
Resources

Table of Contents

Contact Information.....	4
Ministry of the Environment - Regional Offices.....	4
Public Health Units.....	8
Conservation Authorities.....	11
Internet Resources.....	18
Provincial Resources.....	18
Canadian Resources.....	19
International Resources.....	20
Conversion Tables.....	21
pH.....	23
Mathematical Symbols Found in this Manual.....	24
References.....	25

Figures

Figure 1: Map of Ministry Regions.....	4
Figure 2: Conservation Authorities of Ontario.....	11
Figure 3: Conservation Authorities of Ontario – Southwestern Region.....	12
Figure 4: Conservation Authorities - South-Eastern Region.....	14
Figure 5: Conservation Authorities - Northern Region.....	16
Figure 6: pH Scale.....	23

Tables

Table 1: Conversion Table for Area and Volume Measurements.....	21
Table 2: Conversion Table for Length Measurements.....	21
Table 3: Conversion Table for Weight and Mass Measurements.....	22
Table 4: Conversion Table for Pressure Measurements.....	22
Table 5: Conversion Table for Length Measurements.....	22
Table 6: Conversion Table for Work/Energy & Power Measurements.....	22

CONTACT INFORMATION

Spills Action Centre 1-800-268-6060

Water well Help Desk:

Tel: 1-888-396-9355

Fax: (416) 235-5960

Email: helpdesk@waterwellontario.ca

MINISTRY OF THE ENVIRONMENT - REGIONAL OFFICES

This list may be found at <http://www.ene.gov.on.ca>; (click on 'Contact' and then click on 'Regional Offices')



FIGURE 1: MAP OF MINISTRY REGION

NORTHERN REGION**MINISTRY OF THE ENVIRONMENT
THUNDER BAY REGIONAL OFFICE**

Suite 331
435 James St. S.
3rd Floor
Thunder Bay ON P7E 6S7

Toll free from area codes 705/807:
1-800-875-7772
Tel: (807) 475-1205
Fax: (807) 475-1754

**MINISTRY OF THE ENVIRONMENT
KENORA AREA OFFICE**

808 Robertson St.
P. O. Box 5150
Kenora ON P9N 3X9

Toll free from area code 807:
1-888-367-7622
Tel: (807) 468-2718
Fax: (807) 468-2735

**MINISTRY OF THE ENVIRONMENT
NORTH BAY AREA OFFICE**

191 Booth Road
Unit 16 & 17
North Bay ON P1A 4K3
Suite 103

Toll free: 1-800-609-5553
Tel: (705) 497-6865
Fax: (705) 497-6866

**MINISTRY OF THE ENVIRONMENT
SAULT STE MARIE AREA OFFICE**

289 Bay Street,
Sault Ste. Marie ON P6A 1W7

Tel: (705) 942-6354
Fax: (705) 942-6327

**MINISTRY OF THE ENVIRONMENT
SUDBURY DISTRICT OFFICE**

Suite 1201
199 Larch St.
Sudbury ON P3E 5P9

Toll free from area codes 705/807:
1-800-890-8516
Tel: (705) 564-3237
Fax: (705) 564-4180

**MINISTRY OF THE ENVIRONMENT
THUNDER BAY DISTRICT OFFICE**

Suite 331
435 James St. S.
Thunder Bay ON P7E 6E3

Toll free from area code 705/807:
1-800-875-7772
Tel: (807) 475-1315
Fax: (807) 473-3160

**MINISTRY OF THE ENVIRONMENT
TIMMINS DISTRICT OFFICE**

Ontario Govt. Complex
Hwy 101 East
P.O. Bag 3080
South Porcupine ON P0N 1H0

Toll free in area codes 705/807:
1-800-380-6615
Tel: (705) 235-1500
Fax: (705) 235-1520

