

YAMPA BASIN RENDEZVOUS  
STEERING COMMITTEE PRESENTS

# THE 2021 YAMPA BASIN RENDEZVOUS

*A Dialogue on Drought, Water  
Availability, and Conservation*

## Four-part webinar series

Thursday, September 9 | 9 a.m. – 12:45 p.m. MDT

Friday, September 10 | 9 a.m. – 12:45 p.m. MDT

The Yampa River is one of the wildest remaining major tributaries of the Colorado River. It also provides crucial water supplies to local stakeholders and locations as far removed as Arizona and Southern California. However, warming temperatures, rising snowlines, and increased drought occurrence and severity pose serious risks to the boreal, alpine, and riverine ecosystems of the Yampa River Basin.

**How are we, as a community, developing conservation practices and adapting to manage the impacts of current and expected droughts and water availability challenges?** The four-part webinar series will provide an overview of the current state of, and future planning for, water resources in the Yampa River Basin. It will also include a discussion of the role of economic, environmental, and cultural factors that influence conservation planning.

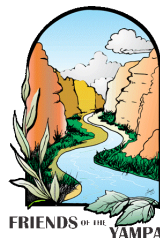
## ORGANIZED BY



Center for Western Weather  
and Water Extremes  
SCRIPPS INSTITUTION OF OCEANOGRAPHY  
AT UC SAN DIEGO



COLORADO  
MOUNTAIN COLLEGE



FRIENDS OF THE  
YAMPA

JILL BERGMAN



## Zoom Information

Link to join for panel webinars: <https://coloradomtn-edu.zoom.us/j/89948383336>

Meeting ID: 899 4838 3336

More zoom information can be found on the last page.

## WELCOME AND INTRODUCTION – THE STATE OF DROUGHT

September 9 • 9-10:45 a.m.

### WELCOME

#### JC Norling

Colorado Mountain College

#### Carrie Besnette Hauser

Colorado Mountain College

### SPEAKERS

#### Marty Ralph

Center for Western Weather and Water Extremes

#### Josh German

Bureau of Reclamation

#### Megan Holcomb

Colorado Water Conservation Board, State of Colorado

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## LATEST DROUGHT SCIENCE

September 9 • 11 a.m. - 12:45 p.m.

### PANEL MODERATOR

#### Michael Dettinger

Center for Western Weather and Water Extremes

### SPEAKERS

#### Ben Livneh

CIRES, University of Colorado Boulder

#### Angeline Pendergrass

Cornell University

#### Chris Milly

U.S. Geological Survey



## STUDENT RESEARCH PRESENTATIONS

September 10 • 8-8:50 a.m.

The 2021 Yampa Basin Rendezvous is pleased to host a special session highlighting original student research. Join us for virtual presentations from undergraduate and graduate students focusing on drought, water, and weather in the west.

Specific link for student presentations:

<https://coloradomtn-edu.zoom.us/j/89078976620>

Meeting ID: 890 7897 6620

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## CURRENT WATER MANAGEMENT STRATEGIES

September 10 • 9-10:45 a.m.

### PANEL MODERATOR

**Nicole Seltzer**

River Network

### SPEAKERS

**Mike Camblin**

Maybell Irrigation District

**Alyson Gould**

Colorado Water Trust

**Kevin Rein**

Colorado Division of Water Resources

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## STRATEGIES FOR ADAPTATION AND ACTION

September 10 • 11 a.m. - 12:45 p.m.

