

High Country News



FIRE CULTURE

HIGH COUNTRY NEWS

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"Julie Green: The Last Supper," detail, 2025, the Boise Art Museum. (See story on page 42.)
Courtesy of the Boise Art Museum

Know the West.

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The Choice

WHEN I WAS IN COLLEGE and my friends all went to study abroad, I attended a field study program run by The Sierra Institute, an outpost of the University of California, Santa Cruz. Over the course of an academic quarter, we learned about four California ecosystems by studying *in* them: the Mojave Desert, the Big Sur coast, the High Sierra and the Klamath Mountains. Along the way we hiked and camped and read and wrote and took turns with cooking, cleanup, fire tending and latrine duty.

“Nature, Philosophy and Religion” was the course title and our area of inquiry. We studied the thinkers and spiritual traditions that have been concerned with the splendor of nature, the sustenance humans get from it, and our mutual symbiosis. We considered our own obligations as individuals and as a species. Rather than a distant place and foreign language, we immersed ourselves in the ways that humans live with, steward and find holiness in the natural world.

These are not values I see reflected in today’s political discourse. Our government is working to cancel any programs aimed at sustainability. Elected and appointed officials are erasing climate data and defunding climate action. They are seeking to sell and develop public land and ignoring, at great risk, the ways humans depend on healthy natural systems. They have no interest in the ethics of their policies: who or what will be impacted, and how. Any deference to the land and its creatures — canceled!

If everyone could do an extended field study program, could be exposed to natural wonder and experience close-knit community, perhaps the idea of having a responsibility toward the Earth, each other and future generations would be more widely understood and accepted. If you’ve haven’t learned why it’s important to respect and preserve natural systems, how would you understand that you have a choice, at this very moment, to be on the side of life — *all* life — and against the denigration and desecration of habitats and wild places, the last refugia where humans are required to show restraint. At *High Country News*, we side with life.

Sadly, after 40 years of running field programs in the backcountry, The Sierra Institute closed in 2015. A post on its Facebook page read, “It is something of a mystery as to why over the last decade the programs became more and more difficult to fill, but it is likely due to a broader cultural change than merely a miscalculation of how to advertise and promote.” The broader cultural change we so desperately need is one in which people believe in the value of nature because they have experienced it and want to continue experiencing it, and because they want those experiences to be available to future generations.

Jennifer Sahn, editor-in-chief



Penny Collins via AP

Mass layoffs can move forward, with devastating impacts for conservation and science

‘Shortsighted’ cuts could eliminate bird banding program, federal bee research and much more.

By Sarah Trent



Alison Taggart-Barone / National Park Service

The Trump administration is asking park rangers to rewrite history

And some national park staffers are pushing back.

By Marissa Ortega-Welch



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ON THE COVER

River Selby in the summer of 2002, fighting the Monument Fire in eastern Oregon.

Sources: Images courtesy of River Selby; Map: USGS

Photo illustration by J.D. Reeves / HCN

Untitled, n.d. Digital reproduction of gelatin silver print. Milton Snow Photography Collection, Navajo Nation Museum, Window Rock, Arizona, NN11-83. Digitization courtesy of Ramona Emerson (Diné), Reel Indian Pictures, LLC. **Milton Snow**



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LETTERS

High Country News is dedicated to independent journalism, informed debate and discourse in the public interest. We welcome letters through digital media and the post. Send us a letter, find us on social media, or email us at editor@hcn.org.

BIRDERS ACROSS BORDERS

It was great to read about the wonderful work Sky Island Alliance is doing with dedicated ranchers like Eduardo Ríos Colores (“Searching for sparrows in the Sky Islands,” July 2025). Collaborative efforts with like-minded people in Mexico are so important for the future of our wildlife and plants. Wildlife knows no borders. We can learn a lot from this concept.

Katherine Brown
Cochise, Arizona

TAKE IT OUTSIDE!

I took the July 2025 editor’s note recommendation to heart. I headed outside to the nearby Blue Ridge Parkway (!) and read your fine publication under the trees in the Roanoke Mountain Campground.

Despite our geographic dis-

tance, I’m a fan. I particularly enjoyed Angie Kang’s drawings and text that I found to be unique and spellbinding.

Rupert Cutler
Roanoke, Virginia

TAKING RESPONSIBILITY

The person featured in July’s “I am the West” seeks, by control of women’s fertility, to “level the playing field with men.” Birth control methods control women’s fertility. Abortion can never level the playing field because abortion is an accommodation that women extend to careless men so to relieve men of responsibility. The gal gets the grief while the guy gets away.

Mark Clinard
Florence, Colorado

BUILD IN, NOT OUT

Thanks for highlighting concerns over the federal land sell-off proposal of Utah Sen. Mike Lee (“MAGA and the developers are coming for your public lands,” June 26, 2025). Those of us who work in local planning and development recognize the difficulties in creating new developments on remote lands. We are very aware of the environmental issues, capacity limitations and public-cost issues raised by this kind of development.

Rural land development is an issue that we in Mesa County, Colorado, and its commu-

nities have grappled with over the years. We have adopted community comprehensive and master plans that attempt to limit “sprawl growth” that is not supported by local infrastructure and instead encourage infill growth. *Costs of Sprawl* by Ewing, Reid, Hamidi and Shima is a well-known book that quantifies the high public cost in infrastructure that such growth entails.

Planners have estimated that existing communities could double their housing stock within their existing growth boundaries, so there is no need to extend these boundaries to rural and federal lands!

Bennett Boeschstein
Member, American Planning Association
Former City Council member and community development director
Grand Junction, Colorado

WOLVES BELONG IN THE WEST

Jonathan Thompson’s article “Wolves Return to the West,” (June 2025) illustrates the charged terrain surrounding wolf reintroduction in the West, shaped as much by fear and politics as by ecology. As someone who has spent decades advocating for wild carnivores, I see a troubling déjà vu: The same misinformation and persecution that nearly wiped wolves out in the 20th century are gaining ground again.

Wolves are once again being vilified, scapegoated and used as political pawns. From aggressive wolf-killing policies in the Northern Rockies to the introduction of federal legislation like Colorado Rep. Lauren Boebert’s “Pet and Livestock Protection Act,” we’re witnessing an orchestrated effort to undermine decades of recovery. The old mythology that wolves are

a threat to ranching and livelihoods is being weaponized to justify killing them, often with taxpayer dollars

Project Coyote’s Protect America’s Wolves (PAW) campaign engages in litigation, coalition-building and public education to fight anti-wolf policies in Montana, advances science-based restoration in the Northeast, and supports Colorado’s return of wolves to the landscape. Public engagement can stop regressive policies that put wolves back on the path toward extinction.

Americans overwhelmingly support wolf recovery. It’s time wildlife agencies and lawmakers listened. We owe wolves better than a cycle of reintroduction followed by eradication. If we’ve learned anything over the last 50 years, it should be this: We must reject this cycle of political scapegoating and instead embrace coexistence — grounded in science, ethics and a shared responsibility — to protect the wild for future generations.

Camilla Fox
Founder and executive director, Project Coyote

LESS TRASH = LESS TROUBLE

Thank you for Jaclyn Moyer’s excellent article “Where the Garbage Goes” (June 2025) about the expansion of the landfill in the community of Soap Creek Valley, Oregon. This is perhaps a topic we would rather not think about but one that has relevance for all of us in our consumer society. It needs to be addressed, both at the source by reducing consumption but also with better solutions for disposal and recycling of the waste that ends up in our landfills.

Janet Rahmani
Colorado Springs, Colorado



REPORTAGE

From oil field to oasis

Federal policies complicate a conservation success story in California.

BY AMAL AHMED
PHOTOS BY NOÉ MONTES

ON A CLEAR DAY, the trails winding through West Coyote Hills near Fullerton, California, offer a sweeping view of the mountains rising over Orange County's suburban sprawl. Over 500 acres of open space are covered in low-growing, feathery coastal sage scrub, a native plant community that urban development is replacing. Dozens of coastal California gnatcatchers, a threatened native bird species, flit around the shrubs.

When it rains, vernal pools, or seasonal wetlands, form between the hills, supporting wildflowers and amphibians. Today, these wetlands are a rare habitat: More than 90% of California's vernal pools have been lost to development. "I love the fact that even in this urban area, there's an open space that is just a jewel," said Angela Lindstrom, who lives nearby.

Until the 1990s, that jewel was actually an oil field, owned by the oil giant Chevron. Though Chevron sold thousands of acres of

A hiking trail in the Robert E. Ward Nature Preserve in Southern California's West Coyote Hills.

land in Orange County to investment firms in the '90s, it kept some parcels for its own development projects, including West Coyote Hills. In the early 2000s, the company's real estate subsidiary finalized a plan to turn the area into a subdivision — squeezing the last bit of commercial value from the land.

Once Lindstrom realized what was at stake, she jumped into local environmental activism. Three decades later, as the president of a group called Friends of Coyote Hills, she's still leading the campaign to establish a nature preserve in Fullerton. "(We have to) think about the green infrastructure that we can save for future generations," she said.

In 2012, Friends of Coyote Hills spearheaded a city-wide referendum on Chevron's



Angela Lindstrom, president of the conservation organization Friends of Coyote Hills (top).

Monarch butterflies are one of the many species found in West Coyote Hills (above).

Members of the Friends of Coyote Hills hike together in the Robert E. Ward Nature Preserve in late June (facing).



plans that proved how unpopular they were with voters. Almost a decade later, under local pressure and with philanthropic, state and federal grants, the city of Fullerton purchased 24 acres of the area next to an existing nature preserve for \$18 million.

But now, the fate of the remaining 483 acres, valued at \$140 million, is on shakier ground, thanks to federal turmoil and lack of support for conservation projects and protecting wildlife habitat. Conservationists were hoping that millions of dollars in grants from the U.S. Fish and Wildlife Service could have supplemented other funding sources. Now, that money might not materialize. Still, state conservation agencies have already secured about \$70 million in state grants to acquire the rest of the land — and Chevron has signaled its willingness to wrap up the sale sooner rather than later, even dropping the price to \$95 million, though negotiations are ongoing.

In the meantime, however, the company can still pursue the housing development, as its permit with the U.S. Army Corps of Engineers is still pending — a hedge against conservation organizers coming up short on funds. Chevron did not respond to requests for comment.

ACROSS CALIFORNIA, land prices are at a premium, and affordable housing is hard to find; a typical home in California costs twice as much as a typical home in the U.S. overall. California mandates that local governments create plans for housing needs across income levels as the population grows. In recent years, the Legislature has added incentives for developers and streamlined the approval process.

Increasingly, housing developments are encroaching on environmentally sensitive spaces like West Coyote Hills — and riskier, more fire- and flood-prone regions. Relatively easy-to-build-on landscapes have already been developed, said Melanie Schlotterbeck, a stewardship consultant with the nonprofit Coastal Corridor Alliance. “Now, we’re stuck with properties that are a challenge.”

Schlotterbeck also serves on her city’s planning commission, approving new developments to meet the state’s housing goals. “You can have housing, and you can conserve land,” she said. “You might

need to think creatively, but it can be done.” Policies like zoning overlays that allow for more mixed-use developments, infill building and higher density would help preserve open spaces, Schlotterbeck said. Strip malls, abandoned warehouses and underused hotels could be converted to townhomes or apartments, too.

But redeveloping former industrial sites can be complicated. Twenty miles south of West Coyote Hills, an old oil storage facility, the Magnolia Tank Farm in Huntington Beach, will become a mixed-used development with 20% of the rental units priced below market rate. The CEO of the real estate company behind the development has said it will “(brighten) this historically blighted stretch of the coast.” Left out of that narrative: The site floods often and borders a toxic waste dump. On top of that, climate change could cause the sea level along the coast to rise by as much as a foot by 2050. (While there are risks associated with building homes over capped oil wells, West Coyote Hills does not face the same flooding or sea-level rise risks.)

“You couldn’t give me one of those houses,” said Ray Hiemstra, the associate policy director at Orange County Coastkeeper, a nonprofit focused on water policy. Ideally, the tank farm would have been restored as a wetland, he said. But it proved difficult to build political support opposing the housing proposal, despite the risks, and the area had no obvious ecological value.

“There’s nothing but dirt,” Hiemstra said. “If we had found something like a burrowing owl, it would have been a problem for the developer.”

