

Cailin Huyck Orr, Ph.D.
Curriculum Vitae, February 2015

Science Education Resource Center
Carleton College
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EDUCATION

- | | | |
|------|-------|---|
| 2005 | Ph.D. | UNIVERSITY OF WISCONSIN - Madison, WI
Limnology and Marine Science |
| 2002 | M.S. | UNIVERSITY OF WISCONSIN - Madison, WI
Limnology and Marine Science |
| 1996 | B.A. | CARLETON COLLEGE, Northfield, MN
Biology |

PROFESSIONAL APPOINTMENTS

- | | |
|--------------------------------------|--|
| Assistant Director
2014 - Current | Science Education Resource Center
CARLETON COLLEGE, Northfield MN |
| Adjunct Faculty
2014 - Current | WASHINGTON STATE UNIVERSITY, Pullman WA
School of the Environment |
| Assistant Professor
2009-2014 | WASHINGTON STATE UNIVERSITY, Pullman WA
School of the Environment |
| Post-doctoral Associate
2006-2008 | National Center for Earth-Surface Dynamics
UNIVERSITY OF MINNESOTA
St. Anthony Falls Laboratory, Minneapolis, MN |
| Post-doctoral Fellow
2005-2006 | UNIVERSITY OF NORTH CAROLINA, Chapel Hill NC
Department of Geography |

PUBLICATIONS

Journal articles [†]student co-author

Orr C.H, K.I. Predick, E.H. Stanley and K.L. Rogers. 2014. Spatial variability of denitrification and associated soil properties on a restored and a natural floodplain. *Wetlands* 34:89-100.

[†]Kelley, C.J., C. Keller, R.D. Evans, C.H. Orr, J.L. Smith, and B.A. Harlow. 2013

- Nitrate-nitrogen and oxygen isotope ratios for identification of nitrate sources and dominant nitrogen cycle processes in a tile-drained dryland agricultural field. *Soil Biology and Biochemistry* 57:731-738.
- ⁺Singh, A, J. Marr, C. Hill, S. Johnson, C. Ellis, J. Mullin, C.H. Orr, P. Wilcock, M. Hondzo, C. Paola, E. Foufoula-Georgiou. 2012 StreaLab: Overview of experiments, instrumentation, and data collected. *Water Resources Research* 49:1746-1752..
- Orr, C.H. J.J. Clark, P.R. Wilcock, M.W. Doyle. 2009. Impact of channel geometry and algae growth on hyporheic exchange and nutrient uptake : Insights from a field-scale flume. *JGR Biogeosciences* 114, G02019, doi:10.1029/2008JG000825.
- Wilcock, P.R, C.H. Orr, J. Marr. 2008. Particles, solutes, and life in flowing water: a large-scale multidisciplinary experiment at St Anthony Falls Laboratory. *EOS* 89(1): 6.
- Orr, C.H., S.J. Kroiss, K.L. Rogers and E.H. Stanley. 2008. Response of benthic sediments and metabolism to dam removal in a small Wisconsin stream. *River Research and Applications* 24(6): 804.
- ⁺Riggsbee, J.A, C.H. Orr, J.C. Julian, D.A. Leech, M.W. Doyle, and R.G. Wetzel. 2008. Suspended sediment, carbon and nitrogen fluxes and transformations during the dewatering of a low-head impoundment. *Journal of Geophysical Research – Biogeosciences* doi:10.1029/2007JG000654
- Orr, C.H., E.H. Stanley, K.A. Wilson, and J.C. Finlay. 2007. Changes in denitrification following reintroduction of flooding to a leveed Midwestern floodplain. *Ecological Applications* 17: 2365–2376.
- Stanley, E.H., M.J. Catalano, N. Mercado-Silva and C.H. Orr. 2007. Implications of small dam removal for distribution of non-native trout in Central Wisconsin. *River Research and Applications* 23:792-798.
- Orr, C.H., K.L. Rogers, and E.H. Stanley. 2006. Phosphorus uptake and channel geometry following small dam removal. *Journal of the North American Benthological Society* 25:556-568.
- Orr, C.H. and E.H. Stanley. 2006. Vegetation development and restoration potential of drained reservoirs following dam removal in Wisconsin. *River Research and Application* 22:281-295.
- Doyle, M.W., E.H. Stanley, C.H. Orr, A.R. Selle, and J.M. Harbor. 2005. Fluvial geomorphic controls on stream ecosystem processes: Lessons from the heartland of small dam removals. *Geomorphology* 71: 227-244.

