

Kelly A. Loria

Postdoctoral Researcher, Desert Research Institute, Division of Hydrologic Sciences

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Education

- 2020 – 2025 **University of Nevada, Reno**
Ph.D., Department of Natural Resources and Environmental Science,
NSF Graduate Research Fellow
- 2014 – 2017 **University of Colorado, Boulder**
B.A., Ecology and Evolutionary Biology, College of Arts and Sciences,
Honors distinction in research
- 2013 – 2014 **Diablo Valley Community College**
Associate degree in environmental science

Academic Appointments

- 2025 – present **Postdoctoral Researcher, Desert Research Institute (DRI)**
Division of Hydrologic Sciences
- 2017 – 2020 Limnology program manager for Niwot Ridge Long Term Ecological (LTER)
Program Boulder, CO

Publications

(students mentored are underlined>

- Loria K**, Lowman H, Krause J, Katona L, Naranjo R, Scordo F, Harpold A, Chandra S, and Blaszcak J (2025). The influence of mountain streamflow on nearshore ecosystem metabolism in a large, oligotrophic lake across drought and wet years. *Limnology and Oceanography*. <https://doi.org/10.1002/lno.70157>
- Scamardo J, Munger W, **Loria K**, Nauman B, Wang J, Leopold S, Heggli A, Huntly N, Baker M, and Meadow A (2024). Restoring Endangered Streams: The Science, Practice, and Law of Instream Process-Based Restoration Amid Climate Change. *Journal of Rangeland Ecology & Management*. <https://doi.org/10.1016/j.rama.2024.08.032>
- Blaszcak J, **Loria K**, Krause J, Lowman H, Chandra S (2024). Making the smart watershed-to-lake connection: using high-frequency sensors and process-based aquatic ecosystem models to predict nearshore greening in Lake Tahoe. Water Quality Report to Nevada Division of State Lands.
- Christianson K, **Loria K**, Blanken, D, Caine N, and Johnson P (2021). On thin ice: Linking elevation and long-term losses of lake ice cover. *Limnology and Oceanography Letters*. <https://doi.org/10.1002/lol2.10181>
- Loria K**, McKnight D, Ragar D, and Johnson P (2020) The life aquatic in high relief: shifts in the physical and biological characteristics of alpine lakes along an elevation gradient in the Rocky Mountains, USA. *Aquatic Sciences*, 82(1), 11. <https://doi.org/10.1007/s00027-019-0684-6>
- Loria K**, Christianson K, and Johnson P (2020). Phenology of alpine zooplankton populations and the importance of lake ice-out. *Journal of Plankton Research*, 42(6), 727-741. <https://doi.org/10.1093/plankt/fbaa050>

Loria K (2017) Freshwater zooplankton communities as indicators of habitat quality: Testing Responses to multiple disturbances. Undergraduate Honors Theses.

In review or preparation:

Loria K, Lowman H, Krause J, Scordo F, Harpold A, Chandra S, and Blaszcak J (2025). Mountain stream ecosystem metabolism and nitrogen cycling responses to hydroclimatic volatility. Submitted to the *Journal of Geophysical Research: Biogeosciences*.

Lowman H, **Loria K**, Katona L, Krause J, Chandra S, MacIntyre S, Melack J, Naranjo R, and Blaszcak J (2025). Daily dissolved oxygen dynamics mediated by light and streamflow in littoral regions of an oligotrophic mountain lake. In preparation for *Limnology and Oceanography Letters*.

Loria K, Davidson J, and Blaszcak J (2025). Contrasting broad and fine scale drivers of spatial synchrony in stream ecosystem productivity. In preparation for *Global Change Biology*.

Presentations

(* indicates oral presentation)

***Loria K**, Lowman H, Krause J, Katona L, Genzoli L, Harpold A, Chandra S, and Blaszcak J (May 2025). Spatiotemporal variation in mountain stream metabolism and nitrogen cycling across contrasting flow regimes. Society for Freshwater Science. 2025 Summer meeting. *Oral presentation*.

***Loria K**, Lowman H, Krause J, Katona L, Naranjo R, Scordo F, Harpold A, Chandra S, and Blaszcak J (June 2024). Upstream efficiency and downstream productivity: Linking Mountain stream processes with near-shore productivity in the Lake Tahoe Basin (California-Nevada, USA). Society for Freshwater Science. 2024 Summer meeting. *Oral presentation*.

***Loria K**, Lowman H, Sudeep C, and Blaszcak, J (June 2023) Mountain streams' role in governing physical drivers of nearshore metabolism: a case study of contrasting flow regimes in the Lake Tahoe Basin. Association for the Sciences of Limnology and Oceanography. Summer 2023 Meeting.

Loria K, Sudeep C., and Blaszcak, J (May 2022) Seasonal variation in nitrate uptake and ecosystem productivity rates in mountain streams with contrasting flow regimes in the Lake Tahoe Basin. In the Joint Aquatic Sciences Meeting (JASM). Summer 2022 Meeting. *Poster presentation*.