The owl, a species of concern in California, was crucial in stopping another luxury development nearby. More than a dozen state or federally threatened or endangered species, including the San Diego fairy shrimp, the Ridgway’s rail and the California least tern, had carved out a habitat near Banning Ranch, a swath of coastal land that had been an active oil field since the 1940s. Their presence was one of many tools that conservation advocates used to create a 387-acre preserve, said Schlotterbeck, who worked on the campaign.

BUT USING FEDERAL LAW to win conservation battles could be harder in the future. The Endangered Species Act prevents

harming, killing and hunting endangered species. For decades, that has included destroying the habitat those species rely on for food and nesting or reproducing.

Now, however, the Trump administration has proposed a federal rule that would limit the scope of the law, outlawing only the direct killing or injuring of a protected species, but not the harming of its habitat. Environmental advocates say that this could lead to more development, drilling, logging and other industrial activity on crucial habitats.

“You would be prohibited from shooting a spotted owl out of a nest, but you would not be prohibited from chopping down the tree containing the nest,” said Tim Preso, an attorney with Earthjustice.

And if the Endangered Species Act is watered down, it could remove incentives for developers to set aside land to make up for habitat destruction elsewhere, Preso

said. The 33,000-acre Balcones Canyonlands Preserve outside of Austin, Texas, for example, was established to offset the region’s rapid growth in the 1980s. As housing developments boomed, eight species were listed as federally endangered in just four years due to habitat loss. Developers still pay fees towards managing and expanding the preserve, which supports golden-cheeked warblers and other wildlife.

In West Coyote Hills, the presence of federally threatened and endangered species, including gnatcatchers and the least Bell’s vireo, a migratory songbird, gave conservation groups “breathing room” to formulate a plan, said Blair Crossman, a project development specialist at a state agency called the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, which has facilitated the land acquisition. Without that leverage, future conservation projects might become more difficult.

And conservation can make the housing around it safer, too. Ecologists plan to remove invasive plants and replant native fire-resistant species in West Coyote Hills, allowing the ecosystem to act as a buffer between neighborhoods, slowing the spread of wildfires and giving first responders time to act. “This isn’t just, ‘Oh, we’re taking a big chunk of property that might have been housing, and it’s going to be birds and bunnies living there,’” Crossman said.

Lindstrom remains optimistic that, with the help of donors and state funds, the hills will remain open. “I think this cause has such deep roots and wide support, it would be extremely unpopular to develop the land,” she said. “If we continue to pave over every green space left in California, our problems will only get worse.” ☀

Amal Ahmed is an environmental journalist based in southwest Washington.



Get to know the American kestrel

This small falcon faces an existential crisis. Can nest boxes help?

TEXT AND ILLUSTRATIONS BY SHI EN KIM

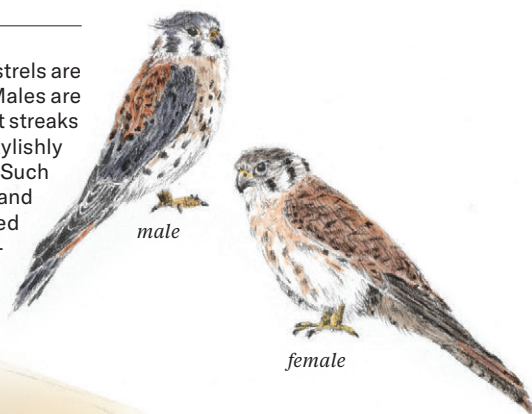
AMERICAN KESTRELS ARE TINY, colorful and feisty. Attitude-wise, they're the chihuahuas of the avian world: They're unafraid to take on much larger birds, ready to backstab turkey vultures and dive-bomb golden eagles to defend their territory.

But despite being the United States' most abundant falcon, American kestrels are struggling. In response to their decline, scientists have set up nest boxes to provide more habitat for these Lilliputian predators. Just how much these efforts are helping remains to be seen. 🌱

Shi En Kim is an editorial fellow at HCN covering science, environment and society.

This story is part of High Country News' Conservation Beyond Boundaries project, which is supported by the BAND Foundation.

Not much bigger than a robin, American kestrels are **the smallest falcons in North America**. Males are slightly smaller than females, plus they sport streaks of slate blue on their wings that contrast stylishly with the rest of their rust-colored plumage. Such disparities in appearance between males and females in the animal kingdom are called sexual dimorphism. The black facial markings, present on both sexes, are commonly called sideburns and mustaches.



American kestrels are found **throughout the Americas**, from Canada to Argentina's southern tip. Come fall, kestrels from Canada and Alaska head south in search of food, returning north in the spring to breed, while birds in warm locales like Southern California can stay put year-round.



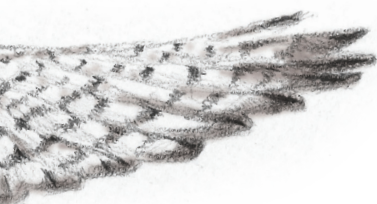
Aerial acrobatics are the kestrel's forte. In particular, kestrels are fantastic hoverers: The birds can stay suspended by flying into a headwind or by beating their wings furiously, like a hummingbird.



This ability helps them ambush prey, allowing them to swoop down on their targets. Kestrels can also snatch their quarry in mid-flight. Nimble and light, they are the dogfighters of the raptor world, unlike hawks and eagles, which tend to cruise through the air.



The kestrel's diet is diverse, consisting of insects, rodents, small reptiles and occasionally smaller birds. Kestrels are not afraid to go after animals that are bigger than they are; researchers have even observed them feeding kingsnakes to their young.



Prime kestrel habitat consists of meadows and farmland dotted with trees and snags. In and around active nest cavities, researchers often find multivitamin-shaped pellets of undigested food such as animal bones, reptile scales and insect parts.



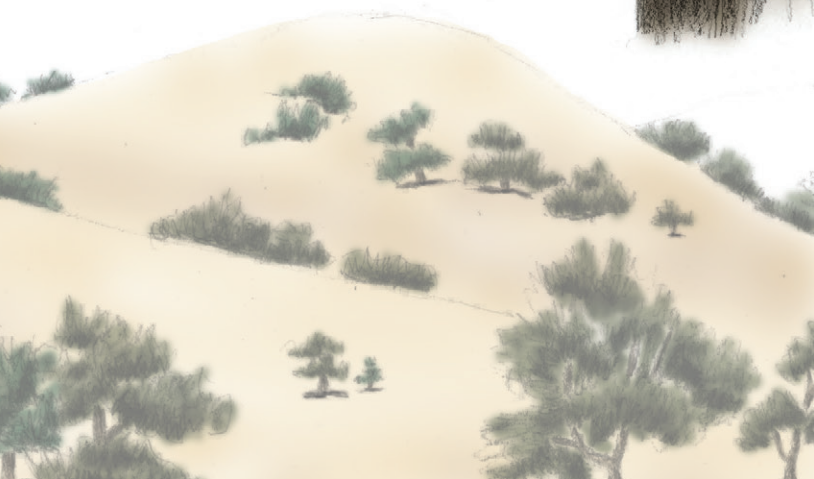
Across North America, **kestrel numbers have fallen by half** since the 1960s. The decline has been even more precipitous in coastal California and the Southern Rockies. Though the reasons aren't fully understood, scientists suspect that habitat loss from development, dwindling food sources and competition for nesting sites from invasive species, particularly starlings, are among the contributing factors. A 2018 study found that on average, kestrels are shrinking in size, indicating that many are chronically undernourished.

One thing seems to be giving kestrels a boost:

nest boxes. Over a thousand have been set up across the U.S., and at some sites, roughly two-thirds of them have become breeding homes for kestrel couples. Some have hosted kestrel families for decades.

Around California's Mount Diablo, which boasts warm weather and abundant grass-covered hillslopes, a nest-box program has entered its eighth season. Several boxes have fledged up to five chicks for several consecutive years. Cameras installed at these boxes help scientists monitor the local population and understand the forces behind shifting kestrel numbers.

WEB EXTRA: Read about Shi En Kim's outing with Mount Diablo kestrel researchers at hcn.org/kestrels



POEM

Being and Time

By Dana Levin

Years ago I sat on a back deck watching elm seeds flying—like the opposite of snow—

The giant tree across the accidental courtyard of trees, the forest of trees in the vacant lot between the back deck and Buena Vista Street, shedding seeds into glorious six o'clock mid-Spring light—

I'd gotten up to get my camera to try to film it, and filmed it, but impossible with my little phone to capture the lit magic of it—

And having a thought about it now, or related to it, to seed-shedding and seed-flying and the benevolence of that scene and hour—

How peaceful and quiet it was, sitting on my back deck waiting for hummingbirds, watching seeds fly, the ghost flowers and ghost cat in a faded temporal ribbon flicking in and out—

The flowers unsown and the cat dead—the first a choice and the second having used up his measure.

I'd been readying

to move from one soil to another—from one city to another—

The videos weren't very good, so I'd taken a couple of the hummingbird feeder with no hummingbird at it—imagined posting one with the caption, "Waiting"—

Having a thought about it now—as with each seed, a light with limits—

Some glittering down in loops and spirals, some swift-sailing by—with what looked like purpose.

Death and all. What was the purpose. To grip down and awaken, the doctor said—

WEB EXTRA Listen to Dana Levin read her poem at hcn.org/being-time

The big digital buildup

Data centers threaten the West's power grids and water supplies.

BY JONATHAN THOMPSON
ILLUSTRATIONS BY HANNAH AGOSTA

THIS MAY, STAX Capital Partners applied for a permit to install turbines fueled by methane from oil wells on Alaska's North Slope. The temporary facilities would serve as a proof of concept for a much larger gas-fired power plant — with an output equal to that of the state's largest coal-fired plant — all of whose electricity would go to a planned bitcoin-mining data center located nearby.

The Alaska-based company told *Northern Journal* it hopes to “create the playbook for sustainable, at-scale Bitcoin mining in Alaska.”

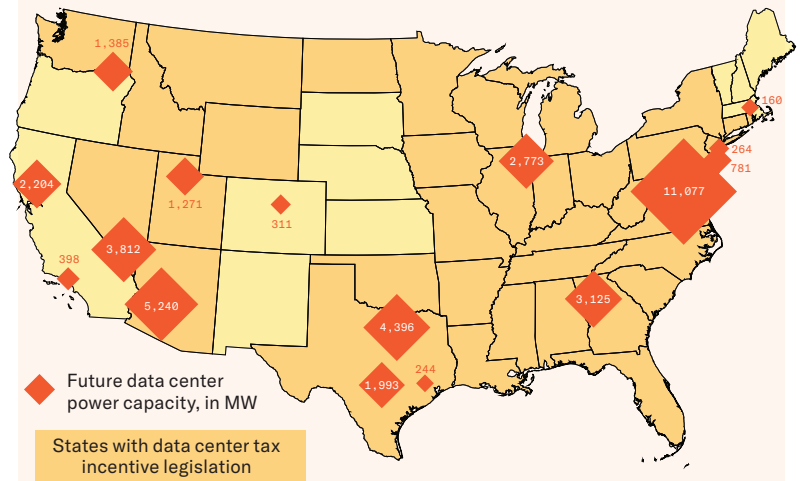
But “sustainable” bitcoin mining is an oxymoron, given the enormous amounts of power and water data centers consume. The massive server banks that run nearly every aspect of our digital world churn away in warehouse-like buildings in Phoenix, Las Vegas, rural Washington and Wyoming, each gobbling as much electricity as a small city to process AI queries, cryptocurrency extraction and other aspects of our increasingly cloud-based society. The harder they work, the hotter they get, and the more power and water they need to cool off.

The International Energy Agency predicts that data centers' electricity and water consumption will both double by 2030, driven

largely by AI-related demand. That in turn threatens to max out existing electricity generation, strain power grids, and — if fossil fuels are used — increase carbon emissions. Even when data centers employ dedicated solar, wind or geothermal, they're taking resources from other users, upending utilities' planning and prompting them to build yet more natural gas plants while keeping nuclear and coal plants running — and polluting — well past their scheduled retirements.

