

## CURRICULUM VITAE

### ROBINSON W. FULWEILER

Department of Earth & Environment  
Department of Biology  
Boston University  
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#### a. PROFESSIONAL PREPARATION

<u>Institution</u>	<u>Major</u>	<u>Degree and Year</u>
University of Vermont, Burlington, VT	International Studies	BA, 2000
University of Rhode Island, Narragansett, RI	Oceanography	MS, 2003
University of Rhode Island, Narragansett, RI	Oceanography	Ph.D., 2007

#### b. APPOINTMENTS

2014-present	Associate Professor, Jointly appointed with tenure in Earth and Environment and Biology, Boston University
2013-present	Visiting Scientist, University of Western Australia
2012-present	Visiting Scientist, EPA, Narragansett, RI
2011-2014	Assistant Professor, Jointly Appointed in Earth and Environment and Biology, Boston University
2010-present	Associate Director, Marine Sciences Program, Boston University
2010-present	Adjunct Faculty, Department of Oceanography and Coastal Sciences, Louisiana State University, Baton Rouge, LA
2010-present	Adjunct Faculty, Graduate School of Oceanography, University of Rhode Island
2010-2014	Assistant Professor, Affiliated Appointment (non-tenure), Biology Department, Boston University
2008-2014	Assistant Professor, Earth Sciences, Boston University
2007-08	Postdoctoral Research Associate, Louisiana State University, Baton Rouge, LA
2007-08	Research Assistant/Teaching Fellow, Graduate School of Oceanography, University of Rhode Island

#### c. POST GRADUATE AWARDS AND HONORS

2012-2014	Sloan Research Fellow in Ocean Sciences. This fellowship is given to individuals “ <i>who show the most outstanding promise of making fundamental contributions to new knowledge.</i> ” Ocean Sciences was introduced as an award category in 2012.
2013	Cronin Award from the Coastal and Estuarine Research Federation (CERF). This award recognizes the “ <i>significant accomplishments of an estuarine scientist who is in the early stages of his/her career development and who has shown great promise with work carried out during the first six years past the Ph.D.</i> ”
2013	The Neu Family Award for Excellence in Teaching in the College of Arts and Sciences. This award honors “ <i>extraordinary dedication and effectiveness in the classroom and beyond.</i> ”
2013	Outstanding Reviewer for the journal <i>Estuaries and Coasts</i>

- 2015-present Invited to Chair the Publications Committee of the Association for the Sciences of Limnology and Oceanography (ASLO).
- 2012-present Elected to the Board of the Association for the Sciences of Limnology and Oceanography (ASLO) Board; Member-at-Large.
- 2012 Invited participant to Earth Cube Early Career Strategic Visioning Workshop; Invitation reads, “*you have been identified by the NSF as a leading early career scholar/professional relevant to the future of EarthCube.*”

#### **d. MENTORING AND TEACHING EXPERIENCE**

##### ***Postdoctoral Mentoring***

Silvia Newell, Postdoctoral Researcher (2011-2014). Currently: Assistant Professor of Earth and Environmental Science, Wright State University  
 Priyanka Chowdhury, Postdoctoral Researcher (2014-present).

##### ***Graduate students (completed)***

Sarah Foster, MS (2010-2012). Currently: Ph.D. in my laboratory.  
 Joanna Carey, Ph.D. (2009-2013). Currently: Postdoctoral Researcher at the Marine Biological Laboratory.  
 Amanda Vieillard, MS (2011-2013). Currently: Ph.D. student at the University of Connecticut.  
 Lindsey Fields, Ph.D., co-advised w/ C. Oviatt at GSO/URI for her last year (2012-2013). Currently: Postdoctoral Researcher at the University of Georgia.  
 Elise Heiss, Ph.D. (2009-2014) Currently: Assistant Professor of Chemistry at King’s College.

##### ***Graduate students (in progress)***

Hollie Emery, Ph.D. (2010-present); Sarah Foster, Ph.D. (2012-present); Sarabeth Buckley, Ph.D. (2013-present); Timothy Maguire, Ph.D. (2013-present).

##### ***High school and Undergraduate Research Mentor (past seven years)***

Undergraduate Research Opportunity Program (UROP): Primary mentor for 10 student projects  
 Undergraduate Directed Studies: 6 students  
 Undergraduate Senior Thesis: Primary Mentor (4); Committee Member (6)  
 Undergraduate Laboratory Volunteers: 30  
 High School Internships: 3

##### ***Courses Taught***

2015 Bigfoot: Nitrogen, the Ocean, and You; Kilachand Honors College, KHC BI 103  
 2015 Advanced Topics in (Bio)Geochemical Cycles – Silica Cycling from Land to Sea, ES 834  
 2009-2014 Marine Biogeochemistry, ES/BI 423/623  
 2008-2014 Introduction to Oceanography, ES 144  
 2008, 2012 Invited Lecturer; Lund University (Lund, Sweden), Global Biogeochemical Cycles  
 2011 Coastal Biogeochemistry, ES/BI 558  
 2011 Advanced Topics in (Bio)Geochemical Cycles - Fundamental Papers; ES 834  
 2007 Invited Lecturer; Louisiana State University for Estuarine Ecology, OCE 4372  
 2006-2007 Invited Lecturer; University of Rhode Island, Graduate School of Oceanography for Coastal Marine Ecosystems, OCG 689  
 2005 Invited Lecturer; University of Rhode Island, Graduate School of Oceanography for Biological Oceanography, OCG 561

2003-2005 Teaching Assistant at the University of Rhode Island, Graduate School of Oceanography for Biological Oceanography, OCG 561  
2000–2001 Teaching Assistant at the University of Rhode Island Biological Science Department: General Zoology

#### e. PUBLICATIONS

*Note: Starting in 2012, my approach to co-authorship when postdoctoral associates or students from my lab are first author is to list myself as last author. ( §postdoc, \*graduate student, ¥undergraduate student)*

