Subject: [EcoClimate News SW] New Podcast with USDA SW Climate Hub

- Date: Tuesday, July 14, 2020 at 10:39:24 AM Mountain Standard Time
- From: SW Climate Adaptation Science Center
- To: Leroy, Sarah Rose (sary21)

View this email in your browser



EcoClimate News Southwest

July 2020

Reflections from SW CASC USGS Deputy Director, Carolyn Enquist, PhD



I'm writing this piece from the 2nd floor of a small cabin overlooking the majestic Gothic Mountain, located at the Rocky Mountain Biological Lab (RMBL) a few miles north of Crested Butte, Colorado. I've stayed in this cabin with my family during many summers over the past 18 years. As I reflect back on my visits to this 100+ year-old townsite, a mining camp turned science field station, little has changed visibly from what I can see in the blurry black and white photos taken at the turn of the 20th century. I can only imagine the pristine valleys and mountains that were home to the Ute mountain people whose ancestral lands spread across Colorado and Utah. With the exceptions of a few new buildings, face lifts to some of the oldest ones, and—finally!—high speed internet, RMBL has not changed much since it was established. However, a closer look at the surrounding ecosystems, reveals the solid, and sometimes dramatic, evidence of climate change—and many long-term studies from RMBL have documented these changes.

Almost every day there is new evidence for how climate-induced ecological changes affect many aspects of our planet's ecosystems (e.g., increased heat and aridity, ecosystem type conversions, mismatches in the timing of biological events, increases in the size and severity of wildfire, loss of water quality and quantity, etc.), and, in particular, how these changes greatly impact people in underrepresented, often marginalized and largely underserved communities. And now, in just the past 5 months, the COVID-19 pandemic has added another layer of stress and havoc to an already stressed system. Adding to this moment of tension, disturbing events across the Nation have required us to face the very real realities of systemic racism and to rethink, re-engage and re-commit to the Black Lives Matter movement, and other efforts that bring light and seek solutions to the extreme disparities that have contributed to a long history of violence. Our Nation now has a responsibility to advance actions for dismantling the systemic racism in our society. And, yet, it is difficult to not get overwhelmed and, quite frankly, deeply saddened by the current state of affairs. Perhaps more than anything, what we need right now is a big dose of *HOPE*, so that we can replenish and tap into our personal and communal reservoirs of strength and resilience. Dr. Amber Pairis, Director of the Climate Science Alliance and the SW CASC's new Partnership Liaison (see link in this issue) speaks often of "Climate Hope," drawing upon inspiration from her work with Tribal communities: "Tribal nations are leaders on climate adaptation and advancing actions within a holistic framework that incorporates many different forms of knowledge to advance innovative and implementable solutions, drawing on the connections to the land that have been sustaining their communities since time immemorial." What better way to learn about resilience and climate adaptation than from the Indigenous people whose ancestors continue to inform and inspire? Moreover, these teachings emphasize the importance of engaging and supporting tribal youth and apply broadly to young people from all backgrounds to help build and solidify bridges between the past, present and future.

In this month's issue three young SW CASC-affiliated scientists share their own perspectives: Corwin Carroll on why he chose the path he's currently on, Mike Sierks on his personal call to action in the aftermath of the recent killings, and Earyn McGee about conducting research as a Black scientist and her involvement in #BlackBirdersWeek. They give me hope and I bet they will inspire you, too.

SW CASC Newsletter Summer Update

Thank you for subscribing to EcoClimate News Southwest! This summer, we will be publishing one newsletter, in July, and will return to a regular monthly release in September. We look forward to sharing pertinent news regarding the Southwest and climate adaptation again with you in September!

Come Rain or Shine Podcast



July's Episode: Atmospheric Rivers

The SW CASC has partnered with the <u>USDA Southwest Climate Hub</u> to produce our new podcast: "Come Rain or Shine." Each month, we highlight stories to share the most recent advances in climate science, weather, and climate adaptation and innovative practices to support resilient landscapes and communities. Each episode is published on the first Wednesday of the month, on the <u>SW CASC website</u>.

July's episode features SW CASC scientists discussing atmospheric rivers in the Southwest U.S.--their characteristics, impacts on water resources and ecosystems, economic impacts, and how they are projected to change in the future. Alexander (Sasha) Gershunov and Dan Cayan are Research Meteorologists and SW CASC PIs, and Tom Corringham is a Postdoctoral research economist, in the Climate, Atmospheric Science and Physical Oceanography Department at Scripps Institution of Oceanography at UC-San Diego.



