WEIWEI MO, Ph.D.

Department of Civil and Environmental Engineering, University of New Hampshire
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EDUCATION

Ph.D., Environmental Engineering	University of South Florida	December 2012
M.S., Environmental Engineering	University of South Florida	May 2011
B.S., Environmental Engineering	Shanghai Jiao Tong University	June 2008

EMPLOYMENT

University of New Hampshire	Assistant Professor	Jan 2015 - present
University of New Hampshire	Post-doctoral Associate	Jul 2014 - Jan 2015
Yale University	Post-doctoral Associate	Apr 2013- Jun 2014
University of South Florida	Research Assistant	Aug 2009 - Dec 2012
Michigan Technological University	Research Assistant	Aug 2008-Jul 2009

SELECTED AWARDS AND HONORS

Roland H. O'Neal Professorship, University of New Hampshire	2019
Award of Excellence in Research, College of Engineering and Physical Sciences	2019
Best poster award (first place), New England Water Works Association Conference	2019
Best poster award (first place), Water Quality Technology Conference	2018
Best poster award, Society of Ecological Restoration New England Regional Conference	2017
Graduate School Summer Faculty Fellowship, University of New Hampshire	2016
Faculty Development Grant, University of New Hampshire	2016
Fudi Scholarship, Shanghai Jiao Tong University	2007
Academic Excellence Scholarship (ranked 2/50), Shanghai Jiao Tong University	2007
Academic Excellence Scholarship (ranked 1/50), Shanghai Jiao Tong University	2006

REFEREED JOURNAL PAPERS

(UNH student co-authors are underlined. "" indicates me as corresponding author.)*

1. Lu, Z., **W. Mo***, B. Dilkina, K. Gardner, S. Stang, J. Huang, M. C. Foreman, "Decentralized Water Collection Systems for Households and Communities: Household Preferences in Atlanta and Boston", *Water Research*, 167, 115-134, **2019**.
2. Bixler, T. S., J. Houle, T. Ballestero, **W. Mo***, "A Dynamic Life Cycle Economic and Environmental Assessment of Green Infrastructures," *Science of the Total Environment*, 692, 1146-1154, **2019**.
3. Song, C., **W. Mo***, "How long should we keep a dam? Influence of dam life and initial fishery conditions on the energy-fish tradeoff" *Stochastic Environmental Research and Risk Assessment*, 1-12, **2019**.
4. Haslett, K. E., E. V. Dave, **W. Mo**, "Realistic Traffic Condition Informed Life Cycle Assessment: Interstate 495 Maintenance and Rehabilitation Case Study," *Sustainability*, 11:12, 3245, **2019**.
5. Song, C., A. Omalley, S. G. Roy, B. L. Barber, J. Zydlewski, **W. Mo***, "Managing dams for energy and fish tradeoffs: What does a win-win solution take?" *Science of the Total Environment*, 669, 833-843, **2019**.
6. Cornejo, P. K., J. Becker, K. Pagilla, **W. Mo**, Q. Zhang, J. R. Mihelcic, K. Chandran, B. Sturm, D. Yeh, D. Rosso, "Sustainability Metrics for Assessing Water Resource Recovery Facilities of the Future", *Water Environment Research*, 91(1):45-53, **2019**.
7. Roy, S. G., E. Uchida, S. P. de Souza, B. Blachly, E. Fox, K. Gardner, A. Gold, J. Jansujwicz, S. Klein, B. McGreavy, **W. Mo**, S. M.C. Smith, E. Vogler, K. Wilson, J. Zydlewskik, D. Hart,

"Damming decisions: a multi-scale approach to balance trade-offs among dam infrastructure, river restoration, and cost", *Proceedings of National Academy of Sciences,* 115 :47, 12069-12074, **2018**.