CENTRAL REGION**MINISTRY OF THE ENVIRONMENT
CENTRAL REGION OFFICE**

5775 Yonge St.
8th floor
North York ON M2M 4J1

Toll free: 1-800-810-8048
Tel: (416) 326-6700
Fax: (416) 325-6345

**MINISTRY OF THE ENVIRONMENT
HALTON-PEEL DISTRICT OFFICE**

4145 North Service Road
Suite 300
Burlington ON L7L 6A3

Toll free: 1-800-335-5906
Tel: (905) 319-3847
Fax: (905) 319-9902

**MINISTRY OF THE ENVIRONMENT
METRO TORONTO DISTRICT OFFICE**

5775 Yonge St.
8th floor
North York ON M2M 4J1

Toll free: 1-800-810-8048
Tel: (416) 326-6700
Fax: (416) 325-6346

**MINISTRY OF THE ENVIRONMENT
BARRIE DISTRICT OFFICE**

54 Cedar Pointe Dr.
Unit 1203
Barrie ON L4N 5R7

Toll free: 1-800-890-8511
Tel: (705) 739-6441
Fax: (705) 739-6440

**MINISTRY OF THE ENVIRONMENT
YORK-DURHAM DISTRICT OFFICE**

230 Westney Rd. S., 5th floor
Ajax ON L1S 7J5

Toll free: 1-800-376-4547
Tel: (905) 427-5600
Fax: (905) 427-5602

EASTERN REGION**MINISTRY OF THE ENVIRONMENT
KINGSTON REGIONAL OFFICE**

Box 22032
1259 Gardiners Road
Kingston ON K7M 8S5

Toll free for area codes 613/705/905:
1-800-267-0974
Tel: (613) 549-4000
Fax: (613) 548-6908

**MINISTRY OF THE ENVIRONMENT
BELLEVILLE AREA OFFICE**

345 College Street East
Belleville, ON K8N 5S7

Toll free from area code 613: 1-800-
860-2763
Tel: (613) 962-9208
Fax: (613) 962-6809

**MINISTRY OF THE ENVIRONMENT
CORNWALL AREA OFFICE**

113 Amelia St.
Cornwall ON K6H 3P1

Toll free number for area code 613:
1-800-860-2760
Tel: (613) 933-7402
Fax: (613) 933-6402

**MINISTRY OF THE ENVIRONMENT
KINGSTON DISTRICT OFFICE**

Box 22032
1259 Gardiners Road
Kingston, ON K7M 8S5

Toll free for area codes 613/705/905:
1-800-267-0974
Tel: (613) 549-4000 extension 2692
Fax: (613) 548-6920

**MINISTRY OF THE ENVIRONMENT
OTTAWA DISTRICT OFFICE**

2430 Don Reid Drive
Ottawa ON K1H 1E1

Toll free: 1-800-860-2195
Tel: (613) 521-3450
Fax: (613) 521-5437

**MINISTRY OF THE ENVIRONMENT
PETERBOROUGH DISTRICT OFFICE**

300 Water Street, Robinson Place
Peterborough ON K9J 8M5

Toll free from area codes:
613/705/905:
1-800-558-0595
Tel: (705) 755-4300
Fax: (705) 755-4321

WEST-CENTRAL REGION**MINISTRY OF THE ENVIRONMENT
HAMILTON REGIONAL OFFICE**

12th floor
119 King St. W.
Hamilton ON L8P 4Y7

Toll free: 1-800-668-4557
Tel: (905) 521-7640
Fax: (905) 521-7820

**MINISTRY OF THE ENVIRONMENT
GUELPH DISTRICT OFFICE**

1 Stone Road W.
Guelph ON N1G 4Y2

Toll free: 1-800-265-8658
Tel: (519) 826-4255
Fax: (519) 826-4286

**MINISTRY OF THE ENVIRONMENT
HAMILTON DISTRICT OFFICE**

9th floor
119 King St. W.
Hamilton ON L8P 4Y7

Toll free: 1-800-668-4557
Tel: (905) 521-7650
Fax: (905) 521-7806

**MINISTRY OF THE ENVIRONMENT
NIAGARA DISTRICT OFFICE**

9th floor
301 St. Paul St.
St. Catharines ON L2R 3M8

Toll free: 1-800-263-1035
Tel: (905) 704-3900
Fax: (905) 704-4015

SOUTHWESTERN REGION**MINISTRY OF THE ENVIRONMENT
LONDON REGIONAL OFFICE**

2nd Floor.
659 Exeter Road
London ON N6E 1L3

Toll free number from area code 519:
1-800-265-7672
Tel: (519) 873-5000
Fax: (519) 873-5020

**MINISTRY OF THE ENVIRONMENT
OWEN SOUND AREA OFFICE**

1580-20th St. E. P.O. 967
Owen Sound ON N4K 6H6

Toll free number from area code 519:
1-800-265-3783
Tel: (519) 371-2901
Fax: (519) 371-2905

