

Special Issue



Will this be our last chance to get climate change under control?

This November, world leaders will gather for the UN Framework Convention on Climate Change's 26th Conference of the Parties (COP26) in Glasgow, Scotland. COP events were established in 1995 to review national communications and emission inventories submitted by participating countries. This year, COP26 will bring together nearly every country in the world to accelerate action towards the goals of the Paris Climate Agreement, which was developed during COP21 in 2015. Read below to discover the ways in which CIRES Education & Outreach is participating in COP activities and how you can best engage with COP from your home or school.

SPECIAL ISSUE: COP26 October 2021

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- New Data Puzzle Alert!
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Read below to discover the ways in which CIRES Education & Outreach is participating in COP activities and how you can best engage with COP from your home or school.

Science Show & Share COP 26 with Max Boykoff and Gina Fiorile

November 9 at 10 AM (MDT)

Join us as we stream LIVE from the world climate summit, COP26, in Glasgow, Scotland with Gina Fiorile and Maxwell Boykoff (from Boulder, CO)



scientists from CIRES

We invite teachers, classrooms, and members of the public to learn about COP26 and be inspired by the work that scientists and climate activists are doing all around the world. We look forward to answering your questions during the Q&A.



Max Boykoff is the Director of the Environmental Studies program at the University of Colorado at Boulder where his research focuses on the cultural politics of science, climate change, and environmental issues - that is, he looks at how people use their values and beliefs to shape and decide our response to environmental challenges like climate change through collective actions and policies. In this talk, he will share some information about what the Conference of Parties is and how it works, what the science tells us, and what actions we hope will come out of this year's COP26 meeting in Glasgow.



Gina Fiorile is the Climate Literacy and Energy Awareness Network (CLEAN) program specialist coordinator and a climate change communicator for CIRES Education and Outreach. She is joining the US Action for Climate Empowerment delegation at COP26 where she will be covering climate education and youth action and engagement. She will connect with us from Glasgow and share her experience of what COP26 is like, how young people can play a role in COP, and what she is most inspired by for our future.

Register or learn more

News Data Puzzle Alert!



Aerial images of Lake Mead show the dramatic decline in water levels (~143 feet) from 2001 to 2015. Photo by the National Park Service.

Megadrought in the Colorado River Basin

Over the past few decades, water levels in Colorado River fed reservoirs Lake Mead and Lake Powell have dropped significantly leaving "bathtub rings" behind on the surrounding bedrock - a sign of what used to be. In this new Data Puzzle, students analyze long-term temperature and precipitation patterns to determine what is causing the megadrought in the Colorado River Basin and identify strategies to reduce/reverse drought conditions in the region.

Data Puzzles are data-driven inquiry-based activities that engage students in making sense of natural phenomena.

View the Data Puzzle collection here





Get Started Teaching about Climate and Energy

Find free climate resources in <u>CLEAN</u> - an awardwinning peer-reviewed collection of free climate and energy science educational resources.

Join a **<u>community</u>** of professionals committed to improving climate and energy literacy.

Find support and professional development for your own learning in our **toolbox**.

Check out these example CLEAN resources to support your teaching about COP26:

- Climate Action Simulation
- <u>NOAA Climate Explorer</u>
- Tribal Climate Tool

- Have a talk about climate change
- Very simple climate model
- <u>Climate Negotiations Game</u>

CIRES E&O News

Alicia Christensen interviewed on *CU Boulder Podcast*: <u>RECCS pairs community college students with CIRES</u> <u>scientists</u>

Rebecca Batchelor highlighted in *Nature*: Online mentoring fills a gap for young researchers



RECCS Recruiting for Summer 2022

Recruiting community college students for a **paid authentic research experience** at CU Boulder, May 30th - July 29th! This unique opportunity to spend a summer working on an independent



research project with a mentor in the geologic or environmental sciences could launch a career!

Student will receive:

- 9 week student-generated research experience with a science mentor at CU, NOAA or other institutions
- Training and support in scientific writing and communication
- Career, academic transfer, and grad school prep
- \$600 per week stipend for a total of \$5400 + gas stipend
- Housing for the summer (for students 50+ miles away)

Applications are due January 17th, 2022.

Visit the RECCS website for more info or to apply

Increasing Students Understanding of Hazard Resilience



Boulder residents place sandbags to reinforce a berm from flooding in September 2013. Photo: Mark Leffingwell/Reuters.

70% of teachers surveyed in rural and urban Colorado teach about natural hazards, but only 30% of teachers address community resilience — a community's ability to respond to and recover from natural hazards — according to a recently published <u>CIRES Education & Outreach study</u> [led by Katie Boyd, Anne Gold and Megan Littrell]. The gap arises from a variety of factors including lack of alignment to the curriculum subjects, absence of the topics in standards/curriculum, lack of time, and lack of personal knowledge. Extreme weather events are on the rise in a warming world, and the work [published in *Geoscience Education*] highlights teachers' need for effective and place-conscious educational resources to help students and communities better prepare for natural hazards.

Read more of the study in here

What's Your Climattitude?

This campaign is an initiative of the UN Climate Change secretariat. It aims to encourage individuals who are willing and in a position to contribute to climate action.



Check out UN's Climate Quiz here

Upcoming E&O Events



2021 CLEAN Webinar Series Humans as agents of change within Earth's climate system October 28, 4:30 - 5:00 PM (MDT) Link to register or learn more



2021 CLEAN Webinar Series The UC Berkeley Understanding Global Change Project and CLEAN November 3, 4:00 - 4:30 PM (MDT) Link to register or learn more



Virtual Colorado Science Conference: CLEAN Session November 6, 1:05-1:55 PM (MDT) Speaker: Heidi Ragsdale, STEM Educator Advocate and Trainer Link to register or learn more



Virtual Colorado Science Conference: Data Puzzles Session November 6, 2:00-2:50 PM (MDT) Speakers: Lynne Harden, Jon Griffith, and Katya Schloesser, CIRES E&O Link to register or learn more



Virtual Colorado Science Conference: Resilient Colorado Session November 6, 2:55-3:45 PM (MDT) Speakers: Katya Schloesser, Curriculum Developer, CIRES E&O Link to register or learn more



Science Show & Share COP26 with Maxwell Boykoff and Gina Fiorile November 9, 10:00 AM (MDT) Link to register or learn more



2021 CLEAN Webinar Series Teaching Climate Consequences with CLEAN November 9, 4:30 - 5:00 PM (MDT) Link to register or learn more



2021 CLEAN Webinar Series Strategies for Integrating Climate Science into the Elementary Classroom November 18, 4:00 - 4:30 PM (MDT) Link to register or learn more

Why is COP26 So Important?

In 2019, COP25 was held in Madrid, Spain, during which <u>Greta Thunberg gave a now-</u><u>famous speech</u>. COP26 is especially important because it allows the world to see what has been achieved since targets to cut carbon emissions were set – and also pay attention to what hasn't worked. Also the after effects of the coronavirus pandemic will certainly have an impact on COP26. Many governments are now paying more attention to the environment and hoping to rebuild their economies in a greener and more sustainable way.



Keep up to date on opportunities & news from CIRES E&O

