

KERI BRYAN WATSON

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Education

The University of Vermont

Ph.D, Natural Resources, The Rubenstein School of Environment & Natural Resources (2017)
Graduate certificate, Ecological Economics, Gund Institute for Ecological Economics (2016)

Sewanee: The University of the South

Bachelor of Science, Environmental Studies: Ecology & Biodiversity, *summa cum laude*
Minor in Geology
Honors: Phi Beta Kappa, Honors and Distinction in Biology

Positions

Assistant Professor of Earth and Environmental Systems. University of the South. *2018-present*

Graduate Research Assistant. Rubenstein School of Environment & Natural Resources, Gund Institute for Ecological Economics. *2013-2017*

Graduate Teaching Assistant. Rubenstein School of Environment & Natural Resources. *2013-2015*

Post-Baccalaureate Fellow. Sewanee Environmental Institute. *2012-2013*

National Science Foundation REU Fellow. University of Alaska Southeast. *2011*

Peer Reviewed Publications

- K.B. Watson**, G. Galford, L. Sonter, I. Koh, and T.H. Ricketts. (In Review). The impact of beneficiary demand the human well-being and biodiversity outcomes of ecosystem service conservation. *Conservation Biology*.
- L.J. Sonter, J. Gourevitch, I. Koh, C.C. Nicholson, L.L. Richardson, A.J. Schwartz, N.K. Singh, **K.B. Watson**, M. Maron, T.H. Ricketts. (2018). Biodiversity offsets may miss opportunities to mitigate impacts on ecosystem services. *Frontiers in Ecology and the Environment*, 16(3), 143-148.
- L.J. Sonter, J.A. Johnson, C.C. Nicholson, L.L. Richardson, **K.B. Watson**, T.H. Ricketts. (2017). Multi-site interactions: the offsite impacts of land use change on the use and supply of ecosystem services. *Ecosystem Services*, 23, 158-164.
- T.H. Ricketts, **K.B. Watson**, I. Koh, A.M. Ellis, C.C. Nicholson, S. Posner, L.L. Richardson, L.J. Sonter. (2016). Disaggregating the evidence linking biodiversity and ecosystem services. *Nature Communications*, 7, 13106.
- L.J. Sonter, **K.B. Watson**, S.A. Wood, T. Ricketts. (2016). Spatial and temporal dynamics of the nature-based recreation ecosystem services provided by conserved land in Vermont, USA. *Plos One*, 11(9), e0162372.
- K.B. Watson**, T.H. Ricketts, G. Galford, S. Polasky, J. O'Niel-Dunne (2016). Quantifying flood mitigation services: The economic value of Otter Creek wetlands and floodplains to Middlebury, VT. *Ecological Economics*, 130, 16-24.
- E.M. Keen, **K.B. Watson**, K.M. Qualls, R.M. Keen (2016). A handheld rangefinder for seabird surveys in confined channels. *Marine Ornithology*.

White Paper Publications

J. Roman and J. Erickson. The Economics of Conservation in Vermont (2014).
- Section Author: Return on Investment of Conservation in Vermont.

Presentations

Role of Wetlands and Floodplains in Reducing Flood Risk.

Sewanee Water Lecture Series, University of the South. Sewanee, TN. February 2018.

Conserving Biodiversity and Ecosystem Services in Vermont, USA.

Ph.D. Dissertation Defense, University of Vermont. Burlington, VT. August 2017.

Balancing Biodiversity and Ecosystem Services in Vermont.

Gund Institute, University of Vermont. Burlington, VT. April 2017.

Spatial dynamics of biodiversity and ecosystem services in Vermont, USA.

Open Science Meeting of the Global Land Project. Beijing, China. October 2016.

Accounting for Beneficiaries in Flood Mitigation Services.

Linking supply to benefit in ecosystem service models, Scenarios Services and Society Research Coordination Network. Burlington, Vt., May 2016

Wetlands and Floodplains as Green Infrastructure.

Green Stormwater Infrastructure Symposium. Burlington, Vt., March 2016.

Economic valuation of flood mitigation services provided by the Otter Creek wetlands.

North American Congress on Conservation Biology. Missoula, Montana, July 2014. (poster)

Economic Valuation of Flood Mitigation Services.

A Community on Ecosystem Services. Washington D.C., December 2014.

Valuing Ecosystem Services in Vermont: Flood Mitigation and the Otter Creek Wetlands.

Gund Tea presentation series. Burlington, VT, March 2014.

Annual Meeting of the Vermont Upper Valley Land Trust.

White River Junction, VT., February 2014.

Vermont Agency of Natural Resources Summit Land Conservation and Flood Resilience.

Randolph, VT., November 2013.

The effect of exurban development on land snail abundance and diversity in Sewanee, TN.

Association of Southeastern Biologists. Huntsville, Alabama, April 2011.

The effect of photochemical degradation on D.O.C in freshwater streams in Southeast Alaska

American Geophysical Union. San Francisco, California, December, 2011. (poster presentation)

Collaborative Research Networks

Earth Observation and Ecosystem Services. (2018)

NASA funded research network bringing together 20 leaders in earth observations and ecosystem services for a series of three workshops.

Scenarios, Services & Society Research Coordination Network. (2015-2017)

Research network focused on land cover impacts on ecosystem services across New England.

Funded by a grant from the National Science Foundation to Harvard Forest, Harvard

University. Participated and contributed to scenario development process through a series of four workshops.

Teaching

Instructor:

- Introduction to Environmental Studies. University of the South. (2018)
- Watershed Science Capstone. University of the South. (2018)
- Environment and Sustainability Colloquium. University of the South. (2018)
- Biodiversity. University of Vermont. (2016)

Teaching Assistantships:

- Introduction to Environmental Studies. University of Vermont. (2013, 2014)
- Nature and Culture. University of Vermont. (2014)

Guest Lectures:

- Environmental Arts and Humanities Seminar. University of the South. (2018)
- Readings in Environmental Sciences. University of the South. (2018)
- Landscape Ecology. University of Vermont. (2015)
- Sustainable Landscape Stewards. Lake Champlain Sea Grant Program. (2014)

Training:

- University Teaching course. University of Vermont. (2016)
- Workshop: Teaching Science Writing. University of Vermont. (2016)
- Teaching track within the Ph.D. in Natural Resources. University of Vermont.

Service

Reviewer:

- Environment, Development and Sustainability
- Ecology and Society

Trainings and Professional Development

- Spatial Analysis in R – Gund Institute on Environment (2016)
- Communicating Science – Alan Alda Center for Communicating Science, (2016)
- Ecosystem service science in decision making, InVest ecosystem service tools: Natural Capital Project Symposium (2014, 2016)
- Science Communications – Compass (2014)
- Stakeholder Facilitation – Consensus Building Institute (2013)
- Land Use and Land Cover Change Modeling – University of Vermont (2013)

Skills

- Geographic Information Systems analysis - ArcGIS
- Data analysis, visualization, and spatial modeling - R Statistical Computing Software
- Ecosystem Service Modeling – InVest, R
- Land Cover Change modeling - Dinamica EGO
- Stakeholder facilitation and scenario development