

NOVEMBER 2022

Field Notes

NEWS FROM WESTERN RESOURCE ADVOCATES

Growing Water Smart from the Start:

Find out how we are helping cities fundamentally rethink water use and plan for a warmer and drier future. **Pg. 2**

Building Community Resilience to Climate Change:

Learn how Western communities are withstanding, reducing and responding to the impacts of a changing climate. **Pg. 14**

THE COLORADO RIVER AT A CROSSROADS

Imagine a world where the nation's two largest reservoirs – Lake Powell and Lake Mead – are essentially empty. Lake Powell is so low that it can no longer generate hydropower, and it doesn't consistently release water into the Grand Canyon. Lake Mead has some water in it, for now, but without reliable inflows from Lake Powell, the millions of people and farms that rely on water from Lake Mead are facing an uncertain and scary future. Smaller Upper Basin reservoirs like the Flaming Gorge in Utah, Blue Mesa in Colorado, and Navajo in New Mexico are already empty, their last drops having been sent down to desperately try to save Lake Powell.

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Photo captured by Emma Kulkarni at Lake Powell, Arizona. @emmaexpedition

Communities in our region, like Salt Lake City, are creating action plans to efficiently use their water, despite population growth and a drier future.



NEWS FROM THE FIELD

Growing Water Smart from the Start

To ensure Western communities can thrive in a warmer and more arid climate, we must start preparing now. WRA water policy analysts Lindsay Rogers, John Berggren, and Chelsea Benjamin do this vital work every day. They partner with cities and towns throughout the West, using their expertise in water conservation to help municipalities manage the effects of climate change on water resources. Through these efforts, they are guaranteeing Western communities can grow water smart in the face of drought and warming temperatures.

Integrating Water and Land Use Planning to Advance Water Conservation

The Interior West is simultaneously the fastest growing and driest region in the country. Even as its water supplies dwindle, it is expected to gain millions of residents in the coming decades. This is a challenge – but WRA has the policy

tools to overcome it.

We are working with communities to integrate water planning into land use planning. For decades, water and land use planning were disconnected in many Western cities and towns. Land use planners would tell water utility managers how much water was needed for a new development, and the water managers would provide it. Yet where and how we build have impacts on the quantity of water we need and the quality of water that supports our communities and ecosystems.

WRA is promoting a different approach: integrating water and land use planning so we consider water conservation and efficiency at all phases of community planning and development. This method encourages water-smart growth from the beginning of development projects, reducing how much water that expanding communities need and building resilience to climate change's impacts on water supplies.

WRA has worked directly with nearly a dozen municipalities and water providers to implement this change in water and land use planning. We partnered with Jordan Valley Water Conservancy District in Utah to review new water efficiency standards for development within the area it services. We also helped the city of Golden develop the first laundry-to-landscape graywater ordinance in Colorado, which will reduce per capita water demand by reusing water on-site for irrigation.

Encouraging Cities and Towns to Grow Water Smart in Utah

Right now, WRA is planning for an exciting next step in our work with localities: the Growing Water Smart Workshop in Utah.

In partnership with the Utah Division of Water Resources, the Babbitt Center for Land and Water Policy, and Utah State University, WRA is hosting a three-day workshop this fall to bring together community staff and decision makers to discuss water and land use planning. Utah is navigating significant water supply

limitations, requiring local jurisdictions to fundamentally rethink water use and to assume new leadership roles.

The overall objective of these workshops is to enable Utah's municipalities to create action plans for efficiently using their water so they can thrive in the context of increasingly limited water supplies and continued growth. Using a range of public engagement, planning, communication, and policy implementation tools, we will help six community teams realize their goals in the areas of water efficiency, smart growth, watershed health, and water resiliency.

After teams complete the workshop, they become eligible to apply for a technical assistance grant to help carry out a water and land use integration strategy identified in their workshop action plan. Projects include implementing land use code audits and ordinance recommendations, updating landscape regulations, incorporating water efficiency into general plan updates, and facilitating collaborative and extensive stakeholder engagement.

Taken together, the ideas and plans developed at this workshop will help create a more sustainable water future for Utahns.



