Stephen B. Shaw, Ph.D., P.E.

SUNY College of Environmental Science and Forestry
Dept. of Environmental Resources Engineering
418 Baker Lab
Syracuse, NY 13210
sbshaw@esf.edu

PROFESSIONAL	EXPERIENCE
I KUPPANUINAL	LYAPPINIE DINCE

Associate Professor August 2017 – Present

Dept. of Envir. Resources Eng., SUNY ESF, Syracuse, NY

Assistant Professor August 2011 – August 2017

Dept. of Envir. Resources Eng., SUNY ESF, Syracuse, NY

Post-Doctoral Researcher / Research Associate May 2009 – August 2011

Dept. of Earth and Atm. Sci., Cornell University, Ithaca, NY NY State Water Resources Institute

Adjunct Assistant Professor August 2008 – May 2009

Hobart and William Smith Colleges, Geneva, NY

Environmental Engineer 2000 - 2003

Malcolm Pirnie, Inc., Fair Lawn, NJ

EDUCATION

Ph.D. Cornell University January 2009

Department of Biological and Environmental Engineering

M.S. Cornell University May 2005

Department of Agricultural and Biological Engineering

B.S. Cornell University May 2000

Department of Agricultural and Biological Engineering

REFEREED PUBLICATIONS

Kelleher, C. A. and **S.B. Shaw**. 2018. Is ET often oversimplified in hydrologic models? Using long records to elucidate unaccounted for controls on ET. Journal of Hydrology. 557: 1269-1279. (doi: 10.1016/j.jhydrol.2017.12.018)

Shaw, S.B. 2017. Does an upper limit to river water temperature apply in all places? Hydrological Processes. 31:3729-3739. (doi: 10.1002/hyp.11297)

Ivancic, T.J. and **S.B. Shaw**. 2017. Identifying Spatial Clustering in Change Points of Streamflow across the Contiguous U.S. between 1945 and 2009. Geophysical Research Letters. 44:2445-2453. (doi: 10.1002/2016GL072444)

- **Shaw, S.B.**, D.B. Bonville, and D.G. Chandler. 2017. Combining Observations of Channel Network Contraction and Spatial Discharge Variation to Inform Spatial Controls on Baseflow in Birch Creek, Catskill Mountains, USA. Journal of Hydrology Regional Studies. 12: 1-12. (doi: 10.1016/j.ejrh.2017.03.003)
- Bhattarai, N., L. J. Quackenbush, J. Im, and **S. B. Shaw**. 2017. A new optimized algorithm for automating endmember pixel selection in the SEBAL and METRIC models. Remote Sensing of the Environment. 196: 178-192. (doi.org/10.1016/j.rse.2017.05.009)
- Carter, E. J. Melkonian, S.J. Riha, and **S.B. Shaw**. 2016. Separating heat stress from moisture stress: analyzing yield response to high temperature in irrigated maize. Environmental Research Letters. 11: 094012.
- Gutchess, K., L. Jin. L. Lautz, **S.B. Shaw**, X. Zhou, and Z. Lu. 2016. Chloride sources in urban and rural headwater catchments, central New York. Science of the Total Environment. 565: 462-472. (doi: 10.1016/j.scitotenv.2016.04.181)
- Ivancic, T.J. and **S.B. Shaw**. 2016. A U.S. Based Analysis of the Ability of the Clausius-Clapeyron Relationship to Explain Changes in Extreme Rainfall with Changing Temperature. Journal of Geophysical Research Atmospheres. 121: 3066-3078. (doi:10. 1002/2015JD024288)
- N. Bhattarai, **S.B. Shaw**, L.J. Quackenbush, J. Im, and R. Niraula. 2016. Evaluating five remote sensing based single-source surface energy balance models for estimating daily evapotranspiration in a humid subtropical climate. International Journal of Applied Earth Observation and Geoinformation. 49:75-86. (doi: 10.1016/j.jag.2016.01.010)
- **Shaw, S.B.** 2016. Investigating the Linkage Between Streamflow Recession Rates and Channel Network Contraction in a Mesoscale Catchment in New York State. Hydrological Processes. 30: 479-492. (doi: 10.1002/hyp/10626)
- Rahm, B.G., N. B. Hill, **S.B. Shaw**, and S.J. Riha. 2016. Nitrate dynamics in two streams impacted by wastewater treatment plant discharge: point sources or sinks? Journal of the American Water Resources Association. (doi: 10.1111/1752-1688.12410)
- Ivancic, T.J. and **S.B. Shaw**. 2015. Examining why trends in very heavy precipitation should not be mistaken for trends in very high river discharge. Climatic Change. 133:681-693. (doi: 10.1007/s10584-015-1476-1)
- **Shaw, S.B.,** J. Marrs, N. Bhattarai, and L. Quackenbush. 2014. Longitudinal Study of the Impacts of Land Cover Change on Hydrologic Response in Four Mesoscale Watersheds in New York State, USA. Journal of Hydrology. 519: 12-22. (doi: 10.1016/j.jhydrol.2014.06.055)
- Cheng, X., **S.B. Shaw**, R.D. Marjerison, S. D. DeGloria, C. Yearick, and M.T. Walter. 2014. Improving risk estimates of runoff producing areas: Formulating variable source areas as a