**MINISTRY OF THE ENVIRONMENT
SARNIA DISTRICT OFFICE**

1094 London Rd.
Sarnia ON N7S 1P1

Toll free number: 1-800-387-7784
Tel: (519) 336-4030
Fax: (519) 336-4280

**MINISTRY OF THE ENVIRONMENT
WINDSOR AREA OFFICE**

4510 Roads Drive
Unit 620
Windsor ON N8W 5K5

Toll free number: 1-800-387-8826
Tel: (519) 948-1464
Fax: (519) 948-2396

PUBLIC HEALTH UNITS

This list can be found at the website:

http://www.health.gov.on.ca/english/public/contact/phu/phuloc_mn.html

ALGOMA PUBLIC HEALTH UNIT

Civic Centre, 6th Floor
99 Foster Drive
Sault Ste. Marie, ON P6A 5X6
Toll free number: 1-866-892-0172
Tel: (705) 759-5287
Fax: (705) 759-1534

BRANT COUNTY HEALTH UNIT

194 Terrace Hill Street
Brantford, ON N3R 1G7
Tel: (519) 753-4937
Fax: (519) 753-2140

CHATHAM-KENT HEALTH UNIT

P.O. Box 1136
435 Grand Avenue West
Chatham, ON N7M 5L8
Tel: (519) 352-7270
Fax: (519) 352-2166

CITY OF HAMILTON

1 Hughson Street North
Hamilton, ON L8R 3L5
Tel: (905) 546-3500
Fax: (905) 546-4075

Reporting Adverse Water Results:

Tel: (905) 546-2424 x7277

Reporting Adverse Water Results Fax:

(905) 546-2787

DURHAM REGION HEALTH DEPARTMENT

605 Rossland Road East
P.O. Box 730
Whitby, ON L1N 0B2
Toll free number: 1-800-841-2729
Tel: (905) 668-7711
Fax: (905) 666-6214

EASTERN ONTARIO HEALTH UNIT

1000 Pitt Street
Cornwall, ON K6J 5T1
Toll free number: 1-800-267-7120
Tel: (613) 933-1375
Fax : (613) 933-7930

ELGIN-ST. THOMAS HEALTH UNIT

99 Edward Street
St. Thomas, ON N5P 1Y8
Toll Free Number: 1-800-922-0096
Tel: (519) 631-9900
Fax: (519) 633-0468

GREY BRUCE HEALTH UNIT

101 17th Street East
Owen Sound, ON N4K 0A5
Toll free number: 1-800-263-3456
Tel: (519) 376-9420
Fax: (519) 376-0605

HALDIMAND-NORFOLK HEALTH UNIT

P. O. Box 247
12 Gilbertson Drive
Simcoe, ON N3Y 4L1
Tel: (519) 426-6170
Fax: (519) 426-9974

HALIBURTON, KAWARTHA, PINE RIDGE DISTRICT HEALTH UNIT

200 Rose Glen Road
Port Hope, ON L1A 3V6
Toll free number: 1-866-888-4577
Tel: (905) 885-9100
Fax: (905) 885-9551

HALTON REGION HEALTH DEPARTMENT

1151 Bronte Road
Oakville, Ontario
L6M 3L1

Toll free number: 1-866-442-5866

Tel: (905) 825-6000

TTY: (905) 827-9833

Fax: (905) 825-8588

**HASTINGS AND PRINCE EDWARD COUNTIES
HEALTH UNIT**

179 North Park Street
Belleville, ON K8P 4P1

Tel: (613) 966-5500

Fax: (613) 966-9418

HURON COUNTY HEALTH UNIT

Health and Library Complex
Highway 4 South
R.R. 5, P.O.Box 1120
Clinton, ON N0M 1L0

