E. Jamie Trammell, Ph.D. Associate Professor of Environmental Science Environmental Science and Policy Southern Oregon University Email: <u>trammelle@sou.edu</u> Office phone: +1 541-552-6496

Summary

I am a landscape ecologist interested in modeling landscape change with explicit focus on the integration of socioeconomic and biophysical drivers. I am particularly interested in modeling alternative futures in order to better understand how various landscape drivers combine to determine future condition of both terrestrial and aquatic systems. I continually work to translate disparate data sources (from climate to social to economic to ecological) into a common geospatial framework for landscape-level analyses, and enjoy using GIS to facilitate visualization and communication of both aquatic and terrestrial systems.

Education and Degrees	
Ph.D. (2011)	Ecology, Evolution, and Conservation Biology, University of Nevada, Reno
M.S. (2006)	Geography, University of Nevada, Reno
B.A. (2003)	Environmental Biology and Environmental Studies, Western State College of Colorado (now Western Colorado University)
Employment	
2019 – present	Associate Professor of Environmental Science, Environmental Science and Policy, Southern Oregon University
2017 - 2019	Assistant Professor of Environmental Science, Environmental Science and Policy, Southern Oregon University
2017 – present	Affiliate Faculty, Alaska Center for Conservation Science, University of Alaska, Anchorage
2012 - 2017	Assistant Professor of Environmental Studies, Geography and Environmental Studies, Alaska Center for Conservation Science, University of Alaska, Anchorage
2012 - 2017	Adjunct Lecturer, Institute for Rural Futures, Armidale, NSW
2011 - 2012	Postdoctoral Research Fellow, Institute for Rural Futures, Armidale, NSW
2011 – present	Adjunct Research Professor, Desert Research Institute, Reno, Nevada
2010 - 2011	Graduate Research Assistant, University of Nevada, Reno, Nevada
2003 - 2011	Graduate Research Assistant, Desert Research Institute, Reno, Nevada
2002 - 2003	Assistant Residence Director, Western State College, Gunnison, Colorado
2000 - 2002	Science and Environmental Studies Hall Coordinator, Western State College, Colorado
2001	Teaching Assistant, Western State College, Gunnison, Colorado

Publications

In review or preparation

- Trammell, E. J., J. H. Reynolds, M. L. Carlson, J. J. Taylor, N. M. Schmidt. Measuring ecological integrity in intact systems: challenges assessing conservation status in northern latitude ecosystems. *In Review*.
- Vynne, C., E. Dovichin, N. Fresco, N. Dawson, A. Joshi, B. Law, K. Lertzman, S. Rupp, F. Schmiegelow, E. J. Trammell. The Importance of Alaska for Climate Stabilization, Resilience, and Biodiversity Conservation. *In Review*.
- Kliskey, A., P. Williams, E. J. Trammell, D. Cronan, D. Griffith, L. Alessa, M. de Haro-Marti, Oxarango-Ingram. Co-producing trajectories of landscape change in Food-Energy-Water Systems: Stakeholder Engagement as a Process in Transdisciplinary Science. *In Review*.