- bivariate process. Journal of Environmental Management. 137: 146-156. (doi: 10.1016/j.jenvman.2014.02.006)
- **Shaw, S.B.**, D. Mehta, and S.J. Riha. 2014. Using simple data experiments to explore the influence of non-temperature controls on maize yields in the mid-West and Great Plains. Climatic Change Letters. 122: 747-755. (doi: 10.1007/s10584-014-1062-y)
- **Shaw, S.B.,** T.M. McHardy, and S.J. Riha. 2013. Evaluating the influence of watershed moisture storage on variations in base flow recession rates during prolonged rain-free periods in medium-sized catchments in New York and Illinois, USA. Water Resources Research, 49: 1-7. (doi: 10.1002/wrcr.20507).
- Buchanan, B.P., J.A. Archibald, Z.M. Easton, **S.B. Shaw**, R.L. Schneider, and M.T. Walter. 2013. A phosphorus index that combines critical source areas and transport pathways using a travel time approach. Journal of Hydrology, 486: 123-135. (doi: 10.1016/j.hydrol.2013.01.018).
- **Shaw, S.B.** and M.T. Walter. 2012. Using comparative analysis to teach about the nature of nonstationarity in future flood predictions. Hydrology and Earth System Sciences, 16: 1269-1279. (doi: 10.5194/hess-16-1269-2012)
- **S.B. Shaw** and S. Riha. 2012. Examining individual recession events instead of a data cloud: A modified interpretation of streamflow recession data applied to glaciated watersheds in a humid, temperate climate. Journal of Hydrology, 434–435: 46–54. (doi:10.1016/j/jhydrol.2012.02.034)
- **S.B. Shaw** and D.A. Eckhardt. 2012. An assessment of radon in groundwater in New York State. Health Physics, 103(3), 311-316. (doi: 10.1097/HP.0b013e31824dadbe)
- **S.B. Shaw**, R.D. Marjerison, D.R. Bouldin, J.Y. Parlange, and M.T. Walter. 2012. A simple model of changes in stream chloride levels due to road salt applications. ASCE Journal of Environmental Engineering, 138: 112-118. (doi:10.1061/(ASCE)EE.1943-7870.0000458)
- **S.B. Shaw**, A.A. Royem, and S.J. Riha. 2011. The relationship between extreme hourly precipitation and surface temperature in different hydroclimatic regions of the US. Journal of Hydrometeorology, 12(2): 319-325. (doi: 10.1175/2011JHM1364.1)
- **S.B. Shaw** and S.J. Riha. 2011. Assessing Possible Changes in Flood Frequency Due to Climate Change in Mid-sized Watersheds in New York State, USA. Hydrological Processes, 25(16): 2542-2550. (doi: 10.1002/hyp.8027)
- **Shaw, S.B.** and S.J. Riha. 2011. Assessing temperature-based PET equations under a changing climate in temperate, deciduous forests. Hydrological Processes, 25(9): 1466-1478. (doi: 10.1002/hyp.7913)
- Harpold, A.A., D.A. Burns, M.T. Walter, **S.B. Shaw**, and T.S. Steenhuis. 2010. Relating hydrogeomorphic properties to stream buffering chemistry in the Neversink watershed, New York State, USA. Hydrological Processes, 24(26): 3759-3771. (doi: 10.1002/hyp.7802)

