

High Country News

For people who care about the West

Losing Lake Coeur d'Alene

A dangerous cocktail
is threatening the gem
of North Idaho

By Emily Benson





A sign near the beach and marina area of Harrison, Idaho, warns of the harmful levels of toxic metals in the soil in and around Coeur d'Alene Lake, where concentrated amounts of lead and other contaminants have settled, a remnant of the Silver Valley mines upstream. JEROME POLLOS

On the cover

Dale Chess, a limnologist for the Coeur d'Alene Tribe's Lake Management Department, retrieves a water sample from the southern end of Coeur d'Alene Lake, near Plummer, Idaho, to test the oxygen levels during a research trip last October. JEROME POLLOS



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Editor's note

Out of sight, out of control



About 55 million years ago, tiny shrew-like mammals began combing the forest canopies in search of food. These were the precursors of primates, fruit foragers whose survival depended on swift movement through the trees, deft hands and acute vision. The vision thing is especially important, because as our ancestors strengthened their ability to see in the dimensions required for canopy life, they developed color vision, a rarity among mammals. This allowed them to perceive what birds and insects had long known: that among the leaves were bright fruits and flowers, wondrous delicacies that could keep them alive.

Eventually, these early frugivores became omnivores and evolved into us. We developed language and culture and intercontinental ballistic missiles, but we never really lost our reliance on vision. Today, humans favor sight well above any other sense, including common. "Seeing is believing," we say, gluing ourselves to a global television industry whose revenue topped \$265 billion last year. We can distinguish 10 million colors, their impact and import hard-wired into our shrewd minds.

Unfortunately, this over-reliance on sight makes us more susceptible to invisible dangers. This issue's cover story is about one such phenomenon. Visually, Coeur d'Alene Lake lives up to its reputation as the gem of Idaho. It is long and deep and lovely, with popular beaches and a tourism industry that relies on the beauty of bald eagles and chinook salmon. What we can't see, Associate Editor Emily Benson writes, is the danger below the surface — a potent concoction of mine-drainage toxins, locked into the bed of the lake by a fluke of chemistry. Under the wrong circumstances, the lake could turn deadly. But the people of Idaho either can't or won't face this danger, at least not yet.

Other stories in this issue warn of hard-to-see hazards, including, it seems, our own government, so fervently dedicated to obfuscation. With the help of diligent Freedom of Information requests, editorial fellow Jessica Kutz has begun investigating an Interior Department program that has operated with little oversight or transparency, as rangers are moved from parks and refuges to patrol the U.S.-Mexico border. And writer Gabriel Furshong reminds us of the power of self-delusion — another vision problem — and asks why Montanans are so enamored of their vigilante origins.

Meanwhile, of course, the greatest danger continues to grow, out of sight and out of control. In May, carbon dioxide in the atmosphere reached 415 parts per million. If we don't act, we'll soon have a planet that hasn't been this warm for hundreds of millions of years — well before those bright-eyed shrews took to the trees and started all this trouble.

—Brian Calvert, editor-in-chief

THE LATEST

Backstory

For nearly two years, Susan Combs has served in an acting capacity as the temporary assistant secretary for Fish and Wildlife and Parks for the Trump administration's Interior Department. In this role, Combs has had oversight of the Endangered Species Act, which she has long opposed. As comptroller of Texas, she consistently fought endangered species protections, favoring oil and gas industries and once comparing newly listed species to "incoming Scud missiles," according to the *Texas Observer*.

Followup

On June 5, nearly two years after she was first appointed to a federal office by President Trump, Combs was confirmed by the U.S. Senate as the Interior Department's assistant secretary for policy, management and budget. Under Trump, Interior has rolled back Endangered Species Act protections and proposed a full revision of the act, which would make it harder for species to be listed and would also weaken protections for critical habitat. **NICK BOWLIN**



Susan Combs, speaking at the 2013 Conservative Political Action Conference.

GAGE SKIDMORE/CC FLICKR



Chuck Hoskin Jr. speaks with young constituents at a campaign event. Hoskin went on to be elected as principal chief. COURTESY OF HOSKIN FOR CHIEF

The Cherokee Nation's next chief will have a big footprint

Cherokee Nation voters elected a new principal chief earlier this month, choosing Chuck Hoskin Jr. to lead the tribe's 370,000 members. The Cherokee Nation, and by extension its chief, has long played an outsized role in Indian Country, interacting with the federal government and working to uphold tribal sovereignty in court. The nation is often seen as the "tip of the legal spear," said Cherokee Nation Attorney General Todd Hembree, referring to the tribe's lawsuit against opioid distributors and its efforts to protect the Indian Child Welfare Act. Hoskin will now become one of the nation's most prominent advocates for Indian Country, carrying on a legacy that began long before the Trail of Tears. **GRAHAM LEE BREWER**
Read more online: hcne.ws/tribal-election

3

Montana's rank among states in per capita rate of death by gun.

1

Its rank in per capita rate of suicides.

In 2003, a Missoula, Montana, resident named Mark Grimes legally sold a handgun that he later learned was subsequently used in a homicide. Three years ago, the city passed a law requiring background checks on most private gun sales and transfers, a move Grimes supports. That law is now before the Montana Supreme Court, and the ruling, expected this summer, will determine whether cities and local governments in Montana will be able to pass firearm regulations. Attorney General Tim Fox is fighting the Missoula law, which he argues violates a state law that prohibits any infringement on the right to bear arms. **GABRIEL FURSHONG**
Read more online: hcne.ws/gun-rights

"We will continue to be a beacon of hope and safety for women in this country."

—State Sen. Catherine Cortez Masto, D-Nev., following Nevada's passage of Nevada Senate Bill 179, known as the Trust Nevada Women Act, which eliminates criminal penalties against women who seek an abortion. The bill was sponsored by State Sen. Yvanna Cancela, D, in response to new restrictions in several states criminalizing abortion. **LIZ WEBER** Read more online: hcne.ws/abortion-access

Sydney Freeland on the set of *Grey's Anatomy*. Freeland says, "One of the things I really love about TV is that because every show has its own tone, visual style and aesthetic style, it forces me as a director to do things I wouldn't normally do."

COURTESY OF SYDNEY FREELAND



Characters on the margins: An interview with Sydney Freeland

"In terms of the projects I'm attracted to, it's definitely if there's an outsider character or a character that comes from a marginalized background. Those are the projects I really like, because myself I'm Native American, I'm transgender, so I'm a minority of a minority. A lot of times in TV shows and movies, Native Americans are either the wise elder or the noble maiden or some sort of caricature or stereotype. And the same thing with trans women; it's certainly changed, but they tended to be more marginalized — caricatures as opposed to characters. So if there's anything in that space that has to do with an outsider character, I really love working in that space. If there's any chance to portray a character with humanity that comes from a marginalized community, I love doing that kind of stuff. ... I wish more people would have the opportunity to watch some of the features I've done, like *Drunktown's Finest*. That was something I wrote and directed,

and going into that film I had a really clear objective — saying, 'I want to tell a story about the reservation, but I don't want it to be tragic. I don't want to have a tragic ending, I don't want to make poverty porn; A: Because it would be too easy; and B: It's already been done. It's literally every documentary by non-Natives on Native Americans.' But at the same time, I didn't want to tell a story where everybody lived happily ever after, because that would also be disingenuous and would gloss over a lot of the issues that are going on back home. So it was sort of like finding this middle ground — this middle ground that wasn't quite tragic, but wasn't quite happily ever after." —Navajo director Sydney Freeland, talking with HCN Associate Editor Tristan Ahtone about how her work celebrates the lives of outsiders and underdogs. Her film credits include the feature film *Drunktown's Finest*, and a recent episode of the Netflix show *Chambers*.
Read more online: hcne.ws/sydney-freeland

Trending

Interior's coal reboot ignores tribes and curtails public input

After ignoring the Northern Cheyenne Tribe's requests for consultation for more than a year, it seems the only place the Trump administration wants to see the tribe is in federal court, where the Northern Cheyenne, environmental groups and state attorneys general recently blocked the administration's effort to lift an Obama-era leasing moratorium. This all comes amid a hasty review of federal plans to jump-start the coal-leasing program. The coal reboot is the latest example of administration policies that have weakened public input and dismissed tribal concerns to promote extractive industries on public lands. **CARL SEGERSTROM**

You say

OLE OLSON: "No amount of political will can 'save' coal. It is time to move on. ..."

THOMAS LEONARD: "The historically appalling Interior Department continues to operate like a feudal lord of the land."

WAINO TUOMINEN: "Isn't keeping a dying industry afloat with tax dollars a form of socialism?"

Read more online: hcne.ws/tribes-ignored and [Facebook.com/highcountrysnews](https://www.facebook.com/highcountrysnews)

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LETTERS

HEARTBREAKING STORY

Crazy, heartbreaking investigation (“None of This Happened the Way You Think it Did,” *HCN*, 6/10/19). “No matter how much meaning their loved one’s body carried, someone else could have viewed it as a product, taken it apart, put it in a box and sold it.”

*Abbey Gingras
Santa Fe, New Mexico*

SIGN ME UP

Fine, fine, fine. I just subscribed to a couple years of the magazine, thanks to this story — largely because I should’ve done it a while ago and just never got around to it.

*Mark Olalde
Washington, D.C.*

LOSING YOUR MISSION

To me, this story has zero contact with *HCN*’s mission. It is simply a local crime story.

*Dennis Olmsted
Montrose, Colorado*

ON GEOTAGGING

Thank you for reminding us that nature is for everyone (“Five reasons to keep geotagging,” *HCN*, 6/10/19). I put lots of hiking and nature photos on my Instagram account and recently have read a bit about whether to geotag or not. This brief piece in the magazine helped me make my decision.

*Hayley Breden
Denver, Colorado*

REAL, OR PARODY?

In the most recent issue of *HCN*, I read a blurb that claimed that an organization called the Melanin Base Camp was accusing the Leave No Trace Center for Outdoor Ethics of racist “gatekeeping” and of perpetuating “purity tests” (“Five reasons to keep geotagging”). As one who began reading *HCN* in 1974 and who has written for both *HCN* and Writers on the Range press service, I wasn’t sure what to make of the blurb. Was it for real, or was it some kind of parody, à la *The Onion*?

*Bill Cook
Helena, Montana*

TRY BEING NICE AS A POLICY

It’s sad reading examples of religion bringing suffering to people’s lives (“The queer Mormon policy reversal is not enough,” *HCN*, 5/27/19). I was relieved



near the end of the commentary to read that the author was no longer a practicing Mormon. Members of a church may think of themselves as devout and moral, but most things about other people are still none of their business. Parishioners would serve themselves and their religion better by just trying to be nice to people.

*Murray Neill
Sequim, Washington*

UNPRETENTIOUS NEW MEXICO

Interesting reaction to “The Atomic Road Trip” (Letters, *HCN*, 5/27/19). Don’t be so defensive. The essay focused on the sanitization of human history and the commercialization of most everything. The “Land of Enchantment” has everything to do with people. I love New Mexico. The best we can do is to be inconspicuous and unpretentious.

*Doug Morris
Sonoita, Arizona*

ROSWELL ARTS AND DRAGONFLIES

I lived in Roswell for 14 years, worked at the Roswell Museum and Art Center, and have a much less skewed view of Roswell than the authors of the article “Atomic Road Trip” (*HCN*, 5/13/19). The arts scene in Roswell is quite substantial, with four museums, active galleries, the New Mexico Military Institute and Bitter Lake Wildlife Refuge, which is known for its dragonfly population and attracts experts from all over. The UFO scene is mostly for tourists and some believers (we actually are in that camp), but does not rule the town. People come from all over for the Robert Goddard collection, the Indian and Western collection, the modern/contemporary art collection, and the Planetarium at the Roswell Museum and Art Center. There is an internationally recognized artist-in-residence program attached to the Roswell Museum and showcased at the Anderson Museum

of Contemporary Art.

*Ellen Moore
Grand Junction, Colorado*

‘FERAL’ HORSES

Thanks for putting “wild” in quotes in the article “Arizona’s Wild Horse Paradox” (*HCN*, 3/18/19). Could you either do that in the title next time, or better yet, refer to the animals as feral, which is what they actually are? Romanticizing them just makes them harder to manage.

*Cait Rottler
El Reno, Oklahoma*

AN IRRESPONSIBLE, EMOTIONAL ACT

In 1971, we became irresponsible and emotional and legislated the National Wild-Free Roaming Horse and Burro Act. Wild horses and wild burros were made into political giants not to be managed carefully on public lands. The program was twofold: Leave horses and burros to graze feely on the public lands, and if the numbers increased severely, take the excess and put them on “welfare” for life; adopt a few out but do not destroy one. Today, we are paying from \$50 million to \$70 million annually out of the national treasury to support the numbers on welfare pastures. But the worst-case scenario is that the ever-growing free-range numbers on the public lands are creating a dustbowl. Their numbers are increasing faster than the removal process can accommodate. Unmanaged heavy grazing creates desertification — there is no turning back on this. We are destroying the public lands. I see a similarity between this and the idea of returning wolves to Colorado. They are wrong ideas to begin with. You want to turn the wolves loose on us — to destroy what living wildlife and ranching livelihoods we have.

