Christine Marie Albano

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Education

Doctor of Philosophy in Hydrology, University of Nevada, Reno, NV   2019
    Co-Advisors: Dr. Michael D. Dettinger and Dr. Maureen I. McCarthy
    Dissertation Title: *"Atmospheric Rivers and Climate Stresses: Retrospective and Prospective Assessments of the impacts of Storm Variability, Climate Changes, and Extremes in the western US"*

Master of Science in Ecology, Colorado State University, Fort Collins, CO   2006
    Advisor: Dr. N. LeRoy Poff
    Thesis Title: *"Structural and Functional Responses of Aquatic Macroinvertebrate Communities to Streamflow Diversion in Rocky Mountain Streams"*

Bachelor of Science in Biology, Westminster College, Salt Lake City, UT   2002
    Graduated summa cum laude; Minors: Chemistry, Environmental Studies

Professional Appointments

Assistant Research Professor – Ecohydrology, Desert Research Institute, Reno, NV	July 2020 -present
Postdoctoral Fellow -Ecohydrology, Desert Research Institute, Reno, NV	June 2019 – June 2020
Lead Scientist, Conservation Science Partners, Truckee, CA	Dec. 2014 – June 2019
Assistant Specialist, John Muir Inst. of the Environ., University of California, Davis, CA	Jan. 2012 – Dec. 2015
Fellow, Southwest Climate Adaptation Science Center	
Program Manager, Grand Canyon Trust, Flagstaff, AZ	Apr. 2007 – Mar. 2012
Biologist, U.S. Geological Survey, Utah Water Science Center, Moab, UT	July 2006 – June 2007
Hydrologic Technician, U.S. Geological Survey, Utah Water Science Center, SLC, UT	Feb. 2000 – Aug. 2003

Publications in Preparation and Review (n = 3)

Albano, C.M., M.I. McCarthy, M.D. Dettinger, S.A. McAfee. *In Review*. Techniques for specifying climate stress-test scenarios for climate adaptation planning. Climatic Change

Albano, C.M., B.A. Minor, J.L. Huntington. *In Prep*. Baseline assessment of groundwater dependent vegetation in relation to climate and shallow groundwater for selected hydrographic basins of Nevada. DRI Technical Report.

Coats, R., and **C.M. Albano.** *In Prep*. Climate Change: hydrologic impacts and responses. Chapter 4 in Coats R., Heyvaert, A., Schladow, G. (eds.), Ecosystem Resilience, Climate Change and Environmental Management in the Tahoe Basin. Target: Univ. of Nevada Press

Peer-reviewed Journal Articles and Book Chapters (n = 18)

Albano, C.M., K.C. McGwire, M.B. Hausner, D.J. McEvoy, C.G. Morton, J.L. Huntington. 2020. Drought sensitivity and trends of riparian vegetation vigor in Nevada, USA (1985-2018). Remote Sensing.12:1362.

Albano, C.M., M.D. Dettinger, A.A. Harpold. 2020. Patterns and drivers of atmospheric river precipitation and hydrologic impacts across the Western US. Journal of Hydrometeorology. 21: 143–159.

Albano, C.M., M.L. McClure, S.E. Gross, W.C. Kitlasten, C.E. Soulard, C.E. Morton, J. L. Huntington. 2019. Spatial patterns of Sierra Nevada meadow sensitivity to interannual climate variability. Ecohydrology. e2128.

Dickson, B.G., **C.M. Albano**, R. Anantharaman, P. Beier, J. Fargione, et al. 2019. Circuit theory applications to connectivity science and conservation. Conservation Biology 33(2): 239-249.

Albano, C.M., M.D. Dettinger, C.E. Soulard. 2017. Influence of atmospheric rivers on vegetation productivity and fire patterns in the southwestern US. Journal of Geophysical Research – Biogeosciences 122(2): 308-323.

Soulard, C.E., **C.M. Albano**, M.L. Villarreal, J.J. Walker. 2016. Continuous 1985–2012 Landsat monitoring to assess fire effects on meadows in Yosemite National Park, California. Remote Sensing 8: 371.

Dickson, B.G., **C.M. Albano**, B.H. McRae, J.J. Anderson, D.M. Theobald, L.J. Zachmann, T.D. Sisk, and M.P. Dombeck. 2016. Informing strategic efforts to expand and connect protected areas using a model of ecological flow, with application to the western US. Conservation Letters 10: 564-571.

