

Wayne R. Munns, Jr., Supervisory Life Scientist, in EPA's National Health and Environmental Effects Research Laboratory

Atlantic Ecology Division
Mailing Address

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Area of Expertise: Developing and applying quantitative methods for risk assessment, ecological modeling with particular emphasis on population dynamics, and using changes in ecosystem services to inform decision making. I have conducted research and managed programs addressing ocean disposal, hazardous waste sites, contaminated sediments, wildlife risk assessment, environmental criteria development, and ecosystem services valuation. I am especially interested in combining multidisciplinary assessment approaches to enhance the value of technical information to environmental and public health decision makers.

Select Publications ([Several links exit this site](#)):

Munns, Jr., W. R., A. W. Rea, G. W. Suter II, L. Martin, L. Blake-Hedges, T. Crk, C. Davis, G. Ferreira, S. Jordan, M. Mahoney, and M. Barron. 2015. [Ecosystem services as assessment endpoints for ecological risk assessment](#). *Integrated Environmental Assessment and Management* **12**:522-528.

Munns, Jr., W. R., A. W. Rea, M. J. Mazzotta, L. Wainger, and K. Saterson. 2015. [Toward a standard lexicon for ecosystem services](#). *Integrated Environmental Assessment and Management* **11**:666-673.

Paul, J. F. and W. R. Munns, Jr. 2011. [Probability surveys, conditional probabilities, and ecological risk assessment](#). *Environmental Toxicology and Chemistry* **30**:1488-1495.

Bruins, R. J. F., W. R. Munns, Jr., S. J. Botti, S. Brink, D. Cleland, L. Kapustka, D. Lee, V. Luzadis, L. Falk McCarthy, N. Rana, D. B. Rideout, M. Rollins, P. Woodbury, and M. Zupko. 2010. [A new process for organizing assessments of social, economic, and environmental outcomes: Case study of wildland fire management in the USA](#). *Integrated Environmental Assessment and Management* **6**:469-483.

Munns, Jr., W. R., R. C. Helm, W. J. Adams, W. H. Clements, M. A. Cramer, M. Curry, L. M. DiPinto, D. M. Johns, R. Seiler, L. L. Williams, and D. Young. 2009. [Translating ecological risk to ecosystem service loss](#). *Integrated Environmental Assessment and Management* **5**:500-514.

Barnthouse, L. W., W. R. Munns, Jr., and M. T. Sorensen (eds). 2008. [Population-Level Ecological Risk Assessment](#). Taylor & Francis, Boca Raton, FL, USA.

View more research publications by [Wayne Munns](#).

Education:

- Ph.D., University of Rhode Island, Kingston, RI; Biological Sciences, 1984
- B.A., University of Washington, Seattle, WA; Zoology, 1977

Professional Experience:

- Director, U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 2010-present
- Chair, Ecological Risk Assessment Advisory Group, Society of Environment Toxicology and Chemistry, 2007-2011
- Associate Director for Science, U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 2000-2010
- Adjunct Associate Professor, University of Rhode Island, Department of Biomedical Sciences, 1998-present
- Risk Assessment Forum, Ecological Oversight Committee, U.S. Environmental Protection Agency, 1998-present
- Advisor, World Health Organization International Programme on Chemical Safety, 1998-2007
- Editorial Board, Environmental Toxicology and Chemistry, 1998-2000
- Chief, Indicator Development Branch, U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 1997-2000
- Research Ecologist (Ecological Risk Assessor), U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 1995-1997
- Senior Scientist/Division Manager/Assistant Vice President, Science Applications International Corporation, 1991-1995