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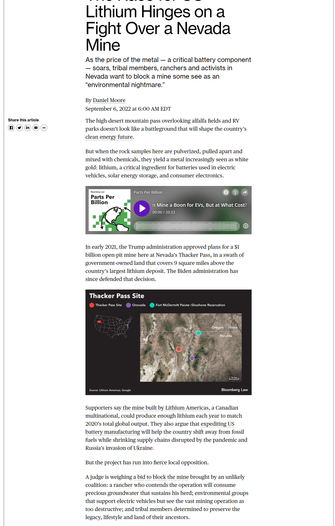

Deronda Hinkey, a member of the Fort McDermitt Paiute and Shoshone Tribe, opposes the Thacker Pass project. *Photographer: Daniel Moore*

Green | New Energy

The Race for US Lithium Hinges on a Fight Over a Nevada Mine

As the price of the metal — a critical battery component — soars, tribal members, ranchers and activists in Nevada want to block a mine some see as an "environmental nightmare."

By Daniel Moore
September 6, 2022 at 6:00 AM EDT

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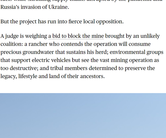
The high-desert mountain pass overlooking alfalfa fields and RV parks doesn't look like a battleground that will shape the country's clean energy future.

But when the rock samples here are pulverized, pulled apart and mixed with chemicals, they yield a metal increasingly seen as white gold: lithium, a critical ingredient for batteries used in electric vehicles, solar energy storage, and consumer electronics.

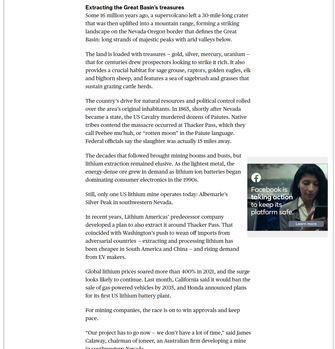


In early 2021, the Trump administration approved plans for a $1 billion open-pit mine here at Nevada's Thacker Pass, in a swath of government-owned land that covers 9 square miles above the country's largest lithium deposit. The Biden administration has since defended that decision.

Supporters say the mine built by Lithium Americas, a Canadian multinational, could produce enough lithium each year to match 2020's total global output. They also argue that expediting US battery manufacturing will help the country shift away from fossil fuels while shrinking supply chains disrupted by the pandemic and Russia's invasion of Ukraine.

But the project has run into fierce local opposition.

A judge is weighing a bid to block the mine brought by an unlikely coalition: a rancher who contends the operation will consume precious groundwater that sustains his herd; environmental groups that support electric vehicles but see the vast mining operation as too destructive; and tribal members determined to preserve the legacy, lifestyle and land of their ancestors.



A billboard bears a message from opposition group People of Red Mountain. *Photographer: Daniel Moore*

The outcome will ripple beyond this corner of Nevada. As the US Department of Energy implements a $7 billion battery supply-chain program and Congress's climate bill rolls out tax credits for electric car makers, some see the state as ground zero for the fledgling industry. It already hosts the nation's only other lithium mine, with plans for more.

"We can become the Lithium Valley here, based on everything else we have," said Dev Chidambaram, an engineering professor at the University of Nevada, Reno, who started one of the country's first battery and energy storage academic programs. "It's better we do this, rather than somebody else."

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Extracting the Great Basin's treasures

Some 16 million years ago, a supervolcano left a 30-mile-long crater that was then uplifted into a mountain range, forming a striking landscape on the Nevada-Oregon border that defines the Great Basin: long stands of majestic peaks with arid valleys below.

The land is loaded with treasures – gold, silver, mercury, uranium – that for centuries drew prospectors looking to strike it rich. It also provides a crucial habitat for sage grouse, raptors, golden eagles, elk and bighorn sheep, and features a sea of sagebrush and grasses that sustain grazing cattle herds.

The country's drive for natural resources and political control rolled over the area's original inhabitants. In 1865, shortly after Nevada became a state, the US Cavalry murdered dozens of Paiutes. Native tribes contend the massacre occurred at Thacker Pass, which they call Peehee mu'huh, or "rotten moon" in the Paiute language. Federal officials say the slaughter was actually 15 miles away.

The decades that followed brought mining booms and busts, but lithium extraction remained elusive. As the lightest metal, the energy-dense ore grew in demand as lithium-ion batteries began dominating consumer electronics in the 1990s.

Still, only one US lithium mine operates today: Albemarle's Silver Peak in southwestern Nevada.

In recent years, Lithium Americas' predecessor company developed a plan to also extract it around Thacker Pass. That coincided with Washington's push to wean off imports from adversarial countries – extracting and processing lithium has been cheaper in South America and China – and rising demand from EV makers.