8. **Mo, W.***, P. K. Cornejo, J. P. Malley, T. E. Kane, M. R. Collins, "Life Cycle Environmental and Economic Implications of Small Drinking Water System Upgrades to Reduce Disinfection Byproducts," *Water Research*, 143:155-164, **2018**.
9. **Mo, W.***, Z. Lu, B. Dilkina, K. Gardner, J. Huang, M. C. Foreman, "Sustainable and Resilient Design of Interdependent Water and Energy Systems: Tackling Complexities at the Infrastructure-Human-Resource Nexus," *Sustainability*, 10(6), 1845, **2018**.
10. Khalkhali, M., K. Westphal, **W. Mo***, "The Water-Energy Nexus in Drinking Water Supply and Its Implications on the Integrated Water and Energy Management," *Science of the Total Environment*, 636, 1257-1267, **2018**.
11. Stang, S., H. Wang, K. Gardner, **W. Mo***, "Influences of Water Quality and Climate on the Water-Energy Nexus: A Spatial Comparison of Two Water Systems," *Journal of Environmental Management*, 218, 613-621, **2018**.
12. Song, C., K. Gardner, S. Klein, S. P. Souza, **W. Mo***, "Cradle-to-Grave Greenhouse Gas Emissions from Dams in the United States of America," *Renewable & Sustainable Energy Reviews*, 90, 945-956, **2018**.
13. **Mo, W.***, Balen, D., M. Moura, K. Gardner, "A Regional Analysis of the Life Cycle Environmental and Economic Tradeoffs of Different Economic Growth Paths," *Sustainability*, 10, 542, **2018**.
14. **Mo, W.***, Q. Zhang, "Modeling the Influence of Various Water Stressors on Regional Water Supply Infrastructures and Their Embodied Energy," *Environmental Research Letters*, 11, 064018, **2016**.
15. **Mo, W.***, H. Wang, J. Jacobs, "Understanding the Influence of Climate Change on the Embodied Energy of Water Supply – A Case Study in Northeast U.S.," *Water Research*, 95, 220-229, **2016**.
16. **Mo, W.***, L. Soh, J. Webber, M. Elimelech, J. Zimmerman, "Application of Membrane Dewatering for Algal Biofuel," *Algal Research*, 11, 1-12, **2015**.
17. **Mo, W.**, R. Wang, J. Zimmerman, "An Energy-Water Nexus Analysis of Enhanced Water Supply Scenarios: A Regional Comparison of Tampa, Florida and San Diego, California," *Environmental Science & Technology*, 48:10, 5883-5891, **2014**.
18. **Mo, W.**, Q. Zhang, "Energy-Nutrients-Water Nexus: Integrated Resource Recovery in Wastewater Treatment Plants," *Journal of Environmental Management*, 127, 255-267, **2013**.
19. **Mo, W.**, Q. Zhang, "Can Municipal Wastewater Treatment Systems be Carbon Neutral?" *Journal of Environmental Management*, 112, 360-367, **2012**.
20. **Mo, W.**, Q. Zhang, R. Wang, "Energy Embodiment of Water Supply: A Comparison between the US and China," *Advanced Materials Research*, 356-360, 2175-2181, **2012**.
21. **Mo, W.**, Q. Zhang, J. R. Mihelcic, D. Hokanson, "Embodied Energy Comparison of Surface Water and Groundwater Supply Options," *Water Research*, 45:17, 5577-5586, **2011**.
22. **Mo, W.**, F. Nasiri, M. J. Eckelman, Q. Zhang, J. B. Zimmerman, "Measuring the Embodied Energy in Drinking Water Supply Systems: A Case Study in The Great Lakes Region," *Environmental Science & Technology*, 44:24, 9516-9521, **2010**.

NON-REFEREED JOURNAL PAPERS

23. Zhang, Q., **W. Mo.,** "Embodied Energy and Carbon Footprint Benefits of Water Reclamation," *World Water: Water Reuse & Desalination*, 3:1, 29-30, **2012**.

REFEREED CONFERENCE PROCEEDINGS

1. C. DeCarlo[1], **W. Mo**, E.V. Dave, and J. Locore[1], "Sustainable Pavement Rehabilitation Strategy using Consequential Life Cycle Assessment: An Example of Interstate 95," Proceedings of BCRRA 2017, *Tenth International Conference on the Bearing Capacity of Roads, Railways and Airfields*, June 28-30, Athens, Greece, 2017.

[1] Uundergraduate students co-advised by Dr. Eshan Dave and me.

2. O. Valle[2], Y. Qiao, E. Dave, and **W. Mo**, "Life Cycle Assessment of Pavements Under a Changing Climate," *Pavement Life-Cycle Assessment* (Eds. Al-Qadi, Ozer and Harvey), ISBN: 978-1-138-06605-2, CRC Press, pp. 241-250, 2017. http://dx.doi.org/10.1201/9781315159324-25
3. **Mo, W.**, Q. Li, Q. Zhang, "The Optimal Design of Water Supply Systems for Energy Efficiency," *Proceedings of IIE Annual Conference & Expo 2013*, May 18-23, San Juan, Puerto Rico, 2013.
4. **Mo, W.**, Q. Zhang, R. Wang. "Energy Embodiment of Water Supply: A Comparison between the US and China," 09/01/2011-08/31/2012, Proceedings of EESD 2011, *International Conference on Energy, Environment and Sustainable Development, 2011*, Shanghai, China, October 21-23, 2011.
5. **Mo, W.**, Q. Zhang, J.R. Mihelcic, D. Hokanson, "Embodied Energy Model on Water Supply Systems in Great Lakes Region," Proceedings of WEFTEC 2009, *The 82nd Annual Water Environment Federation Technical Exhibition and Conference*, October 10-14, Orlando, Florida, 2009.

