

HAN, Bangshuai

Associate Professor

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Education

- Ph.D., 2008 – 2012, **Environmental Resources Engineering**, SUNY ESF, New York, USA
- M.S., 2005 – 2008, **Physical Geography**, Chinese Academy of Sciences, China
- B.S., 2001 – 2005, **Geography**, Lanzhou University, China

Professional Experience

- Associate Professor, 2021-, **Environment Geology and Natural Resources**, Muncie, IN
- Assistant Professor, 2016-2021, **Natural Resources and Environmental Management**, Muncie, IN
- Postdoctoral Researcher, 2013-2016, **Geosciences**, Boise State University, Boise, ID

Research Interests

• *Hydrology and Water Resources*

1) integration of policy into hydrologic modeling, and its applications to inform decision-makers; 2) hydrodynamics, hyporheic exchange, and ecological functions with river management; 3) water quality analysis and monitoring, 4) watershed hydrology, and 5) cross-scale hydrologic modeling and experimentation

• *Social ecological system modeling*

Spatial and temporal patterns of social-ecological processes, and particularly how these patterns are connected with climate change, hydrology, ecology and human activities

• *Land use, remote sensing and GIS-based spatial analysis*

Applying remote sensing and GIS on the investigation of land degradation processes in fragile ecosystems under climate change and human interruptions

Courses Taught

- NREM 101 Environment and Society
- NREM 211 Water Resources
- NREM 415/515 Water Quality Management
- NREM 369 Special Studies
- NREM 385/585 Wastewater Management
- NREM 615 Water Quality Management
- NREM 669 Advance Professional Practice
- NREM 697 Advanced Topics in Environmental and Natural Resource Management
- EGNR 602 Geoscience Colloquium
- SUST 514 Water Resources

Publications – Peer Reviewed Articles (* denotes student author)

1. Shi. P., **B. Han**, K. Duan, K. Nicholson, A. Chen, Y. Wu. Glaciers variation at 'Shocking' pace in the northeastern margin of Tibetan Plateau from 1957 to 21st century: A case study of Qiyi Glacier. *Journal of Geographical Sciences*. (Under review)
2. H.Z. Fan; **B.S. Han**; X.M. Cao; F. Yang; Y.S. Qin. Why Potassium Released by Purple Paddy Soil Meets the Needs of Long-term Planting of Rice and Wheat in Southwest China? *Soil & Tillage Research*. (Under review)
3. Li, X. Z., **Han, B. S.**, Yang, F., Hu, C. Y., Han, G. Z., & Huang, L. M. (2022). Effects of land use change on soil carbon and nitrogen in purple paddy soil. *Journal of Environmental Management*, 314, 115122. (Co-first author).
4. Han, G.-Z., Cao X.M., **Han, B.S**, Yang, F., Huang, L.M., Wu, Y.J. (2021). Potassium supply and

adsorption capacity changes in a Chinese subtropical paddy soil chronosequence. *Archives of Agronomy and Soil Science*.

