

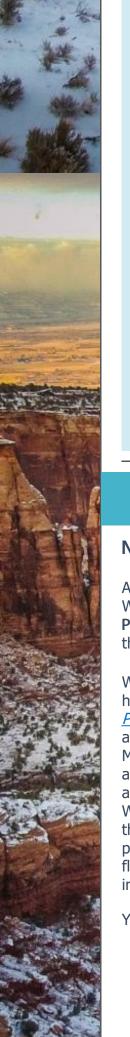
February 2023 Newsletter

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Wyoming Small Grants Competition

The University of Wyoming and Western Water Assessment are pleased to announce the Adapting to Climate Change in Wyoming grant competition. The competition will award up to \$30,000 each to 3-4 projects over two years for climate change adaptation projects for traditionally underserved Indigenous or small rural communities and organizations in Wyoming. <u>Click here</u> for more information!





Adapting to Climate Change in Wyoming



Grant Program

Wyoming communities are facing increased climate-related risks including wildfire, drought, flooding, and heat waves. The University of Wyoming and Western Water Assessment (WWA) are announcing a grant opportunity for community projects—propose one in your community! Learn more at our website below or scan the QR code.

http://www.uwyo.edu/haub/ruckelshausinstitute/outreach/climate-change-grants.html

- The competition will award 3-4 projects of up to \$30,000 over two years
- Information webinar available on March 3, 2023, 12-1pm MT
- The proposal deadline is March 31, 2023 with announcement of awards on May 1, 2023 and project duration from July 2023-July 2025





Research and Products

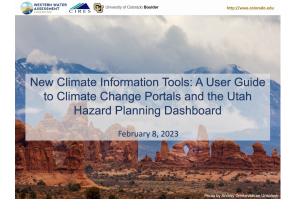
NCA5 and Climate Information Tools Webinars

As part of our webinar series, we hosted a webinar in January about the draft Water Chapter of the Fifth National Climate Assessment (NCA5). Chapter lead Liz Payton presented highlights from the chapter, followed by Q&A with members of the chapter author team.

We also hosted a webinar in February on new climate information tools. We highlighted Aspen Global Change Institute's <u>A User Guide to Climate Change Portals</u>, a new online resource designed to help people and communities acquire and interpret climate change information that is appropriate for their locality in the Mountain West and beyond. **Jeff Lukas** of Lukas Climate Research and Consulting and **Julie Vano** of the Aspen Global Change Institute walked through the User Guide and the six types of curated information resources that are highlighted in the guide. We also highlighted our <u>Utah Hazard Planning Tool</u>, an online dashboard-style tool that provides information about the past incidence, current risk, and future projections of climate hazards important for Utah, such as drought, wildfire, flooding, extreme heat, and others. **Seth Arens** provided an overview of the information available in the tool and a brief demonstration of how to use it.

You can watch the recordings of both webinars on our website.

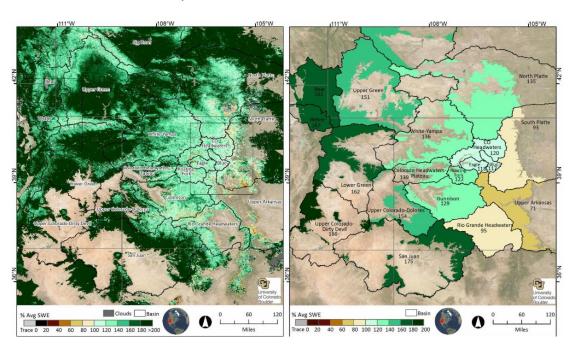




Intermountain West SWE Reports

The Institute of Arctic and Alpine Research at CU Boulder hosts snow-water equivalent (SWE) reports for the Intermountain West (Colorado, Utah, and Wyoming), developed and written by WWA PI Noah Molotch and Leanne Lestak. These reports are an experimental research product that provides near-real-time estimates of SWE at a spatial resolution of 500 m for the Intermountain West from mid-winter through the melt season. The reports are typically released within a week of the date of data acquisition at the top of the report and are distributed to water managers and forecasters. These SWE reports are especially useful for understanding the amount of SWE in locations at higher or lower elevations than Snotel monitoring sites. For more information on reporting or to discuss reporting for your area please contact Leanne.Lestak@colorado.edu.

Click here to access the reports.



Research Article Highlight

Lead co-authors Lisa Dilling and Meaghan Daly, with Bill Travis, Andrea Ray, and Olga Wilhelmi have a new publication out in Global Environmental Change on adaptive capacity, adaptation, and transformation in large U.S. urban water systems. They found that water utilities are engaging in multiple ways to adapt their systems to drought and are generally successful in reducing water use when needed. Drought policies and practices build adaptive capacity by, for example,





increasing flexibility in supply and demand, building water awareness in the public, fostering social learning and a sense of community, and catalyzing planning. However, drought practices can affect adaptive capacity in negative ways, e.g. by limiting revenue, increasing costs, and introducing new operational challenges and exposure to new sources of vulnerability, if not proactively managed. In addition, in carrying out drought policies and subsequent adjustments to systems such as new rate structures, it is important to maintain public trust and a sense of fairness in how policies are structured, which can be a challenge. Both physical (e.g. infrastructure) and social (e.g. fairness, trust, and public support) aspects of adaptive capacity are critical for future flexibility in the face of climate change. Finally, they argue that changes in utility policies and practices initiated by managing for drought can change public values around water and seed the conditions for transformative adaptation needed for climate change. Download the article for free below.

