

## CURRICULUM VITAE

### **Jelena Vukomanovic, PhD**

Department of Parks, Recreation, and Tourism Management  
College of Natural Resources, North Carolina State University

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#### **EDUCATION**

- 2013            PhD, Arid Lands Resource Sciences  
                  School of Natural Resources and the Environment/Office of Arid Land  
                  Studies, University of Arizona, Tucson, Arizona, U.S.A
- 2007            MAsc, Environmental Applied Science and Management  
                  Toronto Metropolitan University (formerly Ryerson University), Toronto,  
Canada
- 2003            Hons. BSc, Ecology  
                  University of Toronto, Toronto, Canada

#### **PROFESSIONAL APPOINTMENTS AND AFFILIATIONS**

- 2016 -            Assistant Professor of Natural Resources, Department of Parks, Recreation, &  
                  Tourism Management, College of Natural Resources, North Carolina State  
                  University
- 2016 -            Faculty Fellow, Center for Geospatial Analytics, North Carolina State  
                  University
- 2013-2016        Research Associate, Institute for Arctic and Alpine Research, University of  
                  Colorado – Boulder.

#### **PUBLICATIONS**

\* indicates corresponding author, if not first author;

Underline indicates student working under my supervision;

Double underline indicates postdoctoral scholar working under my supervision

#### **Peer-Reviewed Publications**

Youngsteadt, E., Terando, A., Costanza, J., & **Vukomanovic, J.** (2023). Compact or Sprawling  
Cities: Has the Sparing-Sharing Framework Yielded an Ecological Verdict? *Current  
Landscape Ecology Reports*, 8, 11–22.

- Vukomanovic, J.**, Barbieri, C., Knollenberg, W., Yoshizumi, A., & Gil Arroyo, C. (2022). To travel or not to travel during COVID-19: The influence of political ideology on travel intentions in the USA. *Annals of Tourism Research Empirical Insights*, 3(2), 100078.
- Zhang, Y., Chen, G., Myint, S.W., Zhou, Y., Hay, G., **Vukomanovic, J.**, & Meentemeyer, R.K. (2022). UrbanWatch: A 1-meter resolution land cover and land use database for 22 major cities in the United States. *Remote Sensing of Environment*, 278, 113106.
- Inglis, N.C., **Vukomanovic, J\***, Singh, K.K., & Costanza, J. (2022). From viewsheds to viewscapes: trends in landscape visibility and visual quality research. *Landscape and Urban Planning*, 224, 104424.
- Singh, K.K., Bhattarai, N., & **Vukomanovic, J.** (2022). Landscape-scale hydrologic response of plant invasion relative to native vegetation in urban forests. *Science of the Total Environment*, 802, 149903.
- Randall, J., Inglis, N. C., Smart, L., & **Vukomanovic, J.\*** (2022). From Meadow to Map: Integrating Field Surveys and Interactive Visualizations for Invasive Species Management in a National Park. *ISPRS International Journal of Geo-Information*, 11(10), 525.
- Vukomanovic, J.**, Walden-Schreiner, C., Hipp, J.A., & Leung, Y-F. (2022). GIS&T in Recreation Planning and Management. *The Geographic Information Science & Technology Body of Knowledge*. (1st Quarter 2022 Edition).
- Barnhart, T., **Vukomanovic, J.**, Bourgeron, P., & N. Molotch. (2021). Future land cover and climate may drive decreases in snow wind-scour and transpiration, increasing streamflow at a Colorado, USA headwater catchment. *Hydrological Processes*, e14416.
- Vogler, J.B., & **Vukomanovic, J.** (2021). Trends in United States human footprint revealed by new spatial metrics of urbanization and per capita land change. *Sustainability*, 13(22), 12852
- Smart, L. S., **Vukomanovic, J.**, Taillie, P. J., Singh, K. K., & Smith, J. W. (2021). Quantifying drivers of coastal forest carbon decline highlights opportunities for targeted human interventions. *Land*, 10(7), 752.
- Schelhas, J., Alexander, J., Brunson, M., Cabe, T., Crall, A., Dockry, M.J., Emery, M.R., Frankel, S.J., Hapner, N., Hickman, C.R., Jordan, R., LaVoie, M.J., Ma, Z., Starinchak, J., & **Vukomanovic, J.** (2021). Social and Cultural Dynamics of Non-native Invasive Species. In: Poland T.M., Patel-Weynand T., Finch D.M., Miniati C.F., Hayes D.C. and V.M. Lopez (eds) *Invasive Species in Forests and Rangelands of the United States*. Springer, Cham.
- Vukomanovic, J.**, & Randall, J. (2021). Research trends in US national parks, the world's "living laboratories". *Conservation Science and Practice*, e414.

Ferrante Agostini, D., **Vukomanovic, J.\***, & Smart, L. S. (2021). Uncovering trends and spatial biases of research in a US National Park. *Sustainability*, 13(21), 1-13.

White, C. T.<sup>†</sup>, Mitasova, H., BenDor, T. K., Foy, K., Pala, O., **Vukomanovic, J.**, & Meentemeyer, R. K. (2021). Spatially explicit fuzzy cognitive mapping for participatory modeling of stormwater management. *Land*, 10(11), 1114.

**Vukomanovic, J.**, & Smart, L.S. (2021). Geospatial Participatory Modeling. *The Geographic Information Science & Technology Body of Knowledge* (1st Quarter 2021 Edition).

Smart, L. S., **Vukomanovic, J.\***, Sills, E. O., & Sanchez, G. (2021). Cultural ecosystem services caught in a 'coastal squeeze' between sea level rise and urban expansion. *Global Environmental Change*, 66, 102209.

Masayuki, S., Barber, J.R. Phillips. J.N., Carter, N.H., Cooper, C.B., Ditmer, M.A., Fristrup, K.M., McClure, C. J.W., Mennitt, D.J., Tyrrell, L.P., **Vukomanovic, J.**, Wilson, A.A., & Francis, C.D. (2020). Sensory pollutants alter bird phenology and fitness across a continent. *Nature*: 587(7835), 605-609.

Smart, L., Taillie, P., Poulter, B., **Vukomanovic, J.**, Singh, K., Swenson, J., Mitasova, H., Smith, J., & Meentemeyer, R.K. (2020). Aboveground carbon loss associated with the spread of ghost forests as sea levels rise. *Environmental Research Letters*: 15(10), 104028.

Inglis, N.C., & **Vukomanovic, J.\***. (2020). Climate change disproportionately affects visual quality of cultural ecosystem services in a mountain region. *Ecosystem Services*: 45, 101190.

Zhang, Y., Chen, G., **Vukomanovic, J.**, Singh, K.K., Liu, Y., Holden, S. & Meentemeyer, R.K. (2020). Recurrent Shadow Attention Model (RSAM) for shadow removal in high-resolution urban land-cover mapping. *Remote Sensing of Environment*: 247, 111945.