#### Journal Articles in Press/Published:

38. Fulweiler, R.W., Oczkowski, A.J., Miller, K.M., Oviatt, C.A., Pilson, M.E.Q. (In Press) Whole truths vs. half truths – And a search for clarity in long-term water temperature records. *Estuarine, Coastal Shelf Science*. doi:10.1016/j.ecss.2015.01.021
37. Duarte, C., **Fulweiler, R.W.**, Lovelock, C., Martinetto, P., Saunders, M., Pandolfi, J., Gelcich, S. (In Press) Reconsidering Ocean Calamities. *BioScience*. doi: 10.1093/biosci/biu198
36. **Fulweiler, R.W.**, \*Maguire, T.J., Carey, J.C. and Finzi, A.C. (2015). Does Elevated CO<sub>2</sub> Alter Silica Uptake in Trees? *Frontiers in Plant Science* **5**:793. doi: 10.3389/fpls.2014.00793
35. \*Foster, S.Q. & **Fulweiler, R.W.** (2014) Spatial and historic variability of benthic nitrogen cycling processes in an anthropogenically impacted estuary. *Frontiers of Marine Science – Global Change and the Future Ocean* **56**: 1-16. doi: 10.3389/fmars.2014.00056
34. \*Vieillard, A. & **Fulweiler, R.W.** (2014) Tidal pulsing alters nitrous oxide fluxes in a temperate intertidal mudflat. *Ecology* **95**(7): 1960-1971. <http://dx.doi.org/10.1890/13-1333.1>
33. \*Fields, L., Nixon, S.W., Oviatt, C.A., **Fulweiler, R.W.** (2014) Benthic metabolism and nutrient regeneration in hydrographically different regions on the inner continental shelf of Southern New England. *Estuarine, Coastal Shelf Science* **148**: 14-26. DOI: 10.1016/j.ecss.2014.06.007.
32. \*Carey, J.C. & **Fulweiler, R.W.** (2014) Silica uptake by *Spartina*—evidence of multiple modes of accumulation from salt marshes around the world. *Frontiers of Plant Science* **5**:186. DOI: 10.3389/fpls.2014.00186.
31. Fagherazzi, S., Mariotti, G., ¥Banks, A.T., Morgan, E.J., **Fulweiler, R.W.** (2014). The relationships among hydrodynamics, sediment distribution, and chlorophyll in a mesotidal estuary. *Estuarine, Coastal and Shelf Science* (144): 56-64. DOI: 10.1016/j.ecss.2014.04.003.
30. \*Carey, J.C. & **Fulweiler, R.W.** (2014) Salt marsh tidal exchange increases residence time of silica in estuaries. *Limnology and Oceanography* **59**(4), 2014, 1203-1212. DOI: 10.4319/lo.2014.59.4.1203.
29. \*Emery, H.E. & **Fulweiler, R.W.** (2014) The Impact of *Phragmites australis* on Salt Marsh Greenhouse Gas Emissions and Global Warming Potential. *Aquatic Botany* (116): 83-92. DOI: 10.1016/j.aquabot.2014.01.010

28. **Fulweiler, R.W.** and \*Heiss, R.W. (2014) (Nearly) A Decade of Directly Measured Sediment N<sub>2</sub> Fluxes – What Can Narragansett Bay Tell Us about the Global Ocean Nitrogen Budget? *Oceanography* 27 (1): 184–195, <http://dx.doi.org/10.5670/oceanog.2014.22>. (Invited)
27. Cole, L.W. & **Fulweiler, R.W.** (2013) First, do no harm. *Frontiers in Ecology and the Environment* 11: 59.
26. **Fulweiler, R.W.**, Brown, S., Nixon, S.W., Jenkins, B. (2013) Denitrification and Nitrogen Fixation are Coupled in Heterotrophic Marine Sediments. *Marine Ecological Progress Series* 482: 57-68. DOI: 10.3354/meps10240.
25. \*Carey, J.C. & **Fulweiler, R.W.** (2013) Watershed Land Use Alters Riverine Silica Cycling. *Biogeochemistry* (1-3): 525-544. DOI: 10.1007/s10533-012-9784-2.
24. \*Carey, J.C. & **Fulweiler, R.W.** (2013) Nitrogen Enrichment Increases Net Si Accumulation in a Temperate Salt Marsh. *Limnology and Oceanography* 58 (1): 99-111.
23. \*Carey, J.C. & **Fulweiler, R.W.** (2012) The Terrestrial Silica Pump. *PLoS ONE* 7(12): e52932. DOI:10.1371/journal.pone.0052932.
22. \*Vieillard, A. & **Fulweiler, R.W.** (2012) Impacts of Long-term Fertilization on Salt Marsh Tidal Creek Benthic Nutrient and N<sub>2</sub> Gas Fluxes. *Marine Ecological Progress Series* 471: 11-22.
21. \*Carey, J. & **Fulweiler, R.W.** (2012) Human Activities Directly Alter Watershed Dissolved Silica Fluxes. *Biogeochemistry* 111: 125-138. DOI: 10.1007/s10533-011-9671-2. DOI: 10.3354/meps10013
20. **Fulweiler, R.W.** & Nixon, S.W. (2012) Net Sediment N<sub>2</sub> Fluxes in a Southern New England Estuary - Variations in Space and Time. *Biogeochemistry* 111:111-124. DOI: 10.1007/s10533-011-9660-5.
19. **Fulweiler, R.W.**, Rabalais, N.N., Heiskanen, A.S. (2012) The Eutrophication Commandments. *Marine Pollution Bulletin* 64: 1997-1999.
18. \*Heiss, E.M., Fields, L., & **Fulweiler, R.W.** (2012) Directly Measured Net Denitrification Rates in Offshore New England. *Continental Shelf Research* 45: 78-86.
17. Nixon, S.W. & **Fulweiler, R.W.** (2012) Environmental Footprints and Shadows in an Urban Estuary, Narragansett Bay, RI (USA). *Regional Environmental Change* 12: 381-394.
16. <sup>‡</sup> Vieillard, A., **Fulweiler, R.W.**, Hughes, Z., Carey, J.C. (2011) The Ebb and Flood of Silica: Quantifying Dissolved and Biogenic Silica Fluxes from a Temperate Salt Marsh. *Estuarine, Coastal and Shelf Science* 95 (4): 415-423.
15. **Fulweiler, R.W.**, \*Emery, H., \*Heiss, E.M., Berounsky, V. (2011) Assessing the Role of pH in Determining Water Column Nitrification Rates in a Coastal system. *Estuaries and Coasts* 34: 1095-1102.
14. Bargu, S., White, J.R., Chunyan, L., Czubakowski, J., **Fulweiler, R.W.** (2011) Effects of Freshwater Input on Nutrient Loading, Phytoplankton Biomass, and Cyanotoxin Production in an Oligohaline Estuarine Lake. *Hydrobiologia* 661 (1): 377-389. DOI: 10.1007/s10750-010-0545-8

13. **Fulweiler, R.W.**, Nixon, S.W., Buckley, B.A. (2010). Spatial and Temporal Variability of Benthic Oxygen Demand and Nutrient Regeneration in an Anthropogenically Impacted New England Estuary. *Estuaries and Coasts* 33 (6): 1377-1390.
12. Rivera-Monroy, Victor H., Peter Lenaker, Robert R. Twilley, Ronald D. Delaune, Charles W. Lindau, William Nuttle, Emad Habib, **Robinson W. Fulweiler**, and Edward Castañeda-Moya. Denitrification in Coastal Louisiana: A Spatial Assessment and Research Needs. *Journal of Sea Research* 63, no. 3 (2010): 157-172.
11. **Fulweiler, R.W.** Fantastic Fixers. (2009) *Science* 326: 377-378. (Invited).
10. White, John; **Fulweiler, Robinson**; Li, Chunyan; Bargu, Sibel; Walker, Nan; Twilley, Robert; Green, Sara. (2009). Mississippi River Flood of 2008 - Observations of a Large Freshwater Diversion on Physical, Chemical and Biological Characteristics of a Shallow, Estuarine Lake. *Environment, Science, and Technology* 43: 5599-5604.
9. **Fulweiler, R.W.** & Nixon, S.W. (2009). Responses of benthic-pelagic coupling to climate change in a temperate estuary. *Hydrobiologia* 629: 147-156. DOI: 10.1007/s10750-009-9766-0.
8. Groffman, P. M., Butterbach-Bahl, K., **Fulweiler, R.W.**, Gold, A.J., Morse, J.L., Stander, E.K., Tague, C., Tonitto, C., Vidon, P. (2009) Challenges to incorporating spatially and temporally explicit phenomena (hotspots and hot moments) in denitrification models. *Biogeochemistry* 93:1-5. DOI: 10.1007/s10533-009-9285-0
7. Fennel, K., Brady, D., DiToro, D., **Fulweiler, R.W.**, Gardner, W.S., Giblin, A., McCarthy, M.J., Rao, A., Seitzinger, S., Thouvenot-Korppoo, Tobias, C. (2009) Modeling denitrification in aquatic systems. *Biogeochemistry* 93:159-178. DOI: 10.1007/s10533-008-9270-z.
6. Nixon, S.W., **Fulweiler, R.W.**, Buckley, B.A., Granger, S.L., Nowicki, B.L., Henry, K.M. (2009). The impact of changing climate on phenology, productivity, and benthic-pelagic coupling in Narragansett Bay. *Estuarine, Coastal, and Shelf Science* 82: 1-18. (Invited Feature).
5. **Fulweiler, R.W.**, Nixon, S.W., Buckley, B.A., Granger, S.L. (2008). Net Sediment N<sub>2</sub> Fluxes in a Coastal Marine System – Experimental manipulations and a Conceptual Model. *Ecosystems* 11: 1168-1180.
4. **Fulweiler, R.W.**, Nixon, S.W., Buckley, B.A., Granger, S.L. (2007). Reversal of the net nitrogen flux in coastal marine sediments. *Nature* 448: 180-182.
3. **Fulweiler, R.W.** & Nixon, S.W. (2005) Terrestrial vegetation and the seasonal cycle of dissolved silica in a southern New England Coastal River. *Biogeochemistry* 74: 115-130.
2. **Fulweiler, R.W.** & Nixon, S.W. (2005) Annual export of nitrogen, phosphorus, and suspended solids from a southern New England Watershed. *Biogeochemistry* 76: 567-593.
1. **Fulweiler, R.W.**, Nixon, S.W., Buckley, B., Granger, S. (2003) Export of organic carbon from a minimally developed southern New England watershed. In: B.A. Brebbia (ed.) *River Basin Management II*, Wessex Institute of Technology. Southampton, UK.