- **Shaw, S.B.**, J.R. Stedinger, and M.T. Walter. 2010. Evaluating pollutant build-up/wash-off models using a Madison, Wisconsin catchment. Journal of Environmental Engineering ASCE, 136(2):194-203. (doi: 10.1061/(ASCE)EE.1943-7870.0000142)
- **Shaw, S.B.**, J.-Y. Parlange, M. Lebowtiz, and M.T. Walter. 2009. Accounting for surface roughness in a physically-based urban wash-off model. Journal of Hydrology, 367(1-2):79-85. (doi: 10.1016/j.jhydrol2009.01.004).
- M.T., Walter, J.A. Archibald, B. Buchanan, D.H. Dahlke, Z.M. Easton, R.D. Marjerison, A.N. Sharma, and **S.B. Shaw**. 2009. New paradigm for sizing riparian buffers to reduce risks of polluted storm water: practical synthesis. Journal of Irrigation and Drainage Engineering ASCE, 135(2): 200-209. (doi: 10.1016/ASCE0733-9437(2009)135:2:200)
- **Shaw, S.B.** and M.T. Walter. 2009. Improving Runoff Risk Estimates: Formulating Runoff as a Bivariate Process Using the SCS-Curve Number Method. Water Resources Research, 45: W030404. (doi:10.1029/2008WR006900)
- **Shaw, S.B.**, M.T. Walter, T.S. Steenhuis. 2008. Reply to "Comment on 'A physical model of particulate wash-off from rough impervious surfaces' by Shaw et al., Journal of Hydrology 327, 618-626" by Prof. Peter I.A. Kinnell. Journal of Hydrology, 351:258-260. (doi: 10.1016/j.jhydrol2007.12.013)
- **Shaw, S.B.**, A.A. Harpold, J.C. Taylor, and M.T. Walter. 2008. Investigating a high-resolution stream chloride time series from the Biscuit Brook Catchment, Catskills, NY. Journal of Hydrology, 348(3-4): 245-256. (doi:10.1016/j.jhydrol.2007.10.009)
- **Shaw, S.B.**, R. Mahklouf, M.T. Walter, J.-Y. Parlange. 2008. Experimental testing of a stochastic sediment transport model. Journal of Hydrology, 348(3-4): 425-430. (doi:10.1016/j.jhydrol.2007.10.014).
- **Shaw, S.B.**, M.T. Walter, T.S. Steenhuis. 2006. A physical model of particulate wash-off from rough impervious surfaces. Journal of Hydrology 327, 618–626.
- Steenhuis, T.S., A. Dathe, Y. Zevi, J.L.Smith, B.Gao, **S.B. Shaw**, D. DeAlwis, S. Amaro-Garcia, R. Fehrman, M.E. Cakmak, I. Toevs, B.M. Liu, S.M. Beyer, J.T. Crist, A.G. Hay, B.K. Richards, J.F. McCarthy. 2006. Biocolloid retention in partially saturated soils. Biologia, 61: S229—S233 (Supp. 19).
- Walter, M.T. and **S.B. Shaw**. 2005. Comment on "Curve Number Hydrology in Water Quality Modeling: Uses, Abuses, and Future Directions," by David C. Garen and Daniel S. Moore. Journal of the American Water Resources Association. 41: 1491-1492.

AWARDED RESEARCH GRANTS

Barge Canal Corporation, Reimagining the Canals Competition Semifinalist. \$50,000. April-July 2018.

NYSERDA (as contractor to Energy Power Research Institute), PI with Co-PI M. Collins, \$76,000. Nov. 2016-Dec. 2018.

USDA NIFA, "Elucidating Characteristics of Forest/Residential Land Interfaces Associated with Increased Risk of Tick-borne Diseases", PI with Co-PI M. Fierke, \$92,236. May 2015 – Sept. 2017.

USDA NIFA AFRI, "Lake Ontario Basin Agriculture in the Coming Decades: Room for Expansion or Imminent Future Water Conflict", PI with Co-PI T. Selfa, \$128,511. May 2015-Nov. 2017.

EAR NSF, "Collaborative Research: Mapping Changes in the Active Stream Channel Network of Mesoscale Watersheds in Order to Understand Distinct Signatures in Event Recession Curves", \$174,212. Aug 2014-Aug 2017.

Hudson River Estuary Program/ NYS Water Resources Institute, "Assessing Flood Risk in a Changing Climate in the Mohawk and Hudson River Basins", \$55,000. Jan. 2013 – Dec. 2014.

PUBLISHED ABSTRACTS

S.B. Shaw and C.A. Kelleher. 2017. Assessing Causation of Temporal Variability of Model Parameters: Does Scaling ET Through Time Make More Sense than Allowing Innate Watershed Parameters to Vary? Abstract H51F-1336 presented at AGU Fall Conference, New Orleans, LA, December 2017.