5. **Han, B.**, Reidy, A.*, & Li, A. (2021). Modeling nutrient release with compiled data in a typical Midwest watershed. *Ecological indicators*, 121, 107213.
6. Alam, M. S. *, **Han, B.**, & Pichtel, J. (2021). Irrigation suitability of White River in Indiana, Midwestern USA. *Environmental Geochemistry and Health*, 1-22.
7. Alam, M. S. *, **Han, B.**, Gregg, A., & Pichtel, J. (2020). Nitrate and biochemical oxygen demand change in a typical Midwest stream in the past two decades. *H2Open Journal*, 3(1), 519-537.
8. Shi P., K. Duan, KN. Nicholson, **B. Han**, K. Neumann, J. Yang (2020). Modeling Past and Future Variation of the Dongkemadi Ice Field on Tibetan Plateau from 1989 to 2050. *Arctic, Antarctic, and Alpine Research*. (Accepted).
9. Alam, S. *, **Han, B.**, Al-Mizan, Pichtel, J. (2019). Assessment of Soil and Groundwater Contamination at a Former Tannery District in Dhaka, Bangladesh. *Environmental Geochemistry and Health*. 1-16.
10. **Han, B.**, Benner, S. G., & Flores, A. N. (2019). Including Variability across Climate Change Projections in Assessing Impacts on Water Resources in an Intensively Managed Landscape. *Water*, 11(2), 286.
11. Burch, K. D. *, **Han, B.**, Pichtel, J., & Zubkov, T. (2019). Removal efficiency of commonly prescribed antibiotics via tertiary wastewater treatment. *Environmental Science and Pollution Research*, 1-10.
12. Hylton L., Ghezzi J.L., and **Han B.** (2018). Microplastic Pollution in Indiana's White River: an Exploratory Study. *Proceedings of the Indiana Academy of Science*, 127(1):72-81.
13. Steimke, A., **Han, B.**, Brandt, J., & Flores, A. (2018). Climate Change and Curtailment: Evaluating Water Management Practices in the Context of Changing Runoff Regimes in a Snowmelt-Dominated Basin. *Water*, 10(10), 1490.
14. **Han, B.**, S.G. Benner, J. Bolte, K.B. Vache, and A.N. Flores. 2017. Coupling biophysical processes and water rights to simulate spatially distributed water use in an intensively managed hydrologic system. *Hydrology and Earth System Science*. 21(7): 3671.
15. Zhou, Q., A. N. Flores, N. F. Glenn, R. D. Walters, and **B. Han**. 2017. A machine learning approach to estimation of downward solar radiation from satellite-derived data products: an application over a semi-arid ecosystem in the U.S., *PLoS One*. 12(8): e0180239.
16. **Han, B.**, H. Chu, and T.A. Endreny. 2015. Streambed and water profile response to in-channel restoration structures in a laboratory meandering stream. *Water Resources Research* 51(11): 9312-9324.
17. **Han, B.** and T.A. Endreny. 2014. Comparing MODFLOW Simulation Options for Predicting Intra-Meander Flux. *Hydrological Processes*, 28(11), 3824-3832.
18. **Han, B.** and T.A. Endreny. 2014. Detailed River Stage Mapping and Head Gradient Analysis during Meander Cutoff in a Laboratory River. *Water Resources Research*, 50(2), 1689-1703.
19. **Han, B.** and T.A. Endreny. 2014. River Surface Water Topography Mapping at Sub-Millimeter Resolution and Precision with Close Range Photogrammetry: Laboratory Scale Application. *Selected Topics in Applied Earth Observations and Remote Sensing, IEEE Journal of*, 7(2), 602-608.
20. **Han, B.** and T.A. Endreny. 2013. Spatial and Temporal Intensification of Lateral Hyporheic Flux in Narrowing Intra-Meander Zones. *Hydrological Processes*, 27(7), 989-994.
21. You, Q, X. Xue, T. Wang, F. Zhao, W. Zhang, G. Liu, R. Zu, **B. HAN**, and F. Lian, 2011. Preliminary Study on Blown Sand Disaster along the Gobi Highway. *Journal of Desert Research*, 31(1), 9-15.
22. You, Q, X. Xue, T. Wang, F. Zhao, W. Zhang, G. Liu, R. Zu, **B. HAN**, and F. Lian, 2011. Wind Tunnel Experiment of the Effect of Sand Prevention Measures along Gobi Highway. *Journal of Desert Research*, 31(3), 550-557.
23. Xue, X., J. Guo, **B. Han**, Q. Sun, and L. Liu. 2009. The Effect of Climate Warming and Permafrost Thaw on Desertification in the Qinghai-Tibetan Plateau. *Geomorphology*, 108(3-4), 182-190.
24. Zhang, F., T. Wang, X. Xue, **B. Han**, F. Peng, and Q. You. 2010. The Response of Soil CO₂ Efflux to Desertification on Alpine Meadow in the Qinghai-Tibet Plateau. *Environmental Earth Sciences*, 60(2), 349-358.
25. **Han, B.**, X. Xian, *et al.* 2008. Progress on Feedback Mechanism between Aeolian Desertification and

Climate Change, *Journal of Desert Research (in Chinese)*, 28(3), 410-416.

26. Guo, J., T. Wang, **B. Han** et al. 2008. Dynamic Process of Aeolian Desertification Land Variation in Mu Us Sandy Land and Its Surrounding Area in Recent 30 Years. *Journal of Desert Research (in Chinese)*, 28(6), 1017-1021.
27. Zhang, F., T. Wang, X. Xue, **B. Han**, and F. Peng. 2009. Research Status of Natural Factors Influencing Soil Respiration of Grassland Ecosystem. *Journal of Desert Research (in Chinese)*, 29(5), 872-877.
28. Xue, X., J. Guo, F. Zhang, L. Zong, **B. Han**, and C. Huang. 2007. Development and Cause of Aeolian Desertification in Alpine Region—in Case of Maduo County in Yellow River Source Area. *Journal of Desert Research (in Chinese)*, 27(5), 725-732.

