Julie C. Padowski, Ph.D.

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State of Washington Water Research Center
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APPOINTMENTS

2019-2022	Affiliate Faculty- *School of the Environment, WSU*
2018-present	Assistant Director- *Center for Environmental Research, Education, & Outreach (CEREO), WSU*
2017-2020	Honors Faculty Fellow- *Honors College, Washington State University (WSU)*
2017-2020	Affiliate Faculty- *Metropolitan Center for Applied Research & Extension, WSU*
2014-2018	Clinical Assistant Professor- *CEREO, WSU*
2014-present	Clinical Assistant Professor- *State of Washington Water Research Center, WSU*
2012-2014	Post-doctoral Fellow, *Woods Institute for the Environment, Stanford University*

EDUCATION

2011	Ph.D., Soil and Water Science, University of Florida (Gainesville, FL) Dissertation Title: *The complexity of urban water resources management: Water availability and vulnerability for large cities in the United States*
2005	M.S., Soil and Water Science, University of Florida (Gainesville, FL) Minor: Environmental Engineering, Concentration in Hydrologic Sciences Thesis Title: *Direct measurement of water and solute mass fluxes using a passive surface water flux meter*
2003	B.S., Environmental Sciences, University of Rochester (Rochester, NY)

RESEARCH INTERESTS

My research interests are in the areas of water resources sustainability, urban hydrogeography and municipal water demand, and the food-energy-water nexus. Much of my work focuses on understanding patterns in and consequences of human development of water sources, including the physical, social, economic, and institutional drivers. My motivation is fueled by growing concerns around current and emerging water scarcity issues, particularly in urbanized areas. To address these research needs, I merge techniques from hydrology (e.g., water balances, simulation modeling) with geography (GIS, spatial statistics) to answer questions about how humans and geography shape water resource use across a range of spatial and temporal scales.

RESEARCH AWARDS/FUNDING

Pending

2019	NSF NRT: "Understanding Complex Cumulative Effects on Large River Systems: Training a Transdisciplinary Workforce in Science, Engineering, and Governance" [$2,999,953; Senior

Personnel: J. Padowski]

2019 State of Washington: "Columbia River Basin Supply and Demand Forecast" [$258,062, PI: J. Adam, co-PI: J. Padowski]

Funding Awarded

2019 NASA ROSES: "Coupling Earth observation data and ecohydrological modeling to predict disturbance-induced runoff and sedimentation for municipal water quantity and quality planning" [$98,978; PI: J. Padowski]

2019 NSF: "SUSRN-Advancing Conference: The Next Urban Giants: Building Resilience and Equity into Growing Megapolitan Regions by Greening the Urban Human-Natural System" [$50,000, PI: B. Gaolach, co-PI: J. Padowski]

2019-2024 USAID: "Egyptian Center of Excellence in Water" [$780,602, Sub-contract: J. Padowski]

2018-2019 State of Washington: "Defining Net Ecological Benefit for implementation of ESSB 6091" [$95,164; PI: J. Yoder, co-PI: J. Padowski]

2018-2021 NSF: "CNH-RCN: A research network for the resilience of headwater systems and water availability for downstream communities across the Americas" [$499,914; PI: J. Boll, co-PI: J. Padowski]

2018-2021 USDA-NIFA: "Technology for trade: new tools and new rules for water use efficiency in agriculture and beyond" [$5,166,223; PI: J. Yoder, co-PI: J. Padowski]

2018-2020 PBAC: "A physically based decision-making support tool for the upper Palouse Basin aquifer" [$65,000; PI: N. Engdahl, co-PI: J. Padowski]

2017 State of Washington and US Department of Energy: "Hanford Groundwater Research Project" [$40,000, PI: J. Yoder, co-PI: J. Padowski]

2016-2020 NSF: "INFEWS/T1: "Increasing regional to global-scale resilience in FEW systems through coordinated management of storage in concert with innovations in technology and institutions" [$2,999,249; PI: J. Adam, co-PI: J. Padowski]

2016 State of Washington: "Skagit Basin Water Mitigation Feasibility Assessment Study" [$72,000, PI: M. Brady, co-PI: J. Padowski]

2015 NSF: "FEW Workshop: Addressing the Food-Energy-Water System Trilemma- Balancing Reliance on Technological and Institutional Solutions" [$44,953; PI: J.Padowski]

