

REFERENCES

APPROVED ASSESSMENT REPORT for the Saugeen Valley Source Protection Area

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REFERENCES

Chapter 2 – Watershed Characterization

- Baker, Douglas and Darryl Shoemaker. *Environmental Assessment and Aggregate Extraction in Southern Ontario: The Puslinch Case*. University of Waterloo: Waterloo, Ontario, 1995.
- Canada Land Inventory. "Canada Land Inventory." Natural Resources Canada, 2000. Web. http://geogratis.cgdi.gc.ca/CLI/frames.html. Accessed April 24, 2010.
- Canadian Hydrographic Service. "Tides Currents and Water Levels." Web. http://www.lau.chs-shc.gc.ca/c&A/wltable_e.html. Accessed June 23, 2010.
- Chapman, L.J. and D.F. Putnam, 1984. The Physiography of Southern Ontario. Ontario Geological Survey.
- Climans Group Inc. "Commercial Needs Study, 2006". As cited in Owen Sound Community Profile. City of Owen Sound. Web. http://www.e-owensound.ca/business/profile/Community_Profile_2009.pdf. Accessed May 23, 2010.
- Conservation Ontario Discussion Paper: Recommendations for Monitoring Ontario's Water Quality. March, 2003.
- County of Bruce. Bruce County Official Plan, 1997.
- County of Grey. Grey County Official Plan, 1999.
- Fisheries and Oceans Canada. "The Role of Conservation Authorities." Fisheries and Oceans Canada ,2005. Web. http://www.dfo-mpo.gc.ca/regions/CENTRAL/pub/municipal-class-niveaux-municipaux-on/section8-eng.htm. Accessed June 23, 2010.
- Ford, D.C. and P.W. Williams. Karst Geomorphology and Hydrology. UnWin Hyman Ltd., London, 1989.
- Griffiths, R.W., BioMAP: Bioassessment of Water Quality. 1999.
- Hemson Consulting Ltd. The County of Grey Development Charges Study. Hemson Consulting Ltd., 2006.
- Henderson Paddon and Associates Ltd. "Septage Management Plan for the Municipalities of Grey County." 2004.
- Hoffman, D.W. and N.R. Richards. Soil Survey of Bruce County. 1954.

- Judd, Anne. Our Watershed Legacy: Saugeen Valley Conservation Authority, 1950-2000. Hanover, Ontario: Saugeen Valley Conservation Authority, 1999.
- Mandrak, N.E. and D. Marson. "Sampling of the Fish Communities in the Saugeen River Watershed, 2005-2006." Can. Tech. Rep. Fish. Aquat. Sci., 2007.
- Nature Conservancy of Canada. "Frequently Asked Questions." Nature Conservancy of Canada. Web. http://www.natureconservancy.ca/site/PageServer?pagename=ncc_about_faq. Accessed July 05, 2010.
- Natural Heritage Information Centre. "Biodiversity Explorer." Queen's Printer for Ontario, 2010. Web. http://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/main.jsp. Accessed April 29, 2010.
- Niagara Escarpment Commission. "Niagara Escarpment Commission." Queen's Printer for Ontario, 2009. Web. http://www.escarpment.org/home/index.php. Accessed Oct. 23, 2009.
- Ontario Cattlemen's Association. "Buffer Strips. Best Management Practices Series." Ontario Cattlemen's Association, 2005.
- Ontario Federation of Anglers and Hunters and Ontario Ministry of Natural Resources. "OFAH Invading Species Awareness Program." Ontario Federation of Angler's & Hunters, 2010. Web. http://www.invadingspecies.com/. Accessed April 24, 2010.
- Ontario Ministry of the Environment. "Brownfield Registry." Queen's Printer for Ontario, 2007. Web. http://www.ene.gov.on.ca/en/land/brownfields. Accessed Oct. 23, 2009.
- Ontario Ministry of the Environment. "4224e_1 Stormwater Pollution Prevention Handbook." Queen's Printer for Ontario, 2001. Web. http://www.ene.gov.on.ca/envision/gp/4224e_1.htm. Accessed June 23, 2010
- Ontario Ministry of the Environment. "Septage." Queen's Printer for Ontario, 2010. Web. http://www.ene.gov.on.ca/en/land/septage/index.php. Accessed June 18, 2010.
- Ontario Ministry of Finance. "Populations Projections." Queen's Printer for Ontario, 2000.
- Ontario Ministry of Municipal Affairs and Housing. "Provincial Policy Statement." Queen's Printer for Ontario, 2010. Web. http://www.mah.gov.on.ca/Page215.aspx. Accessed June 23, 2010.
- Ontario Ministry of Municipal Affairs and Housing. "Stormwater Management." Queen's Printer for Ontario, 2010. Web. http://www.mah.gov.on.ca/Page1735.aspx. Accessed June 23, 2010.
- Ontario Ministry of Natural Resources. "Area of Natural and Scientific Interest." Queen's Printer for Ontario. Web. http://www.mnr.gov.on.ca/en/Business/CLTIP/2ColumnSubPage/STEL02_167425.html. Accessed Oct. 23, 2009.
- Ontario Ministry of Natural Resources. "Build a Parks System." Queen's Printer for Ontario, 2009. Access June 23, 2010.
- Ontario Ministry of Natural Resources. "Owen Sound District Fisheries Management Plan, 1986-2000." Queen's Printer for Ontario, 2000.