The role of adaptive capacity in incremental and transformative adaptation in three large U.S. Urban water systems

Climate Event

Above average water supply for the Upper Colorado River and Great Basins

As of mid-February, snowpack is above to much-above normal for all of the Upper Colorado River and Great Basins. Snow accumulation slowed during the first half of February, but SWE is 120-160% of normal in Utah river basins and 100-150% of normal for the remainder of the Upper Colorado River Basin. Nine SNOTEL sites have accumulated record amounts of SWE and an additional 11 sites have accumulated the second-highest SWE total on record. Above average regional SWE is forecasted to cause above average seasonal streamflow volumes for all of the Upper Colorado River and Great Basins except for the Upper Green River. The highest streamflows are forecasted for the Provo, Six Creeks, Sevier, and Yampa/White Basins. With less than 40 days left of the snow accumulation season,

April-July Water Supply Forecast Guidance Ranges Percent of 1991-2020 Average	
UPPER COLORADO RIVER BASIN	
<u>Basin</u>	Forecast Range
Lake Powell	117
Green River Basin	
Upper Green	75-100
Duchesne	100-155
Yampa/White	120-160
Price/San Rafael/Dirty Devil	105-170
Colorado River Headwaters	
Above Kremmling	90-120
Kremmling to Cameo	95-105
Southwest Colorado	
Gunnison	80-150
Dolores	105-135
San Juan	90-130
GREAT BASIN	
Bear	95-130
Weber	100-150
Six Creeks	115-180
Provo/Utah Lake	120-165
Sevier	115-185

most of the Intermountain West is on track for its first year with above average water supply since 2019.





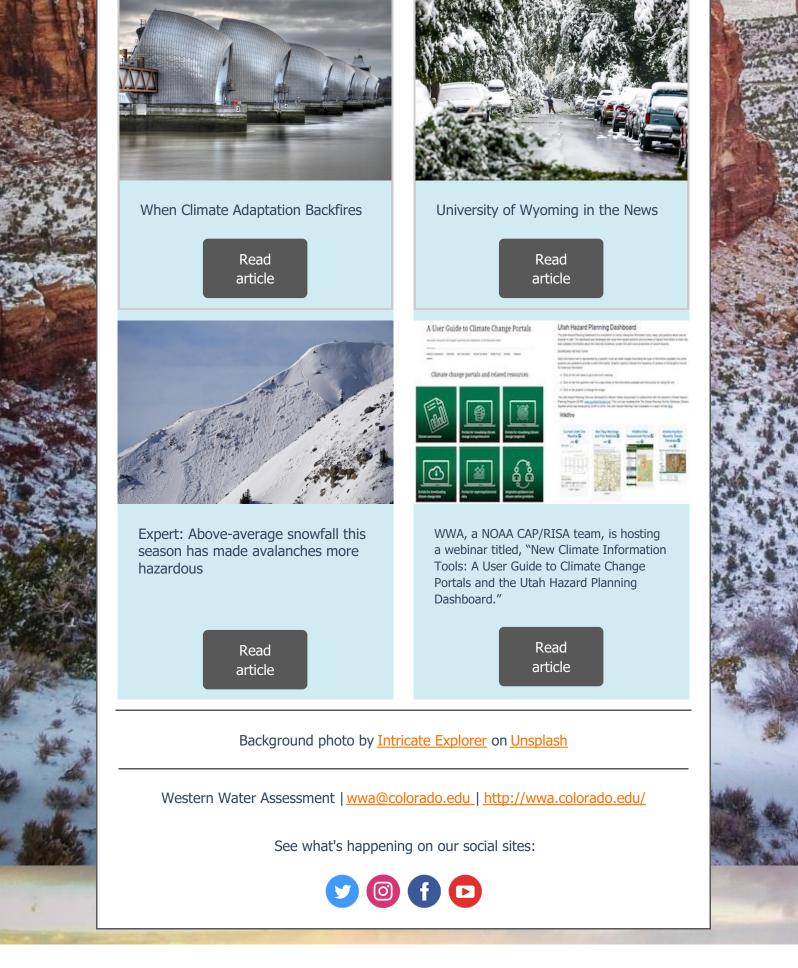
The U.S. wants to slash carbon emissions from power plants. Natural gas is in the way

Read article



How a dangerous stew of air pollution is choking the United States

Read article



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