2010 NWRI Ronald B. Linsky Fellowship for Outstanding Water Research [$10,000]

ACADEMIC AWARDS AND HONORS

2018 Outstanding Reviewer Award for Environmental Research Letters

2014 Best Article for 2014- Environmental Research Letters Editorial Board

2014 Stanford School of Earth Sciences Certificate for Outstanding Achievement in Mentoring

2011 Excellence in Graduate Studies Award, UF Soil and Water Science Dept., Ph.D. Level

2010 EWRI-ASCE Journal of Hydrologic Engineering 2010 Best Paper Notable Mention Award

2007 William K. Robertson Graduate Student Fellowship Award

PUBLICATIONS

Peer reviewed journal articles

1. Brady, M., Padowski, J.C., Yoder, J., Jessup, E., and Yang, Q. 2018. Reallocating water through small-scale distributed storage in the Skagit River Basin, WA. *J. Am. Water Resour. Assoc*. [*in review*].

2. Padowski, J.C., Labou, S., and Powers, S. 2019. Understanding water supply portfolios of rapidly growing US cities. [*in preparation].*

3. Jayakaran, A., Gaolach, B., Godwin, D., Moffett, K., Padowski, J.C. 2019. The Growth of Green Infrastructure in the Pacific Northwest- A Survey of Practitioner Insights and Emerging Issues. [*in preparation*].

4. Katz, S., Padowski, J.C., Goldsby, M., Brady, M., and Hampton, S.E. 2019. Defining the Nature of the Nexus: Specialization, Shortages, Connectedness, and Scale in Food-Energy-Water Management. *Earth's Future*. [*in preparation*].

5. Givens, J., Padowski, J.C., Guzman, C.D., Malek, K., Witinok-Huber, R., Cosens, B., Briscoe, M., Boll, J., and Adam, J. 2018. Incorporating Social System Dynamics into the Food-Energy-Water System Resilience-Sustainability Modeling Process: The Columbia River Basin. *Frontiers in Environmental Science* 6 Article 104. https://doi.org/10.3389/fenvs.2018.00104

6. Allen, L., Gaolach, B., Moffett, K., Brady, M., Collins, D., Padowski, J.C., Rajagopalan, K., Richey, S. 2018. Perspectives on the Food-Energy-Water Nexus in Metropolitan Seattle from stakeholder interviews. *Washington State University Extension Publication.* Washington State University.

7. Padowski, J.C., Carrera, L. and Jawitz, J.W., 2016. Overcoming urban water insecurity with infrastructure and institutions. *Water Res. Manage.* 30(13), 4913-4926 doi:10.1007/s11269-016-1461-0

8. McDonald, R.I., Weber, K., Padowski, J., Boucher, T., and Shemie, D., 2016. Quantifying watershed degradation and its impact on water treatment costs for the world's largest cities. *Proc. Nat. Acad. Sci.* doi: 10.1073/pnas.1605354113

9. Padowski, J.C., Gorelick, S.M., Thompson, B., Rozelle, S. and Fendorf, S., 2015. Assessment of human-natural system characteristics influencing global freshwater supply vulnerability. Environ. Res. Lett. 10 104014 doi: 10.1088/1748-9326/10/10/104014

10. Padowski, J.C. and Gorelick, S.M., 2014. Global analysis of urban surface water supply availability. Environ. Res. Lett. 9 104004 doi:10.1088/1748-9326/9/10/104004**.**

11. McDonald, R.I., Weber, K., Padowski, J., Flörke, M., Schneider, C., Green, P.A., Gleeson, T., Eckman, S., Lehner, B., Balk, D., Boucher, T., Grill, G., and Montgomery, M., 2014. Water on an Urban Planet: Urbanization and the Reach of Urban Water Infrastructure. Global Environmental Change 27: 96–105. http://dx.doi.org/10.1016/j.gloenvcha.2014.04.022

12. Padowski, J.C. and Jawitz, J.W. 2012. Water availability and vulnerability of 225 large cities in the United States. Water Resources Research. 48, W12529, doi:10.1029/2012WR012335.