Publications – Book Chapters and Non-referred

29. Li, Z., A. Mendoza, J. D. Abad, T. Endreny, C. D. Smallidge, and **B. Han**. "Cutoff processes and their importance for bed and planform morphodynamic adaptation." In *River Flow 2016*, pp. 1748-1752. CRC Press, 2016.
30. Han, B. (2019). Water Quality of Prairie Creek Reservoir. Indiana Water Report 2019. Indiana Water Report -- Indiana Water Monitoring Council.

Selected Conference Presentations

1. **B. Han**, M. Yacoub*, A. Li, K.N. Nicholson, K. Neumann. Occurrence and Source of Microplastics in the Sagarmatha National Park, Nepal. AGU 2022 Fall Conference, Chicago, IL. (Abstract accepted).
2. S. Acharya, K. Nicholson, K. Neumann, **B. Han**, B. Pokharel. Multiyear Seasonal Precipitation, Temperature Assessment and Forecasting using ARIMA Forecast Model: A Case Study of Upper Dudh Koshi Basin, Nepal. AGU 2022 Fall Conference, Chicago, IL. (Abstract accepted).
3. Nicholson, K., Acharya, S., Baniya, S., Cobb, C., Gruver, J., Hall, S., **Han, B.**, Hayes, E., Neumann, K., Nishikawa, M., Pandey*, A., Sharma, S., Sherpa, L., and Subedi, I. 2022. Understanding high mountain aquifers to source drinking water in the Sagarmatha National Park. Stage 1: Phortse Village. IMAGES 2022. (Invited Presentation)
4. M. Yacoub*, J. Godfrey, **B. Han**. A streamlined process to analyze microplastics in wastewater. AWRA 2022 Spring Specialty Conference. Tuscaloosa, AL.
5. T. Mohanta*, **B. Han**. Potential streamflow response to policy-induced wetland change in the White River Watershed, Indiana. AWRA 2022 Spring Specialty Conference. Tuscaloosa, AL.
6. J. Godfrey*, **B. Han**. Removal of Microplastics from a Wastewater Treatment System in Midwest USA. AWRA 2021 Annual Conference (online)
7. D Deifenbaugh*, S. Alam*, **B. Han**. Reassessment of Water Quality Change of Prairie Creek Reservoir. Indiana Academy of Sciences Annual Conference 2021. March 2021. Online.
8. Alam S*, D Deifenbaugh*, **B. Han**. Reassessment of Water Quality of the Prairie Creek Reservoir in Eastern Indiana. Indiana Academy of Sciences Annual Conference 2020. March 2020. Indianapolis, IN. (Abstract Accepted but cancelled due to COVID-19)
10. Silowsky A. *, **B. Han**. Modeling the effectiveness of wetland restoration in mitigating extreme streamflows under future climate change in the Ohio River watershed. Indiana Academy of Sciences Annual Conference 2020. March 2020. Indianapolis, IN. (Abstract Accepted but cancelled due to COVID-19)
12. **B. Han**. Exploring the Water Quality-Quantity Nexus under Climate and Landuse Change. AGU Fall Meeting 2019. San Francisco, CA.
13. Meeting 2019. San Francisco, CA.
14. **B. Han**, S. Alam. Exploring the Water Quality-Quantity Nexus under Changing Climate and Land Use. Indiana Water Resources Association Symposium 2019. Syracuse, IN.
15. S. Alam, **B. Han**. Water Quality Change in the Past Two Decades of the White River. Indiana Water Resources Association Symposium 2019. Syracuse, IN.
16. **B. Han**, A. Reidy. Cleaning the Water Supply under Alternative Climate and Land Use Scenarios in a typical Midwest watershed. AGU Fall Meeting 2018. Washington DC.