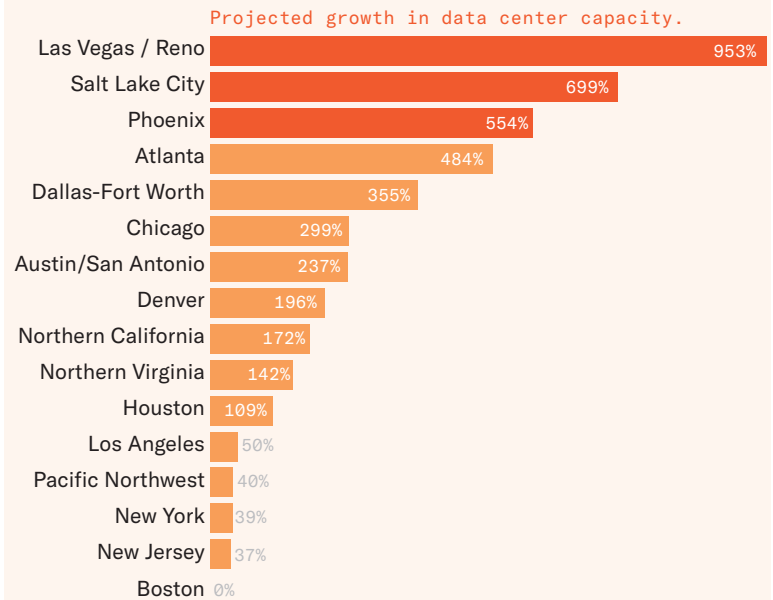
Some states, including Oregon, want to make data centers pay their fair share of electricity and infrastructure costs rather than pass them on to other customers. At the same time, several Western states and local governments offer taxpayer-funded incentives to attract more data centers, even to water- and grid-constrained areas, while utilities welcome the additional profits increased demand will bring. Both the Biden and Trump administrations eagerly offered up federal land and resources for new data centers and the power-generating facilities they need.

The Big Digital Buildup is underway and shows no signs of stopping. The question is how — and whether — we can mitigate its inevitable impacts. ☀



Data center hot spots

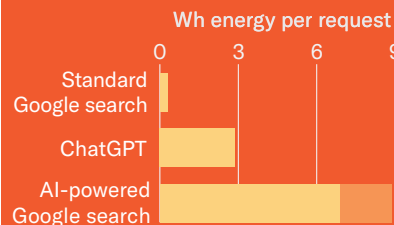
Tax credits and other incentives in seven Western states, along with their lower electricity rates, have lured data center developers to Nevada, Utah, Wyoming and Arizona.



The growth of data center capacity is highest in the West.

Some of the nation's fastest-growing server-farm hubs are in the region. Google is investing \$400 million to expand its Nevada data centers, driving exponential growth in Las Vegas and Reno. The facility's total power demand is expected to exceed 3,800 MW — enough to power more than 3 million homes.

Comparing data's hunger for energy and water

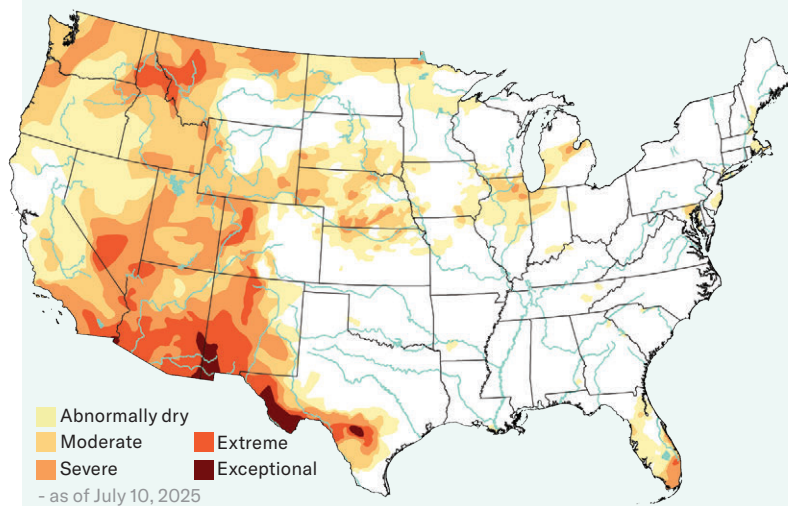


AI-powered search models use 10 times more energy than a standard Google search.

Data centers need water for cooling, and because AI-processing facilities work harder, they need more cooling and even more water.

TIP: include “-ai” after your Google search terms to exclude AI-powered results

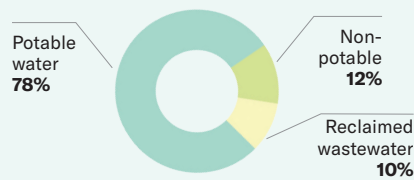
🔍 why do people deny climate change -ai



Data and drought

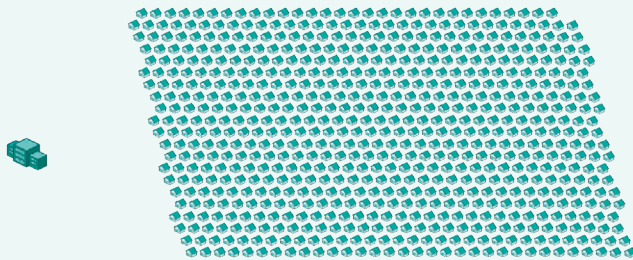
Thirsty data centers are sprouting like weeds in parts of the West that are already arid and now gripped by severe drought. In the greater Phoenix area, proposed housing developments have died due to a lack of available ground-water. Yet data centers, each of which can consume an entire sprawling subdivision's worth, face no such requirements or water restrictions.

Data centers use energy to run their servers, and energy and water to cool the processors. Evaporative chillers that work in low humidity use less energy but more water, while refrigerated cooling uses less water but requires more energy on-site. And power generation generally guzzles water, too, thereby increasing data centers' indirect water use.

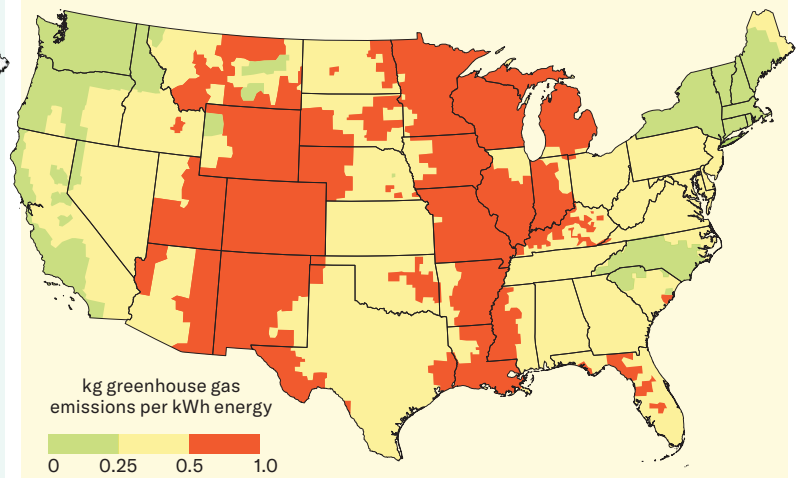


Most of the water used by Google's data centers in 2023 was drinkable.

Google's data centers withdrew 8.65 billion gallons of water in 2023 worldwide. Meta's withdrew 1.39 billion.



A Microsoft data center in Goodyear, Arizona, directly uses about 56 million gallons of municipal potable water annually — about the same as 670 homes. Still, it's substantially less than what the nearby alfalfa fields drink.



The cloud and climate

Some data centers have built dedicated solar installations, others plan to purchase wind and geothermal power, while still others want to install their own modular nuclear reactors to run the "hyperscale" centers needed to process AI. Meanwhile, most server farms get at least some of their power from the local grid, typically paying industrial rates far lower than what residential customers pay.

The carbon intensity of a specific center hinges on the energy mix of its grid. Coal and natural gas generation still dominate the Interior West's grid, meaning its data centers are responsible for larger greenhouse gas emissions and water use for power generation. In the Pacific Northwest, myriad server farms are powered mostly by hydroelectricity, which is low-carbon but hurts rivers and fish. California's grid runs increasingly on solar power.

Arizona's average electricity rates in 2024:

Industrial: 7.9 ¢ / kWh
Residential: 17 ¢ / kWh

In 2014:

Industrial: 6.6 ¢ / kWh
Residential: 10.9 ¢ / kWh

	Google Search	ChatGPT
Energy per query*	0.3 Wh	2.9 Wh
Estimated number of searches/queries worldwide daily	3.5 billion	1 billion
Daily total energy use	1,050 MWh	2,900 MWh
Number of U.S. households this could power for a day	36,200	100,000

SOURCES: APM Research Lab, Google, Meta, Upwind, Cushman & Wakefield, International Energy Agency, Northern Journal, Nevada Independent, NAIOP, JLL, Lawrence Berkeley National Laboratory, MIT, The Times, Los Angeles Times, Flatiron.



Composing a 100-word email using ChatGPT consumes:



140 Wh of energy, enough to charge 7 iPhone Pro Maxs



16oz water



Generating a 5-second video on one of the best AI models consumes:



944 Wh, enough to run a microwave for over an hour



9/10ths of a gallon of water



One hamburger consumes about 660 gallons of water, enough to fill a stock tank.



A real-world burger requires even more water than one conjured up by AI.



REPORTAGE

Indigenous languages on the airwaves

Cuts to public radio endanger Native stations and language preservation efforts.

BY CHAD BRADLEY
PHOTOS BY DEIDRA PEACHES

SAMANTHA HONANI MOLINA was about 20 when KUYI-Hopi Radio first came on air. She was attending college, hours and miles from her home village, and every time she tuned in, she felt connected, hearing her community's songs and language.

"I was struggling to find my place, because when you're coming from the rez, you're trying to find your space in a city or town,

and there's nothing of who you are and where you come from. You feel the sense of, not lost, but just uncertainty, and missing home and stuff like that," said Molina. "By hearing language on the radio, it brings the sense of cultural identity that almost highlights and strengthens that — no matter where you are, even here at home. If you don't hear yourself represented in large spaces, you'll just

get enveloped and folded into the mainstream."

After graduating, she returned home and later became general manager of KUYI-Hopi public radio, a position she's held for three years. Previously, she was the program director for the Hopi Foundation, the station's radio licensee and parent nonprofit, which provides several year-round programs on topics ranging from youth leadership to community development. The station — located in Lower Sipaulovi, below Second Mesa on the Hopi Reservation in northern Arizona — made its on-air debut in 2000 and began broadcasting online in 2010. It is the only news outlet of its kind that focuses on the Hopi community, and uses the Hopi language, Hopilavayi.

And now, as it celebrates its 25th anniversary, KUYI has to contend with the reality of losing a significant portion of its funding, possible cuts and changes to the ways it operates.

Currently, 42 Western radio stations are considered vulnerable because over 30% of their annual funding comes from the Corporation of Public Broadcasting. Twenty of those stations serve Indigenous communities and are located in the rural reaches of reservations and Alaska Native villages.

In May, President Donald Trump signed an executive order ending CPB's congressionally approved funding of National Public Radio and the Public Broadcasting Service. NPR, PBS and various local stations filed lawsuits in response. In early June, Trump asked Congress to claw back the \$1.1 billion it had already set aside for public media. The House of Representatives narrowly approved that legislation, which is currently in the Senate and receiving push-back from both Democrats and Republicans.

The bill would be "devastating" to KUYI if passed, Molina said.

KUYI-Hopi Radio general manager Samantha Honani Molina on the air at the station in Arizona in June.

“KUYI radio capacity is at a place where we’re able to provide all these avenues of service, which is safety, education and entertainment. We’re finally just beginning to really explore its possibilities,” Molina said. “If pulling public media funding is done, it would destabilize not only the progress made but also jeopardizes the essential safety and cultural services we provide daily.”

The station, which has five full-time staff members and a newly built modular studio, broadcasts at 60,000 watts across northern Arizona down to Winslow as well as online on its website. CPB funding accounts for over 48% of its operating budget, according to a June 30 letter the Hopi Tribe sent to the Senate, urging it to preserve funding for public media.

Native Public Media and the National Federation for Community Broadcasters have held summits over this, and Molina said that many broadcast organizations are already planning for cuts, regardless of whether the legislation is ultimately passed.

The immediate and significant budgetary impacts are obvious, but the long-term losses and their ramifications are incalculable. Stations like KUYI provide more than news and information: They’re community hubs where Indigenous languages can thrive, a space to preserve and grow Indigenous

people’s connection to their culture and their own place within the world.

At KUYI, volunteer DJs host music and news segments, often providing bilingual weather and community updates, even a “Hopi Word of the Day” that introduces new words and tells listeners how to use them in conversation — *mavasta*, for example, which means “to aim” in the Hopi language.

KTNN in St. Michaels, Arizona — “The Voice of the Navajo Nation” — not only broadcasts sports events and other announcements, it also delivered essential information during June’s Oak Ridge Fire, all in Diné Bizaad, the Navajo language.