13. Padowski, J.C. and Jawitz, J.W. 2009. The Future of Global Water Scarcity: Policy and Management Challenges and Opportunities. *The Whitehead Journal of Diplomacy and International Relations.* 10(2): 99-114 [Invited]. http://blogs.shu.edu/diplomacy/files/archives/08%20Jawitz_Layout%201.pdf

14. Padowski, J.C., Rothfus, E.A., Jawitz, J.W., Klammler, H., Hatfield, K., and Annable, M.D. 2009. Effect of Passive Surface Water Flux Meter Design on Water and Solute Mass Flux Estimates. *Journal of Hydrologic*

Engineering 14(12): 1334-1342. http://dx.doi.org/10.1061/(ASCE)HE.1943-5584.0000127

15. Klammler H., Newman, M.A., Szilagyi, E., Padowski, J.C., Hatfield, K., Jawitz, J.W., and Annable, M.D. 2007. Initial test results for a passive surface water fluxmeter to measure cumulative water and solute mass fluxes. *Environmental Science and Technology* 41(7): 2485-2490. **DOI:** 10.1021/es061883i

Non-peer reviewed journal articles

16. McDonald, R.I., Shemie, D., (lead authors), Basset, S., Boccaletti, G., Chen, F., Chung, D., Contreras, H., Cross, K., Edelson, D., Florke, M., Freed, A., Goldstein, J., Karres, N., Kroeger, T., Lehner, B., McCarthy, L., Padowski, J.C., Petry, P., Podolak, K., Richter, B., Roiphe Barreto, S., Schultz, S., Simmons, E., Snow, M., Tallis, H., Tellman, B., Tiepolo, G., Veiga, F., Vigerstol, K., Weber, K., Williams, T., Yilmaz, K., Zhu, L. (contributing authors). 2014. Urban Water Blueprint: Mapping conservation solutions to the global water challenge. *The Nature Conservancy.* Online information tool. http://water.nature.org/waterblueprint

17. Padowski, J.C. 2008. Water Utility Regulation in Mexico: Sharing Lessons. *Water 21- Magazine of the International Water Association*. February 2008: 29-30.

Book Chapters

18. Padowski, J.C., 2019. Freshwater: The Importance of Freshwater for Domestic Use. *Encyclopedia of the World's Biomes.* [*in review*].

19. Padowski, J.C. and Gorelick, S.M., 2016. Global analysis of urban surface water supply availability. In *Sustainable Cities: Urban Planning Challenges and Policy,* K. Etingoff, ed., CRC Press.

Technical Documents & Conference Proceedings

20. Padowski, J.C., Pickering, N., and Yoder, J. 2017. Potential Groundwater Availability at the Hanford Site. Delivered to the Hanford Natural Resource Trustee Council as a contribution to the Trustee Council Groundwater Baseline Study. *Publication pending Trustee Council approval.*

21. Barik, M., Adam, J.C., Yoder, J., Brady, M.P., Haller, D., Barber, M.E., Hall, S.A., Kruger, C.E., Yorgey, G.G., Downes, M., Stockle, C.O., Aryal, B., Carlson, T., Damiano, G., Dhungel, S., Einberger, C., Hamel-Reiken, K., Liu, M., Malek, K., McClure, S., Nelson, R., O'Brien, M., Padowski, J.C., Rajagopalan, K., Rakib, Z., Rushi, B., Valdez, W. 2017. 2016 Technical Supplement for the Columbia River Basin Long-Term Water Supply and Demand Forecast. Publication No. 16-12-008. Washington Department of Ecology, Olympia, WA. 216 pp. Online at: https://fortress.wa.gov/ecy/publications/SummaryPages/1612008.html

22. Brady, M., Padowski, J.C., Jessup, E., Yang, Q. and Yoder, J. 2016. Skagit Basin Water Mitigation Feasibility Assessment, Dept. of Ecology, Olympia, WA. Online at: http://www.ecy.wa.gov/programs/wr/instream-flows/Images/pdfs/skagit/WSUSkagit_PublicCommentReport_2Sep2016.pdf

23. Padowski, J.C. et. al. (35 authors). 2016. NSF FEW Workshop White Paper- Addressing the Food-Energy-Water System Trilemma: Balancing Reliance on Technological and Institutional Solutions. *National Science Foundation. Online at:* https://s3.wp.wsu.edu/uploads/sites/95/2017/06/FEW_WhitePaper.pdf

24. Berg, S. and Padowski, J.C. 2007. Overview of Water Utility Benchmarking Methodologies: From Indicators to Incentives. *Public Utility Research Center Working Paper 07-12. Online at: http://warrington.ufl.edu/centers/purc/purcdocs/papers/0712_Berg_Overview_of_Water.pdf*

RESEARCH EXPERIENCE

2014-present *Clinical Assistant Professor (Washington State University)*
Research efforts focus on developing major multi-institutional and interdisciplinary water-related proposals, project management, facilitating the development of environmentally-related learning opportunities, and producing peer-reviewed publications.

