

**Biographical Sketch**      **Michael F. Piehler**

Personal information:

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**Professional Preparation**

**B.S. Biology.** The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

**M.S.P.H. Environmental Sciences and Engineering.** The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

**Ph.D. Environmental Sciences and Engineering.** The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

**Appointments**

2016-            **Professor**, The University of North Carolina at Chapel Hill Institute of Marine Sciences, Department of Marine Sciences, Department of Environmental Sciences and Engineering and the Curriculum for the Environment and Ecology  
2017-            **Interim Executive Director**, UNC Coastal Studies Institute  
2012-            **Director of Graduate Studies and Admissions**, Curriculum for the Environment and Ecology  
2011- 2016    **Associate Professor**, The University of North Carolina at Chapel Hill Institute of Marine Sciences  
2005-2011    **Assistant Professor**, The University of North Carolina at Chapel Hill Institute of Marine Sciences  
1998- 2005:   **Research Assistant Professor**, UNC-CH Institute of Marine Sciences

**Five Most Relevant Publications (81 total) (\*student or post-doc author advised by Piehler)**

Ensign, SH, CA Currin, MF Piehler, C Tobias. 2017. A method for using shoreline morphology to predict suspended sediment concentration in tidal creeks. *Geomorphology* 276: 280-288.  
Gold, AC\*, SP Thompson and MF Piehler. 2017. Water quality before and after watershed-scale implementation of stormwater wet ponds in the coastal plain. *Ecological Engineering*, 105:240-251.  
Gold AC\*, Thompson SP, Piehler MF. 2017. Coastal stormwater wet pond sediment nitrogen dynamics. *Science of The Total Environment* 609:672-81.  
Smyth, AR\*, MF Piehler, and JH Grabowski. 2015. Habitat context influences nitrogen removal by restored oyster reefs. *Journal of Applied Ecology* 52 (3): 716-725.  
Piehler, M.F. and A.R. Smyth\*. 2011. Habitat-specific distinctions in estuarine denitrification affect both ecosystem function and services. *Ecosphere* 2(1):art12.

**Five Additional Publications**

Gittman, RK, FJ Fodrie, AM Popowich, DA Keller, JF Bruno, CA. Currin, CH Peterson and MF Piehler. 2015. Engineering away our natural defenses: An analysis of shoreline hardening in the United States. *Frontiers in Ecology and the Environment* 13:301-307.

- Kimbrow, DL, JE Byers, JH Grabowski, AR Hughes, and MF Piehler. 2014 The biogeography of trophic cascades on U.S. oyster reefs. *Ecological Letters* 17:845–854.
- Ensign, SH\*, DM Leech\* and MF Piehler. 2014. Effects of nutrients and zooplankton on an estuary's phytoplankton: Inferences from a synthesis of 30 years of data. *Ecosphere*, 5:art89.
- Von Korff, BH\*, MF Piehler and SH Ensign. 2014. Comparison of denitrification between river channels and their adjoining tidal freshwater wetlands. *Wetlands*, 34: 1047-1060.
- Piehler, M.F., C.A. Currin, N.S. Hall. 2010. Estuarine intertidal sandflat benthic microalgal responses to in situ and mesocosm nitrogen additions. *Journal of Experimental Marine Biology and Ecology* 390:99-105.

### **Synergistic Activities**

- Albemarle-Pamlico National Estuary Partnership Science and Technical Advisory Committee, 1/06-current  
Executive committee, 7/08-current
- Associate Editor, *Estuarine Coastal and Shelf Science* (2014-2017)
- Chesapeake Bay Oyster-Nitrogen Workshop, Wachapreague, VA, 1/13
- National Oyster Goals Project Science Advisory Team, The Nature Conservancy, 1/11-15
- The Nature Conservancy/US Fish and Wildlife Service Climate Change Adaptation Project Scientific Advisory Committee, 9/10-1/12

### **Advisors**

- Hans W. Paerl – UNC Chapel Hill Graduate and Post-doctoral advisor

### **Current Graduate Students advised**

- Adam Gold (MS student in the Curriculum for the Environment and Ecology)
- Olivia Torano (MS student in the Curriculum for the Environment and Ecology)
- Mollie Yacano (PhD student, Marine Sciences)

### **Advisees who have graduated**

- Kathleen Onoreveole (MS 2016, Marine Sciences) – Env. Consultant
- Luke Dodd (PhD 2015, Marine Sciences) - Helsinki, Finland
- Caitlin White (MS 2014, Marine Sciences) - Oregon State University
- Teri O’Meara (PhD 2014, Env. Sciences and Engineering) – University of Auckland
- Ashley Smyth (PhD 2013, Marine Sciences) – Univ Florida
- Ben Von Korff (MS 2011, Marine Sciences) – Minnesota State University - Mankato
- Scott Ensign (PhD 2010, Curriculum in Ecology) – Principal, AquaCo
- Rebecca Schwartz (MS 2010, Curriculum in Ecology) – Registered Nurse
- Matt Waters (PhD 2007, Env. Science & Engineering) – Auburn University
- Sara McMillan (PhD 2007, Env. Sci. & Engineering) (Co-advisor) – Purdue University