



POSITION ANNOUNCEMENT: Postdoctoral Scientist

Conservation Science Partners (CSP) seeks a Postdoctoral Scientist who will co-lead a diverse working group to synthesize the science around transformational ecological impacts from novel manifestations of drought under a changing climate, and connect the synthesis to resource management decisions. This working group will stem from the project “A co-produced science synthesis for transformational drought” funded by the U.S. Department of Interior’s National Climate Adaptation Science Center (CASC), in partnership with each of the eight Regional CASCs. The mission of the CASCs is to deliver science to help fish, wildlife, water, land, and people adapt to a changing climate, and the CASC network covers the entire continental U.S., Hawai’i, Alaska, the U.S. Affiliated Pacific Islands, and the U.S. Caribbean.

Globally, ecosystems are increasingly threatened by climate change, extreme weather events, and more intense megadisturbances such as drought, wildfire, diseases, and insect outbreaks, and these stressors are increasingly likely to drive ecosystems to change ecological states (from forest to grassland, for example). Droughts are an emerging trigger of ecological transformation and managing “transformational drought” needs strong scientific support. The transformational drought working group will provide a management-guided synthesis of the complex and interdisciplinary science around where, when, and how drought might trigger a persistent transformation in ecosystems, to support natural resource management decisions across the CASC network. The work will be rooted in the decision context of stakeholders and will seek to build a community of practice around linking important drought science to effective natural resource management. The working group itself will be highly diverse, with collective skillsets of climate change and drought, community ecology, ecological disturbance, landscape ecology, systems ecology, hydrology, etc., and will be led by an ecologist (Dr. Shelley Crausbay, CSP) and a climatologist (Dr. Imtiaz Rangwala, University of Colorado).

The work requires highly creative, quantitative thinking to craft a synthesis of interdisciplinary work around complex natural phenomena in a way that meets stakeholder needs. The emphasis of this project is on synthesizing relevant science, and is not on collecting new data. Specifically, the position will work within the group to 1) synthesize, analyze, visualize, and communicate available research on the ecological effects of drought, 2) design, conceptualize, and communicate these syntheses to connect to natural resource management decisions, 3) conduct new analyses to understand transformational drought in at least one regional case, and 4) co-organize and help to facilitate working group meetings and products. Successful applicants will also interact with directors and staff of the eight Regional CASCs and entities involved in a group of Federal land management agencies grappling with how to navigate ecological transformation. In addition, this position offers opportunities to work with scientists at the [North Central CASC](#) and [Earth Lab](#) at the University of Colorado through Dr. Rangwala.



Core responsibilities: This position focuses on science synthesis through a working group, and involves strong stakeholder guidance. Core responsibilities may include, but are not limited to:

- Co-organize a diverse working group of scientists and foster interdisciplinary dialogue about ecological impacts of drought (survey working group members, help determine content of meetings and methods for making virtual meetings successful, facilitate progress, foster regular communication, etc.)
- Contribute to the design and development of science synthesis to target management needs and specific management decisions
- Conduct science synthesis and where possible, meta-analyses of various aspects of transformational drought
- Take an analytical deep dive into at least one regional case study of transformational drought (within a Regional CASC) to support climate adaptation planning or actions
- Translate and communicate science synthesis to the resource management community
- Contribute to a culture of inclusivity, creativity, innovation, and experimentation at CSP and in the working group
- Deliver products including, but not limited to, peer-reviewed publication(s), public-facing synthesis documents, etc.

Skillsets: We desire at least one of the following skillsets. We welcome more than one, but we do not expect candidates to bring *all* of the following. We also welcome broader complements of knowledges and skills that stem from applicants' professional and life experiences.

- Grounding in community or population ecology with a focus on, for example, demographic changes with climate variability (mortality, recruitment), community assembly dynamics, species turnover, vegetation-type conversion, state change, regime shift, or ecological transformation
- Experience researching ecological responses to climate variability and the role of, for example, interacting disturbance and megadisturbance, extreme weather and climate events, hydrologic refugia, invasive species, functional types, etc.
- Grounding in climatology or hydrology with a focus on, for example, synoptic climatology, land surface processes, climate and hydrological modeling, or drought dynamics and categorization
- Interest in and familiarity with engaging in co-production, co-creation, human-centered design, etc., to make science useful to natural resource management
- Demonstrated ability to review, synthesize and analyze large amounts of scientific literature and complex information/data, and perform statistical meta-analyses where appropriate
- Strong communication and interpersonal skills, organizational skills, and ability to take initiative and work independently as well as part of a large team
- Familiarity with using workflows and tools enabling reproducibility (e.g., Git, Google Earth Engine, Python, R, etc.) and commitment to open science principles
- Familiarity with climate vulnerability assessments, and/or climate adaptation planning



Required qualifications: PhD (MSc in combination with 5+ years directly relevant experience will also be considered) in ecology, hydrology, climatology, geography, conservation biology or a related field.