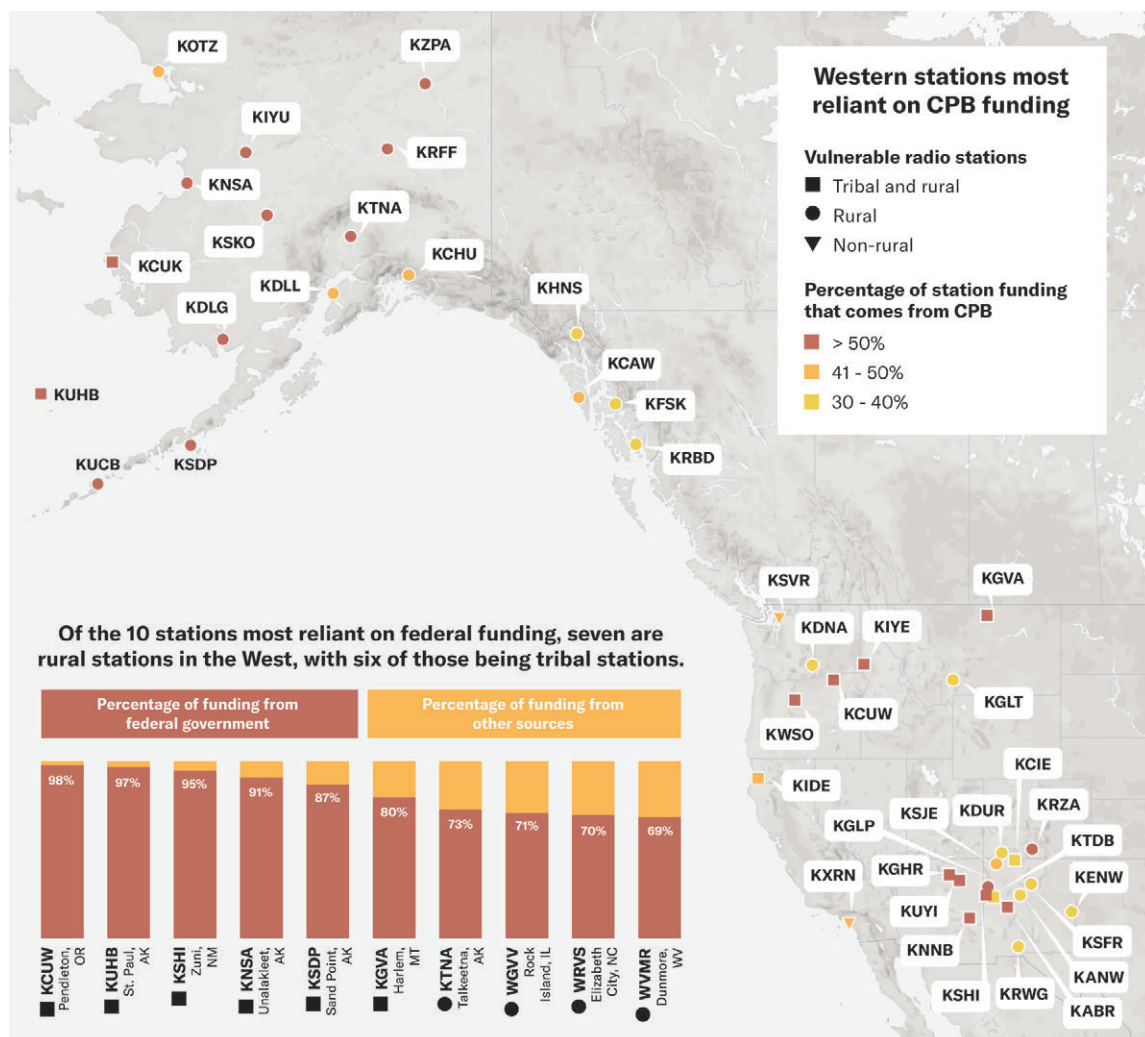
In Barrow, Alaska, the

northernmost community in the United States, KBRW offers an hourlong five-day-a-week program called *Uqalugaat Inupiat Stories* that also teaches Inupiaq words and phrases. The late Fannie Kuutuuq Akpik-Piquik gave lessons on-air, explaining that *misigarriug* means “to make seal oil from blubber.”

Every day, the *Talking Drum and Language Hour* show on KWSO in Warm Springs, Oregon, plays Indigenous drum music and offers language lessons featuring the Ichishkin, Kiksht and Numu languages of the Confederated Tribes of Warm Springs.

In 2024, the United Nations Education, Scientific and

Cultural Organization conducted a study recommended by the United Nations Permanent Forum on Indigenous Issues. UNESCO’s report highlighted the need for developing accessible Indigenous-produced media that provides news, entertainment and cultural programming. The report found that radio is the most widespread media and accounts for 34% of Indigenous media use. Indigenous media in general contribute significantly to the preservation and promotion of Native languages, cultural practices and traditional knowledge, helping “foster a sense of belonging and recognition.” But there are still barriers to providing Native language content on the radio, including



“The number-one issue for language revitalization today is making sure our youth, our families, all have access to learning in some way and in multiple ways,” said Lee. “Just one isn’t going to work and isn’t always the best method for learning, so you need

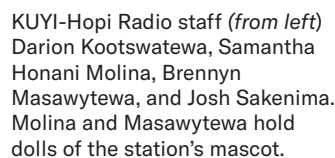
“I have this shirt that says ‘Indigenous language education is education,’ and I love that shirt and that saying because it’s so true,” Lee said. “It’s not just learning the mechanics of speaking your language — it’s an education unto itself. You’re learning your community and your culture’s worldview; you’re learning how language is tied to cultural practice, how it *is*

Meanwhile, Molina and Lee remain hopeful that current U.S. policy, including proposed

“That’s a really pivotal point for us to reflect on,” Molina said. “Then go forward with strength and resilience, just like our people have always done. It’s an opportunity for us to really show what we can do to support something so important, and I’m really excited to see what that looks like.” 🌻

Chad Bradley is the Indigenous Affairs fellow at High Country News. They write from the Southwest and are a member of the Navajo Nation.

WEB EXTRA: Listen to a compilation of Indigenous language radio programs at hcn.org/native-radio



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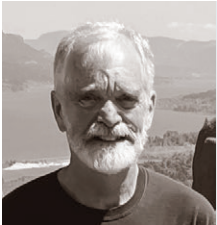
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— Barbara Harper, customer service assistant, Paonia, Colorado



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HCN's incredible Customer Service team

When was the last time you called customer support — anywhere, for any reason — and got another live human being on the line? I suspect it's been a good long while. Does anyone else immediately start punching "0" the second the automated answering system fires up, in hope of somehow snagging another sentient being? Just me?

Well, here at *High Country News*, we stubbornly cling to the idea that when one of our readers needs help — whether it's logging into their account on our website, renewing a subscription or making a donation — they deserve a little personal attention. Call during our regular business hours, and you're likely to get an actual staffer in our Paonia, Colorado, office. And if no one picks up, just leave a message, and we'll call you back as soon as we can.

"We don't want moving and changing addresses or troubles with the website to interfere with accessing the in-depth and insightful reporting that our writers create," said **Tanya Henderson**, customer service specialist.

An email is often a decent way to convey important information like address changes, or a new email address, she said, but please don't hesitate to pick up the phone. "Give us a call before you get frustrated. We're a small team, but we pride ourselves on getting back to folks."

In a recent staff meeting, Customer Service Manager **James Norris-Weyers** explained that the team fields between 400 and 800

calls with *HCN* readers each month, along with hundreds of emails. All this, while Customer Service Data Clerk **Jess Kiernan** and the rest of the team process hundreds of checks from readers renewing subscriptions or making gifts to support our nonprofit journalism.

And these amazing people love what they do! Customer Service Assistant **Barbara Harper** joked that *HCN* must have pre-screened our subscribers, as it seems like "they're all my best friends who I just haven't met yet." Readers love to share their opinions about the magazine and talk about how long they've been reading it.

"We're all *HCN* fans," James said. "We love to be here. We want to play our part in informing and inspiring the West."

To reach *HCN*'s customer service team, email **customerservice@hcn.org** or call (970) 527-4898.

— Greg Hanscom, executive director & publisher

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1. Set up your subscriber dashboard at www.hcn.org.

Making sure your information is accurate and up-to-date can save our team a ton of time, and activating your account gives you access to all of the news and analysis we publish online each week. We have some handy tutorials on our website that will get you started. Just go to: hcn.org/tutorials/

2. Set your subscription to auto-renew.

Entering a credit card into our secure system saves us the trouble of seeking you out and asking you to renew. It also ensures that you won't miss an issue. And of course you can cancel at any time.

3. Give *HCN* to a friend!

It's easy to do via your online dashboard — click on "subscriptions" and then "+ new subscription," then enter your friend's name and address. It's the best way for us to reach people who will appreciate what *HCN* does.

4. Let us know if something's not working for you.

The more specific as you can be, the better. Just saying, "The website is frustrating!" isn't very helpful. Try saying, "I've looked up articles in the online archives before, but can't for the life of me even figure out where it is now!" We can certainly help you, and if we get similar feedback from enough people, it tells us that something might need a more systematic fix.

5. Leave us a voicemail.

Seriously, if no one picks up the phone, we'll get back to you as soon as humanly possible. You matter to us! Without folks like you, we wouldn't even be here. And, as Barbara said, you're all just friends we haven't quite managed to meet yet.



Left to right: Barbara Harper, customer service assistant; Tanya Henderson, customer service specialist; Jess Kiernan, customer service data clerk and James Norris-Weyers, customer service manager. **Gretchen King / HCN**

THE PRESENCE *of* SHEEP

How to look at historical images of a livestock genocide on the Navajo Nation.

PHOTOGRAPHS BY MILTON SNOW | TEXT BY CHRISTINE AMI



*Flocks grazing on the
range, Tolani Lakes,
Leupp, AZ, 1936.
87.45.189.*

Reproduction of
gelatin silver print.
Maxwell Museum
of Anthropology
Archives, University
of New Mexico,



ARIZ- 1202

*Fourth Annual Navajo
Tribal Fair, Window
Rock, AZ, September
19-21, 1941. NF5-125.*

Like many of the Diné people

who frequent Lowe's Market in Window Rock on the Navajo Nation, I have seen Milton Snow's photographs showing Diné agricultural lifeways during the first half of the 20th century. The black-and-white images on the supermarket walls create a nostalgic environment for people seeking groceries in the heart of a food desert. Yet I never made any connection between my shopping trips and the man behind the lens. And I certainly never connected those images to the U.S. government-sponsored Livestock Reduction Program of the 1930s and 1940s, which killed more than 250,000 reservation animals.

Back then, U.S. Indian Commissioner John Collier sought to replace the callousness of previous forced assimilationist approaches with the silkier "Indian New Deal." Collier, who wanted to preserve material culture as well as improve living conditions and poverty levels, hired anthropologists to document languages and brought in photographers to capture lifeways.

One such photographer was Milton "Jack" Snow. Born in Alabama in 1905 and raised in California, Snow worked as archaeological field photographer for the then-Los Angeles County Museum of History, Science, and Art and later as a staff photographer at the Museum of Northern Arizona. During his 20-year tenure with the Navajo Service, he documented the relationship between the U.S. government and Navajo Tribe, including the impacts of the Livestock Reduction Program, which sought to combat land erosion, first by removing horses and goats, then killing sheep.

For Diné people, sheep are a blessing with responsibilities that link us to the *Diyin Dine'é* (Holy People). But to the U.S. government, they were an ecological proxy to "The Navajo Problem," as Gen. James Henry Carleton dubbed the brutal 1863 clashes between the Navajo people and the U.S. government over land, resources and assimilation. On the surface, Collier's approach to solving the "Navajo Problem" was more reasonable — culling Diné livestock simply to "rehabilitate" the land. But sheep removal would also push the people toward assimilation, and it was promoted despite the Treaty of 1868, which had not only returned Diné people to our homelands following incarceration





at Fort Sumner, but also returned sheep to our stewardship.

During the reduction, many sheep and goats were trailered to meat-processing facilities, while others were shot or driven off cliffs. The most vivid accounts document how live sheep were doused with coal oil and set ablaze. This did more than scorch the Diné sheep economic system; it released an unrelenting sorrow, leaving Diné people and sheep to sift through the ashes of *Dibé éí Diné be' iiná* (the “Sheep Is Life” philosophy) as they rebuilt their relationships with the U.S. government and with each other.

