Megan Mehaffey, Research Ecologist, in EPA's National Exposure Research Laboratory

Systems Exposure Division Mailing Address

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Area of Expertise: My area of expertise is ecosystem and landscape ecology. More specifically, my research at EPA has been targeted at examining the relationships between land use patterns and indicators of water, air, habitat, human health, and quality of life. I use statistical and geospatial analysis to assess land use management effects on the environment and human well-being. The cross cutting nature of my research generally requires cooperation and integration with multidisciplinary teams of scientists internal and external to EPA. Together we developed strategic plans, methods, indicators, and tools to help address concerns of local, regional and national decision makers.

I am currently a Deputy Project Lead for the EnviroAtlas in EPA's Sustainable and Healthy Community Research Program. My role includes leading the research efforts for developing national scale metrics for current and future ecosystem services and communicating the importance of ecosystem services to a wide audience. I have been leading research on ecosystem services indicators such as water demand, potentially restorable wetlands, near road pollutant exposure, pollinator habitat, recreational demand, ecosystem rarity, carbon storage and others. As a Deputy, I am also responsible for project planning, budgeting, and mentoring multiple graduate level employees including student service contractors, ORISE fellows, and Post-Doctoral candidates.

Select Publications:

- Pickard, B.R., Daniel, J., Mehaffey, M.H., Jackson, L.E., Neale, A.C. 2015 EnviroAtlas: A New Geospatial Tool to Foster Ecosystem Services Science and Resource Management. Ecosystem Services 14:45-55
- Mehaffey, M. H., Smith, E., Van Remortel, R. 2012. Midwest U.S. landscape change to 2020 driven by biofuel mandates. *Ecological Applications* 22(1) 8-19.
- Mehaffey, M.H., L. Wainger, T. Wade, D. Yankee, E. Smith, V. Bott, and R. Yarbourgh, 2008. Assessing Vulnerabilities from Alternative Development Patterns, *Journal of Landscape and Urban Planning* 87:84-95.
- Mehaffey, M.H., Nash, M.S., Wade, T.G., Ebert, D.W., Jones, K.B., Rager, A. 2005. Linking Land Cover and Water Quality in New York City's Water Supply Watersheds. *Environmental Monitoring and Assessment.* 107:29-44.

- Pickard, B.R., Baynes, J., Mehaffey, M.H., Neale, A.C. 2015 <u>Translating big data into big climate ideas: communicating future climate scenarios to increase interdisciplinary engagement. [EXIT] Solutions Journal Volume 6 Issue 1</u>
- Bliss, N.B. Waltman, S.W., West, L.T., Neale, A, Mehaffey, M.H. 2014. Distribution of soil organic carbon in the conterminous United States. In *Soil Carbon* edited by Alfred.E. Hartemink and Kevin McSweeney; published by Springer Link, Springer Scientific. Pg 85-93.

View more research publications by Megan Mehaffey.

Education:

- Ph.D., Ecology, 1998, University of Kansas
- M.S., Crop Science, 1991, North Carolina State University
- B.S., Ag. Science, 1987, Murray State University

Professional Experience:

- 2013 to Present: Deputy Project Lead EnviroAtlas
- 2012 and 2013: Acting Branch Chief: Two (120-day) details for Landscape Ecology Branch
- 2011 to 2013: Task Lead for EnviroAtlas: Ecosystem Services and Sustainability Project
- 2003 to 2010: Assistant Director of the Regional Vulnerability Program (ReVA)
- 2007 to 2009: Coordinator Cross Place Based Studies
- 1998 to 2003: Principal Investigator of New York City's Water Supply Study

Honors and Awards:

- EPA, ORD Bronze Medal for Commendable Service, 2015 (SHC StRAP)
- EPA, ORD Bronze Medal for Commendable Service, 2015 (EnviroAtlas Team)
- EPA, STAA STAA, Honorable Mention 2009 (Mehaffey et al. 2008 Article)
- EPA, STAA STAA, Silver Medal (Level II) 2007 (Mehaffey et al. 2005 Article)
- EPA ORD Bronze Medal for Commendable Service, 2007 (ReVA-SEQL Charlotte Study)
- EPA ORD Bronze Medal for Commendable Service, 2006 (ReVA Team award)
- EPA ORD Bronze Medal for Commendable Service, 1999. (New York City Watershed Study)