2012-2014 *Post-Doctoral Fellow (Stanford University)*
Working with the Global Freshwater Initiative Project at the Woods Institute for the Environment, research was aimed at identifying and quantifying water vulnerability and providing targeted analyses of viable policy interventions at the global scale.

2012-2014 *City Water Map Initiative (The Nature Conservancy)*
A SESYNC-funded research effort to create a global spatial database of where and how cities obtain their municipal supplies. The initiative is a long-term effort to synthesize dozens of national and sub-national urban supply studies with global hydrologic databases.

2006-2012 *U.S. Urban Water Vulnerability Study (University of Florida)*
Study focused on quantifying water vulnerability and identifying complex patterns in urban water management systems within the U.S using geospatial and hydrologic modeling.

2007-2009 *West Palm Beach Water Utility Department Water Supply Project (University of Florida)*
Collaborated with a local consulting firm to develop a multi-criteria decision analysis tool for the Palm Beach County Water Utility Department as part of a larger water supply project.

2003-2007 *Flux Meter Development (University of Florida)*
Research focused on laboratory and fieldwork related to the development of a novel device for passively measuring cumulative water and nutrient fluxes in flowing surface water bodies. Laboratory work included the use of both spectrophotometry and gas chromatography analyses.

TEACHING & MENTORING EXPERIENCE

2015-2018 Instructor (Washington State University)
HON290: *Science as a Way of Knowing (honors undergraduate curriculum)*
Lead instructor of an undergraduate seminar class exploring environmental research through reading, structured discussion, and environmental research proposal development.

2015 Instructor (Washington State University)
HON499: *Science as a Way of Knowing (honors undergraduate curriculum)*
Lead instructor of an undergraduate seminar class exploring environmental research through active engagement in the CEREO Seminar Series. This was transformed into HON290.

2013 Co-Mentor (Stanford University)
SESUR and SURGE Undergraduate Research Programs, Summer 2013
Co-mentored, with Dr. Steven Gorelick, two minority undergraduate students on urban water security projects.

2012 Co-Mentor (Purdue University/University of Florida)
Environmental Engineering Summer Research Program, Summer 2012
Co-mentored, with Dr. Suresh Rao, a team of two graduate students and one undergraduate student assessing physical and institutional water vulnerability in South American cities.

2008-2012 Co-Instructor (University of Florida)
Water Resources Sustainability (undergraduate/graduate curriculum), Spring 2012
Co-instruction of a combined graduate and undergraduate lecture class focused on understanding the role of the hydrologic cycle in human development. Efforts included preparing and delivering lectures, leading group discussions, writing and grading assignments.

Water, Environment and Society (undergraduate curriculum), Fall 2008, 2010
Co-instruction of an honors undergraduate lecture class offering an interdisciplinary understanding of water resources and water management in the US and abroad. Efforts included course design, preparing and delivering lectures, leading group discussions, writing test questions, and grading assignments.

2005 & 2010 Teaching Assistant (University of Florida), Spring 2005, 2010
Introduction to Soils in the Environment Laboratory Section (undergraduate curriculum),
Develop and deliver weekly lectures, oversee lab experiments, grading and test administration.

Water Resources Sustainability (2005) and Wetlands (2010) (undergraduate curriculums)
Management and grading of distance education class sections.

MEETINGS & CONFERENCE PRESENTATIONS

1. Mueller, D., Goldsby, M., Roshan, H., Hoard, S., Padowski, J.C. 2019. Modeling the Uptake and Spread of Technological and Institutional Innovations in Managed Storage for a FEW System. University Council on Water Resources, Snowbird UT, 11-13 June. Oral presentation.

2. Padowski, J.C., Powers, S. 2019. Adapting to Water Stress: identifying water supply system constraints and options in rapidly growing US cities. National Urban Extension Conference, Seattle WA, 21-23 May. Poster presentation.