Tabrizian, P., Petrasova, A., Baran, P.K., **Vukomanovic, J.**, Mitasova, H., & Meentemeyer, R.K. (2020). High Resolution Viewscape Modeling Evaluated Through Immersive Virtual Environments. *ISPRS International Journal of Geo-Information*: 9(7), 445.

Inglis, N.C., & **Vukomanovic, J.\***. (2020). Visualizing When, Where, and How Fires Happen in US Parks and Protected Areas. *ISPRS International Journal of Geo-Information*: 9(5), 333.

**Vukomanovic, J.**, Singh, K.K., Vogler, J.B., & Meentemeyer, R.K. (2020). Protection status and proximity to public-private boundaries influence land use intensification near U.S. parks and protected areas. *Conservation Science and Practice*: e190.

**Vukomanovic, J.**, Vogler, J.B., & Petrasova, A. (2019). Modeling the connection between viewsapes and home locations in a rapidly exurbanizing region. *Computers, Environment and Urban Systems*: 78, 101388.

- Vukomanovic, J.**, & Steelman, T. (2019). A Systematic Review of Relationships Between Mountain Wildfire and Ecosystem Services. *Landscape Ecology*. 34(5), 1179-1194.
- Vukomanovic, J.**, Skrip, M.M., & Meentemeyer, R.K. (2019). Making it spatial makes it personal: engaging stakeholders with geospatial participatory modeling. *Land*: 8(2), 38.
- Vukomanovic, J.**, Singh, K.K., Petrasova, A., & Vogler, J.B. (2018). Not seeing the forest for the trees: modeling exurban viewsapes with LiDAR. *Landscape and Urban Planning*: 170, 169-176.
- Fischer, A.P, Spies, T.A., Steelman, T.A., Moseley, C., Johnson, B.R., Bailey, J.D., Ager, A.A., Bourgeron, P.S., Charnley, S., Collins, B.M., Kline, J.D., Leahy, J.E., Littell, J.S., Millington, J.D.A, Nielsen-Pincus, M., Olsen, C.S., Paveglio, T.B., Roos, C.I., Steen-Adams, M.M., Stevens, F.R., **Vukomanovic, J.**, White, E.M., & Bowman D.M.J.S. (2016). Wildfire risk as a socio-ecological pathology. *ESA Frontiers in Ecology and the Environment*: 14(5), 276-284.
- Vukomanovic, J.**, & Orr, B.J. 2014. Landscape aesthetics and the scenic drivers of amenity migration in the New West: naturalness, visual scale, and complexity. *Land*: 3(2), 390-413.
- Vukomanovic, J.**, Doumas, S., Osterkamp, W.R., & Orr, B.J. (2013). Housing density and ecosystem function: comparing the impacts of rural, exurban and suburban densities on fire hazard, water availability, and house and road distance effects. *Land*: 2(4), 656-677.
- Vukomanovic, J.**, & Rodd, F.H. (2007). Size-dependent female mate copying in the guppy (*Poecilia reticulata*): Large females are role models but small ones are not. *Ethology*: 113(6), 579-586.

## Reports and Other Publications

- Yoshizumi, A., **Vukomanovic, J.**, & Jones, K. (2023). Reference Guide to Messaging and Engagement for Fire Management. *Report to the NPS Northeast Region Fire Management Office*.
- Shedd, J., Skrip, M., & **Vukomanovic, J.** (2021). Equipping firefighters with the maps they need to preserve history. In: *Mapping America's National Parks – Preserving our Natural and Cultural Treasures*. Redlands, CA: ESRI Press.
- Shedd, J., Shukunobe, M., Inglis, N., Skrip, M., & **Vukomanovic, J.** (2021). Improving communication with web maps in the mid-Atlantic. In: *Mapping America's National Parks – Preserving our Natural and Cultural Treasures*. Redlands, CA: ESRI Press.

Fischer, A.P., Spies, T.A., Steelman, T.A., Moseley, C., Johnson, B.R., Bailey, J.D., Ager, A.A., Bourgeron, P., Charnley, S., Collins, B.M., Kline, J.D., Leahy, J.E., Littell, J.S., Millington, J.D.A., Nielsen-Pincus, M., Olsen, C.S., Paveglio, T.B., Roos, C.I., Steen-Adams, M.M., Stevens, F.R., **Vukomanovic, J.**, White, E.M., & Bowman, D.M.J.S. (2016). Pathology of wildfire risk: A characterization of social and ecological dimensions. *Research Brief 11. Northwest Fire Science Consortium*. 2 p.

Bourgeron, P.S., Baudry, J., Krauze, K., **Vukomanovic, J.**, Humphries, H.C., Maass, M. (2015). Global Issues in Managing the Land – Water - Energy Nexus: The ILTER Contributions to Addressing Wicked Problems. *Report to the International Long-Term Ecological Research Network*.

**Vukomanovic, J.**, Dumas, S., and W.R. Osterkamp. 2013. Ecological-threat mapping, Sonoita Plain, Arizona. The Research Ranch Foundation, USGS, and the Sonoran Institute, Tucson, Arizona. 27 pp.

## GRANTS

2022-2025 US National Park, Fire Management Offices - *Enhancing Fire Management and Engagement through Fire Ecology Science*. **Vukomanovic, J.** (PI). Amount: \$76,000.

2022-2026 McIntire-Stennis Capacity Grant (internal) - *Community-grounded adaptation strategies for forest management and resilience to flooding*. Sanchez, G., **Vukomanovic, J.**, Tulbure, M., & Meentemeyer, R.K. Amount: \$343,773.

2021-2023 US National Park, Fire Management Offices - *Communicating Prescribed Fire Management through Virtual Public Engagement Strategies Post-COVID*. **Vukomanovic, J.** (PI). Amount: \$70,000.

2021-2025 McIntire-Stennis Capacity Grant (internal) - *Climate Adaptive Management for Forest Ecosystem Services: An Assessment of Future Forests*. Scheller, R. (PI), Martin, K.L., Holmes, Z., & **Vukomanovic, J.** Amount: \$454,242

2020-2023 US National Park Service, Fire Management Offices - *Forecasting Fire Risk through Analysis of Past and Future Variability in Hydrologic Regimes & Integrate into South Florida Fire Danger Index*. **Vukomanovic, J.** (PI). Amount: \$104,800.

2020-2021 US National Park Service, Fire Management Offices - *Develop NPS-RI Wildland Fire and Aviation Management Program*. **Vukomanovic, J.** (PI). Amount: \$30,000.