Fall descends on Utah's Flaming Gorge and the Green River, one of the Colorado's major tributaries.



MEET OUR EXPERTS

Kathryne Grove, Vice President of Equity and Culture

As someone who likes to run, Kathryne Grove finds half marathons to be the best way to explore new places. It is here, away from mainstream attractions, where she is able to see the authenticity of the places she explores. Savannah and San Francisco have been some of her favorites, but nothing beats the wild, picturesque views of the Canyonlands half marathon in Moab, Utah.

Grove grew up in a small community outside of Las Cruces, New Mexico, playing and prospecting for hours and catching desert critters of all kinds. Her family moved to Colorado Springs in the '80s, and she has been in Colorado ever since.

Now that she's (mostly) grown up, Grove still finds herself in awe of the breathtaking beauty of the desert and Colorado's wild spaces. She has a rooted connection to the outdoors, sustainability, and protecting the environment for future generations.

This passion to make the world a better

place for all people began in her youth. Having grown up with limited resources, Grove developed a strong desire to support others, as well as a dedication to dismantling systemic barriers that can interfere with people's ability to live their fullest and healthiest lives. She served meals in a Colorado Springs homeless shelter starting in the fifth grade and mentored youth through multiple organizations in Greeley during her time in college. It was during these formative years that she discovered her skill for building relationships and interest in work that contributes to something larger than herself.

After earning her degree in psychology, Grove began her career as a social worker, helping survivors of domestic violence and families experiencing homelessness. She later pursued her law degree with a desire to impact change and continue her advocacy work. After earning her



Kathryne enjoys trips throughout Colorado's wild spaces, like Hanging Lake outside of Glenwood Springs, with her husband and two kids.

law degree from the University of Denver Sturm College, Grove held several legal roles over the next decade, including serving as in-house counsel for a Fortune 500 corporation and as an employment attorney for the Colorado Department of Law, working in private practice, and being a staff attorney for the Supreme Court of the Federated States of Micronesia.

Grove found her path to diversity,

training for the entire workforce and inclusivity training for its board of directors, established a DEI committee, and leveraged community outreach to promote pathways to employment.

At WRA, Grove brings both experience and a fresh perspective to conservation. She works to address diversity and inclusion within the organization and the larger environmental movement.

Grove developed a strong desire to support others, as well as a dedication to dismantling systemic barriers that can interfere with people's ability to live their fullest and healthiest lives.

equity, and inclusion (DEI) work while employed at the University of Denver, where she established the Title IX office, rewrote policies, rebuilt community trust and transparency, and implemented critical training on diversity and inclusion and anti-discrimination laws.

This work was important to Grove, in that it wasn't just about checking the box but about striving for excellence and creating an equitable space for all those in the university community to thrive.

Before coming to WRA, Grove served as the civil rights director and diversity officer for the Regional Transportation District (RTD) in Denver, where she created policies and procedures to promote equitable access to transportation services. She developed a first-of-its-kind compliance and diversity awareness

She accomplishes that by building a greater understanding among staff about the systemic inequities that have impacted communities' land, air, rivers, and drinking water while championing WRA's policy efforts that proactively combat climate change and advance equity throughout the West.

Grove has never been a transactional person. She believes relationship building and connection reveal the pivotal point of true engagement, that by linking arms with our partners and our community we can create meaningful access and amplify the voices of those who are most affected. At WRA, we couldn't be more excited for Grove to walk (or maybe run) this path with us to address the impacts of the climate crisis and environmental injustices.

Trail ready, Kathryne and her family depart on a backpacking trip in Colorado's Buffalo Peaks Wilderness Area.





How to Make the Most of Your Philanthropy to Fight Climate Change

By Theresa Bushman, Vice President of Development and Communications

Now more than ever, it can be difficult to maintain hope about the future. But studies show the very act of giving boosts happiness, health, and well-being. That simple act doesn't just make the world better, it also makes you feel better. On top of that, philanthropy is an important driver of social change.



It can start with you. More than 80% of all donations to charities and nonprofit organizations in the U.S. come from individuals, and six out of ten American households participate in some sort of charitable giving. Annual donors in particular are the backbone of philanthropy and will be instrumental in the costly fight against climate change.