- Ontario Ministry of Natural Resources. "Pit or Quarry data layer." Queen's Printer for Ontario, 2005
- Ontario Ministry of Natural Resources. "Digital Elevation Model." Queen's Printer for Ontario, 2007.
- Ontario Ministry of Natural Resources. "Natural Resources Values Information System (NRVIS)." Queen's Printer for Ontario, 2007.
- Ontario Ministry of Natural Resources. "Species at Risk." Queen's Printer for Ontario, 2010. Web. Excerpted from http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/276503.html. Accessed April 24, 2010.
- Ontario Ministry of Northern Development & Mines (MNDM). Last modified Nov. 7, 2003. Web. http://www.mndm.gov.on.ca/mndm/mines/mg/dimstone/intro_e.asp. Accessed May 8, 2006.
- Ontario Nature. "Nature Reserves." Ontario Nature, 2010. Web. http://www.ontarionature.org/protect/habitat/priorities.php. Accessed July 5, 2010.
- Ontario Parks. "Build a Parks System." Queen's Printer for Ontario, 2009. Web. http://www.ontarioparks.com/english/bldg.html. Accessed June 23, 2010.
- Owen Sound Field Naturalists, 2004. Guide to the Geology and Landforms of Grey and Bruce Counties.
- Saugeen Conservation. The Importance of Wetlands, Featuring The Greenock Swamp. Hanover, Ontario: Saugeen Conservation, 2003.
- Saugeen Conservation. "Watershed Report Cards, 2008". Hanover, Ontario: Saugeen Conservation, 2009.
- Saugeen, Grey Sauble, Northern Bruce Peninsula Source Water Protection Committee. "Conceptual Water Budget for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region." Hanover, Ontario: Saugeen Conservation, 2007.
- Saugeen, Grey Sauble, Northern Bruce Peninsula Source Water Protection Committee, 2007. "Watershed Description for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region." Hanover, Ontario: Saugeen Conservation, 2007.
- SHS Consulting. "Bruce County Census Update." Bruce County Housing Services, Affordable Housing Division, 2009.
- StatCan Census of Agriculture, 2006. Source: Statistics Canada, 2006 Census of Agriculture, Farm Data and Farm Operator Data, catalogue no. 95-629-XWE.
- Statistics Canada. 2007. 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. Accessed April 10, 2010.
- U.S. Department of the Interior. National Atlas of the United States. 2006.

- Waterloo Hydrogeologic Inc. "Grey and Bruce Counties Groundwater Study: Final Report." Prepared for the County of Bruce, County of Grey and the Ontario Ministry of the Environment, 2003.
- Waterloo Hydrogeologic, Inc. "Technical Memorandum: AEMOT Study results and Grey & Bruce Counties Karst Mapping." 2005. Wildlands League. "Northern Bruce Peninsula Community Atlas." Wildlands League, 2005.

Chapter 3 – Water Quantity Stress Assessment

- Agriculture and Agri-Food Canada, 1997. Ecozones Mapping for Canada.
- AquaResource, Inc., 2008a. Saugeen, Grey Sauble, Northern Bruce Peninsula Conceptual Geologic and Numerical Modelling Report.
- AquaResource, Inc., 2008b. Saugeen, Grey Sauble, Northern Bruce Peninsula Tier 1 Surface Water Budget and Stress Assessment Report.
- AquaResource, Inc., 2010. Saugeen Valley, Grey Sauble, Northern Bruce Peninsula Tier Two Subwatershed Stress Assessment.
- Barnett, P.J., 1992. Quaternary Geology of Ontario, in: Geology of Ontario, Ontario Geological Survey, Volume 4, Part 2, p1011-1090.
- Brunton, F.R., J.E.P. Dodge, and J. Shirota, 2006. Karst Compilation for Southern Ontario: An Update. In: Summary of Fieldwork and Other Activities 2006, Ontario Geological Survey, Open File Report 6192, p31-1 to 31-9.
- Chapman, L.J. and D.F. Putnam, 1984. The Physiography of Southern Ontario. Ontario Geological Survey.
- De Loë, R., 2002. Agricultural Water Use in Ontario by Watershed: Estimates from 2001. Rob de Loë Consulting Services. Prepared for the Ontario Ministry of Natural Resources.
- Environment Canada. National Climate Archive. Accessible at: http://climate.weatheroffice.ec.gc.ca/.
- Ford, D.C. and P.W. Williams, 1989. Karst Geomorphology and Hydrology. UnWin Hyman Ltd., London.
- Gillespie, J.E. and N.R. Richards, 1954. Soil Survey of Grey County.
- Hoffman, D.W. and N.R. Richards, 1954. Soil Survey of Bruce County.
- Johnson, M.D., D.K. Armstrong, B.V. Sanford, P.G. Telford and M.A. Rutka, 1992. Paleozoic and Mesozoic geology of Ontario, in: Geology of Ontario, Ontario Geological Survey, Volume 4, Part 2, p907-1010.

- Karrow, P.F. and S. Occheitti, 1989. Quaternary Geology of the St. Lawrence Lowlands; in: Quaternary Geology of Canada and Greenland, R.J. Fulton (ed.), Geological Survey of Canada, Geology of Canada, no. 1 p321-390.
- Liberty, B.A., and T.E. Bolton, 1971. Paleozoic Geology of the Bruce Peninsula Area, Ontario. Memoir 360, Geological Survey of Canada, Department of Energy, Mines and Resources. Ottawa, Canada.
- Matrix, 2016. Tier Three Water Budget and Local Area Risk Assessment. Matrix Solutions Inc. Breslau, ON. January, 2016.
- MNRF, 2002. Ontario Ministry of Natural Resources. Digital Soils Mapping.
- MNRF, 2002. Ontario Ministry of Natural Resources. Digital Elevation Model.
- MNRF and MOECC, 2009. Ontario Ministry of Natural Resources and Ontario Ministry of the Environment. Technical Bulletin: Delineation of Significant Groundwater Recharge Areas. Queen's Printer for Ontario, April 2009.
- MOECC, 2006a. Ontario Ministry of the Environment. *Clean Water Act*, 2006. Queen's Printer for Ontario, 2006.
- MOECC, 2006b. Ontario Ministry of the Environment. Draft Guidance Module 7. Water Budget and Water Quantity Risk Assessment. October 2006. Accessible at: http://www.ene.gov.on.ca/envision/gp/5600e_waterbudget.pdf
- MOECC, 2009. Technical Rules: Assessment Report to the *Clean Water Act*, 2006. Section 107. Ontario Ministry of the Environment. Queen's Printer for Ontario, 2009.
- Owen Sound Field Naturalists, 2004. Guide to the Geology and Landforms of Grey and Bruce Counties.
- Saugeen, Grey Sauble, Northern Bruce Peninsula Source Water Protection Committee, 2007a. Conceptual Water Budget for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Water Protection Region.
- Saugeen, Grey Sauble, Northern Bruce Peninsula Source Water Protection Committee, 2007b. Watershed Description for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Water Protection Region.
- SGSNBP SPR, 2008. Watershed Characterization Report. Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Drinking Water Source Protection Project Report, 2008.
- Singer, S.N., C.K. Cheng, and M.G. Scafe, 2003. The Hydrogeology of Southern Ontario, 2nd Edition. Environmental Monitoring and Reporting Branch, Ontario Ministry of the Environment, Toronto, Ontario.