Orr, C.H. and B.M Roth, J.D. Gonzales, K.J. Forshay, M.M. Papenfus, and R.D.G. Wassell. 2004. An Examination of Physical and Regulatory Variables Leading to Small Dam Removal in Wisconsin. *Environmental Management* 33(1):99-109.

Overdevest, C., C.H. Orr and C. Stepenuk. 2004. Volunteer stream monitoring and local participation in natural resource issues. *Human Ecology Review* 11(2):177-185.

Articles in active preparation

⁺Kelley, C.J., C.K. Keller, J.L. Smith, E. Brooks, C.H. Orr, and R.D. Evans. Seasonal and long-term trends of water and NO₃⁻ from a dryland agroecosystem headwater catchment. Intended for *Journal of Hydrology*.

⁺Kelley, C.J., C.K. Keller, E. Brooks, C.H. Orr, R.D. Evans and J.L. Smith. Water and leaching from a subsurface artificial drain during storm-events are controlled by the seasonal evolution of preferential flow and transport. Intended for *Soil Science Society of America*.

⁺Parzych, J., C.H. Orr and A. K. Fremier. Hyporheic exchange variability with restoration and implications for nutrient transport and retention. Intended for *Journal of the Society for Freshwater Science*.

Hardesty, L.H., S. Canwell, C.H.Orr, ⁺B. Clement. Guidelines for Controlling Reed Canarygrass (*Phalaris arundinacea* L.) in the Pacific Northwest. WSU extension publication.

Other publications and reports

Research in Landscape Sustainability: Earth-surface processes in the SEES context. GLD Science, Engineering, and Education for Sustainability workshop group*, October 2011. https://netfiles.umn.edu/xythoswfs/webui/_xy-19935902_1-t_cLewUwlG

An Assessment of the Most Suitable Water Levels for Osoyoos Lake. 2010. M. Barber, M. Beutel, W. Helander, B. Moore, C. H. Orr, L. Tran, and K. Rajagopalan. Report prepared for Washington State Department of Ecology.

Effects of Zosel Dam Water Regulation on Osoyoos Lake Water Quality. 2010. M. Barber, M. Beutel, W. Helander, B. Moore, C. H. Orr, L. Tran, and K. Rajagopalan. Report prepared for Washington State Department of Ecology.

An Investigation of Methods for Including Ecosystem Requirements in Orders of Approval. 2010. M. Barber, M. Beutel, W. Helander, B. Moore, C. H. Orr, L. Tran, and K. Rajagopalan. Report prepared for Washington State Department of Ecology.

Orr, C.H., A.F. Lightbody. 2009. *Stream Restoration Research in the Outdoor*

StreamLab, a New Facility at the University of Minnesota. Ecological Restoration 27:394-396.

Lightbody, A.F., P. Belmont, J. Marr, C.H. Orr, C. Paola. 2009. Determination of appropriate metric(s) for sediment-related total maximum daily loads (TMDLs). Report to the Minnesota Water Research Center.

Orr, C.H., S. Koenig. 2006. Contribution of seed-bank and planting to vegetation re-colonization following dam removal. Ecological Restoration 24:79-86.

Orr, C.H. 2005. Review of ecological response in recent river restorations. Ecological Engineering Technical Notes 2:12-19.

Orr, C. 2001. Review: Dams and Development: A New Framework for Decision-Making: The report of the world commission on dams. Environmental Practice 3(3):191-912.

COURSES TAUGHT

Conservation Biology	BIES 226
Oceanography	GEO 230
Introduction to Earth Systems Science	ENVR_SCI 275
Sustainable Watersheds and Communities	ENVR_SCI 290
Limnology	ZOO 315/316
Ecosystem Ecology & Global Change	BIO & ENVR_SCI 469/569
Stream Ecology	ENVR_SCI 491
Nitrogen Cycling in Earth's Systems (team taught)	SOIL/BIO/ENVR/GEO 544
Undergraduate and Graduate Seminars	ENVR_SCI and GEO

STUDENTS ADVISED

Undergraduate projects at WSU

Camden Nix	Environmental Science independent research “ In-stream cold-season denitrification in a semi-arid Palouse stream”.
Skuyler Herzog	Honors College distinction 2011. Thesis supported by WSU College of Science Undergraduate Mini-grant and Auvil Foundation grant: “Determining potential for nitrate pollution removal by streams in a semi-arid watershed”.
Elizabeth Aultman	Research intern with US EPA 2010. Thesis: “Review of methods for groundwater nitrate pollution mitigation”.
Emily Gibson	Research intern with USDA 2013. Western Regional Plant Introduction Station. Germination study of <i>Carthamus tinctorus</i> .