### Book Chapters:

5. **Fulweiler, R.W.** & Bartoli, M. (2012) Variation Among Estuarine Geochemistry and Productivity, In Volume 1: Features/Classification of Estuaries and Coastal Waters. Editors: E. Wolanski and D. McLusky, Elsevier (*Invited*).
4. Fagherazzi S., FitzGerald D.M., **Fulweiler R.W.**, Hughes Z., Wiberg P.L., McGlathery K.J., Morris J.T., Tolhurst T.J., Deegan L.A., Johnson D.S. (2013) Ecogeomorphology of Tidal Flats, Treatise on Geochemistry, Volume 12 Ecogeomorphology. Editors: Butler D., Hupp C., Executive Editor: Shroder J. Elsevier.
3. Fagherazzi S., FitzGerald D.M., **Fulweiler R.W.**, Hughes Z., Wiberg P.L., McGlathery K.J., Morris J.T., Tolhurst T.J., Deegan L.A., Johnson D.S. (2013) Ecogeomorphology of Salt Marshes, Treatise on Geochemistry, Volume 12 Ecogeomorphology. Editors: Butler D., Hupp C., Executive Editor: Shroder J. Elsevier.
2. Nixon, S.W. & **Fulweiler, R.W.** (2009). Nutrient Pollution, Eutrophication, and the Degradation of Coastal Marine Ecosystems. In: C.M. Duarte, J. Culberston et al. (ed). Global Loss of Coastal Habitats: Rates, Causes, and Consequences. Bilbao: Fundacion BBVA. 184 p.
1. Nixon, S.W., B. A. Buckley, S.L. Granger, L. A. Harris, A.J. Oczkowski, **R.W. Fulweiler**, and L.W. Cole. (2008). Nutrient (N and P) inputs to Narragansett Bay: past, present, and future. In: B. Costa-Pierce, A. Colt, and A. Desbonnet (eds.) Science for Ecosystem-based Estuarine management: Narragansett Bay in the 21st Century. Springer Verlag, NY.

### Theses:

- Fulweiler, R.W.** (2007) The Impact of Climate Change on Benthic-Pelagic Coupling and the Biogeochemical Cycling of Narragansett Bay, R.I. Ph.D. thesis in Oceanography, Narragansett, University of Rhode Island: p. 265.
- Fulweiler, R.W.** (2003) An assessment of carbon, nutrient, and total suspended solids export from the Wood-Pawcatuck Watershed to Little Narragansett Bay. Masters thesis in Oceanography. Narragansett, University of Rhode Island: p. 165.

### Technical Reports:

- Gawarkiewicz, G., J. Nelson, R. He, **R. W. Fulweiler**, J. Goff, T. Grothues, and E. LaBrecque, 2011: Shelf/Slope Processes: Science opportunities and issues relating to the OOI Pioneer Array. OOI/NSF Technical Report, 57 pp.
- Nixon S.W., Buckley B., Granger S., Harris L., Oczkowski A., Cole L., and **Fulweiler R.** (2005) Anthropogenic Nutrient Inputs to Narragansett Bay: A Twenty-five Year Perspective. A report to the Narragansett Bay Commission and Rhode Island Sea Grant. Narragansett, RI. 30 p.
- Nixon, S.W., Olsen, S.B., Buckley, E., **Fulweiler, R.** (2004) Lost to the Tide: The importance of Freshwater Flow to Estuaries. Final Report submitted to the Coastal Resources Center. Narragansett, RI: University of Rhode Island, Graduate School of Oceanography.  
[http://www.crc.uri.edu/download/2\\_LosttotheTide\\_Nixon\\_2004.pdf](http://www.crc.uri.edu/download/2_LosttotheTide_Nixon_2004.pdf).

### Popular Press and Science Outreach:

**Fulweiler, R.W.** (2013): Blog for Nitrogen News about N impacts on sea turtles in Hawaii:  
<http://www.nitrogennews.com/interactivemap/hawaii.html>

**Fulweiler, R.W.** (2012) Nitrogen News: Nitrogen Impacts on New England Salt Marsh  
<http://www.nitrogennews.com/interactivemap/massachusetts.html>

**Fulweiler, R.W.** (2012) Big Foot: Nitrogen Part IV:  
<http://www.thenakedscientists.com/HTML/articles/article/bigfoot-the-nitrogen-problem/>

**Fulweiler, R.W.** (2012) No Smoke Detectors in the Sea: The Nitrogen Story Part III:  
<http://www.thenakedscientists.com/HTML/articles/article/no-smoke-detectors-in-the-sea/>

**Fulweiler, R.W.** (2011) Breathless: The Nitrogen Story Part II:  
<http://www.thenakedscientists.com/HTML/articles/article/breathless/>

**Fulweiler, R.W.** (2011) The Wheels on the Bus: The Nitrogen Story for the Naked Scientist:  
<http://www.thenakedscientists.com/HTML/articles/article/the-wheels-on-the-bus/>

**Fulweiler, R.W.** (2007) The Louisiana Wetlands: An Introduction; Science Tales from the Red Stick for the Naked Scientist:  
<http://www.thenakedscientists.com/HTML/articles/article/thelouisianawetlandsanintroduction/>

**Fulweiler, R.W.** (2007) Climate change and the Marine Nitrogen Cycle for the Naked Scientist:  
<http://www.thenakedscientists.com/HTML/>.