BOOK CHAPTER

1. Diaz-Elsayed, N., **W. Mo**, Q. Zhang, "The Sustainability Dimensions of Resource Recovery from "Wastewater"", book chapter in "Resource Recovery from Wastewater – Advances in Microbiology, Processes and Technologies" (V. G. Gude), Apple Academic Press/CRC Press.

INVITED PRESENTATIONS

1. "Life Cycle Assessment of Municipal Drinking Water Systems", *Eastern Research Group, Inc., Lexington, Massachusetts*, December 2018.
2. "Integrated Design of Urban Centralized and Decentralized Water Systems for Sustainability and Resiliency", *National Science Foundation Critical Resilient Interdependent Infrastructure Systems and Processes (CRISP) Program PI workshop*, George Mason University, December 2018.
3. "Strengthening the Scientific Basis for Decision Making About Dams", *China-US 2018 Joint Symposium of Advances in Critical Needs for the Nexus of Food, Energy, and Water Systems*, Jiangsu, China, October 2018.
4. "Sustainable Design of Urban Decentralized Water and Energy Systems", *China-US 2018 Joint Symposium of Advances in Critical Needs for the Nexus of Food, Energy, and Water Systems*, Jiangsu, China, October 2018.
5. "Spatial and Dynamic Analyses of Water's Dependence on Energy", *Tennessee Tech University*, November 2016.
6. "Can Municipal Wastewater Treatment Systems Be Energy Neutral?", the 7th Annual Water Symposium, *Tufts University*, Medford, Massachusetts, April 2016.
7. "Considering Time in Water-Energy Nexus Analyses - A Dynamic Life Cycle Framework", ERG Research Seminar, *University of New Hampshire*, Durham, New Hampshire, December 2014.
8. "Understanding Water's Dependence on Energy for Adaptive Water and Energy Management", NRESS Research Seminar, *University of New Hampshire*, Durham, New Hampshire, October 2014.
9. "Water-Energy Nexus: Analysis of Embodied Energy in Water and Wastewater Systems", Research Seminar, *Northeastern University*, Boston, Massachusetts, July 2014.
10. "Water's Dependence on Energy: An Analysis of Embodied Energy in Water Systems", Graduate Research Seminar, *University of Exeter*, Exeter, UK, March 2012.
11. "Combined Cost-Embodied Energy Modeling for Water Systems", Research Seminar, *Tongji University*, Shanghai, China, May 2011.

CONFERENCE PODIUM PRESENTATIONS

1. **Mo, W.**, Z. Lu, B. Dilkina, K. Gardner, J. Huang, "Do Decentralized Water Supply Systems Enhance Urban Sustainability?", *Institute of Industrial and Systems Engineers (IISE) Annual Conference*, May 18-21, Orlando, Florida, 2019.

[2] Summer Sustainability Fellow (2016) at UNH co-advised by Dr. Eshan Dave and me.