*Gus Halandras
Meeker, Colorado*

VISUAL REPORTING HAS ITS PLACE

I so enjoyed being introduced to the Nizhoni Girls’ music and story (“Nizhóni Girls,” *HCN*, 2/4/19). The decision by *HCN* to dive into a medium rarely seen in reporting made me think more deeply about what exactly journalism is, and why some forms might be unfairly thought of as less rigorous, less serious, or less deserving of respect than others. Hoping to see more of this visual storytelling in the issues to come.

*Maggie Mullen
Laramie, Wyoming*

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News



High Country News is a nonprofit 501(c)(3) independent media organization that covers the issues that define the American West. Its mission is to inform and inspire people to act on behalf of the region’s diverse natural and human communities. (ISSN/0191/5657) is published bi-weekly, 22 times a year, by High Country News, 119 Grand Ave., Paonia, CO

81428. Periodicals, postage paid at Paonia, CO, and other post offices. POSTMASTER: Send address changes to High Country News, Box 1090, Paonia, CO 81428. All rights to publication of articles in this issue are reserved. See hcn.org for submission guidelines. Subscriptions to *HCN* are \$37 a year, \$47 for institutions. **800-905-1155 | hcn.org**



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Interior Department border deployments remain mired in secrecy

A 2018 ‘surge’ has left agencies short-handed

BY JESSICA KUTZ

In southern Nevada, where the Mojave meets the Great Basin Desert, two U.S. Fish and Wildlife Service law enforcement officers are responsible for patrolling the entire Desert National Wildlife Refuge complex. Their job comes with a diverse set of responsibilities: enforcing hunting and fishing regulations, stopping park vandalism and rescuing stranded visitors, among other things. At 1.6 million acres, this is the largest wildlife refuge in the country outside of Alaska, home to over 500 plant species and the desert bighorn sheep, Nevada’s state animal. So why are these two officers being sent hundreds of miles away from the refuge on rotating missions to the U.S.-Mexico border?

Their deployment is part of a pilot program launched in May of 2018 under then-Interior Secretary Ryan Zinke, described as a “surge operation” meant to help with border security. “President Trump and I are 100% committed to keeping our border communities and the American people safe and secure,” Zinke said at the time. Twenty-two law enforcement officers were sent to federally managed public lands along the border, including Organ Pipe Cactus National Monument in Arizona and Amistad National Recreation Area in Texas.

So far, the department has been tight-lipped about the program’s details, including the cost of deployments, the work being done and any future plans. At the beginning of this year, *High Country News* filed a Freedom of Information Act (FOIA) request to find out more about its effectiveness. Interior’s move appeared to be part of a pattern of similar deployments of National Guard and military personnel, whose recent efforts to reinforce the U.S.-Mexico border with concertina wire have been much criticized. And while officers have been detailed to the border for specific field missions under previous administrations, there has never been an open-ended rotation of Interior Department personnel, according to public-lands advocates. With national parks already seriously understaffed, the question arises: How does drafting park law enforcement officers to assist with immigration enforcement affect resource and visitor management at home parks and public lands?

The program continues to grow, but

oversight is lacking. On May 15, it was reported by *The Hill* that 47 Interior Department officers were currently assigned to the border — more than double the previous number. This leaves public-lands advocates worried about the effects of their absence on the lands these employees are actually charged with protecting. “The Park Service visitation has gone up significantly over the last decade, but the number of law enforcement rangers is down,” said Jeff Ruch, Pacific Field Office director for Public Employees for Environmental Responsibility, a nonprofit that helps employees hold the federal government accountable. Nor is it clear what need these officers are responding to, unless it’s simply to fill “rhetorical or political gaps,” Ruch said. “We don’t know, because the information isn’t out there, except in a cursory fashion.”

Questions remain after the Interior Department released a heavily redacted 23-page planning document in response to HCN’s request. The document states that law enforcement personnel sent under Zinke’s program are working in coordination with the U.S. Border Patrol, but the details describing how they’re being used have been redacted. It’s unclear whether the thousands of apprehensions listed in the document — something Zinke had touted as a marker of the program’s success — are really due to these employees

or simply a sign of their assistance to other agencies like the Border Patrol, which already has approximately 20,000 officers charged with that mission. Beyond the apprehension numbers — and a table showing that the only drugs confiscated during a three-month period consisted of marijuana — almost everything else in the document is redacted.

A separate FOIA request to the National Park Service shows that between May 2018, when the border surge program started, and mid-February of this year, the agency has had to spend more than \$1.7 million on the deployments. This amount does not include money allocated to send officers from the Bureau of Land Management or U.S. Fish and Wildlife Service to the Borderlands. While it might not seem like a significant amount compared to other federal expenses, it adds to the proposed 14% cut in funding to the Park Service outlined in the 2020 federal budget.

What was initially a 90-day “pilot” program is now expected to continue through at least the end of fiscal year 2019. Still, the Park Service “will not be disclosing any additional information about our officers assisting in the operations,” according to Jeremy Barnum, the agency’s chief spokesperson. Ruch, of Public Employees for Environmental Responsibility, doesn’t deny that help might be needed on the border, but he questions whether “resources are being effectively deployed to address those needs.” □

Editor’s Note: As the program continues, we hope to deepen our reporting and learn more about the impacts to home parks around the West. Please consider sharing a tip through our confidential and secure tip form at hcn.org/doi-tips.

Department of Interior staff from around the country are being deployed to work with U.S. Border Patrol agents at Organ Pipe Cactus National Monument in Arizona. JABIN BOTSFORD/ THE WASHINGTON POST VIA GETTY IMAGES



Where the (water) buffalo roam

Why one rancher is running a different kind of herd in Colorado

BY SARAH TORY

It's a DIY model he hopes other aspiring farmers might follow — one that might make it easier for a place like the Roaring Fork Valley, with its emphasis on local food, to actually support the farmers and ranchers who produce it.

If more ranchers knew about water buffalo, they would forget about cows,” José Miranda, a Carbondale, Colorado, rancher, told me one morning last January over breakfast. He listed their advantages: The milk tastes great and it’s healthier, with less cholesterol, 11% more protein, 9% more calcium and 37% more iron than cow’s milk. Water buffalo have environmental benefits, too; they’re able to thrive on more marginal pastures and less resource-intensive foods than dairy cows.

We’d been sitting around Miranda’s kitchen table with his partner, Erin Cuseo, who runs her own small vegetable farm, and his friend and apprentice, Wyatt Dallenbach, getting ready to visit the herd of 18 water buffalo he keeps on a rented plot of land just west of town. Then we climbed into his old green Land Rover, accompanied by his daughter, Paz, and drove through the snow-blanketed streets toward the mountains.

Originally from the swamplands of Southeast Asia, water buffalo have been imported to many parts of world, most famously Italy, where they are coveted for

their milk, source of the soft and creamy cheese *mozzarella di bufala*. Water buffalo herds are now found in the Americas from the high Andes to the dry prairies of central Canada. Still, Miranda has encountered plenty of skeptics. How, they ask, does an animal from the tropics survive winters — especially a hard winter like the last one — at over 6,000 feet in Colorado’s Roaring Fork Valley?

Miranda, who came from a hot climate himself, merely replies, “It’s harder for them, just like it is for many people and other farm animals.”

In any case, he has always been drawn to difficult things.

Miranda, who has an unruly black beard, intense green eyes and a missing front tooth, was born and raised in Venezuela’s *los llanos*, the central flatlands, where his family owned a water buffalo ranch. “Cows were foreign to me,” he said.

Cows didn’t thrive in Venezuela’s native grasslands, so for decades, cattle ranchers planted non-native grasses at great cost. When water buffalo were introduced in 1976 — the year Miranda was born — Venezuela’s ranchers started realizing that they didn’t have to remove native grasses anymore. It’s ironic, he

admits, that a foreign animal could help preserve the natural landscape.

At 22, Miranda left to study animal and range science at Montana State University. He never planned on staying in the U.S.; he hoped to take over the family ranch back in Venezuela. But when his father sold it, Miranda decided to go home anyway and start his own herd from scratch. He brought his then-wife (the two are now divorced) and two small children and bought 500 acres and 20 buffalo.

Meanwhile, Venezuela was descending into political and economic turmoil under the Hugo Chávez regime. For a few years, Miranda believed that he could avoid it out there on his ranch, but the turmoil found him. One day, in 2013, a group of armed men arrived at the ranch and robbed his family at gunpoint. They forced Miranda to the floor, tied him up, and filled a pickup with his tools, saddles — even the kids’ bicycles.

A day later, his wife and kids were on a plane to the U.S. Miranda followed soon after, walking away from everything he had built. They moved to Carbondale, where Miranda’s wife was from, and Miranda got a job as a ranch manager at the Tybar Cattle Ranch.

Despite having no animals, no land and a young family to support, Miranda was not ready to give up on his dream. In 2014, Colorado delisted the water buffalo as an exotic species, and Miranda decided to begin building a herd. A hobby farmer from Fort Collins named Richard Wheeler spearheaded the delisting, after he pointed out that Asian water buffalo and African water buffalo had been incorrectly categorized as the same species. Asian water buffalo have been domesticated for longer than cattle, he argued, and by keeping them listed as “exotic,” the state was hindering dairy commerce.

The following year, Miranda bought his first two water buffalo calves from a Texas breeder. The next year, he bought a couple more. But buying his own property was too expensive, so he began leasing plots of land around Carbondale and transformed an old trailer into a portable dairy barn, painted light blue and emblazoned with the words “mobile milking trailer.” It’s a DIY model he hopes other aspiring farmers might follow — one that might make it easier for a place like the Roaring Fork Valley, with its emphasis on local food, to actually support the farmers and ranchers who produce it.

At the pasture, two water buffalo calves were suckling a pregnant heifer named Missouri that Miranda bought



The youngest calf in José Miranda’s herd nurses in a small brush opening that her mother stamped out before giving birth.

LUNA ANNA ARCHY/HIGH COUNTRY NEWS



from the Texas breeder. The breeder artificially inseminated her with sperm he imported from Italy — the only country that meets USDA approval for imported water buffalo semen. With Missouri pregnant, Miranda had trained her to adopt the new calves as her own.

On the other side of the pasture, another animal stuck his nose in the pee stream of a fellow buffalo. “They like to bathe in each other’s pee,” 13-year-old Paz said, by way of explanation.

Miranda — who treats the buffalo more like beloved pets than livestock — had a different take on it. “They all have distinct personalities,” he said.

With the lack of an established water buffalo industry in the U.S., finding reliable animals has remained a challenge. So is capital: Miranda needed money to keep growing his herd. He tried to apply for a zero interest loan from 2 Forks Club, a local nonprofit that supports local farmers and food entrepreneurs, but wasn’t accepted. “In Venezuela, we say (you need to be) *encamburado*,” Miranda told me. “I came here as a foreigner, so I’m not part of the club,” he explained, meaning the local ranching community whose roots in the valley go back generations. He ended up getting a regular loan from the bank.

Access to land is another challenge. Across the West — and especially in the Roaring Fork Valley — rising property values mean the cost of a mortgage far surpasses what a farmer or rancher can produce from agriculture. At one point, Miranda looked into buying a house on 40 acres — just enough to use as a winter base camp for the buffalo — but the cheapest

place he could find was \$700,000. Farther up the valley, closer to Carbondale, it was at least \$1.5 million.

In the past few decades, many of the older ranchers and farmers have sold their property to developers or to land trusts as conservation easements. The easements protect the farmland from becoming subdivisions, but don’t ensure that it stays in production. Miranda would like to see a program in which more county-owned land is made available to farmers at low cost so they can provide some of the food they grow to food banks and low-income communities.

In the meantime, Miranda has been innovating his way around the challenges he faces. By renting land and building his mobile dairy, he can keep his costs low, buying time to grow his herd and make connections with future buyers. Chefs and foodies consider buffalo mozzarella a premium product, worth much more than regular mozzarella. One restaurateur from nearby Aspen invited Miranda to taste the mozzarella he made from buffalo milk imported all the way from Italy. The cheese regularly sells for \$30 a pound in the U.S. and Miranda realized that his only competitors were the Italians; he could offer the same product locally and more cheaply.

Still, even Wheeler, the man who got water buffalo off Colorado’s exotic species list, remains skeptical of the animal’s ranching potential. “It’s a niche market,” he told me. “Maybe some local cheese stores would be interested, but it’s mostly a novelty.”

Miranda has learned to ignore the skepticism. After all, he does not give up easily.

On a recent blustery day in May, I went with Miranda and his partner, Cuseo, to visit the herd at their summer pasture, east of Carbondale in Old Snowmass, in a green valley at the base of the Elk Mountains. It was a season of changes. Two weeks before, Cuseo had given birth to a baby boy — their first child together — while in February, a female named Orinoco gave birth to Miranda’s first calf, Caicara — both named after places in Venezuela. Meanwhile, in Miranda’s home country, a violent attempted coup against the regime of Nicolás Maduro was underway. Miranda’s parents and 94-year-old grandmother still live there, despite his pleas for them to leave.

Miranda no longer contemplates returning permanently to Venezuela. Most of his fellow ranchers have moved their herds to neighboring Colombia anyway, while here in the mountains of Colorado, Miranda is finally rebuilding what he lost when he left his native country. With another of his heifers pregnant and nine calves expected for next year, Miranda is confident that in a few years, he’ll have enough milk-producing buffalo to begin making cheese commercially.