- 2019-2023 US Fish and Wildlife Service - *The North Carolina Strategic Plan for Sustaining Military Readiness through Conservation Partnerships*. Bardon, R.E. (PI), Addor, M.L., Sanchez, G.M., & **Vukomanovic, J.** Amount: \$206,782.
- 2018-2020 Gaylord and Dorothy Donnelly Foundation - *Johns Island Community Conservation Initiative: Ecosystem Services Mapping and Land Protection Toolkit*. **Vukomanovic, J.** (PI), & Sills, E.O. Amount: \$79,986.
- 2018-2021 US National Park Service - *Interactive Analytics for Natural and Cultural Resource Management at Congaree National Park*. **Vukomanovic J.** (PI). Amount: \$64,320.
- 2017-2021 US National Park Service, Fire Management Offices - *Geospatial Analytics for the Fire Management Offices of the National Capital, Northeast, and Southeast Regions of the National Park Service*. **Vukomanovic, J.** (PI). Amount: \$131,875.
- 2018-2019 US National Park Service, Fire Management Offices - *Analytics and Communication Tools for the Valley Forge Meadow Management Plan*. **Vukomanovic, J. (PI)** & Shedd, J. Amount: \$32,000
- 2017-2019 US National Park Service, Inventory and Monitoring Division – *Integrating Science into Resource Management via WebGIS*. **Vukomanovic, J.** (PI) & Shedd, J. Amount: \$30,000.
- 2017-2018 College of Natural Resources (NC State) Junior Faculty Mentoring Program – *Participatory Modeling with Stakeholders in Johns Island, SC*. **Vukomanovic, J.** (PI). Amount: \$2,000
- 2016-2017 Office of Institutional Equity and Diversity (NC State) Diversity Grant. *Women in Science Speaker Series*. **Vukomanovic, J.** (PI). Amount: \$4,000.

## FELLOWSHIPS, AWARDS AND HONORS

**2020-2021 TRELIS Fellow (Training and Retaining Emerging Leaders in STEM – GI Science)**. Selected through a competitive process to participate in a year-long program of professional development for academic women in the geospatial sciences. Program funded by the National Science Foundation (Award #1660400).

**2018 Engaged Scholarship Travel Award**. Office of Outreach and Engagement, NC State University. \$500 award to present interdisciplinary research that addresses significant community challenges.

**2013 NASA – MSU Professional Enhancement Award in Landscape Ecology.** Jointly funded by the National Aeronautics and Space Administration and Michigan State University, this \$700 award supports travel to the International Association of Landscape Ecology – North America meeting and includes special recognition at the conference awards banquet. Past awardees become mentors to subsequent cohorts.

**2011 Global Land Project Travel Fellowship.** Field Science Center for Northern Biosphere at Hokkaido University, Japan. Internationally competitive fellowship (15 PhD candidates) for an intensive 20-day field course, research experience, and cultural exchange in Japan (approximately \$5,000).

**2011 Ariel Appelton Ecosystem Services Research Fellowship.** Inaugural recipient of an \$8,000 award from the Research Ranch Foundation and Audubon to study the patterns and impacts of housing development in southeastern Arizona.

**2008 University of Arizona Water Sustainability Program Graduate Fellowship.** One of four recipients of a \$18,500 university-wide fellowship to study natural resource use and land policy to advance water sustainability and resilience.

**2007 Arid Lands Resource Sciences Fellowship, University of Arizona.** A competitive recruitment scholarship of \$18,000.

## OTHER RECOGNITION OF SCHOLARSHIP

### Popular Media

Asia Research News. (2021). Article (“Noise and light pollution alter bird mating behavior”)

<https://www.asiaresearchnews.com/content/noise-and-light-pollution-alter-bird-mating-behaviour>

Scientific American. (2020). Article (“Light Pollution Is Causing Birds to Nest Earlier—Which Might Not Be a Bad Thing”)

<https://www.scientificamerican.com/article/light-pollution-is-causing-birds-to-nest-earlier-which-might-not-be-a-bad-thing/?amp;text=Light>

NASA. (2020). Featured *Climate* Article (“Noise and Light Pollution From Humans Alter Bird Reproduction”)

<https://www.nasa.gov/feature/esnt/2020/noise-and-light-pollution-from-humans-alter-bird-reproduction>

Cosmos Magazine. (2020). Article (“Songs, sounds and the life of birds - they remember their tunes but are disrupted by our noise”)

<https://cosmosmagazine.com/nature/birds/songs-sounds-and-the-life-of-birds/>

ScienceDaily. (2020). Science News Story ("Noise and light can 'profoundly' alter bird reproduction") <https://www.sciencedaily.com/releases/2020/11/20111122823.htm>

Science Current. (2020). Article ("The Effect of Noise and Light Pollution on Bird Survival")  
<https://sciencecurrent.com/latest-posts/the-effect-of-noise-and-light-pollution-on-bird-survival>

9News Denver - NEXT with Kyle Clark. (2020). Broadcast news segment ("Future generations may not be able to enjoy Colorado leaf-peeping as we do now")  
<https://www.9news.com/video/news/local/next/future-generations-may-not-be-able-to-enjoy-colorado-leaf-peeping-as-we-do-now/73-fd05fd4d-c111-443d-8521-3ce894c7elf5>

Aspen Times. (2020). News story ("Are these the aspens' golden years?")  
[https://www.aspendailynews.com/news/are-these-the-aspens-golden-years/article\\_cb0276b0-0041-11eb-8715-efb874310c7b.html](https://www.aspendailynews.com/news/are-these-the-aspens-golden-years/article_cb0276b0-0041-11eb-8715-efb874310c7b.html)

H2O Radio. (2020). News story and radio interview ("Fading Fast? Colorado's Iconic Aspen Trees Will Likely Decline with Climate Change") <http://h2oradio.org/Aspen.html>

NPR - Colorado Public Radio. (2020). News story and radio interview ("Would Leaf Peepers Still Love Trail Ridge Road If There Were Fewer Aspen?")  
<https://www.cpr.org/2020/09/18/would-leaf-peepers-still-love-trail-ridge-road-if-there-were-fewer-aspen/>

Fortune Magazine. (2020). News story ("As seawater moves inland, 'ghost forests' are spreading. Why that's so scary")  
[https://fortune.com/2020/09/29/what-are-ghost-forests-sea-water-coastal-forests/?xid=socialflow\\_twitter\\_FORTUNE&utm\\_source=twitter.com&utm\\_medium=social&utm\\_campaign=fortunemagazine](https://fortune.com/2020/09/29/what-are-ghost-forests-sea-water-coastal-forests/?xid=socialflow_twitter_FORTUNE&utm_source=twitter.com&utm_medium=social&utm_campaign=fortunemagazine)

## News Releases

Center for Geospatial Analytics December 2022 Newsletter ("New Multimedia Story Map Shares Experiences of Veterans in Fire Management")  
<https://cnr.ncsu.edu/geospatial/news/2022/11/30/story-map-veterans-in-fire-management/>

NSF Social, Behavioral and Economic Sciences Newsletter - Winter 2021. (2021).  
Featured study ("Study Shows Noise and Light Alter Bird Reproduction")  
<https://content.govdelivery.com/accounts/USNSF/bulletins/2b404e1>

NC State News Release ("Noise and Light Pollution Impact Songbird Reproduction"). (2020).  
[https://news.ncsu.edu/2020/11/noise-and-light-pollution-impact-songbird-reproduction/?utm\\_source=twitter&utm\\_medium=social&utm\\_content=cnr&utm\\_campaign=socialhub](https://news.ncsu.edu/2020/11/noise-and-light-pollution-impact-songbird-reproduction/?utm_source=twitter&utm_medium=social&utm_content=cnr&utm_campaign=socialhub)



NC State News Release (“Colorado’s Famous Aspens Expected to Decline Due to Climate Change”). (2020).