2. **Mo, W.**, Z. Lu, B. Dilkina, K. Gardner, J. Huang, "Sustainable Integration of Urban Decentralized Water Systems into the Centralized Network", *AEESP 2019, The 18th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, May 14-16, Tempe, Arizona, 2019.
3. Ashcraft, C., N. Leuchanka, **W. Mo**, C. Song, "Science-based Role-play Negotiation: Integrating knowledge and boundaries across researchers and stakeholders for sustainability science", *The American Association of Geographers Annual Meeting*, April 3-7, Washington, DC, 2019.
4. Jakositz, S., **W. Mo**, S. Greenwood, B. McGreavy, J. Malley, "When money doesn't matter – Exploring motivations for citizen science", *2019 Citizen Science Association Conference (CitSci2019)*, March 13-17, Raleigh, North Carolina, 2019.
5. Song, C., **W. Mo**, "System dynamics modeling of energy and fish tradeoffs under various dam decision scenarios", *The 26th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST)*, June 25-28, Buffalo, New York, 2018.
6. Khalkhali, M., **W. Mo**, "Dynamic LCA of Operation of Water Supply and Wastewater Treatment Process and the Existing Tradeoffs", *The 26th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST)*, June 25-28, Buffalo, New York, 2018.
7. Gardner, K., **W. Mo**, Z. Lu, B. Dilkina, J. Huang, M.C. Forman, "Modeling of the Resilience and Sustainability of Urban Water Supply and Treatment at the Infrastructure-Human-Resource Nexus", *2018 WE&RF Research Conference*, May 7-8, Atlanta, GA, 2018
8. McGreavy, B., T. Quiring, S. Roy, K.A. Wilson, S. Souza, D. Hart, K. Gardner, C. Druschke, C. A. Ashcraft, S. Fultineer, J. Jansujwicz, S. Klein, **W. Mo**, E. Vogler, A. Gold, E. Uchida, "How do we decide what to do with dams? Dynamic Design Planning (DDP) to shape collaboration for sustainability science," *Resilience 2017: Resilience Frontiers for Global Sustainability Conference*, August 20-23, Stockholm, Sweden, 2017.
9. Aghababaei, M., **W. Mo**, "Life cycle environmental and economic performances of urine diversion practices in the Rich Earth Institute," Urine Summit, Rich Earth Institute, August 17-18, Brattleboro, Vermont, 2017.
10. Khalkhali, M., **W. Mo**, "Modeling Water Supply and Hydropower Generation Tradeoffs of the Massachusetts Water Resources Authority", *The 9th biennial conference of the International Society for Industrial Ecology (ISIE) and the 25th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST)*, June 25-29, Chicago, Illinois, 2017.
11. Song, C., **W. Mo**, K. Gardner, S. Klein, S. P. Souza, "Understanding the Cradle-to-Grave Greenhouse Gas Emissions of Dams", *AEESP 2017, The 17th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, June 20-22, Ann Arbor, Michigan, 2017.
12. Li, C., H. Shi, Y. Mu, L. Li, J. Gao, S. Tabassum, Z. Zhang, A. Hao, **W. Mo**, W. Wu, "Scale-up of Ecological Dam for *in situ* Aquaculture Pollution Control on Yangcheng Lake: Design and Evaluation," *2017 IWA Symposium of Lake and Reservoir Management*, Shanghai, China, May 22-26, 2017.
13. DeCarlo, C., J. Locore, **W. Mo**, E. Dave, "Sustainable Pavement Rehabilitation Strategy using Consequential Life Cycle Assessment: An Example of Interstate 95," Tenth International Conference on the Bearing Capacity of Roads, Railways and Airfields, June 28-30, Athens, Greece, 2017.
14. Ashcraft, C., **W. Mo**, N. Leuchanka, C. Song, "System Dynamics and Role-Play Simulations: Acting and Modeling to Co-Produce Knowledge," *American Association of Geographers Annual Meeting*, April 5-9, Boston, Massachusetts, 2017.
15. Valle, O., Y. Qiao, E. Dave, **W. Mo**, "Life Cycle Assessment of Pavements under a Changing Climate," *Pavement Life-Cycle Assessment Symposium 2017*, April 12-13, Champaign, Illinoi, 2017.
16. Souza, S. P., K. Gardner, **W. Mo**, C. Song, S. Smith, "Sediments Can Represent an Alarming Source of GHG Emissions in the Decommissioning of Dams," *Society of Ecological Restoration New England Regional Conference*, October 14-15, Durham, New Hampshire, 2016.