- Smith, D., 2002. Improving the Sustainability of River Systems Through the Removal of Dams on the Saugeen River, Southwestern Ontario. Unpublished M.A. Thesis, Royal Roads University.
- Statistics Canada, 2001. 2001 Census of Agriculture, Farm Data and Farm Operator Data.
- Waterloo Hydrogeologic Inc., 2002. Phase 1 Sinkhole Study: Final Report. Prepared for the Ausable Bayfield Conservation Authority and the Ontario Ministry of Northern Development and Mines.
- Waterloo Hydrogeologic Inc., 2004. Phase 2 Sinkhole Study: Final Report. Prepared for the Ausable Bayfield Conservation Authority and the Ontario Ministry of Northern Development and Mines.
- Waterloo Hydrogeologic Inc., 2003. Grey and Bruce Counties Groundwater Study: Final Report. Prepared for the County of Bruce, County of Grey and the Ontario Ministry of the Environment.
- Waterloo Hydrogeologic, Inc., 2005. Technical Memorandum: AEMOT Study results and Grey & Bruce Counties Karst Mapping.
- Waterloo Hydrogeologic, Inc., 2005. Grey Bruce Counties Municipal Groundwater Supply Vulnerability Pilot Study.

Chapter 4 – Water Quality

- Agriculture and Agri-Food Canada, 1983. Updates to Soils Mapping from the Soil Survey of Bruce County, Report No.16 of the Ontario Soil Survey, Hoffman and Richards, 1954.
- Baird, 2012. Numerical Modelling in Support of IPZ-3 Delineation, Saugeen, Grey Sauble, Northern Bruce Peninsula. W.F. Baird & Associates Coastal Engineers Ltd. Oakville, ON. February, 2012.
- Baird, 2013. IPZ-3 Modelling for Identification of Significant Threats, Saugeen, Grey Sauble, Northern Bruce Peninsula. W.F. Baird & Associates Coastal Engineers Ltd. Oakville, ON. September, 2014.
- Burniston *et al.*, 2006. Sediment Quality in Canadian Lake Huron Tributaries: A Screening Level Survey. Environment Canada.
- Burnside, R.J., 2001a. Town of Minto Groundwater Study. R. J. Burnside & Associates Limited.
- Burnside, R.J., 2001b. Engineer's Report. Teeswater Well Supply. R. J. Burnside & Associates Limited, May 28, 2001.

- Chapman, L.J. and D.F. Putnam, 1984. *The Physiography of Southern Ontario*. Ontario Geological Survey.
- CRA, 2007. 2005-2006 Groundwater Technical Study, Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Conestoga-Rovers & Associates. Owen Sound, ON. November 2007.
- CRA, 2008. Round 2 Groundwater Technical Study Groundwater Vulnerability Assessment for the Municipalities of West Grey and Northern Bruce Peninsula. Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Conestoga-Rovers & Associates. Owen Sound, ON. September 2008.
- CRA, 2008b. Preliminary Analysis For Municipal Well Head Protection Areas Grey Sauble Conservation Authority Owen Sound, Ontario. Reference No. 047059 (2). February 2008.
- CRA, 2009. Phase II: Groundwater Technical Study: Groundwater Vulnerability Assessment Drinking Water Quality Threats. Commissioned by Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Conestoga-Rovers & Associates. Owen Sound, ON. August 2009.
- Cobean, S.J., 2001. First Engineer's Report for the Durham Municipal Water Works, Corporation of the Township of West Grey, County of Grey. D.J. Peach & Associates Ltd. Professional Engineers, Durham ON. January 2001.
- Colozza, F.C., 2001. The Corporation of the Municipality of West Grey Wellhead Inspection Report for the Neustadt Groundwater Supply System. AMEC Earth and Environmental Limited. London, ON. May 2001.
- Environment Canada, 1999. Canadian Environmental Protection Act, 1999. Government of Canada.
- GENIVAR, 2009. Municipality of Arran-Elderslie Groundwater Vulnerability Study. GENIVAR Consultants LP.
- GENIVAR, 2010. Source Water Protection Round 2 Groundwater Technical Study Communities of Tara and Chesley Municipality of Arran-Elderslie. GENIVAR Consultants LP.
- Golder, 2001. Town of Walkerton Groundwater Protection Study. Golder and Associates.
- Golder, 2003. Determination of Capture Zones for Walkerton Wells 7 and 9 Municipality of Brockton County of Bruce, ON. Golder and Associates. February 28, 2003.
- Golder, 2006. County of Wellington Groundwater Protection Study. Golder and Associates.
- Golder, 2010. Update to County of Wellington Groundwater Protection Study. Golder and Associates.
- Harden Environmental, 2002. Hanover Well No. 1 Hydrogeological Assessment. March 2002.