### PANEL MODERATOR

**Elise Osenga**

Aspen Global Change Institute

### SPEAKERS

**Cary Talbot**

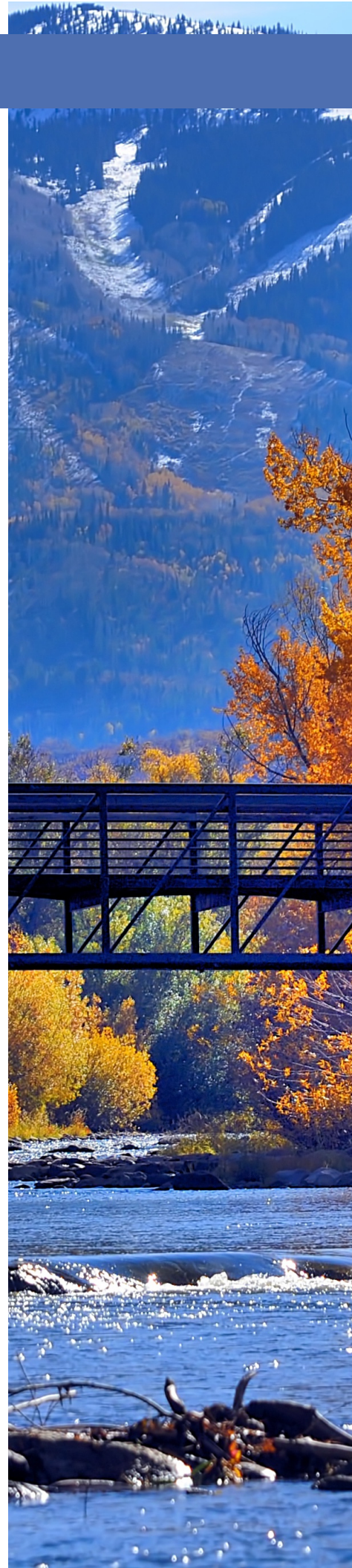
U.S. Army Corps of Engineers

**Kate Greenberg**

Colorado Department of Agriculture

**Rob Billerbeck**

National Park Service







## About the Yampa Basin Rendezvous

**YBR Mission:** The YBR strives to be an opportunity for reflection, communication, appreciation, and collaborative, interactive learning about the Yampa Basin ecosystems, environment, weather, climate, people, and culture and their intersections for members of the Yampa Basin community as well as all the communities downstream who rely on the Yampa's water.

**YBR Goals:** Connect students, researchers, institutions, and community members who live and work in the Yampa River Basin to share knowledge regarding climate variability and change that has impacts on the environment, people and the economy. Build community and encourage collaborative problem-solving and planning, and provide an opportunity for citizens and visitors to be informed about the state of the Yampa Basin and the people and plans in place and in process to protect it.

For detailed information on previous YBR conferences and speakers visit  
[ypsc.org/yampa-basin-rendezvous](https://ypsc.org/yampa-basin-rendezvous)

### **2021 YBR Steering Committee Members:**

**Anna Wilson**, Co-Chair, Center for Western Weather and Water Extremes, UC San Diego

**Sarah Jones**, Co-Chair, Steamboat Ski and Resort Corporation

**Jill Bergman**, Artist

**Matt Jost**, Colorado Mountain College

**Holly Kirkpatrick**, Upper Yampa Water Conservancy District

**Lindsey Marlow**, Integrated Water Management Plan and Yampa River Fund

**Madison Muxworthy**, Yampa Valley Sustainability Council

**Marty Ralph**, Center for Western Weather and Water Extremes, UC San Diego

**Mike Sierks**, Center for Western Weather and Water Extremes, UC San Diego

**Nathan Stewart**, Colorado Mountain College

**Tony Urbick**, Community Member

**Kent Vertrees**, Friends of the Yampa & Steamboat Powdercats



# SPEAKERS

## WELCOME AND INTRODUCTION - THE STATE OF DROUGHT

### CARRIE BESNETTE HAUSER

Since 2013, Dr. Carrie Besnette Hauser has served as President and CEO of Colorado Mountain College. Previous to CMC, Hauser held leadership roles at the Kauffman Foundation, Metropolitan State University of Denver and the Daniels Fund. Hauser is currently chair of the Colorado Parks and Wildlife Commission, a member of the El Pomar Northwest Regional Council, and serves on the Great Outdoors Colorado (GOCO) and Vail Valley Foundation boards of directors. Hauser has also been a long-time board member of American Rivers.



### JC NORLING

JC is the Vice President and CMC Steamboat Springs Campus Dean. He holds a Ph.D. in Parks, Recreation, and Tourism, from The University of Utah, a M.S. in Education: Outdoor Recreation Management from Southern Illinois University and a B.A. in History from North Park University. JC is an avid outdoorsman and can be found biking, skiing, or teaching avalanche classes for the college.

### MARTY RALPH

Dr. F. Martin Ralph is a weather and water scientist focused on understanding the origins of floods and droughts, and on improving predictions for water management and flood control applications. After 21 years at NOAA, he created the "Center for Western Weather and Water Extremes" at UC San Diego. He's published over 150 peer-reviewed scientific articles and has developed programs on new science and technology and their application to solving practical problems. He is a leading expert on atmospheric rivers and provides input to policy makers on western weather and water extremes. He is a leader in development of Forecast-Informed Reservoir Operations (FIRO), working closely with federal, state and local water managers. He is a Fellow of the American Meteorological Society and has received awards from several organizations. He has a B.S. in Meteorology from University of Arizona, and a Ph.D. in Atmospheric Sciences from UCLA.