Right now though, Miranda is just looking forward to a simple joy: summer naps with his buffalo.

“Oh, *mi preciosa*,” he coos, gently nudging one of the buffalo to lie down with him in the scratchy grass. Miranda rubs her belly, savoring the animal’s slightly sour smell and recalling how, until he arrived in Colorado, he didn’t realize that what he thought was the smell of his homeland had been the smell of the water buffalo all along. □

José Miranda, joined by his mother, stepson, and his partner, Erin Cuseo, holds his and Cuseo’s newborn son, Wekta. The water buffalo are extremely affectionate toward him and his family.

LUNA ANNA ARCHIEY/
HIGH COUNTRY NEWS

Since 2014, 9 million acres of sagebrush have been permanently lost to wildfires like the Artesian Fire in 2018.

AUSTIN CATLIN/BLM



The West's worst fires aren't burning in forests

Range fires are getting bigger every year, threatening sagebrush habitat and rural communities

BY NICK BOWLIN

Between the town of Elko, Nevada, and the Idaho border stretches some of the most remote land in the Lower 48, rolling hills and arid basins as far as the eye can see. Last July, this section of the Owyhee Desert was scorched by a fierce, fast-moving blaze with 40-foot flames, the largest wildfire in state history. In the end, the Martin Fire burned 435,000 acres, including some of the West's finest sagebrush habitat. Now, the raw range wind whips up the bare earth into enormous black clouds that roil on the horizon.

Once rare, fires that large, hot and destructive are now common in the Great Basin, a 200,000-square-mile region of mountains and valleys that includes all of Nevada and much of Utah, as well as parts of California, Idaho and Oregon. But despite the rising fire risk, a general lack of attention is putting the rangeland in growing danger.

The fire problem "risks permanent loss" of the ecosystem, according to Jolie Pollet, a fire ecologist and the Bureau of Land Management's division chief for fire planning and fuels management. This is a genuine crisis, she said, and it demands greater urgency and attention than it is currently getting.

"The general public, especially urban areas, doesn't seem to have an appreciation for the impacts on these landscapes, since the areas are so sparsely populated," she said.

The new ferocity of rangeland fires has an old culprit: cheatgrass, an annual originally from Eurasia that was brought to this country in the late 1800s in cattle

feed, packing material and ships' ballast. It has since proliferated through overgrazing and development. The grass burns easily and often, and it thrives on fire. In intense blazes, when native shrubs perish, cheatgrass simply drops its seeds and then expands into the burned areas. The areas of greatest fire risk in the Great Basin have a high correlation with the areas of highest cheatgrass incursion, and the increasingly dry and arid climate brought by climate change is encouraging its spread. The Great Basin now has the nation's highest wildfire risk.

Historically, sagebrush habitat burned about once every century or less, but now it happens around every five to 10 years. Over the past two decades, more than 15 million acres of sagebrush have been permanently lost to fire, according to the BLM, 9 million of them since 2014. Overall, since 2000, more acres of shrubland or grassland have burned than forest.

If sagebrush decline continues, the approximately 350 species that depend on it are in serious trouble. The Martin Fire burned some of the best sage grouse habitat in the country and destroyed more than 35 grouse mating grounds, or leks. The fires also harm watersheds, cause erosion and destroy wildlife corridors used by pronghorn antelope, mule deer and elk.

The impact on rural Americans is equally severe. Counties and ranchers must deal with infrastructure loss, including troughs, fencing, and damage to roads and power lines. Many ranchers struggle with the additional costs, said Ron Cerri, a rancher and commissioner in agriculture-dependent Humboldt County, where the Martin Fire burned. Ranchers may lose hayfields in a blaze, for example, and six months of hay for 500 cattle costs about

\$216,000, according to Cerri. Cattle often die in the flames, and ranchers have to put down animals crippled by the smoke. Jon Griggs, a Nevada rancher whose land burned in 2007, called it the worst part of the job.

Because sagebrush ecosystems are neglected, they get less funding, making the fire threat even worse. Indeed, the BLM receives even less money than the already-underfunded Forest Service. For 2019, the Forest Service got about \$400 million in annual funding for fuel management, and about \$1.3 billion for firefighting preparedness. The BLM received \$85 million and \$180 million respectively, even though it manages about 50 million more acres of public land. The BLM also received \$11 million for fire recovery, a microscopic amount given the scale of the problem.

When the BLM runs out of firefighting money, it's forced to raid other programs, as the blazes quickly burn through agency budgets.

"The agencies run out of money and all the other programs get gutted," said University of Montana wildlife biology professor Dave Naugle. "In the long term, it really hurts conservation."

Last year, Congress passed a measure that allows the BLM to access emergency fire funds without draining other initiatives. But the provision doesn't kick in until next year, and even when it does, the BLM will remain seriously underfunded for firefighting, prevention and restoration.

Meanwhile, wildfires are already burning across the West, and the cheatgrass is beginning to dry up, turning from its spring purple to the yellowish hue that signals its readiness to burn.

Pollet put it succinctly: "I'm scared for 2019." □

Nick Bowlin is an editorial intern at *High Country News*. [@npbowlin](#)

Fires are indiscriminate. Recovery isn't.

A comparison of two California wildfires shows deep disparities

BY SARA VINER

On the afternoon of Sept. 12, 2015, the Valley Fire erupted near the outskirts of Cobb, California, an unincorporated community in Lake County. The fire grew so rapidly that it trapped the first responders from CalFire's Helitack Crew 104. Four firefighters were badly injured and were rescued by CalFire Division Chief Jim Wright, who drove through the smoke in his pickup and was able to transport the firefighters to a waiting helicopter. With their resources already depleted, fire crews were unable to stop the uncontrolled Valley Fire — sparked by a poorly installed hot tub wire — as it charged toward populated communities.

Two years later, a private electrical system ignited a cluster of fires — part of the North Bay Complex Fires. The flames spread through Lake County's neighbor, Sonoma County, where more than 400 vineyards and the grapes of some of the world's favorite wines sprawl across almost 60,000 acres. Survivors of the fast-moving fire were confronted by a towering wall of flames, and evacuation notices were received far too late.

The 2015 Valley Fire and the 2017 North Bay fires occurred in adjacent counties, but the recovery of the communities has been very different. According to a 2018 study published in *PLOS One*, the

socioeconomics of a community and its ability — or inability — to recover following a disaster are linked.

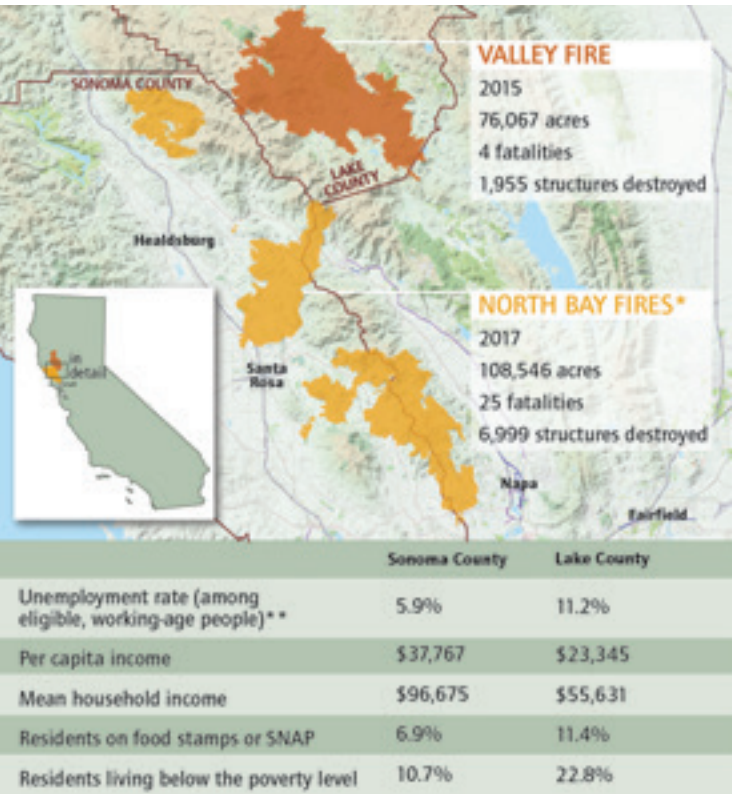
Overwhelming insurance company requirements, gaps in financial support and lack of local political power make rebuilding a far more arduous process for poorer counties, such as Lake County, than wealthy ones like Sonoma County. As a result, recovery takes longer for less affluent communities.

Proper insurance coverage prior to the fire made a big difference in each of the counties. Surveys conducted by United Policyholders, a nonprofit research organization that advocates for insurance policyholders, showed that approximately 14% of residents surveyed in Lake County were uninsured as opposed to fewer than 1% of those surveyed in Sonoma County. In Lake County, about 20% of residents surveyed said their insurance companies had dropped them.

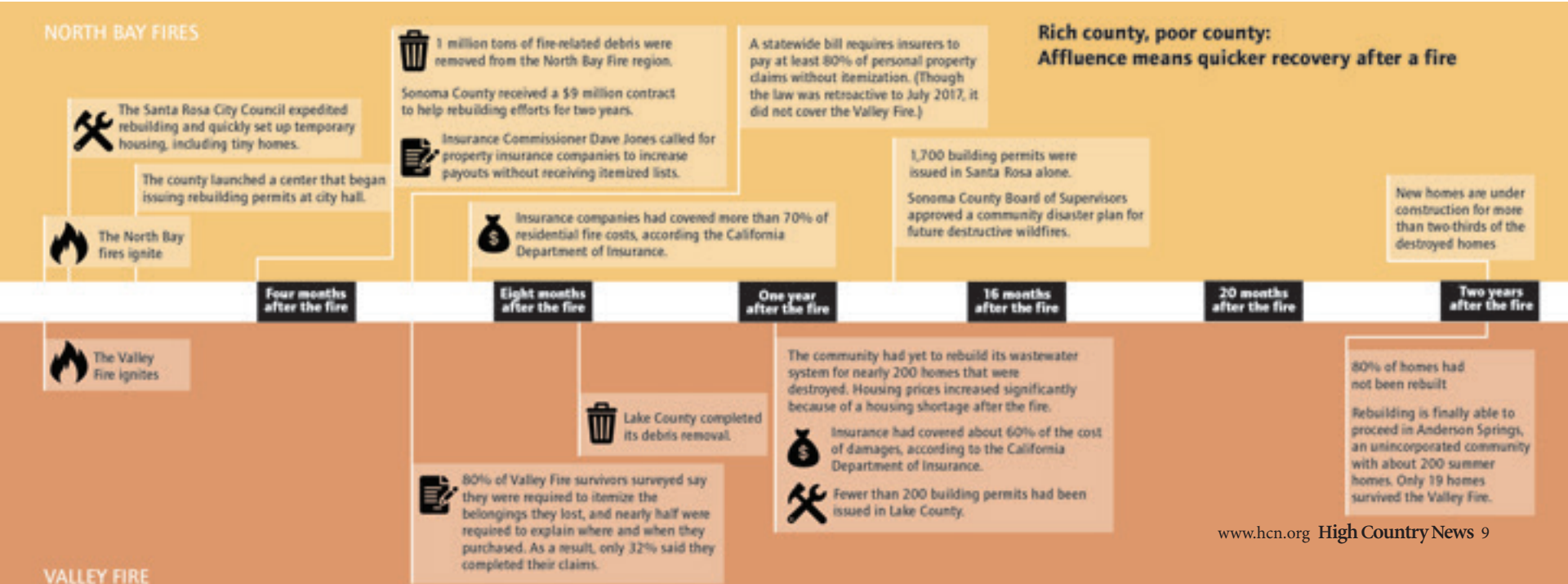
Not only were Lake County residents underinsured overall, they were also more likely to face burdensome requirements by their insurance companies after the fire swept through their community. United Policyholders revealed that survivors in Lake County were required to individually itemize their valuables in order to recoup lost costs. Survey respondents described the undertaking as “daunting” and a seemingly hopeless task.

For Sonoma County, however, Dave Jones, California's insurance commissioner, worked alongside policyholders to put tremendous pressure on insurance companies to waive consumers' requirement to

itemize lost belongings by publicly listing the companies that gave better (and worse) payouts without itemized lists. Many insurance companies responded to this pressure. State Sen. Mike McGuire followed up on this by creating a bill that would wave inventory requirements during a governor-declared state of emergency, which was passed unanimously. “The less affluent the community, the less powerful the community, the less concessions the insurers make,” said Amy Bach, executive director of United Policyholders. “The insurers will just put up obstacles and you'll see slower recovery.” □



*Includes only the fires impacting Sonoma County: The Central LNU complex, which included the Pocket, Tubbs and Nuns fires.
**Census defines the civilian labor force as people who are civilians (not members of the Armed Services), 16 years or older, and are not in institutions.



Blowing the whistle on Fish and Wildlife

How an Arizona field supervisor finally got fed up

BY TONY DAVIS

Steve Spangle, a career employee of the U.S. Fish and Wildlife Service, was an unlikely whistleblower. During his 15 years' supervising Arizona's ecological services office, which is responsible for protecting the region's endangered wildlife, migratory birds and habitats, Spangle frequently opposed environmentalists. In 2016, he signed off on a key biological clearance for the Rosemont Mine, a giant open-pit copper project that will disturb more than 5,000 acres of lush Madrean woodlands of oak and mesquite near Tucson.