Multicultural Summer Research Program at the University of Minnesota

Alyxis Feltus	Fond du Lac Tribal and Community College 2006
Jordan Theissen,	Lawrence University 2007

Graduate advisees at WSU

Joe Parzych	MS Environmental Science, <i>in progress</i> . Thesis: “Impact of stream restoration on nutrient retention in a salmon-bearing stream.”
Leif Moon Neilsen	MS Environmental Science 2013. Thesis: “Using stable isotopes to determine source and fate of nitrate in the semi-arid Palouse River watershed”.
Julia Schwarz	MS Geology, 2013. Thesis “Magnitude and timing of nitrate export in a semi-arid dryland agricultural watershed”.
Brooke Clement	MS Environmental Science, 2012. Thesis: “Response of Reed Canary Grass to restoration methods in Eastern Washington”.
Katherine Tillotson	MS Environmental Science, 2010. “Restoration plan and curriculum for Palouse River restoration in Pullman, WA”.
Eric Brynstad	MS Environmental Science, 2010. “Teaching a ‘Middle Path’ to at-risk youth: Ecology education as cultural criticism”.
David Egerton	MS Environmental Science, 2010. “Water temperature mitigation at the Pend Oreille Mine, Metaline Falls, WA”.

INVITED SEMINARS

Central Washington University – Geology department	2013
Washington State University – Civil and Environ. Engineering	2013
InTeGrate NSF Step Geoscience workshop Northfield, MN	2012
University of Idaho - IWRRI Water Resources Seminar	2011
Osoyoos Lake Water Science Forum, Osoyoos, B.C.	2011
Washington State University – Soil Science department	2011
Eastern Washington University – Biological Sciences	2009
WSU Vancouver – School of Earth and Environmental Sci.	2009
Washington State University, Civil & Environ. Engineering	2009
University of Wisconsin-Madison, Soil Science department	2007
Virginia Commonwealth University, Biology department	2007
University of Nevada – Reno, Hydrology colloquium	2006
Lawrence University, Science Hall colloquium	2006
University of Wisconsin-Madison, Botany department	2003
Carleton College, Environmental Studies program	2002

GUEST LECTURES

Washington State University, LA Rocky Mountains course	2012-13
Washington State University, Climate Change course	2010-12
Washington State University, Earth and Environment course	2009
Washington State University, Oceanography course	2009/12
Washington State University, Landscape Architecture course	2009 -12
University of Idaho, Stream Ecology course	2009

University of Minnesota, Ecology and Society course	2007
St. Olaf College, Ecological Principles course	2007
University of Minnesota, Stream Restoration certificate program	2006 - 08
University of Wisconsin-Madison, Limnology course	2004
Carleton College, Aquatic biology course	2002
Carleton College, Geomorphology course	2002

