

Sarah Rose LeRoy
Phone: (520) 260-4735
Email: sary21@arizona.edu

EDUCATION

- 2011** M.S. Geosciences, The University of Arizona
- Area of specialization: Paleoclimatology
- 2007** B.S. Ecology and Evolutionary Biology, The University of Arizona

EMPLOYMENT

Science Applications and Communications Coordinator, Southwest Climate Adaptation Science Center (SW CASC), Arizona Institute for Resilience, University of Arizona (address: 1064 E. Lowell St., Tucson, AZ, 85721)

September 2021 – Present

- Coordinate and manage Principal Investigator and partner-led actionable science initiatives (e.g., [Southwest Fire and Climate Adaptation Partnership](#)) by: leading regular meetings; tracking deliverables and timelines; developing outreach materials and activities; consulting with internal and external partners to ensure successful project outcomes
- Build and maintain partnerships (e.g., National Park Service, Tribal Nations, US Forest Service)
- Support Director in project management
- Track SW CASC-funded project activities and serve as point-of-contact to communicate this work with the National CASC and USGS
- Assist in planning and facilitating workshops and other events, such as the Southwest Adaptation Forum with over 120 participants
- Oversee communications staff and outreach for the Center, including editing written content (such as blog posts and fact sheets), managing website, editing the monthly newsletter with over 800 subscribers, hosting webinars, and overseeing what information is shared and where
- Lead, develop, and implement ‘Come Rain or Shine’ podcast (a collaboration with the USDA Southwest Climate Hub with over 5,000 downloads): identify discussion topics and participants, write scripts, host and distribute episodes
- Present on SW CASC activities at relevant meetings, conferences, and webinars
- Contribute to peer-reviewed publications

Science Communications Coordinator, Southwest Climate Adaptation Science Center (SW CASC); **Assistant Staff Scientist**, Arizona Institutes for Resilience, University of Arizona

October 2018 – September 2021

- Managed a co-produced project assessing vulnerability of cultural resources in the National Park Service (NPS). Responsibilities included: research development, writing and submitting reports, ensuring project deadlines and deliverables were met, coordinated and facilitated workshops with partners, tracked budget expenses
- Led all communications for the SW CASC, such as writing and editing content, managing website content, social media, developing monthly newsletter, hosting webinars, coordinating and recording podcast episodes, creating and distributing fact sheets, handouts and reports
- Led development of host institution annual report to USGS
- Assisted in coordinating workshops and other events
- Communicated with all consortium institution investigators and reported researcher activities to the National CASC
- Contributed to peer-reviewed publications

Research Assistant, Institute of the Environment, University of Arizona

July 2014 – October 2018

- Coordinated and facilitated workshops and team meetings, contributed to research development, developed and distributed outreach materials (e.g., handouts, factsheets, brochures, magnets), contributed to peer-reviewed publications, tracked budget expenses, developed and submitted proposals, developed workshop summary reports and regular required reports, tracked project deadlines and deliverables, engaged closely with partners to ensure outputs were useful, published monthly climate outlook for Rio Grande/Bravo Basin
- Managed projects:
 - developed community climate profiles (in collaboration with Tribes and other communities) portraying current and future local climate and discussed various local/regional impacts of climate change, such as flooding, fire, and extreme heat
 - created a framework (in close collaboration with NPS partners) for assessing vulnerability of cultural resources in the NPS Intermountain Region
 - led workshops in:
 - future risk of fire in the Southwest and the impacts of post-fire flooding
 - low probability, high consequence cascading impacts at the water, energy, heat, fire nexus
 - Tribal data sovereignty
 - conducted a pilot project focused on engaging partners (including promotoras) on the topic of extreme heat and public health in the Paso del Norte region, including the major cities of Las Cruces, NM, El Paso, TX, and Ciudad Juárez, MX

Climate Communications Specialist, Institute of the Environment, University of Arizona

July 2013 – July 2014

- Collected metrics for the Institute over 5 years (e.g., publications, events, grad students supported)
- Developed and distributed press releases
- Maintained website and managed content

Research and Outreach Scientist, Department of Geosciences/Institute of the Environment, University of Arizona

September 2011 – June 2013

- Coordinated author input and publication of *Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment* (in listed publications below)
- Managed and developed content for Southwest Climate Change Network website
- Recorded and edited podcast episodes

PUBLICATIONS

MacDonald, G., T. Wall, C. A. F. Enquist, **S. R. LeRoy**, J. B. Bradford, D. D. Breashers, T. Brown, D. Cayan, C. Dong, D. A. Falk, E. Fleishman, A. Gershunov, M. Hunter, R. A. Loehman, P. J. van Mantgem, B. R. Middleton, H. D. Safford, M. W. Schwartz, V. Trouet. The Drivers of California's Changing Wildfires: A State-of-the-Knowledge Synthesis. In press-*IJWF*.