Tel: (519) 482-3416

Fax: (519) 482-7820

**KINGSTON, FRONTENAC AND LENNOX &
ADDINGTON PUBLIC HEALTH**

221 Portsmouth Avenue
Kingston, ON K7M 1V5

Toll free number: 1-800-267-7875

Tel: (613) 549-1232

Fax: (613) 549-7896

LAMBTON HEALTH UNIT

Community Health Services Department
160 Exmouth Street
Point Edward, ON N7T 7Z6

Toll free number: 1-800-667-1839

Tel: (519) 383-8331

Fax: (519) 383-7092

**LEEDS, GRENVILLE AND LANARK DISTRICT
HEALTH UNIT**

458 Laurier Boulevard
Brockville, ON K6V 7A3

Tel: (613) 345-5685

Fax: (613) 345-2879

MIDDLESEX-LONDON HEALTH UNIT

50 King Street
London, ON N6A 5L7

Tel: (519) 663-5317

Fax: (519) 663-9581

**NIAGARA REGION PUBLIC HEALTH
DEPARTMENT**

2201 St. David's Road
Campbell East
Thorold, ON L2T 4C2

Toll free number: 1-800-263-7248

Tel: (905) 688-3762

Fax: (905) 682-3901

**NORTH BAY PARRY SOUND DISTRICT HEALTH
UNIT**

681 Commercial Street
North Bay, ON P1B 4E7

Tel: (705) 474-1400

Fax: (705) 474-8252

NORTHWESTERN HEALTH UNIT

21 Wolsley Street
Kenora, ON P9N 3W7

Toll free number: 1-800-830-5978

Tel: 807-468-3147

Fax: 807-468-4970

OTTAWA PUBLIC HEALTH

100 Constellation Cres.
Ottawa, ON K2G 6J8

Toll free number: 1-866-426-8885

Tel: (613) 580-6744

TTY: (613) 580-9656

Fax: (613) 580-9601

**OXFORD COUNTY - PUBLIC HEALTH &
EMERGENCY SERVICES**

410 Buller Street
Woodstock, ON N4S 4N2

Toll free number: 1-800-755-0394

Tel: (519) 539-9800

Fax: (519) 539-6206

SIMCOE MUSKOKA DISTRICT HEALTH UNIT

15 Sperling Drive
Barrie, ON L4M 6K9

Toll free number: 1-877-721-7520
Tel: (705) 721-7520
Fax: (705) 721-1495

SUDBURY AND DISTRICT HEALTH UNIT

1300 Paris Street
Sudbury, ON P3E 3A3

Tel: (705) 522-9200
Fax: (705) 522-5182

THUNDER BAY DISTRICT HEALTH UNIT

999 Balmoral Street
Thunder Bay, ON P7B 6E7

Tel: 807-625-5900
Fax: 807-623-2369

Toll free number: 1-888-294-6630
(807 areas only)

TIMISKAMING HEALTH UNIT

P.O. Box 1240
221 Whitewood Avenue
New Liskeard, ON P0J 1P0

Tel: (705) 647-4305
Fax: (705) 647-5779

TORONTO PUBLIC HEALTH

277 Victoria Street, 5th Floor
Toronto, ON M5B 1W2

Tel: (416) 392-7401
Fax: (416) 392-0713

**WELLINGTON-DUFFERIN-GUELPH
PUBLIC HEALTH**

474 Wellington Road #18, Suite 100
RR 1
Fergus, ON N0B 1J0

Tel: (519) 846-2715
Fax: (519) 846-0323

WINDSOR-ESSEX COUNTY HEALTH UNIT

1005 Ouellette Avenue
Windsor, ON N9A 4J8

Tel: (519) 258-2146
Fax: (519) 258-6003

CONSERVATION AUTHORITIES

There is a number of conservation authorities located in each of Ontario's three regions. Main offices for each authority are listed with contact information on the following pages.



