Michael Schramm

578 John Kimbrough Blvd · 2260 TAMU · College Station, TX 77843
mpschramm@gmail.com 910 232-3760 mps9506 | *Updated:* Jul. 17, 2020

Research Experience

2019 - current
Research Specialist III
Texas A&M AgriLife Research and Extension Service
Texas Water Resources Institute

2016 - 2019
Research Associate
Texas A&M AgriLife Research and Extension Service
Texas Water Resources Institute

2014 - 2016
Research Associate
Oak Ridge National Lab
Environmental Sciences Division

2012 - 2013
Graduate Research Assistant
University of Delaware
Center for Energy and Environmental Policy

Education

2011 - 2013
Master of Energy and Environmental Policy
University of Delaware
Newark, DE

2010 - 2011
B.A. Environmental Studies
University of North Carolina - Wilmington
Wilmington, NC

1999 - 2004
B.S. Biology
University of North Carolina - Wilmington
Wilmington, NC

Research Area

I work at the intersection of environmental science and policy. Our group works with state agencies and local stakeholders to facilitate planning for water quality protection. I provide technical expertise in the domains of stream discharge and pollutant load statistical modelling to support state efforts in the development of Total Maximum Daily Loads and associated efforts. My primary interest revolves around water (quality and conservation) policy and the effectiveness of policy implementation. I'm especially interested in leveraging open data and modern analytic tools to help us understand the links between environmental outcomes and policy implementation.

Skills

Data analysis, Environmental Policy, GIS, Grant Writing, Policy Analysis, `Python`, `R`, Reproducible Research, Stakeholder Facilitation, Water Quality Modeling and Assessment, Watershed Planning

Peer Reviewed Articles

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. DeRolph CR, Schramm MP, Bevelhimer MS (2016) Predicting environmental mitigation requirements for hydropower projects through the integration of biophysical and socio-political geographies. *Science of The Total Environment*, 566-567:888–918. DOI:10.1016/j.scitotenv.2016.05.099

3. 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

4. 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

5. Cutting RH, Cahoon LB, Flood JF, Horton L, Schramm MP (2011) Spill the beans: GoodGuide, Walmart and EPA use information as efficient, market-based environmental regulation. *Tulane Environmental Law Journal*, 24(291):45.

Technical Reports

1. Schramm MP, Jha A (2020) Technical Support Document for Two Total Maximum Daily Loads for Indicator Bacteria in Sandy Creek and Wolf Creek.:63. URL: https://www.tceq.texas.gov/assets/public/waterquality/tmdl/118sandywolfcreeks/118-sandy-wolf-tsd-2020june.pdf

2. Schramm MP, Jha A (2020) Technical Support Document for One Total Maximum Daily Load for Indicator Bacteria in Hillebrandt Bayou.:65. URL: https://www.tceq.texas.gov/assets/public/waterquality/tmdl/118hillebrandt/118-hillebrandt-tsd-2020june.pdf

3. 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/

4. Schramm MP, Berthold A, Entwistle C, Peddicord K (2018) Lavaca River Watershed Protection Plan. URL: https://twri.tamu.edu/media/1456/tr-507.pdf

5. Jain S, Ruff S, Schramm MP (2018) Technical Support Document for One Total Maximum Daily Load for Indicator Bacteria in Arenosa Creek. URL: https://www.tceq.texas.gov/assets/public/waterquality/tmdl/108arenosa/108-arenosa-tsd-final.pdf

6. 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

7. Schramm MP, Berthold A, Entwistle C (2017) Tres Palacios Creek Watershed Protection Plan. URL: https://twri.tamu.edu/media/1449/tr-500.pdf

8. Schramm MP (2017) Technical Support Document for Total Maximum Daily Loads for Indicator Bacteria in Aransas River Above Tidal and Poesta Creek. URL: https://www.tceq.texas.gov/assets/public/waterquality/tmdl/76copano/76-aransas-poesta-tsd.pdf

9. McManamay RA, Troia MJ, DeRolph CR, Bevelhimer MS, Schramm MP, Larson KB, Tagestad JD, Johnson GE, Jager HI (2015) Identifying Environmental Opportunities outside the Hydropower Project Boundary: An Updated Methodology of the Basin Scale Opportunity Assessment. DOI:10.13140/rg.2.1.3000.0482

Presentations

1. Schramm MP, Jain S, Kathuria D (2020) Can statistical models provide improved performance over DAR methods for estimating flow-duration curves and daily streamflows in ungauged catchments?Can.