17. **Mo, W.**, "Understanding the Influence of Climate Change on Energy Usage in Water Supply and Treatment," *ACE 2016*, Annual Conference & Exposition of American Water Works Association, June 19-22, Chicago, Illinois, 2016.
18. **Mo, W.**, J. Jacobs, "Climate-Water-Energy nexus: Influence of Climate Change on the Embodied Energy of Water Supply," *AEESP 2015, The 16th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, June 13-16, New Haven, Connecticut, 2015.
19. **Mo, W.**, "Understanding Water's Dependence on Energy for Adaptive Water and Energy Management", *CESF 2015, Chinese Environmental Scholars Forum*, May 30-31, New Haven, Connecticut, 2015.
20. Jacobs, J., N. Thomas, **W. Mo**, P. Kirshen, E. Douglas, J. Daniel, E. Bell, L. Friess, R. Mallick, J. Kartez, K. Hayhoe, S. Croope, "Explorations Around "Graceful Failure" in Transportation Infrastructure: Lessons Learned By the Infrastructure and Climate Network (ICNet)," *American Geophysical Union Fall Meeting*, December 15-19, San Francisco, California, 2014.
21. **Mo, W.**, R. Wang, J. B. Zimmerman, "Water-Energy Nexus: Implications of Sustainable Water Management in Coastal Regions under Rising Water Scarcity," *Nexus 2014: Water, Food, Climate, and Energy conference*, March 5-8, Chapel Hill, North Carolina, 2014.
22. **Mo, W.**, Q. Li, Q. Zhang, "The Optimal Design of Water Supply Systems for Energy Efficiency," *Proceedings of IIE Annual Conference & Expo 2013*, May 18-23, San Juan, Puerto Rico, 2013.
23. Zhang, Q., **W. Mo**, "Embodied Energy and Carbon Footprint Benefits of Water Reuse", *2011 Portable Reuse Conference*, November 13-15, Hollywood, Florida, 2011.
24. Li, Q., **W. Mo**, Q. Zhang, "The Optimal Design of Water Supply Systems for Energy Efficiency," *AEESP 2011, The 14th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, July 10-12, Tampa, Florida, 2011.
25. Zhang, Q., **W. Mo**, J. R. Mihelcic, D. Hokanson, "Embodied Energy of Water Supply Systems," *ISIE 2011, The 6th International Conference on Industrial Ecology,* June 7-10, Berkeley, California, 2011.
26. **Mo, W.**, Q. Zhang, J.R. Mihelcic, D. Hokanson, "Embodied Energy Model on Water Supply Systems in Great Lakes Region," *WEFTEC 2009, The 82nd Annual Water Environment Federation Technical Exhibition and Conference*, October 10-14, Orlando, Florida, 2009.

CONFERENCE POSTER PRESENTATIONS

1. Jakositz, S., **W. Mo**, S. Greenwood, B. McGreavy, J. Malley, "A Contest-Based Crowdsourcing Scheme to Engage Citizens for Household Water Quality Monitoring", *AEESP 2019, The 18th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, May 14-16, Tempe, Arizona, 2019.
2. Song, C., **W. Mo**, A. Omalley, S. Roy, J. Zydlewski, B. Barber, "Managing dams for energy, fish, and cost tradeoffs: what does a win-win solution take?" *AEESP 2019, The 18th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, May 14-16, Tempe, Arizona, 2019.
3. Leuchanka, N., C. Song, C. Ashcraft, **W. Mo**, "Role-play simulations and system dynamics for sustainability solutions around dams in New England", *AEESP 2019, The 18th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, May 14-16, Tempe, Arizona, 2019.
4. Jakositz, S., **W. Mo**, S. Greenwood, B. McGreavy, J. Malley, "A Contest-Based Crowdsourcing Scheme to Engage Citizens for Household Water Quality Monitoring", *New England Water Works Association Spring Conference*, April 1-2, Worcester, Massachusetts, 2019.
5. Stang, S., **W. Mo**, "Modelling Decentralized Water Systems for Optimization", *New England Water Works Association Spring Conference*, April 1-2, Worcester, Massachusetts, 2019.
6. Greenwood, S., S. Jakositz, B. McGreavy, **W. Mo**, "A Contest-Based Crowdsourcing Scheme to Monitor Household Water Quality", New Hampshire Water & Watershed Conference, March 15, Plymouth, New Hampshire, 2019.