17. **B. Han**; S. G. Benner, A. N. Flores. Evaluating impacts of climate change on future water scarcity in an intensively managed semi-arid region using a coupled model of biophysical processes and water rights. AGU Fall Meeting 2017. New Orleans, LA
18. A. Steimke, **B. Han**, J. Brandt, R. S. Castellano, A. Leonard, A. N. Flores. Quantifying the effects of climate and post-fire landscape change on hydrologic processes. AGU Fall Meeting 2016. San Francisco, CA.
19. A. Leonard, A. N. Flores, **B. Han.**, R. S. Castellano, A. Steimke. Impacts of irrigation and climate change on water security: using stakeholder engagement to inform a process-based crop model. AGU Fall Meeting 2016. San Francisco, CA.
20. **B. Han**; S. G. Benner, A. N. Flores. Projecting the impact of climate change and LCLUC on future water scarcity in an irrigation intensive semi-arid region using an integrated modeling approach. *AAG Annual Meeting 2016*. Boston, MA (**Oral presentation**).
21. **B. Han**, A. Leonard, A. Steimke, A. Flores. Modeling spatially explicit water use change in an irrigation intensive semi-arid system under regional climate change scenarios. *The International Society for Ecological Modelling Global Conference 2016*. Towson, MD (**Best Poster Award for Early Career Scientist, 2nd prize**).
22. A. Leonard, **B. Han**, A. Steimke, A. Flores. Quantifying the impacts of climate change and farm management practices on crop yield and water use in semi-arid environments: A modeling approach. *The International Society for Ecological Modelling Global Conference 2016*. Towson, MD (**Best Poster Award for Student, 2nd prize**).
23. A. Steimke, A. Flores, **B. Han**, A. Leonard, 2016. Linking management and hydrology in an agent- based model to assess trends in future water availability. *The International Society for Ecological Modelling Global Conference 2016*. Towson, MD.
24. **Bangshuai Han** *et al.* 2016. Integrating Human Influences and Climate Change to Assess Future Water Availability in Semi-arid Southwest Idaho. *2016 Natural Capital Symposium*. Stanford, CA.

Invited Lectures/Talks

- Delaware County Soil and Water Conservation District Annual Meeting. Invited Keynote Speaker. 2023
- IMAGES 2022. Nicholson, K., Acharya, S., Baniya, S., Cobb, C., Gruver, J., Hall, S., **Han, B.**, Hayes, E., Neumann, K., Nishikawa, M., Pandey*, A., Sharma, S., Sherpa, L., and Subedi, I. 2022. Understanding high mountain aquifers to source drinking water in the Sagarmatha National Park. Stage 1: Phortse Village (Cross-listed with conference presentations)
- Flatland Resources Inc. & Delaware Co. SWCD. Riparian Forest Buffer. 2021.
- Ball State University. Environmental Science PhD Colloquium. Muncie, IN. 2018
- Ball State University. Department of Natural Resources and Environmental Management. Muncie, IN. 2016
- University of Oklahoma. Department of Geography and Environmental Sustainability. Norman, OK. 2016
- Boise Irrigation Canal Company. Boise, ID. 2015
- Boise Watershed Adventure Learning Summer workshop. Boise, Idaho. 2014.

Grants and Awards - Funded

External (Total \$185,235)

1. The Environmental Protection Agency. *Removal of Microplastics from a Domestic Wastewater Treatment Plant*. 2022 - 2023 (PI, Phase I - \$25,000; Recipients for Phase I grants will be eligible to compete for Phase II grants).
2. The Nature Conservancy. *Ecosystem Connections Institute Vendor Agreement for Monitoring and Assessment of Streamflow Regime in Headwater Streams of the Upper White River*

Watershed. 2021-2022. (PI, \$31,998)

3. Indiana Academy of Science. *The Effect of Biochar on Soil Fertility, Soybean Yield, and Leachate Quality*. 2021 - 2022 (Funded, PI, \$3,000)
4. USGS. *Monitoring and Assessment of Streamflow Regime in Headwater Streams of the Upper White River Watershed*. 2021- 2022 (Funded, PI. \$76,174)
5. USGS. *Effectiveness of Wetland Restoration in Mitigating Streamflow Extremes under Future Climate Change in the White River Watershed, Indiana*. 2019 – 2020 (Funded, PI, \$46,080)
6. Indiana Academy of Science. *Assessment of Water Quality Change of Prairie Creek Reservoir in the Past Decade Under Implementation of Conservation Plans*. 2019 -2020 (Funded, PI, \$2,983)

Internal (Total \$86,701)

