LILLIAN M. MCGILL

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EDUCATION

Ph.D. University of Washington, Seattle, Washington *September 2016 – Present*
Quantitative Ecology and Resource Management
Advisors: Co-advised by Drs. E. Ashley Steel and Gordon Holtgrieve

B.S. University of Notre Dame, Notre Dame, Indiana *August 2012 – May 2016*
Environmental Science, Applied and Computational Mathematics and Statistics, Minor in Glynn Family Honors Program
Honors Thesis: Use of an ecosystem based model to evaluate the effects of nonnative Pacific salmon spawning on stream resident fish contaminant loads in the Great Lakes Basin.
Advisors: Co-advised by Drs. Gary Lamberti and Dominic Chaloner

PUBLICATIONS

1. **L.M McGill**, J.R. Brooks, E.A Steel. In Press. Spatiotemporal dynamics of water sources in a mountain river basin inferred through δ^2H and $\delta^{18}O$ of water. *Hydrological Processes*.
2. **L.M McGill,** E.A Steel, J.R. Brooks, A.H. Fullerton, R.T. Edwards. 2020. Elevation and spatial structure explain most surface-water isotopic variation across five Pacific Coast basins. *Journal of Hydrology*. *583: 124610.*
3. N. Weber, B. Gerig, **L.M McGill,** D.T. Chaloner, G.A. Lamberti. 2018. Interactive effects of introduced Pacific salmon and brown trout on native brook trout: an experimental and modeling approach. *Canadian Journal of Fisheries and Aquatic Sciences. 75(4): 538-548.*
4. **L.M McGill,** B. Gerig, D.T. Chaloner, G.A. Lamberti. 2017. An ecosystem model for evaluating the effects of introduced Pacific salmon on contaminant burdens of stream-resident fish. *Ecological Modelling 355: 39–48.*

FELLOWSHIPS

- 2018-23: National Science Foundation Graduate Research Fellowship (3 years graduate tuition + stipend)
- 2017-18: Northwest Climate Science Center Actionable Science Fellowship (1 year graduate tuition + stipend)
- 2016-17: UW QERM First Year Fellowship (3 quarters graduate tuition + stipend)

AWARDS & PROGRAMS

- 2019-Present: Stream Resiliency Research Coordination Network Member
- 2019: National Science Foundation Graduate Research Internship Program ($5,000)
- 2019: University of Utah Isotopes in Spatial Systems Short Course Participant
- 2018: UW College of the Environment Student Organized Meeting Fund Award to support WaterHackWeek ($1,500)
- 2018: Society for Freshwater Science Best Presentation Emphasizing Methodology ($250)
- 2016-Present: Annual Conference Travel Award

PRESENTATIONS (* poster presentation, Φ invited presentation)

ΦL.M McGill, E.A. Steel, J.R. Brooks. The spatial and temporal dynamics of water sources across the Snoqualmie River: a stable isotope approach. Snoqualmie Science Coordination and Advisory Team Meeting. *April 2020.*

***L.M McGill,** E.A. Steel, J.R. Brooks, A. Fullerton. The spatial and temporal dynamics of water sources across the Snoqualmie River: a stable isotope approach. American Geophysical Union. *December 2019.*

***L.M McGill,** E.A. Steel, J.R. Brooks, A. Fullerton. Examining spatial patterns of water stable isotopes across multiple river basins. Graduate Climate Conference. *November 2018*.

L.M McGill, E.A. Steel, J.R. Brooks, A. Fullerton. Examining spatial patterns of water stable isotopes across multiple river basins. Society for Freshwater Science Annual Conference. *May 2018*.

L.M McGill, E.A. Steel, J.R. Brooks, A. Fullerton. Where does the water come from? Examining spatial patterns of water stable isotopes across multiple river basins. Salish Sea Ecosystem Conference. *April 2018*.