Refereed Publications

- 23. E. J. Trammell, M. Krupa. P. Williams and A. Kliskey. 2021. Using comprehensive scenarios to identify social-ecological threats to salmon in the Kenai River watershed, Alaska. Sustainability (Trajectories of Change in Food-Energy-Water Systems: Exploring Futures of Landscape-scale Systems Using Community Engagement Methodologies); 13(10), 5490; https://doi.org/10.3390/su13105490
- 22. Carter, S. K., D. S. Pilliod, T. Haby, K. L. Prentice, C. L. Aldridge, P. J. Anderson, Z. H. Bowen, J. B. Bradford, S. A. Cushman, J. C. DeVivo, M. C. Duniway, R. S. Hathaway, L. Nelson, C. A. Schultz, R. M. Schuster, E. J. Trammell, and J. F. Weltzin. 2020. Bridging the research-management gap: Landscape science in practice on public lands in the western United States. *Landscape Ecology* 35: 545–560; https://doi.org/10.1007/s10980-020-00970-5
- 21. Nawrocki, T., M. L. Carlson, J. Osnas, **E. J. Trammell**, F. Witmer. **2020**. Regional mapping of species-level continuous foliar cover: beyond categorical vegetation mapping. *Ecological Applications*.
- 20. Cronan, Daniel; Kliskey, Andrew D.; Trammell, Jamie; Lorentzen, Chad; Griffith, David L.; and Williams, Paula (2019) "An Alternative Futures Approach to Green Infrastructure Planning for an Increasing Population," Proceedings of the Fábos Conference on Landscape and Greenway Planning: Vol. 6, Article 56. DOI: <u>https://doi.org/10.7275/evjy-c088</u>
- 19. Franklin, M, M. Cenek, E. J. Trammell. 2019. Studying Kenai River fisheries' socio-ecological drivers using a holistic fisheries agent-based model: implications for policy and adaptive capacity. *Fishes* 4(2): 33. <u>https://doi.org/10.3390/fishes4020033</u>
- Williams, P., L. Alessa, A. Kliskey, D. Rinella, J. Trammell, J. Powell, M. McCarthy, and J. Abatzoglou.
 2018. The role of perceptions versus instrumented data of environmental change: Responding to changing environments in Alaska. *Environmental Science and Policy* 90: 110-121. https://doi.org/10.1016/j.envsci.2018.09.018
- 17. Reynolds, J. H., **E. J. Trammell**, J. J. Taylor. **2018**. Migration's Foundation: Ecological Intactness of Alaska's Ecosystems. *Alaska Park Science*. <u>https://www.nps.gov/articles/aps-17-1-13.htm</u>
- 16. Trammell, E. J., S. K. Carter, T. Haby, J. J. Taylor. 2018. Evidence and Opportunities for Integrating Landscape Ecology into Natural Resource Planning across Multiple-Use Landscapes. *Current Landscape Ecology Reports* 3(1): 1-11. <u>https://doi.org/10.1007/s40823-018-0029-5</u>
- 15. Brunckhorst, D. E. J. Trammell, M. Shannon. 2017. Landscape Loopholes: Moments for Change. Journal of Research Practice 13(1). <u>http://jrp.icaap.org/index.php/jrp/article/view/569/481</u>
- 14. Williams, P., L. Alessa, J. T. Abatzoglou, A. Kliskey, F. Witmer, O. Lee, E. J. Trammell, G. Beaujean, R. Venema. 2017. Community-based observing networks and systems in the Arctic: Human perceptions of environmental change and instrument-derived data. *Regional Environmental Change* 18(2): 547-559. <u>https://link.springer.com/article/10.1007/s10113-017-1220-7</u>
- Krupa, M., M. Cenek, E. J. Trammell, and J. Powell. 2017. Mapping the Stakeholders: Using social network analysis to increase the legitimacy and transparency of participatory scenario planning. *Society and Natural Resources* 31(1): 136-141. <u>https://doi.org/10.1080/08941920.2017.1376140</u>