## JOSH GERMAN

Josh German is a Program Analyst for the U.S. Bureau of Reclamation. He has worked in the Water Resources and Planning Office for over 10 years and coordinates WaterSMART Grants. He received a Bachelor of Arts degree from Colby College and an LLM degree in Environmental Law from the University of Denver.



## MEGAN HOLCOMB

Megan Holcomb is a hydrologist and drought specialist working in complex political-practitioner systems to help communicate what “resilience” really means in a society. In all roles, she advocates for cooperative, anti-scarcity approaches to resource management. Megan has served the state's water supply planning team with the Colorado Water Conservation Board since 2017, providing technical expertise to implement the Colorado Water Plan. She manages the state's drought task force network to help Colorado communities and water economies respond to drought and adapt to climate change.

# LATEST DROUGHT SCIENCE

## MIKE DETTINGER

Dr. Michael Dettinger recently retired from being a senior research hydrologist for the U.S. Geological Survey's Water Resources Mission Area (Water Cycle Branch); and is still a visiting researcher at the Scripps Institution of Oceanography, Center for Western Weather and Water Extremes, a resident scientist at the University of Nevada Reno, and a distinguished visiting researcher at the Desert Research Institute. Dettinger has monitored and researched the hydrology, climates, and water resources of the West for 40 years, focusing on regional water resources, watershed modeling, causes of hydro-climatic variability and extremes (including atmospheric rivers and droughts), and climate-change impacts and adaptations.





## BEN LIVNEH

Ben is an assistant professor in the department of Civil, Environmental, and Architectural Engineering, a principal investigator of the Western Water Assessment, and a Fellow of the University of Colorado Cooperative Institute for Research in Environmental Sciences (CIRES). His research group focuses on solving problems in the field of physical hydrology, with specific interests in how land cover and climate changes will affect water availability across the western U.S.



## ANGELINE PENDERGRASS

Professor Angeline Pendergrass has a B.S. in meteorology/math and physics from the University of Miami, and an M.S. and Ph.D. in atmospheric science from the University of Washington. She then joined the National Center for Atmospheric Research as an Advanced Studies Program postdoctoral research fellow. After moving to CIRES at the University of Colorado as a Visiting Fellow, she returned to NCAR as a Project Scientist. She also spent one year as a visitor at ETH-Zurich in Switzerland. She joined Cornell as an Assistant Professor in 2020. Dr. Pendergrass's research focuses on precipitation and its response to climate variability and change.

## CHRIS MILLY

Chris Milly is a Research Hydrologist with the U.S. Geological Survey and a Research Affiliate with the National Oceanic and Atmospheric Administration's Geophysical Fluid Dynamics Laboratory (GFDL) on the Princeton University campus. His scientific contributions span the areas of global hydrology; climate-change hydrology; land water- and energy balance processes and modeling; impacts of soil-water mass variability on crustal deformation, interannual sea-level variability, and gravity; soil-water transport theory and modeling; integrated modeling and remote sensing of soil water; and experimental methods to determine multi-phase-flow characteristics of porous media. For many years he had co-lead an interdisciplinary, multi-institution team responsible for development of the land component of GFDL's climate and earth-system models. Chris received his M.S. and Ph.D. from MIT, and his BSE from Princeton University. Prior to joining USGS, he was an assistant professor at Princeton.



# CURRENT WATER MANAGEMENT STRATEGIES

## NICOLE SELTZER

Nicole has a 20+ year career in Colorado water, and has lived in Oak Creek since 2016. She specializes in designing processes that convene diverse stakeholders to plan technical water resources projects.

During her career, she has managed public input for federal and state reservoir and pipeline permitting processes; facilitated communities of practice for water education, watershed planning and environmental water transactions; and produced written, audio and video content to simply explain complex water topics to diverse audiences. She is currently the

Colorado River Program Director for River Network, a national non-profit river conservation organization, and was previously the Executive Director of Water Education Colorado and worked for the Northern Colorado Water Conservancy District.



## MIKE CAMBLIN

Mike Camblin ranches in Maybell CO. with his wife Danna and 3 children.

They sell purebred Angus cattle that run on a fourth-generation ranch of Danna's family. Mike has been on the Maybell Irrigation board for over 20 years and is also on the Colorado Cattlemen's Association board, Land use board, 4H Foundation, and the Yampa-White-Green Basin Roundtable.