3. Padowski, J.C., Adam, J.C., Boll, J., Katz, S., McLarty, D. 2018. Building resilience in FEW systems through innovations in technology and institutions for coordinated resource management. University Council on Water Resources, Pittsburgh PA, 26-28 June. Oral presentation.

4. Padowski, J.C., Adam, J.C., Boll, J., Katz, S., McLarty, D. 2017. Strategies to Move From Conceptual Models to Quantifying Resilience in FEW Systems. American Geophysical Union, New Orleans, 11-15 Dec. Poster No. GC33A-1051

5. Goldsby, M., Padowski, J.C., Katz, S., Brady, M., Hampton, S.E. 2017. Establishing a Conceptual Foundation for Addressing Challenges Facing Food-Energy-Water Management. American Geophysical Union, New Orleans, 11-15 Dec. Poster No. GC33A-1052

6. Malek, K., Adam, J.C., Richey, A.S., Rushi, B.R., Stockle, C., Yoder, J., Barik, M., Lee, S., Rajagopalan, K., Brady, M., Barber, M.E., Boll, J., Padowski, J.C. 2017. Two Case Studies to Quantify Resilience across Food-Energy-Water Systems: the Columbia River Treaty and Adaptation in Yakima River Basin Irrigation Systems. American Geophysical Union, New Orleans, 11-15 Dec. Poster No. GC33A-1053

7. Givens, J., Padowski, J.C., Malek, K., Guzman, C.D., Boll, J., Adam, J.C., Witinok-Huber, R. 2017. Incorporating Social System Dynamics into the Food-Energy-Water System Resilience-Sustainability Modeling Process. American Geophysical Union, New Orleans, 11-15 Dec. Poster No. GC33A-1054

8. Padowski, J.C. (December 2017). Increasing Resilience Across the Food, Energy, and Water Sectors in the Columbia River Basin. NSF FEWSTERN Workshop, Knoxville, TN. Invited Speaker.

9. Padowski, J.C., and B. Gaolach. (June 2017). Increasing regional to global-scale resilience in a climate constrained world. NSF FEWSTERN Workshop, Knoxville, TN. Invited Speaker.

10. Padowski, J.C., and J. Adam. (2017). INFEWS/T1: Increasing regional to global-scale resilience in FEW systems through coordinated management of storage in concert with innovations in technology and institutions. NSF INFEWS Principal Investigator Meeting, Arlington, VA. Poster.

11. Padowski, J.C., Brady, M., Jessup, E., Yang, Q., Yoder, J. (2016). Coordinating Mitigation Strategies for Meeting In-Stream Flow Requirements in the Skagit River Basin, WA American Geophysical Union, San Francisco, CA. Poster # H53A-1656.

12. Padowski, J.C., Carrera, L.C., and Jawitz, J.W. (2015). Integrating Infrastructure and Institutions to Assess Water Security in Large Urban Areas. American Geophysical Union, San Francisco, CA. Oral presentation.

13. Padowski, J.C., and Gorelick, S.M. (2013). Vulnerability of supply basins to demand from multiple cities. American Geophysical Union, San Francisco, CA. Poster # H21J-1210

14. Padowski, J.C., and Jawitz, J.W. (2011). Untapped reservoirs: a storage-based approach for assessing urban water availability & vulnerability across the United States. American Geophysical Union, San Francisco, CA. Oral presentation.

15. Padowski, J.C., and Jawitz, J.W. (2010). Assessing Urban Water Supply Vulnerability. The Water Institute Symposium, Gainesville, FL. Poster # 311.

16. Padowski, J.C., Jawitz, J.W., Unel, B., Berg, S.V., O'Neil, K., Esterson, K. (2008) Inverse modeling of a dynamic decision support system for water resources planning and management. Water Institute Conference, Gainesville, FL. Poster # 407

17. Padowski, J.C. and Jawitz, J.W. (2007) Validation of a Multi-Criteria Decision Model for Water Resources Planning. UF Soil and Water Science Departmental Forum, Gainesville, FL. Oral presentation.

18. Padowski, J.C., Atkinson, E.C., Jawitz, J.W., Hatfield, K., Annable, M.D., Klammler, H. (2007) An Investigation of the Effects of PSFM Body Design on Measurement Accuracy and Optimal Deployment Duration. American Geophysical Union- Spring Meeting. Acapulco, Mexico. Poster # H28-8487

19. Padowski, J.C. and Berg, S.V. (2007) Survey of Benchmarking Methodologies: Improving Utility

Efficiencies. Seminario Internacional de Gestión y Regulación de los Servicios de Agua Potable y Saneamiento: La Experiencia Mexicana e Internacional. Mexico City, Mexico. Oral presentation.

