

Jennifer Boehme, Ph.D.

Environmental and Marine Scientist, Expertise in Program Management and Science Policy

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Summary of Qualifications

- US Citizen with a Ph.D. in Marine Science (Chemical Oceanography) from the University of South Florida
- Working at the interface of research and policy to assist the governments of the United States and Canada in resolving water quality issues affecting the Great Lakes
- Science policy experience at multiple federal agencies
- Seven years strategic development and project management for university and government research laboratories

Government Experience

Science Adviser, International Joint Commission

July 2012 - Present

- Science Adviser and Secretariat, Health Professionals Advisory Board
- Works with and on behalf of members of international boards, councils, and task forces at the Great Lakes Regional Office to address complex issues involving U.S.-Canadian trans-boundary water quality and pollution issues in the Great Lakes region

Senior Communications Consultant, National Science Foundation

October 2011 - June 2012

- Strategic communications for congressional affairs, geosciences and science education in Office of Legislative and Public Affairs; assistant editor for NSF monthly newsletter Current
- Speech and article writing, development of visual media and coordination for team implementing two congressional events during rotation at Office of Legislative and Public Affairs

AAAS Science & Technology Policy Fellow

September 2009-August 2011

National Science Foundation, Biological Sciences Directorate, Biological Infrastructure Division

- Organized and managed writing committee and intra-directorate approval process for Foundation-wide solicitation, Research Coordination Networks (RCN), to promote international collaborations, encourage interdisciplinary science and broaden participation of underrepresented groups
- Developed research strategies and technical content for interagency (NOAA, EPA, NSF) solicitation to develop climate adaptation management tools for water and wastewater utilities (estimated release date October 2011)

Rotation, National Oceanographic and Atmospheric Administration, Climate Program Office (CPO), Nov. 2010 – Apr. 2011

- Briefed management on the impacts of legislative changes to levy certification within the National Flood Insurance Program (NFIP) on Washington, DC, and other activities between CPO and the Federal Emergency Management Agency; resulted in decision to pursue management level engagement to consolidate climate partnership efforts
- Expanded partnerships between NOAA, the Western Governors Association, Dept. of Interior and Dept. of Agriculture and draft preliminary memorandum of understanding on climate adaptation and sustainability. Final version adopted June 30, 2011

Management and Research Experience

Ecologist, Smithsonian Environmental Research Center, Edgewater, MD 2005-2009

- Examined ties between urban watershed constraints, acidification and physical/seasonal factors on organic carbon and trace elements in major international and US West Coast ports and coastal environments; furthered an approach to improve US Coast Guard (USCG) regulation and management of ballast water exchange verification (BWEV) for commercial ships in US ports to reduce ecological damage by invasive species transport
- Developed and implemented proof-of-concept testing for handheld BWEV fluorometers developed by the USCG; performed comparative fluorometer analysis for setting chemical tracer regulatory thresholds

- Managed field budgets and analytical subcontracts (\$300,000) sourced from three states (CA, WA and OR), two US federal agencies (US Coast Guard and NOAA Seagrant), and the New Zealand Ministry of Fisheries; successfully implemented program despite a doubling of planned number of samples

Early Research Experience

Assistant Research Scientist, Darling Marine Center, University of Maine, ME 2002-09

- Co-principal investigator, evaluated physical and environmental origin of observed changes in biological, photochemical and geochemical cycling and particulate size of colloidal carbon in Damariscotta River Estuary and associated watersheds
- Supervisor of Marine Fluorescence Laboratory; initiated program for paid sample analysis and data presentation; trained undergraduate and graduate interns in analytical techniques

Associate in Research, College of Marine Science, University of South Florida, FL 2000-02

- Statistical analysis of changes in geochemistry and photochemistry in organic carbon as monitored by fluorescence in Florida watersheds, estuaries and the Gulf of Mexico
- Planned and implemented cruises for testing of prototype in-situ fluorescence sensor

Education

- 2000** Ph.D., College of Marine Science, University of South Florida, Tampa, FL
Dissertation: Artificial and Natural Fluorescence of Dissolved Organic Matter in the Tampa Bay Estuary
Advisor: Paula Coble
- 1993** B.S., Chemistry, Emory University, Atlanta, Georgia
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