FIGURE 2: CONSERVATION AUTHORITIES OF ONTARIO

SOUTHWESTERN REGION



FIGURE 3: CONSERVATION AUTHORITIES OF ONTARIO – SOUTHWESTERN REGION

GREY SAUBLE CONSERVATION AUTHORITY

#237897 Inglis Falls Road
R.R. #4, Owen Sound, ON
N4K 5N6

Phone: (519) 376-3076
Fax: (519) 371-0437

Email: admin@greysauble.on.ca
<http://www.greysauble.on.ca/>

NOTTAWASAGA CONSERVATION AUTHORITY

8195 8th Line
Utopia, ON
LOM 1T0

Phone: (705) 424-1479
Fax: (705) 424-2115

Email: admin@nvca.on.ca
www.nvca.on.ca

SAUGEEN CONSERVATION AUTHORITY

R.R. # 1, Hanover, ON
N4N 3B8

Phone: (519) 364-1255
Fax: (519) 364-6990

Email: publicinfo@svca.on.ca
<http://www.svca.on.ca/>

LAKE SIMCOE REGION CONSERVATION AUTHORITY

120 Bayview Parkway
Box 282, Newmarket, ON
L3Y 4X1

Phone: (905) 895-1281
Fax: (905) 853-5881

<http://www.lsrca.on.ca/>

TORONTO AND REGION CONSERVATION AUTHORITY

5 Shoreham Drive
Downsview, ON
M3N 1S4

Phone: (416) 661-6600
Fax: (416) 661-6898

E-mail: info@trca.on.ca
Website: <http://www.trca.on.ca/>

CREDIT VALLEY CONSERVATION AUTHORITY

1255 Old Derry Road
Mississauga, ON
L5N 6R4

Phone: (905) 670-1615 or
1-800-668-5557
Fax: (905) 670-2210

Email: cvc@creditvalleycons.com
Website: www.creditvalleycons.com

GRAND RIVER CONSERVATION AUTHORITY

400 Clyde Road
PO Box 729
Cambridge, ON
N1R 5W6

Phone: (519) 621-2761 or
1-866-900-4722
Fax: (519) 621-4844

Email: grca@grandriver.ca
<http://www.grandriver.ca/>

**MAITLAND VALLEY CONSERVATION
AUTHORITY**

1093 Marietta Street
Box 127
Wroxeter, ON N0G 2X0

Phone: (519) 335-3557
Fax: (519) 335-3516

Email: info@mvca.on.ca
<http://www.mvca.on.ca/>

SOUTHEASTERN REGION



FIGURE 4: CONSERVATION AUTHORITIES - SOUTH-EASTERN REGION

RAISON REGION CONSERVATION AUTHORITY

18045 County Road #2
P.O. Box 429 Cornwall, ON
R.R. #4, Owen Sound, ON
K6H 5T2

Phone: (613) 938-3611
Fax: (613) 938-3221

<http://www.rrca.on.ca/>

SOUTH NATION CONSERVATION AUTHORITY

P.O. Box 429 Cornwall, ON
15 Union Street, Berwick, ON
K0C 1G0

Phone: Toll-free 1-877-984-2948;
613) 984-2948
Fax: (613) 984-2872

www.nation.on.ca

RIDEAU VALLEY CONSERVATION AUTHORITY

P.O. Box 599
3889 Rideau Valley Drive, Manotick, ON
K4M 1A5

Phone: Toll-free 1-800-267-3504;
(613) 692-3571
Fax: (613) 692-0831

<http://rvca.ca/index2.html>

MISSISSIPPI VALLEY CONSERVATION AUTHORITY

4175 Hwy 511, RR#2
Lanark, ON
K0G 1K0

Phone: (613)-259-2421
Fax: (613) 259-3468

Email: info@mvc.on.ca

<http://www.mvc.on.ca/>

CATARAQUI REGION CONSERVATION AUTHORITY

P.O. Box 160, Glenburnie, ON
K0H 1S0

Phone: Toll-free 1-877-956-2722;
(613)-546-4228
Fax: (613) 547-6474

<http://www.cataraqueiregion.on.ca/>

QUINTE CONSERVATION AUTHORITY

2061 Old Highway 2
R.R. #2, Belleville ON
K8N 4Z2

Phone: (613)-968-3434 or
(613)-354-3312
Fax: (613) 968-8240

www.quinteconservation.ca

CROWE VALLEY CONSERVATION AUTHORITY

70 Hughes Lane
P.O. Box 416, Marmora ON
K0K 2M0

Phone: (613)-472-3137

Fax: (613) 472-5516

Email: info@crowevalley.com

<http://www.crowevalley.com/>

LOWER TRENT CONSERVATION AUTHORITY

714 Murray Street
R.R. #1, Trenton, ON
K8V 5P4

Phone: (613) 394-3915

Fax: (613) 394-5226

<http://www.ltc.on.ca/>

OTONABEE CONSERVATION AUTHORITY

250 Milroy Drive
Peterborough, ON
K9H 7M0

Phone: (705) 745-5791

Fax: (705) 475-7488

<http://www.otonabee.com/orca/>

GANARASKA CONSERVATION AUTHORITY

P.O. Box 328
2216 County Road 28, Port Hope, ON
L1A 3W4

Phone: (905) 885-8173

Fax: (905) 885-9824

<http://www.grca.on.ca/>

CENTRAL LAKE ONTARIO CONSERVATION AUTHORITY

100 Whiting Ave.
Oshawa, Ontario
L1H 3TC

Phone: (905) 579-0411

Fax: (905) 579-0994

Email: mail@cloca.com

<http://www.cloca.com/>

KAWARTHA CONSERVATION AUTHORITY

277 Kenrei Road
Lindsay ON
K9V 4R1

Phone: (705) 328-0411

Fax: (705) 328-2286

Email:

geninfo@kawarthaconservation.com

<http://www.kawarthaconservation.com/>

NORTHERN REGION



FIGURE 5: CONSERVATION AUTHORITIES - NORTHERN REGION

LAKEHEAD REGION CONSERVATION AUTHORITY

P.O. Box 10427
130 Conservation Road
Thunder Bay, ON
P7B 6T8

Phone: (807) 344-5857
Fax: (807) 345-9156

Email: info@lakeheadca.com
<http://www.lakeheadca.com/>

SAULT STE. MARIE REGION CONSERVATION AUTHORITY

1100 Fifth Line East
Sault Ste. Marie, ON
P6A 5K7

Phone: (705) 946-8530
Fax: (705) 946-8533

E-mail: nature@ssmra.ca

NICKEL DISTRICT CONSERVATION AUTHORITY

200 Brady Street, First Floor
Tom Davie Square
Sudbury, ON
P3E 5K3

Phone: (705) 674-5249
Fax: (705) 674-7939

E-mail: ndca@city.greatersudbury.on.ca
<http://www.nickeldistrict.ca>

NICKEL DISTRICT CONSERVATION AUTHORITY

200 Brady Street, First Floor
Tom Davie Square
Sudbury, ON
P3E 5K3

Phone: (705) 674-5249
Fax: (705) 674-7939

E-mail: ndca@city.greatersudbury.on.ca
<http://www.nickeldistrict.ca>

**MATTAGAMI REGION CONSERVATION
AUTHORITY**

100 Lakeshore Road
Timmins, ON
P4N 8R5

Phone: (705) 360-2660

Fax: (705) 360-2692

<http://www.timmins.ca/>

NORTH BAY – MATTAWA CONSERVATION AUTHORITY

15 Janey Avenue
North Bay, ON
P1C 1N1

Phone: (705) 474-5420

Fax: (705) 474-9793

E-mail: nbmca@nbmca.on.ca

<http://www.nbmca.on.ca/site/home.asp?id=12>

INTERNET RESOURCES

PROVINCIAL RESOURCES

ASSOCIATION OF PROFESSIONAL GEOSCIENTISTS OF ONTARIO

<http://www.apgo.net/>

ENVIRONMENTAL COMMISSIONER OF ONTARIO'S RESOURCE LIBRARY

<http://www.eco.on.ca/eng/index.php/environmental-bill-of-rights/role-of-the-eco/resource-centre-library.php>

MINISTRY OF THE ENVIRONMENT WATER WELLS WEBSITE:

<http://www.ene.gov.on.ca/envision/water/wells.htm>

MINISTRY OF THE ENVIRONMENT WATER WELL ONTARIO WEBSITE: THIS WEBSITE HAS A DATABASE OF LICENCED WELL CONTRACTORS.

<http://www.waterwellontario.ca/>

ONTARIO ASSOCIATION OF CERTIFIED ENGINEERING TECHNICIANS AND TECHNOLOGISTS

<http://www.oacett.org>

ONTARIO MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS PUBLICATIONS ONLINE:

Information on care and maintenance of private wells; including, what to do in times of water shortage, maintaining water quality, protecting drinking water and proper construction and abandonment of wells.

<http://www.omafra.gov.on.ca/english/environment/water/publications.htm>

ONTARIO GROUND WATER ASSOCIATION (OGWA):

“Created in 1952 as a not-for-profit organization to facilitate the various sectors of the groundwater industry coming together for the delivery of safe and clean water supplies throughout the Province.”

<http://www.ogwa.ca/>

PROFESSIONAL ENGINEERS ONTARIO

<http://www.peo.on.ca/>

SERVICE ONTARIO E-LAWS:

<http://www.e-laws.gov.on.ca>

CANADIAN RESOURCES

ALBERTA DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT:

Water Wells that Last Generations Online Manuals for the construction, maintenance and abandonment of water wells.

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/wwg404](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/wwg404)

CANADIAN GROUNDWATER ASSOCIATION –

“national voice of the groundwater industry in Canada”; includes numerous fact sheets on groundwater and sanitizing a water well, etc.”

<http://www.cgwa.org/>

CANADIAN WASTE WATER AGENCY (OCWA)

Provides wastewater treatment resources

<http://www.cwwa.ca>

ENVIRONMENT CANADA:

Green Lane: Provides information about environmental preservation including the conservation and protection of Canada’s water resource.