For more than a decade, developers and agencies have battled over building the 28,000-home Villages at Vigneto subdivision. Pumping for Vigneto could choke off the aquifer that nourishes miles of ciénega and cottonwood-willow forests along the San Pedro River, an important destination for migratory birds. The development would also clear more than 12,000 acres of desert. In 2016, Spangle required the U.S. Army Corps of Engineers to do a full environmental review of the project.

But in 2017, Spangle dropped that requirement. That meant the Army Corps could re-issue its federal permit, clearing the way for the developer to start building. The Corps has since suspended its permit, which authorized filling in desert washes, after multiple groups — including the Lower San Pedro Watershed Alliance, Sierra Club and Center for Biological

Diversity — sued. But Spangle's policy reversal stands, meaning the developer still won't have to study environmental impacts on most of the land.

In late March, Spangle told the Arizona Daily Star that he acted under pressure from superiors at the Interior Department, then led by Ryan Zinke, and that this case led him to retire early. (The department denies pressuring Spangle.)

Spangle recently spoke with High Country News. This interview has been edited for length and clarity.

High Country News: When you reversed your decision on the Vigneto development, was it hard for you to write a decision that you didn't believe in?

Steve Spangle: I knew that this was the (Trump) administration's position, and, since I worked for the administration, I had a job to do. I was also pretty certain that the correct interpretation would float to the top during any litigation, so I didn't lose any sleep over the decision.

HCN: Why did you blow the whistle?

SS: It was the political aspect — that I strongly suspected had happened and has now been confirmed — that somebody had done an end run around my office and sought influence above me to change my position. That was different than anything that had happened to me before. I felt the public should know that some shenanigans had taken place. It didn't seem like the right way to do business.

HCN: Who requested the reversal of your original decision? How did you learn of the request?

SS: A friend in the Interior Solicitor's Office called me to say that she was told by an Interior Department political appointee that it would be in my best interest politically to reverse my decision. The way she phrased it, it was clear that she wanted to keep that person anonymous. So I didn't even ask (who it was). I'm also not going to disclose who called me, because she's a friend.

HCN: What makes this case different from other permits, such as for the Rosemont Copper Mine, over which you went toe-to-toe with environmental groups?

SS: What really, at its core, bothered me the most this time was that decisions were being made with political influence. I'm not saying there weren't political decisions being made before, but they never affected me. I was never told to make a decision different than what I thought was the right decision until now.

Our job (at Fish and Wildlife) is to assist federal agencies in implementing their programs, while at the same time minimizing the effects on listed species. That often requires a detailed consultation about those impacts under the Endangered Species Act. In this case, Interior and the Corps were trying to avoid that review.

HCN: The developer and the Army Corps say that a detailed analysis of indirect environmental impacts to the San Pedro River isn't needed. What's wrong with that rationale?

SS: I don't think that is the correct position. It's the only north-south migratory corridor of any significance between the Rio Grande and the Colorado River.

HCN: What does Interior's handling of this case say about the Trump administration's view of environmental issues?

SS: What happened to me is a symptom of a much bigger problem with the administration's environmental policy. Trump's appointments to run natural resource agencies such as Interior and EPA have really been examples of putting the fox in charge of the henhouse. It shows the pro-industry side of the equation is dominant right now in Washington, D.C.

HCN: What do you hope will come from your decision to speak out?

SS: I hope that the 2017 decision will be reversed and that my original decision will be restored. □

(Editor's note: Both the Arizona Republic and the Arizona Daily Star have reported that Mike Ingram, the CEO of development company El Dorado Holdings Inc., called then-Deputy Interior Secretary David Bernhardt in 2017 to argue against Spangle's earlier decision.)

A longtime High Country News contributor, Tony Davis is currently the Arizona Daily Star's environment reporter. [@tonydavis987](https://twitter.com/tonydavis987)



Steve Spangle.
COURTESY OF STEVE SPANGLE

Green kingfishers rely on the San Pedro River for habitat, which new development could threaten. RHETT HERRING



'Forever chemicals'

Western states lag behind on regulating PFAS pollution

BY PAIGE BLANKENBUEHLER

Polyfluoroalkyl chemicals exist in furniture, waterproof makeup and clothing, nonstick cookware, popcorn bags, the foam used to extinguish petroleum fires (which is different from the slurry used across the West to fight wildfires), and countless other items. Known collectively as PFAS, this class of chemicals contains more than 5,000 different compounds that are often called "forever chemicals" because they take so long to break down in the environment. PFAS chemicals are an omnipresent, if largely invisible, part of daily life.

Yet numerous studies have linked exposure to them to cancer, thyroid disease, weakened childhood immunity and other health problems, according to the Centers for Disease Control and Prevention. A 2007 study published in the journal *Environmental Health Perspectives* estimated that PFAS are in the blood of 98% of Americans.

Because the Environmental Protection Agency does not regulate PFAS chemicals, states are left not only to research and track them, but also to develop regulations to clean up already dangerous levels of pollution. And, according to recent data from the Social Science Environmental Health Research Institute at Northeastern University and the Environmental Working Group, the West isn't doing a great job.

Bill Walker of the Environmental Working Group, a nonprofit environmental advocacy organization, says that, by and large, Western states are lagging far behind, not only in PFAS regulations, but also in monitoring. "The scope of this problem is growing — not because our exposure to PFAS chemicals is growing, but because we're finally becoming aware of the persistence of these compounds in our lives," said Walker. "Because there is so little action from the EPA on this, addressing this crisis falls to the states."

People can be exposed to PFAS chemicals through household cooking items, or simply by eating popcorn out of the bag after microwaving it. But the greatest source of concern involves military bases, fire departments and airports, where the chemicals are used for extinguishing petroleum fires. That leaves high levels of PFAS chemicals in close proximity to public drinking-water sources. According to recent data compiled by EWG and the Social Science Environmental Health Research Institute at Northeastern University, 610 areas in 43 states have confirmed PFAS contamination. The researchers estimate that the drinking water of approximately 19 million people is tainted.

In the West, PFAS contamination has been confirmed in water supplies in Alaska, Arizona, California, Colorado, Idaho, New Mexico, Oregon, Utah, Washington and Wyoming. But only Colorado, California, Oregon and Washington regulate the chemicals, and among those, only California requires that public water systems monitor their levels.

Most Western states are already facing the consequences of contamination: Municipal water managers are scrambling to address high PFAS levels in drinking water, even as communities experience health impacts, such as higher rates of kidney and testicular cancers. Still, very few have passed laws that track or regulate dangerous PFAS levels. "Northeastern states are ahead of most other states in monitoring and tracking this contamination," said Phil Brown, the project director of Northeastern University's PFAS monitoring project. "But in reality, if you look for it, you'll find it most everywhere."

Industry representatives say that while they support more oversight, a "one-size-fits-all" regulation for the class of chemicals goes too far. On May 22, the Senate Committee on Environment and Public Works held a hearing to discuss appropriate legislation for addressing PFAS contamination. PFAS "play a central role in

American life and not all are dangerous to public health," said Kimberly Wise White, a toxicologist for the American Chemistry Council, an industry trade group that advocates for manufacturers of PFAS chemicals. "All PFAS are different; they have different hazard profiles. Some are not water-soluble, for example. It is not scientifically appropriate to regulate as one class."

Advocates for stronger regulations, however, say that the EPA isn't doing nearly enough to monitor the problem. And many disagree with White's suggestion that the chemicals should be regulated on an individual basis, which would allow manufacturers to continue to make money from potentially dangerous chemicals. "The EPA's current guidelines do not include a commitment to set a drinking water standard, even for a subset of PFAS chemicals that even manufacturers agree are dangerous," said Suzanne Novak, an attorney for Earthjustice, an environmental advocacy organization.

Meanwhile, ever more Western communities are discovering troubling levels of PFAS in their water. Last month, the water district for the town of Security, Colorado, and the local Pikes Peak Community Foundation filed a \$17 million lawsuit against the U.S. Department of Defense for PFAS contamination from Peterson Air Force Base, near Colorado Springs, Colorado. Shortly after that, the Centers for Disease Control identified the area as part of an upcoming study on the impacts of long-term exposure to high levels of PFAS in drinking water, with research due to begin this fall. New Mexico's attorney general, too, has sued the U.S. Air Force after confirming PFAS contamination at Lake Holloman, on the westernmost edge of White Sands National Monument.

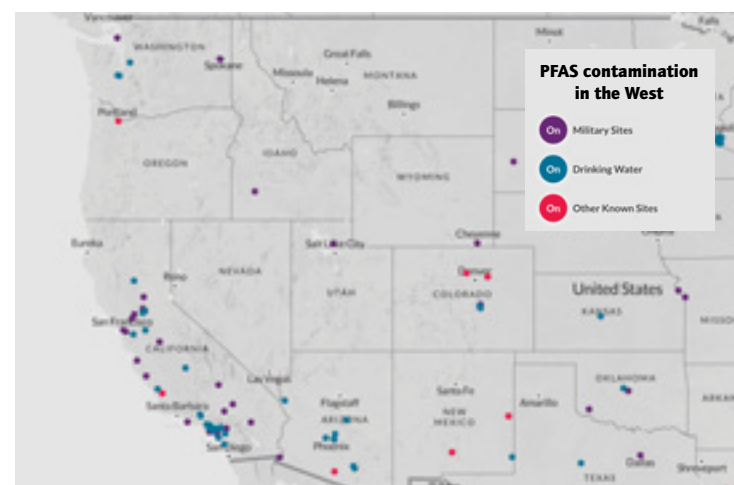
"PFAS chemicals are one of the most complex groups of pollutants out there," said Chris Higgins, a professor at the Colorado School of Mines, who is researching the effects of exposure in El Paso County. "Once they are in the groundwater, it's really hard to stop the spread, and treating them is even more difficult." □

The U.S. Air Force was sued after PFAS contamination was confirmed at Lake Holloman, near Holloman Air Force Base in New Mexico.

J.M. EDDINS JR./U.S. AIR FORCE

Researchers estimate that the drinking water of approximately 19 million people in the United States contains PFAS contamination.

INFOGRAPHIC BY THE SOCIAL SCIENCE ENVIRONMENTAL HEALTH INSTITUTE AND THE ENVIRONMENTAL WORKING GROUP SOURCE: THE ENVIRONMENTAL PROTECTION AGENCY



Paige Blankenbuehler is an assistant editor for *High Country News*. [@paigeblank](#)

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A storm closes in on the plains of San Agustin.

BART SMITH

THE CONTINENTAL DIVIDE TRAIL: EXPLORING AMERICA'S RIDGELINE TRAIL

By Barney Scout Mann
288 pages, hardcover: \$50.
Rizzoli New York, 2018.

The Appalachian Trail and the Pacific Crest Trail have both become famous in books and film, achieving notoriety as two classic ways to experience the United States on foot. But there is another and less-frequented third path that runs down the spine of the nation and across five states, and, according to Barney Scott Mann, there are many reasons to hike it. In *The Continental Divide Trail: Exploring America's Ridgeline Trail*, Mann writes about this less well-known option, a 3,100-mile journey from Mexico to Canada. The book chronicles the first steps of the trailblazers (literally) who envisioned the CDT's creation and describes the various organizations that have since kept it accessible to the heartiest of hiking enthusiasts. These pages are an ode to the trail's beauty and travails, its glorious vistas and its history. **JESSICA KUTZ**

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Jack Sawaske | Carpinteria, CA
Eric Schabtach | Eugene, OR
Rick Schneider & Diana Pilson | Lincoln, NE
Bebe & David Schweppe, Aspen Community Foundation | Ocala, FL
Phillip Scott | Seattle, WA
Randy S. Selig | Corvallis, OR

Wayne Shanks | Boulder, CO
Sarah Sisk | Lamy, NM
Jerry Smith | San Jose, CA
James Sorenson | Las Cruces, NM
David Suehsdorf | Eden, UT
Gerald Terwilliger & Anna Naeser | Basalt, CO
Richard Thelin | Santa Fe, NM
William & Betty Walters | Salida, CO
Stan Usinowicz | Lake Havasu City, AZ
Lila Vogt | Anchorage, AK
Clifford & Liana Wallman | Midway, UT
Lynn Waltke | Tucson, AZ
Cathy & Norm Weeden | Bozeman, MT
Julia West | Sandy, UT
John Whitmer | Bellingham, WA
Keith & Dolores Willett | Stillwater, OK
Park Willis | Salt Lake City, UT
William Wilson | Boise, ID
Leslie Wood & Edward Spauling | La Grande, OR
Tim Worley | Claremont, CA
Lynn Yamaoka | Torrance, CA

FRIEND

Anonymous (3)
In honor of Bill Michaels | Olema, CA
In memory of Lawrence Booco | Arvada, CO
In memory of Peter Eastman | Denver, CO
Bonnie Adamson | Fort Collins, CO
Suzanne Anderson | Seattle, WA
Kirk L. Askerschott | Denver, CO
Henry L. Atkins | Houston, TX
Eric Baack | Decorah, IA
Allison Banfield | Bozeman, MT
David Barclay | Marion, MT
John F. Unwin Jr. | Bozeman, MT
Rainer M. Wachalovsky | Petaluma, CA
Anne Wenzel & David Miller | Palisade, CO
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Domenick White | Rochester, NY
Nadia White | Missoula, MT
Mack & Loyes Wilkinson | Beaverton, OR
Deborah Wood | White Rock, NM
James C. Woods | Littleton, CO
Steven J. Wright | Seattle, WA

Board meetings and broken beds

Gunnison, Colorado, on a day in early June. A scream shatters the peaceful morning: **Jessica Kutz**, editorial fellow, has awakened to a spider climbing up her leg, uninvited. Later that day, when intern **Nick Bowlin** sits down on his bed, the frame collapses underneath him. Our intrepid journalists use brick and hardcover books to prop the bed back up, just before editorial fellow **Elena Saavedra Buckley** trips, forcefully kicking a full mug of coffee under the couch. The three hope the terrors have finally ended, but alas — at 11:30 p.m. that night, the basement toilet begins to overflow.