- Henderson and Paddon, 2000. Engineer's Report for the Chesley Water Works.
- Henderson and Paddon, 2002a. Hydrogeologic Study to Examine Groundwater Sources Potentially Under the Direct Influence of Surface Water (Town of Durham Supply Wells #1B & #2), (Former Town of Durham), Municipality of West Grey. Henderson, Paddon & Associates Limited, Civil Engineering Consultants and Planners. Owen Sound, ON. October 2002.
- Henderson and Paddon, 2002b. Hydrogeologic Study to Examine Groundwater Sources Potentially Under the Direct Influence of Surface Water (Neustadt Water Supply Wells 1, 2, and 3) Former Village of Neustadt, Municipality of West Grey. Henderson, Paddon & Associates Limited Civil Engineering Consultants and Planners. Owen Sound, ON. September 2002.
- Henderson and Paddon, 2003: "Municipality of Arran-Elderslie (Chesley), Well Assessment and Groundwater Study, Community Park Well 3", Henderson Paddon & Associates Limited, Project No. 101075, October 2003.
- Hoffman and Richards, 1954. Hoffman, D.W. and N.R. Richards, Soil Survey of Bruce County, Report No.16 of the Ontario Soil Survey, 1954.
- Matrix, 2016. Town of Ripley, Township of Huron Kinloss Wellhead Protection Area Delineation Ripley Wells 3 And 4. Matrix Solutions Inc. Breslau, ON. January, 2016.
- MNRF, Water Poly Segment (WPS). GIS Dataset. Ontario Ministry of Natural Resources. Oueen's Printer for Ontario.
- MNRF, 1999. Water Virtual Flow (WVF). GIS Dataset. Created 1998, updated 1999. Ontario Ministry of Natural Resources. Queen's Printer for Ontario.
- MNRF, 2006a. Southwestern Ontario Orthophotography Project (SWOOP). Images taken in 2006 at 30 cm resolution by First Base Solutions, Inc., 2006. Ontario Ministry of Natural Resources. Queen's Printer for Ontario.
- MNRF, 2006b. Digital Elevation Model Version 2.0.0. GIS Dataset. Created 2005, updated 2006. Ontario Ministry of Natural Resources. Queen's Printer for Ontario.
- MNRF, 2009. Southern Ontario Land Resource Information System (SOLRIS) Version 2.0. GIS Dataset. Created 2000, updated 2009. Ontario Ministry of Natural Resources. Queen's Printer for Ontario.
- MNRF, 2009. Ontario Base Mapping (OBM). Contour. GIS Dataset. Created 1977, updated 2009. Ontario Ministry of Natural Resources. Queen's Printer for Ontario.
- MNRF, 2010. Southwestern Ontario Orthophotography Project (SWOOP) 2010. Data supplied under License by Members of the Ontario Geospatial Data Exchange. Ontario Ministry of Natural Resources. Queen's Printer for Ontario.

- MOECC, 2001. Groundwater Studies 2001/2002 Technical Terms of Reference. Ontario Ministry of the Environment. Queen's Printer for Ontario, 2001.
- MOECC, 2002. *Safe Drinking Water Act*, 2002. Ontario Ministry of the Environment. Queen's Printer for Ontario, 2002.
- MOECC, 2003a. Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines. Ontario Ministry of the Environment. Queen's Printer for Ontario, 2006.
- MOECC, 2003b. Drinking Water Inspection Report. Durham Water Works Inspection #228.03, May 20, 2003. Ontario Ministry of the Environment.
- MOECC, 2003c. Drinking Water Inspection Report. Lake Rosalind Water Works. Inspection February 6, 2003. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled February 20, 2003.
- MOECC, 2004. Drinking Water Inspection Report. Chepstow Well Supply. Powers Subdivision Well Supply Inspection #1-PHHN, September 28, 2004. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled December 15, 2004.
- MOECC, 2005a. Ontario Ministry of the Environment. Drinking Water Systems Regulation O.Reg. 170/03 Southampton Water Treatment Plant, Annual Report-Part III Form 2, 2005.
- MOECC, 2005b. Drinking Water System Inspection Report. Lakeshore Well Supply. Inspection #1-49RZ8, May 10, 2005. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled August 5, 2005.
- MOECC, 2005c. Drinking Water System Inspection Report. Mount Forest Well Supply. Inspection #1-TYK5, February 15, 2005. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled April 18, 2005.
- MOECC, 2006a. *Clean Water Act, 2006*. Ontario Ministry of the Environment. Queen's Printer for Ontario, 2006.
- MOECC, 2006b. Drinking Water System Inspection Report. Arran-Elderslie Well Supply. Inspection #1-5CF2R, June 7, 2006. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled July 31, 2006.
- MOECC, 2006c. Ministry of the Environment Amended Certificate of Approval Municipal Drinking Water Systems Southampton WTP #0482-6U2PG4, November 2006.
- MOECC, 2006d. Drinking Water System Inspection Report. Kincardine Water Treatment Plant. Inspection 2006. Ontario Ministry of the Environment, Safe Drinking Water Branch.
- MOECC, 2008. Drinking Water System Inspection Report. Markdale Well Supply. Inspection #1-6ONY7, May 6, 2008. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled July 18, 2008.

