

Brian P. Neff

Geographer (Water Resources Specialty)

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Summary of Qualifications

- Faculty Instructor at St. George's University since 2006
- Current PhD Student in Geography, University of Waterloo, M.S. in Environmental Science (2001), and B.S. in Biological Sciences (1996)
- 5 years experience as a 'proposal to publication' hydrologist for the U.S. Geological Survey
- Considerable expertise in hydrology and water resource issues, including substantial peer-reviewed research, see publication list below
- Demonstrated ability to develop, fund, manage, and complete transdisciplinary and crossdisciplinary research projects

Education

- Ph.D. (Student) in Geography
University of Waterloo
Waterloo, Ontario, Canada
Coursework completed, comprehensive examination expected fall 2009, graduation expected 2011-12
- Coursework focused on the philosophical grounding of geography, complex social-ecological systems, and water and energy resource issues
 - Research emphasis on linkages between water resources and public health in the Caribbean
 - Teacher Assistant for Geography & Human Habitat (GEOG 101, fall 2008) and Dimensions of Natural Hazards (GEOG 206, spring 2009)
 - Membership on the following committees (2008-2009):
 - Environmental Graduate Student Association, Social Coordinator and weekly trivia leader (committee representing all graduate students in the Faculty of Environment)
 - Academic Representation Advisory Committee, Faculty of Environment Representative (committee advises Faculty Senate on academic and research regulations)
 - Waterloo Environment Students Endowment Foundation, graduate student representative (committee manages funds raised through student fees to fund projects to improve student wellbeing)
 - Senate Graduate Research Committee, Faculty of Environment graduate student representative (committee consists mainly of faculty and serves as a subcommittee to the Faculty Senate to review all matters relating to university research)

M.S. in Environmental Sciences
University of Colorado
Denver, Colorado
Graduated December, 2001

- Coursework stressed the interdisciplinary aspects of environmental issues, particularly ecology, chemistry, hydrology, law, human health, and economics
- Thesis examined interactions between the geology, hydrology, water quality, sediment chemistry, and plant biology of a northern Minnesota lake

Education
(continued)

B.S. in Biological Sciences
Colorado State University
Ft. Collins, Colorado
Graduated December, 1996

- Area of study emphasized chemistry, botany, and ecology

Also attended
Metropolitan State College of Denver
Denver, Colorado
August, 1992 – May, 1993

Professional
Experience

Instructor (Environmental Health)
St. George's University
Dept. of Public Health and Preventative Medicine
True Blue, Grenada, West Indies
8/2006 – Present
Omur-Cinar Elci, Department Chair

Research

- In planning stages of dissertation research intended to identify linkages between water resources and public health in the Caribbean
- In planning stages of coordinating a study to evaluate the psychological effects of environmental exposure to hazardous substances in Grenada. Co-investigators to include Dr. Jennifer Durst, St. George's University and Joel Nigg, Michigan State University

Teaching

- Course Director – Water Resources and Public Health
- Course Director – Introduction to Environmental Health
- Course Director – Child Health and the Environment
- Co-instructor – Community and Preventive Medicine

Service – Community

- 2008 Grenada coordinator of the annual Ocean Conservancy International Coastal Cleanup
- Frequent volunteer at St. Mary's orphanage (April 2007 – present)

Service – University

- Chair – Department of Public Health Scheduling Committee (2008-2009)
- Co-leader of faculty "trivia night" (2008)
- Faculty Adviser to SGU Project 2015 student organization, committed to enabling Grenada meet the water-based UN Millennium Development Goals by the 2015 deadline

Professional
Experience
(continued)

Hydrologist (Ecology)
U.S. Geological Survey
Michigan Water Science Center
Lansing, Michigan
10/2001 – 8/2006 – permanent status
8/2006 – present – intermittent status

Jim Nicholas, Center, Director

(517) 887-8903

- “Proposal to Publication” research
- Developed, secured funding, managed, and completed many (approximately 10) research projects involving government and non-government cooperators in the U.S. and Canada
- Co-designed and secured funding for a transdisciplinary study to assess physical processes that affect coastal hydrology and ecology along western Lake Erie. This study integrated research in geology, ecology, and hydrology. My role involved drafting funding proposals, site selection, permit acquisition, evaluating ground-water/surface water interactions, scientific conference presentations, and writing scientific journal articles.
- Conducted 3 studies on water balances at scales ranging from small lakes to the Great Lakes Basin
- Authored or coauthored over 10 peer-reviewed scientific reports and scientific journal articles (see below)
- Notable recent research includes a binational assessment of base flow in streams and recharge to shallow ground-water aquifers in all gauged *and ungauged* portions of the Great Lakes Basin

Student Trainee (Hydrology)
U.S. Geological Survey
National Research Program
Lakewood, Colorado
6/1999 – 9/2001

Tom Winter, Supervisor
Don Rosenberry, Supervisor

(Retired)
(303) 236-4990

- Conducted formal QA/QC on surface water, ground-water, and atmospheric data, and utilized these data to quantify water budgets for small lakes
- Assisted with the planning, construction, and maintenance of stream flow gauging structures and ground-water seepage meters
- Installed and surveyed piezometers used to quantify ground water / surface water interactions
- Used pore-water “peepers” to collect water quality samples from shallow lakebed sediments
- Conducted water chemistry analyses for major and trace ions, nutrients, and alkalinity