- M. L. Carlson, E. J. Trammell, T. Nawrocki and E. Noongwook. 2017. Addition to the vascular plant flora of St. Lawrence Island: New records, rare species, and phytogeographic patterns. *Rhodora* 120(981): 1-41. <u>https://doi.org/10.3119/17-04</u>
- Schoen, E. R., Wipfli, M. S., Trammell, E. J., Rinella, D. J., Floyd, A., Grunblatt, J., McCarthy, M., Meyer, B., Morton, J., Powell, J., Prakash, A., Reimer, M. N., Stuefer, S. L., Toniolo, H., Wells, B., and Witmer, F. 2017. Future of Pacific Salmon in the Face of Climate and Landscape Change: Insights from Kenai River, Alaska. *Fisheries* 42(10): 538-553. <u>https://doi.org/10.1080/03632415.2017.1374251</u>
- Trammell, E. J., S. Thomas, D. Mouat, Q. Korbulic and S. Bassett. 2017. Using alternative land use scenarios to facilitate natural resource management across jurisdictional boundaries. *Journal of Environmental Planning and Management*. <u>http://dx.doi.org/10.1080/09640568.2017.1289901</u>
- Kliskey, A., L. Alessa, S. Wandersee, P. Williams, E. J. Trammell, J. Powell, J. Grunblatt, M. Wipfli. 2016. A science of integration: frameworks, processes, and products in a place-based, integrative study. Sustainability Science. DOI 10.1007/s11625-016-0391-3.
- von Hippel, F. A., E. J. Trammell, J. Merila, M. B. Sanders, T. Schwarz, J. H. Postlethwait, T. A. Titus, C. L. Buck and I. Katsiadaki. 2016. The ninespine stickleback as a model organism in arctic ecotoxicology. *Evolutionary Ecology Research*. <u>http://evolutionary-ecology.com/abstracts/v17/2973.html</u>
- 6. Mauger, S., R. Shaftel, E. J. Trammell, M. Geist and D. Bogan. 2015. Stream temperature data collection standards for Alaska: minimum standards to generate data useful for regional-scale analyses. *Journal of Hydrology: Regional Studies*. doi:10.1016/j.ejrh.2015.07.008
- 5. Morley, P, Trammell, J, Reeve, I, McNeill, J, Brunckhorst, D, Bassett, S. 2012. Past, present and future landscapes: Understanding alternative futures for climate change adaptation of coastal settlements and communities. National Climate Change Adaptation Research Facility, Gold Coast. pp.157. <u>http://www.nccarf.edu.au/publications/past-present-and-future-landscapes</u>
- 4. Trammell, E. J. and S. Bassett. 2012. Impact of urban structure on avian diversity along the Truckee River, USA. Urban Ecosystems 15(4): 993-1013. <u>http://www.springerlink.com/content/064906642r18177t/</u>
- 3. Thomas, S. A., K. C. McGwire, A. Lutz, C. Kratt, E. J. Trammell, J. M. Thomas and W. Alan McKay. 2012. Geospatial and Regression Tree Analysis to Map Groundwater Depth for Manual Well Drilling Suitability in the Zinder Region of Niger. *Journal of Hydrology* 446-447: 35-47. http://dx.doi.org/10.1016/j.jhydrol.2012.04.023
- Trammell, E. J., P. W. Weisberg and S. Bassett. 2011. Avian response to urbanization in an arid riparian context. *Landscape and Urban Planning* 102(2): 93-101. http://dx.doi.org/10.1016/j.landurbplan.2011.03.013
- Trammell, E. J., K. Berry, S. Bassett and D. W. Sada. 2008. Distribution and recovery of vegetational assemblages in Ash Meadows National Wildlife Refuge. *Southwestern Naturalist* 53(3): 326-334. <u>http://dx.doi.org/10.1894/ME-38.1</u>

Chapters

Brunckhorst, D. J. and E. J. Trammell. 2016. Restorative futures for social-ecological systems in changing times. In V. Squires & S. Whisenant (eds) Ecological Restoration: Global Challenges, Social Aspects and Environmental Benefits. Nova Publishers, Hauppauge, NY. ISBN: 978-63484-611-0.

Dissertation

Trammell, E.J. 2011. Avian Urban Ecology: Conservation Planning Opportunities for Reno, NV, USA. Doctoral Dissertation, University of Nevada, Reno.

Thesis

Trammell, E. J. 2006. Groundwater, land use and land-cover change in the Ash Meadows National Wildlife Refuge from 1948-1998. Masters Thesis, University of Nevada, Reno.