- MOECC, 2009a. Technical Rules: Assessment Report to the *Clean Water Act*, 2006. Section 107. Ontario Ministry of the Environment. Queen's Printer for Ontario, 2009.
- MOECC, 2009b. Technical Bulletin: Proposed Methodology for Calculating Percentage of Managed Lands and Livestock Density for Land Application of Agricultural Source of Material, Non-Agricultural Source of Material and Commercial Fertilizers. Ontario Ministry of the Environment. Queen's Printer for Ontario, September 2009.
- MOECC, 2009c. "Brownfield Registry." Ontario Ministry of the Environment. Queen's Printer for Ontario, 2007. Web. http://www.ene.gov.on.ca/en/land/brownfields. Accessed Oct. 23, 2009.
- MOECC, 2009d. Drinking Water System Inspection Report. Armow Well Supply. Inspection #1-7HFRM, November 10, 2009. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled December 22, 2009.
- MOECC, 2009e. Drinking Water System Inspection Report. Clifford Well Supply. Inspection #1-7I8XZ, November 17, 2009. Ontario Ministry of the Environment, Safe Drinking Water Branch. Report compiled January 11, 2010.
- MOECC, 2011a. Director's opinion regarding the addition of the operation of the Nuclear Generating Station where nuclear reactions are being moderated by deuterium (Heavy Water) in any quantity. Ontario Ministry of the Environment, January 26, 2011.
- MOECC, 2011b. Drinking Water System Inspection Report. Lake Rosalind Drinking Water System. Ontario Ministry of the Environment, Safe Drinking Water Branch.
- MOECC, 2015. Provincial Tables of Circumstances. Ontario Ministry of the Environment and Climate Change. Queen's Printer for Ontario, 2015. Web. http://www.ontario.ca/environment-and-energy/provincial-tables-circumstances.
- Montgomery, T.H., 2001. Engineers' Reports for the Groundwater Supply System in the Municipality of West Grey: Neustadt Groundwater Supply System. KMK Consultants Limited. Kitchener, ON. May 2001.
- OMAFRA, 2000. Publication 19: Pasture Production. Manual created February 1, 2000; reviewed February 25, 2015. Ontario Ministry of Agriculture, Food and Rural Affairs. Queen's Printer for Ontario, 2015.
- OMAFRA. Constructed Drains GIS dataset. Ontario Ministry of Agriculture, Food and Rural Affairs. Queen's Printer for Ontario.
- OMAFRA, 2009. Tile Drainage Areas GIS dataset. Ontario Ministry of Agriculture, Food and Rural Affairs. Queen's Printer for Ontario, 2009.
- Ontario Clean Water Agency, 2008. Saugeen Shores Water Treatment, Schedule 22. Summary Report for the Period of June 30, 2007 to December 31, 2007.

- Ross, B.M., 2001a. Township of Huron-Kinloss Village of Ripley Engineer's Report. B.M. Ross and Associates Limited, Consulting Engineers. Goderich, ON. January 2001.
- Ross, B.M., 2001b. Township of Huron-Kinloss Lakeshore Area Engineer's Report. B.M. Ross and Associates Limited, Consulting Engineers. Goderich, ON. January 2001.
- SGSNBP SPC, 2009. Technical Report 7c, Development of Water Quality Standards for Issues Evaluation. Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee, January 23, 2009.
- SGSNBP SPR, 2008. Watershed Characterization Report. Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Drinking Water Source Protection Project Report, 2008.
- Saugeen Shores, 2009. Water and Sanitary Sewer Servicing Master Plan. Town of Saugeen Shores. OS-08-054-11-OS. Prepared by Genivar Consultants LP, June 2009.
- Saugeen Shores, 2009b. O.Reg. 170/03 Annual Water Report. Port Elgin. Town of Saugeen Shores, Feb. 2009.
- Schlumberger, 2009. 2009 Grey-Bruce Model Update. Internal Memo from Lucas Carson to Don Smith, DWSP Project Manager. April 28th, 2009.
- Stantec, 2008 (Phase 1 Report). Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Planning Technical Study: Phase 1 Report "Surface Water Source Protection Technical Studies". Commissioned by the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Authority. Stantec Consulting Ltd., February 2008.
- Stantec, 2009 (Phase 1 Technical Addendum). Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Planning Technical Study: Phase 1 Technical Addendum: Riverine and Pathway, Vulnerability, and Uncertainty Level Analyzes for the Kincardine, Southampton, Lion's Head, Wiarton, Presqu'ile, East Linton, R.H. Neath, Meaford, and Thornbury, Water Treatment Plants. Commissioned by the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Authority. Stantec Consulting Ltd., DRAFT, November 2009.
- Stantec, 2009 (Phase 2). Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Planning Technical Study: Phase 2 Potential Threats Analysis Technical Memorandum. Commissioned by the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Authority. Stantec Consulting Ltd., DRAFT, December 2009.
- Statistics Canada, 2006a. 2006 Census of Agriculture, Farm Data and Farm Operator Data. Catalogue no. 95-629-XWE.
- Statistics Canada, 2006b. 2006 Community Profiles. 2006 Census. Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. Accessed April 10, 2010.
- TBCS, 2009. The Federal Contaminated Inventory. Treasury Board of Canada Secretariat. Government of Canada. Web. http://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx.

- Waterloo Numeric Modelling Corporation, 2009. Round 1 Technical Study for the Ausable Bayfield Maitland Source Protection Region.
- Wilson, 2002a. Hydrogeological Study Powers Subdivision Well Community of Chepstow Municipality of Brockton. Ian D. Wilson Associates Limited Consulting Hydrogeologists. Clinton, ON. August 2002.
- WHI, 2003. Grey and Bruce Counties Groundwater Study, Final Report. Waterloo Hydrogeologic Inc. Waterloo, ON. July 2003.