**Fulweiler, W.** (2004) The Importance of Land and Sea. Wood-Pawcatuck Watershed Report. Vol 21(1).

#### Media Coverage of Research:

Story on Fulweiler's research on nitrogen:  
<http://www.bu.edu/today/2013/fulweilers-message-in-a-bottle/>

Fulweiler speaks on Fox News about Sewage Spill in Hull, MA:  
<http://www.myfoxboston.com/video?clipId=8536323&auto>

Story on Fulweiler's research on salt marshes and tidal flats:  
<http://www.bu.edu/cas/magazine/spring12/fulweiler/>

Interview (8/22/10) with the Naked Scientist's Helen Scales on Gulf of Mexico spill and the Louisiana Wetlands: <http://www.thenakedscientists.com/HTML/podcasts/show/2010.08.22/>

Interview (6/13/10) with the Naked Scientist's Ben Valsler on evaluation the impact of the Gulf Horizon Oil Spill on Louisiana Wetlands.  
<http://www.thenakedscientists.com/HTML/podcasts/show/2010.06.13/>

Interview (6/9/10) with Mark Strassman from CBS news:  
<http://www.cbsnews.com/video/watch?id=6566045n&tag=related;photovideo>

Interview (2/2/08) with the Naked Scientist's Dr. Chris Smith on the importance of wetlands in Louisiana, "Wet and Wild," <http://www.thenakedscientists.com/HTML/podcasts/show/2008.02.03/>.

Lane, Nick (2007). What's in the Rising Tide? *Nature* 449, 778-780 (2007).

Interview with Rhode Island Public Radio's Nancy Cook, "Climate change changing Narragansett Bay," <http://www.wrni.org/wrninews/archive/070926-bay1.asp>.

Nature Podcast: July 12, 2007. <http://www.nature.com/nature/podcast/v448/n7150/nature-2007-07-12.mp3>.

## **f. PRESENTATIONS**

### Invited Seminars at Universities and Research Centers:

- 2015 Marine Biological Laboratory, Woods Hole, MA: "*Marine Sediment Nitrogen Cycling – Variations in Space and Time.*"
- 2014 University of Delaware, College of Earth, Ocean, and Environment, Newark, DE: "*Climate Change Impacts on Nitrogen Cycling in the Coastal Ocean.*"
- 2014 Michigan State University, Ecology, Evolutionary Biology, and Behavior Department; Lansing, MI: "*The Where, the Who, and Maybe the Why of N-Fixation Coastal Marine Systems.*"
- 2013 Woods Hole Oceanographic Institute, Marine Chemistry and Geochemistry Seminar; Woods Hole, MA: "*Have We Underestimated the Importance of Sediment N Fixation?*"
- 2013 MIT, Microbial Systems Seminar Series; Cambridge, MA: "*Have We Underestimated the Importance of Sediment N Fixation?*"
- 2013 Mediterranean Institute for Advanced Studies (IMEDEA); Mallorca, Spain: "*Climate, Carbon, and Heterotrophic Sediment N Fixation.*"
- 2013 University of North Carolina–Chapel Hill; Chapel Hill, NC: "*Climate, Carbon, and Heterotrophic Sediment N Fixation.*" (\*Invited for Gussenhoven Lecture)
- 2012 University of Massachusetts–Boston; Boston, MA: "*Harmful Algal Blooms and Benthic Nutrient Mineralization – A Positive Feedback Loop or a Dead End?*"
- 2012 Lund University; Lund, Sweden: Lecturer for Global Biogeochemical Cycles: "*The Global Nitrogen Cycle – Today and Tomorrow.*"
- 2012 Marine Biological Laboratory; Woods Hole, MA: "*A Different Kind of Dam: The Influence of Terrestrial Vegetation on Silica Export to Coastal Waters.*"
- 2012 Rutgers University, Marine Science Institute; Brunswick, NJ: "*Climate, Carbon, and Heterotrophic Sediment N Fixation.*"
- 2011 Graduate School of Oceanography/University of Rhode Island; Narragansett, RI: "*Climate, Carbon, and Heterotrophic Sediment N Fixation.*"



- 2011 University of Florida; Environmental Engineering; Gainesville, FL: “*Climate Induced Changes of Benthic-Pelagic Coupling and Biogeochemistry in a New England Estuary (and beyond...)*.”
- 2010 University of Virginia; Department of Environmental Sciences; Charlottesville, VA: “*Sediment N<sub>2</sub> and Greenhouse Gas Fluxes from Shore to Shelf – Seasonal Patterns and Environmental Controls*.”
- 2010 California Institute of Technology, Environmental Science and Engineering Seminar; Pasadena, CA: “*Climate Change Impacts on Biogeochemical Cycling in a Temperate Estuary*.”
- 2009 Carey Institute of Ecosystem Studies; Millbrook, NY: “*Climate Induced Changes of Benthic-Pelagic Coupling and Biogeochemical Cycling in Narragansett Bay, RI*.”
- 2009 Woods Hole Oceanographic Institute, Woods Hole, MA: “*The Impact of Changing Climate on Phenology, Productivity, and Benthic-Pelagic Coupling in Narragansett Bay*.” (co-Presentation w/ Dr. Scott W. Nixon).
- 2009 Virginia Institute of Marine Science; Gloucester Point, VA: “*Climate Change Impacts on Biogeochemical Cycling in a Temperate Estuary*.”
- 2008 Massachusetts Institute of Technology; Earth, Atmospheric & Planetary Sciences; Cambridge, MA: “*Climate Induced Changes of Benthic-Pelagic Coupling in Narragansett Bay, RI*.”
- 2007 Princeton University; Ecology and Evolutionary Biology; Princeton, NJ: “*Climate Induced Changes of Benthic-Pelagic Coupling in Narragansett Bay, RI*.”
- 2007 Louisiana State University; Department of Oceanography and Coastal Science; Baton Rouge, LA: “*Climate Induced Changes of Benthic-Pelagic Coupling in Narragansett Bay, RI*.”
- 2007 Florida State University; Oceanography Department; Tallahassee, FL: “*Climate Induced Changes of Benthic-Pelagic Coupling in Narragansett Bay, RI*.”
- 2007 University of Texas at Austin Coastal Marine Lab; Port Aransas, TX: “*Climate Induced Changes of Benthic-Pelagic Coupling in Narragansett Bay, RI*.”
- 2007 University of Connecticut; Marine Science Department; Avery Point, CT: “*Climate Induced Changes of Benthic-Pelagic Coupling in Narragansett Bay, RI*.”
- 2006 Natural and anthropogenic modifications of the Si cycle along the land-ocean continuum: Worldwide Ecological, Biogeochemical and Socio-economic consequences (Si-Webs) Conference; Brest, France.

Invited Conference Lectures: ( §postdoctoral associate, \*graduate student, †undergraduate student)

- 2013 **Fulweiler, R.W.** & \*Emery, H.E. Greenhouse Gas Fluxes in Tidal Restricted and Restored Salt Marshes. Salt Marsh Symposium: Symposium on C/N Cycling and Ecosystem Valuation of Tidal Wetlands in the Northeast. Waquoit Bay National Estuarine Research Reserve, East Falmouth, MA.
- 2013 **Fulweiler, R.W.** The Immortal Life of Nitrogen. Darwin Festival. Salem State University. Salem, MA. (*Sponsored by the Charles Albert Read Trust*).