Theobald, D.M., D. Harrison-Atlas, W.B. Monahan, **C.M. Albano**. 2015. Ecologically-relevant maps of landforms and physiographic diversity for climate adaptation planning. PLoS ONE 10(12): e0143619.

Albano, C.M., M.D. Dettinger, M.I. McCarthy, T.L. Welborn, D.A. Cox. 2015. Application of an extreme winter storm disaster scenario to identify vulnerabilities, mitigation options, and science needs in the Sierra Nevada Mountains, USA. Natural Hazards 80(2): 879-900.

Lawler, J., D. Ackerly, **C.M. Albano**, M. Anderson, S. Dobrowski, J. Gill, N. Heller, B. Pressey E. Sanderson, S. Weiss. 2015. The theory behind, and the challenges of, conserving nature's stage in a time of rapid change. Conservation Biology. 29: 618–629.

Anderson, M., P. Comer, P. Beier, J. Lawler, C. Schloss, S. Buttrick, **C.M. Albano**, D. Faith. 2015. Case studies of conservation plans that incorporate geodiversity. Conservation Biology. 29: 680–691.

Albano, C.M. 2015. Identification of geophysically diverse locations that may facilitate species' persistence and adaptation to climate change. Landscape Ecology. 30(6): 1023-1037.

Mac Nally, R., **C.M. Albano**, E. Fleishman. 2014. A scrutiny of evidence for pressure-induced shifts in estuarine and nearshore ecosystems. Austral Ecology. 39(8): 898-906.

Dickson, B.G., L. Zachmann, **C.M. Albano**. 2014. Identifying new conservation priority areas on roadless BLM lands in the western United States. Biological Conservation. 178: 117-127.

Bernstein, E.J., **C.M. Albano**, T.D. Sisk, T.M. Crews, and S.S. Rosenstock. 2014. Seeding cool-season grasses on a degraded rangeland on the Colorado Plateau. Restoration Ecology. 22(1): 57-64.

Albano, C.M., C. Angelo, R. Strauch, and L. Thurman. 2013. Potential effects of climate warming on visitor use in three Alaskan national parks. Park Science. 30(1): 36-43.

Baker, D. W., B.P. Bledsoe, **C.M. Albano** and N.L. Poff. 2011. Downstream effects of diversion dams on sediment and hydraulic conditions of Rocky Mountain streams. River Research and Applications. 27(3) p. 388-401.

Sisk, T.D. and 13 Co-authors. 2010. Integrating restoration and conservation objectives at the landscape scale: The Kane and Two Mile Ranch Project. Pp. 45-66 in The Colorado Plateau IV. University of Arizona Press, Tucson, AZ.

Peer-reviewed Reports

Albano, C. M., B.A. Minor, Z. Freed, J.L. Huntington. 2020. Status and trends of groundwater dependent vegetation in relation to climate and shallow groundwater in the Harney Basin, Oregon. DRI Publication No. 41280.

Albano, C. M., K. Sterle, M. Dettinger, L. Singletary. 2019. Four climate scenarios developed to explore adaptation strategies for the Truckee-Carson River system. University of Nevada, Reno Cooperative Extension, Fact Sheet 19-09.

Fleishman, E., **C.M. Albano,** B. Bradley, T. Creech, C. Curtis, B. Dickson, C. Epps, E. Hegeman, C. Hoglander, M. Leu, N. Shaw, M. Schwartz, A. VanCuren, L. Zachmann. 2019. Natural resource condition assessments for six parks in the Mojave Desert Network, 330, National Park Service: Fort Collins, CO, Natural Resource Report NPS/MOJN/NRR - 2019/1959.

Gross, S., M. McClure, **C.M. Albano,** B. Estes. 2019. A spatially explicit meadow vulnerability decision framework to prioritize meadows for restoration and conservation in the context of climate change Version 1, 62, U.S. Forest Service White Paper.

Albano, C.M. and L.E. Stevens. 2018. Wildlife: Invertebrates *in* Stortz, S. D., C. E. Aslan, T. D. Sisk, T. A. Chaudhry, J. M. Rundall, J. Palumbo, L. Zachmann, and B. Dickson. Natural resource condition assessment: Greater Grand Canyon landscape assessment. Natural Resource Report NPS/GRCA/NRR—2018/1645. National Park Service, Fort Collins, Colorado.