Funded Research

At Southern Oregon University

- 2020-2021. Sauk-Suiattle Indian Tribe Climate Vulnerability Assessment. Funded by the Bureau of Indian Affairs and the Sauk-Suiattle Indian Tribe Natural Resource Department (Trammell PI: **\$26,000**).
- 2020-2021. Rogue Forest Restoration Partnership Geospatial Synthesis. Funded by Southern Oregon Forest Restoration Collaborative (Trammell PI: **\$9,800**).
- 2018-2020. Socio-ecological-technological solutions to waster reuse in food, energy, and water systems (ReFEWS). Funded by National Science Foundation (Allisa, PI: Award amount \$3,200,000). Subaward (Trammell Co-I: **\$78,000**) to perform alternative futures modeling of Upper Snake River Basin. Role: Lead scenarios and alternative futures development to integrate social, biophysical and engineering models of water and waste reuse in the Upper Snake River Basin.

At the Alaska Center for Conservation Science

- 2017-2022. Hosting the Alaska Climate Science Center. Funded by the U.S. Geological Survey (Rupp, PI: Award amount **\$9,000,000**). Role: Co-I for Southcentral Alaska lead and co-production lead.
- 2016-2019. Assessment, Inventory, and Monitoring Integration in arctic Alaska. Funded by Bureau of Land Management (Trammell, Co-PI: Award amount **\$210,000**). Role: Mentor graduate students in integrating ground and remote-based measurements of ecological structure and function using the National Petroleum Reserve Alaska as a test case.
- 2016-2017. Modeling socioecological systems in the Kenai River watershed (Trammell, PI: Year 5 award from Alaska EPSCoR **\$850,000**). Role: PI for test case in final year of NSF EPSCoR funding. Lead all integration of social and biophysical data for understanding how Alaska communities could respond to changing environments.
- 2015-2016. Modeling landscape change and alternative landscape futures for salmon in the Kenai watershed (Trammell, PI: Subaward from Alaska EPSCoR **\$40,000**). Role: Continue to lead spatial integration of hydrology, aquatic ecology, and landscape change models for the Alaska Changing Environments (ACE) project, lead stakeholder driven scenario analysis, and assist in across EPSCoR integration.
- 2015-2017. Building a Foundation of Decision-Support Tools Integrating Existing Mapping & Monitoring Information for the Benefit of Long-Term Shellfish Sustainability and Management in Kachemak Bay & Cook Inlet. Funded by National Oceanic and Atmospheric Administration (Trammell, PI: Award amount **\$371,818**). Role: Project lead, spatial analysis and habitat modeling.
- 2015-2017. Developing minimum standards for regional-scale vegetation monitoring across Boreal North America. Funded by the U.S. Fish and Wildlife Service under the Northwest Boreal Landscape Conservation Cooperative (Trammell, PI: Award amount **\$34,000**). Role: Project lead, coordination of stakeholder workshops, expert review of existing monitoring protocols.
- 2015-2017. Conflating Alaska Hydrography Updates by the Alaska Hydrography Database. Funded by U. S. Geological Survey (Trammell, PI: Award amount **\$89,000**). Role: Manage project and oversee hire of a new database manager for the AK Hydro program, support expansion to Arctic systems.
- 2015-2017. Coordination for Mapping Alaska's Water (Trammell, PI: Award amount **\$99,671**). Role: Manage and oversee AK-Hydro program and work to engage stakeholders in the Arctic to update hydrography.
- 2014-2017. Geospatial modeling to support Areas of Critical Environmental Concern nominations. Funded by the Pew Charitable Trusts Foundation (Trammell, PI: Award amount **\$70,000**). Role: Project lead, supervise students and technicians performing geospatial analysis.
- 2014-2015. Integrating landscape, hydrologic and cultural change on the Kenai Peninsula (Trammell, PI: Subaward from Alaska EPSCoR **\$36,322**). Role: Lead spatial integration of hydrology, aquatic ecology, and landscape change models for the Alaska Changing Environments (ACE) project.