Is the lovely new *High Country News* intern house cursed? The flooding has subsided and the bed appears to be structurally sound, but we will keep you updated.

Fortunately, Editor-in-Chief **Brian Calvert's** house was still standing when he returned from a well-earned two-week backpacking vacation in Utah canyon country. He jumped back into work by attending *HCN's* board meeting in Bozeman, Montana, with Digital Editor **Gretchen King** and Associate Editor **Emily Benson**.

Our staff has dispatched to many other destinations. Assistant Editor **Paige Blankenbuehler** recently unplugged from email and social media for a writing retreat in the Green Mountains of Vermont at the Bread Loaf Environmental Writers Conference. There, she walked about with her notebook, attempting to be thoughtful, even though the persistent rain blurred the pen strokes on her pages. She workshopped a reported essay on attachment to place, landscape and culture and the question of why, for some, a

sense of “home” only comes from ownership.

Our associate photo editor, **Luna Anna Archey**, attended a photography conference in Denver called The Image Deconstructed. She met photographers she knew through *HCN*, as well as many potential collaborators. And Executive Director **Paul Larmer** and Assistant Editor **Anna V. Smith** held a roundtable in Portland, Oregon, to meet with readers, listen to story ideas and discuss all things *HCN*.

Anna also had a recent visitor: Former editorial fellow **Lyndsey Gilpin**, who now runs *Southerly*, a magazine on the American South, came to Portland. They hiked in the Columbia River Gorge and reminisced about their time in Paonia, Colorado, as interns.

Meanwhile, our Major Gift Advisor **Alyssa Pinkerton** truly embodied her job title — by giving a kidney to one of her friends. Ever-generous Alyssa hopes her story can help inspire others to do the same through the National Kidney Registry. Visit www.kidneyregistry.org if you're interested.

By the time you read this piece, the author will have finished her time with *HCN*. She will spend some time at home in Albuquerque, New Mexico, and then head up to Alberta, Canada, for a month-long writing residency. She will miss *HCN's* readers, who display a level of attentiveness and loyalty no other magazine is likely to match. Thank you!

And a final note: Our summer issue break means your next *High Country News* will arrive around July 22. Happy summer!

— *Elena Saavedra Buckley, for the staff*



Lyndsey Gilpin and Anna V. Smith at the top of Angels Rest in the Columbia River Gorge, Oregon.

COURTESY OF ANNA V. SMITH



A duck swims alongside a dock near Plummer, Idaho, at the far southern end of Coeur d'Alene Lake, adjacent to the mouth of the St. Joe River.

Losing Lake Coeur d'Alene

*A dangerous cocktail is threatening
the gem of North Idaho*

Early this spring, a migrating flock of tundra swans flew toward a long and narrow body of water in North Idaho marked on today's maps as Coeur d'Alene Lake, seeking a stopover on their way north.

From a few thousand feet, the birds would have seen the expanse of the lake, surrounded by forested hills and shaped roughly like a human arm. Near the elbow, they would have flown over the political boundary marking the edge of the Coeur d'Alene Tribe's reservation, which encompasses the southern third of the lake. To the north, the swans, thousands of them, would have glimpsed the high-rises of the resort town of Coeur d'Alene at the lake's edge, and the lake's outlet, the Spokane River, winding west. They would have passed sandy beaches and rocky peninsulas dotted with marinas, parks, homes and resorts, and the Coeur d'Alene River, which meets the lake at Harrison Slough. It is an appealing place to alight — and a lethally toxic wetland.

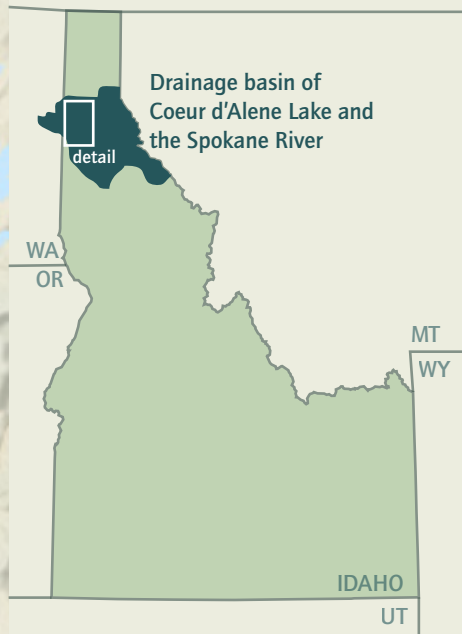
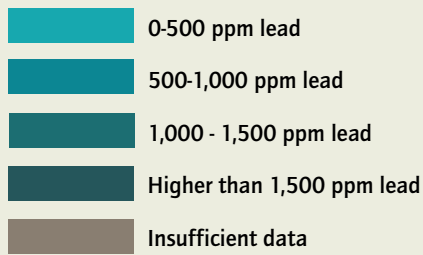
Indeed, many of the swans stopped at the slough. There, they stretched their long necks under the water, digging into contaminated sediment with their beaks to root up edible plants and

invertebrates. And then, just as dozens of tundra swans do every year, many of them died, poisoned by the lead and other heavy metals in the mud, a legacy of Idaho's hard rock mining.

As attractive as it appears, the landscape around Coeur d'Alene Lake can be lethal to animals, and dangerous to humans. The local health district warns people who swim, boat and barbecue along the picturesque lower Coeur d'Alene River to brush dirt from their pets, shoes and camping gear, so they don't track lead-laced dust into their homes.

But the area's mining past has left an additional, and largely invisible, legacy. Far below the surface of the lake lies another threat: 75 million metric tons of contaminated sediment, lining most of the lakebed. While the pollution in the watershed is the focus of a massive and ongoing cleanup led by the Environmental Protection Agency, protecting the health of the lake itself has been left to the state of Idaho and the Coeur d'Alene Tribe. The flaws of that approach — exacerbated by mistrust, political calculations and disagreements over cleanup obligations — are now imperiling both the lake and the life that depends on it, human and nonhuman alike.

Lead concentrations in the sediment of Coeur d'Alene Lake and the Coeur d'Alene River floodplain



MAP: LUNA ANNA ARCHIE/HIGH COUNTRY NEWS
SOURCE: COEUR D'ALENE TRIBE

RIGHT NOW, LEAD, MERCURY, ARSENIC and other toxins are bound up in the bed of Coeur d'Alene Lake. That contamination is sequestered there and stays relatively dormant, owing to the chemical conditions of the water. But scientists monitoring the lake say all this could change as more nutrients filter in from the watershed. They're already seeing rising nutrient levels in some areas. That could one day trigger a release of contaminants into the lake, at poisonous concentrations.

The science is complex, but critical: The toxins are lodged in the lake's sediment by a twist of chemistry, kept in check by the oxygen in the water. However, if the layer of water above the sediment loses all of its oxygen, the chemistry changes. If there's an algae bloom, for instance, which nutrient pollution can cause, then Coeur d'Alene Lake is in trouble. When algae die, they sink to the bottom of the lake and decompose, in a process that can consume all the oxygen there. The resulting toxic cascade would devastate the lake's ecosystem, starting with the algae. They could turn the clear, inviting lake into a vat of pea soup, the kind of mess that, in other places, has shut down water supplies and caused fish die-offs.

The region's human inhabitants rely on the lake. It supports both a bustling recreation industry and significant lake-side property values, which would be threatened by algae blooms and toxin releases. The lake's outlet, the Spokane River, is a major supplier of water to the Spokane Valley-Rathdrum Prairie Aquifer, the source of drinking water for more than 500,000 people. And culturally, the value of Coeur d'Alene Lake is unquantifiable; it's considered a gem by the people of North Idaho, and its potential loss is so devastating as to be almost inconceivable.

Unfortunately, phosphorous nutrient levels have been increasing lately in the northern part of Coeur d'Alene Lake, with last year's some of the highest on record. If regulators can't rein in those nutrient inputs, major algae blooms and a massive release of lead and other toxic metals could result.

THE TOXIC CHEMISTRY is a large part of the problem the lake is facing. But there's also a toxic history at work in the watershed.

The traditional homeland of the Coeur d'Alene Tribe extends across about 5 million acres of what is now western Montana, the Idaho Panhandle and eastern Washington, centered on Coeur d'Alene Lake. The people who lived there caught fish, harvested an aquatic root called the water potato and traveled along the lake and its rivers. They also pondered the lake and its origins and told stories about it, as they still do today.

By the mid-1800s, white missionaries, traders and soldiers were common visitors to the area. In the early 1870s, the Coeur d'Alene Tribe and the U.S. government negotiated the boundaries of a reservation that included — at the

tribe's insistence — nearly all of Coeur d'Alene Lake. But the U.S. Congress never ratified it. Instead, in 1890, it finally approved a significantly reduced reservation, which encompassed only the southern third of the lake.

Meanwhile, mining in the region was ramping up. In 1884, two brothers staked a claim on a tributary to the South Fork of the Coeur d'Alene River, upstream of the lake. By the end of the 20th century, that mine — one of dozens in what's called the Silver Valley — was the most productive silver mine in the world. From the 1880s onward, companies like now-closed Bunker Hill, the region's largest mining company, extracted millions of tons of lead, zinc and silver from the area. And millions of tons of toxic waste have been left behind, blown onto Silver Valley hill-sides by smoke stacks employed during ore processing, discarded in tailings piles strewn across the floodplain, and washed downstream to Coeur d'Alene Lake.

In 1983, the federal government added the area to the list of Superfund sites, the most severely contaminated hazardous waste dumps in the country; one of the first, and perhaps most famous, was Love Canal, in New York. Overseen by the Environmental Protection Agency, the program cleans up contamination with money that comes primarily from annual appropriations by Congress and the companies responsible for the pollution; states are responsible for covering at least 10% of the cost. In the Silver Valley, the agency's early efforts addressed human health risks in small towns like Kellogg, Pinehurst and Smelterville, Idaho, through initiatives like replacing the soil of contaminated yards and playgrounds with clean dirt.

During the same period, in 1991, the Coeur d'Alene Tribe sued the state of Idaho, embarking on a decade-long legal battle to affirm its ownership of Coeur d'Alene Lake. That fight culminated in a 2001 U.S. Supreme Court decision ruling that "the bed and banks" of the southern third of the lake belong to the tribe. Idaho controls the rest. The two governments were yoked together as joint managers of the lake.

Upstream, the cleanup was working. By 2002, lead levels in the blood of Silver Valley residents were low enough to meet the EPA's goals, and the agency had shifted its focus to include the rest of the Coeur d'Alene Basin, including Coeur d'Alene Lake. The same year, the agency released a "record of decision" — essentially a cleanup plan — to address contamination outside the Silver Valley.

That plan is important. It now guides how the EPA spends Superfund dollars in the Coeur d'Alene Basin — a total of nearly \$700 million earmarked for cleanup in 2011, after major settlements with mining companies ASARCO and Hecla. The plan called for a range of activities, including treating wells and capping contaminated areas. But following a whirlwind of fierce local and state opposition to the perceived



◀ A clear-cut near Santa, Idaho, above the St. Maries River, which feeds one of Coeur d'Alene Lake's main tributaries, the St. Joe River. Clear-cutting can boost the amount of sediment and nutrients in runoff, spurring algae growth downstream.

▼ Dead swans in a marshy area along Highway 97 near Harrison, Idaho. Six were seen in this area in May.



stigma of a Superfund label, the plan did not touch the toxic sediment at the bottom of Coeur d'Alene Lake.

In other words, though the lake was — and still is — part of the Superfund site, the 2002 decision carved it out of the area where Superfund money could be spent. Instead, the EPA developed an alternative: It helped broker a plan between Idaho and the Coeur d'Alene Tribe to manage lake contamination outside of the Superfund program.

But that framework, called the 2009 Lake Management Plan, has never been well-funded, and it lacks the regulatory teeth to prompt substantial change. Two and a half years ago, the Coeur d'Alene Tribe's scientists raised an alarm over

declining oxygen levels and rising signs of algae in Coeur d'Alene Lake. Now, as cooperation on the plan crumbles, the future of the lake — and of those who rely on it — is in peril.

REGARDLESS OF THE SETBACKS, efforts to understand the lake and avert a calamity continue.