Albano, C.M., M.D. Dettinger, M.I. McCarthy, K.D. Schaller, T.L. Welborn, D.A. Cox. 2014. ARkStorm@Tahoe: Stakeholder perspectives on vulnerabilities and preparedness for an extreme storm event in the greater Lake Tahoe, Reno and Carson City region. University of Nevada Cooperative Extension Special Publication-14-16.

Brasher, A.M.D., **C.M. Albano**, R.N. Close, Q.H. Cannon, M.P. Miller. 2010. Macroinvertebrate communities and habitat characteristics in the northern and southern Colorado Plateau networks: pilot protocol implementation. Natural Resources Technical Report NPS/NCPN/NRTR-2010/320, 107p.

Brasher, A.M.D., **C.M. Albano**, R.N. Close, M.L. Freeman, C.L. Lauver, S.A. Monroe, A. E. Snyder, and L.P. Thomas. 2009. Aquatic macroinvertebrate monitoring protocol for National Parks in the Southern Colorado Plateau Network. Natural Resource Technical Report NPS/SCPN/NRR—2011/460. 213 pp.

Albano, C.M. and E. M. Giddings. 2007. Characterization of habitat and biological communities at fixed sites in the Great Salt Lake Basins, Utah, Idaho, and Wyoming, Water Years 1999-2001. U.S. Geological Survey, Scientific Research Investigations Report 06-5300.

Waddell, K., R. Baskin, E.M. Giddings, S.J. Gerner, J.R. Cederberg, S.A. Thiros, and **C.M. Albano**. 2004. Water quality in the Great Salt Lake Basins, Utah, Idaho, and Wyoming. U.S. Geological Survey Circular 04-1236.

Peer-reviewed Datasets

Albano, C. M., M.D. Dettinger, and C.E. Soulard. 2017, Data on influence of atmospheric rivers on vegetation productivity and fire patterns in the southwestern U.S. Geological Survey data release. http://dx.doi.org/10.5066/F71Z42KJ.

Dickson, B.G., **C.M Albano**, B.H. McRae, J.J. Anderson, D.M. Theobald, and L.J. Zachmann. 2016. A model of ecological connectivity based on current flow for the western US. https://databasin.org/datasets/7e62c9930e734bbf8ab32d50db97f0c3

Theobald, D.M., L.J. Zachmann, B.G. Dickson, M.E. Gray, **C.M. Albano**, V. Landau, D. Harrison-Atlas. 2016. The disappearing West. https://disappearingwest.org/map/

Theobald D.M., D. Harrison-Atlas, W.B. Monahan, **C.M**. **Albano.** 2015. Ecologically-relevant maps of landforms and physiographic diversity for climate adaptation planning. https://www.sciencebase.gov/catalog/item/564b4bb0e4b0ebfbef0d31d2

Zachmann, L.J., B.G. Dickson, and **C.M. Albano**. 2014. Areas of high conservation value on Bureau of Land Management lands in the 11 western states. https://databasin.org/datasets/21240fc2bafe460d922d212edc3c9786

Selected Professional Presentations (from among ~ 50)

Albano, C. M., K.C. McGwire, M.B. Hausner, D.J. McEvoy, C.G. Morton, B.A. Minor, J.L. Huntington. 2020. Using satellite remote sensing and climate data to assess status and trends of groundwater dependent ecosystem vegetation in Nevada, Nevada Water Resources Association: Las Vegas, NV. Feb. 11-13.

Saito, L., S. Byer, K. Badik, L. Provencher, **C.M. Albano**. 2020. Water Needs for Groundwater Dependent Ecosystems in Nevada, Nevada Water Resources Association: Las Vegas, NV. Feb. 11-13.

Albano, C. M., M.B. Hausner, J.L. Huntington, D.J. McEvoy, K.C. McGwire. 2019. Using the Landsat Archive to Assess Multi-Decadal Changes in Riparian Vegetation in Western U.S. Drylands, AGU Fall Meeting: San Francisco, CA. Dec. 9-13.

Hausner, M. B., **C.M. Albano**, J.L. Huntington, C. Pearson, C. 2019. Using the Landsat Archive to Understand and Assess Changes in Mountain Meadow Vegetation, AGU Fall Meeting: San Francisco, CA. Dec. 9-13.

Huntington, J. L., K.C. McGwire, C. Pearson, M.B. Hausner, **C.M. Albano**, B.A. Minor, D.J. McEvoy, C.G. Morton. 2019. Assessing the role of climate and resource management on groundwater dependent ecosystem changes in arid environments with the Landsat archive and cloud computing, American Fisheries Society/ Wildlife Society Joint Meeting: Reno, NV, Sept. 30-Oct 3.