<u>Chapter 5 – Climate Change</u>

- Aerts, J. and P. Droogers (eds.) 2004: Climate Change in Contrasting River Basins: Adaptation Strategies for Water, Food and Environment. Centre for Agricultural Bioscience International, 2004.
- Assel, R.A., K. Cronk, and D.C. Norton. 2003: *Recent trends in Laurentian Great Lakes ice cover*. Climatic Change 57:185-204. http://www.glerl.noaa.gov/pubs/fulltext/2003/20030001.pdf
- Assel, R. A. 2007: *Indicator: Lake Erie ice cover. In State of the Strait: Status and Trends of Key Indicators.* J.H. Hartig, M.A. Zarull, J.H. Ciborowski, J.E. Gannon, E. Wilke, G. Norwood, and A. Vincent (eds.). Great Lakes Institute for Environmental Research, Occasional Publication No. 5, University of Windsor, Ontario, Canada, 102-104 (2007). http://www.glerl.noaa.gov/pubs/fulltext/2007/20070044.pdf
- Bai, X., and J. Wang. *Impacts of ENSO and AO on interannual variability of Great Lakes ice cover*. 52nd Annual Conference of the International Association for Great Lakes Research, University of Toledo, Toledo, OH, May 18-22, 2009 (2009).
- Barrow, E. et al., 2005: *Climate Variability and Change in Canada: Past, Present and Future.* Environment Canada.
- Bates, B.C., Z.W. Kundzewicz, S. Wu and J.P. Palutikof (eds.) 2008: *Climate Change and Water*. Technical Paper of the Intergovernmental Panel on Climate Change. IPCC.
- Bruce, J.P. and D. Lean 2006: *Planning for Extremes: Adapting to Impacts on Soil and Water from Higher Intensity Rains with Climate Change in the Great Lakes Basin.* Paper presented on the Planning for Extremes Workshop of the Soil and Water Conservation Society; Milwaukee, Wisconsin; November 1-3, 2006.
- Burton, Ian 2008: *Moving Forward on Adaptation*. In From Impacts to Adaptation: Canada in a Changing Climate 2007. D.S. Lemmen, F.J. Warren and E. Bush (eds). Ottawa: Government of Canada. pp. 425-440.
- Canadian Climate Impacts and Adaptation Research Network 2006: *Climate Change Impacts in the Great Lakes Region*. (Poster). http://www.c-ciarn.ca/pdf/great_lakes_poster2.pdf

- Clean Air Partnership 2007. *Cities Preparing for Climate Change: A Study of Six Urban Regions*. Clean Air Partnership. http://adaptation.nrcan.gc.ca/projdb/pdf/171e_e.pdf
- Canadian Centre for Climate Modelling and Analysis 2008: Website of the Canadian Centre for Climate Modelling and Analysis, Data section. http://www.cccma.ec.gc.ca/data/data.shtml. October 16th, 2008.
- Climate Change Science Program, 2008a: *Climate Projections Based on Emissions Scenarios for Long-Lived and Short-Lived Radiatively Active Gases and Aerosols*. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. H. Levy II, D.T. Shindell, A. Gilliland, M.D. Schwarzkopf, L.W. Horowitz, (eds.). Department of Commerce, National Oceanic and Atmospheric Administration's National Climatic Data Center, Washington, D.C., USA, 100 pp.
- Climate Change Science Program, 2008b: Weather and Climate Extremes in a Changing Climate. Regions of Focus: North America, Hawaii, Caribbean, and U.S. Pacific Islands. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. Thomas R. Karl, Gerald A. Meehl, Christopher D. Miller, Susan J. Hassol, Anne M. Waple, and William L. Murray (eds.). Department of Commerce, National Oceanic and Atmospheric Administration's National Climatic Data Center, Washington, D.C., USA, 164 pp.
- Changnon, S.A., 2004: *Temporal behaviour of levels of the Great Lakes and climate variability*. Journal Great Lakes Research, 30, 184-200.
- Corkal, Darrell R. and Philip E. Adkins 2008: *Canadian Agriculture and Water Coping with environmental pressures and climate change*. Authors are employed by Agriculture and Agri-Food Canada's Prairie Farm Rehabilitation Administration. Paper presented at 13th International Water Resources Association World Water Congress, Montpellier, France 2008.
- de Loë, R.C. and A. Berg, 2006: *Mainstreaming Climate Change in Drinking Water Source Protection in Ontario.* 2006.
- Food and Agriculture Organization 2006: *Livestock's Long Shadow Environmental Issues and Options*. Food and Agriculture Organization of the United Nations. Rome, 2006.
- Field, C.B., L.D. Mortsch, M. Brklacich, D.L. Forbes, P. Kovacs, J.A. Patz, S.W. Running and M.J. Scott, 2007: North America. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, (eds.), Cambridge University Press, Cambridge, UK, 617-652.
- Global Environment Centre 2007: Parish, F., A. Sirin, D. Charman, H.Joosten, T. Minayevaand M. Silvius, (eds.) *Assessment on Peatlands, Biodiversity and Climate Change: Executive*

- *Summary*. Global Environment Centre, Kuala Lumpur and Wetlands International, Wageningen.
- GEMCLIM 2008: GEMCLIM (Global Environment Multiscale in climate mode). Environment Canada Collaboration, http://collaboration.cmc.ec.gc.ca/science/rpn/gem/gem-climate/ Last updated June 2008.
- Goyette, S., N.A. McFarlane, and G. Flato, 2000: Application of the Canadian Regional Climate Model to the Laurentian Great Lakes Regions. Implementation of a Lake Model. Atmos. Oc., 38, 481-503.
- Huron Geosciences, 2011. Climate Trends in the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Unpublished Report.
- Intergovernmental Panel on Climate Change 2001, *Special Report on Emissions Scenarios*. Nebojsa Nakicenovic and Rob Swart (eds.), Intergovernmental Panel on Climate Change. Geneva, 2001. http://www.grida.no/publications/other/ipcc_sr
- Intergovernmental Panel on Climate Change AR4 WG1 2007. Climate Change 2007: *The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.* Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 996 pp.
- Intergovernmental Panel on Climate Change AR4 Synthesis Report: Summary for Policy Makers 2007: Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. This summary, approved in detail at IPCC Plenary XXVII (Valencia, Spain, 12-17 November 2007), represents the formally agreed statement of the Intergovernmental Panel on Climate Change concerning key findings and uncertainties contained in the Working Group contributions to the Fourth Assessment Report. http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf
- Intergovernmental Panel on Climate Change 2007: Report of the 27th session of the Intergovernmental Panel on Climate Change. Valencia, 12-17 November 2007 http://www.ipcc.ch/meetings/session27/final-report.pdf
- Intergovernmental Panel on Climate Change 2008: *Climate Change and Water*. Bates, B.C., Z.W. Kundzewicz, S. Wu and J.P. Palutikof (eds.). Intergovernmental Panel on Climate Change Secretariat, Geneva, 210 pp., June 2008
- IPCC, 2013: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.