SELECT PRESENTATIONS *invited +student co-author

- Orr, C.H., E. Iverson, D. McConnell, and C.M. Manduca. 2014. The challenge and opportunity of engaged teaching at research universities. Geological Society of America annual meeting. Vancouver, B.C. Canada.
- Orr, C.H., Keller, C.K., +Kelley, C.J., +Moon-Neilsen, L, +Martin R.A. 2014. Do greenhouse gases evaded from an agricultural stream have a terrestrial source? Joint Aquatic Science Meeting. Portland, OR.
- *Orr, C.H., J. Adam, A. Beall. 2013. Improving future water use planning in the Columbia River Basin by linking interdisciplinary earth system modeling with collaborative stakeholder modeling. Society for Freshwater Science, Jacksonville, FL
- Orr, C.H., L. +Moon-Neilsen, +J. Schwarz, +C.J. Kelley. C.K. Keller. 2013. Seasonality in flux of nitrogen to streams and atmosphere in a semi-arid and dryland agriculture dominated watershed. Ecological Society of America, Minneapolis, MN
- Orr, C.H., J. Adam, A. Beall, M. Barber and +T. Nguyen. 2012. Using Linked Models to Study Interactions Between Water Use Decisions and Climate Change-Driven Watershed Processes in the Pacific Northwest Region. American Geophysical Union. San Francisco, CA.
- +Moon-Nielsen, L. and C.H. Orr 2012. The spatiotemporal coupled measurement of CO₂, CH₄, and N₂O in a semi-arid agricultural stream and the importance of intra-stream studies. American Geophysical Union. San Francisco, CA.
- +Kelley, C.J., C.K. Keller, E. Brooks, J.L. Smith, C.H. Orr, and R.D. Evans. 2012 Nitrate transport and fluxes during storm-event discharge from a 12 ha tile-drained dryland agricultural field American Geophysical Union. San Francisco, CA.
- Orr, C.H. and +K. Tillotson 2012. Using Case Studies to Teach Interdisciplinary Water Resource Sustainability. American Geophysical Union. San Francisco, CA.
- +Moon-Nielsen, L. and C.H. Orr 2012. Improving estimates of in-stream nitrogen transformations by applying spatiotemporal variability in a semi-arid agricultural stream. Ecological Society of America, Portland, OR.

- ⁺Tran, L., K. Rajagopalan, M. Barber, M. Beutel and C.H. Orr 2011 “An Assessment of Water Levels for Osoyoos Lake during Drought Years,” Osoyoos Lake Water Science Forum: Shared Water, Shared Future, Oral Presentation, Osoyoos, BC, CA.
- Orr, C.H., ⁺L. Tran, ⁺K. Rajagopalan, W. Helander, M. Barber, and M. Beutel 2011 “Investigating Methods for including Ecosystem Requirements in Orders of Approval,” Osoyoos Lake Water Science Forum: Shared Water, Shared Future, Oral Presentation, Osoyoos, BC, CA.
- ⁺Kelley, C.J., C.K. Keller, R.D. Evans, C.H. Orr, and J.L. Smith. 2011. Using NO₃-N and NO₃-O isotope ratios to identify nitrogen sources and cycling in the Palouse Basin. 8th Washington Hydrogeology Symposium, Tacoma, WA.
- *Orr, C.H., J.D. Schade and S.A. Thomas. 2010. Determining the potential contribution of hyporheic flow to nitrogen and phosphorus retention in streams in a northern California watershed. H24C American Geophysical Union, San Francisco, CA.
- ⁺Moon-Nielsen, L. and C.H. Orr. 2010. Seasonal Variation in Hydrology driving shifts in Sources of Nitrate in an Agricultural Dominant Semi-arid watershed. H41E-1126 (Poster) American Geophysical Union, San Francisco, CA.
- ⁺Kelley, C.J., C.K. Keller, R.D. Evans, C.H. Orr, and J.L. Smith. Using nitrate N and O isotope ratios to identify nitrate sources and dominant nitrogen cycling processes in a 12 ha tile drained dryland agricultural field in the Palouse Basin of the Eastern Washington State. H41E-1127 (Poster) American Geophysical Union, San Francisco, CA.
- Orr, C.H. and C.M. Cooper. 2010. Geology 201: Non-linear processes in geofluids or Why does the Earth look the way it does? ED21A-0655 (Poster) American Geophysical Union, San Francisco, CA.
- *Orr, C.H. 2010. Using Physical-Biogeochemical Linkages to Understand Fluvial Nutrient Processing at the Terrestrial Aquatic Interface. Symposium. Ecological Society of America, Pittsburgh, PA.
- Orr, C.H., K.I. Predick, and E.H. Stanley. 2009. Spatial autocorrelation of denitrification and associated soil properties in a restored and a natural floodplain (Poster). American Geophysical Union, San Francisco, CA.
- Orr, C.H., A.F. Lightbody, and R. Bronk. 2009. Determination of the short-term response of aquatic macroinvertebrate communities to suspended sediment loading. North American Benthological Society, Grand Rapids, MI.
- Orr, C.H., and J.C. Finlay. 2008. Variability in hyporheic exchange and biogeochemical