Hausner, M.B., **C.M. Albano**, C. Pearson, J.L. Huntington. 2019. Assessing changes in mountain meadow condition using the Landsat archive, Geological Society of America Annual Meeting: Phoenix, AZ, Sept. 22-25.

Albano, C.M., Hausner, M.B., McEvoy, D.J., McGwire, K.C., Huntington, J L. 2019. Assessing multi-decadal changes in riparian areas across Nevada using the Landsat archive, Geological Society of America Annual Meeting: Phoenix, AZ, Sept. 22-25.

Albano, C.M., M.D. Dettinger, M.I. McCarthy, S.A. McAfee. 2019. Techniques for specifying climate extreme stress test scenarios: a case study in the Truckee and Carson River basins. Nevada Water Resources Association. Reno, NV. Jan. 29-Feb 1.

Albano, C.M., M.D. Dettinger, A.A. Harpold. 2018. Spatial and temporal variability of atmospheric river hydrologic impacts across the Western U.S. American Geophysical Union Annual Meeting. Washington DC. Dec 10-15.

McCarthy, M.I., K. Bocinsky, **C.M. Albano**, M.D. Dettinger. 2018. Native Waters on Arid Lands: enhancing climate resilience on tribal lands. American Geophysical Union Annual Meeting. Washington DC. Dec 10-15.

Albano, C.M., M.D. Dettinger. 2018. Using climate extremes scenarios for climate adaptation planning: rationale and methods for scenario specification and design. Nevada Water Resources Association Fall Water Event. Reno, NV. Sept. 24-27.

McClure, M.L., **C.M. Albano**, S.E. Gross, W.C. Kitlasten, C.E. Morton, J.L. Huntington. 2018. Assessing climate vulnerabilities of Sierra Nevada meadows. Sierra Meadows Partnership Annual Meeting. Tahoe City, CA. May 29-June 1.

Dickson, B.G. and **C.M. Albano**. 2016. Managing our Public Lands for Conservation Values. FLPMA (Federal Lands Management and Policy Act) Turns 40. University of Colorado School of Law. Oct 21.

Albano, C.M., C.E. Soulard. 2016. Understanding climate sensitivities of Sierra Nevada meadows as a foundation for prioritizing adaptation actions. Natural Areas Conference. Davis, CA. Oct 18-20.

Albano, C.M., M.D. Dettinger, C.E. Soulard. 2016. Linking Atmospheric River Landfalls to Vegetation Responses in the Southwestern United States. 1st International Atmospheric Rivers Conference. La Jolla, CA. Aug. 8-11.

Albano, C.M. B.G. Dickson, D.M. Theobald, M.E. Gray, J. Page, J. Falkner, N. Dubois. 2016. A framework to assess impacts of renewable energy development on wildlife and to inform siting and mitigation strategies in the southwest. North American Congress for Conservation Biology. Madison, WI. July 17-20.

Albano, C.M., M.A. Williamson, M.W. Schwartz, G.B. Arnold. 2015. Assessment of climate information use within the National Environmental Policy Act (NEPA) planning process in the Southwestern US. Southwest Climate Summit. Sacramento, CA. Nov. 11-13.

Albano, C.M., M.D. Dettinger, M.I. McCarthy, D.A. Cox, T.L. Welborn. 2014. ARkStorm@Tahoe: Addressing social and ecological resilience to extreme winter storm events in the Sierra Nevada. Ecological Society of America Conference. Aug. 10-15.

Albano, C.M., B.G. Dickson, L.J. Zachmann. 2013. Identifying new conservation priority areas and opportunities on unprotected roadless lands in the western U.S.: a Great Basin case study. Great Basin Consortium conference. Dec. 9-10.

Rogers, A.S., **C.M. Albano**. 2012. Mule deer habitat improvement on the North Kaibab: A partnership focusing on increasing native shrub diversity, monitoring cheatgrass, and implementing adaptive management. Invited presentation. Colorado Plateau Native Plant Program Annual Meeting. Page, AZ. March 20-22.

Albano, C.M., E.N. Aumack, B.G. Dickson, and T.D. Sisk. 2010. The Kane and Two Mile Ranch program: building public lands stewardship capacity on the Colorado Plateau. Society for Conservation Biology, Colorado Plateau Chapter Meeting. Moenkopi, AZ. Oct. 22-24.