- 2012 **Fulweiler, R.W.** “Times They Are a-Changin’ - Examining Long-term Changes and Short-term Variations in Benthic-pelagic Coupling and Sediment N Cycling in the Coastal Ocean.” 2<sup>nd</sup> International Council for the Exploration of the Seas (ICES) and the North Pacific Marine Science Organization (PICES) Conference for Early Career Scientists. Mallorca, Spain.
- 2011 **Fulweiler, R.W.**, White, J.R., Twilley, R.R. The Impact of Flood-Pulse Disturbance on Lake Ponchartrain Sediment Biogeochemistry (Invited Speaker). North American Benthological Society Annual Meeting; Linking Landscapes: Watersheds to the Ocean. Providence, Rhode Island.
- 2011 **Fulweiler, R.W.** N Fixation in Marine Sediments. (Invited Speaker, declined). International Society for Environmental Biogeochemistry – “Frontiers in Biogeochemistry”. Istanbul, Turkey.
- 2010 **Fulweiler, R.W.**, Heiskanen, A., Rabalais. Symposium Summary: We know a lot, we have more to Learn, but what more do we need to know to take action? (*Invited Plenary Talk*). EUTRO 2010 - Research and Management of Eutrophication in Coastal Ecosystems; Nyborg, Denmark.
- 2009 **Fulweiler, R.W.** & Nixon, S.W. The History and Future of Urban Water Use in Providence, RI. (*Invited Talk*). Workshop on History of Urban Ecological Imprint, CNRS/UPMC. Paris, France.

Conferences: (§postdoctoral associate, \*graduate student, ¥undergraduate student)

- 2014 Carey, J.C. and **Fulweiler, R.W.** Salt Marshes as Sources and Sinks of Silica. (Oral, Invited). American Geophysical Union, San Francisco, CA.
- 2014 Fagherazzi, S., Viggato, T., \*Vieillard, A., **Fulweiler, R.W.** The effect of evaporation and nutrient enrichment on the mudflats in a mesotidal estuary. American Geophysical Union, San Francisco, CA.
- 2014 **Fulweiler, R.W.**, §Newell, S.E., \*Heiss, E.M., ¥Rogener, M.K., LeCleur, G.R., Wilhelm, S.W. The Observer Effect: Quantifying the Impact of the Acetylene Reduction Assay on Marine Sediment N-Fixers. (Oral) Joint Aquatic Sciences Meeting. Portland, OR.
- 2014 Carey, J.C., Ayvazian, S., Hancock, B., Brown, D.S., **Fulweiler, R.W.** Investigating the Role of Oysters in Altering Net N<sub>2</sub> Fluxes Using a Novel *In-Situ* Experimental Design. (Poster) Ocean Sciences Meeting. Honolulu, HI.
- 2014 **Fulweiler, R.W.**, \*Heiss, E.M., §Newell, S.E., M.K., LeCleur, G.R., Wilhelm, S.W. Assessing Acetylene Impacts on Marine Sediment N-fixers. (Oral) Ocean Sciences Meeting. Honolulu, HI.
- 2014 \*Heiss, E.M., **Fulweiler, R.W.** The Role of Nitrification in Estuarine Water Column Nitrous Oxide Production and Consumption. (Poster) Ocean Sciences Meeting. Honolulu, HI.
- 2014 §Newell, S.E., McCarthy, M.J., Gardner, W.S., **Fulweiler, R.W.** Disentangling sediment N<sub>2</sub> Fluxes: A Call for Re-Evaluating the Coastal Marine N Budget. (Poster). Ocean Sciences Meeting. Honolulu, HI.
- 2013 Ayvazian, S., Carey, J., Hancock, B., Brown, S., **Fulweiler, R.W.** Oyster Reef Restoration and Aquaculture Impacts on Denitrification and the Benthic Community. (Poster) Coastal Estuarine Research Federation. San Diego, CA.

- 2013 Brawley, J.W., Weeks, M.V., Hare, M., **Fulweiler, R.W.**, Murphy, D., Reitsma, J. A Study on the Effects of Cultured vs. Wild Oysters (*Crassostrea Virginica*) on Nitrogen Cycling And Ecosystems with Two Similar, Eutrophic Estuaries in Cape Cod, MA. (Talk) Coastal Estuarine Research Federation. San Diego, CA.
- 2013 Fields, L., Nixon, S.W., Oviatt, C., **Fulweiler, R.W.** Responses of Benthic-Pelagic Coupling to Anthropogenic and Climate-Driven Ecosystem Changes in a Temperate Estuary. (Talk) Coastal Estuarine Research Federation. San Diego, CA.
- 2013 \*Foster, S.Q. & **Fulweiler, R.W.** Trends in Sediment Nutrient Cycling Dynamics and Net Ecosystem Metabolism Over Twenty Years in Waquoit Bay, MA. (Talk) Coastal Estuarine Research Federation. San Diego, CA.
- 2013 **Fulweiler, R.W.** & Nixon, S.W. Guiding Light. (Talk) Coastal Estuarine Research Federation. San Diego, CA.
- 2013 §Newell, S., McCarthy, M.J., Gardner, W.S., **Fulweiler, R.W.** The Enigmatic Nitrogen Cycle: Disentangling Sediment N<sub>2</sub> Fluxes in a Temperate Estuary. (Talk) Coastal Estuarine Research Federation. San Diego, CA.
- 2013 **Fulweiler, R.W.** & Heiss, E.M. A Decade of Net Sediment N<sub>2</sub> Fluxes - What can Narragansett Bay tell us about the Global Ocean Nitrogen Budget? (Talk). Scott W. Nixon Symposium - Science Worth Noticing. Graduate School of Oceanography, University of Rhode Island, Narragansett Bay, RI.
- 2013 \*Carey, J.C. & **Fulweiler, R.W.** Land Use Change Directly Alters Riverine Dissolved Silica Fluxes. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- 2013 Cramer, C.B. & **Fulweiler, R.W.** Video Fluxes: An Interpretation for Education and Outreach. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- 2013 \*Emery, H.E. & **Fulweiler, R.W.** Anthropogenic Impacts on Salt Marsh Greenhouse Gas Emissions. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- 2013 \*Fields, L., Nixon, S.W., **Fulweiler, R.W.** Rapid Response of Benthic-Pelagic Coupling to Climate Driven Ecosystem Changes in a Temperate Estuary. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- 2013 \*Foster, S.Q. & **Fulweiler, R.W.** Effects of Increasing Eutrophication on Sediment N<sub>2</sub>O and N<sub>2</sub> Fluxes in a Shallow Coastal Ecosystem. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- 2013 \*Heiss, E.M. & **Fulweiler, R.W.** Pelagic Nitrification in Varying Environments: How Rates Change Along an Estuary-to-Shelf Gradient. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.