2. Schramm MP (2019) Automating Retrieval of Wastewater Discharge Monitoring Reports with R.

3. Schramm MP (2019) Automating Retrieval of Wastewater Discharge Monitoring Reports with R.

4. Schramm MP, Bevilhimer MS, DeRolph CR (2015) Analysis of Required Environmental Mitigation at Licensed Hydropower Project Across the US.

5. DeRolph CR, Bevilhimer MS, Schramm MP (2015) Development of an Environmental Mitigation Database and Statistical Models for Predicting Likely FERC License Mitigation Requirements at Hydropower Projects.

Published 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) "tbrf": Time-Based Rolling Functions. DOI:10.5281/zenodo.3727319

4. Schramm MP (2018) "echor": Access EPA 'ECHO' Data. DOI:10.5281/zenodo.3635017

Published Datasets

1. Bevelhimer MS, Schramm MP, DeRolph CR (2015) US Maps of Non-Federal Hydropower Water Quality Requirements. URL: nhaap.ornl.gov/environmental-mitigation

2. Bevelhimer MS, Schramm MP, DeRolph CR (2015) US Maps of Non-Federal Hydropower Mitigation Data. URL: nhaap.ornl.gov/environmental-mitigation

3. Bevelhimer MS, Schramm MP, DeRolph CR (2015) Non-Federal Hydropower Mitigation Database. URL: nhaap.ornl.gov/environmental-mitigation

Grants and Projects

2018 - current *Section 319 Nonpoint Source Grant*: Lavaca River Watershed Protection Plan (WPP) - Coordination, Implementation and Routine Water Quality. Amount: $150,000. - Role: Grant Writer, PI: Allen Berthold

2018 - current *Section 319 Nonpoint Source Grant*: Tres Palacios On-Site Sewage Facilities Remediation. Amount: $327,361. - Role: Grant Writer, PI: Allen Berthold

2018 - current *Section 319 Nonpoint Source Grant*: Tres Palacios WPP implementation. Amount: $355,800. - Role: Grant Writer, PI: Allen Berthold

2019 - 2020 *Texas Commission On Environmental Quality TMDL Program*: Basins Approach to Address Bacterial Impairments in the Lower Neches Basin (FY20). Amount: $135,790. - Role: Project Manager, PI: Lucas Gregory

2019 - 2020 *Texas Commission On Environmental Quality TMDL Program*: Basins Approach to Address Bacterial Impairments in Basins 15, 16, 17 (FY20). Amount: $51,888. - Role: Project Manager, PI: Allen Berthold

2018 - 2019 *Texas Commission On Environmental Quality TMDL Program*: Basins Approach to Address Bacterial Impairments in Basins 15, 16, 17 (FY19). Amount: $97,399. - Role: Project Manager, PI: Allen Berthold

2018 - 2019 *Texas Commission On Environmental Quality TMDL Program*: Basins Approach to Address Bacterial Impairments in the Lower Neches Basin (FY19). Amount: $139,343. - Role: Project Manager, PI: Lucas Gregory

2017 - 2019 *Texas General Land Office Coastal Management Program*: Mission and Aransas Rivers TMDL I-Plan implementation. Amount: $83,979. - Role: Grant Writer, PI: Allen Berthold

2017 - 2019 *Texas General Land Office Coastal Management Program*: Coordinating Implementation of the Tres Palacios Watershed Protection Plan. Amount: $95,816. - Role: Grant Writer, PI: Allen Berthold

2017 - 2018 *Texas Commission On Environmental Quality TMDL Program*: Basins Approach to Address Bacterial Impairments in Basins 15, 16, 17 (FY18). Amount: $220,166. - Role: Project Manager, PI: Allen Berthold

2016 - 2017 *Texas Commission On Environmental Quality TMDL Program*: Basins Approach to Address Bacterial Impairments in Basins 15, 16, 17 (FY17). Amount: $292,699. - Role: Project Manager, PI: Allen Berthold

2015 - 2017 *Texas State Soil and Water Conservation Board*: Coordinating Implementation of the Upper Llano Watershed Protection Plan. Amount: $347,493. - Role: Project Manager, Co-PIs: Tom Arsuffi, Kevin Wagner

Awards and Honors

Center for Energy and Environmental Policy Leadership Award

North Carolina Department of Transportation Environmental Service Scholarship

Service

Review committees

2018 - current: Texas Hill Country Headwaters Conservation Initiative Regional Conservation Partnership Program

2017 - current: TWRI Mills Scholarship Program

2017 - current: USGS Graduate Research Program

2019 - 2019: Texas A&M AgriLife, Texas A&M AgriLife Extension, and Texas A&M Engineering Station Water Seed Grant Initiative

Peer review

Water, Sustainability, R Journal