On a clear morning last October, the tribe's lake scientists invited me out on their boat to see how they monitor water quality in Coeur d'Alene Lake. The day started off chilly and bright, the kind that seems to want to hold onto summer even as the coming winter looms. Despite the sunlight sparkling across the tops of the wavelets, it was cold on the water. We

**"If there were
400 dead
birds washing
up on
City Beach,
there would
be an uproar."**

*—Phillip Cernera,
director of the Coeur
d'Alene Tribe's
Lake Management
Department*

huddled in the boat's heated cabin as we sped away from the marina, the roar of the twin engines insulating us from the world outside.

We stopped at a site the researchers call C5, partway up the forearm of the arm-shaped lake. Despite the chill, Dale Chess, a research scientist for the tribe, wore sneakers and shorts on the boat's back deck as he gathered ropes, buckets and a Hydrolab, a high-tech device that can measure water temperature, dissolved oxygen and other parameters. Inside, Michael George, a technician and a member of the Coeur d'Alene Tribe, and Scott Fields, a program manager for the tribe's Lake Management Department, transformed the boat into a floating laboratory, preparing sample bottles and a water filtering station.

According to U.S. Geological Survey data, in recent years, 98% of the lead that flowed into Coeur d'Alene Lake stayed there, an average of about 480 tons per year. The rest ended up somewhere downstream of the lake. The most polluted parts of the lake are at the mouth of the Coeur d'Alene River — south of the lake's elbow — and north of C5.

Chess explained the lake's ecology to me as he worked. He lowered the Hydrolab into the water, carefully dropping the instrument exactly one meter between readings. A waterproof cable snaked into the heated cabin, where it connected to a laptop manned by George. "How's that depth?" Chess called to him, ready to adjust by an inch or two if needed. "That's good," George said.

A breeze from the south ruffled the water, sloshing rhythmic waves into the metal pontoons of the boat. In churning it, the wind also helped mix oxygen from the air into the lake, but only the top layer of it. Many lakes form layers of different temperatures in the summer, like a cake: As the sun warms the upper layer, the colder, denser water gets trapped at the bottom.

During the summer, the top layer seals off the bottom, preventing oxygen from reaching the lower layers. That means there's only a finite amount of oxygen available at the lake bottom until the fall, when the upper layers cool off enough that the whole lake mixes again. At C5, the oxygen is almost gone by the end of the summer. Because of that, it's an important area to keep an eye on. If regulators pay attention to the scientists, this could be an early-warning sign before catastrophic toxins are released from the lakebed. "It's the site that's really going to respond first," Chess said. "We call it the canary in the coal mine."

Laura Laumatia, at the time the Lake Management Plan coordinator for the Coeur d'Alene Tribe, was out on the boat, too. A sunny woman with blond hair, she stood on the front deck at our next stop, in the southern, less-polluted section of the lake. She flung a hoop with fine mesh tied to it, like a butterfly net without a handle, over the side, then reeled it in

and pulled it, dripping, back into the boat. Unscrewing the small plastic container at its base, she dumped the contents — greenish water, alive with hundreds of tiny, swimming organisms, each the size of a grain of salt — into a white five-gallon bucket. The bucket was destined for a classroom in Wallace, Idaho, where the teacher planned to use its contents to illustrate a lesson on food webs, hoping to help students understand that nothing lives in isolation.

Much of the problem with the Lake Management Plan, Laumatia had explained to me, is that it lacks regulatory authority. It includes goals like monitoring the lake, public outreach and identifying nutrient inputs, but no tools for enforcing reductions. Nutrients flow into the lake from a variety of sources, including diffuse ones like agricultural runoff and erosion from forests; specific ones like wastewater treatment plants; and also things individual communities or homeowners have more control over, like stormwater, lawn fertilizer and septic systems. But the plan doesn't give the tribe or the state agency that's party to it — the Idaho Department of Environmental Quality — direct power to limit pollution. Instead, policies and actions to rein in nutrients are largely left up to local governments and members of the public. So outreach and education were a big part of Laumatia's job. If residents of the watershed understand the problem and the threats, they might, for example, welcome land use regulations that would keep nutrients out of the lake.

But that can be a tough idea to sell in North Idaho, where regulations are often seen as an infringement on private property rights, and where some residents believe the lake has already been cleaned up. Laumatia told me about a time a year or two ago, when she was invited to speak to the members of an influential Coeur d'Alene Lake property owners' association. As the group's leader was introducing her, he called the core logic of the Lake Management Plan itself — the idea that changing chemical conditions could release metals from the lakebed — a myth. "To be introduced in that way was so disheartening," Laumatia said. The problem wasn't that people disagreed on solutions, but that "there are individuals that are questioning the very idea that something needs to happen at all."

After we finished collecting samples and measurements, we motored a few hundred yards up the St. Joe River, Coeur d'Alene Lake's other main tributary, looking for the two moose we'd heard were hanging out there. Sure enough, we spooked them, a cow and small bull on the levee by the river's outlet. As the animals ran across the spit of land, the cow loped through a thicket of cattails, launching a whirlwind of fuzz a dozen feet into the air, where it hung, floating in the sun.

SUCH VIBRANT LIFE ON THE LAKESHORE belies the dearth of living things below

the surface, thanks to another toxic metal left over from mining — zinc. Zinc creates yet another conundrum for the lake and those who rely on it. Thirty-five percent of the zinc that enters the lake, or about 150 tons, sticks around annually, with the rest flowing down the Spokane River. "It's a contaminant that is toxic to plants and animals," Sheryl Bilbrey, the director of the Environmental Protection Agency's Superfund program for the region that includes Idaho, told me. "Zinc is a problem in the system that we need to remove."

To do that, the federal government is paying \$48 million to upgrade a water treatment plant and build a groundwater collection system near Kellogg. Once the renovations come online in 2021, the facility, called the Central Treatment Plant, will strip zinc from groundwater contaminated by mining waste before it's released downstream.

But there's a catch: Because zinc is toxic to aquatic life, it may be keeping plants and algae in Coeur d'Alene Lake in check — like the chlorine that keeps a swimming pool clear. Remove it, and we don't really know what will happen, though many scientists are concerned that if enough zinc is taken out of the system, algae growth could spike and release the toxic metals at the lake's bottom. (The EPA disagrees that the upgrade will be an issue. "We certainly don't want to create a problem in the lake, and we don't think we are," Bilbrey told me.)

"We want to meet water-quality standards, we want to have low metals, we want our lake to be healthy," Craig Cooper, a lake scientist for the Idaho Department of Environmental Quality, told me. "So, getting these metals down is a good thing. But ... it also exposes us greater to risks they were suppressing."

Layered on top of that challenge are additional stressors, Cooper said, like climate change. Take, for example, the increased wildfire in the West. Wildfire soot and ash, which contain nutrients like nitrogen and phosphorous, can settle or get washed into rivers and lakes, especially when runoff surges after a blaze. More fires across the region could mean even more nutrients coming into Coeur d'Alene Lake. "We've got to pay attention to (controlling nutrients), we can't just paper it over," Cooper said. "We're working on it ... (but) there's more we can and need to do, because if we don't, then we lose this irreplaceable, priceless gem."

POLITICAL BOUNDARIES don't mirror the natural edges of watersheds. And that means reducing nutrients to protect Coeur d'Alene Lake requires cooperation between agencies and governments with long, complex histories.

There are examples of successful collaborative projects in the watershed. For instance, Caj Matheson, a member of the Coeur d'Alene Tribe and the director of its natural resources department, told me about a partnership among the tribe,

the state and a local children's camp to rebuild a buffer at the edge of the camp's property, thereby preventing nutrients from running into the lake.

To some extent, cooperation depends on the relationships individuals build, regardless of the history between the groups they're affiliated with. Still, differences in values drive tensions that are difficult to overcome. It often boils down to concerns over individual rights versus a community outlook, Matheson told me. "Folks on one side don't necessarily trust other people to do what's right for everybody and for the environment, and on the other side I think people don't trust that there's enough respect for their personal private property," he said. He also pointed out that many private property owners in the basin are willing to do what's best for the lake. But, he said, "It's hard to build the trust, easy to shatter."

Many lakes across the country host lake associations, groups of people who own property along the shoreline. These can operate as social clubs and fundraising bodies, and often include an aspect of environmental conservation. The Coeur d'Alene Lakeshore Property Owners Association, however, appears to be largely dedicated to protecting its members' private property rights. As a 2018 newsletter for the association notes: "CLPOA continues to fight for the issues that protect our right to use our waterfront property without unnecessary regulation and restrictions."

Those issues include the Coeur d'Alene Tribe's water rights claims, which the association is legally challenging as part of a lengthy adjudication process overseen by the state. Idaho sees that fight as separate from disagreements over the Lake Management Plan, since different agencies govern each process. But the tribe doesn't compartmentalize things that way. "We govern things and manage things in a more holistic sense," Matheson told me. "We see, on one hand, the state of Idaho doing this, but on the other hand, the state of Idaho doing that," he said. "It makes it really, really tough for us to trust the state." But with the future of the lake at stake, "whether you trust or don't trust, the bottom line is ... we're all still working on it together, because we have to."

IN APRIL, I attended an environmental conference in Spokane, hosted by the Spokane River Forum. Outside, damp air rose from the river, the roar of its falls mingling with the rumble of traffic zooming over a bridge. Inside, a few hundred people — scientists, students, agency employees, resource managers, local officials and others — gathered to discuss issues concerning the Spokane River-Coeur d'Alene Lake Basin.

There, I met with Phillip Cernera, the director of the tribe's Lake Management Department, and his colleague, Rebecca Stevens, who sat with me at the edge of a mostly empty hotel ballroom. Our talk



Michael George, a water resources technician for the Coeur d'Alene Tribe's Lake Management Department, retrieves a sediment-covered anchor from the bottom of Coeur d'Alene Lake during a data collection trip in October. The amount of organic materials and nutrients in the sediment are indicators of excessive nutrient loading from the lake's watershed.



Laura Laumatia and Scott Fields, with the Coeur d'Alene Tribe's Lake Management Department, collect and inspect water samples, left, while Dale Chess checks the data collected on a device that measures the temperature and marks the specific GPS coordinates showing where the data was collected during a research trip on Coeur d'Alene Lake.



turned to the death toll of the tundra swans at Harrison Slough, and Stevens unfolded a large map onto the table in front of us. "Nothing's going to happen until that stuff is happening right here," Cernera told me, jabbing his finger at the map: the northern edge of the lake, where the buildings of downtown Coeur d'Alene are clustered near a waterfront town park. "If there were 400 dead birds washing up on City Beach, there would be an uproar."

But no such thing has yet happened, and so the uproars tend to be about management. Two years ago, the Coeur d'Alene Tribe and the Idaho

Department of Environmental Quality reported that, as of 2015, water-quality benchmarks set in the Lake Management Plan weren't being met. At some sites, phosphorous was too high, oxygen too low and chlorophyll, a sign of algae, was rising, meaning the lake was tipping dangerously close to an outcome nobody wants. Since then, oxygen and chlorophyll measurements have improved, though phosphorous is still above the target level in the northern part of the lake.

Still, under the Lake Management Plan, the 2015 numbers should have triggered a review of the causes and prompted a coordinated plan to address them.



Phillip Cernera, director of the Coeur d'Alene Tribe's Lake Management Department, sits atop Tubbs Hill in downtown Coeur d'Alene, Idaho, overlooking an area that's packed with cruise boats full of tourists during the summer months. Cernera says the lake's decline is bound to impact the tourism industry of Coeur d'Alene.



Associate Editor Emily Benson writes from Moscow, Idaho. [@erbenson1](#)

This story was funded with reader donations to the High Country News Research Fund.

According to the tribe, that never happened. “Since 2016, the Tribe has asked EPA and the State of Idaho what response actions will be taken,” the tribe’s lake management department staff wrote in a recent review of the plan. “Yet for more than two years there has been no response other than both agencies/governments wanting to engage in dialog to discuss the results of the water quality monitoring; that data has been available to EPA for years.”

At the Spokane environmental conference, Cernera, who, at 60 years old, has worked for the tribe for nearly half his life, stood at the front of the ballroom, where all of the attendees were gathered for lunch. He explained that, from the tribe’s perspective, the plan isn’t working: Despite its existence, the lake is deteriorating. “I really want to urge people to recognize that our lake is not some static thing; it is alive, it’s dynamic, and it’s on the decline,” Cernera said, his voice strident with emotion. “We need to protect this lake, and we’re at a crossroad. What’s it going to be?”

The tribe formally withdrew its support for the Lake Management Plan in early April, saying that the plan “has been ineffective in protecting lake water quality,” according to a letter signed by Chairman Ernest Stensgar and sent to state and federal officials. The letter goes on to ask the Environmental Protection Agency to “formally evaluate how they will use their authorities to address the legacy mining pollution that exists in Coeur d’Alene Lake.” In other words, what will the agency do now that its ad hoc alternative to a Superfund cleanup for the lake has failed to protect the waterbody? In retracting its support for the lake management plan, the tribe may force the agency’s hand — though, from

the agency’s perspective, there’s nothing to force. “It’s really more of a local ordinance issue,” the EPA’s Sheryl Bilbrey told me. “There’s just a whole host of sources (of nutrients) that we don’t have authority to regulate.”

Cernera also spoke about what he’d like to see happen: An influx of funding from the Environmental Protection Agency to deal with the toxic pollution at the bottom of the lake. “Call a spade a spade,” he said. “The way I see it now, EPA is using the lake bottom as the largest repository (of mining contamination) in our basin, if not the country.”