Welcome New SW CASC Team Members!



The SW CASC has hired two new staff members on the USGS side of the partnership. Amber Pairis (Climate Science Alliance) joins us as a Partnership Liaison, and Molly Hunter (University of Arizona) as our Research Manager. Learn more about Amber and Molly <u>here</u>. Welcome Amber and Molly!



Corwin Carroll (half Navajo, half White Mountain Apache) joins the SW CASC as a

BIA Pathways Intern, working closely with SW CASC Tribal Climate Adaptation Science Liaison, Althea Walker. Corwin is a tribal member of the Fort Apache Indian Reservation located in the White Mountains of Northeast Arizona, and is currently an undergraduate student at the University of Arizona. Learn more about Corwin <u>here</u>. Welcome Corwin!

Upcoming Events

Webinars: Indigenous Peoples Climate Change Working Group (IPCCWG) Parts 3 & 4

The IPCCWG gathers for a series of virtual meetings to discuss the future generations of Indigenous geoscience professionals, educators, and workforce. An in-person IPCCWG meeting will take place at the <u>National Tribal & Indigenous Climate</u> <u>Conference</u>. The IPCCWG is open to all who share our commitment to strengthening the connections between tribes, TCUs, federal agencies, and NGOs. Recordings of past meetings can be found <u>here</u>.

Part 3: July 16, 2020 Part 4: August 13, 2020 Time: 1:00pm PDT

Register Today

Webinar Coping with Crisis: Building Psychosocial Resilience in the Face of Climate Change

Climate change is putting Tribal communities at an increased risk for severe impacts from heat, drought, wildfires, floods, melting ice, sea level rise, and more. As tribal environmental professionals, it is our job to understand these risks and help develop plans for adapting to climate change threats. Addressing the mental and emotional impacts of climate change is an important part of developing individual and community psychosocial resilience. This webinar, with presenter Shasta Gaughen (Pala Band of Mission Indians), will provide you with the opportunity to learn and share techniques to protect emotional health and wellness as part of your climate change adaptation planning, and will help you build psychosocial resilience to better cope, connect, and recover before, during, and after a disaster.

Date: July 29, 2020 Time: 1:00pm PDT

Register Today

What's Needed to Effectively Manage the California Coast?



Coastal ecosystems face many challenges, from both climate and non-climate factors —overdevelopment, rising sea levels, ocean acidification, sediment management—the list goes on and on. When it comes to managing and conserving coastal ecosystems, however, the biggest impediment is a lack of understanding about those systems, according to coastal resource managers who participated in a recent workshop hosted by the University of California-Los Angeles (UCLA), and the SW CASC. The aims of the workshop, held in August 2019, were to begin a dialog between climate scientists and coastal resource managers, foster an atmosphere of collaboration and engagement between the two groups, identify specific research needs, and create new partnerships. In <u>this blog</u>, we summarize the needs identified at the workshop. For a full accounting of the workshop, please see the full report linked <u>here</u>.

Fellows' Highlight

Radically Reimagined: Reflecting on My Power and Privilege as an Earth Scientist

"Inequality is structural, but it is upheld everyday by our individual choices" - Nicole Hannah-Jones

Mike Sierks is a PhD candidate at Scripps Institution of Oceanography at UC-San Diego. Below are his experiences and insights as a SW CASC Natural Resources Workforce Development (NRWD) Fellow.

In the wake of the killings of Breonna Taylor, George Floyd, Ahmaud Arbery, Dominique Rem'mie Fells, and far too many others, the national conversation regarding racial justice and systemic racism has <u>shifted in a profound way</u>. Driven by the impeccable organization of the <u>Black Lives Matter</u> and <u>Movement 4 Black Lives</u> leadership, a national grassroots effort has emphasized a radical reimagining of what power and accountability could (and should) look like in America. Though much of the national conversation has focused on the deeply entrenched <u>racist history of</u> <u>policing and the criminal justice system</u> in the United States, the massive momentum of the moment has spurred dialog and action into far-reaching corners of society. These conversations demand that normative assumptions of 'business as usual' and the 'status quo' be challenged so to illustrate the pervasive scaffolding of modern society which props up whiteness above all else.