1. Ball State University. Aspire Grad Student Res. Grant. Transportation and Deposition of Microplastics at the Water-Sediment Interface in the White River Watershed in Muncie. 2023 (Faculty PI with Student B. Adjornor; \$700)
2. Ball State University. Aspire Grad Student Res. Grant. Potential streamflow response to policy-induced wetland change in the White River Watershed, Indiana. 2022 (Faculty PI with Student T. Mohanta; \$550)
3. Ball State University. Aspire Grad Student Res. Grant. Improving the Measurement and Detection Method of Microplastics in Wastewater. 2022 (Faculty PI with Student M. Yacoub; \$700)
4. Ball State University. Aspire Junior Faculty Research Grant. Impacts of Wetland Restoration and Climate Change on Streamflow of the Ohio River Basin. 2020-2021 (PI; \$13,439)
5. Ball State University. Aspire Grad Student Res. Grant. Assessment of Long-term Water Quality Change and Irrigation Suitability of the White River Water in Indiana. 2019 – 2020 (Faculty PI with Student T. Mohanta, \$932)
6. Ball State University. New Faculty Startup Award. 2016 – 2019 (Funded, PI, \$69,175)
7. Ball State University. Digital Scholarship Associate. Preliminary Study on the Response of Water Resources and Water Quality to Climate Change and Land Degradation in the Sagarmatha National Park and Buffer Zone, Nepal (WRWQ-Nepal) 2018 – 2019 (Funded, PI, \$1,200)
8. Ball State University. Aspire Grad Student Res. Grant. Efficacy of Silica Filtration and Chlorination as a Combination Approach to Remove Sulfonamide, Tetracycline, Quinolone, and Macrolide Antibiotics from Sewage. 2017 – 2018 (Faculty PI with Student K. Burch, \$500)

Grants and Awards – Pending (Total: 2,014,636)

1. National Science Foundation. Occurrence and Delivery of Microplastics from Terrestrial Environments at the Watershed Scale. (Single PI; requested amount \$419,993)
2. National Science Foundation. DISES: Tourist Behavior, Water Pollution, and Integrated Governance in High Mountain Areas. (Co-PI with PI Steven Hall; requested amount \$1,594,633).

Selected Grants and Awards – Unfunded (Total: \$4,573,023)

1. National Science Foundation. DISES: Tourist Behavior, Water Pollution, and Integrated Governance in High Mountain Areas. 2021. (Co-PI with PI Steven Hall; requested amount \$1,738,125).
2. National Science Foundation. CAREER: Water for the Future of the Ohio River Basin: How to Restore Wetlands and Adapt to Climate Change. (PI; requested amount \$783,756).
3. Ball State University. Aspire Grad Student Res. Grant. Analysis of Dam Impacts on Streamflow Regime in the Ohio River. 2020. (Faculty PI with Student J. Godfrey; requested amount \$530)
4. USGS. Water for the Future of the Ohio River Basin: How to Restore Wetlands and Adapt to Climate Change. 2020 (PI; requested amount \$524,646)
5. National Science Foundation. CNH2-S The application of integrated transdisciplinary research to the socio-environmental systems surrounding water in the Sagarmatha National Park, Nepal. (Co-PI with PI Nicholson; requested amount \$795,318)
6. Ball State University. Aspire Grad Student Res. Grant. Irrigation suitability analysis of the upstream White River in Indiana. (Faculty PI with Student S. Alam; requested amount \$745)

7. National Science Foundation. Hydrological Responses and Water Vulnerability under Climate Change and Land Degradation in the Southern Himalayan Mountains. 2019 (PI; requested amount \$726,730)
8. Sigma Xi. Efficiency of Sequential Chlorination and Silica Filtration for Removal of Antibiotics from Municipal Wastewater. (Faculty PI with Student K. Burch; requested amount \$998)
9. Efficacy of Silica Filtration and Chlorination as a Combination Approach to Remove Sulfonamide, Tetracycline, Quinolone, and Macrolide Antibiotics from Sewage 2017 (PI; requested amount \$2,175)

Peer Reviewer & Editorialship

Guest Editor

- JAWRA Featured Collection: "Water Risk Under a Rapidly Changing World". June, 2023

Peer Reviewer

- The Environmental Protection Agency (Panel)
- National Science Foundation (Ad Hoc)
- The French Academy of Sciences (Ad Hoc)
- Water Resources Research
- Journal of Hydro-Environment Research
- IEEE, Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- Resources, Conservation & Recycling
- Stochastic Environmental Research and Risk Assessment
- Journal of Water and Climate Change
- Environmental Earth Sciences
- Journal of Water and Climate Change
- Advances in Meteorology
- Hydrology Research

Conference Organizing

- General Conference Co-Chair, 2024 AWRA Spring Specialty Conference, Tuscaloosa, AL.
- Technical Program Chair, 2022 AWRA Spring Specialty Conference, Tuscaloosa, AL.
- 2015 International Conference on Water Resource and Environment, Beijing, China
- 4th International Conference on Water Resource and Environment, Kaohsiung, Taiwan
- 2017 10th International Conference on Environmental and Computer Science (ICECS 2017), Ottawa, Canada.