- activity: Implications for benthic nutrient retention. (Poster). North American Benthological Society, Salt Lake City, UT.
- Orr, C.H., Clark, J.J., P. R. Wilcock, and J.C. Finlay. 2007. Impact of channel geometry and periphyton growth on nutrient uptake and location of biogeochemical hotspots: Insights from a field-scale flume. Ecological Society of America, San Jose, CA.
- Orr, C.H., Clark, J.J., P. R. Wilcock, M.W. Doyle and J.C. Finlay. 2006. Impact of variable bed morphology on transient storage, hyporheic exchange and nutrient uptake in a field-scale flume. (Poster). American Geophysical Union, San Francisco, CA.
- Orr, C.H., J.A. Riggsbee, D.M. Leech, and M. W. Doyle. 2006. Role of light in carbon release and iron sorption during simulated river sediment transport events. Ecological Society of America, Memphis, TN.
- *Orr, C.H. and E.H. Stanley. 2005. Hydrologic Alteration and Response of Ecosystem Functions to River Restoration. In session: Scales of River Restoration and Ecosystem Response. American Geophysical Union, San Francisco, CA.
- Orr, C.H., K.L. Rogers, and E.H. Stanley. 2005. Restorations as experiments linking geomorphology and nutrient retention in streams (Poster). 36th Binghamton Geomorphology Symposium, Buffalo, NY.
- Orr, C.H. and E.H. Stanley. 2005. Flow regime, ecosystem function and the 'field of dreams' in river restoration. In session: Linking the practice of stream restoration with the science of stream ecology Ecological Society of America/INTECOL. Montréal, Quebec.
- Orr, C.H., E.H. Stanley, K.A. Wilson, and J.C. Finlay. 2005. Reintroduction of flooding and change in denitrification rates on a leveed Midwestern floodplain. NABS/AGU Joint Assembly meeting. New Orleans, Louisiana.
- Orr, C.H., E.H. Stanley, K.A. Wilson, and J.C. Finlay. 2004. Changes in denitrification following reintroduction of flooding to a leveed Midwestern floodplain. Ecological Society of America. Portland, Oregon.
- Orr, C.H., K.L. Rogers, N.R. Lottig, and E.H. Stanley. 2004. Phosphorus uptake, channel geometry, and sediment size before and after small dam removal in Boulder Creek, Wisconsin. North American Benthological Society, Vancouver, British Columbia.
- Orr, C.H., Stanley, E.H., G.C. Cumming, M.W. Doyle, and H.A. Livingston. 2003. Geographic and temporal analysis of dam construction and removal in the State of Wisconsin. North American Benthological Society, Athens, Georgia.

Orr, C.H., E.H. Stanley. 2002. Vegetation succession on former impoundments during the first 46 years following dam removal. American Society of Limnology and Oceanography, Victoria, British Columbia.

PROPOSALS PENDING

NSF IUSE. \$249,217 Critical Incidents and Institutional Context: Cases of evidence-based universities. Lead PI C.H. Orr, Co-PIs E. Iverson, D. McConnell.

NSF IUSE. \$509,458 (Carleton portion), Transformation through Integration: Interdisciplinary campus-wide engagement in STEM. Orr Co-PI to proposal lead Mary Hubbard, Utah State University.

NSF IUSE. \$457,296 (Carleton portion) Collaborative Research: Creating Embedded Assessment Tools to Evaluate Education. Sub-award to C.H. Orr and E. Iverson, Lead PI Karen Viskupic at Boise State University.

NSF IUSE. \$97,883 (Carleton portion) Creating and Studying a National Network of Centers of STEM Education: Infrastructure for Educational Transformation. Sub award to C.H. Orr and C. Manduca. Lead PI Noah Finkelstein at Univ. Colorado-Boulder..

AWARDS

USGS 104b Program. \$27,000. 2014-2015. Impacts of restoration activities on nutrient retention and cycling in salmon-bearing streams. PIs A.K. Fremier and C.H. Orr.

NSF/USDA Water Sustainability and Climate -Category 3. \$1,468,180.

“Watershed Integrated System Dynamics Modeling (WISDM): Feedbacks among biogeochemical simulations, stakeholder perceptions, and behavior.” 2012-2015. Orr lead PI 2012-2014. Co-PIs: J. Adam, M. Barber, A. Beall, M. Brady, B. Cosens, C. Gazis, J. Harrison, K. Keller, C. Kruger, B. Lamb, C. Stöckle, J. Yoder.

USGS 104b Program. \$27,000. 2012-2013. Climate change implications for land-water transfer and in-stream fate of nitrogen. PIs C.H. Orr, J. Harrison.