Loria K, and Blaszcak, J (2021, December). Linkages Between Ecosystem Productivity and Nitrogen Uptake in Mountain Streams with Contrasting Flow Regimes in the Lake Tahoe Basin. In AGU Fall Meeting Abstracts (Vol. 2021, pp. H15I-1144). *Poster Presentation*.

Loria K, and Blaszcak, J (2021, May). Modeling mountain stream metabolism: methods for linking upland rates of biotic nutrient processing with nearshore productivity in the Tahoe Basin. Society for Freshwater Science. 2021 Virtual meeting. *Poster presentation*.

***Loria K**, McKnight D, Ragar D, and Johnson P (2018) Comparative survey of the abiotic and biotic characteristics of lakes across an elevation gradient in the Rocky Mountains, USA. *Association for the Sciences of Limnology and Oceanography*. 2018 Summer Meeting. *Oral Presentation*.

***Loria K** (2017) The effects of elevation on the plankton communities of alpine lakes. *Tenth Annual Guild of Rocky Mountain Ecologists and Evolutionary Biologists*. 2017 Summer Meeting. *Poster Presentation*.

***Loria K** (2015) Biotic Implications of Climate Change on Alpine Lakes. *Research experience for undergraduate oral presentation at the University of Colorado Boulder Mountain Research Station*

Teaching

Teaching Assistantship: NRES 295 Wildlands Hydrology

University of Nevada, Reno; January-May 2021 and 2024

- Coordinated lectures, taught guest lectures, hosted labs, and held weekly office hours to help with scientific writing and graded assignments.

Teaching Assistantship: NRES 210 Environmental Pollution

University of Nevada, Reno; January-May 2024

- Coordinated lectures, taught guest lectures, helped with course material, and graded assignments during weekly office hours.

Teaching Assistantship: ENV 101 Introduction to Environmental Science

University of Nevada, Reno; January-May 2021

- Coordinated lectures, class resources, and graded assignments held weekly office hours to help with material.

Teaching Assistantship: NRES 422/622 Soil Physics

University of Nevada, Reno; August-December 2020

- Prepared laboratory kits and exercises for students, coordinated lectures, class resources, and graded assignments.

Teaching Assistantship: NRES 322 Soil science

University of Nevada, Reno; August-December 2020

- Coordinated lectures, class resources, and graded assignments held weekly office hours to help with material.

Summer science programming: NevadaFIT

University of Nevada, Reno; August 2022 and 2023

- Two-day limnology field course with incoming natural science undergraduate students

Science mentor: University of Nevada, Reno: 2021-present

- REU student Rija Masroor on a project looking at surface water patterns in dissolved organic material.
- McNair scholar and NURA recipient Paola Miramontes-Gonzalez investigates longitudinal patterns in urban stream chemistry and stable water isotopes.
- NV EPSCoR summer research fellow Rob Miller works measuring nearshore N-fixation rates in Lake Tahoe.

Science mentor: University of Colorado, Boulder: 2017-2020

- Field and lab experience to two NSF funded Research Experiences for Undergraduates at the University of Colorado Mountain Research Station
- Field and lab experience to five Undergraduate Research Opportunities Program students (three of whom used their projects to complete undergraduate honors thesis)

Grants and Awards

- **2024** MtnClim Student Travel Scholarship (\$350)
- **2024** Graduate Student Association Travel Grant to Philadelphia PA SFS Meeting (\$500)
- **2023** Graduate Student Association Travel Grant to Palma Spain for ASLO Meeting (\$750)
- **2021** Graduate Student Association Travel Grant to New Orleans for American Geophysical Union Fall Meeting (\$500)
- **2021** AGU Student Travel grant for Fall Meeting (\$1000)

- **2021** Graduate Student Association Spring Research Award for Survey of Caldor Fire on stream water quality (\$1,500).
- **2021-2022** The Southwest Climate Adaptation Science Center Natural Resources Workforce Development Fellowship (\$8,000)
- **2021** National Science Foundation Graduate Research Fellow
- **2020** Honorable Mention in the National Science Foundation Graduate Research Fellowship Program competition.
- **2020** University of Nevada Reno Graduate Dean's Merit Scholar for students who show the potential to make substantive contributions to their discipline (\$10,000).
- **2020** Whittell Forest Graduate Research Fellowship for University of Nevada Reno graduate research (\$1,500).
- **2016** Undergraduate Research Opportunities Program (UROP) to fund a research project in which we sampled lakes North and South of the Green Lakes Valley (\$3,000).
- **2016** Marian and Gordon Alexander Memorial Fellowship Award for 2016 to support research related to the living study of mountains (\$5,000).
- **2015** National Science Foundation for Research Experience for Undergraduates (REU) in Ecology and Evolutionary Biology to participate in a project that sampled alpine lakes in Rocky Mountain National Park (\$5,000).
- University of Colorado, Boulder: Dean's List (2015-2017).