- 2014-2017. Developing a Landscape Conservation Design in the Northwest Boreal LCC. Funded by the U.S. Fish and Wildlife Service under the Northwest Boreal Landscape Conservation Cooperative (Trammell, PI: Award amount **\$75,000**). Role: Project lead, coordination with project partners, lead spatial analyst.
- 2014. BLM REA Power User Course Development. Funded by U.S. Bureau of Land Management (Trammell, PI: Award amount **\$27,653**). Role: Create course material, lead class on how to use REA data for BLM managers and planners.
- 2014. Bering Sea Western Interior RMP-REA data extension. Funded by U.S. Bureau of Land Management (Trammell, PI: Award amount **\$76,783**). Role: Principle investigator, lead spatial analyst.
- 2014. AK-OATS Data Collection Standards. Funded by U.S. Fish and Wildlife Service under the Western Alaska Landscape Conservation Cooperative (Trammell, PI: Award amount **\$49,559**). Role: principle investigator, lead for spatially-explicit power and sensitivity analyses.
- 2014-2016. National Hydrography Dataset (NHD) Update Coordination. Funded by USGS and Alaska Landscape Conservation Cooperatives (Trammell, PI: Award amount **\$261,212**). Role: Manage and oversee newly created statewide coordinator position, develop long range plans with stakeholders and oversee infrastructure and capacity building.
- 2014. Critical Habitat Assessment Tool Data Layer Development. Funded by Alaska Department of Fish and Game (Trammell, Co-PI: Award amount **\$35,407**). Role: Development of landscape integrity dataset for Alaska.
- 2013-2017. Central Yukon Rapid Ecoregional Assessment Project, Alaska. Funded by U.S. Department of Interior: Bureau of Land Management (Trammell, PI: Award amount **\$1,099,721**). Role: Principle investigator. Coordinate a multi-disciplinary (and institutional) team of climate, social and ecological scientists. Lead spatial analyst and spokesperson for project.
- 2013-2014. Alaska Online Aquatic Temperature Site (AK-OATS). Funded by U.S. Fish and Wildlife Service under the Western Alaska Landscape Conservation Cooperative (Trammell, PI: Award amount \$59,995).
 Role: Principle investigator. Oversaw vendor involvement with project, coordinated project activities, led stakeholder workshops, developed online GIS database for water temperature monitoring across Alaska.
- 2013-2015. North Slope Rapid Ecoregional Assessment Project, Alaska. Funded by U.S. Department of Interior: Bureau of Land Management (Trammell, Co-PI: Award amount **\$1,045,000**). Role: Project visioning, led management question analysis, developed methodology, lead spatial analyst.
- 2012-2014. Yukon Lowlands-Kuskokwim Mountains-Lime Hills Rapid Ecoregional Assessment Project, Alaska. Funded by U.S. Department of Interior: Bureau of Land Management (Trammell, Co-PI: Award amount \$980,000). Role: Project manager, visioning, developed methods, lead spatial analyst.
 Craduate and postdoctoral funding.

Graduate and postdoctoral funding

- 2011-2012. Past, Present and Future Landscapes: Understanding Alternative Futures for Climate Change Adaptation of Coastal Settlements and Communities. Funded by Department of Climate Change (Australia): Climate Change Adaptation Research Grants Program (Brunckhorst, PI: Award amount \$489,000). Role: Land use/land cover change assessment, spatial analysis and impact assessment, urban growth parameterization, development of climate change impact models.
- 2011. Valuing Community Engagement in Biosecurity Surveillance. Funded by the Australian Centre of Excellence for Risk Analysis (Reeve, PI: Award amount \$60,000). Role: Spatial analysis and statistics, spatially predicted investment return of public awareness programs.
- 2008-2011. Alternative Futures at the Range Complex Level: Phase 2, Yuma and Twenty-nine Palms Scenarios. Funded by the Office of the Secretary of Defense (Mouat, PI: Award amount \$950,000). Role: Spatial analysis and impact assessment, urban growth parameterization, remote sensing of urban areas, development of water use models, presentations to regional and national stakeholders.
- 2007-2010. Alternative Futures at the Range Complex Level: Phase 1, Las Vegas Scenarios. Funded by the Office of the Secretary of Defense (Mouat, PI: Award amount \$950,000). Role: Spatial analysis and impact assessment, urban growth parameterization, remote sensing of urban areas, development of water use models, presentations to regional and national stakeholders.