S.B. Shaw, N. Ng, and J. Shanley. 2015. Explaining Variations in Streamflow Recession Rate Using Observations of Subcatchment-Scale Heterogeneity in Flow Contribution. Abstract H33F-1677 presented at AGU Fall Conference, San Francisco, CA, December 15 -19th.

Ivancic, T. and **S.B. Shaw**. 2015. Examining why trends in extreme precipitation should not be mistaken for trends in extreme discharge. Abstract H42B-04 presented at AGU-GAC-MAC-CGU Joint Assembly, Montreal, Canada, May 3-7.

Bonville, D. and **S.B. Shaw**. 2015. Spatial variations in baseflow generation in a headwater mountain catchment: Birch Creek. Abstract H44B-0185 presented at AGU-GAC-MAC-CGU Joint Assembly, Montreal, Canada, May 3-7.

Shaw, S.B. and N. Ng. 2015. Using streamflow recession analysis to understand variations in hydrologic connectivity during baseflow. Abstract H23C-03 presented at AGU-GAC-MAC-CGU Joint Assembly, Montreal, Canada, May 3-7.

Susan J. Riha, **Stephen B. Shaw** and Jeff Melkonian. 2014. Canopy Temperatures in Irrigated and Non-Irrigated Maize. Session No. 236: Evaporation in crops and hydrologic models: testing, refinements, and cross-comparisons II. American Society of Agronomy International Annual Meeting, Long Beach, CA, 2-5 Nov.

- N. Bhattarai, L.J. Quackenbush, **S.B. Shaw**, 2014. Comparison of four single-source surface energy balance-based models for estimating remotely sensed daily evapotranspiration rates, ASABE International ET Symposium, Raleigh, NC, 7-10 April.
- N. Bhattarai, L.J. Quackenbush, **S.B. Shaw**, J. Im, 2014. Introduction of automated calibration approaches to the surface energy balance-based evapotranspiration algorithms, ASPRS Annual Conference, Louisville, KY, 23-28 Mar.
- **Shaw, S.B.** 2013. Relating field-observed changes in the active stream channel network to features of dQ/dt-Q recession curves. Abstract H21G-1142 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- Ivancic, T. and **S.B. Shaw.** 2013. A U.S. based analysis of the ability of the Clausius-Clapeyron relationship to explain changes in extreme rainfall with changing temperature. Abstract GC21A-0823 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- **Shaw, S.B.** and A. M. Ryan. 2013. Classifying Hydroclimatological Causes of Annual Maximum Discharges on Portions of the Mohawk River and its Tributaries. Presented at the 2013 Mohawk Watershed Symposium, March 22, Union College, Schenectady, N.Y.
- Ivancic, T.J., and **S.B. Shaw**. 2012. Using a Comparative Analysis Among Meteorological Stations in New York State to Examine the Ability of the Clausius-Claperyron Relationship to Explain Changes in Extreme Rainfall with Changing Temperature. Abstract GC11B-0991 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- **Shaw, S.B.**, R.D. Marjerison, D. Bouldin, and M.T. Walter. 2009. Inferring watershed characteristics using records of multi-decade stream chemistry response to road salt applications. Eos Trans. AGU, 90(22), Jt. Assem. Suppl., Abstract H30-1452.
- **Shaw, S.B.**, M.T. Walter, and R.D. Marjerison. 2008. Grouping like catchments: A novel means to compare 40+ catchments in the Northeastern U.S. Eos Trans. AGU, 89(52), Fall Meeting Suppl., Abstract H33D-1038.
- **Shaw, S.B.**, M.T. Walter, and A.A. Harpold. 2006. Modeling a high resolution stream chloride time series from the Biscuit Brook Catchment, Catskills, NY. Eos Trans. AGU, 87(52), Fall Meeting Suppl., Abstract H23B-1484.
- **Shaw, S.B.**, M.E. Lebowitz, and M.T. Walter. 2005. Physical modeling of particulate wash-off from rough impervious surfaces. Eos Trans. AGU, 86(52), Fall Meeting Suppl., Abstract B43C-0296.
- **Shaw, S.B.** and B.M. Liu. 2004. Replicating complex soil moisture patterns with a physically-based distributed model. Eos Trans. AGU, 85(17), Jt. Assem. Suppl., Abstract H23C-04.