- International Assessment of Agricultural Science and Technology for Development 2008: International Assessment of Agricultural Knowledge, Science and Technology for Development – Synthesis Report. Intergovernmental report, International Assessment of Agricultural Science and Technology for Development, http://www.agassessment.org/, April 2008.
- International Assessment of Agricultural Science and Technology for Development 2008b: *Food Security in a Volatile World Issues in Brief.* International Assessment of Agricultural Knowledge, Science and Technology for Development. http://www.agassessment.org/docs/10505_FoodSecurity.pdf, April 2008.
- Jackson, Brian 2007: Potential effects of climate change on lake trout in Atikokan Area. Climate Change Research Note CCRN-04, 2007. Ontario Government, Ministry of Natural Resources, 2007
- Kling, G.W., K. Hayhoe, L.B. Johnson, J.J. Magnuson, S. Polasky, S.K. Robinson, B.J. Shuter, M.M. Wander, D.J. Wuebbles, D.R. Zak, R.L. Lindroth, S.C. Moser, and M.L. Wilson. 2003. *Confronting Climate Change in the Great Lakes Region: Impacts on our Communities and Ecosystems*. Cambridge, Massachusetts: Union of Concerned Scientists; Washington, D.C.: Ecological Society of America.
- Kunkel, Kenneth E. and Leslie Ensor, Michael Palecki, David Easterling, David Robinson, Kenneth G. Hubbard, Kelly Redmond 2009: *A new look at lake-effect snowfall trends in the Laurentian Great Lakes using a temporally homogeneous data set.* Journal of Great Lakes Research. Volume 35, Issue 1, March 2009, Pages 23-29.
- Latif, M. and T.P. Barnett, 1994: *Causes of decadal climate variability over the North Pacific and North America*. Science 266, 634-637.
- Lemmen, D.S. and F.J. Warren and E. Bush (eds.) 2007: *Canada in a Changing Climate* 2007. Ottawa: Government of Canada. pp. 425-440.
- Lake Huron Centre for Coastal Conservation 2008: *Lake Huron and Climate Change What Are The Possibilities?* Report of Lake Huron Centre for Coastal Conservation, 2008.
- Luinstra, Brian 2009: *Climate Trends in the Maitland Valley Conservation Authority Watershed.* unpublished report for Maitland Valley.
- MacRae, R., 2008: *How Will Your Farm Cope with a Changing Climate?* Maitland Valley Conservation Authority. 2008.
- MacIver, D. et al., 2007: Coastal Zone Management under a Changing Climate in the Great Lakes, Environment Canada.
- Martynov, A., L. Sushama, R. Laprise, 2009: *Implementation of lakes in the Canadian Regional Climate Model*. Présentation orale, 62nd Annual Conference of the Canadian Water Resources Association, June 9-12 2009, Quebec, QC, Canada.

- Mills B.N., S.L. Tighe, J. Andrey, J.T. Smith, S. Parm, K. Huen (2007): *The Road Well-Travelled: Implications of Climate Change for Pavement Infrastructure in Southern Canada*. Study for Environment Canada. http://adaptation.nrcan.gc.ca/projdb/pdf/134b_e.pdf
- Ministry of Natural Resources 2009: *Climate Change & Ontario's Wetlands*. Website of the Ministry of Natural Resources.http://www.mnr.gov.on.ca/en/Business/ClimateChange/2ColumnSubPage/STEL 02_168601.html
- Mortsch, L. 1998: Assessing the Impact of Climate Change on the Great Lakes Shoreline Wetlands. Climatic Change 40: 391-416, 1998.
- Mortsch, L. et al., 2005: Development of Climate Change Scenarios for Impact and Adaptation Studies in the Great Lakes St. Lawrence Basin, Environment Canada. 2005.
- Mortsch, L. et al., (eds.) 2006: *Great Lakes Coastal Wetland Communities: Vulnerable to Climate Change and Response to Adaptation Strategies*, Environment Canada. 2006.
- Music, B., and D. Caya, 2007: Evaluation of the Hydrological Cycle over the Mississippi River Basin as Simulated by the Canadian Regional Climate Model. J. Hydromet., 8(5), 969-988.
- North American Regional Climate Change Assessment Program 2009: *Model Information, Regional Models*. North American Regional Climate Change Assessment Program. Boulder, Colorado. http://www.narccap.ucar.edu (Accessed October 2009).
- Obenchain, A.M. 2004: *Including Wetlands in Carbon Budget Modelling*. Ontario Forestry Research Institute, Ontario Ministry of Natural Resources, Sault Ste. Marie, Ontario, Insights, 6(2): 13-14.
- Program For Climate Model Analysis and Comparison 2009: *Program For Climate Model Analysis and Comparison*. Lawrence Livermore National Laboratory in Livermore, California. www-pcmdi.llnl.gov/ (Accessed October 2009).
- Pearson, David 2009 Summary of MVCA Meeting. Unpublished conference report. *Climate Change Action: Rural Perspectives from the Maitland Valley Watershed April 23*, 2009. See also http://www.climateontario.ca/workshops.html
- Plummer, D.A., D. Caya, A. Frigon, H. Cote, M. Giguere, D. Paquin, S. Biner, R. Harvey, and R. de Elia, 2006: *Climate and Climate Change over North America as Simulated by the Canadian RCM*. J. Clim, 19(13), 3112-3132.
- Rodionov, S. and R. A. Assel. Winter severity in the Great Lakes region: A tale of two oscillations. Climate Research 24:19-31 (2003).