7. **Mo, W.**, P. K. Cornejo, J. Malley, T. E. Kane, M. R. Collins, "Life Cycle Environmental and Economic Assessment of Disinfection Byproduct Reduction Techniques in Small Drinking Water Systems", *2018 Water Quality Technology Conference (WQTC 18)*, November 11-15, Toronto, Canada, 2018.
8. **Mo, W.**, S. Jakositz, S. Greenwood, B. McGreavy, J. Malley, "A Contest-Based Crowdsourcing Scheme to Engage Citizens for Household Water Quality Monitoring", *2018 Water Quality Technology Conference (WQTC 18)*, November 11-15, Toronto, Canada, 2018.
9. Ren, M., **W. Mo**, "Dynamic Environmental and Economic Assessment and Optimization of Grid-Connected Household Solar Photovoltaic (PV) Systems", *The 26th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST)*, June 25-28, Buffalo, New York, 2018.
10. Roy, E., L. Bomeisl, P. Cornbrooks, **W. Mo**, "An integrated decision support system for wastewater nutrient recovery and recycling to agriculture," *American Geophysical Union Fall Meeting*, December 11-15, New Orleans, 2017.
11. Khalkhali, M., **W. Mo**, "System Dynamics Modeling of Water Supply and Hydropower Generation Tradeoffs", *The 35th International Conference of the System Dynamics Society*, July 16-20, Cambridge, Massachusetts, 2017.
12. Song, C., **W. Mo**, A. O'Malley; J. Zydlewski, "Understanding the Tradeoffs of Dam Decision-Making by System Dynamics Modeling", *The 35th International Conference of the System Dynamics Society*, July 16-20, Cambridge, Massachusetts, 2017.
13. Song, C., **W. Mo**, K. Gardner, "System Dynamics Modeling of Water Availability and Hydropower Generation Tradeoffs under Various Dam Decision-Making Scenarios", *AEESP 2017, The 17th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, June 20-22, Ann Arbor, Michigan, 2017.
14. Aghababaei, M., **W. Mo**, "Life Cycle Assessment of Current Urine Diversion Practice by the Rich Earth Institute," Graduate Research Conference, University of New Hampshire, April 10-11, Durham, New Hampshire, 2017.
15. Khalkhali, M., **W. Mo**, "Modeling Water Supply and Hydropower Generation Tradeoffs of the Massachusetts Water Resources Authority," Graduate Research Conference, University of New Hampshire, April 10-11, Durham, New Hampshire, 2017.
16. Song, C., K. Gardner, S. Klein, S. P. Souza, **W. Mo**, "How Much Greenhouse Gases (GHGs) Does a Dam Emit Over its Life Cycle?", *Society of Ecological Restoration New England Regional Conference*, October 14-15, Durham, New Hampshire, 2016.
17. Song, C., **W. Mo**, "Life Cycle Greenhouse Gas (GHG) Emissions of Various Types of Dams", ISSST 2016, *International Symposium on Sustainable Systems and Technology*, May 16-18, Phoenix, Arizona, 2016.
18. **Mo, W.**, H. Wang, "Understanding the Influence of Climate Change on Municipal Water Supply Systems," *The 16th National Conference and Global Forum on Science, Policy and the Environment*, January 19-21, Washington DC, 2016.
19. **Mo, W.**, Balen, D., M. Moura, K. Gardner, "Economic Growth and Environmental Impacts-A Life Cycle Perspective," *The 24nd National NSF EPSCoR Conference*, November 1-3, Portsmouth, New Hampshire, 2015.
20. **Mo, W.**, R. Wang, J. B. Zimmerman, "Influence of Spatial Heterogeneity on the Environmental and Economic Performances of Enhanced Water Supply Scenarios," *NSF Food Energy Water Nexus Workshop*, October 19-20, Rapid City, South Dakoda, 2015.
21. Garvey, E., **W. Mo**, "Life Cycle Environmental and Cost Assessment of Multiple Water-Saving Technologies for Three U.S. Cities," *AEESP 2015, The 16th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, June 13-16, New Haven, Connecticut, 2015.

22. Santello, K., **W. Mo**, "Life Cycle Assessment of Tourism Activities," *AEESP 2015, The 16th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, June 13-16, New Haven, Connecticut, 2015.
23. Jakositz, S., P. Marciano, K. Gardner, **W. Mo**, "Life Cycle Environmental Impacts Associated with Timber Uses," *Undergraduate Research Conference*, April 22, Durham, New Hampshire, 2015.
24. Balen, D., M. O. Moura, K. Gardner, **W. Mo**, "Dynamic Environmental Life Cycle Assessment of Economic Development in New Hampshire," *Undergraduate Research Conference*, April 22, Durham, New Hampshire, 2015.
25. Santello, K., **W. Mo**, "Life Cycle Assessment of Tourism Activities," *Undergraduate Research Conference*, April 22, Durham, New Hampshire, 2015.
26. **Mo, W.**, J. Jacobs, "Assessing the Impacts of Climate Change on the Water-Energy Nexus," *American Geophysical Union Fall Meeting*, December 15-19, San Francisco, California, 2014.
27. Zhang, Q., **W. Mo**, J. Downs, "Regional Embodied Energy for Water Supply: The Impacts of Water Source, Land Use and Population," *AEESP 2013, The 50th Anniversary Association of Environmental Engineering and Science Professors Education & Research Conference*, July 14-16, Golden, Colorado, 2013.
28. **Mo, W.**, Q. Zhang, J. R. Mihelcic, "Embodied Energy Comparison of Groundwater and Surface Water Sourced Water Supply Systems," *3rd Annual Graduate Student Research Symposium,* Tampa, FL, October 14, 2010.
29. Ballard, M. M., K. A. FitzGerald, R. Gyawali, **W. Mo**, A. Mayer, Q. Zhang, D. Watkins, and J.R. Mihelcic. "Modeling and analyzing the use, efficiency, value, and governance of water in the Great Lakes region through an integrated approach: An Update," Conference Abstract, Published Bibliography: International Association for Great Lakes Research, 53nd Annual Conference, May 2010, University of Toronto, Toronto, Canada, August 2010.
30. **Mo, W.**, Q. Zhang, "Water Embodied in US Economic Sectors," *2nd UF Water Institute Symposium*, Gainesville, FL, February 24-25, 2010.
31. **Mo, W.**, Q. Zhang, J. R. Mihelcic, D. Hokanson, "Development and Application of an Embodied Energy Model for Individual Water Supply Systems," *2nd Annual USF College of Engineering Research Day*, Tampa, FL, October 7, 2009.
32. Ballard, M. M., K. A. FitzGerald, R. Gyawali, **W. Mo**, and E. Satchell, "Modeling and Analyzing the Use Efficiency, Value, and Governance of Water in the Great Lakes Region through an Integrated Approach: An Update," *the Sustainable Future Institute Poster Session*, Michigan Technological University, Houghton, MI, June 16, 2009.
33. **Mo, W.**, Q. Zhang, "Embodied Energy Model on Water Systems in Great Lakes Region," *World Water Day Poster*, Michigan Technological University, Houghton, MI, March 23, 2009.