Many of Snow’s images of this period were housed at the archives of the University of New Mexico’s Maxwell Museum and the Navajo Nation Museum. After a 2024 exhibit at the Maxwell entitled “Nothing Left for Me: Federal Policy and the Photography of Milton Snow in *Diné Bikéyah*,” the Navajo Nation Museum arranged to exhibit its collection under the co-curatorship of its curator, Clarendia Begay (Diné), and the University of New Mexico’s American Studies Department chair, Jennifer Denetdale (Diné).

In June 2024, I was invited to the museum to aid Denetdale and the project coordinator, museum anthropologist Lillia McEnaney, with image cataloging. I braced myself, expecting to see animal deaths in the same format as the images that captured the massive buffalo slaughters of the 1800s. To my surprise, there were no images of dead or dying sheep. I did not know if I was disappointed or relieved.

I considered the photos’ purpose: to document the success of the U.S. government’s assimilationist agenda. Corralled in Snow’s lens were immense numbers of sheep, sometimes in the thousand, often in confined areas awaiting judging, sales, shearing and dips. They evoked my grandmother’s stories, making my own flock of 20 sheep seem trite. But Snow’s photos also demonstrated why the government saw a need to reduce. They dissolved family memories that recall the violence of the time and replaced them with Diné people successfully using Western irrigation techniques, canning practices, community fairs, English-based schooling and medicinal practices. At the end of the camera was security. The only cost: the sheep.

Although the photos fail to capture the violence of this cost, through visual sovereignty Diné exhibit organizers are reaching into Snow’s images and sourcing hidden stories of our past, present and future relationships with sheep. Many Native and non-Native people who attend this exhibit — “*Nihinaaldlooshii doo nídinéeshgóó k’ee’q q’q yilzhish dooleet* (Our Livestock Will Never Diminish): The Photography of Milton Snow and the Legacies of Livestock Reduction (1935-1959)” — will learn about this animal genocide for the first time. Others will find it anticlimactic; many are already aware through community. The deliberate absence of sheep death in the images does not change their stories.

Regardless of their initial impact, Snow’s images call us to pause and consider the significance of sheep in our individual lives today. 🌱

The exhibit opens Aug. 8 at the Navajo Nation Museum in Window Rock, Arizona.

Christine Ami is a Diné scholar, associate professor and weaver at Diné College, specializing in Indigenous animal studies, traditional ecological knowledge, cultural arts and epistemological imperialism.





*Navajo Tribal ram herd in District 17,
February 16, 1945. NN7-42.*



Fall Lamb Sale, Klagetoh, Arizona, 1941.
NN9-69 (top).

Miss. Stover Teaching Navajo Language.
Hunter's Point Day School, Arizona,
November 24, 1943. NF1-36 (bottom).

Navaho [Navajo] Tribal Fair. Beauty Contest Winner,
Sep 11-13, 1953. NF5-1088C (right).









For DINÉ PEOPLE,
SHEEP *are a*
BLESSING *with*
RESPONSIBILITIES
that LINK
US *to the*
DIYIN DINE'É
(HOLY PEOPLE).

*Rambouillet Ram.
Belongs to the Mexican
Springs Livestock
Association. Mexican
Springs, New Mexico,
September 11, 1942.
NN9-28*

All photos:
Digital reproductions
of gelatin silver
prints. Milton Snow
Photography Collection,
Navajo Nation Museum,
Window Rock, Arizona.
Digitization courtesy
of Ramona Emerson
(Diné), Reel Indian
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BURNED

A FORMER HOTSHOT RECKONS WITH THE CULTURE OF FIREFIGHTING, AND WHAT IT MEANS FOR FOREST HEALTH. BY RIVER SELBY

River Selby
conducting a
backburn on the
Monument Fire in
Oregon in 2002.



Holding the
line, Angeles
National Forest,
California, 2002.

Editor's note: The names in this piece have been changed to protect people's privacy.

I WAS 19 WHEN I FIRST STARTED FIGHTING FIRES,

in the spring of 2000. By then, I had been a tween and teenage runaway, a sex worker, and a survivor of violence inflicted by both strangers and people I knew. Anyone eyeing my life trajectory would've guessed that I'd end up permanently homeless and possibly addicted to several substances. That did happen. That's the life wildland firefighting saved me from.

After two years working for private contractor crews, 2002 was my first year on a Forest Service hotshot crew, called the Solar Hotshots. I was the only woman on the crew and one of the only crew members from outside of California. We'd started in May, first traveling to Southern California, then the Eastern Sierras. A hotshot crew is composed of 18-22 people, mostly or exclusively men, who spend their summers on the front lines of wildfires. Trained for complex initial attack, these elite crews are self-sustaining, capable of working as a single unit or multiple smaller ones. The term "hotshot" is a good indicator of the profession's machismo ethos. I was 22, mature for my age but also untethered, unprepared for the rigid and conformist culture of my chosen crew, which was much different from the diverse, often multilingual men (and few women) I had worked with as a contractor.

The hotshot superintendent, Phillip, warned me: Most of the guys had never worked with women before. I took that as a challenge. There was so much I didn't know back then, both about myself and the world. Experiences for which, in my language, there existed no lexicon or vocabulary, like "misogyny" and "nonbinary." I was uncomfortable with both my gender and women in general, but wouldn't begin unpacking this until years later. I had no idea what I was getting myself into.

Solar Hotshots was my first hotshot crew (there would be two more), and I was constantly singled out, particularly by my superintendent, whose style was classified back then as "old-school." There are still many crews who operate in this way, rarely hiring women at all or, if they do, only hiring one or two and never putting them on the same squad or team. The belief back then was that women caused trouble. This belief persists among many firefighters, whether spoken out loud or not. I was forced off that crew after less than two years, giving up a



hard-earned permanent position because of unchecked harassment. I can count myself among hundreds of women and other minorities who have left wildland fire because of a hostile or dangerous work environment.

This hostility is echoed in our federal approach to fighting wildfires. Despite living in a country whose landscapes evolved with and are adapted to the presence of fire — much of it human-caused — wildfires are, for the most part, approached solely with suppression in mind rather than prevention and adaptation. Federal agencies and laws dictate local responses, often hindering efforts of nonprofits and state agencies. Clear scientific evidence has proven the effectiveness of wildfire mitigation strategies like prescribed burning, thinning,



cultural burning and year-round land stewardship, but the majority of federal funding goes towards suppression.

Yearly wildfire suppression averages around \$3 billion in federal spending, but fire suppression tactics can make future fires worse. This is known as the “fire suppression paradox.” As a wildland firefighter, I often found myself engaging in suppression tactics that were downright destructive to ecosystems. Prevention and mitigation have been proven more effective, and could also reduce the emission of greenhouse gasses. By working with nonprofits and Indigenous groups to expand stewardship responsibilities and cultural access, we could halt what has become a fire feedback loop and protect ecosystems from the dangers of climate change.

+ + +

BY MID-JULY 2002, the country was at a Preparedness Level 5, meaning that over 80% of the nation’s fire-fighting resources were committed. This was an extreme year for fires, with Oregon, Colorado and Arizona setting new records for acreage burned.

We worked two or three weeks at a time, followed by two or three days off, traveling in two small buses equipped with seating and storage compartments, called buggies, and the superintendent’s truck, which we called the “Supt.” (*pronounced like “soop”*) truck. I could count my days off on my hands by the time we were called to the Monument Fire. This was in eastern Oregon, adjacent to John Day, a

small town where I was stationed for one month the previous summer when I was working on the contract crew.

As we drove through John Day, I remembered the demolition derby and the local John Day crew — I had helped one of the guys prepare his car for the derby, and we all attended the county fair, screaming at him from the sidelines as he demolished his car. Those had been country boys like some of the guys I worked with now, but so much more laid-back. So much more fun. Not hostile, like some of my co-workers.

Often, I had to remind myself that I got along with men. There was something about the hotshot crew itself, the performance of it, similar to the military in its rigid conformity. This was very different from the contract crews, which had been a more diverse mix of ages and backgrounds, and whose members changed with each fire call. These guys loved watching war films, like *Platoon*, *Full Metal Jacket* and *Saving Private Ryan*. Most of us were under 25 years old except for the squad bosses, captains and superintendent. This, among other things, made it like a platoon. Phillip was equivalent to a platoon leader, handing down orders to the captains, who gave them to the squad bosses, or squaddies.

In the Army, platoons are split into squads, and squads are split into teams, equivalent to our mods and squads. We used “strategy” and “tactics” to fight fires, like soldiers did in war. Each crew member was expected to conform to the crew’s culture, just as soldiers must conform to their platoon’s culture. The grunts — the ones without a title like lead firefighter, squad boss or captain, like me — remained mute when it came to thoughts or opinions. We weren’t supposed to initiate communication with the captains or Phillip, who had ultimate authority over our lives and behavior.

This is no accident. The first national parks were governed by the U.S. Cavalry. Military training occurred in national parks during World War II. The military was also deployed in Oregon and California when Indigenous people resisted displacement from lands that are now governed by the Park Service, Forest Service and Bureau of Land Management.

The Spanish came by ship to Oregon in the 1500s — they were

the first Europeans to arrive there, where more than 60 tribes and bands had lived for thousands of years, speaking at least 18 languages (probably more; written accounts were mostly left by settlers and explorers). Oregon and California hadn’t yet been separated into two states. There was no border, and many Northern California tribes were also southern Oregon tribes. Tribes and bands were intimately connected to their land, its microclimates and flora and fauna, in a way most white settlers never would be. Food and game were abundant. Salmon ran all the way from the ocean to the Malheur River in eastern Oregon, something that is now almost inconceivable.

Before the arrival of Europeans and American settlers, meadows and grasslands populated much of Oregon. Tribes, such as the Klamath, Sahaptin Umatilla and Coos-Kalawatset, maintained lush green grass by fire in order to lure elk and other herd animals from forested areas; the absence of trees improved sightlines for hunters. After each year’s elk hunt tribes throughout Oregon, like the Tolowa, burned the meadows, keeping trees at bay. The use of fire was multi-functional, encouraging new grass while also producing pliable shoots for basketry and building materials.

Berries, particularly huckleberries, were also burned on time-lines tailored to each berry’s growth cycle, usually occurring in late summer after harvests. Although settlers also burned in Oregon well into the mid-1900s, these burns were in service of livestock grazing, not land tending. With the disappearance of Indigenous fire, open prairies transformed into dense, flammable forests overgrown with brush. This was an ecological occurrence across the U.S. as it was settled — townships and villages sprouted on sparsely forested land formerly maintained by the frequent burning of prairies and grasslands. Grasslands converted to forests, and forests, which had become so scarce in Europe, became a symbol of the land’s health rather than a sign of deterioration. Increased tree cover transformed the landscape.

Some of Oregon’s largest fires occurred in the 20th century with the advent of clear-cutting. The Tillamook Burn, which started in 1933, burned over 350,000 acres. Historian Stephen Pyne argues that the fire burned for 18 years, with new fires igniting each year in its footprint and each successive fire further degrading the land. In 1949 reseeded began. It continued for two decades. In 1979, the Tillamook burn area became the Tillamook State Forest.

When we were called to Oregon in 2002, the Biscuit Fire, Oregon’s largest post-1900 fire since the Tillamook, had ignited four days before we arrived. It was expanded by thousands of acres (almost doubling its natural size) through firefighters’ burning operations, although no structures were threatened by the fire, and the region included many fire-adapted native species. The area, which is considered “mixed-conifer,” supports a fire return interval of 45-80 years. This doesn’t mean that one fire burns every 45-80 years but rather that many small fires regularly burn in mosaic patterns, leaving some patches unburned and others burned, whereas some other ecosystems, like lodgepole pine, have a longer fire return interval (up to hundreds of years) and thrive with high severity fires that kill nearly all the trees. Mixed-conifer landscapes thrive with frequent low or medium severity fires. When the Forest Service decided to burn extra land to allow the fire to meet various barriers, like hand-dug firelines, roads, and dozer lines, they interrupted the natural mosaic pattern the fires would have assumed, increasing the severity of the fire as well as its



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DANGERS OF CLIMATE CHANGE.**



Selby during the McNally Fire in Sequoia National Forest, California, 2002 (*top*).

Selby stands in front of A-Mod's buggy while fighting the Monument Fire in Oregon, 2002 (*above*).

Cutting line in Angeles National Forest, California, 2002 (*left*).

size. They spent over \$150 million on suppression, but the fire wasn't declared contained until December, by which time it had made its way across the California border. Many large fires, especially those in forest ecosystems, burn until the snow falls, despite aggressive suppression efforts.

