

# Forest & Fire Learning Series, 2021

April 1, 8, 15, 22, and 29 6-7pm Virtual E-vent

Learning Series Organizers

Mountain Studies Institute (MSI)

# Partners

2-3-2 Cohesive Strategy Partnership Colorado State Forest Service Dolores Watershed Resilient Forest Collaborative Durango Outdoor Exchange Maria's Bookshop Pagosa Mountain Sports San Juan Citizens Alliance San Juan Headwaters Forest Health Partnership San Juan Mountain Association Southern Rockies Fire Science Network Rocky Mountain Research Station USFS San Juan National Forest Wildfire Adapted Partnership

## BACKGROUND

Since 2017, the San Juan Mountains of Southwest Colorado have experienced exceptional drought and fire alongside record snowpack and swollen rivers. In response to community concerns regarding these climatic fluctuations across our landscape, MSI and partners began the Forest & Fire Learning Series in the spring of 2018. For the past three years, this lecture series has offered information and resources to how we, as a community, can better understand and approach local climatic changes using the best available science and landscape expertise to promote both ecological and community resilience.

There are many increasingly relevant conversations to address, one of which is the context of historical fire regimes – though 2021 may not prove to be an intense fire year, impacts from climate change suggest that fire events with increased frequency will occur. As our community continues to experience the fluctuations in climatic extremes alongside the consequences of more than a century of wildfire suppression throughout the West, we must discuss what it means to cultivate community resilience within the context of the forest ecology of the San Juan Mountains, historical fire regimes, and societal relationships to wildfire. The relationships and responses people have to wildfire can be complex and multi-faceted, which is why MSI aims to include what varying areas of science have to say about fire, forests, and community resilience.

To continue exploring these ideas, MSI is preparing for its 4<sup>th</sup> annual Forest & Fire Learning Series with the intent to educate and engage our community. This livestream e-vent will feature a Q&A session following presentations that cover a range of topics that include fire adapted communities, the connection between wildfires and



water, adaptations to COVID19, wildfire smoke and air quality, local seasonal outlooks for 2021, and personal stories of living with fire. Because engagement with a virtual audience is important, interactive questions will be posed throughout the e-vent to encourage a sense of connection and better understand how to reach community members online. Analytics resulting from these questions and the e-vent as a whole will be drafted in a 1-2 page document and shared with partners, sponsors, and local government officials, and posted to MSI's website.

We invite you to join the conversation, ask questions, and help to inform a community approach to living with fire.

# **EVENT SPECIFICS**

## April 1: Forest & Fire Management – A Collaborative Approach

This year's Learning Series will kick off with a co-presentation from Shawna Legarza PsyD. and Alison Layman on the topic of forest and fire management using efficient wildfire response and achieving a fire adapted community while maintaining and restoring landscapes. They will begin with an overview of the Cohesive Strategy, also known as the National Cohesive Wildland Fire Management Strategy, and take a look at what is occurring locally for wildfire response. They will then delve into what makes a fire adapted community and cover the direction CPAW, or Community Planning Assistance for Wildfire, is taking things in La Plata County.

#### Speakers

- Shawna Legarza, PsyD.: Director of Emergency Management, La Plata County
- Alison Layman: Planner I, La Plata County

#### April 8: At the Nexus of Wildfire & Water

Our 2<sup>nd</sup> evening will feature ongoing studies conducted by partners at Mountain Studies Institute (MSI) and Rocky Mountain Research Station (RMRS). Researchers Scott Roberts and Dr. Rhoades will share data and stories that detail the fascinating effects that wildfires have on stream chemistry, stream habitats, and aquatic life. They will also provide insight into what their research is saying about post-fire recovery in these environments.

#### Speakers

- Scott Roberts, M.S.: Aquatic Ecologist, Mountain Studies Institute
- Chuck Rhoades, Ph.D.: Research Biochemist, Rocky Mountain Research Station

#### April 15: Adapting to the Unprecedented

For our 3<sup>rd</sup> evening, Emily Hohman will be taking a broad look at the impacts of COVID19 in respect to specific regions' historic 2020 fire season and how folks around the nation have adapted to these circumstances. Emily will point to examples from southeast and northern California to New Mexico and Colorado, and explain how collaborative partnerships fit into the challenges faced in these areas. She will also share her efforts with the Prescribed Fire Training Exchanges (TREX) and the tremendous benefits of their work.

Lo Williams will follow up with a conversation about the challenges and successes of 2020 brought to the San Juan National Forest (SJNF). These include human impacts due to increased use of national lands as well as project accomplishment thanks to innovative strategies, strong community engagement, and support from local collaboratives. With lessons learned from 2020, Lo will share the foundations that were laid this past winter to prepare for the 2021 field season and how the SJNF and its partners are planning for the future.

#### Speakers

- Emily Hohman: Fire Learning Network Manager, North America Fire, The Nature Conservancy
- Lo Williams: Partnership and Public Affairs Specialist, USDA Forest Service



## April 22: The Chemistry of Wildfire Smoke

The 4<sup>th</sup> installment of the Learning Series will feature Dr. Gilman and her research on the air quality impacts of wildfire smoke. Dr. Gilman will describe her work making detailed chemical measurements of biomass burning from the NOAA (National Oceanic and Atmospheric Administration) lab in Boulder, the Missoula Fire Sciences Laboratory, and aboard the NASA DC-8 research aircraft as it flew through smoke plumes in the western and southeastern U.S. We will then explore with her the chemistry of wildfires and how its emissions impact air quality and climate.

Speaker

• Jessica Gilman, Ph.D.: Research Chemist, National Oceanic and Atmospheric Administration

## April 29: In Our Backyard – Community Preparedness & Seasonal Outlooks

To wrap up the Forest & Fire Learning Series, we will learn about local wildfire resources and mitigation efforts with Alex Graf and Gem Boone. Alex will cover some of the many programs and services offered by Wildfire Adapted Partnership (WAP) while Gem shares her experience as a neighborhood ambassador for the Elk Steam Ranch in the East Canyon Community. Her powerful story will outline the coordinated and community-wide response to the East Canyon Fire in the summer of 2020 - by the time Gem received her emergency alert text with the mandatory evacuation order, the entire community was mostly through its evacuation plan, phone-trees were completed, livestock was loaded, and Gem herself was already driving out of the community with all of her belongings.

Brad Pietruszka will conclude with a presentation showing seasonal outlooks for both wildfire and prescribed fire across the San Juan National Forest and surrounding areas for 2021. Brad will explain the concept of fire "debt", or the amount of fire that is missing from our landscape, what that means in our changing climate, and the two paths we can take to prepare for its' inevitable return.

#### Speakers

- Alex Graf: Montezuma County Coordinator, Wildfire Adapted Partnership
- Gem Boone: Neighborhood Ambassador, East Canyon Community
- Brad Pietruszka: Fuels Program Manager, San Juan National Forest, USDA Forest Service





Photo: Michael Remke, mikeremkephotography.com

Founded in 2002 in Silverton, Colorado, the Mountain Studies Institute (MSI) is a non-profit institution dedicated to enhancing understanding and sustainable use of the San Juan Mountains through research and education. The organization works in an 8-county region in Southwestern Colorado and maintains offices in both Durango and Silverton. MSI is committed to increasing knowledge and understanding of unique mountain environments and the issues that affect them, and to developing solutions for the benefit of mountain communities. For more information, visit MSI online at <u>www.mountainstudies.org</u>.