<https://news.ncsu.edu/2020/09/colorados-aspens-expected-to-decline-due-to-climate/>

Center for Geospatial Analytics September 2020 Newsletter ("Colorado’s Famous Aspens Expected to Decline Due to Climate Change")

<https://news.ncsu.edu/2020/09/colorados-aspens-expected-to-decline-due-to-climate/>

College of Natural Resources September 2020 Newsletter ("Colorado’s Famous Aspens Expected to Decline Due to Climate Change")

<https://cnr.ncsu.edu/news/2020/09/colorados-famous-aspens-expected-to-decline-due-to-climate-change/>

NC State Bulletin, featured under "Research + Partnerships", ("Colorado’s Famous Aspens Expected to Decline Due to Climate Change"). (2020).

[https://news.ncsu.edu/2020/09/colorados-aspens-expected-to-decline-due-to-climate/?utm\\_source=Bulletin+September+List&utm\\_campaign=ed5a6e26a6-EMAIL\\_CAMPAIGN\\_2020\\_09\\_24\\_02\\_57&utm\\_medium=email&utm\\_term=0\\_fe56520904-ed5a6e26a6-103641133](https://news.ncsu.edu/2020/09/colorados-aspens-expected-to-decline-due-to-climate/?utm_source=Bulletin+September+List&utm_campaign=ed5a6e26a6-EMAIL_CAMPAIGN_2020_09_24_02_57&utm_medium=email&utm_term=0_fe56520904-ed5a6e26a6-103641133)

NC State News Release (“Study Finds Spreading Ghost Forests on N.C. Coast May Contribute to Climate Change”). (2020).

<https://news.ncsu.edu/2020/09/study-finds-spreading-ghost-forests-on-n-c-coast-may-contribute-to-climate-change/>

Center for Geospatial Analytics September 2020 Newsletter (“Study Finds Spreading Ghost Forests on N.C. Coast May Contribute to Climate Change”)

<https://news.ncsu.edu/2020/09/study-finds-spreading-ghost-forests-on-n-c-coast-may-contribute-to-climate-change/>

## PRESENTATIONS

Underline indicates student working under my supervision;

Double underline indicates postdoctoral scholar working under my supervision

### *Refereed Oral Presentations*

#### **International**

**Vukomanovic, J.**, Singh, K.K., Yoshizumi, A., Vogler, J.B., & Meentemeyer, R.K. (2022).

*What’s driving residential development around parks and protected areas in the United States?* International Association of Landscape Ecology - North America (IALE-NA) Annual Meeting, planned for Riverside, CA (Virtual Meeting).

Jones, K., Loudermilk, L., Robbins, Z., **Vukomanovic, J.**, & Scheller, R. (2021). *Forecasting Prescribed Fire Smoke in Southern Appalachian Communities*. 9<sup>th</sup> International Fire Ecology and Management Congress, planned for Miramar Beach, FL (Virtual Meeting).

**Vukomanovic, J., Smart, L.,** Koch, J., Dale, V., Plassin, S., Byrd, K., Beier, C., Wilson, M., & Doyon, F. (2021). *Translating stakeholder narratives for modeling in landscape ecology*. International Association of Landscape Ecology - North America (IALE-NA) Annual Meeting, planned for Reno, NV (Virtual Meeting).

**Yoshizumi, A., & Vukomanovic, J.** (2021). *Spatial Characterization of Exurbia in the United States*. International Association of Landscape Ecology - North America (IALE-NA) Annual Meeting, planned for Reno, NV (Virtual Meeting).

**Jones, K., & Vukomanovic, J.** *Spatio-temporal Relationships between Prescribed Fire and Wildfire Events*. (2021). International Association of Landscape Ecology – North America (IALE-NA) Annual Meeting, planned for Reno, NV (Virtual Meeting).

**Inglis, N., Vukomanovic, J., & Petrasova, A.** (2021). *Temporally dynamic viewscapes for modeling the visual amenities of exurban housing development*. International Association of Landscape Ecology – North America (IALE-NA) Annual Meeting, planned for Reno, NV (Virtual Meeting).

**Inglis, N., & Vukomanovic, J.** (2020). *Spatially-explicit exurban land change modeling requires novel amenity parameters*. International Association of Landscape Ecology – North America (IALE-NA) Annual Meeting, planned for Toronto, Canada (Virtual Meeting).

**Vukomanovic, J., Smart, L., Sanchez, G., & Yoshizumi, A.** (2020). *Spaces between the Bases: Sustaining Military Readiness and Conservation Priorities through Geospatial Participatory Modeling*. International Association of Landscape Ecology – North America (IALE-NA) Annual Meeting, planned for Toronto, Canada (Virtual Meeting).

**Smart, L., Vukomanovic, J., Sills, E.O., & Sanchez, G.** (2020). *Incorporating Stakeholder-driven Conservation Priorities into Models of Coastal Land-use and Land Cover Change*. International Association of Landscape Ecology – North America (IALE-NA) Annual Meeting, planned for Toronto, Canada (Virtual Meeting).

**Randall, J., Cutts, B., Vukomanovic, J.** (2019). *Understanding the spatial justice of mapping energy poverty*. Energy and Society in Transition: 2<sup>nd</sup> International Conference on Energy Research and Social Science, Tempe, AZ.

**Inglis, N., Shedd, J., & Vukomanovic, J.** (2018). *Fire management costs and at-risk wildland-urban interface communities in South Florida's National Parks*. International Association of Wildland Fire: Human Dimensions Conference (IAWF), Asheville, N.C.

**Vukomanovic, J., Smart, L.S., Sanchez, G.M., Jouzi, Z.S., & Sills, E.O.** (2018). *Participatory Mapping and Modeling of Land Change in Coastal South Carolina: The Johns Island Community Conservation Initiative*. International Congress on Environmental Modelling and Software, Fort Collins, CO.