The Monument Fire, where we were being sent to work, was east of the Biscuit Fire, near Unity, in a more arid ecosystem. Ponderosa fuel type up high, piñon/juniper at mid-elevation, and sage in the high desert, which is the lowest elevation. The Burnt River Valley, where the town of Unity is situated, is over 4,000 feet in elevation despite being the flattest and lowest landscape around. Much of eastern Oregon and Washington is high desert. Unity is on the east side of Malheur National Forest, less than two hours west of the Snake River, which traces Idaho's western border. This is where the Northern Paiute, including the Burns Paiute, Cayuse, Umatilla and Walla Walla tribes once tended the land with fire, and many, including the Umatilla, are now engaged in bringing cultural fire back to the land.

Our vehicles angled up from the valley, along switchback dirt roads and into the shelter of the mountains, armed with extra fuel, water and rectangular cases of military rations, otherwise known as Meal, Ready to Eat (MREs). Although there was an established fire camp, the drive to the fire was so long and the camp was already so crowded that we decided it was better for us to spike out — make our own camp — and retain our independence as a crew.

Everyone helped to construct our camp, surrounded by a haze of gauzy gray smoke that obscured the waning daylight. David, a squad boss, built a warming fire as the sawyers bucked a tree for sitting logs. Once they settled, standing and sitting around the warm orange glow, I found a place to sit and write in my journal. Some of the guys teasingly called it my diary. Are you writing about me in your diary? I did write about them, all of them, but not in the way they imagined. I tried to parse each day, to understand my place on the crew and in the world.

Cold, high-elevation nights called for the tangible shelter of our tents. Each morning our captains, Owen and Nickolas, rustled our tents and told us to get up. More and more, I was startled from a deep sleep, groggier than earlier in the season. Some of the guys needed to be yelled at or shaken awake. My body carried the past two months of 16-hour days like dead weight. I craved sleep more than anything else and hated waking up to frigid mornings. My sleeping bag was filthy but so cozy, unlike my stiff, cold fire-resistant pants. We hadn't showered for seven days and wouldn't shower for seven more. My entire body prickled with grime, legs layered with ash and dirt, hair an unbrushable tangled mess. Every morning, I switched out my sleeping shirt for a dirty crew shirt bleached with whitish sweat lines matching the straps of my pack. I first donned clean cotton socks, then a pair of wool socks stiff with old sweat and dirt or, on alternating days, luxuriously clean ones. My leather boots had pinched hard red calluses into the fronts and backs of my ankles. Calluses and blisters marred my heels, toes and the balls of my feet. My big toes were numb and would never regain full sensation.

We milled around like zombies, all of us looking haggard beyond our years, until Owen poured us strong hot coffee from Phillip's percolator. For breakfast we had MREs. (We also had them for lunch and dinner.) After that, we brushed our teeth and got to work.

Every day we poured streams of burning fuel mix into thick unburned undergrowth composed of half-fallen dead trees, brush,

and plant litter. There's a picture of me holding a drip torch while the dry, spindly trees behind me crown. Crowning is what happens when fire fully consumes a tree, including its crown, and these trees crowned quickly and easily because of their poor health. Trees that crown are more likely to die in fires. This is why trees like redwoods are so fire-resistant. Their lack of lower branches prevents fire from climbing into their vulnerable crowns.

Two and a half months in, burning, once exciting, was now mundane. I no longer needed a funnel to pour fuel mix into the canisters, and I wasn't scared of laying a line of fire down right next to me. I high-stepped over the forest floor, almost running to keep pace with the fire. It felt like an obstacle course, choked with brush and small trees, ladder fuels that carried flames upwards, causing crown fires and incinerating the canopy. The ground, a crunchy layer of parched needles, scraggly brush, and fallen branches, dried by months without rain, crunched beneath my feet. This accumulated matter increased the intensity of the fires we set, so even the most resistant trees would likely die. All of it lit up magnificently, its heat parching my skin. My face was blackened by soot and dirt, but my upper lip was clean; I obsessively wiped it, because the guys had made fun of me for my trademark black soot mustache.

Phillip encouraged us to torch the landscape, because without any remaining plant matter to burn, the main fire would stop when or if it met these. Back then I didn't question the strategy. I was happy to be in the woods and grateful for a paycheck. Privileged to be traipsing through nature, even when it was burning. But I cringed sometimes, setting little trees on fire, knowing I was leaving a moonscape of torched land in my wake. I thought we were doing something useful because the land clearly needed to burn, but creating a moonscape in these forests is the opposite of a fire mosaic. It increases invasive plant populations and takes longer to regenerate. So much land burned so completely only leads to more land primed for burning with more volatility in the future. We never considered regional fire regimes, or what would foster long-term forest health. This is the traditional mode of wildland firefighting: a self-perpetuating feedback loop that encourages larger fires and ultimately weakens the ecosystem. The end point is desertification.



MY ADRENALINE CRESTED AND FELL LIKE WAVES THROUGHOUT THE DAY.

I got fourth, fifth and sixth winds. Phillip took advantage of the lengthier Oregon daylight, making sure we got lots of overtime. Near the end of our time on the fire, we were snapping at each other constantly, all of us exhausted from days made longer since we spent what would usually be our driving time working instead. Since early in the season, Phillip had been pulling me off the line during the workday so I could write out the timesheets. I dreaded spending time with him. "Girl," he once said, "you look like you're getting skinny." He spoke to me intimately, as if we were close friends. Each time he said "girl," I cringed. The word sounded like an insult. His nickname for me was "Fake Red," because of my dyed hair.

After burning for many days, we worked with military personnel, clearing more fuel breaks, sawing trees and brush and chaining the stumps, branches and clumps of brush from hand to hand onto the



River Selby (then 20 years old) in their second year fighting wildfires. Siskiyou National Forest, Oregon, 2001.

THE WAY WE TORCHED THE TREES AND IMMOLATED THE LANDSCAPE, WHICH MAY NOT HAVE BURNED AT ALL WITHOUT US — IT ALMOST FELT LIKE A SHOW OF FORCE.

THE GOVERNMENT SPENT MILLIONS OF DOLLARS FOR AN INCREASED BURN AREA WITH A REDUCED FIRE MOSAIC, BUT THERE WEREN'T ENOUGH FUNDS TO PROPERLY MANAGE THE LAND AFTER THE FIRE.

other side of the fuel break, where we hoped the fire would not burn. Fire dozers were everywhere: small ones cutting fireline and large ones heaping the flammable materials we'd thrown across the break into piles reaching 6 feet tall. These piles were commonly slotted for off-season burning, but most of them would be neglected along with the fuel we had thrown across the fuel break, only to increase the power of successive wildfires.

The way we torched the trees and immolated the landscape, which may not have burned at all without us — it almost felt like a show of force. The government spent millions of dollars for an increased burn area with a reduced fire mosaic, but there weren't enough funds to properly manage the land after the fire. The money, which could have gone towards prescribed burns and other land management, was now spent, released from the government coffers for the "emergency." Of course, wildfires can be emergencies, but stewarding the land in which they burn could lessen the severity. That simply can't happen without adequate federal funding.

+ + +

ON OUR LAST NIGHT, DAY 21, we drove into camp for demobilization. We raided the government-funded supply caches, grabbing cases of water bottles and Gatorade that we carried on our shoulders back to the buggies. Phillip and Owen always reminded us to take as many as would fit into the buggies and Supt. Truck.

Everyone exchanged their dirty Nomex for clean, showering for the first time in three weeks. The shared women's shower stall was all mine, one of the few benefits of being a minority at fire camp. Gingerly I removed my stiff dirty Nomex. I had long ago run out of clean socks and underwear. My wool socks retained the shape of my foot, reinforced by residual salt. Grime lined my hairline. My hair was matted with salt, dirt and ash.

I stared at my body in the mirror. I saw it as an object — an unruly body, different from the women I saw in magazines, film and television. I hated the characteristics that marked it as a woman's body. Turning sideways, I pressed the flats of my hands hard against my breasts, imagining myself without them. Free of them. My hands were dark against my pale skin, knuckles creased with black soot. I had no understanding then of how to shift the way I saw and categorized myself.

In the woods, away from everything, there were moments of freedom from my social obligations as *woman*. As *girl*. The men I worked with carved me out, separating me into a divergent category. But I wanted to be of them. Not one of them, but among them and unobserved the way I assumed they were. I thought they were free from scrutiny, but some of the men must have felt like outsiders, too, especially Hank, who was teased for being scrawny, or Juan, whose beer belly was constantly pointed out. Not even Phillip was free. I didn't ridicule his size, but most of the guys called him fat and conflated his size with laziness, not taking into account how decades of hotshotting had destroyed his body, just as it would destroy our own bodies, if we stayed long enough.

These nuances escaped me back then. I only looked in the mirror and hated myself for being too big. My belly, one of the only parts of my body mostly free from grime, was soft, pale, lined with stretch marks. Even as a child I had imagined this part of me different than it was. I stared at my blackened legs, their skin fully obscured by layers of sweat-salt, ash, soot, and dirt. Most of the hair on my legs had been rubbed off by my pants. Some would never grow back.

In the shower I let the hot water pummel my face before soaping my body and washing my hair. I was alone for the first time in three weeks, rediscovering my unobserved body. I'd forgotten that I had a body at all, or a self that was independent from the crew's perceptions of me. With them I was so focused on how I was *supposed* to be, *supposed* to act, that it felt like I was losing any real sense of who I was, or who I wanted to be.

We bedded down in a field at fire camp. An Oregon hotshot crew nearby popped their tents as we laid out our space blankets. I watched them, counting out four women. Maybe five. I had never seen that many women on a hotshot crew, and imagined how my life would be different if I were on that crew. Would I be freer? Surely not, I thought. I had been taught that the presence of women led only to complications, and it would have been too painful to imagine otherwise. Despite my overwhelming loneliness, I didn't try to talk to them.

In the end, I never worked on a hotshot crew that embodied a true team ethos, but, in my last year as a hotshot, I formed an enduring friendship with the other woman on my crew, one that I still deeply value. I've come to understand the importance of diversity in wildland fire — the people doing the firefighting just as much as the tools used to mitigate catastrophic fire. Any minority is inevitably singled

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out and scrutinized. If there's two women on a 20-person crew that's otherwise all men, they're compared and contrasted in ways that foster competition or resentment. But four or five women? They're just part of the crew.

Similarly, diverse and varied approaches are essential when approaching fire policy. Some have proposed a singular federal fire agency, but a new federal agency won't solve our problems. Approaching wildfires from a solely federal standpoint is what got us here. Instead, we need increased support and funding for local land stewardship, including prescribed and cultural burning. The U.S. is composed of incredibly varied ecosystems, nearly all of which evolved with the presence of fire. Federal laws and regulations (like the Clean Air Act and national burn bans) have historically inhibited local groups, including Indigenous groups, from reintroducing fire as a natural part of local ecosystems. Federal regulation is important for personnel qualifications and training, but once someone has met their qualifications, say, as a burn boss, they should be trusted to act according to their training. This involves trust and a willingness to prioritize ecological (and cultural) health, rather than profit. The payoff is a closer relationship with fire, but a healthier one, for humans and all creatures. ☀

This essay is excerpted from Hotshot: A Life on Fire by River Selby, which will be published this August from Atlantic Monthly Press, an imprint of Grove Atlantic. All rights reserved. Reprinted with permission.

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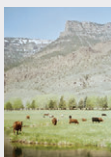
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Food for thought

Artist Julie Green painted 1,000 final meals served to prisoners on death row. It forced me to think about capital punishment and challenge my own assumptions.

BY KIM CROSS

THIS SPRING, I visited the Boise Art Museum to see “The Last Supper,” an exhibition of ceramic plates painted with images of the last meals requested by 1,000 people sentenced to death in the United States. Over a 22-year period, artist Julie Green rendered each meal in brushstrokes of cobalt blue on second-hand white ceramic plates, then fired them in a kiln.

While teaching at the University of Oklahoma in 1999, Green opened a local newspaper and read about a 45-year-old man condemned for murder on Oklahoma’s death row. In the account of his execution, an arresting detail leaped out: For his last meal, Norman Lee Newsted requested six tacos, a half-dozen glazed doughnuts, and a Cherry Coke.

