

Ari Engelberg
Implementation Project Officer
Chesapeake and Coastal Service
Department of Natural Resources
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Summary: Natural Resources Management professional with an interdisciplinary background in environmental science and policy. Experience working at federal and state levels with a strong foundation in grant management, water quality research, GIS, and statistical methods.

Work Experience:

Maryland Department of Natural Resources: Chesapeake and Coastal Service 02/2017-present Implementation Project Officer (Natural Resources Planner III)

Manage restoration grants and obtain, review, and QA/QC data related to restoration project implementation such as pollutant load reductions, construction expenditures, and restoration progress.

Lead and confer with interagency research initiatives including DNR's Resource Assessment Services monitoring efforts and the Chesapeake Bay Trust's Pooled Monitoring Partnership to ensure that state investments are delivering desired water quality improvement.

Assist with monitoring and restoration tasks such as shoreline plantings, vegetation surveys, and aquatic sampling.

Oak Ridge Institute of Science and Education at the U.S. EPA 03/2014 - 01/2017 ORISE Research Participant

Provided scientific and analytical support to the USEPA Nonpoint Source Control Branch of the Assessment and Watershed Protection Division to implement programs and policies of section 319 of the Clean Water Act.

Worked closely with state scientists and biologists to support the peer review process of environmental science and restoration data for publication in USEPA Success Stories (<https://rb.gy/5zoeba>). Co-led exploratory research on the relationships between water quality impairments (e.g. 303(d) listings of nutrients, metals, sediment, pathogens), restoration work, and physical watershed characteristics.

Audubon Naturalist Society 10/2016 - 12/2019 Volunteer Water Quality Monitor

Volunteer water quality monitor at Audubon Naturalist Society. Helped conduct benthic macroinvertebrate sampling including organism collection and identification. Sampling is seasonal, field work conducted four days/year.

State University of New York College of Environmental Science and Forestry 08/2012 - 12/2012 Teaching Assistant

Teaching Assistant for Introduction to Geographic Information Technology (ESF 300), course providing an introduction to the uses and limitations of geospatial information technologies, including geographic information systems (GIS), global positioning systems (GPS) and remote sensing for environmental science

and natural resources management applications.

Hands On Frederick County (via Chesapeake Conservation Corps) 12/2010 - 08/2011
Environmental Project Manager

Conducted watershed protection and restoration projects in Frederick Maryland including forestry projects (riparian plantings) and engineering/design of a stream restoration.

Baltimore Green Works 09/2009 - 02/2010
Program Assistant

Collaborated with interdisciplinary group including Baltimore City government and watershed groups to organize conference on restoring the environmental health of the Chesapeake Bay.

Dundalk Renaissance Corporation 05/2009-08/2009
Environmental Studies Internship

Developed an environmental forestry survey and coordinated environmental program with Maryland Department of Natural Resources.

Land Studies Inc. 05/2008 - 08/2008
Restoration Laborer

Assisted in restoration of riparian floodplain and stream running through Avenel Golf Course (Potomac MD.) Installed native shrubs in restored floodplain in order to create functional wetland, protect against nonpoint source pollution and treat nutrients and sediments in floodplain corridor.

Americorps NCCC 09/2005 - 05/2006
AmeriCorps NCCC Volunteer

Worked in environmental restoration and public service projects throughout the Southeast United States. Gained management and leadership experience through work and training with Americorps.

Anacostia Watershed Society 05/2005-05/2005
Internship

Supported watershed restoration projects in the Anacostia Watershed.

Education:

State University of New York College of Environmental Science and Forestry

Master of Science Degree 05/2014

Major: Environmental Science

Relevant Coursework, Licenses and Certifications:

Completed Master of Science in Environmental Science with an area of study in Water and Wetland Resource Studies. Conducted technical scientific research for Master's Thesis compiling and analyzing precipitation, runoff, and nutrient data to inform strategic recommendations on ways New York City can improve its drinking water protection program due to changes in climate and land cover.

Montgomery College

College Coursework Completed 05/2011

Relevant Coursework, Licenses and Certifications:

Undergraduate coursework in general Chemistry, Statistics, Calculus, and Microeconomics.

Graduate School USA

Some College

Coursework Completed 07/2010

Relevant Coursework, Licenses and Certifications:

Wetland Ecosystems course studying landscape and ecological processes that form wetlands and identifying the plants and animals commonly found in wetlands.

Goucher College

Bachelor's Degree 05/2010

Major: Political Science **Minor:** Environmental Studies

Relevant Coursework, Licenses and Certifications:

Bachelor's degree with a focus in environmental policy, environmental science, and biology. Study Abroad in marine biology at Roatan Institute for Marine Sciences, and multiple Environmental Studies Internships.

Job Related Training:

- 1) Responsible Personnel Training for Erosion and Sediment Control (Maryland Department of the Environment: certification issues March 2017)
- 2) Chesapeake Bay Landscape Professional (Chesapeake Conservation Landscaping Council: certification issued April 2019)
- 3) U.S. EPA Water Quality Standards Academy: Five day course focusing on the interpretation and application of water quality standards regulation; policies and program guidance; the development of water quality criteria (human health, aquatic life, nutrient, and biological); and other facets of the water program. (2014)

Professional Publications and Presentations:

- 1) Presented 'translations' of Pooled Monitoring Research at MDE forums for Restoration Research Grant Program. (2017-2020)
- 2) The National Nonpoint Source Monitoring Workshop: "Characterizing Recovery from Nonpoint Pollution: Landscape and Programmatic Factors Related to Delisting Impaired Waterbodies" (August 2016)
- 3) 2016 AWRA Summer Specialty Conference, GIS and Water Resources IX: "Exploring Patterns of Clean Water Act Implementation Across Catchments" - Daniel Auerbach, EPA Office of Wetlands, Oceans and Watersheds, Washington, DC (co-authors: A. Engelberg, L. Shumway) (July 2016)
- 4) 2016 National NPS Training Workshop Innovative Tools and Topics Poster Session. "Adventures in water quality Analysis (Integrated reports, stream cat and 319, oh my!)". (October 2016).
- 5) National Nonpoint Source Program Highlights Report (2016: supported publication through review and data analyses, Cynthia Curtis (EPA) primary author)
- 6) Masters Thesis: "Potential Impacts on Nutrient Export, Concentration, and Runoff from Changing Precipitation and Land Use in the Catskill/Delaware Watersheds." (2014)
- 7) New York Water Environment Association (NYWEA) Watershed Science and Technical Conference:

"Assessing Changes in the Catskills and Delaware Watersheds Water Quality as a Function of Changing Land Cover: A Post 9/11 Perspective." (2012)

Additional Information:

- 1) Co Chair for Best Practices in Using Data for Decision Making and Management Conference Session at National NPS Monitoring Workshop . (2016)
- 2) Served as Rapporteur for technical science work group at National Climate Assessment Northeast Regional Town Hall. (2013)
- 3) Served on committee of elected environmental science graduate students to represent the Graduate Program in Environmental Science (GPES) in the Graduate Student Association (GSA) at SUNY ESF. (2012)
- 4) Served on GSA International Committee at ESF during time as GPES representative. (2012)
- 5) Governor's Volunteer Service Certificate from Chesapeake Bay Trust. (2011)
- 6) Ariel Singer Prize for Achievement in the Environment, Ethics, and/or Human Rights from Goucher College. (2010)
- 7) Presidential Volunteer Service Award from Americorps NCCC. (2006)
- 8) Congressional Initiative Achievement Service Award from Americorps NCCC. (2006)