How, C., **S. Shaw**, L. Wordsman, K. Kane, and D. Lipsky. 2003. Croton Watershed Management Strategy – Developing a Risk Ranking Watershed Assessment Strategy, AWRA International Congress: Watershed Management for Water Supply Systems, NY, NY, 2003.

PUBLISHED REPORTS

Herrmann, M., S. Doney, T. Ezer, K. Gedan, P. Morefield, B. Muhling, D. Pirhalla, **S. Shaw**. 2018. Scientific and Technical Advisory Committee Review of the Chesapeake Bay Program Partnership's Climate Change Assessment Framework and Programmatic Integration and Response Efforts. STAC Publication Number 18-001, Edgewater, MD. 32 pp.

Shaw, S. and D. Daley. 2012. Do design storms in New York State need updating? N.Y. Water Environment Association, Clear Waters, Winter 2012, V. 42, 16-18.

Shaw, S., R. Schneider., A. McDonald, S. Riha. et al. 2011. Water Resources – Chapter 4. In *Climaid: Integrated Assessment for Effective Climate Change Adaptation Strategies in New York State*. C. Rosenzweig, W. Solecki. A. DeGaetano. (Eds). NYSERDA, Albany, New York.

Eckhardt, D.A., Reddy, J.E., and **Shaw, S.B**. 2009. Groundwater quality in central New York, 2007: U.S. Geological Survey Open-File Report 2009-1257.

Tamulonis, K.L., Kappel. W.M., and **Shaw, S.B**. 2009. Causes and movement of landslides at Rainbow Creek and Rattlesnake Gulf in the Tully Valley, Onondaga County, New York: U.S. Geological Survey Scientific Investigations Report 2009-5144, 18 p.

TALKS AND PRESENTATIONS

S.B. Shaw. 3/4/2018. Making Streamflow Measurements in Small Streams. Engineers Without Borders Student Symposium. Syracuse, NY. (Invited)

S.B. Shaw. 10/3/2017. Analyzing Hydrologic Time Series Through the Lens of Change Points: Identifying Evidence of Natural Variability in Streamflow Across the U.S. Between 1940 and 2014. Syracuse Center of Excellence Symposium. Syracuse, NY. (Invited)

S.B. Shaw. 9/30/2017. Thinking About Infrastructure Planning with Future Climate Uncertainty. Hobart & William Smith Colleges Environmental Hackathon. Geneva, NY. (Invited)

S.B. Shaw. 6/26/2017. Analyzing Hydrologic Time Series Through the Lens of Change Points: Identifying Evidence of Natural Variability in Streamflow Across the U.S. Between 1940 and 2014. American Water Resources Association Specialty Conference. Tysons, VA.

N. Piedmonte, **S. B. Shaw**, M. Prusinski, and M. Fierke. September 2016. Biotic and Abiotic Factors Affecting Blacklegged Tick (Ixodes scapularis) Distribution and Tick-borne Disease

- Prevalence in Onondaga County, New York –Entomological Society of America's XXV International Congress of Entomology (ICE 2016). Orlando, Florida.
- N. Piedmonte, **S. B. Shaw**, and M. Fierke. May 2016. Effects of Habitat and Forest Cover on Blacklegged Tick (*Ixodes scapularis*) Distribution in Onondaga County, New York. Entomological Society of America Integrated Tick Management Symposium: Solving America's Tick-Borne Disease Problem. Washington D.C.
- **S.B. Shaw.** 11/16/2015. Categorizing Causes of Historical High Streamflow to Better Inform Possible Future Changes in High Streamflow, Climate Change and Streamflow in the Northeast Workshop, USGS Water Science Center Baltimore.
- **S.B. Shaw.** 11/12/2015. Irrigation water demand in NYS, Crop and Soil Science Department Seminar. Cornell University, Ithaca, NY.
- **S.B. Shaw.** 10/6/2015. Seeking a better understanding of mesoscale processes in catchments: What can changes in the active stream channel network tell us? Syracuse University Water Seminar. Syracuse, N.Y.
- Bonville, D. and **S.B. Shaw**. 10/24/2014. Spatial variations in baseflow generation in a headwater mountain catchment: Birch Creek, Catskill Environmental Research and Monitoring Conference, Belleayre Mountain, Highmount, N.Y. (poster)
- Halton, C. and **S.B. Shaw**. 10/24/2014. Evaluating short and long term changes in channel structure and associated sediment loads in McKinley Hollow, Catskill Mountains, NY, Catskill Environmental Research and Monitoring Conference, Belleayre Mountain, Highmount, N.Y. (poster)
- **Shaw, S.B.** 9/17/2014. Can we use past climate observations to plan for the future? At Water Resources Infrastructure A Critical Piece of Community Development, Cornell Community Development Institute, Ellenville, N.Y. (invited)
- Shaw, S.B. and A.M. Ryan. 6/18/2014. Evaluating Historical Causes of Flooding on the Mohawk River. 2014 UCOWR/NIWR/CUAHSI Annual Science Conference, June 18-20, Tufts University, Medford, MA.
- Shaw, S.B. and A. M. Ryan. 3/27/2014. Examining Historical Causes of High Flows in the Mohawk River to Inform Predictions of Future Flooding. New York State Floodplain and Stormwater Managers Association Thirteenth Annual Meeting, March 27th, Poughkeepsie, N.Y.
- Shaw, S.B. and A. M. Ryan. 3/21/2014. Predicting Occurrences of Ice Jam Flooding on the Mohawk River at the End of the 21st Century. 2014 Mohawk Watershed Symposium, Union College, Schenectady, N.Y.