- 2007-2009. Multiple Species Habitat Conservation Plan Science Advisor Team. Funded by Clark County Desert Conservation Program (Bassett, PI: Award amount \$1,532,000). Role: Served as science advisor to ecosystem level assessments and classifications.
- 2006-2008. Range Sustainment: Alternative Futures at the Range-complex Level Southwest United States. Funded by U.S. Marine Corps (Mouat, PI: Award amount \$410,957). Role: Spatial analysis and management of geodatabases, presentation to regional and national stakeholders.
- 2007-2008. Development of a Water Rights GIS Database of the Walker River Basin, NV. Funded by U.S. Bureau of Reclamation (Minor, PI: Award amount \$911,565). Role: Spatial analysis and remote sensing to support agricultural mapping.
- 2005-2007. Assessment of Stream Ecosystem Modeling Methodologies within the McCarran Reach Section of the Lower Truckee River. Funded by U.S. Army Corps of Engineers (Bassett, PI: Award amount \$131,618). Role: Led development of model for aquatic ecosystem function and assessed impacts under alternative river flow regimes.
- 2005-2006. Change Analysis of Far North Coast, New South Wales, Australia. Funded by the University of New England, NSW, Australia (Bassett, PI: Award amount \$18,000). Role: Remote sensing and environmental impact assessment, parameterized urban growth model.
- 2005-2006. Development and Testing of a Groundwater Management Model for the Project Shoal Area. Funded by the U.S. Department of Energy (Boyle, PI: Award amount \$250,000). Role: Development of alternative land use scenarios, mapping of groundwater rights.
- 2004-2005. Development and Testing of a Groundwater Management Model for the Faultless Underground Nuclear Test, Central Nevada Test Area. Funded by the U.S. Department of Energy (Boyle, PI: Award amount \$255,000). Role: Development of alternative land use scenarios, mapping of groundwater rights.
- 2003-2004. Fish community and habitat relationships in Lake Tahoe, NV streams. Funded by the Nevada Department of Wildlife (Sada, PI: Award amount \$100,000). Role: Developed habitat relationships, performed majority of field work, aided in presenting material to stakeholders.

Trainings and Workshops

- Trammell, E. J. and T. Nawrocki. 2018. North Slope and Central Yukon Rapid Ecoregional Assessment Power Users Training Course. Bureau of Land Management Fairbanks District Office. Fairbanks, AK, March 2018.
- Trammell, E. J., M. McTeague, T. Nawrocki. 2015. Yukon Kuskokwim Rapid Ecoregional Assessment Power Users Training Course. Bureau of Land Management Alaska State Office. Anchorage, AK, February 2015.
- Trammell, E. J. and S. Bassett. 2014. How to design plausible and useful scenarios for modeling landscape change? U.S. Chapter of International Association for Landscape Ecology annual symposium. Anchorage, AK. May 2014.

Peer-Reviewed Blog Posts

Brunckhorst, D., E. J. Trammell, I. Reeves. 2016. The integrative role of landscape. Integration and Implementation Insights. <u>https://i2insights.org/2016/11/15/integrative-role-of-landscape/</u>10.13140/RG.2.2.28044.92809

Professional Presentations

- Trammell, E. J., D. Cronin, A. Kliskey. 2021. Integrating social and landscape solutions and interventions into alternative futures. International Association of Landscape Ecology-North America Annual Meeting. April 2021.
- Trammell, E. J. A, Specht, S. Reddy, J. Evans, A. Bayarsky and S. Stall. Using Big Data to Better Understand the Socioecological Implications of Protected Areas. AGU Fall Meeting. December 2020.
- Cronin, D., E. J. Trammell. 2020. Drawings to Evoke Decision-Making: A Project to Determine Compelling Representations in a Geodesign Project. ESRI Geodesign Summit. February 2020.