Something about it compelled Green to tuck the newspaper clip into a folder. Six months later, Green encountered another death penalty story that vividly described the last breath, the dimming eyes and the trembling foot of 41-year-old Malcolm Rent Johnson. Convicted of raping and murdering an elderly woman, Johnson was the 20th person to be executed

in Oklahoma since the death penalty was reinstated in the 1970s. His final meal: three fried chicken thighs, a pile of shrimp, Tater Tots with ketchup, two slices of pecan pie, strawberry ice cream, honey and biscuits, and a Coke.

“So specific. So personal,” Green later said. “It humanized death row for me.”

From a distance, Green’s two-tone mosaic of plates on the gallery walls reminded me of the blue-and-white Dutch pottery hung on some grandmother’s walls. Up close, the details were portraits of craving and comfort: Bologna and cheese sandwiches. Butter pecan ice cream. Fried green tomatoes. Cherry limeade. Apple pie.

The exhibit made me realize how little I know about capital punishment. For most of my life, I’d considered the death penalty only abstractly, through the distance of moral reasoning and philosophy. A few years ago, while writing *In Light of All Darkness*, I stepped closer, viewing it through the lens of one crime — the 1993 kidnapping and murder of 12-year-old Polly Klaas. Her killer, Richard Allen Davis, has spent three decades on death row in California, one of 27

states with the death penalty but one of only four that have moratoriums on executions. Davis will likely die in prison of old age.

My research made me aware of how much suffering one person can cause. I searched through case records for some trace of humanity in Davis’ past. Some small act of kindness, any evidence of love. But I found none.

I wondered: If I had the chance to sit down and talk with Davis, what would I feel? What if I felt empathy? That would bother me. What if I didn’t? That might bother me even more. Could I look another human in the eye and wish for him to be killed? I haven’t had the chance to find out: Davis has not responded to my letters requesting an interview.

As I stood before a wall of last suppers, I realized that food is love. In the aftermath of a deadly tornado, I witnessed the healing power of casseroles, saw church groups cooking in parking lots for people who’d lost their kitchens. At my uncle’s funeral, I felt the urge to ease my family’s grief by making great-grandma’s *okazu*, her Japanese comfort food. Cooking is kindness in action, one small thing we can control in the midst of all we can’t. We may be powerless to make the pain go away, but folks still need to eat.

The exhibit featured only two plates from Idaho. One depicts the prison’s “Daily Special” on Nov. 18, 2011: hot dogs with sauerkraut, baked beans and veggie sticks, gelatin studded with fruit, and a “special treat” from the prison chef — strawberry ice cream. That was Paul Rhoades’ last meal. The other, which Keith Michael Wells ate on Jan. 6, 1994, shows a whole lobster beside a rack of prime rib, two

pints of black walnut ice cream, a 2-liter bottle of Coca-Cola, and a half-gallon carton of milk.

Almost nine miles due south of where I stood in the Boise Art Museum, eight men reside on Idaho’s death row. (A ninth, the only woman, lives in a women’s prison in Pocatello.) I thought about them, especially in light of the new Idaho law that will take effect in July 2026, making a firing squad the primary method of execution.

Four other states allow execution by firing squad: Mississippi, Oklahoma, South Carolina and Utah. But Idaho is the only state that has declared it the primary method. (Some others let condemned people choose.) Even for a gun-loving state like Idaho, it seemed odd, a step backward. “Barbaric,” as one friend put it.

Then I learned about Thomas Creech, a 74-year-old serial killer who is Idaho’s longest-serving resident of death row — incarcerated for more than 50 years, on death row for 46. On a winter day in February 2024, he ate his last supper (fried chicken, mashed potatoes with gravy, corn, rolls and ice cream). The next day, he was strapped to a bed in the death chamber while three Idaho Department of Correction employees searched for a vein. They poked him eight times in his hands, feet and legs, but his veins just kept collapsing. After about an hour, the execution — the state’s first in 12 years — was called off.

To learn more, I called my friend Kevin Fixler, a reporter for the *Idaho Statesman* who interviewed Creech after his failed execution. “I laid on that table and fully expected to die that day,” Creech told him. The execution is supposed to be rescheduled, but Creech’s lawyers say that a second attempt would be “cruel



Julie Green, "The Last Supper":
Washington 10 September 2010; Pizza,
apple pie and Root Beer; 2011, Paint on
found ceramic plate, 7 in. diameter.
Crystal Bridges Museum of American Art,
Bentonville, Arkansas, Gift of The Last
Supper Irrevocable Trust, 2023.6

and unusual punishment,” and therefore unconstitutional.

How can the method routinely used to euthanize animals go so badly with humans? “Lethal injection drugs have been increasingly hard to get,” Fixler said. “Drug companies don’t want to be associated with executions.” This has led to states passing shield laws to protect the identity of drug sources, making the drugs easier to obtain. But administering them remains a challenge: Most doctors want nothing to do with an act that violates the Hippocratic Oath. So the task falls to prison employees who lack the training and experience of doctors and nurses.

Seeking another point of view, I spoke with Craig Durham, a lawyer who works on death penalty cases in Idaho. He said that death by firing squad might be faster and more painless than a cocktail of lethal substances that can fail in gruesome and excruciating ways. Many states use multiple drugs in a sequence: The first drug sedates, the second

paralyzes and the third stops the heart. If one doesn’t work, the others might mask the suffering.

He also raised a point I had not considered: Because it is gory and unsanitary and therefore controversial, firing squads might make the public more aware of executions. If the state is killing someone on behalf of its residents, shouldn’t we know about it — and think seriously about it?

That’s one of the implicit questions raised by “The Last Supper.” “I paint to point,” said Green, who used art as a vehicle for advocacy. I appreciated the way this art compelled me to think, without telling me *what* to think. It led me to interrogate my assumptions and inspired some thoughtful conversations.

One of them was with my friend Joshua Sharpe, a journalist whose reporting helped exonerate an innocent man convicted of murder, a story he tells in his new book, *The Man No One Believed*. His stories of wrongful convictions — which are way more common than I’d realized

— helped me understand why it takes millions of dollars and decades of court proceedings before a death sentence can be carried out. Sharpe lives in Detroit, but he looked at Green’s exhibit online, where the meals are listed in detail.

“I think what (Green) is doing is adding dignity to this concept of publicizing the last meal,” he said, “taking that information and putting humanity back in.”

While painting the 1,000th plate in September 2021, the artist, 60, was suffering from advanced ovarian cancer. A few weeks later, at home in Corvallis, Oregon, Green ended their life with the assistance of a physician, a right protected by the state’s Death With Dignity Act.

Green’s obituary in *The New York Times* did not specify their last supper. ☀

Kim Cross is a journalist and author of In Light of All Darkness, a nonfiction account of the kidnapping and murder of 12-year-old Polly Klaas.

Julie Green, “The Last Supper”:
Paint on found ceramic plates.
**Crystal Bridges Museum of
American Art, Bentonville,
Arkansas, Gift of The Last Supper
Irrevocable Trust, 2023.6.**

*Facing, clockwise from top left:
Idaho 18 November 2011; Chose the
prison’s “daily special” of hot dogs,
sauerkraut, baked beans, veggie
sticks with ranch dressing, and
gelatin with fruit--although the prison
chef did add strawberry ice cream as
a special treat. 2012, 9 in. diameter.*

*Idaho 06 January 1994; Prime rib,
lobster, 2 pints of black walnut ice
cream, rolls, 1/2 gallon milk, 2 liter
bottle of Coca Cola. 2002,
10 in. diameter.*

*Texas 22 May 2002; None. 2021,
6 in. diameter.*

*California 17 January 2006; Had a
last meal of buffalo steak, a bucket of
KFC white-meat-only chicken, sugar-
free pecan pie, sugar-free black
walnut ice cream, Indian pan-fried
bread and whole milk (ice cream was
left out one hour to thaw, and turned
into a milkshake by hand). 2006,
10 in. diameter.*

*Below: “Julie Green: The Last Supper,”
Boise Art Museum installation, 2025.
Courtesy of the Boise Art Museum*







ESSAY

No one gets left behind

In the face of the climate crisis and a strained 911 system, community paramedic programs are helping vulnerable people.

BY BRETT ZIMMERMAN
PHOTOS BY EMREE WEAVER

I STARTED MY FIRST DAY of fire academy with excitement, hope and very sweaty palms. Thirteen of us had made it through the public safety hiring gantlet. I imagined being a firefighter would involve responding to heart attacks, house fires and high-speed car crashes. And over the next decade, I went

on nearly 7,000 911 calls in Portland, Oregon, and we did save heart attack victims, put out house fires and pull people from car wrecks. But a feeling of helplessness displaced any sense of heroism once I began to realize how much misery was hidden from view.

Most 911 calls are not for life-threatening emergencies. They may be calls for regular back pain, diabetes-related issues or just feeling ill. Nearly every shift, we would be called to pick someone up from the floor, from the toilet, from the floor beside the toilet. I never imagined so many people fell and truly could not get up. Some of the toughest calls involved performing CPR on people we'd regularly responded to, watching them slowly decline in isolation. We couldn't meaningfully improve their lives, but maybe we could get their hearts thumping again. We watched people die from preventable diseases, from exposure, from being alone and poor. Often, it felt like we were the only people who crossed their thresholds — that the only human touch they knew was through gloved hands.

I live in rural Clackamas County, in what's become wildfire country, and commute to the city, driving past trailers with soft wooden porches, houses with blackberries creeping under the siding, lived-in vehicles. I pay more attention to these homes now. I know there are people hidden behind their doors and

bramble thickets, caught in the same eddies of decline as the 911-callers in Portland. Every wildfire, heat wave or ice storm brings new fears they will be overlooked during a "Go Now!" evacuation order, left in a sweltering aluminum-sided trailer with home oxygen concentrators failing when the power goes out.

Someone does have the job of helping the medically underserved residents of this 1,900-square-mile county: Jamie Breunig, a community paramedic with the County's Department of Public Health Emergency Services.

When gaps in social and medical services swallow people whole, community paramedics offer preventive care and connection to essential resources. These programs are appearing across the country in response to the growing realization that some people rely on 911 for primary health care, managing chronic disease or simply meeting basic needs. The programs ease the strain on an overwhelmed system and expand health-care access, especially in rural communities like mine.

I first met Breunig in 2022, when we worked together responding to non-urgent 911 calls. We connected over the weight of how sick our community's residents were. Breunig is smooth and methodical at emergency scenes, but when she speaks about how we could better serve the forgotten, her eyes light

up. Community paramedicine is “the perfect fit,” she said, “a chance to work upstream, focus on more preventative care and help create a healthier community through meaningful, lasting support.”

Over 90% of the people she serves are experiencing homelessness. She does medical assessments, cares for wounds, assesses suicide risk, vaccinates people, schedules doctor appointments. She goes where people congregate, concentrating on the urban corner of the county bordering Portland.

During extreme heat events, she said, older adults without air conditioning as well as unhoused locals use the county cooling shelter. There’s a shuttle for folks without cars in more rural parts of the county, but she worries that not everyone knows how to access it. She does what she can to spread the word.

This type of community care is essential. If done well, it is also invisible: It’s harder to count deaths that were prevented than the lives that are lost.

In June 2021, a heat dome caused temperatures to soar to 116 degrees in Portland. Nearly 100 Oregonians died. Most were elderly, lived alone and lacked air conditioning. After a decade with the fire department, I spent a year doing outreach to people who frequently called 911; one of them, who ticked all three of those boxes, was transported to the ER during the heat dome. Her cat died after the ambulance took her away. So did the neighbor down the hall. Community paramedics like Breunig, however, can arrange early transportation to cooling shelters for patients, and even their pets.

As I worked with people with high 911 use, I soon realized that, to a person, each wanted someone to talk to, someone to listen. Community paramedics provide connection as well as medical care, centering relationship-building as a way to improve health outcomes.

For the three years that it was funded by the American Rescue Plan Act, the Healthy Rural Oregon Grant helped implement community paramedic programs across Oregon. But as federal support disintegrates, here’s a list of what’s in jeopardy: expanded access to rural health care, improved weather forecasting to trigger early warning systems, federal aid after natural disasters, money to fight wildfires, support for low-income residents to heat and cool their homes, and funds to extend broadband and improve

communication, a crucial service during natural disasters.

Changing weather patterns add a new layer of urgency: Vulnerable people need access to climate-controlled environments and realistic evacuation plans as well as to health care and social services. When these needs are not acknowledged, our communities risk splintering between those who have the resources and are healthy enough to survive climate fluctuations, and those who are too poor, too dispossessed or burdened by disease to withstand the shock. We seem to forget that we cannot be disentangled from each other.