- 2013 \*Vieillard, A.M. & **Fulweiler, R.W.** High-resolution Nitrous Oxide Fluxes from a Temperate Intertidal Mudflat. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- 2013 <sup>‡</sup>Rogener, M., \*Heiss, E.M., Ireland, T., Murray, R., **Fulweiler, R.W.** Short and Long-term Temporal Variations of Manganese, Iron, and N<sub>2</sub> Fluxes Across the Sediment Water Interface in a Temperate Estuary. (Talk) Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- 2012 \*Carey, J.C. & **Fulweiler, R.W.** Land Use Change Directly Alters Dissolved Silica Export to Coastal Systems. (Talk). Coastal Estuarine Research Federation. Mar Del Plata, Argentina.
- 2012 \*Vieillard, A.M., Deegan, L.A., **Fulweiler, R.W.** Influence of Long-term fertilization on Salt Marsh Tidal Creek Nitrogen Removal. (Poster). Coastal Estuarine Research Federation. Mar Del Plata, Argentina.
- 2012 \*Carey, J.C. & **Fulweiler, R.W.** Watershed Land Use – A Major Control on Silica Export to Marine Waters. (Talk). New England Estuarine Research Society. Block Island, Rhode Island. [*\*\*won Ketchum Award for best graduate talk*]
- 2012 \*Emery, H.E. & **Fulweiler, R.W.** Decreased Salt Marsh Greenhouse Gas Emissions Associated with *Phragmites Australis*. (Talk). New England Estuarine Research Society. Block Island, Rhode Island.
- 2012 Fields, L., Nixon, S.W., Granger, S., **Fulweiler, R.W.** An Apparent Rapid Response of Benthic-Pelagic Coupling to Ecosystem Changes in Mid-Narragansett Bay, Rhode Island. (Talk). New England Estuarine Research Society. Block Island, RI.
- 2012 \*Foster, S.Q. & **Fulweiler, R.W.** Net N<sub>2</sub> Flux and Nutrient Cycling Dynamics Over a Trajectory of Increasing Eutrophication in Waquoit Bay, MA. (Talk). New England Estuarine Research Society. Block Island, RI.
- 2012 \*Heiss, E.M. & **Fulweiler, R.W.** Water Column Nitrification From Shore to Shelf. (Talk). New England Estuarine Research Society. Block Island, RI.
- 2012 <sup>‡</sup>Rogener, M.K., \*Heiss, E.M., **Fulweiler, R.W.** Metals, Mud, and the Nitrogen Cycle – The Impact of Mn and Fe on Sediment N<sub>2</sub> Fluxes in a Temperate Marine Ecosystem. (Talk). New England Estuarine Research Society. Block Island, RI. [*\*\*won Rankin Award for best undergraduate talk*]
- 2012 \*Vieillard, A.M. & **Fulweiler, R.W.** Are Tidal Flats Funny? Nitrous Oxide Fluxes and the Wetting and Drying of Tidal Flat Sediments. (Talk). New England Estuarine Research Society. Block Island, RI.
- 2011 **Fulweiler, R.W.**, Gobler, C., \*Heiss, E.M., Wall, C. Harmful Algal Blooms and Benthic Nutrient Remineralization: A Positive Feedback Loop or a Dead End? (Talk) Sixth Symposium on Harmful Algae in the U.S. Austin, Texas.
- 2011 \*Carey, J.C. & **Fulweiler, R.W.** Exploring the Role of Silica Limitation in Nutrient-Enriched Marshes. (Talk) Coastal Estuarine Research Federation: Daytona Beach, FL.

- 2011 \*Emery, H.E. & **Fulweiler, R.W.** The Effects of Phragmites Invasion, Tidal Restriction and Marsh Restoration on the Greenhouse Gas Emissions in a New England Salt Marsh System (Poster). Coastal Estuarine Research Federation: Daytona Beach, FL.
- 2011 \*Foster, S.Q. & **Fulweiler, R.W.** Effects of Low Oxygen on Sediment Nitrous Oxide Flux in a Shallow Coastal Ecosystem. (Talk) Coastal Estuarine Research Federation: Daytona Beach, FL.
- 2011 \*Heiss, E.M. & **Fulweiler, R.W.** Directly Measured Net N<sub>2</sub> Fluxes in Offshore New England Sediments. (Talk) Coastal Estuarine Research Federation: Daytona Beach, FL.
- 2011 \*Vieillard, A.M., **Fulweiler, R.W.**, Carey, J.C., Hughes, Z.J., Fagherazzi, S., Deegan, L.A., Fitzgerald, D.M. The Ebb and Flood of Silica in a New England Salt Marsh. (Talk) Coastal Estuarine Research Federation: Daytona Beach, FL.
- 2011 \*Heiss, E.M. & **Fulweiler, R.W.** Net Sediment N<sub>2</sub> Fluxes in the Coastal New England Ocean: Evidence of Direct Denitrification (Poster). Graduate Climate Conference: Woods Hole, MA.
- 2011 \*Carey, J. & **Fulweiler, R.W.** The Impact of Nutrient Enrichment on Si Accumulation in Two Temperate Salt Marshes. (Talk). IBI-S: Isotopes in Biogenic Silica, Antwerp, Belgium.
- 2011 **Fulweiler, R. W.**, \*Heiss, E. M.; Morgan, E. J. Hitting a Moving Target - Sediment Heterotrophic Activity in a Changing Coastal Ocean Ecosystem. (Talk). American Society of Limnology and Oceanography (ASLO), San Juan, Puerto Rico.
- 2010 **Fulweiler, R.W.**, \*Heiss, E.M., Morgan, E. Sediment Nitrous Oxide Fluxes from Shore to Shelf. (Talk). American Geophysical Union (AGU), San Francisco, CA.
- 2010 <sup>¥</sup>Vieillard, A.M. & **Fulweiler, R.W.**, Deegan, L., Fagherazzi, S., Fitzgerald, D. Effects of Fertilization on Benthic and Pelagic Silica Fluxes in a New England Salt Marsh. (Talk). New England Estuarine Research Society. Provincetown, MA. [*\*\*won Rankin Award for best undergraduate talk*]
- 2010 \*Carey, J. & **Fulweiler, R.W.** Dissolved Silica in Salt Marsh Porewater Profiles – Do Concentrations Vary along a Nutrient Gradient? (Talk). New England Estuarine Research Society. Provincetown, MA.
- 2010 \*Heiss, E.M. & **Fulweiler, R.W.** Sediment N<sub>2</sub> Fluxes from Estuary to Offshore Along and Anthropogenic Gradient. (Talk). New England Estuarine Research Society. Provincetown, MA.
- 2010 <sup>¥</sup>Gifford, S. & **Fulweiler, R.W.** Using nitrogen and carbon isotopes to compare wild and captive penguin colonies. (Poster). Seventh International Penguin Conference. Boston, MA.
- 2010 Brown, S. M., **Fulweiler, R. W.**, Nixon, S. W., Tahmassian, A., Fogarty, C. E., Jenkins, B. D. Elucidating Controls on Nitrogen Fixation and Denitrification in Estuarine Sediments by Coupling Gene Activity and Biogeochemical Flux Measurements. (Poster). American Society for Limnology and Oceanography. Portland, OR.
- 2009 Brown, S. M., **Fulweiler, R. W.**, Nixon, S. W., Tahmassian, A., Fogarty, C. E., Jenkins, B. D. Coupling Gene Expression and Biogeochemical Measurements to Understand Controls on Estuarine Sediment Nitrogen Cycling Processes. (Poster). EPSCoR National Conference. Washington, D.C.