- Trammell, E. J. 2019. Designing integrated (food, energy, water) solutions for intensive agricultural landscapes in the Magic Valley of Idaho using alternative futures. U.S. Chapter, International Association of Landscape Ecology Annual Meeting. April 2019.
- Trammell, E. J. 2019. Landscape ecology in natural resource management: we're just getting started! **Invited** U.S. Chapter, International Association of Landscape Ecology Annual Meeting. April 2019.
- Trammell, E. J. and D. Cronan. 2019. Integrated scenarios for the Magic Valley, Idaho. Geodesign Summit, Redlands, CA. February 2019.
- Trammell, E. J. 2018. Collaborative Story Maps: Telling the story of I&M through an SOU service-learning project. Klamath Conversations, National Park Service, Ashland, OR. December 2018.
- Trammell, E. J. 2018. Taking a socio-ecological systems approach to defining ecological integrity: How intact is Alaska? Association of Pacific Coast Geographers Annual Meeting, Reno, NV. October 2018.
- Batistella, E., J. Trammell, P. Condon. 2018. Ashland, Oregon, HIPsters. American Association of State Colleges and Universities Academic Affairs Summer Meeting, Bellevue, WA. July 2018.
- Trammell, E. J., J. Reynolds, J. J. Taylor. 2018. Latitude Matters! Toward a new paradigm for assessing integrity of intact northern ecosystems. North American Congress for Conservation Biology, Toronto, Ontario. July 2018.
- Trammell, E. J. 2017. Comparative analysis of alternative co-production approaches to conservation science in Alaska. American Geophysical Union Fall Meeting, New Orleans, LA. December 2017.
- Cenek, M., Franklin, M., Trammell, E. J., Dahl, S. 2017. How will the Kenai fisheries respond to changing environmental conditions: scenario based studies of coupled socio-ecological systems dynamics using an agent-based model? OCEANS17 MTS/IEEE Conference: Our Harsh and Fragile Ocean. September 18-21, 2017. Anchorage, AK. #170321-002.
- Trammell, E. J. 2017. Salmon Futures: Stakeholder-driven salmon management scenarios under changing environmental conditions. Association of American Geographers Annual Meeting, Boston, MA. April 2017.
- Lema, P., E. J. Trammell, and S. Little. 2017. Engaging Remote Alaskan Communities in the Federal Land Planning Process. Association of American Geographers Annual Meeting, Boston, MA. April 2017.
- Trammell, E. J. 2017. Landscape change and management in the Arctic. Anchorage Arctic Research Day, Anchorage, AK. March 2017.
- Trammell, E. J. and M. Aisu. 2017. Integrated Ecological Assessments: Quantifying Intactness and Cumulative Change throughout Alaska. AFS/AWRA Alaska Chapter Annual Meeting, Fairbanks, AK. March 2017.
- Trammell, E. J., M. Krupa, J. Powell, D. Rinella, K. Farnham, C. Breest, C. Brummer. 2017. Salmon 2050: Using scenarios analysis to develop an integrated understanding of uncertainty. AFS/AWRA Alaska Chapter Annual Meeting, Fairbanks, AK. March 2017.
- Krupa, M. and E. J. Trammell. 2017. Salmon 2050: Participatory Scenario Planning on Alaska's Kenai Peninsula. AFS/AWRA Alaska Chapter Annual Meeting, Fairbanks, AK. March 2017.
- Trammell, E. J. and M. Geist. 2017. Geography for a Changing Alaska: Conservation GIS at UAA. Alaska Surveying and Mapping Conference in Anchorage, AK. February 2017.Trammell, E. J. 2016. Integrated Landscape Management: North Slope Rapid Ecoregional Assessment. The Ecosystem Approach to Management of Arctic Ecosystems: Status of Implementation International Science and Policy Conference. Fairbanks, AK, August 2016. Accessible here:

https://www.youtube.com/watch?v=O1WxJs_G5Ig&feature=youtu.be.