But according to the EPA, the rules governing how it spends Superfund dollars prohibit the agency from using the money to manage the lake itself. After Cernera spoke — and the applause for him, mingled with a few whoops from the audience, had died down — representatives from the EPA and the Idaho Department of Environmental Quality also addressed the crowd.

Speaking on behalf of the EPA, Bilbrey leaned into the microphone on the table in front of her and kept her remarks brief and official. More needs to be done to protect the lake, she said, but exactly what that action might be is still the question. “The bottom line is the federal government can’t come in and tell the locals how to regulate.”

Dan Redline, the Coeur d’Alene region administrator for the Idaho Department of Environmental Quality, spoke next. He reiterated the state’s support of the Lake Management Plan, but wondered whether more was needed. “Is the Lake Management Plan really enough, given all the stresses in this watershed and where it’s going?” he asked. “I guess I’ll leave it at that.”

After Redline’s presentation, an audience member suggested some ways to reduce those stresses, like mandating the use of composting toilets and gray-water systems on shoreline properties. Why isn’t it possible, he asked, to institute those kinds of restrictions?

In response, Redline pointed to the political environment in the region. Indeed, Kootenai County, one of the three Idaho counties within the watershed, decided last year to give some homeowners the ability to opt out of building codes altogether. But even in North Idaho, politics don’t always play out in expected ways. As I later learned, the two commissioners who championed that change weren’t re-elected, and, a few months ago, Kootenai County reinstated the codes. Reading about the reversal, I wondered if there might be more support for regulations — small, sensible ones that would clearly benefit Coeur d’Alene Lake — than some might assume.

Later that day, I met a conference attendee named James “Trey” George III. He grew up in the area, moved away for a while after college, then returned and went to work for the city of Spokane last year. I asked him what he made of the panel. The contrasts between the various speakers’ remarks highlighted the quagmire they, and by extension, the lake, have found themselves in, he told me. “They all acknowledge there’s a problem. How do they solve it, and who’s got the authority?” George said. He told me about snowboarding at the ski resorts in the Silver Valley as a young adult, in the early 1990s. The landscape was so scarred by pollution that there weren’t any trees there then; now, the mountains are full of them. Perhaps that kind of change, in reverse, is the only thing that will prod Idahoans to act. “If that lake starts to go south visually, everything will change,” George said. “I have faith that if we get close to that, that we’ll reel it back in, because we don’t want to lose that lake.”

I wanted to agree, but seeing the disagreements over the lake’s management left me feeling uneasy about its future, considering how many problems are swirling around it. Right now, some 75 million metric tons of contaminated sediment are resting, uneasily, at the bottom of it, like so many buried resentments. Like many dangerous things, they’re invisible — cloaked by the beauty of the landscape. I thought of the day on the lake with the Coeur d’Alene Tribe’s scientists last fall: the moose, the drifting cattails, the calm water. I know the stats: The lake and its watershed are horribly polluted. But on that sunny October day, even as I watched the tribe’s Scott Fields and his colleagues filter water samples and measure oxygen levels, charting the health of the lake, it was hard to believe the landscape is really that hazardous. Of all the dangers facing Coeur d’Alene Lake, that may be the biggest. “Once you see the problem here,” Fields told me, “it’s way too late.” □



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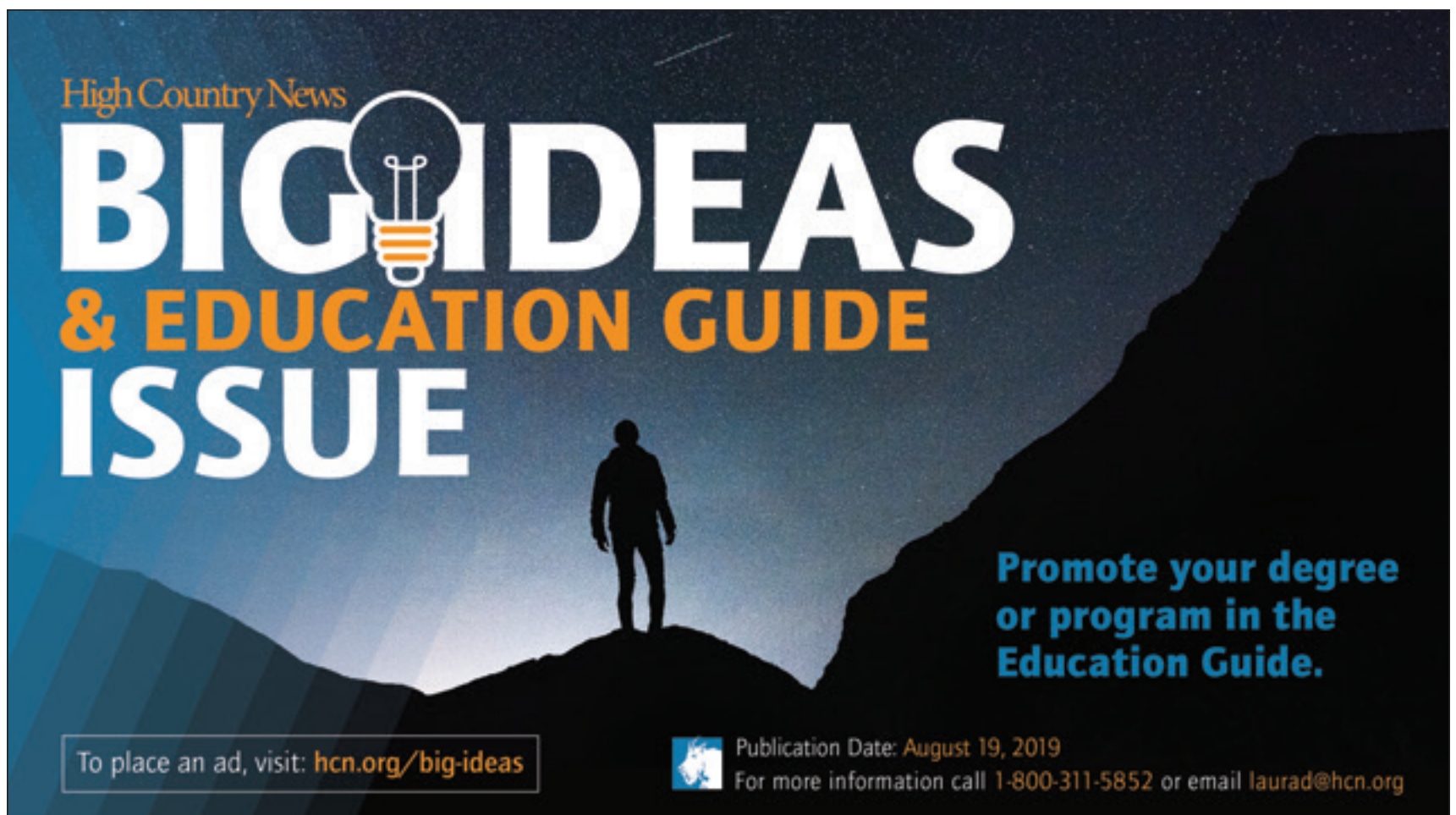


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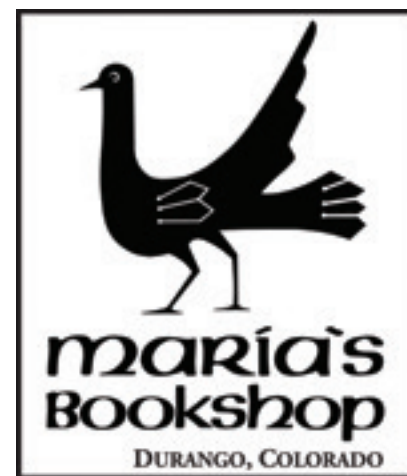
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The Body Remembers When the World Broke Open looks at hard issues but offers no easy answers

Elle-Máijá Tailfeathers, left, as Áila, and Violet Nelson as Rosie, in a still from *The Body Remembers When the World Broke Open*.

When we meet Áila and Rosie, the two principal characters in the film *The Body Remembers When the World Broke Open*, they couldn't be on more different paths. Rosie, who is Kwakwaka'wakw, is beaten down, walking away from an abusive boyfriend and doing so without any support system. Áila, who is Blackfeet/Sami, has just left a stressful visit to the doctor after deciding to get an IUD. Rosie is pregnant. Áila has made the decision not to be, but is not entirely comfortable with her choice. When Áila sees Rosie standing fearfully in the street, her boyfriend screaming at her, she comes to her rescue, and we are thrust smack-dab into the action.

Elle-Máijá Tailfeathers (Blackfeet/Sami), who co-wrote and co-directed the film with Kathleen Hepburn (non-Native), has created an intimate and sometimes excruciating character study of two women navigating the uncertain process of getting to know one another in a very short time. Áila needs Rosie to trust her so she can help her. And Rosie certainly needs help, but is stubborn and skeptical about accepting it.

Over the course of the film, we observe Rosie's and Áila's relationship blossom in real time. Rosie, vulnerable and hostile, cusses like a sailor. We see her steal Áila's wallet and behave spitefully, asking Áila if she is into "white guys or something," after she passes Áila's light-skinned Indigenous boyfriend in the hall. Later, in a cab ride, she accuses Áila of being "a dumb white bitch." She creates tension in Áila's relationship, encouraging Áila to caress her pregnant belly while hinting that Áila's boyfriend might leave her since she's not yet ready

for children. Rosie is not an easy person to like. And yet we realize that she's been dealt a bad hand, and, like Áila, we want to empathize with her. She's in a very tough spot, and that puts us, as viewers, in the same difficult space.

Áila is Rosie's opposite. Her comfortable apartment in a nice neighborhood is filled with rugs from Target, a record player and mid-century modern furniture — all the accoutrements of a tasteful Indigenous hipster. She appears flawless, even in moments of angst, and has a dog and a decent live-in boyfriend. Áila has the luxury of choice — the chance for a happy and stable life — while Rosie just has to make do with her lot. This stark contrast of environments, personalities and situations creates a true dramatic tension that lasts throughout the film.

We observe their relationship unfold in real time, a directing choice that makes the film move slowly, sometimes painfully so. While the pace forces viewers to pay attention to the smallest details — the random street where the two women meet, their apartments, a cab, the hospital rooms and bathrooms where the two sneak away from each other to breathe and fight off panic attacks — not a lot happens over the course of the afternoon, except that we slowly get to know the two women. The camera lingers over seemingly insignificant moments and follows the characters everywhere.

Moreover, the camera literally *moves*. Handheld camerawork is not a cinematic choice that I always appreciate. While the constant movement creates a natural tension and more realistic, documentary-style scenes, some viewers,

including this one, get queasy. When I watched Anne Hathaway in the 2008 film *Rachel Getting Married*, the camerawork practically forced me to lie down sideways on a theater chair (gross) in order to get through the movie. It is difficult to enjoy a film when one is trying to avoid vomiting.

The film lasts an hour and 45 minutes, following Rosie and Áila's relationship from the beginning to the end, minute-by-minute. That creates editing challenges: What do you leave in? Better yet, what do you cut out? *The Body Remembers When The World Broke Open* easily could have worked as a short film, but instead, the directors have decided to let the characters and scenes breathe. And that is the point: We catch a glimpse into the lives of two women in a real, significant moment of time. You either buy in or you don't.

In *The Body Remembers When the World Broke Open*, we realize an uncomfortable truth. On its surface, the film suggests that social media activism alone is not enough, and that the actual work one does is all that matters. Yet scratch a little deeper, and it seems that directors Máijá-Tailfeathers and Hepburn hint that, despite the best intentions, help may not exist for their protagonists. It's a mature look at a situation with no easy answers. The film's boldness comes from its choice not to give everyone a happy ending. There is no smiling group hug. Instead, this courageous entry in Indigenous cinema refuses to wrap up life neatly with a bow; we are shown, rather than told, just how things are in 2019.

BY JASON ASENAP

Montana's vigilante obsession

It's time to face the facts about the hangmen who helped 'settle' Montana



NEWS
COMMENTARY
BY GABRIEL
FURSHONG

Every year for nearly a century, my hometown, Helena, Montana, has celebrated our state's dark history of vigilante killings by closing schools and holding a parade. This May, we celebrated the pageant's 95th anniversary.

When I was growing up here in the 1980s and 90s, we looked forward to the Vigilante Day Parade with great anticipation. High school students got two days off from school to prepare. We drank beer and built elaborate "Old West" scenes on flatbed trucks. We dressed up as barkeeps, prostitutes, gunslingers and Indian warriors. Our parents and grandparents set up lawn chairs and cheered.

The raucous pre-game has since been tamed, and racist and sexist floats are less common now — though not completely abolished — following stronger administrative oversight. Still, this year's parade featured at least one brothel and two hanging trees, complete with swinging nooses.

This spectacle must seem odd to outsiders, but in Montana, many children are taught to honor our founding myth of vigilante justice. In public schools, students learn about a group of courageous community leaders who hanged a handful of known criminals in the mining boomtowns of Bannack and Virginia City, making the territory safe for settlement.

The truth is more complicated. In 1862 and 1863, thousands of settlers moved into new mining camps in southwest Montana, where Shoshone, Salish, and Crow were already living. In January 1864, influential settlers formed a "vigilance committee" and hanged 21 men without due process in just six weeks. Five victims were strung from the crossbeam of an unfinished store on Virginia City's main street, their bodies dangling between the timbers like a grotesque window display.