Service in National Organizations

- Board of Directors. 2023-2025. American Water Resources Association
- Future Risk Committee Co-chair. 2020-present. American Water Resources Association

Student Advising

Graduate students advised

	Student	Degree	Department	Defense Time	Role
1	Bless Ajornor	M.S.	EGNR	TBD	Chairperson
2	Dan Deifenbaugh	M.S.	EGNR	Spring 2023 (Expected)	Chairperson
3	Tusher Mohanta	M.S.	EGNR	Summer 2023 (Expected)	Chairperson
4	Moayad Yacoub	Ph.D.	EGNR	TBD	Chairperson
5	Jaymi Godfrey	M.S.	EGNR	Fall 2022	Chairperson
6	Kayla Burch	M.S.	EGNR	Spring 2019	Chairperson
7	Shahin Alam	M.S.	EGNR	Spring 2020	Chairperson

8	Alex Silowsky	Ph.D.	EGNR	2019 - 2020 (quit)	Chairperson
9	Carson Wright	Ph.D.	EGNR	TBD	Committee Member
10	David McFarland	Ph.D.	EGNR	TBD	Committee Member
11	Nada Alzahrani	Ph.D.	Chemistry	TBD	Committee Member
12	Jessica Weir	Ph.D.	Biology	TBD	Committee Member
13	Smrita Acharya	Ph.D.	EGNR	TBD	Committee Member
14	Kuo-Hao Chen	Ph.D.	Chemistry	Fall 2022	Committee Member
15	David Isenberg	M.S.	EGNR	TBD	Committee Member
16	Anthony Smith	M.S.	ENGR	Summer 2022	Committee Member
17	Emily Dewig	M.S.	Biology&EGNR	Spring 2020	Committee Member
18	Richards Heather	M.S.	Geography	Spring 2020	Committee Member
19	Carson Wright	M.S.	NREM	Spring 2019	Committee Member
20	Lindsay Hylton	M.S.	NREM	Winter 2017	Committee Member

Undergraduate Student Research Supervised

- Jillian Burton: Honors Thesis, 2022. Erosion Control and Bank Restoration of the Indiana Dunes National Park.
- Nadia Briddell: Teacher-scholar program, 2022. Understanding microplastic contaminant of water bodies.
- Claire Richter: Teacher-scholar program, 2021. Microplastic removal efficacy in wastewater
- Andie Reidy: BSU Honors Fellow, 2018, Cleaning the Water Supply in the White River Watershed
- Matt Tindall: Summer Research, 2018, Assessment of Water Quality in the Prairie Creek Reservoir
- Roy Olvera: MURI (MILES Undergraduate Research and Internships), 2015, Climate Data Analysis using Matlab
- Macy Kay Rohr: Independent Study, 2017, Greensburg Municipal Water Treatment Plan

Students Hourly Employed Via Grants (except students listed above)

Qiaorong Wang (Ph.D., 2022-2023), Sam Hockwalt (B.S., 2022), William Cape (B.S., 2019), Matthew Tindall (B.S., 2018)

Student Awards

- Aspire Graduate Student Research Grant. Shahin Alam. 2019-2020. (\$900)
- Aspire Graduate Student Research Grant. Kayla Burch. 2017-2018. (\$500)
- Farmland Conservation Club Scholarship. Kayla Burch. 2017-2018 (\$2,000)
- Honors College Undergraduate Fellowship. Andie Reidy. 2011-2018 (\$1,300)
- Perham Scholarship. Kayla Burch (Nomination). 2017

Professional Membership

- American Water Resources Association (AWRA), American Ecological Engineering Society (AEES), American Geophysical Union (AGU), International Congress on Environmental Modelling and Software (iEMSs), International Association of Hydrological Sciences (IAHS)