- 2009 Brown, S. M., Fogarty, C. E., **Fulweiler, R. W.**, Nixon, S. W., Jenkins, B. D. Using Gene Expression and Biogeochemical Measurements to Understand Controls on Estuarine Sediment Nitrogen Cycling Processes. (Talk). American Society for Limnology and Oceanography. Nice, France.
- 2009 **Fulweiler, R.W.**, Granger, S.L., Buckley, B.A., Van Keuren, A., Nixon, S.W. Downstream Changes in Groundwater N<sub>2</sub> Concentrations of Constructed Subterranean Wetlands. (Poster). RCN Denitrification Workshop, University of Rhode Island, Narragansett, RI.
- 2008 Nixon, S.W. & Fulweiler, R.W. Oligotrophication – Coming to an estuary near you? (Talk). American Society of Limnology and Oceanography (ASLO); Orlando, FL.
- 2008 Twilley, R.R., **Fulweiler, R.W.**, Lenaker, P., Bond, D.C., Baker, J., and Rich, S. Hot Flashes in Dynamic Coastal Landscapes: Tracking the Fate of Nitrogen in Coastal Louisiana. (Poster). American Society of Limnology and Oceanography (ASLO); Orlando, FL.
- 2008 **Fulweiler, R.W.** Reversal of the net N<sub>2</sub> Flux in Narragansett Bay. (Talk). RCN Denitrification Workshop; Horn Point Laboratory, Cambridge, MD (*Invited*).
- 2007 **Fulweiler, R.W.** & Nixon, S.W. The Impact of Climate Change on Benthic Remineralization and Sediment Net N<sub>2</sub> Flux. (Talk). Estuarine Research Federation (ERF); Providence, RI.
- 2006 **Fulweiler, R.W.** & Nixon, S.W. Climate-induced Alteration of the Coastal Marine N Cycle. (Poster). RCN Denitrification Workshop; Institute for Ecosystem Studies (IES); Millbrook, NY.
- 2006 **Fulweiler, R.W.** & Nixon, S.W. Climate Induced Changes of Benthic-Pelagic Coupling in Narragansett Bay, R.I. (Talk). New England Estuarine Research Society (NEERS); Groton, CT.
- 2006 **Fulweiler, R.W.** & Nixon, S.W. Impact of Climate Induced Oligotrophication on Benthic-Pelagic Coupling in Narragansett Bay (Talk). Research and Management of Eutrophication in Coastal Ecosystems. Nyborg, Denmark.
- 2005 **Fulweiler, R.W.** & Nixon, S.W. Denitrification in organic rich coastal sediments under varying levels of hypoxia (Talk). Estuarine Research Federation (ERF); Norfolk, VA.
- 2004 **Fulweiler, R.W.** & Nixon, S.W. A Different Kind of Dam: Terrestrial Vegetation and the Annual Flux of Silica to Little Narragansett Bay. (Talk). New England Estuarine Research Society (NEERS); Block Island, RI.
- 2004 **Fulweiler, R.W.** & Nixon, S.W. Terrestrial vegetation and the seasonal cycle of dissolved silica in a southern New England coastal river. (Talk). American Society of Limnology and Oceanography (ASLO) and The Oceanography Society (TOS) Ocean Research Conference; Honolulu, HI.
- 2003 **Fulweiler, R.W.** & Nixon, S.W. Carbon, Nitrogen, and the Black Hole of New England: Examining Thirty years of C and N Export from the Wood-Pawcatuck Watershed, R.I. (Poster). Estuarine Research Federation (ERF): Estuaries on the edge, convergence of ocean, land, and culture; Seattle, WA.

- 2003 **Fulweiler, R.W.** & Nixon, S.W. Export of Organic Carbon from a Minimally Developed Southern New England Watershed (Talk). Wessex Institute of Technology: River Basin Management II; Las Palmas, Gran Canaria.
- 2002 Granger, S., Nixon, S., Harris, L., Chaves, J., **Fulweiler, R.**, Mueller, C., Sturgis, B., and Almario, A. A preliminary assessment of seagrass health and vitality in Assateague National Seashore's coastal bays. Understanding the Role of Macroalgae in Shallow Estuaries. January 10-11, 2002. Linthicum, MD.
- 2002 **Fulweiler, R.W.**, Nixon, S.W., Buckley, B., Granger, S.L. Quantifying Nutrient Loading From the Pawcatuck Watershed to Little Narragansett Bay. (Talk). New England Estuarine Research Society (NEERS); Bar Harbor, ME.

**g. FUNDED GRANTS**

Current:

6. Quantifying Benthic-Pelagic Coupling in Long Island. (PI)  
 Source of Support Connecticut and New York Sea Grant  
 Award Dates 03/01/2015-02/28/2017  
 Award Amount \$275,250
5. Collaborative Research: Development of an *In Situ* Porewater Sampler Coupled to an Underwater Mass Spectrometer for High-Resolution Biogenic Gas Measurements in Permeable Sediments. (Lead PI w/ Co-PIs William Savidge at Skidaway Institute of Oceanography and Tim Short and Andreas Cardenas at SRI).  
 Source of Support NSF-Ocean Sciences/Ocean Technology and Interdisciplinary Coordination  
 Award Dates 09/01/2014-08/31/2017  
 Award Amount \$462,790
4. Sentinels of Change – Are Salt Marshes in Long Island Sound Keeping Pace with Sea Level Rise? (PI)  
 Source of Support EPA (distributed through NEIWPC)C  
 Award Dates 01/01/14-07/31/2015  
 Award Amount \$145,740
3. N Cycling Processes Across an Oyster Aquaculture Chronosequence. (PI)  
 Source of Support RI Sea Grant  
 Award Dates 2/1/2014-1/31/2016  
 Award Amount \$160,178
2. Examining Significant Changes to the Nitrogen Cycle in Waquoit Bay. (PI)  
 Source of Support WHOI Sea Grant  
 Award Dates 2/1/2014-1/31/2016  
 Award Amount \$109,487
1. Quantifying the Impact of Low Oxygen Conditions on Sediment Methane Fluxes in Waquoit Bay (PI)  
 Source of Support WHOI Sea Grant

Award Dates 02/1/2012-01/31/2015 (1 year no cost extension)  
Award Amount \$107,935

Past:

10. ETBC: Coupling Biogeochemical Cycles and Sediment Fluxes in the Intertidal Zone: Erosion, Deposition and Landform Evolution (co-PI at BU w/ Fagherazzi, FitzGerald and w/ Bruce Peterson, Marine Biological Laboratory)

Source of Support NSF (0924287)- Ocean Sciences/Marine Geology & Geophysics  
Award Dates 9/1/2009-8/31/2014 (2 year no cost extension)  
Award Amount \$897,134 (Fulweiler amount: \$300,000)

9. Assessing the Impact of Hypoxia/Anoxia on Sediment Denitrification and the Production of Nitrous Oxide in Waquoit Bay (PI)

Source of Support WHOI Sea Grant  
Award Dates 02/1/2010-01/31/2013 (1 year no costs extension)  
Award Amount \$113,037

8. Development Funds: Quantifying the Impact of Reduced Wastewater Nitrogen Loading on Benthic-Pelagic Coupling in Narragansett Bay (PI)

Source of Support RI Sea Grant Development Funds  
Award Dates 01/1/2013-12/31/2013  
Award Amount \$25,000

7. Collaborative Research: Using Biogeochemical and Genetic Tools to Unravel the Environmental Controls of Nitrogen Fixation and Denitrification in Heterotrophic Marine (PI at BU w/ Anne Giblin, Marine Biological Laboratory & Bethany Jenkins/Scott Nixon, University of Rhode Island)

Source of Support NSF (0926859) Ocean Sciences/Chemical Oceanography  
Award Dates 9/15/2009-8/31/2013 (1 year no cost extension)  
Award Amount \$239,272

6. Evaluating Climate Change Impacts on Nitrogen Cycling Along a Gradient of Anthropogenic Impact – From Narragansett Bay to Rhode Island Sound and Block Island Sound (PI)

Source of Support RI Sea Grant  
Award Dates 02/1/2010-01/31/2012  
Award Amount \$112,306

5. No More Black Box: Linking the Microbial Community to Biogeochemical Processes in Coastal Wetlands (PI)

Source of Support Boston University Mary Erskine Catalyst Award  
Award Dates 2010-2011  
Award Amount \$20,000

4. Grants for Undergraduate Teaching and Research: Aimless Wanderers: Phytoplankton Biomass and Composition Along an Environmental Gradient from the Charles River to Boston Harbor. (PI)

Source of Support Boston University  
Award Dates Fall 2010  
Award Amount \$1,300



3. Grants for Undergraduate Teaching and Research: “The Other CO<sub>2</sub> Problem: Understanding the Impacts of Ocean Acidification on Phytoplankton and Bacteria using Experimental Manipulations.” (PI)

Source of Support	Boston University
Award Dates	Fall 2011
Award Amount	\$1,795

2. Mississippi River Flood of 2008: Flood-Pulsed Experiments of Coastal Ecosystem Dynamics. (Co-PI w/ John White (Lead PI), Sarah Green, Sibel Bargu, and Chunyan LI (Co-PIs) at Louisiana State University.

