John Johnston, Supervisory Ecologist, in EPA's National Exposure Research Laboratory

Computational Exposure Division
Mailing Address

johnston.johnm@epa.gov

Area of Expertise: John M. Johnston, Ph. D., has worked with the EPA's Office of Research and Development since 1996, collaborating across disciplines including ecology, biology, geographic information systems, engineering, chemistry, and computer science. He has worked with a tribe facing contamination from mercury pollution, and his team was awarded the Agency's Silver Medal for Superior Service for contaminated site assessment in a New England community. Dr. Johnston is Supervisory Ecologist and Chief of the Watershed Exposure Branch with ORD's National Exposure Research Laboratory's Computational Exposure Division. His areas of interest include systems dynamics, ecosystem services and climate change adaptation, macroecology, exposure modeling of fate, transport and food web bioaccumulation, integration of geographic information systems and simulation models for multi-scale impact assessment, and model parameter estimation and uncertainty analysis.

Dr. Johnston also serves as a Task Lead for EPA's Sustainable and Healthy Communities Research Program where he promotes the use of Integrated Environmental Modeling and Decision Analysis by regional, state and community decision makers to protect human and ecosystem health. He was also a Project Lead with the Safe and Sustainable Water Resources Program to design more flexible and reusable science solutions to water resources and local economies. Recently he was an Embassy Science Fellow with the Department of State, on detail to the Mekong River Commission Secretariat in Vientiane, Laos, working with the Climate Change and Adaptation Initiative to forecast ecosystem and biodiversity impacts, understand resilience and promote sustainable development.

Select Publications:

Ghimire, S. and J.M. Johnston. 2015. Traditional Knowledge of Rainwater Harvesting Compared to Five Modern Case Studies. World Environmental and Water Resources Congress: Floods, Droughts, and Ecosystems Conference Proceedings pp. 182-193.

Ghimire, S., J.M. Johnston, W. Ingwersen, and T. Hawkins. 2014. Life Cycle Assessment of Domestic and Agricultural Rainwater Harvesting Systems. Env Sci & Tech 48(7):4069-4077.

Ghimire, S. and J.M. Johnston. 2013. Impacts of domestic and agricultural rainwater harvesting systems on watershed hydrology: A case study of Albemarle-Pamlico Watershed basins (NC, VA, USA). Ecohydrology and Hydrobiology 1-14.

McGarvey, D. and J.M. Johnston. 2013. 'Fishing' for Alternatives to Mountaintop Mining in Southern West Virginia. Ambio 42(3):298-308.

Ogilvie-Hendren, C., M. Lowry, K. Grieger, E. Money, J.M. Johnston, M. Wiesner, and S. Beaulieu. 2013. Modeling Approaches for Characterizing and Evaluating Environmental Exposure to Engineered Nanomaterials in Support of Risk-Based Decision Making. Env Sci & Tech 47(3):1190-1205.

Shanley, J., R. Moore, R. Smith, E. Miller, A. Simcox, N. Kamman, D. E. Nacci, K. Robinson, J.M. Johnston, M.M. Hughes, C. Johnston, D. Evers, K. Williams, J. Graham, and S. King. 2012. MERGANSER - An Empirical Model to Predict Fish and Loon Mercury in New England Lakes. Env Sci & Tech 46(8):4641-8.

View more research publications by [John Johnston.](#)

Education:

- Ph.D. Ecology, University of Georgia, 1996
- B.S. Chemistry, Xavier University, 1990

Professional Experience:

Honors and Awards:

- Embassy Science Fellow, 2013
- ORD Diversity Award for Supervisors, 2011
- Exceptional/Outstanding ORD Technical Assistance to Regions or Program Offices, 2009, 2011
- ORD Honor Award, Bronze Medal, 2005, 2007, 2011
- EPA Silver Medal for Superior Service, 2010
- Scientific and Technical Achievement Award (STAA) Level II, 2010
- NERL Teamwork Award, 2010
- ORD Science Communications Award, 2009
- Sigma Xi Outstanding Research Paper 2004