

Qualifications - Biographical Summary

Ph.D. - Syracuse Univ., 1981; geology; minor geotechnical engineering

M.S. – SUNY Fredonia, 1974; geology

A.B. – SUNY Fredonia, 1971; earth science education

Holds NY State permanent teaching license for grades 7-12

Full time experience – 1984-present SUNY Fredonia; 1980-83 Texas A & M Univ.;
1976-80 UNC-Charlotte; 1976 Syracuse University

Taught 11 different introductory and 20 different upper-division and graduate courses
Supervised or co-supervised 17 M.S. theses; numerous grad teaching and research assistants
Supervised more than 200 undergraduate research or other experiences

Recent examples of student supervision: Spring 2010, 2 students measuring and analyzing stream erosion and restoration; Summer 2010, 3 students (one working on quake liquefaction analysis; one on constructing automated long-profiles of streams; one helping with constructing teaching graphics); Fall 2010, 2 students (one completing a summer-fall internship at off-campus industry, and one beginning a study of river diversion).

Participant in several grant funded projects in education, such as projects where I directly worked with children of underrepresented groups and projects where I worked with up to 52 middle school teachers over several summers.

Recipient of approximately 60 grants (other than consulting)

Consultant or expert witness on 34 projects

Author or coauthor of more than 75 documents, including monographs, journal papers, reports

Service activities included elections to 8 professional society offices; >50 general-public lectures; coordinator of academic programs in Geophysics, in GIS, and in Environmental Science; administrator of several academic research programs (GIS, water supply, engineering geology); recent government committee assignments included Chautauqua Lake Management Commission, County Water Quality Task Force, Environmental Management Council, and reviewer for state and local government grant proposals. Dr. Wilson served on the Editorial Board of the Association of Engineering Geologists Bulletin, presented stream erosion research to the North Carolina Sediment Control Commission, and was North Carolina's representative to the Southeast Conference on Groundwater Management. He was appointed by the New York State Department of Health to the New York State Source Water Assessment Program (SWAP) and featured in a thousand-attendee teleconference. He wrote technical portions of the New York State Civil Service Exam in hydrology for Water Resources Specialists. In 2008-2009 he provided testimony and reporting on nuclear waste issues to several committees of the Vermont and New York State Legislatures.

Professional interests – all aspects of Earth surface processes, especially water related

Personal interests – visual arts, performing arts, outdoor recreation; previous vineyard owner

Research

Wilson has completed many projects related to erosion, erosion control and landscape evolution, as well as projects related to contamination and environmental management. Wilson investigated watershed loading in southwestern NY for Chautauqua Lake, Findley Lake, Green Lake, Fredonia Reservoir, Brocton Reservoirs, and Westfield Reservoir, involving 22 watersheds. Because of the frequent problems at these sites with erosion and turbidity, he has investigated erosion controls at numerous southwest NY locations. Previously, Wilson conducted erosion and erosion control studies in east Texas and several North Carolina locations.

Wilson also conducted many ground water contamination studies of both hazardous and municipal wastes (landfills, poultry, cyanide, salt, septic systems, sewers, etc.). He is expert in ground water and surface water interactions such as temporal concepts of micro-organism transport and natural filtration, having worked on projects in New York, Connecticut, and Wyoming.

Other recent studies included: snow hydrology and chemistry; ground temperatures; landscape visualization such as the appearance of pre-European settlement landscape; paleo-hydraulics of glacial melt-water; GIS application to ground-water lake-water interactions; climate statistics for southwest NY; writing a lake management plan; and maintaining a water quantity measuring network and website at <http://www.fredonia.edu/org/waternet/>

Dr. Wilson has investigated the development of many landscapes across North America and elsewhere, including morphogenesis of modern and ancient northeastern US uplands, valleys and subsurface landforms, both north and south of the Pleistocene glacial limit. He is an expert on several distinct locations such as water and geology of Big Bend National Park, Texas.

Examples of Wilson's most recent reports are:

“Improvement of Conewango Creek – Research and Implementation Plan” by Wilson; July 2010; for Cattaraugus County Soil and Water Conservation District

“Water Net – The Chautauqua County Water Network – Ten Year Overview” by Wilson and Boyle; June 2010; for Chautauqua County Health Department

“Overview of Geologic Issues Regarding the Retrievable Storage of Nuclear Waste near the Connecticut River, Southeastern Vermont” by Wilson; February 2009; for Vermont Legislature

“The Real Costs of Cleaning Up Nuclear Waste” by Napoleon, Fisher, Steinhurst, Wilson, Ackerman, and Resnikoff; November 2008; a project of Synapse Energy Economics, Inc., for NYS Legislature and a consortium of citizen groups including the Center for Health, Environment and Justice; Citizen's Environmental Coalition; Coalition on West Valley Nuclear Wastes; Nuclear Information & Resource Service

“Independent Review of the Draft Environmental Impact Statement for Decommissioning and/or Long Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center” by Garrick (chairperson), Bell, Bennett, Fakundiny, Neuman, Parker,

Ryan, Swift, Whipple, and Wilson; September 2008; for New York State Energy Research and Development Authority (NYSERDA)

“Expert Elicitation Summary – Landslides” by Wilson and Fakundiny (August 2008) reported to Garrick et al for use in “Quantitative Risk Assessment of the State-Licensed Radioactive Waste Disposal Area” for NYSERDA

“Fredonia Reservoir Water Budget and Source Evaluation” by Wilson and Shermet; July 2008; for Chautauqua County Health Department and Village of Fredonia, NY

“Analysis of Groundwater and Surface Water Temperature Profiles in Chautauqua County, NY” by Fisher and Wilson; August 2007; Chautauqua County Health Dept and SUNY Fredonia

“Sources of Unwanted Nutrients at Findley Lake, NY” by Shermet and Wilson; March 2007; for Town of Mina, NY, Findley Lake Watershed Foundation, and Chautauqua County Health Dept

Contact information:

Michael P. Wilson, Ph.D.
108 Houghton Hall
SUNY Fredonia NY 14063
716-673-3843
FAX 716-673-3347
Wilson@fredonia.edu