**Vukomanovic, J.**, Skrip, M., Smart, L.S., & Meentemeyer, R.K. (2018). *Armed with science: The case for stakeholder engagement with geospatial participatory modeling*. International Symposium on Society and Natural Resources (ISSRM), Salt Lake City, UT.

Shedd, J., & **Vukomanovic, J.** (2018). *Promoting resilient landscapes through the use of prescribed fire in south Florida*. The Fire Continuum Conference, Missoula, Montana.

Shedd, J., **Vukomanovic, J.**, & Shukunobe, M. (2017). *Collaborative web-based tools for National Park Service Resource Managers*. International Fire Ecology and Management Congress, Orlando, FL.

**Vukomanovic, J.**, & Bourgeron, P. (2017). *Cross-scale connections and impacts of fire on ecosystem services in mountain systems*. International Symposium on Society and Natural Resources (ISSRM), Umeå, Sweden.

Vogler, J., **Vukomanovic, J.**, Slocumb, W., & Meentemeyer, R. (2017). *Tracking human footprint across the continent: geospatial analytics for measuring and visualizing per capita land and resource consumption in the conterminous United States*. International Symposium on Society and Natural Resources (ISSRM), Umeå, Sweden.

**Vukomanovic, J.**, Bourgeron, P., & Ray, C. (2015). *Teaching social-ecological systems: VART curriculum development*. International Association of Landscape Ecology (IALE) World Congress, Portland, OR.

**Vukomanovic, J.**, & Bourgeron, P. (2015). *Mountain forest fires and ecosystem services: impacts, cross-scale connections, and the development of an explicit assessment framework*. International Association of Landscape Ecology (IALE) World Congress, Portland, OR.

**Vukomanovic, J.**, & Vogler, J. (2015). *Changing landscapes, changing preferences: dynamic viewshed analysis of feedbacks between exurban development and privacy in the Colorado Front Range*. International Symposium on Society and Resource Management (ISSRM), Charleston, SC.

**Vukomanovic, J.**, Bourgeron, P., & Humphries, H. (2015). *Impacts, trade-offs, and cross-scale connections between wildfire and ecosystem services in the Colorado Front Range*. International Wildland Fire Safety Summit and Human Dimensions of Wildland Fire Conference [Invited presentation - Special Session: Wildfire management in coupled human and natural systems (CHANS): integrating biophysical and socioeconomic information], Boise, ID.

Bourgeron, P., & **Vukomanovic, J.** (2015). *The dynamics of fire-prone coupled human and natural systems (CHANS) and the emergence of wicked problems*. International Wildland Fire Safety Summit and Human Dimensions of Wildland Fire Conference [Invited presentation - Special Session: Wildfire management in coupled human and natural systems (CHANS): integrating biophysical and socioeconomic information], Boise, ID.

**Vukomanovic, J.** (2014). Panelist: *Managing the Pandora's Box: trade-offs between delivering currently prioritized ecosystem services and the capacity to deliver future services*. International Science and Policy Conference on the Resilience of Social & Ecological Systems, Montpellier, France.

**Vukomanovic, J.** (2012). *Housing density and fire hazard in a southeastern Arizona grassland*. International Drylands Symposium: Learning from Legacies, Sustaining the Future, Las Cruces, NM.

**Vukomanovic, J., & Orr, B.** (2011). *The challenges of interdisciplinary research and the emerging role of interdisciplinary facilitators*. Global Land Project & International Long-Term Ecological Research (LTER) Network Summer Workshop, Hokkaido University, Sapporo, Japan.

**Vukomanovic, J.** (2011). *Exurbanization and the effects of landscape fragmentation on ecosystem services in a southwestern grassland: vegetation, wildlife and carbon storage*. Global Land Project & International Long-Term Ecological Research (LTER) Network Summer Workshop, Hokkaido University, Sapporo, Japan.

## **National**

Terando, A.J., Sanchez, G., Petrasova, A., Collins, E., Vogler, J., **Vukomanovic, J.**, Mitsova, H., & Meentemeyer, R. (2021). *Forecasting land change in response to sea-level rise and frequent flooding*. AGU Fall Meeting, New Orleans, LA.

Randall, J., Cutts, B., **Vukomanovic, J.** (2020). *A Framework for the Spatial Analysis of Energy Poverty*. Association of American Geographers (AAG) Annual Meeting, planned for New York City, NY (Virtual Meeting).

**Vukomanovic, J., & Inglis, N.** (2019). *Scenic drives and fall color viewing in Colorado impacted by changes to quaking aspen distribution due to climate change*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Ft. Collins, CO.

Smart, L.S., Sills, E.O., & **Vukomanovic, J.** (2019). *Informing Natural- and Working-Landscape Conservation in the Coastal Carolinas through Integration of Participatory Research and Geospatial Analytics*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Ft. Collins, CO.

Randall, J., Cutts, B., & **Vukomanovic, J.** (2019). *Spatial Analysis of Energy Poverty Vulnerabilities: Characterizing Spatial Injustices in Classifications and Solutions*. Association of American Geographers (AAG) Annual Meeting, Washington,

Randall, J., Smith, C., Slocumb, W., Cutts, B., & **Vukomanovic, J.** (2018). *Mapping Energy Efficiency: Understanding Low-Income Energy Geographies Through Data*

*Collaboration*. Human Geography Dimensions of Energy Access and Use Symposium, WWHGD Working Group. Washington, DC.

**Vukomanovic, J., Smart, L.S., Sanchez, G.M., Jouzi, Z.S., & Sills, E.O.** (2018). *FUTURES in their hands: participatory modeling of land change in coastal South Carolina*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Chicago, IL.

Vogler, J., Meentemeyer, R.K., & **Vukomanovic, J.** (2018). *Tracking our human footprint: trends in U.S. land consumption and use efficiency in the urban millennium*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Chicago, IL.

Jouzi, Z., Smart, L.S., Sills, E.O., & Vukomanovic, J. (2018). *Identifying conservation priorities through participatory ecosystem services mapping in a coastal zone*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Chicago, IL.

Randall, J., Cutts, B.B., Vukomanovic, J., Minn, M., & Greenberg, J. (2018). *Mortgages and maintenance: characteristics of greenness change in an urban desert landscape*. Association of American Geographers (AAG) Annual Meeting, New Orleans, LA.

**Vukomanovic, J., Singh, K., Vogler, J., & Petrasova, A.** (2017). *Not seeing the forest for the trees: modeling viewscapes with LiDAR*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Baltimore, MD.

**Vukomanovic, J., Van Berkel, D., & Meentemeyer R.** (2016). *Making it spatial, makes it personal: engaging stakeholders with geospatial participatory modeling (GPM)*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Asheville, NC.

**Vukomanovic, J., Bourgeron, P., & Ray, C.** (2016). *Household decisions, landscape impacts: Flammability, exurban development and fire regime interactions*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Asheville, NC.

