

## Autumn Oczkowski, Research Ecologist, in EPA's National Health and Environmental Effects Research Laboratory

Atlantic Ecology Division  
Mailing Address

[oczkowski.autumn@epa.gov](mailto:oczkowski.autumn@epa.gov)

**Area of Expertise:** I am interested in how anthropogenic nutrient loads impact coastal and freshwater ecosystems. I use tools such as stable isotopes (natural abundance and tracer), laboratory and greenhouse mesocosms, long-term field datasets, and fixed-site monitoring stations to examine the links between upstream nutrient runoff and riverine and estuarine food webs. Much of my current work also looks at the impacts of climate change on coastal ecosystems and the net impact of these changes on nutrient dynamics. I like to work across scales, from individual organisms to entire estuaries, and across climatic zones, from temperate to tropical.

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

- Oczkowski, A. J., C. Hunt, K. Miller, C. Oviatt, S. Nixon, and L. Smith. 2016. [Comparing measures of estuarine ecosystem production in a temperate New England estuary](#). *Estuaries and Coasts* **39**:1827-1844.
- Oczkowski, A. J., T. Gumbley, B. Carter, R. Carmichael, and A. Humphries. 2016. [Establishing an anthropogenic nitrogen baseline using Native American shell middens](#). *Frontiers in Marine Ecology* **3**:79.
- Oczkowski, A. J., C. Wigand, A. Hanson, E. Markham, and R. Johnson. 2016. [Nitrogen retention in salt marsh systems across nutrient-enrichment, elevation, and precipitation regimes: a multiple stressor experiment](#). *Estuaries and Coasts*. **39**:68-81.
- Oczkowski, A. J., R. A. McKinney, S. Ayvazian, A. R. Hanson, C. Wigand, and E. Markham. 2015. [Preliminary evidence for the amplification of global warming in shallow, intertidal estuarine waters](#). *PLoS ONE* **10**(10): e0141529.
- Oczkowski, A. J., E. Markham, A. Hanson, and C. Wigand. 2014. [Carbon stable isotopes as indicators of coastal eutrophication](#). *Ecological Applications*. **24**:457-466.
- Watson, E. B., A. J. Oczkowski, C. Wigand, A. R. Hanson, E. W. Davey, S. C. Crosby, and R. L. Johnson. 2014. [Nutrient enrichment and precipitation changes do not enhance resiliency of salt marshes to sea level rise in the Northeastern U.S.](#) *Climatic Change*. **125**:501-509.

View more research publications by [Autumn Oczkowski](#).

### Education:

- Ph.D., Graduate School of Oceanography, University of Rhode Island, Narragansett, RI; Biological Oceanography, 2009

- M.S., Geochemical Systems, University of New Hampshire, Durham, NH; Earth Sciences, 2002
- B.S., Washington and Lee University, Lexington, VA; Geology, 2000

**Professional Experience** ([Several links exit this site](#)):

- Research Ecologist, U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 2010-present
- Secretary of the New England Estuarine Research Society, 2015-present
- Post-Doctoral Researcher, U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 2009-2010
- Six other Non-EPA publications:
  - Oczkowski, A. J., S. W. Nixon, S. L. Granger, A-F. M. El-Sayed, and R. McKinney. 2009. [Anthropogenic enhancement of Egypt's Mediterranean fishery](#). *Proceedings of the National Academy of Sciences* **106**:1364-1367.
  - Oczkowski, A. J. and S. Nixon. 2008. [Increasing nutrient concentrations and the rise and fall of a coastal fishery; a review of data from the Nile Delta, Egypt](#). *Estuarine, Coastal, and Shelf Science*. Invited Feature **77**:309-319.
  - Oczkowski, A. J., S. Nixon, K. Henry, P. DiMilla, M. Pilson, S. Granger, B. Buckley, C. Thornber, R. McKinney, and J. Chaves. 2008. [On the distribution and trophic importance of anthropogenic nitrogen in Narragansett Bay](#). *Estuaries and Coasts* **31**:53-69.
  - Oakley, S. M., A. J. Gold, and A. J. Oczkowski. 2010. [Nitrogen control through decentralized wastewater treatment: process performance and alternative management strategies](#). *Ecological Engineering* **36**:1520-1531.
  - Oczkowski, A. J. and S. W. Nixon. 2010. Lagoons of the Nile Delta. In M. Kennish and H. Paerl (eds.) *Coastal Lagoons: Critical Habitats of Environmental Change*. Taylor & Francis Group LLC.
  - Oczkowski, A. J., S. Nixon, S. Granger, A-F. M. El-Sayed, M. Altabet, and R. McKinney. 2008. [A Preliminary Survey of the Nitrogen and Carbon Isotope Characteristics of Fish from the Lagoons of Egypt's Nile Delta](#). *Estuaries and Coasts* **31**:1130-1142.