PROFESSIONAL DEVELOPMENT

Workshops, Led and Attended

2019 Bull Run River Watershed Fire Resilience Workshop- Portland, OR- Organizer
2018 INFEWS Annual Team Meeting, Chelan, WA- Organizer (40 attendees)
2018 Green Infrastructure Summit, Tigard, OR- Organizer
2018 Resilience Assessment Workshop, Moscow, ID- Attendee
2018 ESSB 6091 Workshops, Seattle WA- Technical Team
2018 Cedar River Watershed Fire Resilience Workshop- Seattle, WA- Attendee
2017 Tri-State Food-Energy-Water Workshop, Hermiston, OR- Attendee
2017 Spatial Statistical Stream Network Modeling, Pullman, WA- Organizer
2017 WSU Municipal Stormwater Conference, Yakima, WA- Volunteer
2017 INFEWS Principal Investigator Workshop, Arlington, VA- Presenter
2017 Food, Energy, Water Systems Transdisciplinary Environmental Research Network (FEWSTERN) Workshop, Knoxville, TN- Aug and Dec Workshops- Invited Presenter
2017 INFEWS Annual Team Meeting, Prosser, WA- Organizer (28 attendees)
2017 WSU Environmental Science Writing Workshop, Pullman, WA- Organizer
2017 Tri-State Food-Energy-Water Workshop, Coeur d'Alene, ID- Organizer (35 attendees)
2016 Water Summit, Madison, WI- Attendee
2016 Urban Food-Energy-Water Summit, Seattle, WA- Organizer (60 attendees)
2015 Science Communication Workshop, Pullman, WA- Organizer (18 participants)
2015 WSU Food-Energy-Water Workshop, Pullman, WA- Organizer (90 participants)
2015 Data and Software Carpentry Workshops- Organizer (60 attendees per year)

Advisory Positions

2018 Northwest Climate Adaption Science Center, University Advisor
2018 Consortium of Universities for the Advancement of Hydrologic Science, WSU Delegate
2018 University Council on Water Resources, WSU Delegate
2018 Engineers without Borders- Faculty Mentor, WSU
2017 Food Systems Initiative Steering Committee- External Advisory Member, WSU
2017 WSU Student Water Resources Club- Faculty Advisor
2016-present SURCA Undergraduate Research- Student Poster Judge, WSU
2016-present USGS 104(b) Water Research Grants- Proposal Reviewer, WSU
2016-present Udall Distinguished Scholarship- Review Panel Member, WSU
2016-present LSAMP Faculty Research Mentor, WSU
2016-present Thesis Reviewer, Honors College, WSU
2014-present Sustainability & Environment Committee- Executive Committee Member, WSU

2014-present Palouse Basin Aquifer Committee- Water Research Center Representative, WSU

Program Coordination

2019- present WSU-WRC Interdisciplinary Water Resources Certificate Program for Graduate Students

2017-present WSU-WRC Interdisciplinary Water Resources Certificate Program for Undergraduates

2016-present WRC-SULI Summer Internship Program- Co-coordinator

2016-present C-NSPIRE Graduate Certificate Program – Program Coordinator

2016-present CEREO Newsroom Student Training Program – Program Coordinator

2015-2016 CEREO/CSANR/WRC FEW Seed Grants- Grant Manager

2014-present CEREO Seminar Series- Organizer (10-15 lecturers per year)

Guest Lectures

2019 The language of water: how it supports us and what it's telling us. Jointly presented with Dr. Debbie Lee (Dept. of English, WSU). Palouse Discovery Science Center Pub Talk. 7 May.

2017 Managing for water sustainability. Lecture for ENVR_SCI 483: Sustainability- Applied Improvement or Promotion Projects. 19 April.

2016 Managing for water sustainability. Lecture for ENVR_SCI 483: Sustainability- Applied Improvement or Promotion Projects. 18 April.

Ad Hoc Reviewer (2014-present)

Water Resources Research, Environmental Research Letters, Water Policy, Sustainability, Ecological Economics, Forests, Water, Hydrologic and Earth System Sciences, Science of the Total Environment, World Development