EXTERNAL GRANTS

(*Total amount of funding: **$6,911,180**; total external grant dollars under my control: **$930,493***)

1. EAGER: PPER: Development of a Contest-based Crowdsourcing Scheme for Public Water Quality Monitoring, **National Science Foundation CBET Program**, PI, $100,000, 2018.
2. Resilience, Reliability, and Externalities of Integrated Centralized and Distributed Water and Energy Systems: The Integrated Water-Energy Dynamic (iWED) Model, **National Science Foundation CBET Program**, PI, $303,680, 2017.
3. Sustainability through Enhanced Nutrient Recovery and Community Engagement in Durham, NH, **New Hampshire Sea Grant**, PI, $7,500, 2016.
4. CRISP Type 1/Collaborative Research: Sustainable and Resilient Design of Interdependent Water and Energy Systems at the Infrastructure-Human-Resource Nexus, **National Science Foundation CRISP Program**, lead PI, $500,000 ($252,938 for the UNH site), 2016.

5. RII Track-2 FEC: Strengthening the Scientific Basis for Decision Making About Dams: Multi-Scale, Coupled-Systems Research on Ecological, Social, and Economic Trade-offs, **National Science Foundation EPSCoR program**, Senior Personnel, $6,000,000, 2015.

INTERNAL GRANTS

6. Agent-based Traffic Flow Model for Transportation LCA, **UNH Sustainability Institute**, co-PI, $6,000, 2018.
7. Sustainable Pavement Designs using Life Cycle Assessment with Climate Change Inputs, **UNH Sustainability Institute**, co-PI, $6,000, 2016.

COURSE TEACHING

Course Number	Course Title	Year	Term	Credits	Enrollment		Instructor Rating (Scale: 1 - 5)
					U	G	
CEE 520	Environmental Pollution and Control: A Global Context	2019	Spring	4.0	65	-	4.46
		2018	Spring	4.0	67	-	4.63
CEE 907	Systems Analysis of the Environment	2017	Spring	3.0	-	6	5.00
		2015	Fall	3.0	-	4	N.A.[3]
		2014	Fall	3.0	-	5	5.00
CEE 706/806	Environmental Life Cycle Assessment	2019	Spring	3.0	27	1	4.70
		2017	Spring	3.0	16	2	4.58
		2016	Spring	3.0	15	5	4.80
		2015	Spring	3.0	6	1	4.50
CEE 721/821	Environmental Sampling and Analysis	2018	Fall	4.0	37	0	4.87
		2016	Fall	4.0	28	4	4.06
CEE 795/895	Independent Study	2019	Spring	4.0	1		N.A.
		2016	Fall			3	N.A.
		2015	Spring		1		N.A.
CEE 799H	Senior Honors Thesis	2018	Spring		1	-	N.A.
		2015	Spring		1	-	N.A.

ADVISING AND MENTORING

PhD Students

Taler Bixler
Mingcheng Ren, expected May 2021
Masoumeh Khalkhali, expected May 2020
Cuihong Song, expected May 2020

MS Students (thesis option)

Danyi Feng
Shannon Stang, expected December 2019
Sarah Jakositz, expected December 2019
Rebecca Maskwa, expected December 2019

[3] No course evaluation was solicited due to UNH's change of policy on 900-level graduate-only classes.

