


Michael **SCHRAMM**

Researcher | Watersheds, water quality and open science

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 Bryan, Texas

I work at the intersection of environmental science and policy by facilitating water quality planning efforts with state agencies and local stakeholders. I provide expertise in water quality modeling and assessment through the use of GIS and open source programming tools. My primary interest revolves around water policy and the evaluation of implementation effectiveness. I'm especially interested in leveraging open data and open source analytic tools to develop toolkits and resources for evaluating the environmental outcomes of policy implementation.

SKILLS

Communication	academic and technical writing, extension and outreach programming, stakeholder facilitation
Programmatic	grant writing, project management, proposal development
Technical	ArcGIS, Excel, 'git' (limited), 'Python', 'R'
Water Management and Science	statistical methods for water quality, TMDL development, water quality policy, watershed planning

EXPERIENCE

current	Research Specialist III, TEXAS A&M AGRILIFE RESEARCH AND EXTENSION SERVICE, Texas Water Resources Institute
2019	<ul style="list-style-type: none">▶ Collaborate with researchers to design, plan, conduct, and coordinate water focused research projects. Secured over \$1.6 million in extramural grants and contracts with project partners▶ Supervise and mentor graduate students and other technical or field staff involved in research.▶ Develop, evaluate, and apply research and statistical methods for water resources planning. Published over 10 technical reports, 2 journal articles (in review), and 2 software packages.▶ Conduct engagement, education, and extension activities. Provided 59 public presentations with over 967 contact hours.
2019	Research Associate, TEXAS A&M AGRILIFE RESEARCH AND EXTENSION SERVICE, Texas Water Resources Institute
2016	<ul style="list-style-type: none">▶ Facilitate stakeholder engagement and provide technical support for watershed planning efforts in collaboration with state agencies
2016	Research Associate, OAK RIDGE NATIONAL LAB, Environmental Sciences Division
2014	<ul style="list-style-type: none">▶ Developed relational database and methods to assess environmental mitigation at U.S. hydropower facilities.▶ Utilized statistical and geospatial methods to analyze movement and behavioral response data.▶ Published three peer-reviewed journal articles, two technical reports, and one conference presentation related to research findings.
2013	Graduate Research Assistant, UNIVERSITY OF DELAWARE, Center for Energy and Environmental Policy
2012	<ul style="list-style-type: none">▶ Responsible for interviews, data analysis, and developing policy recommendations in two policy analysis reports delivered to the state General Assembly.

EDUCATION

- 2013 Master of Energy and Environmental Policy, University of Delaware
- 2011 B.A. Environmental Studies, University of North Carolina - Wilmington
- 2004 B.S. Biology, University of North Carolina - Wilmington

SELECTED PEER-REVIEW PUBLICATIONS

1. Schramm MP, Bevelhimer MS, Scherelis C (2017) Effects of hydrokinetic turbine sound on the behavior of four species of fish within an experimental mesocosm. *Fisheries Research*, 190:1–14. DOI:10.1016/j.fishres.2017.01.012
2. Schramm MP, Bevelhimer MS, DeRolph CR (2016) A synthesis of environmental and recreational mitigation requirements at hydropower projects in the United States. *Environmental Science & Policy*, 61:87–96. DOI:10.1016/j.envsci.2016.03.019
3. Pracheil BM, DeRolph CR, Schramm MP, Bevelhimer MS (2016) A fish-eye view of riverine hydropower systems: The current understanding of the biological response to turbine passage. *Reviews in Fish Biology and Fisheries*, 26(2):153–167. DOI:10.1007/s11160-015-9416-8

SELECTED TECHNICAL REPORTS

1. Schramm M, Jha A (2020) Technical Support Document for Four Total Maximum Daily Loads for Indicator Bacteria in Neches River Tidal. URL: <https://www.tceq.texas.gov/assets/public/waterquality/tmdl/118nechestidal/118-nechestidal-bacteria-tsd-2020july.pdf>
2. Schramm MP, deVilleneuve S, Jain S, Berthold A, Mohandass U (2019) Carancahua Bay Watershed Protection Plan. URL: <https://twri.tamu.edu/publications/technical-reports/2019-technical-reports/tr-514/>
3. Schramm MP, Broad T, Arsuffi T (2018) *Escherichia Coli* and Dissolved Oxygen Trends in the Upper Llano River Watershed, Texas (2001-2016). URL: <https://twri.tamu.edu/media/1458/tr-511.pdf>

SOFTWARE

1. Schramm MP (2019) dartx: Drainage area ratio with correction factors. URL: <https://github.com/mps9506/dartx>
2. Schramm MP (2019) wd4tx: R interface for Texas Water Development Board water data. URL: <https://github.com/mps9506/wd4tx>
3. Schramm MP (2018) echor: Access EPA 'ECHO' data. URL: <https://CRAN.R-project.org/package=echor>
4. Schramm MP (2018) tbrf: Time-based rolling functions. URL: <https://CRAN.R-project.org/package=tbrf>