On June 10th, 2020, I began shaping my long-term plan, my personal call to action for engaging in work to remove and dismantle anti-Blackness and white supremacy. A natural starting place was examining my role as a climate scientist. I considered the ways in which I can use my privilege as a researcher to push back on normative western settler colonial science. Although I have an incredible amount of work to do, I found a bright spot in my role as a SWCASC NRWD Fellow.

Read the full blog post by SW CASC NRWD Fellow Mike Sierks <u>here</u>.

SW CASC in the News

In the news this past month was SW CASC Communications Assistant, Earyn McGee, who helped organize #BlackBirdersWeek. In a <u>NYTimes</u> article about the spreading calls for racial justice, and an <u>AZCentral</u> article about Black conservationists, Earyn discusses conducting field research as a Black scientist, and the dangers associated with it. "Our job means going into the field and being visible and moving in spaces that are not always welcoming to us." Earyn is a valued SW CASC team member, and is the right person at the right time to speak up about the racial injustices in science and academia!

Also in the news, was SW CASC Principal Investigator Brad Udall (Colorado State University), who was quoted in several media outlets in early June discussing recent research in the Colorado River Basin. In one article, in <u>The Revelator</u>, he states, "The basin has really entered a fundamentally different period than what we experienced during the 20th century." The author of the article describes "a creeping, permanent dryness" that is expanding across the U.S. Another article (<u>AZCentral</u>) focuses more closely on the lower basin, specifically on the Salt and Verde rivers in Arizona. A recent study suggests that these rivers may be more resilient to future temperature increases. Scientists urge that risks still remain in the region, however, and everyone needs to be planning for change. As Udall reminds, "No one is getting a free pass on preparing for climate change."



Other SW Science

Human-caused climate change will rapidly alter ecosystems in the Southwest U.S. and around the world, putting species that inhabit them under severe stress. In a time of dramatic ecological upheaval, identifying and protecting climate change

refugia--areas relatively buffered from climate change over time--can protect species from the negative effects of climate change. The Climate Adaptation Science Centers have been at the forefront of climate change refugia research, prompting *Frontiers in Ecology and the Environment* to publish a special issue to look at how far the field has come in recent years and what research is still needed to effectively manage refugia in a changing climate. Read more <u>here</u>.

Colorado River Basin Climate and Hydrology: State of the Science

From the Western Water Assessment (WWA), this comprehensive report integrates nearly 800 peer-reviewed studies, agency reports, and other sources of information to assess the state of the science in the Colorado River Basin, including the latest data, tools, and research underpinning the management of Colorado River water resources. Additionally, the report aims to guide resource managers and researchers in efforts to improve forecasts and projections for the basin's water system.

2020 Climate Change Consortium for Specialty Crops Report

The <u>Climate Science Alliance</u> and the California Department of Food and Agriculture recently released a report, "Climate Change Impacts for Specialty Crops." The team connected with regional producers, technical advisors, and researchers to better understand climate impacts in southern California, and challenges for producers in building resilience. The report represents a reflection of the feedback and recommendations from producers.

Partner Highlights

Climate-wise Reforestation Toolkit

California's recent drought resulted in significant tree mortality and the need to reforest in areas where the overstory was lost. In partnership with the Forest Service, UC Berkeley, and the John Muir Institute of the Environment, the <u>California Climate Hub developed a toolkit</u> that can be used to inform reforestation decisions with climate change in mind. The toolkit's three tools can help land managers to identify priority areas for restoration, understand current stand conditions in the aftermath of the drought, and develop a reforestation planting guide based on known best management practices.

Climate Change Primer for Forest Managers in the Sierra Nevada

The California Climate Hub and their Forest Service partners developed <u>a brief</u> <u>summary of the latest science</u> to support forest managers in the Sierra Nevada. By providing a framework for approaching climate change adaptation strategies, the Primer provides a synthesis of guidance to help managers make climate-informed, science-based decisions.

June 2020 Southwest Climate Podcast - TooSoon or Not Soon Enough, The Wildfire and Monsoon Edition

In the June 2020 edition of the CLIMAS Southwest Climate Podcast, Mike Crimmins and Zack Guido sit down to talk about the last month of weather (including what Zack has coined the "TooSoon"), the current conditions (including the wildfire situation) and look forward to the monsoon. Listen to the podcast <u>here</u>.