**Professional
Organization
Membership**

- Canadian Association of Geographers
- Caribbean Academy of Sciences

**Relevant Personal
Information**

- Avid kayak fisherman, backpacker, backcountry telemark skier, and scotch aficionado of sorts
- Favorite charity is the Canadian Red Cross MalariaBites! Campaign,
<http://www.redcross.ca/malariabites/>

Selected Publications (peer-reviewed first and second authorship)

- Dean, W.E., Neff, B.P., Rosenberry, D.O., Winter, T.C., and Parkhurst, R.S., 2003, The significance of ground water to the accumulation of iron and manganese in the sediments of two hydrologically distinct lakes in North-Central Minnesota: A geological perspective: *Ground Water*, v. 41, n. 7, p. 951-963. <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1745-6584.2003.tb02437.x>
- Haack, S.K., Neff, B.P., Rosenberry, D.O., Savino, J.F., and Lundstrom, S.C., 2005, An Evaluation of Effects of Groundwater Exchange on Nearshore Habitats and Water Quality of Western Lake Erie: *Journal of Great Lakes Research*, v. 31 (Supplement 1): 45-63. <http://www.glsc.usgs.gov/publications.php?action=2006&abstract=1322>
- Neff, B.P., 2001, Analysis of factors limiting macrophyte growth near freshwater springs in a mesotrophic lake in north-central Minnesota, Thesis, University of Colorado, Denver, CO.
- Neff, B.P., and Killian, J.R., 2003, The Great Lakes Water Balance: Data Availability and Annotated Bibliography of Selected References: U.S. Geological Survey Water-Resources Investigations Report 02-4296, 37 p. <http://www.glc.org/wateruse/wrmdss/finalreport/pdf/ABpaperFINALPUBLISHED.pdf>
- Neff, B.P., Day, S.M., Piggott, A.R., and Fuller, L.M., 2005, Base Flow in the Great Lakes Basin, U.S. Geological Survey Scientific Investigations Report, U.S. Geological Survey Scientific Investigations Report 2005-5217, 23 p. <http://pubs.usgs.gov/sir/2005/5217/>
- Neff, B.P., and Nicholas, J.R., 2005, Uncertainty in the Great Lakes water balance: U.S. Geological Survey Scientific Investigations Report 2004-5100, 42 p. <http://pubs.usgs.gov/sir/2004/5100/>
- Neff, B.P., Weaver, T.L., and Wydra, D.G., 2005, Changes in Streamflow Patterns Related to Hydrologic Restoration of C-3 Watershed, Seney National Wildlife Refuge, Michigan, 1998-2004, Scientific Investigations Report 2005-5137, 20 p. <http://pubs.usgs.gov/sir/2005/5137/>
- Neff, B.P., Piggott, A.R., and Sheets, R.A., 2006, Shallow Aquifer Recharge in the Great Lakes Basin, U.S. Geological Survey Scientific Investigations Report 2005-5284. <http://pubs.usgs.gov/sir/2005/5284/>
- Piggott, A.R., and Neff, B.P., 2005, Calculation of Stream Flow Statistics for Ontario and the Great Lakes States: U.S. Geological Survey Open File Report 2005-1295, 12 p. <http://pubs.usgs.gov/of/2005/1295/>
- Rheume, Stephen J., Neff, Brian P., and Blumer, Stephen P., 2007, Cooperative Water-Resources Monitoring in the St. Clair River/Lake St. Clair Basin, Michigan, U.S. Geological Survey Open File Report 2007-1148. <http://pubs.usgs.gov/of/2007/1148/>
- Weaver, T.L., Neff, B.P., and Ellis, J.M., 2006, Water Resources of the Lac Vieux Desert Watershed, Gogebic County, Michigan and Vilas County, Wisconsin, U.S. Geological Survey Scientific Investigations Report 2005-5237. <http://pubs.usgs.gov/sir/2005/5237/>

Conference Proceedings Publications

- Haack, S.K., Neff, B.P., Rosenberry, D.O., Savino, J.F., Lundstrom, S.C., and Reeves, H.W., 2004, Effects of ground water on Great Lakes nearshore water and habitat quality, in Proceedings of the 47th Annual Conference of the International Association for Great Lakes Research, p. 55-56.
- Neff, B.P., Haack, S.K., Rosenberry, D.O., Savino, J.F., and Lundstrom, S.C., 2006, Coastal groundwater/surface-water interactions: a Great Lakes case study. Pages 289-295 in Singh, V. P. and Y. J. Xu, eds. *Coastal Hydrology and Processes*. Water Resources Publications, LLC, Highlands Ranch, CO. <http://www.wrpllc.com/books/chp.html>
- Piggott, A.R., Neff, B.P., Day, S.M., and Nicholas, J.R., 2004, A coordinated bi-national assessment of groundwater discharge within the Great Lakes Basin, in Proceedings of the 47th Annual Conference of the International Association for Great Lakes Research, p. 124.
- Piggott, A.R., Neff, B.P., Hinton, M., 2007, Base flow due to groundwater discharge. Indicator #7102, pages 288-295 in Environment Canada and U.S. Environmental Protection Agency, eds. *State of the Great Lakes 2007*, ISBN 978-0-662-47328-2. http://www.epa.gov/glnpo/solec/sogl2007/7102_BaseFlowDueToGroundwaterDischarge.pdf.