Albano, C.M., K. Watters. 2010. Engaging Citizen Stewards in Restoration Partnerships: a case study of the Paria River. National Landscape Conservation System Science Symposium. Albuquerque, NM. May 24-27.

Albano, C.M., B.G. Dickson, E.N. Aumack, T.D. Sisk. 2009. Landscape-scale predictors of cheatgrass invasion on the lower elevations of the Kaibab Plateau in northern Arizona. Colorado Plateau Biennial Conference. Flagstaff, AZ. Oct. 5-8.

Monroe, S., **C.M. Albano**, K. Watters, S. Rice, D. Burger. 2009. A collaborative inventory of springs in the Grand Canyon region. Colorado Plateau Biennial Conference. Flagstaff, AZ. Oct. 5-8.

Albano, C.M., B.G. Dickson, E.N. Aumack, T.D. Sisk. 2007. Modeling cheatgrass (*Bromus tectorum*) occurrence to target restoration priorities on the Kane and Two Mile Ranches, Northern Arizona. Colorado Plateau Biennial Conference. Flagstaff, AZ. Oct. 29- Nov 1.

Albano, C.M., N.L. Poff, D.W. Baker, and B.P. Bledsoe. 2006. Macroinvertebrate community response to streamflow diversion magnitude in Rocky Mountain streams. North American Benthological Society Conference, Anchorage, AK, June 4-9.

Albano, C.M., B.E. Hurst, N.L. Poff, and B.P. Bledsoe. 2005. The independent and interactive effects of reduced streamflow and fine sediment deposition on macroinvertebrate community structure and function. North American Benthological Society Conference, New Orleans, LA, May 22-27.

Albano, C.M. and N.L. Poff. 2004. Linking flow regime and geomorphic setting to water quality impairment over a gradient of streamflow diversion. North American Benthological Society Conference, Vancouver, B.C., June 6-10.

Pending and Awarded Grants and Contracts (~$1.75 million awarded)

Albano, C.M., 2020. Using Satellite Remote Sensing to Quantify the Role of Atmospheric Rivers on Wintertime Flood Extents in the Central Valley of California. U.S. Geological Survey. $80,000 (pending)

McCarthy, M.I.**, C.M. Albano**, X**.** Huang. 2020. ARkStorm Concurrent Emergencies. U.S. Geological Survey. $60,000 (pending)

Wall, T., B. Hatchett, D. McEvoy, M.I. McCarthy, C.M. Albano. 2020. Exploring Sub-Annual Variability in a Changing Climate Including Extremes. California Dept. of Water Resources. $202,500

McConnell, J., N. Chellman, **C.M. Albano.** 2020. Evaluating the isotopic composition of wintertime atmospheric river precipitation. Desert Research Institute. Innovation Research Program. $31,500

Albano, C.M., S. Loheide, L. Saito. 2019. Quantifying environmental water requirements for groundwater dependent ecosystems for resilient water management. Bureau of Reclamation WaterSmart Applied Science Grant. $298,780.

Albano, C.M., S.E. Gross, J. Huntington, B. Daudert, C. Morton. 2016. Decision support for meadow conservation and restoration in the Sierra Nevada Ecoregion: leveraging landscape-scale retrospective and near real-time data to enhance understanding of vulnerabilities and adaptation options under changing climate. California Landscape Conservation Cooperative. $187, 530.

Dickson, B.G., D.M. Theobald, L.J. Zachmann, **C.M.Albano**. 2015. Measuring and mapping open lands lost to development from 1990-present in the western U.S. Center for American Progress. $100,000.

Dettinger, M.D., **C.M. Albano,** C. Soulard, G. Bawden, S. Bond, D. Cox, M. McCarthy. 2013. Linking interannual variations of extreme storms with ecological and hydrologic disturbance in the Sierra Nevada. Southwest Climate Science Center. $293,000.

Schwartz, M.W., and 13 Co-PIs. 2013. Preliminary assessment of the landscape of climate relevant resource management decisions in the southwest: characterizing climate science, information exchange and stakeholder engagement needs of resource managers Southwest Climate Science Center. $167,000.

Albano, C.M. 2012**.** Pronghorn habitat improvement in House Rock Valley, AZ. Habitat Partnership Funds, Arizona Game and Fish Dept. $3000.

Albano, C.M. 2012. Native plant conservation on Vermilion Cliffs National Monument. Native Plant Conservation Initiative, National Fish and Wildlife Foundation. $35,000.