Monteblanco, A. D., J. K. Vanos, **S. LeRoy**, P. M. Juarez, and G. M. Garfin. 2021. An Evaluation of a Maternal Health and Extreme Heat Exposure Training. *Journal of Social, Behavioral, & Health Sciences* 15. doi: [10.5590/JSBHS.2021.15.1.02](https://doi.org/10.5590/JSBHS.2021.15.1.02).

LeRoy, S., M. Friggens, G. Garfin, K. Hayhoe, S.J. Lite, M.J. Montero Martínez, J. Nielsen-Gammon, D. Rissik, B. Wickel, and M. Briggs. 2020. Adapting Your Stream Restoration Project to Climate Change. In Briggs, M.K., W.R. Osterkamp (eds.), *Renewing our Rivers: A Guidebook to Stream Corridor Restoration in Dryland Regions*. UA Press.

Parsons, L. A., **S. LeRoy**, J. T. Overpeck, M. Bush, G.M. Cárdenes-Sandí, and S. Saleska. 2018. The Threat of Multi-Year Drought in Western Amazonia. *Water Resources Research* 54, 9. doi: 10.1029/2017WR021788

Garfin, G., **S. LeRoy**, and H. Jones. 2018. A Heat-Health Regional Pilot in the Paso del Norte Region. *Southern Climate Monitor* 8, 1:2-6.

Garfin, G., **S. LeRoy**, M. Muth, H. Jones, M. Ibarra Ochoa, J. L. Vázquez Aguirre, M. Shafer, D. Brown, J. Saldaña Colín, G. Velázquez Angulo, M. L. Romo Aguilar. 2017. Climate Services for Coping with Climate Change, Drought, and Extreme Heat in the México-U.S. Border Region. In Montero Martínez, M.J., and O. F. Ibáñez Hernández (eds.), *La Cuenca del Río Conchos: Una Mirada desde las Ciencias ante el Cambio Climático*. Jiutepec, Morelos, Mexico: Instituto Mexican de Tecnología del Agua, pp. 39-57. ISBN 978-607-9368-89-0.

LeRoy, S. and G. Garfin. 2017. The Climate of Las Cruces, New Mexico. Produced in conjunction with the project, Using Critical Thresholds to Customize Climate Projections of Extreme Events to User Needs and Support Decisions. Tucson, AZ: CLIMAS, 23 p.

Garfin, G., **S. LeRoy**, and H. Jones, 2017. Developing an Integrated Heat Health Information System for Long-Term Resilience to Climate and Weather Extremes in the El Paso-Juárez-Las Cruces Region. Tucson, AZ: Institute of the Environment, 63 p.

Garfin, G., **S. LeRoy**, B. McMahan, M. Black, and B. Roh, 2016. Preparing for High Consequence, Low Probability Events: Heat, Water & Energy in the Southwest. Report to the U.S. Bureau of Reclamation, from the project Enhancing Water Supply Reliability. Tucson, AZ: Institute of the Environment, 30 p. doi: 10.13140/RG.2.1.4823.3205.

Garfin, G., **S. LeRoy**, D. Martin, M. Hammersly, A. Youberg, and R. Quay, 2016. Managing for Future Risks of Fire, Extreme Precipitation, and Post-fire Flooding. Report to the U.S. Bureau of Reclamation, from the project Enhancing Water Supply Reliability. Tucson, AZ: Institute of the Environment, 33 p. doi: 10.13140/RG.2.2.12750.05448.

LeRoy, S., G. Garfin, and M. Black, 2016. Anticipating Cascading Effects from Climate Extremes. *Eos* 97. doi: 10.1029/2016EO048971

Garfin, G., A. Jardine, R. Merideth, M. Black, and **S. LeRoy** (eds.), 2013. *Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment*. Washington, DC: Island Press, 509 p.

Ritchie, E. A., K. M. Wood, D. S. Gutzler and **S. White**, 2011. The Influence of Eastern Pacific Tropical Cyclone Remnants on the Southwestern United States. *Monthly Weather Review* 139, 192-210.

AWARDS

NSF Amazon-PIRE Fellowship

2008 – 2010

PREVIOUS EXPERIENCE

Graduate Research and Teaching Assistant, Department of Geosciences and Department of Ecology and Evolutionary Biology, University of Arizona

2008 – 2011

- Conducted field work in the Peruvian and Brazilian Amazon
- Analyzed lake sediments to reconstruct precipitation and vegetation changes in the Peruvian Amazon over the past ~2000 years

Lab Manager, Laboratory of Tree-Ring Research, University of Arizona

2007 – 2008

- Managed a stable isotope lab
- Troubleshooted issues with mass spectrometer
- Reconstructed past precipitation using both tree rings and isotopic analysis of tree cores