Cornell University. 3/25/2013. "Is there information in baseflow recession curves that has been overlooked?: A new interpretation of recession analysis". Ithaca, NY.

Science Teachers Association of New York State, 117th Annual Conference. 11/2/2012. "Thinking about the Impacts of Climate Change on a Local Level: Investigating Future Flooding in NYS". Rochester, NY.

Binghamton University. 5/3/2012. "Changes in flood risk in a changing climate". Binghamton, NY.

NY Section AWWA, New York Water Expo and Conference. 4/17/2012. "Putting water quality related risks from shale gas extraction in context". Saratoga Springs, NY.

Cornell University. 3/16/2012. "Changes in flood risk in a changing climate". Ithaca, NY.

ESF Hydrology and Biogeochemistry Seminar. 2/7/2012. "Using comparative analysis to make science-based inferences of changes in regional hydrology in a changing climate." Syracuse, NY.

WSYR News Channel 9. 1/12/2012. "Lack of snow will have little impact on water supply." Television Interview.

American Geophysical Union Fall Meeting. 12/9/2011. "Is there really an upper limit to river water temperatures?" San Francisco, Ca. Abstract #H51Q-01.

NY Section AWWA, Finger Lakes Water Works Conference. 12/1/2011. "An update on the impacts of Marcellus Shale gas extraction on water resources". Waterloo, NY.

COMET Advanced Hydrological Sciences Virtual Course. 8/18/2011. "The Predictability of river flooding in a changing climate". Webinar.

WSKG Radio Community Conversation. 8/9/2011. "The State of Water in Central NY".

Cornell Cooperative Extension In-Service Conference. 11/17/2010. "Unraveling the water-energy nexus in New York State". Ithaca, NY.

NY Water Environment Association – Central and Genesee Valley Chapter. 10/29/2010. "Impacts of shale gas extraction on water resources in New York". Ithaca, NY.

Department of Horticulture, Cornell University. 9/27/2010. "Translating global climatology to local hydrology: Are we more uncertain than we are willing to admit?". Ithaca, NY.

NOAA/ Sea Grant Climate Change Literacy Workshop. 8/4/2010. "Climate Change and New York's Water Resources". Ithaca, NY.

NY American Water Works Association Board Meeting. 6/23/2010. "Impacts of Shale Gas Extraction on Water Resources in New York". Webinar.

Finger Lakes Water Works Conference. 4/1/2010. "Impacts of Shale Gas Extraction on Water Resources in New York". Watkins Glen, NY.

University of Maine. 3/15/2010. "Reformulating standard hydrologic tools to better describe land use and climate change". Orono, Me.

COLLEGE AND DEPARTMENT SERVICE

Member, Committee on Research – Aug 2011 to Present

Member, Campus Climate Change Committee – Jan. 2012 to Jan. 2014

Member, ERE Geospatial Position Search Committee – Sept. 2013 to May 2014

Member, ESF Strategic Plan: Undergraduate Experience Committee – Jan. 2015 to May 2015

Coordinator, ERE Undergraduate Curriculum – Jan. 2016 to Present

PROFESSIONAL CERTIFICATION

N.Y.S. Professional Engineer (P.E.), Environmental Engineering (#097342)