Partner Events

CA-NV Drought & Climate Outlook Webinar



The California-Nevada Drought Early Warning System (CA-NV DEWS) July 2020 Drought & Climate Outlook Webinar is part of a series of regular drought and climate outlook webinars designed to provide stakeholders and other interested parties in the region with timely information on current drought status and impacts, as well as a preview of current and developing climatic events (i.e. El Niño and La Niña).

Date: July 27, 2020

Time: 11:00AM-12:00PM PDT

Register Today

New Mexico Weather Outlook Monthly Webinar



These monthly webinar presentations provide information on current and upcoming weather and climate conditions in New Mexico, with a highlight on conditions on Tribal lands. Agricultural producers and land managers are encouraged to attend. If you are unable to attend the live event the recording will also be available on the <u>Quivira Coalition</u> and <u>NIDIS</u> websites.

July 23, 2020 August 27, 2020 September 24, 2020

Time: 9:30 AM-10:00 AM PDT

Register Today

Job and Funding Opportunities

Job Opportunities

Ecologist Position

An ecologist position is available at the USGS Southwest Biological Science Center located in Moab, UT. The successful candidate will work on a collaborative project examining how climate change and livestock grazing affect soils, plants, and nutrient cycles of the Colorado Plateau. DEADLINE - Position open until filled

Climate Scientist

Climate Central seeks a mid- to senior-level natural or social scientist to make accurate and effective climate communications ubiquitous. The successful candidate will provide scientific leadership and inputs for a major new initiative leveraging technology to deliver compelling climate content.

DEADLINE - Position open until filled

David H. Smith Conservation Research Fellowship Program

The Society for Conservation Biology is soliciting applications for postdoctoral fellowships that will support early-career scientists who want to better link conservation science and theory with policy and management.

DEADLINE - September 4th, 2020

Funding Opportunities

Climate Resilience Fund (CRF) RFP

The CRF is seeking applications for its Coordination and Collaboration in the Resilience Ecosystem Program. The funding is to be used to build upon, strengthen or connect two or more tools or resources within the climate services sector. Maximum request of \$50,000; a total of \$300,000 is available.

DEADLINE - July 17th, 2020

Volunteer Hosting Opportunity

American Indian Higher Education Consortium (AIHEC) Volunteers in Service to America (VISTA) Program

AIHEC is seeking tribal environmental programs, inter-tribal organizations, and Tribal Colleges & Universities to host full-time VISTA members who carry a range of skills including research, planning, field work, meeting facilitation, etc. through the AIHEC VISTA Program. VISTAs can help provide capacity for community-driven projects that address pressing local climate change concerns. Contact AIHEC VISTA Program Director John Phillips at jphillips@aihec.org.

DEADLINE - Ongoing

We at the Southwest Climate Adaptation Science Center stand in solidarity with Black communities in the fight for freedom, liberation, and justice. We acknowledge that Black and Indigenous communities, and all people of color continue to experience systemic and institutional racism. We commit to challenging these entrenched systems through our work on climate change adaptation, and through our personal behavior. We acknowledge that communities of color are disproportionately affected by climate change due to the legacy and continuing burdens of environmental racism and injustice. The SW CASC is hosted by The University of Arizona, which sits on the ancestral homelands of the Tohono O'odham Nation and the Pascua Yaqui Tribe. The University of Arizona is recognized for being a Hispanic Serving Institution and has long-standing programs and institutions focused on underrepresented communities, including a strong commitment to Indigenous community governance and resilience. Collaboration with tribal communities is a key tenet of the SW CASC mission. We commit to using our expertise and experience, in collaboration with our colleagues, to work in partnership with Black, Indigenous, and other communities of color to anticipate, monitor, and adapt to climate change impacts and collaborate on adaptation efforts that support each community's effort in building sustainable, healthy, and resilient communities.

> **Contact us at:** University of Arizona, ENR2 Building, 1064 E. Lowell St., Suite N441, Tucson, AZ 85721

> > Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>.

Copyright © 2020 Southwest Climate Adaptation Science Center | All rights reserved.

Subscribe to EcoClimate News Southwest





SCRIPPS and a contract of oceanography

UC San Diego





