

EDUCATION**PhD in Civil Engineering, University of Washington, Seattle, WA, Expected 2010***Emphasis: Hydrology and Water Resources, Overall/Major GPA: 3.84/4.0**Dissertation: Improving hydrologic prediction in the western United States (in progress)***MS in Civil Engineering, Columbia University, New York, NY, 2004***Emphasis: Construction Engineering and Management, Overall/Major GPA: 3.93/4.0***BS in Civil Engineering, Northwestern University, Evanston, IL, 1998***Emphasis: Structures, Humanities Theme: Hebrew, Overall GPA: 3.54/4.0, Major GPA: 3.88/4.0***PROFESSIONAL EXPERIENCE****Graduate Research Assistant, University of Washington, Seattle, WA, 2006-Present***Member of research team for Professors Anne C. Steinemann and Dennis P. Lettenmaier.*

- *Decision Support through Earth Science Results, Sponsor: NASA* – Conducted research to improve water resources management in the western U.S through the use of remote sensing data and seasonal climate forecasts for this \$1.2 million grant.
- *Washington State Climate Change Impacts Assessment, Sponsor: Washington State Congress* – Conducted research to evaluate potential impacts of climate change on state's urban stormwater infrastructure, one of eight sectors evaluated.
- *West-Wide Drought Forecasting System – A Scientific Foundation for NIDIS, Sponsor: USGS* – Conducted research to incorporate USGS streamflow and well data into a drought forecast and nowcast model for the National Integrated Drought Information System.

Senior Principal Engineer, Hazen and Sawyer PC, New York, NY, 2000-2006*Member of 300-person office providing environmental engineering services, specializing in the fields of water and wastewater management, collection, and treatment.*

- *South Richmond Drainage Project, Staten Island, NY* – Served as project engineer responsible for contract drawing production, design services during construction, and project management assistance, performing civil design for 90 stormwater “best management practices” (BMPs), ranging from meandering streams to constructed wetlands.
- *Inner Harbor Combined Sewer Overflow Abatement, New York, NY* – Prepared contract drawings and specifications for project to replace deteriorated sluice gates in 70 regulators located throughout Brooklyn and Manhattan. Provided cost estimates, assistance in bidding process, and design services during construction.
- *Croton Water Treatment Plant, Bronx, NY* – Prepared contract drawings for site preparation phase of 290 MGD water filtration plant. Responsible for site layout, roadway, grading, and utility design, code compliance, and sediment and erosion control measures.

Design Engineer, KPF Consulting Engineers, Seattle, WA, 1998-2000*Member of 15-person Special Projects Division providing project management and civil engineering services for site development projects involving ports and harbors.*

- *Port of Longview Berth 8 Wharf, Longview, WA* – Developed designs of grading, dredging, drainage, and utility systems. Provided design services during construction. Generated cost estimate for this \$8 million project.
- *Pier T Container Yard, Long Beach, CA* – Conducted hydrologic analysis and prepared storm drainage designs for 200-acre shipping facility. Directed profiling of storm mains and assisted in drafting of contract drawings.
- *Seattle Iron & Metals Relocation, Seattle, WA* – Prepared preliminary and final designs of grading, drainage, and utility systems for scrap metal facility. Coordinated and designed all improvements within public right-of-way.

Temporary Construction Inspector, NYSDOT, Binghamton, NY, Summer 1996

Member of 5-person team overseeing the construction of two-lane, 250-foot bridge. Conducted topographical surveys, slump tests, and soil moisture studies. Calculated quantity estimates for earthwork, paving, and structural concrete. Monitored and evaluated safety and performance of contractor.

REFEREED PUBLICATIONS

Rosenberg EA, Keys PW, Booth DB, Hartley D, Burkey J, Steinemann AC, Lettenmaier DP (2009) Precipitation Extremes and the Impacts of Climate Change on Stormwater Infrastructure in Washington State. *Journal of Climatic Change*. Submitted.

Whitely Binder LC *with contributions from* Barcelos JK, Booth DB, Darzen M, Elsner MM, Graham TF, Hamlet AF, Hodges-Howell J, Huppert DD, Jackson JE, Karr C, Keys PW, Littell JS, Mantua N, Marlow J, McKenzie D, Robinson-Dorn M, **Rosenberg EA**, Stockle CO, Vano JA (2009) Preparing for Climate Change in Washington State. *Journal of Climatic Change*. Submitted.

Tang Q, **Rosenberg EA**, Lettenmaier DP (2009) Use of satellite data to assess the impacts of irrigation withdrawals on Upper Klamath Lake, Oregon. *Hydrology and Earth System Sciences*, 13: 617-627.