NSF MRI. \$551,000. 2009-2013 Acquisition of instrumentation to study stable isotopes of the carbon, nitrogen, and water biogeochemical cycles. Asaph Cousins, R. D. Evans, C. K. Keller, G. Mount, and C. H. Orr.

NSF WSU ADVANCE External Mentoring Grant.\$3,200..2011-2012. Mentor: H. Maurice Valett, Flathead Lake Biological Station, University of Montana.

Lake Osoyoos Drought Studies. \$150,000. 2009-2011 Washington Department of Ecology through Washington Water Research Center, M. Barber, M. Beutel, C. H. Orr, B. Moore. 2009-2011.

Minnesota Water Resources Center. \$32,000. 2008-2009. A. Lightbody, C.H. Orr, J. Marr, P. Belmont, C. Paola. Determination of appropriate metric(s) for sediment-related total maximum daily loads.

NSF-IGERT Graduate Fellowship 2000-2003

Jefferson Davis Research Award, University of Wisconsin 2002, 2004, 2005

Anna Grant Birge Memorial Scholarship, University of Wisconsin 2004

River Alliance of Wisconsin Research Grant 2001

PROFESSIONAL TRAINING

Systems, Society, Sustainability and the Geosciences teaching workshop. Hosted by the InTeGrate NSF STEP Center. Northfield, MN	2012
NSF Science, Engineering and Education for Sustainability workshop Minneapolis, MN	2011
Defining best practices for integrating cross-discipline sustainability content into higher education. Workshop Natural Step Network. Portland,	2010
Developing Student Understanding of Complex Systems in the Geosciences: On the Cutting Edge - Professional Development for Geoscience Faculty. Science Education Research Center at Carleton College, Northfield, MN	2010
OTIS Solute Transport Model training Instructor: Rob Runkel, North American Benthological Society meeting	2009
Write Winning Grants Seminar. Instructor: Steve Russell	2009
Productive Proposal Writing Track. WSU OGRD semester program	2009

OUTREACH & SERVICE

Steering Committee, Science & Mathematics Teacher Imperative (SMTI) national conference “STEM Education Centers” hosted by the APLU and Alfred P. Sloan Foundation.	2015
GSA Session organizer “A showcase of undergraduate research in Hydrogeology” with K. Dunkle, C. Lowry, A. Wilcox.	2015
Tri-State Rural Solutions workshop, Richland WA	2014
Panelist, USDA Agriculture and Food Research Initiative	2013- 2014
Panelist and ad hoc reviewer, National Science Foundation, DEB & EAR	2010-2013
Advisory committee, Stable Isotope Core Facility WSU	2012- 2014
GSA Session organizer “Streams and Aquifers: Integrating the physical and chemical” with C.Kent Keller, Chris Lowry and Richelle Allen-	2013
Aquatic/Riparian Ecologist hiring committee, WSU School of the Environment	2012
Academic assessment committee, WSU School of the Environment	2012
WSU Honors College common reading program instructor	2011
WSU admitted students ALIVE program	2011
Executive Vice President, Society for Ecological Restoration, Northwest Chapter	2010-2011
Hiring committee, Environmental Justice position WSU-Vancouver	2010
AGU special session convener: “Experimental Rivers: New Facilities, New Observational Technologies, and New Questions (EP19)” with A. Lightbody and J. Venditti	2009
North American Benthological Society meeting Special Session organizer: “Integrating Biological/Biogeochemical Measurements with Complexity in Hydraulics and Geomorphology in Streams”	2008
Meeting of Young Researchers in Earth Science (MYRES) organizer: “Dynamic Interactions of Life and its Landscape”	2008

Association for Women Geoscientists, University of Minnesota panelist	2006
Teaching Inquiry-based MN Earth Science guest lecturer	2006
Ways of Knowing Biology Graduate Shadowing mentor	2003-2005
Grandparent University, UW-Madison instructor	2004
College for Kids, UW-Madison instructor	2003

MANUSCRIPT REVIEWER (since 2009)

Ecology
Ecological Monographs
Ecosystems
Environmental Management
North American Journal of Fisheries Management
Hydrological Processes
Hydrobiologia
International Journal of Limnology
Lake and River Management
USGS ad hoc manuscript reviewer

PROFESSIONAL MEMBERSHIP

Ecological Society of America	Geological Society of America
American Geophysical Union	Society for Freshwater Science
National Association of Geoscience Teachers	