Fortunately, you can leverage your philanthropy in many ways. Here are a few strategies I use that can help you make the most of your giving, increase your impact, and resist the grip of news-cycle apathy.

Give Now

The long and short of it is we need a sharp decline in greenhouse gas emissions

by 2030, or global warming will surpass 1.5 degrees Celsius in the following decades. That gives us just over seven years to transition to clean energy and decarbonize other sectors of the economy — that's only four election cycles, someone reminded me. We must believe that we can realize a different future for the planet and commit ourselves immediately to creating that future. One simple action I'm taking is to give the most I can now. The more we can achieve today in the fight against climate change the better our chances of success. In this case, time is the enemy, so don't wait to make your philanthropic decisions.

Give Consistently

For most people, giving monthly allows them to give more than they originally thought possible. I know that's true for me. I'm able to give more by structuring my philanthropy as monthly gifts. And once set up, monthly giving takes less of my time. Giving consistently also helps nonprofit organizations anticipate revenue and plan their work. Most organizations offer monthly giving options. Take advantage of them, automate your giving, and use that time you saved to get out and savor nature.

Pay Transaction Fees

I pay transaction fees whenever the option is offered. I like the convenience of using my credit card and the rewards I get from spending, but I don't like the organization I'm supporting to incur these costs on my behalf. Sometimes I even go really old school and write a check!

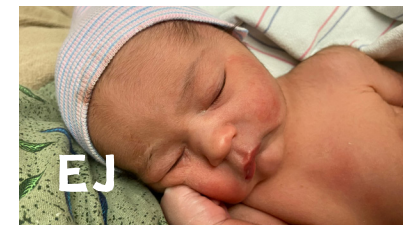
Leverage Giving Days and Employer Giving Programs

Many organizations are working to engage donors in giving to the causes they care about — whether it be a community foundation that sponsors a giving day with matching gift opportunities or your workplace that matches your charitable giving. Engage with these types of partners to match your gift and increase your giving at no cost to you.

Choose a Nonprofit Beneficiary

Like many people, I have most of my savings in my 401K in preparation

for retirement, and one great thing about individual retirement accounts (IRA, 401K, 403b, and pension funds) is how easy it is to name a nonprofit as the beneficiary of unused retirement assets. I recently had to update one of my accounts, and it took only a few moments to add WRA as a beneficiary and to determine an allocation amount. This gift will likely be larger than what I will do in my lifetime, and I feel good knowing that I'm making a better future for the people I care about — especially my four newest great nephews, all born in the past year. They will be eight in 2030 and, I hope, very proud of us all for addressing the complexity of climate change while we still had the time.



Theresa's newest great nephews, all smiles and clearly photogenic.

IRA Contributions

Do you still need to take a required minimum distribution from your IRA? A charitable IRA rollover makes it easier to use your IRA assets to make a charitable gift during your lifetime. Satisfy all or a portion of your required minimum distribution by making a qualified charitable distribution to WRA to help fight climate change.

WRA Tax ID: 84-1113831

Questions? Contact WRA's Vice President of Development and Communications: Theresa.Bushman@westernresources.org | 720.763.3727

Water flows through the Glenwood Canyon section of the Colorado River, a vital stretch prized for its outdoor recreation opportunities.

The Colorado River at a Crossroads

(...continued from page 1)

An ecological crisis from a river no more. The system has crashed.

For many years, this was the apocalyptic storyline that seemed like a science fiction account of a dystopian future. But it is exactly the scenario experts have warned about. And rather than being many years, if not decades, down the road, the possibility that the Colorado River system crashes has now become a likely reality – within the next year.

The Colorado River is essential for the lives and livelihoods of communities across the West, and it is in crisis. As scientists predicted decades ago, the Colorado River Basin is getting hotter and drier due to climate change, and the result is less water in rivers and less water available for people, wildlife, and the environment.

The impacts of climate-driven warming and drying in the Colorado River Basin extend far beyond worsening river health and reduced water supplies. In Utah, the Great Salt Lake continues its plunge to record lows, exposing more of the lakebed and increasing the risk of airborne toxic dust harming the health of nearby residents. Catastrophic wildfires worsened by climate change are imperiling wildlife habitat, choking Western rivers with debris, and damaging watersheds.