NON-REFEREED PUBLICATIONS

Westerling A, Barnett T, Gershunov A, Hamlet AF, Lettenmaier DP, Lu N, **Rosenberg E**, Steinemann AC (2008) Climate forecasts for improving management of energy and hydropower resources in the western US. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-XXX

Rosenberg E (2008) Predicting the Future: The Value of Seasonal Climate Forecasts for Water Resources Management in California. *AWRA Newsletter*, 3: 8-9.

Vokral J, Gumb D, Cavallaro AD, Overall N, McCulloch FA, **Rosenberg E** (2003) Restoring Staten Island's Riparian Ecology. *Stormwater*, 4(7): 12-24.

Vokral J, Gumb D, Cavallaro AD, Mehrotra S, **Rosenberg E** (2003) Wetlands at Work. *Civil Engineering*, 73(2): 56-63.

CONFERENCE PRESENTATIONS

Rosenberg E (2009) Historical and future trends in precipitation extremes and their impacts on the stormwater infrastructure of Washington State. *The Water Center's 19th Annual Review of Research*, February 18, Seattle, WA.

Keys PW, **Rosenberg EA**, Booth DB, Steinemann AC, Lettenmaier DP (2008) Precipitation Extremes and the Impacts of Climate Change on Stormwater in Washington State. *2008 American Geophysical Union Fall Meeting*, December 15-19, San Francisco, CA.

Rosenberg E, Tang Q, Wood AW, Steinemann AC, Lettenmaier DP (2008) Statistical Applications of Physical Hydrologic Models and Satellite Snow Cover Observations to Seasonal Water Supply Forecasts. *2008 American Geophysical Union Fall Meeting*, December 15-19, San Francisco, CA.

Lundquist JD, Lott F, Minder J, **Rosenberg E** (2008) Storm Tracks and Spatial Precipitation Patterns in the Sierra Nevada, California: Implications for Hydrologic Modeling and Water Resource Planning. *2008 American Geophysical Union Fall Meeting*, December 15-19, San Francisco, CA.

Rosenberg E, Steinemann AC (2008) Utility of seasonal climate outlooks for water supply forecasts in northern California. *The Water Center's 18th Annual Review of Research*, February 14, Seattle, WA.

Rosenberg E (2007) The utility of remote sensing data for hydrologic prediction in the Feather River basin. *2007 UBC/UW Hydrology and Water Resources Symposium*, September 28, Vancouver, BC.

Rosenberg E, Wood AW, Tang Q, Steinemann AC, Imam B, Sorooshian S, Lettenmaier DP (2007) Improving water resources management in the western United States through use of remote sensing data and seasonal climate forecasts. *5th Annual Climate Prediction Applications Science Worksho.*, March 20-23, Seattle, WA.

Deb-Moorjani D, Vokral J, Gumb D, Cavallaro AD, Mehrotra S, **Rosenberg E** (2005) The Staten Island Bluebelt: A Case Study in Urban Watershed Management. *ASCE Watershed Management Conference 2005*, July 19-22, Williamsburg, VA.

Gumb D, Brauman R, Mehrotra S, **Rosenberg E**, Deb D (2004) A Study of Water Quality Benefits Provided by BMPs in the Staten Island Bluebelt. *6th Annual Conference on Watershed Protection and 2nd Annual New York City Watershed Science and Technical Conference*, September 21-22, Fishkill, NY.

REVIEW COMMITTEES

Snover AK, Whitely Binder L, Lopez J, Willmott E, Kay J, Howell D, Simmonds J (2007) *Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments*. In association with and published by ICLEI – Local Governments for Sustainability, Oakland, CA.

Journals: *Water Resources Research*

TEACHING

CEE 345 Hydraulic Engineering and Hydrology (University of Washington; TA)

HONORS AND AWARDS

AWWA Archie Rice Scholarship – Pacific Northwest Section (2009)

AWRA Rod Sakrison Fellowship – Washington State Chapter (2007)

UW Water Center Andy Studebaker Fellowship (2006)

ASCE Outstanding Student Award for Illinois (1998)

Alpha Lambda Delta Freshman Honor Society (1995)

PROFESSIONAL AFFILIATIONS

Registered Professional Engineer, State of New York

Member, American Society of Civil Engineers

Member, Water Environment Federation

Member, American Water Resources Association

Student Member, American Geophysical Union

Student Member, American Water Works Association

Student Member, American Society for Photogrammetry and Remote Sensing