The committee did not disband after this initial purge of purported lawbreakers. It persisted even after federal courts were established in Montana. "Over a six-year period they killed a total of fifty men, many of whom were not guilty of capital crimes, some of whom were not guilty of crimes at all," according to writer Frederick Allen's authoritative history, *A Decent, Orderly Lynching: The Montana Vigilantes*.

One such victim was Ah Chow, a Chinese immigrant and Helena resident who mortally wounded John R. Bitzer in 1870. Each man claimed the other had been the aggressor. A trial might have revealed the truth. Instead, vigilantes lynched Chow from Helena's hanging tree, a short walk from where students paraded two models of such trees through downtown Helena earlier last month.

This 150-year-old murder matters today because, as historian Roxanne Dunbar-Ortiz wrote, "Origin narratives form the vital core of a people's unifying identity and of the values that guide them." We choose, generation after generation, to honor the vigilantes, and examples of their posthumous influence abound.

Many businesses use the vigilantes to tout their Montana roots, including Big Sky Brewing, whose logo includes the numbers 3-7-77. According to

legend, vigilantes painted this code on the doors of potential victims to put them in mind of an early grave — 3 feet wide, 7 feet long and 77 inches deep. These numbers are also emblazoned on the shoulder patches of the Montana Highway Patrol and have appeared on the flight suits of the Montana Air National Guard. One version of the emblem, designed for the 186th Airlift Squadron Vigilantes, depicts a shotgun-toting pioneer in front of a hanging tree.

Many have argued that these modern references to a bloody chapter in Montana history are harmless homages to the Old West, but the official use and remarkable ubiquity of these references demand a deeper analysis. The vigilante brand has been carefully distilled as an expression of Montanans' rugged independence and heroic self-reliance. But it also sells the idea that Montana was built by white pioneers who settled a wild place full of reckless people by any means necessary. It sells the idea that these settlers were the main characters on a vast Western stage. It sells the idea that the vigilante story is *the* Montana story. Of course, this enduring falsehood obscures the truth.

Most Montanans, myself included, never studied the Chinese laborers and business owners, people like Ah Chow, who represented about 10% of the state's population in 1870. Many of us have rarely, if ever, considered how white settlement in Montana gold camps sparked a war along the Bozeman Trail between the United States and the Lakota, Northern Cheyenne and Arapahoe nations, which led to the Fort Laramie Treaty of 1868 — a legal agreement that was quickly broken by further white settlement.

Too often, these essential chapters of Montana history are crowded to the margins of our minds by the tall tales of the vigilantes and other stories of heroic white settlement. We've never had a good rationale for this narrative imbalance, and we cannot defend it. It is time for Montana to give up its founding myth of vigilantism, which perpetuates an incomplete and racist version of our past. Montanans need to remove official references to the vigilantes from government institutions and discourage their use as a commercial trademark or community icon. We need to re-brand the Vigilante Day Parade and completely eliminate racist and sexist floats. We need to tell the vigilante story accurately and reframe it as a tragic and complicated episode in the much larger and complex story of our state. Finally, we need to create space for the many other true stories that have gone untold for far too long.

After all, the history we celebrate today reinforces the values that will guide us tomorrow. □

The vigilante brand has been carefully distilled as an expression of Montanans' rugged independence and heroic self-reliance. But it also sells the idea that Montana was built by white pioneers who settled a wild place full of reckless people by any means necessary. It sells the idea that these settlers were the main characters on a vast Western stage.

Gabriel Furshong lives in Helena, Montana, where he writes for *Yes!* magazine, *The Nation* and other publications.
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Where the ‘lords of yesterday’ still hold sway



NEWS
COMMENTARY
BY ADAM M.
SOWARDS

Seventy-five twisting road miles northeast of Boise, Idaho, the South Fork Payette River bends through the tiny community of Lowman, lately a mecca for whitewater sports and other recreational escapes. Hemmed in by steep, pine-covered hillsides, the river has long attracted attention — as a site for a hydroelectric dam, a source of valuable minerals and a destination for outdoor recreation.

Those potential uses, however, cannot always peacefully coexist. In March, a federal administrative law judge for the Bureau of Land Management prohibited mining on 35 small claims along the stream. Judge Andrew S. Pearlstein relied on a little-known law that, paradoxically, was designed to open mining claims. He concluded that scouring the streambed for gold and other minerals would interfere with the activities already taking place — boating, camping and fishing, among others — and that those activities have a greater economic value than mining.

The judge’s decision seems surprising, given mining’s traditional dominance in the West. Yet it opens a window into the long-standing and complicated relationship between mining and recreation, showing how public-land users have often exploited mining laws for purposes far removed from prospecting. That trend may well continue, as Westerners increasingly choose recreation over extraction.

The General Mining Act of 1872 opened the public domain to prospecting, virtually without restriction. Passed after the California gold rush, the mining law was meant to facilitate the West’s economic transformation, a process that encouraged white settlement in the West after Indigenous peoples had been displaced. It’s one of a suite of 19th-century laws that still shape today’s legal landscape. Such legislation helped individuals and corporations build fortunes and allowed them, often, to devastate landscapes and diminish resources with minimal or no oversight or thought about the future. Legal scholar Charles Wilkinson labeled these laws the “lords of yesterday” in his influential book *Crossing the Next Meridian*, judging them “outmoded” and “stultifying.” Despite their mismatch for 21st-century concerns about environmental and economic sustainability, they remain difficult to change — the mining law particularly so.

After the law was passed, it became so easy to stake a claim — and the rules were so loosely enforced — that people claimed land for deceitful purposes: business opportunities, second homes or private fishing reserves. The unscrupulous claimed acreage and erected “No Trespassing” signs on what ought to have been the public’s land. Most famously, Ralph H. Cameron, later a one-term U.S. senator from Arizona, filed multiple mining claims at the Grand Canyon between 1902 and 1919, amounting to 13,000 acres he planned to use to help him pry dollars from tourists rather than silver or gold from the ground. After mixed entrepreneurial results, Cameron lost his Grand Canyon claims in a 1920 U.S. Supreme Court decision.

Still, in 1953, a journalistic stunt showed how simple — and broken — the process remained. A reporter from *Collier’s*, a national weekly, paid \$1.25 to record

a claim on 20 acres in Colorado’s Arapaho National Forest, allowing him to block a proposed interstate highway. In explaining the absurd, but legal, situation, the writer noted that nationally, only 3% of claims were being actively mined. Americans were exploiting Congress’ generosity far beyond the law’s intent.

Accordingly, Congress tried to wrest back some control, reasoning that such fraudulent claims interfered with legitimate use of public lands. The 1955 Surface Resources Act strengthened federal agencies’ power to manage resources for other purposes, such as timber harvests or superhighways, even when would-be prospectors claimed subsurface rights. As legal expert John D. Leshy explained in *The Mining Law*, the legislation was a modest reform, largely re-establishing power the federal government already possessed. But it signaled that the government was losing patience.

Another 1955 law is central to the South Fork Payette River case, suggesting that the mid-1950s marked a moment when Congress sought stronger control over mineral administration. Periodically, Congress closes specific areas of public land to mining, for a variety of purposes.

National parks are the most obvious example, but the Department of the Interior also reserved potential dam sites, protecting promising hydropower locations from private claims. By midcentury, placer mining, the excavation of minerals from a streambed, was prohibited on 7 million acres of public lands. The 1955 Mining Claims Rights Restoration Act reinstated the right to mine in areas where the Interior Department had not developed power projects. The act seems to support extraction; however, it contained a critical caveat.

The federal agency that controlled the land — typically the U.S. Forest Service or the BLM — could request a public hearing to determine whether “placer mining would substantially interfere with other uses of the land.” The burden is on the federal agency to challenge the claim; without it, mining may proceed unimpeded. The law’s structure laid bare the fact that passive acceptance of mining’s economic and legal power has been the rule in the U.S.

The currents of history met on the South Fork Payette River at Power Site Withdrawal 146, a place closed to mining claims in 1926. Idaho, as much as any Western state, built fortunes and communities from extraction, but economic foundations shift. In his March ruling, Pearlstein concluded that “placer mining would substantially interfere with the dominant other uses and values of the land — whitewater recreation, camping, tourism, scenery viewing, fisheries, cultural resources, and the revenue from those activities flowing to the local economy.”

It seems that the Western mining economy no longer routinely reigns supreme, because in some places natural amenities pay better than placers. Even moribund mining laws can recognize that. □

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Adam M. Sowards is an environmental historian, professor and writer. He lives in Pullman, Washington.

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THE WEST

If you've been blaming natural gas emissions for contributing to climate disruption, well, you need to rethink your attitude and be more gung-ho and patriotic. That's what the Trump administration is doing, bragging that our export of liquefied natural gas to Europe ranks right up there with American troops helping to defeat the Nazis during World War II. Thus the new term "freedom gas" — instead of natural gas — coined by Energy Secretary Rick Perry. In a press release, Steven Weinberg, an assistant Energy Department secretary for fossil energy, waxed poetic in a semi-scientific fashion, praising the government for selling "molecules of U.S. freedom" to the benighted world. Jason Bordoff, an energy policy expert at Columbia University, called this phrasing "bizarre" and mocked it on Twitter: "Personally, I don't think this goes far enough, and would like to request that its data metric be changed from mcf (million cubic feet) to musf (molecules of US freedom)," reports *EcoWatch*. Washington Gov. Jay Inslee, who is running for president on a platform of combating climate change, said that the term "freedom gas" reminded him of Republican attempts to re-label French fries as "freedom fries" during the run-up to our invasion of Iraq. "Freedom is generally good," acknowledged Inslee, "but freedom from glaciers, freedom from clean air, freedom from healthy forests that aren't on fire, and freedom from the world we know and cherish is not what we seek." *The New York Times* reported that the Trump administration was also altering "the methodology" of government climate reports to paint a happier picture of the consequences of burning fossil fuels.

COLORADO

Landslides caused by heavy rains have closed some roads for weeks at a time in western Colorado, but when a gigantic boulder weighing 4,250 tons smashed onto a state highway near the small town of Dolores, the state highway department faced a daunting problem: How could it possibly remove the behemoth when no bulldozer was big enough to do the job? The solution was to let sleeping boulders lie, diverting the road around either side of what will now be known as



COLORADO Can't miss this tourist trap. COLORADO DEPARTMENT OF TRANSPORTATION

"Memorial Rock," since it fell on Memorial Day weekend. Or maybe not. A *Denver Post* poll of nearly 900 readers found they want the governor to name it "Rocky McRocker Face," with "Rocky Road" their second choice. "Tourist Trap" came in a distant third.

MONTANA

The osprey nest was precariously perched about 25 feet up on a telephone pole, reports the *Missoulian*, when something began making it wobble and rattle. Thanks to a live camera feed recorded by Explore.org, you can see the cause of the commotion: An intrepid black bear, whose snout pokes up on the lower left of the screen. Then the raider's whole head pops up near the nest's three eggs, while an agitated osprey continually swoops past, trying to protect its nest. Finally, the bear climbs back down and ambles off. Denver Holt, who set up the camera at his Owl Research Institute near the town of Charlo, Montana, said he'd never before seen a bear try to climb the telephone pole. Live cameras have shown him other amazing sights, though. Once, a great horned owl flew to the osprey nest in the dark, Holt said, and whacked the male osprey, whom Holt calls Charlie, "right off his perch three nights in a row. The attacks are unbelievable. You wonder how he survives." Holt's cameras also revealed that great gray owls are more active at night, and that they sometimes fight with great horned owls: "The cameras expose some really cool behavioral stuff."

COLORADO

After working for 37 years for the Bureau of Land Management in several Western states, Jim Cagney is now retired and sounding off. His deft columns for the *Grand Junction Daily Sentinel* are always a treat, because when it comes to the outback, he knows what he's talking about. Recently, one of his targets included the newspaper itself, after a headline in its lifestyle section cheered the "glory of going off-road." That "glory," wrote Cagney, might better be described as destructive driving behavior. Cagney also slammed a TV commercial that was widely shown this spring, in which a vehicle rips up a wet cow pasture. "Who likes to chase calves with their car?" Cagney asks. "How could a video that disgusting generate car sales?" People should think before they start their engines, Cagney advises: Motorized travel on lawful routes through backcountry public lands is OK, but "off-road travel is heinous."

IDAHO

Is it cruel to fool a fish? In a way, that's what catch-and-release anglers do when they hook a fish, hold it up to admire and maybe photograph it, then remove the hook before letting the fish swim away. But some conservationists say that catch-and-release stresses fish and impedes their chances of survival by exposing them to air, perhaps several times during the season. According to six studies by the University of Idaho and the Idaho Department of Fish and Game, however, the fish don't seem all that bothered by being handled. Once a fish is hooked, reeling it in takes little time, and the fish isn't held out of the water for more than several seconds, reports the *Lewiston Tribune*. How the fish feel about the practice of catch-and-eat was not studied.

WEB EXTRA For more from Heard around the West, see hcn.org.

Tips and photos of Western oddities are appreciated and often shared in this column. Write betsym@hcn.org or tag photos #heardaroundthewest on Instagram.



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