**Vukomanovic, J., Bourgeron, P. & Humphries, H.** (2014). *Interactions among disturbances, climate change, and exurbanization in the Colorado Front Range: shift to a wicked problem and some potential solutions*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Anchorage, AK.

Bourgeron, P., & **Vukomanovic, J.** (2014). *Issues in managing the Land-Water-Climate nexus: causes and consequences of a shift to a wicked problem*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Anchorage, AK.

Campbell, A., Bourgeron, P., & **Vukomanovic, J.** (2014). *Preliminary assessment of the effects of unconventional energy development on Ecosystem Services*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Anchorage, AK.

**Vukomanovic, J.** (2013). *In search of solitude: privacy as a driver in exurban housing location selection*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Austin, TX.

**Vukomanovic, J.** (2013). *Housing density and ecosystem function: comparing the impacts of rural, exurban, and suburban densities of fire hazard, water availability, and house and road distance effects*. Association of American Geographers (AAG) Annual Meeting, Los Angeles, CA.

**Vukomanovic, J.** (2012). *The effects of houses and road networks on ecological processes in a southwestern grassland*. Ecological Society of America (ESA) Annual Meeting, Portland, OR.

**Vukomanovic, J.** (2012). *Restricted viewsheds and the distribution of exurban homes in a southwestern grassland*. Association of American Geographers (AAG) Annual Meeting, New York, NY.

## **Regional**

Jones, K., & **Vukomanovic, J.** (2023). *FireHydro: Mapping South Florida daily fire risk for decision support using fuels, water levels, and fire history*. Greater Everglades Ecosystem Restoration (GEER) Conference, Coral Springs, FL.

Yoshizumi, A., **Vukomanovic, J.**, Smart, L., Bardaka, E. (2023). *A Tool for Assessing Alternative Fuel Vehicle Infrastructure Resilience across Emergency Evacuation Scenarios*. NC Department of Transportation Research & Innovation Summit, Raleigh, NC.

Jones, K., Loudermilk, L., Robbins, Z., **Vukomanovic, J.**, Scheller, R. (2022). *Forecasting Prescribed Fire Smoke in Southern Appalachian Communities*. SE Climate Adaptation and Science Symposium, Gulf Shores, AL.

Randall, J., Cutts, B., **Vukomanovic, J.** (2019). *A Framework for the Spatial Analysis of Energy Poverty*. Southeastern Division of the American Association of Geographers (SEDAAG), Wilmington, NC.

Smart, L.S., **Vukomanovic, J.**, Sills, E.O., & Sanchez, G. (2019). *Participatory Mapping of cultural ecosystem services impacted by coastal squeeze*. Southeast Climate Adaptation Science Center Regional Symposium, New Orleans, LA.

## **Refereed Poster Presentations**

## International

Perella, C., Vukomanovic, J., & Terando, A. (2023) *Delineating Boundaries in Social-Ecological Systems*. International Association of Landscape Ecology - North America (IALE-NA) Annual Meeting, Riverside, CA.

Yoshizumi, A., Vukomanovic, J., & Meentemeyer, R. (2023). *Spatial Characterization of Exurbia in the United States*. IALE-North America Annual Meeting, Riverside, CA.

Sanchez, G.M., **Vukomanovic, J.**, Smart, L.S., Addor, M.L., Yoshizumi, A., Gonzales, C., & Bardon, R. (2022). *Envisioning co-benefits of conservation and military readiness through participatory modeling*. International Association of Society and Natural Resources (IASNR) Annual Meeting, San José, Costa Rica.

Agostini, D., Shedd, J., & **Vukomanovic, J.** (2019). *Research trends in National Parks: lessons from Congaree National Park*. International Association of Society and Natural Resources (IASNR) Annual Meeting, Oshkosh, WI.

## National

Agostini, D., Shedd, J., & **Vukomanovic, J.** (2019). *Interactive, online tools to understand research trends and identify opportunities for research in the U.S. National Parks system*. University Consortium for Geographic Information Science (UCGIS) Symposium, Washington, DC.

Barnhart, T.B., **Vukomanovic, J.**, Bourgeron, P., & Molotch, N.P. (2017). *Streamflow response to future land-cover change at a headwaters catchment spanning the alpine-subalpine transition on the Colorado Front Range*. American Geophysical Union (AGU), New Orleans, LA.

Culler, M., Shedd, J., & **Vukomanovic, J.** (2018). *Geospatial web applications for NPS fire management at the wildland-urban interface*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Chicago, IL.

Michaels, A., Ressler, L., & **Vukomanovic, J.** (2017). *Land use and land cover change in the Crown of the Continent Ecosystem, Montana, USA (1992-2011)*. U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Baltimore, MD.

## Regional

Lawrimore, M.A., Sanchez, G.M., Petrasova, A., Skrip, M.M., Collins, E.L., Vogler, J.B., Terando, A., **Vukomanovic, J.**, Mitasova, H., & Meentemeyer, R.K. (2022). *Forecasting scenarios of human mobility and shifts in development patterns driven by future flood*

*hazard conditions*. Southeast Climate Adaptation Science Center Regional Symposium, Gulf Shores, AL.

Jones, K., Loudermilk, L., **Vukomanovic, J.**, Robbins, Z, Jacobs, R., Mohr, H., Warwick, A., & Scheller, R. (2022). *Prescribed fire smoke scenarios using projected climate, housing development, and management priorities*. Southeast Climate Adaptation Science Center Regional Symposium, Gulf Shores, AL.

Sanchez, G.M., Petrasova, A., Skrip, M.M., Collins, E.L., Lawrimore, M.A., Vogler, J.B., Terando, A., **Vukomanovic, J.**, Mitsova, H., & Meentemeyer, R.K. (2022). *Improving forecasts of societal responses to sea level rise and frequent flooding*. Southeast Climate Adaptation Science Center Regional Symposium, Gulf Shores, AL.

**Vukomanovic, J.**, Smart, L.S., & Sills, E.O. (2019). *Incorporating Stakeholder-Derived Conservation Priorities into Models of Coastal Land-use and Land Cover Change*. Southeast Climate Adaptation Science Center Regional Symposium, New Orleans, LA.

**Vukomanovic, J.** (2012). *Generalized distance effects of houses and road networks on ecosystem function in a southeastern Arizona grassland*. Research Insights in Semiarid Ecosystems Symposium, Tucson, AZ.

**Vukomanovic, J.** (2008). *Application of Remote Sensing for Conservation Easement Monitoring*. American Association for the Advancement of Science (AAAS) Southwestern and Rocky Mountain (SWARM) Division, Albuquerque, NM.

## Invited Talks

**Vukomanovic, J.** (2021). *Ten lessons for translating stakeholder narratives to models*. Department of Geography, George Washington University (virtual seminar).