A Once-in-a-Generation Opportunity

The challenges posed by aridification in the Colorado River Basin are gargantuan, yet we know what we have to do: We have to use less water and fundamentally change how our region values, manages, and stewards this mighty waterway in the era of climate change.

For the past century the Colorado River has been divvied up and governed by agreements that, from their inception, promised more water on paper than would be physically available. As climate change rapidly reduces the river's flows even

further, the basin must urgently come together around solutions that rebalance the system. We no longer have the luxury of time.

WRA has worked for more than 30 years to protect the Colorado River and build up communities' resilience to climate change. In Colorado and Utah, we helped develop the first-ever statewide lawn replacement programs, which will help conserve vast amounts of water. We've provided on-the-ground support to dozens of municipalities to help them grow water-smart from the start, thereby decreasing pressure on rivers. We continue to push back against large proposed water projects, such as the Lake Powell Pipeline, when there are better ways to meet new demands. And in line with our work to reduce power sector carbon emissions – a key driver of climate change – we are working to reallocate retiring coal plants' water rights in new, innovative ways that restore flows in stressed rivers.

And now, as the basin approaches the 100th anniversary of the Colorado River Compact, key water decision makers will convene over the upcoming months and years to renegotiate the current guidelines for managing the river, which expire in 2026. These negotiations are a once-in-a-generation opportunity for state and federal leaders, Indigenous nations, water users, and key stakeholders to address the systemic issues impacting the river and plan for a future with significantly less water.

WRA is committed to seeing the basin reach an equitable and sustainable agreement by advocating for water-conscious and cost-effective solutions. We will push for the updated guidelines to incorporate modern interests and values – including river health and authentic participation by sovereign tribal nations – to ensure a more flexible, adaptable, and fair system that enables the region to live within its means.

Animals like coyotes, deer, and otters all depend on the Colorado River for survival.



Using innovative approaches and water saving techniques can create climate resilience while also improving the health of our communities.



Building Community Resilience to Climate Change

The reality of climate change is no longer a worry of the future. The impacts are here now, and communities in the Interior West are facing increasingly harsh conditions as a result.

While each community is unique in terms of its strengths and vulnerabilities to climate-related impacts, the West is especially vulnerable, and we are already living with an ongoing megadrought, catastrophic wildfires, dangerous heat waves, and worsening air pollution.

But it doesn't have to be this way. There is hope and healing in building community resilience to climate change.

Resilience is the capacity to recover – to

bounce back – from difficulties. It is the ability of a community, business, or natural environment to prevent, withstand, respond to, and recover from disruptions linked to extreme weather conditions or climate-related hazards.

Reducing the impacts of these hazards on the lives and livelihoods of residents of the West is a top priority for WRA. We work to anticipate climate impacts, assess vulnerabilities, develop evidence-based solutions, and implement them. We know that we need proactive and robust actions – so our communities are better prepared to respond today and tomorrow.

Taking Action Today

When most people think of climate change in the West, drought and water scarcity are likely the first things that come to mind. The Colorado River is at its lowest levels in modern history, and

We work to anticipate climate impacts, assess vulnerabilities, develop evidence-based solutions, and implement them.

its two biggest reservoirs, Lake Powell and Lake Mead, are at some of their lowest points since construction – and they continue to decline. This is a critical system that supplies water for more than 40 million people living across seven Western states and Mexico.

WRA works with communities on land use codes, zoning ordinances, conservation programs, and conservation tools to more efficiently manage and use our water resources. For example, WRA led in developing and advocating for a turf replacement bill in Colorado. It requires the state to provide financial resources to property owners to remove water-intensive turf grass and replace it with more water-efficient landscaping. Programs like this help to ensure communities can respond and adapt to the future of increasing climate change impacts and even less water availability.