- Bieniek, P., U. S. Bhatt, E. W. Plumb, R. Thoman and E. J. Trammell. 2016. Climate Drivers of Alaska Summer Stream Temperature. American Geophyical Union Fall Meeting. San Francisco, CA. December 2016.
- Trammell, E. J. 2016. Climate impacts on infrastructure in Alaska. **Invited.** American Association of State Geologists Annual Meeting. Girdwood, AK, June 2016.
- Taylor, J. and E. J. Trammell. 2016. An integrated landscape approach. **Invited.** Arctic Cumulative Impacts Workshop. Anchorage, AK, April 2016.
- Trammell, E. J. and J. Taylor. 2016. Managing at Landscape Scales: How can landscape science inform resource planning and management? International Association of Landscape Ecologists-U.S. Chapter Annual Symposium. Asheville, NC April 2016.

- Trammell, E. J. and S. Guyer. 2016. North Slope Rapid Ecoregional Assessment Key Findings. U.S. Fish and Wildlife Subsistence Council Annual Meeting, Anchorage, AK March 2016.
- Trammell, E. J. 2015. Salmon Futures: Stakeholder-driven salmon management scenarios under changing environmental conditions on Alaska's Kenai Peninsula. American Geophysical Union Fall Meeting. San Francisco, CA, December 2015. 10.13140/RG.2.2.31400.37125.
- Trammell, E. J. 2015. Cumulative Stressor Index: Planning for Environmental Change in Alaska. International Association of Landscape Ecologists World Congress. Portland, OR. July 2015.
- Krupa, M and E. J. Trammell. 2015. Salmon 2050: Drivers of Change. Alaska Chapter of American Fisheries Society. Juneau, AK, December 2015.
- Trammell, E. J. 2015. Conservation GIS that matches the scale of Alaska. Alaska Survey and Mapping Conference. Anchorage, AK. March 2015.
- Trammell, E. J., M. L. Carlson, M. L. McTeague, D. Vadapalli and N. Fresco. 2014. Cumulative Impacts in Arctic Alaska: How Much Change is Too Much? The Arctic Biodiversity Congress. Trondheim, Norway. December 2014.
- Trammell, E. J. 2014. Quantifying Intactness in Rapid Eco-regional Assessments: Tools and Lessons Learned. Invited. Institute for Rural Futures Research Seminar. University of New England, Armidale, NSW, Australia. November 2014.
- Trammell, E. J. 2014. Alternative Landscape Futures: Using Spatially-Explicit Scenarios to Model Landscape Change. **Invited**. Complex Systems Brown Bag Seminar Series. University of Alaska, Anchorage. October 2014.
- Trammell, E. J. and M. L. McTeague. 2014. Quantifying Intactness in Rapid Ecoregional Assessments: Tools and Lessons Learned. Invited. National Workshop on Large Landscape Conservation. Washington D.C. October 2014.
- Trammell, E. J. 2014. Baseline Landscape Data: New Opportunities for Ecoregional Assessments. U.S. Chapter of International Association for Landscape Ecology annual symposium. Anchorage, AK. May 2014.
- Donovan, S., A. Taylor, J. Trammell. 2014. Integrating service-learning into environmental studies curriculum: an interactive showcase of solutions. The 17th Annual Continuums of Service Conference. Honolulu, HI. April 2014.
- Geist, M and J. Trammell. 2014. Taking Alaska's Temperature: AK-OATS. Alaska Forum for the Environment. Anchorage, AK. February 2014.
- Morley, P, E. J. Trammell, and I. Reeve. 2012. Past, Present and Future Landscapes: Understanding Alternative Futures for Climate Change Adaptation of Coastal Settlements and Communities. National Adaptation Conference: Climate Adaption in Action 2012. Melbourne, Victoria, Australia. June 2012.
- Trammell, E. J. 2011. Future landscapes: using scenario analysis to understand comprehensive environmental change. **Invited.** Colloquium Speaker, Department of Geography, University of Nevada, Reno. April 2011.
- Trammell, E. J., P. Marin, D. Mouat, S. Bassett, S. Thomas, D. Casserly, Q. Korbulic and J. Landcaster. 2010. Modeling the future with ArcGIS. Environmental Systems Research Institute (ESRI) User Conference. San Diego, CA, July 2010.
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