Taler Bixler, May 2018

MEng Students (non-thesis option)
Mi Zhou
Hui Guo

Funded Undergraduate Students
Giovanni Guglielmi
Lana Pillsbury
Shannon Stang
Alexa Kaminski
Emily Cook
Sarah Jakositz
Pia K Marciano
Darline Balen
Marianna Oliveira Moura
Kayla N Santello
Elizabeth R Garvey
Matthew J McGinnis

K-12 Teachers
Kaela Plante
Kacie Ferraro
Kate Dusinberre
Shani Scarponi

MEMBERSHIP AND COMMITTEES

American Water Works Association
Water Resources Planning & Management Committee
System Dynamics Society
Association of Environmental Engineering & Science Professors

JOURNAL REVIEW

Environmental Science & Technology; Water Research; Science of the Total Environment; Journal of Environmental Management; Journal of Cleaner Production; Journal of Renewable and Sustainable Energy; Resources, Conservation & Recycling; Stochastic Environmental Research and Risk Assessment; Water Resources Management; Industrial & Engineering Chemistry Research; Materials; Environmental Science and Engineering

PROPOSAL REVIEW

NSF CBET, CMMI, INFEWS
NOAA Sea Grant
Foundation for Food and Agriculture Research

CONFERENCE/WORKSHOP ORGANIZER

- Co-chair of the food-energy-water nexus systems theme, the 27th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST), June 25-27, Portland, Oregon, 2019.
- Workshop co-organizer, the Future of Dams Negotiation Simulation Workshop, 25 stakeholder participants, Manchester, New Hampshire, May 31, 2019.
- Workshop co-organizer, the Future of Dams Negotiation Simulation Workshop, 7 stakeholder participants, Rhode Island, May 29, 2019.

- Workshop co-organizer, workshop titled "Science-Based Role Play Simulation for Engaged Decision Making – A Dam Negotiation Application" at the *18th Biannual Association of Environmental Engineering and Science Professors Education & Research Conference*, May 14-16, Tempe, Arizona, 2019.
- Workshop co-organizer, the Future of Dams Negotiation Simulation Workshop, 35 stakeholder participants, Manchester, New Hampshire, January 14, 2019.
- Workshop co-organizer, the Future of Dams Negotiation Simulation Workshop, 10 stakeholder participants, Rhode Island, January 16, 2019.

CONFERENCE ABSTRACT REVIEWER

- The 27th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST), June 25-27, Portland, Oregon, 2019.
- The 26th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST), June 25-28, Buffalo, New York, 2018.
- The 9th biennial conference of the International Society for Industrial Ecology (ISIE) and the 25th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST), June 25-29, Chicago, Illinois, 2017.

SESSION CHAIR/MODERATOR

- Session moderator, the 27th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST), June 25-27, Portland, Oregon, 2019.
- Session moderator, the 26th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST), June 25-28, Buffalo, New York, 2018.
- Rapporteur for the NSF Workshop for Developing Evaluation Metrics to Advance a National Water Resource Recovery Facility Test Bed Network, May 2016.

JOURNAL EDITING

- Co-Guest Editor with K. Gardner, *Sustainability*, Special Issue, "Sustainable Environmental Engineering: Critical, Interdependent Infrastructure Sustainability and Resilience", 2018.

UNIVERSITY/COLLEGE SERVICES

- Co-lead, CEPS junior faculty lunch meetings, 2019-2020
- Faculty Marshal, Honors Convocation, 2016, 2017, 2018, 2019

DEPARTMENTAL SERVICES

- Honors Coordinator, 2019-
- Faculty Search Committee, 2016-2017, 2019-2020
- Admitted Student Visit Days, program lead, Spring 2018, 2019
- Environmental Engineering Curriculum Planning Committee, 2017-2018
- Faculty meeting scribe, 2014-2018
- Writing up the report for the ABET employer and alumni surveys for the environmental engineering program, 2017
- Visiting student meetings, 2015-2017
- Summer freshmen orientation, student registration mentor, summer 2015, 2017, 2018, 2019
- Judge for UNH Undergraduate Research Conference, 2015, 2017
- Invited and hosted five speakers from University of Vermont (1 person), University of Michigan (1 person), University of Massachusetts Lowell (1 person), and University of New Hampshire (2 persons) for the ASCE Seminar and the Environmental Research Group Seminar Series, 2014-2018
- EWRI research panel member, November 2014