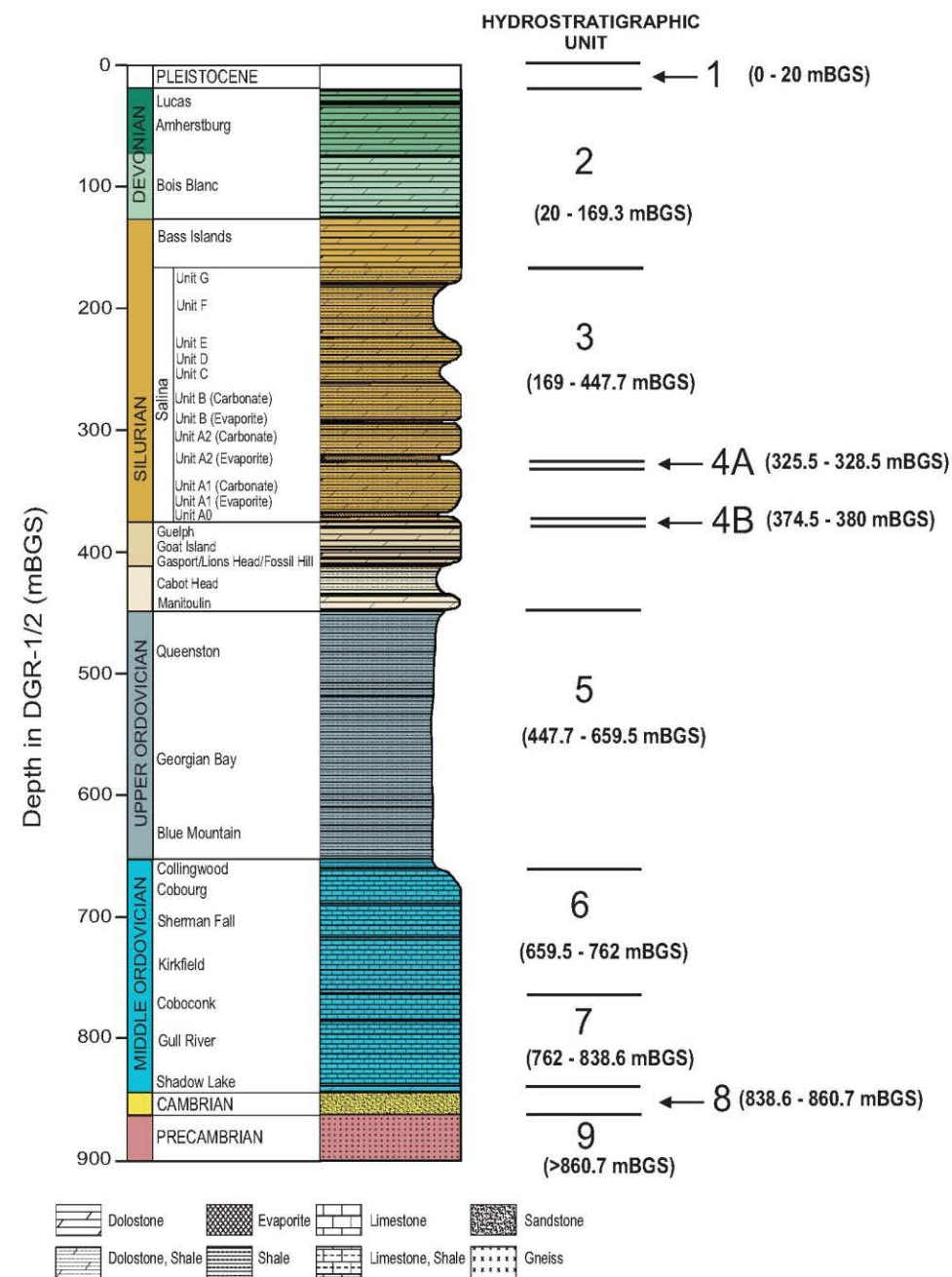
0 2.5 5 10 15 20
Kilometres

COORDINATE SYSTEM: UTM NAD83 Zone 17N
SOURCE:
Basemap Layers: LIO MNR
ISI & SGRA: Source Water Protection Conservation Authorities, 2013
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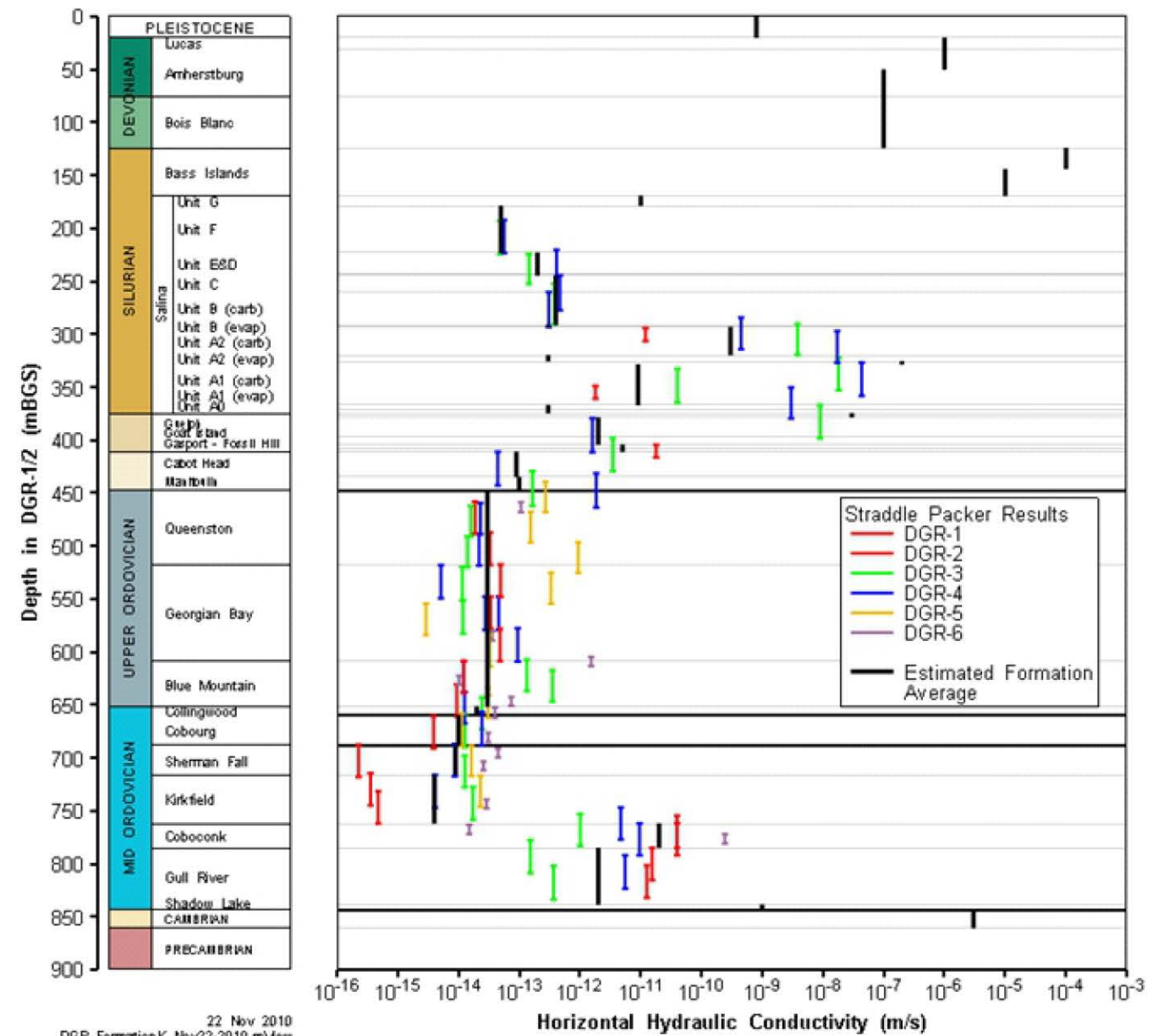
PROJECT No. 10-214-7
NWMO Phase 1 Geoscientific Desktop Preliminary Assessment Study - Sedimentary Sites

TITLE **Aquifer Vulnerability and Significant Groundwater Recharge Areas in the Area of the Five Communities**

FIGURE 4.2	DESIGN: NMP CAD/GIS: NMP/ADG CHECK: KGR/DJH REV: 0	
	DATE: 04/06/2014	



a. Reference Stratigraphic Column and Hydrostratigraphic Units
(after Intera Engineering Ltd., 2011)



b. Results of Straddle-Packer Hydraulic Testing
(after Walsh, 2011)

FIGURE 4.3 - Hydrostratigraphic Units and Results of Hydraulic Testing at the Bruce Nuclear Site

Prepared by: ECK
Reviewed by: KGR/SNS
Date: 27/06/2014

NWMO Phase 1 Geoscientific Desktop Preliminary Assessment Study - Sedimentary Sites