**Vukomanovic, J.** (2018). *Participatory Mapping and Stakeholder Engagement*. Geospatial Forum, Center for Geospatial Analytics, NC State.

**Vukomanovic, J.** (2017). *Forest Modeling - Coupled Human-Natural Systems Research & the LANDIS-II Model*. Department of Forestry and Environmental Resources, NC State.

**Vukomanovic, J.** (2016). *The Need for Geospatial Participatory Modeling*. Coffee & Viz Seminar Series, North Carolina State University.

**Vukomanovic, J.** (2016). *Advancing Research in Human Dimensions of Natural Resources and Geospatial Analytics*. Department of Parks, Recreation, and Tourism Management, NC State.

**Vukomanovic, J.** (2014). *Coupling ethnographic descriptions and spatial distribution: drivers of exurban amenity migration in the New West*. Department of Earth Sciences, Montana State University.



**Vukomanovic, J.** (2013). *Amenity-migration in the Western U.S.: reconciling human preference, distribution of housing, and ecological impacts*. Institute of Arctic and Alpine Research, University of Colorado – Boulder.

**Vukomanovic, J.** (2012). *Exurbanization and Amenity-Driven Development*. School of Geography and Development, University of Arizona.

**Vukomanovic, J.** (2010). *Incentive Mechanisms for Conservation on Private Property*. School of Geography and Development, University of Arizona.

**Vukomanovic, J.** (2006). *Genotoxicity of halogenated disinfection by-products in chlorinated water: effects of pH, temperature & bromide concentration*. Department of Chemistry & Chemical Engineering, Royal Military College of Canada.

**Vukomanovic, J.** (2005). *Introduction to Canadian Environmental Legislation: the Ontario Environmental Protection Act, Canadian Environmental Assessment Act and the Fisheries Act*. Department of Chemistry & Chemical Engineering, Royal Military College of Canada.

## TEACHING AND MENTORING

### Courses Taught as Instructor

#### *North Carolina State University*

1. GIS and Spatial Analysis in Parks, Recreation, Tourism and Sport Management (Graduate – PRT 505), Spring 2020, Spring 2021, Spring 2022
2. Geospatial Applications for Parks, Recreation and Tourism Management (Undergraduate – PRT 240), Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023
3. Geospatial Applications for Environment and Society (Undergraduate – Special Topics), Spring 2017, Spring 2018
4. Doctoral Seminar (PRT 801), Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019

#### *University of Arizona*

1. Human-Environment Dimensions of Arid Lands Graduate Seminar, Spring 2013
2. Biology Lab Methods, Dept. of Molecular and Cellular Biology, Fall 2012
3. The Physical Universe, Dept. of Astronomy and Steward Observatory, Fall 2011

#### *Ryerson University*

1. General Chemistry Lab Methods, Dept. of Chemistry & Biology, Fall 2006

### Graduate Committee Membership

## Graduate Student Committees Chaired

<i>Current Students (3)</i>	<i>Degree</i>	<i>Major</i>	<i>Anticipated Graduation</i>
Alexander Yoshizumi	Ph.D.	Geospatial Analytics	May 2023
Katherine Jones	Ph.D.	Geospatial Analytics	May 2023
Christina Perella <sup>1</sup>	Ph.D.	Geospatial Analytics	May 2026
<i>Graduated Students (4)</i>	<i>Degree</i>	<i>Major</i>	<i>Graduation</i>
Daniela Agostini	M.S.	Parks, Recreation & Tourism Management	May 2020
Nicole Inglis	Ph.D.	Geospatial Analytics	December 2021
Carrie Gonzales	M.S.	Parks, Recreation & Tourism Management	May 2022
Joshua Randall <sup>2</sup>	Ph.D.	Parks, Recreation & Tourism Management	August 2022

<sup>1</sup>Co-Chair with Dr. Adam Terando (USGS, Southeast Climate Adaptation Science Center)

<sup>2</sup>Co-Chair with Dr. Bethany Cutts (Parks, Recreation and Tourism Management)

## Graduate Student Advisor – Professional Master's Students

<i>Current Students (9)</i>	<i>Degree</i>	<i>Major</i>
Michael Brown	MPRTSM	Parks, Recreation, Tourism & Sport Management
Michael Clegg	MPRTSM	Parks, Recreation, Tourism & Sport Management
Robin Ficarelli	MPRTSM	Parks, Recreation, Tourism & Sport Management
Sarah Hesington	MPRTSM	Parks, Recreation, Tourism & Sport Management
Bond Lammey	MPRTSM	Parks, Recreation, Tourism & Sport Management
Matthew Morgan	MPRTSM	Parks, Recreation, Tourism & Sport Management
William Walker	MPRTSM	Parks, Recreation, Tourism & Sport Management
Jacob Wentink	MPRTSM	Parks, Recreation, Tourism & Sport Management
Chasady Wudkwyeh	MPRTSM	Parks, Recreation, Tourism & Sport Management
<i>Graduated Students (8)</i>	<i>Degree</i>	<i>Major</i>
Nicole Benbow	MPRTSM	Parks, Recreation, Tourism & Sport Management

Jonathan Bentley	MPRTSM	Parks, Recreation, Tourism & Sport Management
Lauren Deutscher	MPRTSM	Parks, Recreation, Tourism & Sport Management
Maria Gilbert	MPRTSM	Parks, Recreation, Tourism & Sport Management
Kendall Henderson	MPRTSM	Parks, Recreation, Tourism & Sport Management
Lauren Morris	MPRTSM	Parks, Recreation, Tourism & Sport Management
Joanna Nalboraska	MPRTSM	Parks, Recreation, Tourism & Sport Management
William Walker	MPRTSM	Parks, Recreation, Tourism & Sport Management

#### **Graduate Committee Member**

<i>Current Students (7)</i>	<i>Degree</i>	<i>Major</i>	<i>Anticipated Graduation</i>
Will Beam	M.S.	Parks, Recreation & Tourism Management	December 2022
Eleanor Knight	M.S.	Parks, Recreation & Tourism Management	December 2022
Adam Schmidt	Ph.D.	Civil Engineering	May 2023
Jae In Oh	Ph.D.	Parks, Recreation & Tourism Management	December 2023
Corey White	Ph.D.	Geospatial Analytics	December 2022
Shannon McAvoy	Ph.D.	Geospatial Analytics	May 2025
Louis Goodall	Ph.D.	Geospatial Analytics	December 2025
<i>Former Students (1)</i>	<i>Degree</i>	<i>Major</i>	<i>Graduation</i>
Anna Kletcova	M.N.R	Natural Resources	May 2018

#### ***Postdoctoral Scholars and Research Associates Mentored***

Lindsey Smart – 2019-2021. Current position - Coastal Wetlands Strategy Analyst, The Nature Conservancy.