Underlying water scarcity is significant population growth. The West has some of the fastest growing populations in the country. The combination of more people and less water puts massive strain on the Colorado River, and that makes protecting our precious resources even more critical. Beyond protecting what we have, we also must consider

how a dwindling water supply will be equitably allocated. WRA is working with state and federal decision makers, Indigenous nations, water users, and key stakeholders across the region to redesign a robust and resilient river management agreement that can work

for the entire river basin.

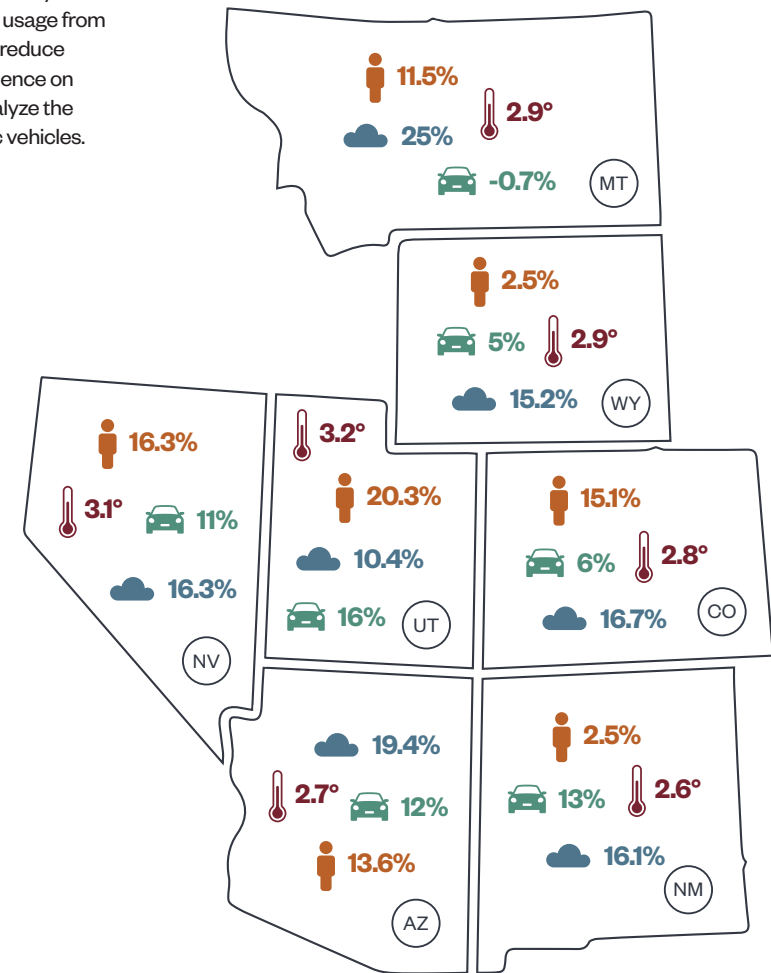
This continued aridification, or drying out, of the region is also escalating fire behavior, transforming wildfire that has been a natural part of the landscape for millennia into catastrophic megafire events that have become a year-round threat for towns and cities across the West.

At WRA, we are leveraging our expertise in state-level policy development to identify opportunities that would give communities more tools and funding to bolster resilience to wildfire, while achieving co-benefits for landscape and habitat conservation. One solution is to increase the use of prescribed burns – controlled fires conducted under the trained and watchful eye of experts – as a safe mitigation tool. Healthy forests treated with prescribed burns can lead to improved air quality, protecting our communities and encouraging ecosystem health.

Another approach is through better land use planning, especially in high fire-risk areas, and identifying state-level policies that could be improved or strengthened to help local governments thoughtfully plan for growth to avoid putting future communities in harm's way. With more people moving into high

Making Progress Toward Climate Resilience

As the population in the West continues to grow and temperatures are on the rise, climate resilience means taking steps to drastically decrease our water usage from the Colorado River, reduce our region's dependence on fossil fuels, and catalyze the transition to electric vehicles.