L.M McGill, B. Gerig, D.T. Chaloner, and G. A. Lamberti. Use of an ecosystem model for evaluating the effects of introduced Pacific salmon on contaminant burdens of stream-resident fish. Notre Dame College of Science-Joint Annual Meeting. *April 2016*.

***L.M McGill,** B. Gerig, D.T. Chaloner, and G. A. Lamberti. Use of an ecosystem-based model to evaluate the effects of non-native Pacific salmon spawning on stream-resident fish in the Great Lakes. Midwest Fish and Wildlife Conference. *January 2016*.

L.M McGill, H. Zhang, E. Rutherford, and D. Mason. Forecasting food web dynamics in Lake Erie: Development of the Atlantis Ecosystem Model. CILER Summer Fellowship Presentation. *August 2015*.

***L.M McGill,** B. Gerig, D.T. Chaloner, and G. A. Lamberti. Use of an ecosystem-based model to evaluate the effects of non-native Pacific salmon spawning on stream-resident fish in the Great Lakes. Notre Dame College of Science-Joint Annual Meeting. *April 2015*.

RESEARCH EXPERIENCE

Research Associate, Duke University, *June - September 2016*

- Aided graduate students and faculty of the Bernhardt Laboratory in the collection, processing, cleaning, and analysis of sensor and chemistry data to assess how various urban development patterns influence stream flow and water quality.

CILER Great Lakes Summer Fellow, NOAA Great Lakes Environmental Research Lab, *May - August 2015*

- Completed the initialization, parameterization, and calibration of an Atlantis Ecosystem Model of Lake Erie to assess potential effects of invading Asian Carp under various nutrient-loading scenarios.

Summer Undergraduate Research Fellow, University of Notre Dame, *May – August 2014*

- Conducted field sampling and built a food web model using the software Ecopath with Ecosim to assess biotransport of PCB, PBDE, DDE, and THg to Midwestern stream systems due to Pacific salmon spawning.
- Aided in a laboratory experiment comparing growth rates, contaminant concentrations, and C and N isotope ratios of brook and brown trout in the presence and absence of salmon material.

Undergraduate Researcher, University of Notre Dame, *February 2014 - May 2016*

- Worked in the Lamberti Stream and Wetland Ecology Laboratory to conduct independent research assessing effects of salmon spawning on brook and brown trout in Midwestern streams.

WORK EXPERIENCE

Communications Fellow, JRS Biodiversity Foundation, *February 2017 – April 2018*

- Maintained the JRS Biodiversity media presence, including Facebook, Twitter, and website.

TA for Applied Linear Algebra, University of Notre Dame, *August - December 2015*

- Graded homework and tests and held office hours every week to answer student questions regarding the material.

TA for Biostatistics, University of Notre Dame, *January - May 2015*

- Collaborated with a team of graduate and undergraduate teaching assistants to prepare tutorials, answer questions during tutorial sessions, and grade assignments covering a broad range of biological statistics topics.

Environmental Consulting Intern, Holzmacher, McLendon, and Murrell (H2M), *May - August 2013*

- Conducted indoor and outdoor air sampling for mold and asbestos.
- Drafted recommendation reports to be submitted to clients and insurance companies.

LEADERSHIP & VOLUNTEER EXPERIENCE

- Member of the Future of Instream Flows in Washington State Science Panel, *January-June 2021*
- Member of the Quantitative Ecology and Resource Management Executive Committee, *June 2019-September 2020*
- UW WaterHackWeek Student Director, *June 2018-2019*
- Member of the Snoqualmie Science Coordination and Advisory Team, *June 2017-Present*
- UW Freshwater Initiative Student Steering Committee member, *September 2017-2020*
- Volunteer writing mentor for UW NSF GRFP Workshop, *September 2018, 2020*
- Volunteer with UW Students Exploring Aquatic Sciences, *September 2017- Present*
- Volunteer with Sierra Club Inspiring Connections Outdoors, *September 2016-Present*