Albano, C.M. 2012. Vermilion Cliffs National Monument flora. BLM National Landscape Conservation System Research Award. $17,000.

Albano, C.M., E.N. Aumack. 2008. Paria River invasives removal project: phase I. Arizona Water Protection Fund. $294,000.

Aumack, E.N., B.G. Dickson, T.D. Sisk, **C.M. Albano**. 2008-2013. Building a conservation science foundation on the Grand Canyon's North Rim. Wilburforce Foundation. $360,000.

Scholarships, Fellowships and Awards

2019   Graduate Program in Hydrologic Sciences Outstanding Service Award, Univ. of Nevada, Reno
2018   Lake Tahoe Science Scholarship, Nevada Water Resources Association
2017   NASA Nevada Space Grant Consortium Fellowship, Univ. of Nevada, Reno
2017   William J. "Hoot" Newman Scholarship, Univ. of Nevada, Reno
2005   Conservation and Environmental Issues Research Award, North American Benthological Society
2005   Edward and Phyllis Reed Fellowship, Colorado State University
2001   Gore Science and Mathematics Scholarship, Westminster College
2000   Leah M. Wyer Scholarship, Westminster College

Teaching Experience

2018	**Co-instructor:** 2-day Boot Camp in R programming language, University of Nevada, Reno
2018	**Co-instructor:** 3-day Short Course in R programming language, Salish Kootenay College
2017	**Co-organizer:** Perspectives on Western Hydroclimate Seminar (ATMS 792), University of Nevada, Reno
2015-2016	**Course module instructor:** Integration of field data with GIS; Sierra and Truckee High Schools
2011	**Co-instructor:** Ecological Restoration on the Kaibab Plateau (ENV 399H); Northern Arizona University
2008-2010	**Guest lecturer:** Conservation Biology (ENV440/540, BIO441), Northern Arizona University
2007-2011	**Field trip leader:** Regularly led field trips with citizen scientists, K-12, and college groups to provide introductions to real-world natural resource management challenges in the desert southwest; Grand Canyon Trust
2006	**Lab course instructor:** Zoology (BZ 110), Colorado State University
2004	**Lab course instructor:** Stream Ecology (BZ 472), Colorado State University

Skills and Experience

- Proficient in the management and analysis of large spatiotemporal datasets, including remote sensing-based datasets and downscaled climate and hydrology projection ensembles
- Proficient in ArcGIS, QGIS, and the R programming language. Capable with other languages (e.g., Python, JavaScript) and analytical platforms (e.g., Google Earth Engine)
- Experienced with modeling of ecological and hydrological flows using Circuitscape and GMS implementation of the MODFLOW groundwater model, respectively

- Experienced with several statistical modeling techniques, generalized linear models, logistic and quantile regression, and likelihood-based and information-theoretic methods for model selection and multi-model inference. Familiar with Bayesian inferential techniques
- Experienced with non-parametric multivariate techniques for analysis of ecological community data (plants, macroinvertebrates), including NMDS, SIMPER, ANOSIM and various clustering algorithms
- Experienced with multi-criteria analytical methods, including Analytical Hierarchy Process, weighted linear combination, and fuzzy set operations and their applications to systematic conservation planning
- Experienced with a wide variety of approaches to climate adaptation planning (e.g., stress test scenario development, vulnerability assessment techniques, climate-smart conservation planning)
- Successful grant writer
- Experience working and communicating with diverse partners, including those from government agencies, universities, NGOs, tribal and rural communities, students, and the general public
- Experienced with the preparation of National Environmental Policy Act (NEPA) documents and engagement with the NEPA process
- Keen interest and familiarity with natural resource management issues and policies relevant to federal lands in the Western US
- Experienced with design, implementation, management, and supervision of field projects under time and budget constraints
- Experienced with equipment calibration procedures and field techniques involved with the collection of physical, chemical, and biological data in stream, riparian, and upland systems

Professional Service
2017-2019   Board of Directors, Student Representative, Nevada Water Resources Association
2012-2014   California Landscape Conservation Cooperative Science-Management Team Member
2011-2012   Board of Directors, Founding Vice President, Friends of the Cliffs (a grass-roots community organization aimed at increasing stewardship of the Vermilion Cliffs National Monument)
2011-Present   Reviewer: Conservation Science and Practice; Weather, Climate, and Society; Conservation Biology; Forests; Nature Scientific Reports; Western North American Naturalist; Water; Remote Sensing