Source of Support	NSF (0833225) - Environmental Biology/Ecosystem Studies
Award Dates	04/15/08-03/31/09
Award Amount	\$99,885

1. Understanding Climate Change and the Nitrogen Cycle in Narragansett Bay: A Biogeochemical and Molecular Approach (co PI w/ B. Jenkins (URI) and Scott Nixon (GSO/URI).

Source of Support	RI Sea Grant
Award Dates	02/1/2008-01/31/2010
Award Amount	\$190,004

#### **h. UNIVERSITY AND PROFESSIONAL SERVICE**

- 2014, 2015 Boston University Trustees Scholarship Committee
- 2014-present Associate Editor of *Frontiers of Global Change and the Future Ocean*
- 2015-present Chair of ASLO Publications Committee
- 2014-present Boston University Department of Earth and Environment Search Committee for Global Climate Change Scientist
- 2013-2014 Serving on ASLO Publications Committee
- 2014 Co-organized a special session for the Aquatic Sciences Meeting (ASM) (May meeting) w/ A. Marcelli, T. Scott, and J. Welter entitled: We have a Nitrogen Fixation.
- 2014 Co-organized a special session for the Association for the Sciences of Limnology and Oceanography (ASLO) (February meeting) w/ P.J. Treguer, J.C. Carey, M.A. Brzezinski, C. De La Rocha, and M. Maldonado entitled: Advancing the Frontiers of the Si cycle in Terrestrial, Coastal, and Open Ocean Ecosystems.
- 2013-2014 Boston University Department of Earth and Environment Curriculum Redevelopment Committee
- 2013-2014 Boston University Department of Earth and Environment Search Committee for Social Scientist specializing in Global Climate Change

- 2013 Co-organized a special session for the Coastal Estuarine Research Federation (CERF) (November meeting) w/ L. Fields, M. Brush, and K. Henry entitled: Synthesis Research in Estuarine and Coastal Science: A Session in Honor of Scott W. Nixon.
- 2013-2015 Appointed as co-Chair of the Public Policy Committee of the Association for the Sciences of Limnology and Oceanography (ASLO).
- 2013, 2014 Boston University Graduate Student Orientation Talk – How to be a good Teaching Fellow. (*Invited*)
- 2013 Louisiana Sea Grant (NOAA) Proposal Review Panel
- 2013 Co-organized a special session for the ASLO (February meeting) w/ K. Fennel, J. Lehrter, and R. Maranger entitled: Biological and Biogeochemical Responses to Human Impacts at the Sediment-Water Interface. New Orleans, LA.
- 2012-2013 Boston University Biology Department Search Committee for Microbiology Faculty position
- 2012-present Voted to the ASLO Board as Member at Large.
- 2012-present Associate Editor for *Estuarine, Coastal, and Shelf Science*.
- 2012 Reviewer for National Fellowships Committee for Sigma Delta Epsilon, Graduate Women in Science.
- 2012 Boston University Volunteer Judge for Scholars Day
- 2012 Boston University Earth Sciences and Geography and the Environment Merging Space Committee
- 2011, 2013 Geosciences Congressional Visits Day.
- 2011 NSF Chemical Oceanography Proposal Review Panel.
- 2011 NSF Workshop on Ocean Observatory Initiative (*Invited*).
- 2011 MIT Sea Grant (NOAA) Proposal Review Panel.
- 2010-present Editorial Board for the *Journal of Sea Research*.
- 2010-present Member at Large, New England Estuarine Research Society.
- 2010-2012 Editor for the Journal *CLEAN- Soil, Air, Water*.
- 2010 Co-organized a special session for the Association for the Sciences of Limnology and Oceanography (ASLO) (February meeting) w/ R. Maranger and M. McCarthy entitled: Can nitrogen fixation in aquatic systems reverse nitrogen limitation?

- 2010-2011 Earth System Forum Steering Committee - helped plan and schedule forum; presented at forum on behalf of the BU Marine Program (BUMP)
- 2010-2012 Dive Safety Committee - help monitor and approve diving projects associated with BU research or educational activity.
- 2009-2013 UROP Science Presentation Judge
- 2010-present Associate Director of the BU Marine Program (BUMP)
- 2009-2012 Volunteer Judge for Science and Engineering Day
- 2009-2010 Earth Sciences Graduate Student Admissions Committee
- 2009 SEP Career Panel – University of Vermont (*Invited*)
- 2009 BU Geological Society (BUGS) Graduate School Advise Panel
- 2008-2009 Geography and the Environment Faculty Search Committee
- 2008-2009 Boston University Department Biology Search Committee for Marine Biology
- 2008 Co-organized a special session Association for the Sciences of Limnology and Oceanography (ASLO) (June meeting): Special Session w/ R. Twilley entitled: The Response of Coastal Marine Ecosystems to Pulsing Events.
- 2007 Co-organized a special session (Coastal) Estuarine Research Federation (CERF) (November meeting) w/ S. Nixon for session entitled: The Impact of Climate change on Biogeochemical Cycles.
- 2005-present *Journal Reviews:* Aquatic Microbial Ecology; Aquatic Sciences, Biogeochemistry; Biogeosciences, Chemical Ecology; Chemosphere; CLEAN-Soil, Air, Water; Continental Shelf Research, Deep Sea Research, Ecological Modeling; Ecosystems; Environmental Microbiology; Earth Science Reviews; Environmental Microbiology; Environmental Science and Technology; Estuaries and Coasts; Estuarine, Coastal, and Shelf Science; Frontiers in Aquatic Microbiology; Geophysical Research Letters; Global Change Biology; Global Biogeochemical Cycles; Journal of Vegetation Science; Journal of Environmental Quality; Limnology and Oceanography; Marine Ecology Progress Series; Marine Pollution Bulletin; Nature; Plant and Soil; Proceedings of the National Academy of Sciences (PNAS); Silicon; Science; Water Research; Wetlands.
- 2008-present *Proposal Reviews:* NSF: Biological Oceanography, Chemical Oceanography, OPUS, Arctic Programs; Sea Grant: Louisiana, Maryland, MIT, North Carolina, Virginia; National Institute for Climate Change Research (NICCR).

#### **i. PROFESSIONAL SOCIETIES**

American Geophysical Union (AGU)  
 American Society of Limnology and Oceanography (ASLO)  
 American Society of Microbiology (ASM)  
 Coastal and Estuarine Research Federation (CERF)

Ecological Society of America (ESA)  
New England Estuarine Research Society (NEERS)