Population Growth: Percent increase from 2010 to 2021, source: *usafacts.org*

Carbon Dioxide Emissions: Percent decrease in carbon dioxide emissions from fossil fuel consumption (2010-2020), source: *U.S. Energy Information Administration, eia.gov*

Hotter Temperatures: Degrees above the norm compared to the past 100 years, source: *IPCC April 2022 Report*

Fossil Fuel-Emitting Vehicles: Percent increase 2016 to 2021, source: *U.S. Department of Energy, Alternative Fuels Data Center, afdc.energy.org*

Transportation electrification is critical to reduce air pollution and help Western ecosystems and communities thrive.



fire-risk areas, it is increasingly difficult to use tools like prescribed burning to reduce the risk of catastrophic fire. That forces the continued use of aggressive fire suppression strategies to protect communities. To break this vicious cycle, we need to think differently about where and how we develop communities and what tools we need to reduce the risks to them.

This strategic approach to development includes a careful and calculated look at our energy use and sources. The burning of fossil fuels is driving the climate crisis, so in order to address this, we need to rapidly transition away from their use.

But as temperatures continue to increase, so does our use of fossil fuels for air conditioning, as an example. In Colorado, Utah, and Wyoming, air conditioning use in the population jumped from about 60% in 2009 to around 80% in 2020. WRA not only is working to clean up the electric grid, replacing coal and gas generation with renewables. We are simultaneously improving grid flexibility to handle more peak demand as the days get hotter and more people use air conditioning.

Fossil fuel use in buildings also has public health implications. Burning gas in buildings, particularly for cooking,

causes nitrogen oxide emissions that can create respiratory issues and are linked to childhood asthma. WRA was instrumental in passing a clean heat standard in Colorado last year, which will require gas utilities in the state to reduce their emissions from both their distribution system and end use gas consumption in buildings.

Another fundamental transition that WRA is spearheading in our region is transportation electrification, including the implementation of Advanced Clean Cars II and Advanced Clean Trucks regulations in Colorado, Nevada, and New Mexico. Fossil-fueled vehicles contribute to climate change and air pollution that disproportionately impacts low-income communities located along highways and near industrial areas. We are working to transition personal cars, commercial fleets, and public transit, like buses and trains, from fossil-fueled vehicles to those powered by electricity. Electric vehicles emit two to five times less greenhouse gas pollution than fossil-fueled vehicles, depending on the source of the electricity. The transition to electric vehicles provides substantial economic, environmental, and public health benefits, and the faster the transition occurs, the faster those benefits

are realized by our communities.

But while the transition to clean energy will reduce the use of fossil fuels for energy, increase renewable energy sources, and create energy resilience, fossil fuel extraction industries have been major economic engines for many communities around the West. As coal power plants and mines close, it is critical to support those who relied on them. WRA is working in several states to help make sure these transitions away from fossil fuel energy are happening in a just and equitable way.

WRA has been fully engaged in the coal transition in Arizona, working with the Arizona Corporation Commission to address funding, repurposing of plants and facilities, and benefits and impacts to ratepayers. Several Indigenous communities and their tribal government budgets substantially depend on the money generated from these power plants and coal mines. We are committed to advancing a fair and equitable transition from coal power to clean energy sources to avoid detrimental economic and human impacts. For example, WRA advocates for the siting of new clean energy power plants in proximity to switch yards and

transmission lines already in place from shuttered coal plants, creating new jobs and continuing and often increasing tax revenue in these communities.

Building for Tomorrow

WRA is working with decision makers to find creative ways to prepare for future climate challenges. Through our state-level on-the-ground work, we are developing and supporting programs and policies that are effective and equitable for the needs of our communities.

Once we start down the path of building resilience, the positive effects become synergetic – centering on more efficient water use, building and transportation electrification, and smart land use and development, all while advancing a just and equitable transition.

Resilience offers us opportunities to prepare for new climate conditions, reduce greenhouse gas emissions, and address issues of environmental injustices. Together, we can slow the impacts of climate change, while creating more livable, healthy ecosystems and thriving communities throughout the West.

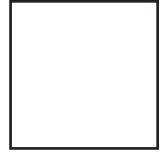
The sun sets on the Valley of Fire in Nevada, known for its bright red sandstone that, when illuminated at dusk, appears to be on fire.