Two hundred miles up the Columbia River, on the other side of the Cascade Mountains, Jessica Marcum is the lone community paramedic for Umatilla County’s Fire District 1, serving the rural city of Hermiston and its surrounding areas. She sees herself as a jack of all trades, filling in gaps in health care, social services and communication. She visits people at home, drawing blood for labs and performing welfare checks; she reads electrocardiograms, coordinates care with doctors and responds to 911 calls.

Marcum emphasizes how important it is to go to her patients’ homes. Sometimes she’s able to speak to their doctors directly. “Patients don’t always know how to navigate the health-care system or what information to provide when they are contacted by their

doctor,” she said. “Home visits allow community paramedics to see the whole picture, identify potential issues, and provide concise and pertinent information to providers for continuity of care.”

Above all, she sees herself as a connector, someone who can move between first responders, patients, providers and community resources and ensure that people are not overlooked or forgotten. “These are people who have worked hard all their life,” Marcum said.

Community paramedicine is adaptable because it has to be: “If you’ve seen one program, you’ve seen one program,” she said, half-joking. Every community has different needs. But the 911 system is not enough — and leaders in semi-urban Clackamas County and rural Umatilla County realized this and decided to do something different.

One thread binds these different programs and their different locations: an unwillingness to leave anybody behind. ☀

Brett Zimmerman is a former firefighter/EMT who now works at Portland Street Response, an alternative 911 response program, in Portland, Oregon.

Jessica Marcum listens to patient Shirley Oliver’s heart during a home visit in Hermiston, Oregon (opposite). Marcum picks up donated walkers from Agape House, a social services organization (below).



CONFETTI WESTERNS

Exploring the queer natural and cultural histories of the American Southwest.



My friend, the San Juan

If rivers can be legal persons, then surely they are queer and disabled.

BY MILES W. GRIFFIS | ILLUSTRATION BY PAUL KIMPLING

THE BATS SWEEP above us as we entered the water. In late spring, the San Juan charged like a desert bighorn ram in the rut. It was strewn with cottonwood seeds: The puffy globs drifted on the khaki surface like a monsoon over a desert escarpment. Dragonflies dipped and blue grosbeaks got in their final *bzzts* before nightfall. “The old age river” (*Sq̓ Bitooh*), as the Diné call it, was alive. But like so many of our rivers today, it was disabled.

My partner and I were on a four-day trip through southern Utah, floating the 27 miles from Sand Island through a deep canyon dome of Martian geology to Mexican Hat, Utah. I stayed with the river that night, talking to the waterway and giving them my gratitude for our safe passage. I listened to their rhythmic voice, absorbing their stories and woes.

Rivers are often at their strongest lifeforce in spring, but it is important to not be tricked. The San Juan may look healthy, but many disabilities have invisible undercurrents: When you float the lower canyon below Mexican Hat, you can feel the river’s terminal sickness as the flow halts, approaching the stagnant Lake Powell. A large tributary of the Colorado, the San Juan is plagued by overconsumption, scorched by climate change and threatened by contamination from mining. Pollution, too — I mistook a blown-out tire for a beaver’s tail on a remote bank on River Mile 11.

As a person disabled by the ongoing pandemic, I often feel a bond with rivers. Despite looking “normal” on the outside, we are made crips by climate change and capitalism. Sunaura Taylor, author of *Disabled Ecologies*, describes modern environmental health as a “mass ecological disablement of the more than human world, a disablement that is utterly entangled with the disablement of human beings.” In his latest book, *Is a River Alive?*, Robert MacFarlane writes that “our fate flows with that of rivers, and always has.”

In recognition of that, there’s been a renewed push to grant rivers personhood — a designation that gives them the right to be represented in court by human guardians. The Klamath was granted this status in 2019 by the Yurok Tribe, while in 2021, communities near Colorado’s Boulder Creek and the Uncompahgre River passed resolutions recognizing their rights to flow naturally and maintain biodiversity. Indigenous peoples have long regarded rivers as interconnected entities, and now many groups are leading

the charge to grant rivers legal personhood, including the Colorado River Indian Tribes who are considering personhood status for the Colorado River. Yet other efforts in the West, like the drive for the Great Salt Lake’s personhood, have failed — for now.

The section of the San Juan we floated went through Utah. In 2024, the Utah Legislature passed a law that prohibits giving personhood to natural entities, even though corporations are granted those same rights via, most recently, the *Citizens United* court ruling. Politicians on both sides of the aisle are threatened by the rights-to-nature movement, trembling at the idea of their corporate donors going up against beloved mountains and rivers in the courtroom.

One afternoon on the trip, in the shade of a riverside cottonwood tree, I shivered at the thought of greedy corporations being people. To combat such a nightmarish concept, I

*As a person disabled by
the ongoing pandemic,
I often feel a bond
with rivers.*

closed my eyes and imagined what the San Juan River might look like as a person, drawing from Studio Ghibli’s river spirits.

At first, I saw buzzed hair and a crown of woven yellow prince’s plume flowers. Top surgery scars gave way to arms made of silty rapids and rattlesnake bends. They held a cane made from netleaf hackberry wood. Their fingers were tattooed with hundreds of gnats. If rivers are persons, then surely they are queer and trans persons. And as most have been harmed by corporate greed and debilitated by climate change, they must be queer disabled people, too.

For one, rivers are canonically not straight. They meander, twist and wiggle as the San Juan does through its plunging Goosenecks. Because of this nonconformity, mankind and capitalism have often tried to channelize rivers, a process literally called “river straightening” that forces them into canals in order to tame them. It leads to habitat loss, erosion and even heightened flood

risk. Put simply, it’s “conversion therapy” for waterways. Keep rivers wiggly!

Some riparian terms that show the health of rivers are also used to describe sexual and gender identities. *Fluidity* can refer to how either — or both — can change over time, how they are never permanent. That fluidity can be erotic and connective: Writer Ewelina Jarosz uses the term “hydrosexuality” to describe water as “a non-binary substance connecting all bodies of water on the planetary scale.” Hydrosexuality blends love, care and attraction with environmental justice. Additionally, many terms about queer people are inspired by water. According to the *Queer Arab Glossary*, “qāyiso-l-mā” is a derogatory Moroccan term for effeminate men that means “one who has been touched by water.” It suggests that queer men are “swaying as if they are liquid.”

The San Juan kept flowing, despite its struggles, carrying us along with it downstream. Our lives were also reaching a confluence. Aaron had proposed to me with a ring he made of grass and a single desert globemallow flower a few weeks before our trip. On the last night on the river, I proposed to him, too: another globemallow bloom that I’d found swaying on our riverbank campsite. He said also yes (*phew!*) and we skinny-dipped in cool waters sown with Russian olive flowers that had fallen in the river from bankside trees.

There, the San Juan rippled and wiggled in celebration with us as we splashed and swayed. We were two men *touched by water* who were committing to each other for the rest of our lives. “In sickness and in health” was a vow we had been preparing for since we fell in love five years ago; I was ill when we started dating. Our relationship had also been forged by the rivers of the Southwest, so it was only natural for our first engagement party to include the living river, our friend the San Juan.

Though they weren’t yet recognized as a legal person, we asked: If a river was given personhood, could it marry you? Come spring, I want the San Juan to slide on their bolo tie and officiate our wedding. After all, aren’t the promises of care that we weave into our vows the same as the ones that we make to protect our rivers? 🌿

Miles W. Griffis is a writer and journalist based in Southern California. He is the co-founder of The Sick Times, a nonprofit news site covering the long COVID crisis.

CALIFORNIA

Sidney Woodruff, an ecology Ph.D. candidate at UC Davis, wants to save the northwestern pond turtle — and other critters, too — from an invasive amphibian, *Lithobates catesbeianus*, or the American bullfrog. It's hard to imagine that Kermit's distant cousin could threaten the delicate ecosystem of Yosemite National Park, but looks are deceiving: These particular frogs, Woodruff told NPR, can grow to "the size of a grapefruit" and "will literally just feed on anything that fits into their mouth," including salamanders, snakes — even small birds, rodents and other frogs. (Talk about having a frog in one's throat!) According to the U.S. Fish and Wildlife Service, biologists have been trying to rid Yosemite of bullfrogs since the 1990s, a challenge for both the biologists and the bullfrogs. Native to Eastern North America, they — the bullfrogs, not the biologists — were brought West in the late 1800s, often for food, and have been a problem ever since. Over the course of several years, Woodruff and her colleagues set about removing the adult bullfrogs by night and their egg masses by day, about 16,000 bullfrogs across two sites. This is good news for Yosemite's northwestern pond turtles, which have made a resurgence, along with other water critters. "As the bullfrog population went down," Woodruff said, "you started to hear some of our native chorus of frogs again. They're the ones that have this iconic Hollywood *ribbit* sound." Or, as NPR put it, "Once the bullfrogs croak, the native frogs can finally croon."

THE WEST

Sometimes a gal just has to get away and spend quality time alone, with her friends. That's what Patricia Petrina set out to



Heard Around the West

Tips about Western oddities are appreciated and often shared in this column. Write heard@hcn.org.

BY TIFFANY MIDGE | ILLUSTRATION BY DANIEL GONZÁLEZ

do, accompanied only by her four horses and a dog named Piglet. She wanted to have plenty of time to enjoy the scenery — about 3,000 miles' worth — all the way from the U.S.-Mexico border up to Canada, KSLTV reports. And the best way to travel and have time to take it all in? The old-fashioned way — on horseback. Petrina, who grew up around horses in northern Idaho, felt called to adventure and wanted to do something big. The trek hasn't always been easy, but she and her companions are taking it one step, or four hooves, at a time: "It's doing the hard things and knowing that you can and pushing through hard stuff." She left Arizona in

early March and expects to reach Montana's Glacier National Park by September, in the process answering Mary Oliver's question: "Tell me, what is it you plan to do with your one wild and precious life?"

WASHINGTON

Bee-lieve it or not: When a commercial truck carrying 14 million honeybees, including 70,000 pounds of hives, rolled over, dumping its precious cargo all over Weidkamp Road in Whatcom County, beekeeping experts and emergency personnel grabbed their gear and rushed to the scene. Matt Klein, deputy director of the

Whatcom County Sheriff's Office of Emergency Management, told KOMO News that he was given a "little beekeeping suit" that turned out to be useful, since he was instantly covered in the insects. Derek Condit, author of *The Natural Beekeeper's Path: Treatment-Free Practices for a Living World*, was one of a dozen beekeepers who responded. They worked on rebuilding the hives for several hours, dispensing smoke to calm the bee-fuddled bees — which were justifiably as mad as, well, hornets — in the hope that they might make a bee-lated beeline back to the hives. But not all are likely to return. "It's a percentage thing, and in this case, no, the bees ... there's going to be massive losses," Condit said. The bees, he noted, would swarm to local areas to start new hives. Though we hope no new cases of hives. ...

WASHINGTON

For 60 years, the "Uncle Sam" billboard along Interstate 5 in Lewis County has been notorious for its controversial right-wing messaging. No longer, however: It was purchased by the Confederated Tribes of the Chehalis Reservation. The price for the 3.5-acre property that hosted the roadside landmark? \$2.5 million. The tribe wasn't thinking about the billboard, though; the property is a good site for economic development, *The Seattle Times* reports. But the contentious political messages are definitely a thing of the past. Jeff Warnke, the Chehalis Tribe's director of government and tribal relations, said the tribe "had a good time thinking of crazy stuff we could put up there." Also some not so-crazy stuff: The property represents tribal LandBack efforts, after all. Why not a message reminding people that it really *is* tribal land? ☀



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#IAM THE WEST

MARY LOU SOSCIA (SHE/HER)

**Columbia River advocate, 38-year employee
of the Environmental Protection Agency
Portland, Oregon**

When I came to work at the EPA, it was still a very new agency, and we weren't really paying much attention to tribes or tribal governments. I was trying to help recognize tribal governments in our work. My first job in the Pacific Northwest was working with the Warm Springs, Umatilla, Yakama and Nez Perce tribes. I worked with farmers, state and tribal governments, industries and citizens who cared about the Columbia River; trying to say: "Here's what you need and here's what you want, and here's what you need and here's what you want, and gosh almighty, some of us want the same thing. So let's figure out how we work together." We built a diverse collaboration for the whole basin. My vision was to build a healthy ecosystem for all who live in it. But I'm worried about the future. With all the severe cuts to federal agencies, lots of really good people have left the EPA. I am concerned that those who replace me won't have the technical knowledge, the scientific basis and the collaboration skills to work with people to solve these really, really complicated problems.

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