<http://www.ec.gc.ca/>

FLEMING COLLEGE:

For information about training courses for well technicians in Ontario:

<http://www.welltechtraining.org>

ONTARIO CLEAN WATER AGENCY (OCWA):

provides wastewater treatment resources:

<http://www.ocwa.com>

CANADIAN WATER RESOURCES ASSOCIATION:

“Promoting Effective Water Management”:

<http://www.cwra.org/>

ONTARIO WATER WORKS ASSOCIATION (OWWA):

“A voluntary membership organization of drinking water professionals dedicated to protecting public health through the delivery of safe, sufficient and sustainable drinking water in Ontario.”

<http://www.owwa.com/hm/inside.php?id=15>

WELL WISE –

A “resource, research and education centre that provides support to private well owners across Ontario and professionals that work with them”.

<http://www.wellwise.ca/>

INTERNATIONAL RESOURCES

Most of the following sites are U.S. based water information sites and include general and global information on water resources and issues.

AMERICAN GROUNDWATER TRUST –

Educational organization re the hydrologic, economic and environmental significance of groundwater; includes a 12-part groundwater education series

<http://www.agwt.org/>

OREGON STATE UNIVERSITY –

Groundwater Stewardship – provides basics of understanding groundwater and its protection

<http://www.groundwater.orst.edu/>

NATIONAL SANITATION FOUNDATION

<http://www.nsf.org/>

U.S. NATIONAL GROUNDWATER ASSOCIATION

<http://www.ngwa.org/>

UK'S CENTRE OF ECOLOGY AND HYDROLOGY

<http://www.ceh.ac.uk/index.html>

WATER MAGAZINE.COM –

Water policy ideas and information from around the world

<http://www.watermagazine.com/>

U.S. ENVIRONMENTAL PROTECTION AGENCY –

Number of articles on groundwater, aquifers, wells, etc.; also general water articles such as water cycle; link to groundwater primer on basics, quality, what you can do, protection programs, glossary and references

<http://www.epa.gov/seahome/>

AMERICAN WATER WORKS ASSOCIATION

<http://www.awwa.org/>

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

http://www.michigan.gov/deq/0,1607,7-135-3313_3675---,00.html

NSF CERTIFIED PRODUCT AND SERVICE LISTINGS

http://www.nsf.org/business/search_listings/index.asp

CONVERSION TABLES

To Convert: On the left hand column of the table is the SI (Système International d'Unités). To convert from Metric units to Imperial units, simply multiply by the conversion factor in the upper portion of each cell. To convert from the Imperial units to Metric units, simply multiply by the conversion factor in the lower portion of each cell. The arrows next to each conversion factor show the direction of the conversion.

Table 2: Conversion Table for Length

mm	x 0.03937 →	inches
	← x 25.4	
mm	x 3.28×10^{-3} →	feet
	← x 304.8	
cm	x 0.3937 →	inches
	← x 2.54	
cm	x 0.0328 →	feet
	← x 30.48	
m	x 39.37 →	inches
	← x 0.0254	
m	x 3.281 →	feet
	← x 0.3048	
km	x 3 280.84 →	feet
	← x 0.3048×10^{-3}	
km	x 1 093.61 →	yards
	← x 9.144×10^{-4}	
km	x 0.6214 →	miles
	← x 1.609	

Table 1: Conversion Table for Area and Volume Measurements

m ²	x 10.7639 →	square feet
	← x 0.0929	
m ²	x 1.196 →	square yards
	← x 0.8361	
m ²	x 2.471×10^{-4} →	acres
	← x 4046.9	
ha	x 2.471 →	acres
	← x 0.40469	
cm ³	x 0.061024 →	cubic inches
	← x 16.387	
m ³	x 35.315 →	cubic feet
	← x 0.02832	
m ³	x 219.9 →	Imperial gallons
	← x 4.546×10^{-3}	
L	x 0.2199 →	Imperial gallons
	← x 4.546	
mL	x 0.000219 →	Imperial gallons
	← x $.4346 \times 10^{-5}$	
m ³	x $.2199 \times 10^{-3}$ →	Million Imp. gallons
	← x 4.546×10^3	

Table 3: Conversion Table for Weight and Mass Measurements

g	$x 2.205 \times 10^{-3} \rightarrow$	pounds
	$\leftarrow x 453.59$	
g	$x 15.4323 \rightarrow$	grains
	$\leftarrow x 0.064799$	
g	$x 0.03527 \rightarrow$	ounces
	$\leftarrow x 28.3495$	
mg	$x 2.205 \times 10^{-6} \rightarrow$	pounds
	$\leftarrow x 453\,592.3$	
mg	$x 0.01543 \rightarrow$	grains
	$\leftarrow x 64.799$	
kg	$x 2.2046 \rightarrow$	pounds
	$\leftarrow x 0.4536$	