## ALYSON GOULD

Alyson was born and raised in Colorado. After earning her B.S. in Biology from Bucknell University, Alyson returned to Colorado to pursue law. Alyson earned a J.D. and an LL.M. in Environmental and Natural Resources Law and Policy from the University of Denver Sturm College of Law. Before joining the Colorado Water Trust, Alyson was in private practice, focusing on the representation of water districts, contractors, and property owners in federal, state, and water court, and administrative proceedings. Alyson spends her free time with her family and enjoys painting, gardening, and coaching soccer.





## KEVIN REIN

Kevin Rein is the State Engineer and Director of the Colorado Division of Water Resources, also known as the State Engineer's Office. Kevin directs the division's responsibilities, which include administration of water rights in Colorado, issuing well permits, performing administrative approvals for water use, administering programs that ensure the safety of dams and the safe construction of water wells, managing compliance with interstate compacts, and providing information and education resources to the public. He has worked at the Division of Water Resources for 23 years.



# STRATEGIES FOR ADAPTATION AND ACTION

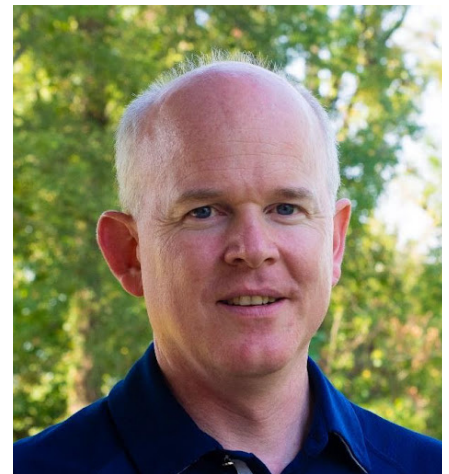


## ELISE OSENGA

Elise Osenga is the Community Science Manager for Aspen Global Change Institute, a non-profit committed to advancing global change science and solutions. Elise manages the AGCI's iRON program, a long-term soil moisture and meteorological network in the Roaring Fork Watershed of Colorado. Her work includes site maintenance, data collection, and engagement with local partners and community members. Elise holds a B.A. in Biology and English from St. Olaf College and an M.A. in Conservation Biology from Miami University, Ohio. She is a lead editor for the Mountain Views Chronicle.

## CARY TALBOT

Cary Talbot is Chief of the Flood & Storm Protection Division in the Coastal & Hydraulics Laboratory (CHL), US Army Engineer Research and Development Center (ERDC). He supervises the execution of research and development activities in a wide range of coastal hydraulic and hydrologic engineering data collection and analysis applications. He also serves as the Program Manager of the Forecast Informed Reservoir Operations (FIRO) Program, which is assessing the viability of using advanced hydrometeorological forecasting capability and hydrologic and water management tools to operate reservoirs more efficiently for multi-purpose benefits.



## KATE GREENBERG

Kate Greenberg was appointed to serve as Colorado's first female Commissioner of Agriculture by Governor Jared Polis in December 2018. As Commissioner, Greenberg provides leadership and direction to the Colorado Department of Agriculture, which serves producers operating more than 38,700 farms and ranches in the state. She is a member of numerous state boards and commissions, current vice president of the Western U.S. Agricultural Trade Association, and secretary/treasurer of the Western Association of State Departments of Agriculture. Commissioner Greenberg is the recipient of the Emerging Conservation Leader Award from Western Resource Advocates and a 2019 Who's Who In Agriculture honoree. She has worked in and advocated for agriculture for more than 14 years.



## ROB BILLERBECK

Rob Billerbeck is the Colorado River Coordinator for the National Park Service out of the NPS Denver office. Rob coordinates internally and externally regarding water and resource issues related to the Colorado River for the NPS Colorado River Steering Committee and for the 10 national parks units that participate in that committee. He was the NPS project manager, along with his Bureau of Reclamation co-lead counterparts, on the Glen Canyon Long Term Experimental and Management Plan (LTEMP) Environmental Impact Statement from 2011-2016.



# ZOOM MEETING INFORMATION

Join Zoom Meeting

<https://coloradomtn-edu.zoom.us/j/89948383336>

Meeting ID: 899 4838 3336

One tap mobile

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Dial by your location

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+1 929 205 6099 US (New York)

Meeting ID: 899 4838 3336

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