Application deadline and expected start date: Priority will be given to complete applications received by July 24, 2020, with screening to begin soon thereafter; interviews in early August, and an ideal start date of mid-September 2020.

About Conservation Science Partners. CSP is a 501(c)(3) nonprofit scientific collective established to meet the analytical and research needs of diverse stakeholders in conservation projects. Our mission is to apply human ingenuity to the preservation of species, populations, and ecosystems using scientific principles, innovative approaches, and lasting partnerships with conservation practitioners.

Organizational Values and Culture. Our core values include scientific and technical excellence and integrity, and we consider diversity, equity, and inclusion as equally important skills for our employees to possess or be open to learning and growing. We support and encourage creativity and innovation in practice and products; respectful co-production of knowledge; engagement with social justice; and connection to the living world. CSP supports vibrant, diverse living systems of all kinds, remaining mindful of the root causes of ecological harm. In particular, we are committed to realizing diversity, equity, and inclusion in all we do. We are actively pursuing projects that directly involve Black, Indigenous, and communities of color and diverse international partners, address disparate impacts of environmental change, and support social justice. [We are advancing a process to ensure that such goals come alive](#), recognizing the sustained attention, learning, and long-term commitment that this requires.

CSP's culture stems from highly skilled, independent people working in dynamic collaboration to implement quality projects while imagining the future shape, form, and landscape of conservation partnerships. Our staff includes artists, musicians, athletes, collectors, mechanics, and people pursuing other passions beyond conservation. As a group, we are candid and embrace respectful communication, intellectual independence, intentional collaboration across a dispersed network, personal accountability, ownership of quality and joy in our work, and adaptability and resilience. We put a special emphasis on innovation and creative co-leadership. Through staff workshops and retreats, collaborative 'Innovation Labs,' cross-sector outreach and training, and staff-driven technical and facilitative approaches, we seek ways to increase our creativity, efficiency, and effectiveness, while enjoying the process.

Location: This position is to be located in Fort Collins, CO. Due to the ongoing, fluid situation with the risks of COVID-19 transmission, and CSP's interest in reducing such risks, we will consider a remotely-stationed postdoc. Ideally, if and when the risks are sufficiently reduced



and if the candidate and CSP staff are comfortable, we would like to place the postdoc in Fort Collins, or at minimum, travel for one or more in-person visits.

Compensation. The salary is \$55,000 per year. We offer a comprehensive group medical, dental, and vision insurance package; retirement benefits; and professional growth and advancement opportunities.

Term of Appointment: Two years.

How to apply: Please prepare a cover letter explaining how your goals, skills, and experience fit the core responsibilities of the role and please also describe how your broader knowledges and experiences can contribute to our organizational culture and values. In addition, please provide the names and contact information of at least three relevant professional references, as well as your CV, and send to: hire@csp-inc.org. Please indicate **TRANSFORMATIONAL DROUGHT POSTDOC** in the subject line. *Your cover letter, reference list, and CV should be compiled and emailed as a single PDF file.*

Inquiries: If you have any questions about the position, please contact Shelley Crausbay at CSP (shelley@csp-inc.org) or Imtiaz Rangwala at the University of Colorado (imtiaz.rangwala@colorado.edu).

CSP is an equal opportunity employer and does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, sexual orientation, gender identity, gender expression, creed, veteran status, parental status, or marital status in its programs and activities. We recognize that diverse backgrounds, cultures, and experiences can only enrich our community and our conservation mission and goals. As part of our intentional efforts to increase inclusivity, equity, diversity, and justice, we encourage applicants from underrepresented groups in conservation, e.g., those who identify as women or non-binary, LGBTQ+, are people of color, or represent any combination of these and other identities