Kunwar Singh –2019. Current position - Geospatial Scientist at AidData and Research Faculty at the Center for Geospatial Analysis, College of William & Mary

#### **PROFESSIONAL AND UNIVERSITY SERVICE**

##### **University Service**

### **University Level (NC State)**

2016–present, Member, Association of Women Faculty (AWF) Steering Committee. AWF advocates for women faculty and was part of the successful joint initiative to provide parental leave for non-tenure track faculty.

2017–present, Member, NC State Showcase of Women Faculty Research, Creativity, and Scholarship Organizing Committee. An annual showcase and networking for event for women faculty.

2017, Organizer, Women in Science Speaker Series. The Speaker Series brought three prominent women scientists and leaders to NC State to reflect on their research and careers and the opportunities, challenges, and detours experienced.

2016 & 2017, Faculty Panelist, NC State's Building Future Faculty program.

### **College Level (College of Natural Resources)**

2020–present, Member, Safety Committee

2023–present, Member, Mentoring Committee for Dr. Kurt Smith, Department of Forestry and Environmental Resources.

2022-2023, Member, Search Committee for Associate Dean of Diversity, Equity & Inclusion.

2016–2021, Chair, Women in Science Discussion Group. The Women in Science Discussion Group met weekly to discuss to support, mentor and sponsor women faculty and graduate students and to discuss issues of relevance to women in science. The group had over 150 members from CNR and beyond. To promote community and engagement we met for informal discussion and shared resources. Pre-COVID-19, I compiled, organized and shared resources for weekly discussion. During the COVID-19 pandemic, I organizing regular Zoom lunches and compiled a “weekly digest” of relevant resources, studies and news stories, and opportunities to the group.

2018, Judge, CNR Graduate Student Research Symposium

2017, Faculty Panelist, CNR Prospective Student Visitation Day (Furman University)

### **Department Level (Parks, Recreation and Tourism Management)**

2019–present, Member, Graduate Program Advisory Committee

2019–present, Member, Peer Review of Teaching Committee

2022–present, Member, Scholarship Committee

2022-present, Departmental Libraries Representative

2021, Chair, Search Committee for Teaching Assistant Professor in Parks, Recreation, and Tourism Management

2017–2020, Member, Educational Technology Fund Advisory Committee

2017–2020, Member, Space Committee

2018 & 2019, Faculty lead, Tours of the Center for Geospatial Analytics for PRTM Visitation Day and PRTM New Student Orientation.

2016–2019, Member, Human Dimensions Research Circle

### **Recognition for Service**

2021, **Chancellor's Creating Community Award Nominee (Faculty)**, Office for Institutional Equity and Diversity, NC State University. The Recognizing Excellence in Diversity (RED) event recognizes outstanding faculty, staff, colleges, students and student organizations that have made exceptional efforts and contributions in the areas of equity, diversity and inclusion during the course of the academic year.

2020, **Chancellor's Creating Community Award Nominee (Faculty)**, Office for Institutional Equity and Diversity, NC State University. The Recognizing Excellence in Diversity (RED) event recognizes outstanding faculty, staff, colleges, students and student organizations that have made exceptional efforts and contributions in the areas of equity, diversity and inclusion during the course of the academic year.

2019, **Equity for Women Award Nominee**, Council on the Status of Women, NC State University. Recognition of faculty, staff and students for their outstanding leadership in establishing equity for women at NC State.

2018, **Equity for Women Award Nominee**, Council on the Status of Women, NC State University. Recognition of faculty, staff and students for their outstanding leadership in establishing equity for women at NC State.

2017, **Equity for Women Award Nominee**, Council on the Status of Women, NC State University. Recognition of faculty, staff and students for their outstanding leadership in establishing equity for women at NC State.

### **Professional Service External to the University**

#### **Service to Professional Societies**

2020–present, Member, University Consortium for Geographic Information Science (UCGIS) Research Committee

2016–present, Mentor, International Association of Landscape Ecology – North America (IALE-NA) Student Mentoring Program

2018–2020, Councilor-at-Large position on the Executive Committee of the International Association of Landscape Ecology – North America (IALE-NA). Chair of sub-committee that rewrote the society’s mission and purpose to promote diversity and inclusion and champion participation in landscape ecology regardless of race, religion, gender identification, sexual orientation, age, disability, or veteran status.

2018-2020, Chair, Site Selection Committee, International Association of Landscape Ecology – North America (IALE-NA)

2019, Session Organizer: Weaving Stakeholder Narratives into Quantitative Models of Environmental Change, International Association of Landscape Ecology-North America (IALE-NA) Annual Meeting, planned for Toronto Canada (virtual meeting).

2017–2019, Mentor, ISSRM Student Mentoring Program

2016, Session Organizer: Modeling with Stakeholders, U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Asheville, NC.

2015, Workshop Organizer: The emergence of wicked problems in coupled human and natural systems: causes and consequences. International Association of Landscape Ecology (IALE) World Congress, Portland, OR.

2014, Session Organizer: Cascading Thresholds in Coupled Human and Natural Systems and the Emergence of Wicked Problems, U.S. Regional Association of the International Association of Landscape Ecology (US-IALE) Annual Meeting, Anchorage, AK.

2014, Session Organizer: Managing the Pandora's Box: trade-offs between delivering currently prioritized ecosystem services and the capacity to deliver future services, International Science and Policy Conference on the Resilience of Social & Ecological Systems, Montpellier, France.

2013, Session Organizer: Exurbanization and Amenity-Driven Development, Association of American Geographers (AAG) Annual Meeting, Los Angeles, CA.

### **Reviewing and Referring Service**

2022-present, Associate Editor, *Leisure Sciences*.

2020, Book Proposal Reviewer (“An Evaluation of Participatory Mapping Software”), Springer Publishing

2017, Grant Proposal Reviewer, University of Nebraska Collaborative Initiative Grant Program.

Ad-Hoc Reviewer for Scholarly Journals: Global Environmental Change, Ecosphere, Landscape and Urban Planning, Journal of Mountain Science, Environmental Science and Policy, PLOS ONE, Environmental Earth Science, Urban Forestry and Urban Greening, Forests, Southeastern Geographer, Land, Sustainability, ISPRS International Journal of Geo-Information, Remote Sensing of Environment, Advances in Engineering Software

### **Membership in Professional Societies**

2020–present, University Consortium for Geographic Information Science (UCGIS)

2012–present, International Association of Landscape Ecology – North America (IALE-NA) (formerly US-IALE)

2015–present, International Association for Society and Natural Resources (IASNR)

2015–present, International Association of Wildland Fire

2011–2016, Association of American Geographers (AAG)

2012–2016, Ecological Society of America (ESA)

2009–2013, American Association for the Advancement of Science (AAAS)

2004–2007, Canadian Water Resources Association