Table 4: Conversion Table for Pressure

Pa	$x 0.145 \times 10^{-3} \rightarrow$	pounds per square inch
	$\leftarrow x 6.895 \times 10^3$	
kPa	$x 0.145 \rightarrow$	pounds per square inch
	$\leftarrow x 6.895$	
kPa	$x 4.0145 \rightarrow$	inches of water column
	$\leftarrow x 0.249$	
kPa	$x 0.295 \rightarrow$	inches of mercury col.
	$\leftarrow x 3.386$	
psi	$x 2.31 \rightarrow$	Feet of water depth
	$\leftarrow x 0.433$	
kPa	$x 0.102 \rightarrow$	Metres of water depth
	$\leftarrow x 9.8$	

Table 5: Conversion Table for Length

°C	$(1.8 \times ^\circ\text{C}) + 32 \rightarrow$	°F
	$\leftarrow (^\circ\text{F} - 32) \times 0.5556$	

Table 6: Conversion Table for Measurements

J	$x 0.7376 \rightarrow$	foot pounds
	$\leftarrow x 1.356$	
kJ	$x 0.9478 \rightarrow$	BTU
	$\leftarrow x 1.055$	
kW	$x 1.341 \rightarrow$	hp (electric)
	$\leftarrow x 0.7457$	

PH

A pH scale is used to measure the acidity of a substance. A pH lower than 7 indicates an acidic substance (maximum acidity = 0), and pH greater than 7 indicates a less acidic – or more alkaline – substance (maximum alkalinity = 14). A pH of 7 is neutral. Pure water has a pH of 7¹.

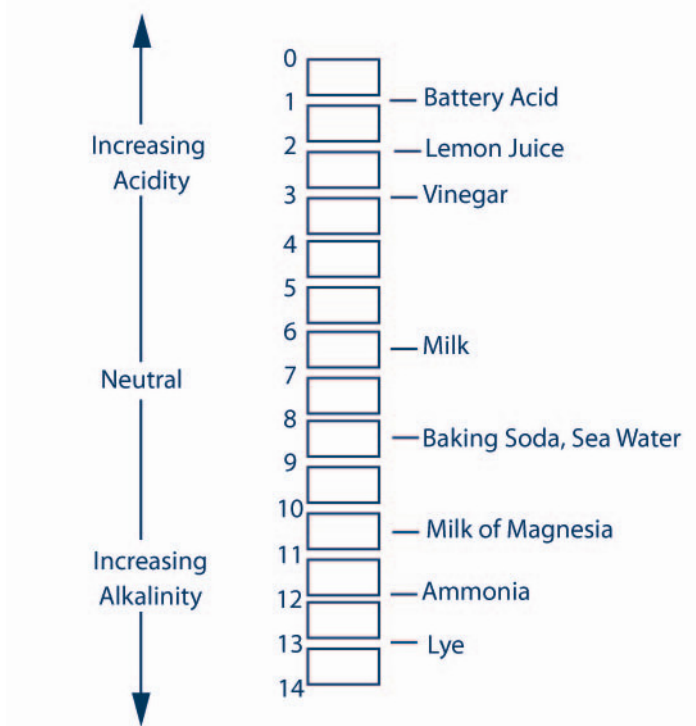


FIGURE 6: PH SCALE

¹ Environment Canada. 2005. Acid Rain and the Facts. Available at URL: <http://www.ec.gc.ca/acidrain/acidfact.html>

MATHEMATICAL SYMBOLS FOUND IN THIS MANUAL

Symbol	Name	Description
$>$	Greater-than	Used to express a larger value than a given value. For example: in the expression $(x > y)$; x has a greater value than y .
\geq	Greater than or equal to	Used to express a value that can be either a larger value or the same value as a given value. For example: in the expression $(x \geq y)$; x has either a greater value than y or it has the same value as y .
$<$	Less-than	Used to express a lesser value than given value.
\leq	Less-than or equal to	Used to express a value that can be either a lesser value or the same value as a given value.
π	Pi	Approximately equal to 3.14; pi is a mathematical constant representing the ratio of a circle's circumference to its diameter.

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