- Prodonović, P., 2008: Response of Water Resources Systems to Climate Change, University of Western Ontario. 2008.
- Rush, R., with J. Ivy, R. de Loë, and R. Kreutzwiser, 2004: *Adapting to Climate Change in the Maitland Valley Watershed, Ontario: A Discussion Paper for Watershed Stakeholders*. University of Guelph. 2004.
- Schertzer, W.M., R.A. Assel, D. Beletsky, T.E. Croley II, B.M. Lofgren, J.H. Saylor, and D.J. Schwab 2008: *Lake Huron climatology, inter-lake exchange and mean circulation*. Aquatic Ecosystem Health and Management 11(2):144-152 (2008).
- Schroeter and Associates 2007: *Meteorological Data Missing-Value Fill-in Study for Ontario*. Memo report to the Ministry of Natural Resources, Ontario. Report supplied by MNR with data disk. June 2007.
- Scinocca, J. F., N. A. McFarlane, M. Lazare, J. Li, and D. Plummer, 2008: *The CCCma third generation AGCM and its extension into the middle atmosphere*. Atmos. Chem. Phys. Discuss., 8, 7883-7930. www.atmos-chem-phys-discuss.net/8/7883/2008/.
- Séguin, Jacinthe and Peter Berry (eds.) 2008: *Human Health in a Changing Climate: A Canadian Assessment of Vulnerabilities and Adaptive Capacity*. Climate Change and Health Office, Safe Environments Program, Health Canada, Ottawa, Ontario
- Semenov, M.E and E.M Barrow 1997: *Use of a stochastic weather generator in the development of climate change scenarios*. Climatic Change 35, pp. 397–414, 1997
- Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region 2008a: *Watershed Characterization Report*. Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Drinking Water Source Protection Project Report, 2008
- Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region 2008b: Saugeen, Grey Sauble, And Northern Bruce Peninsula Tier 1 Surface Water Budget And Stress Assessment Report. Drinking Water Source Protection Project Report, 2008
- Tupman, Kevin 2004: *The potential impact of climate change on the Lake Huron shoreline at Oliphant*. Report to Lake Huron Centre for Coastal Conservation. 2004
- United States Global Climate Change Research Program 2009: Global Climate Change Impacts in the United States. A State Of Knowledge Report from the U.S. Global Change Research Program. Cambridge University Press. June 2009. www.globalchange.gov/usimpacts
- Wall, Ellen and Barry Smith and Johanna Wandel 2007: Farming in a Changing Climate: Agricultural Adaptation in Canada. Book, University of British Columbia Press, Canada
- Zhang, Y., J.M. Wallace and D.S. Battisti 1997: ENSO-like Interdecadal Variability: 1900-93. Journal of Climate, Vol. 10, 1004-1020. Aerts, J. and P. Droogers (eds.) 2004: *Climate*

Change in Contrasting River Basins: Adaptation Strategies for Water, Food and Environment. Centre for Agricultural Bioscience International, 2004.

Chapter 6 – Great Lakes Considerations

- Conservation Ontario Council. Conservation Ontario Submission on Amending the Great Lakes Water Quality Agreement Governance Issues. February, 2010.
- Council of the Great Lakes Governors. *The Great Lakes Charter: Principles for the Management of Great Lakes Water Resources*. Retrieved June 22, 2010 from Council of the Great Lakes Governors website: http://www.cglg.org/pub/charter/index.html.
- Government of Ontario. *Clean Water Act*, 2006. Retrieved June 22, 2010 from E-Laws website:http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_06c22_e.htm.
- Government of Canada. Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem. 2002.
- International Joint Commission. *Who We Are*. Retrieved on June 22, 2010 from International Joint Commission website: http://www.ijc.org/en/background/ijc_cmi_nature.htm.
- Ministry of Natural Resources. Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement Supporting Documents. Retrieved on June 22, 2010 from Ministry of Natural Resources website: http://www.mnr.gov.on.ca/en/Business/Water/2ColumnSubPage/STEL02_164560.html.
- Ministry of the Environment. *Source Protection and the Great Lakes*. Retrieved from Ministry of the Environment website: http://www.ene.gov.on.ca/en/water/cleanwater/cwadocs/6349.pdf.
- Ministry of the Environment. *The Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem: A Renewed Commitment to the Great Lakes*. Retrieved on June 22, 2010 from Ministry of the Environment website: http://www.ene.gov.on.ca/en/news/2007/081602mb.php.
- Ministry of the Environment. Source Protection Plans under the Clean Water Act, 2006: A Discussion Paper on Requirements for the Content and Preparation of Source Protection Plans. Ontario Ministry of the Environment, June 2009.

Chapter 7 – Addressing Limitations

Ministry of the Environment, October 8th, 2009. Memo to Source Protection Chairs and Project Managers: Incorporating data in assessment reports.

Worthington, S.R.H., 2009b. Review of the existing Well Head Protection mapping for the Kimberley and Shallow Lake Municipal Water systems and the influence of karst on groundwater supplies. Report prepared for Saugeen Valley Conservation Authority, Grey Sauble Conservation Authority and Municipality of Northern Bruce Peninsula, 18p. plus plates and figures.

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