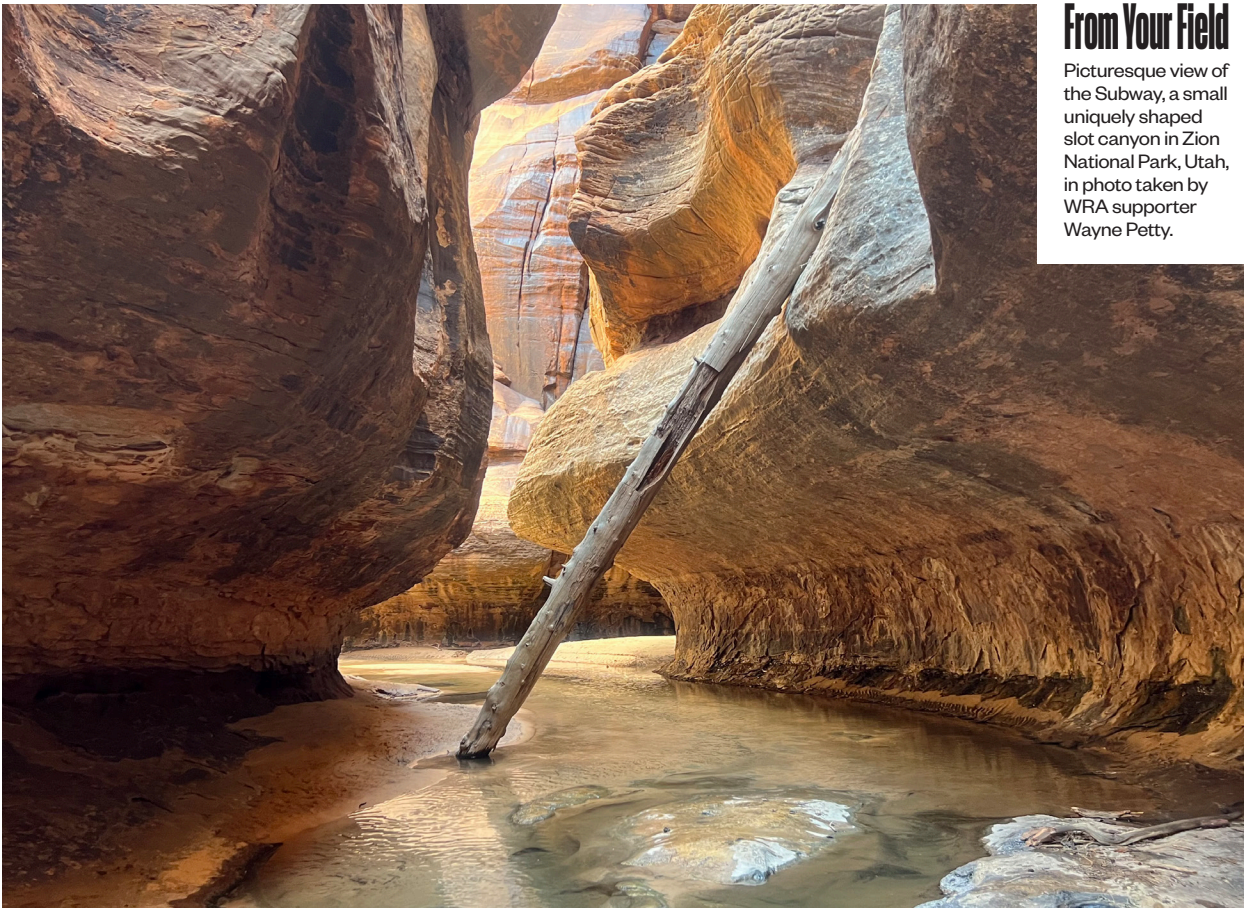
Learn more about climate resilience on our 2° Out West Podcast. The featured Climate Nexus series digs into the ways that pressing environmental challenges and the causal factors of climate change overlap, as well as the ways in which our staff at WRA work together and combine their expertise to drive innovative solutions and get results. Listen on Spotify, Stitcher, iTunes, and SoundCloud.



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From Your Field

Picturesque view of the Subway, a small uniquely shaped slot canyon in Zion National Park, Utah, in photo taken by WRA supporter Wayne Petty.