Global lithium prices soared more than 400% in 2021, and the surge looks likely to continue. Last month, California said it would ban the sale of gas-powered vehicles by 2035, and Honda announced plans for its first US lithium battery plant.

For mining companies, the race is on to win approvals and keep pace.

"Our project has to go now – we don't have a lot of time," said James Calaway, chairman of Ioneer, an Australian firm developing a mine in southwestern Nevada.

'Are we going to leave them with a desolate land?'

Thacker Pass sits amid a largely rural area with an economy focused on agriculture, mining and roadside businesses that cater to travelers along Route 95, a growing artery between Boise and California.

Winnemucca, the nearest city of about 8,000 people, is about an hour south, named for a 19th-century Northern Paiute chief. The reservations for the Fort McDermitt Paiute and Shoshone Tribe, with 500 people squeezed onto land near the Oregon border, sits about 50 miles north.

The tribe's business, the Red Mountain Travel Plaza, was destroyed in a 2020 wildfire, and its gas pumps sit empty along the highway. The nearby McDermitt school and tribal government are now the biggest employers, with federal grants and contracts providing the most revenue.

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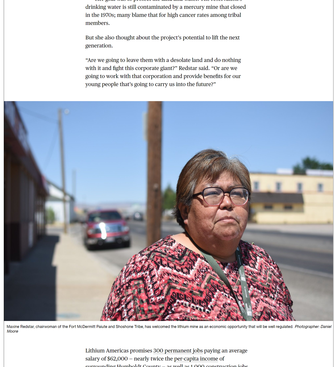
The pandemic had shut down tribal council offices and limited interaction, so Fort McDermitt tribe Chairwoman Maxine Redstar didn't learn the Trump administration had approved the mine until a few weeks after the decision in early 2021, she said. It felt like a slap in the face.

"I reached out to [Bureau of Land Management] and said, 'Okay, hang on. Let's back up,'" Redstar recalled during an interview in July at the Sky Ute Casino, a faded pink gambling hall just off the reservation known for its cheeseburgers.

Her goal was to protect the land and water. The reservation's drinking water is still contaminated by a mercury mine that closed in the 1970s; many blame that for high cancer rates among tribal members.

But she also thought about the project's potential to lift the next generation.

"Are we going to leave them with a desolate land and do nothing with it and fight this corporate giant?" Redstar said. "Or are we going to work with that corporation and provide benefits for our young people that's going to carry us into the future?"



Maxine Redstar, chairwoman of the Fort McDermitt Paiute and Shoshone Tribe, has welcomed the lithium mine as an economic opportunity that will be well regulated. *Photographer: Daniel Moore*

Lithium Americas promises 300 permanent jobs paying an average salary of $92,000 – nearly twice the per capita income of surrounding Humboldt County – as well as 1,000 construction jobs. Partnering with Great Basin College, the company has held job training seminars for tribal members, committed $5 million for a new preschool and cultural museum and invited some to oversee cultural surveys.

Its mine also has potential to be an economic engine for the rest of the community.

"My God, we've got to make sure this goes through," said Illyssa Fogel, a Minnesota-born lawyer who for 20 years has owned the Diamond A Motel, a roadside stop near the Sky Ute Casino.

She said she has broader fears about climate-fueled drought and wildfire, concerns instilled in her by her father, a hydrologist. "I just think you have to look at it from a far more global perspective than just local," Fogel said.

Through 2021, Redstar had meetings with the Biden-led land bureau and mine officials. She left with assurances the site would be well regulated.

At the same time, tribal members who opposed the mine were building momentum.

They formed People of Red Mountain and joined other tribal groups angry they had not been consulted about the project. They successfully pushed a petition requiring the tribal council to "disengage" from talking to Lithium Americas. And they accused Redstar of capitulating to the company and denying them a say at a closed door meeting she had with land bureau officials.

"They locked us out," said Gary McKinney, a spokesperson for People of Red Mountain who led ceremonial prayer circles at the mine site.

He said the government and mining company are using a divide-and-conquer strategy to steamroll the proposal.

"If we don't tell the people what's really going to happen – the negative impacts, the takeaways – as opposed to only hearing the greenwashed version of how great lithium is and how it's going to save us, we're not going to get anywhere," McKinney said. "We're just going to keep getting smaller and smaller."

Last year, they joined forces with Edward Bartell.

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Lithium, sulfur and water
Bartell, a tall, soft-spoken rancher, has lived in the area since 2008, tending to more than 500 cattle that graze on BLM-leased land in the mountains above the Lithium Americas site and on 960 acres he owns below the site.

When he first heard chatter about the proposed mine, Bartell didn't think much of it. Then, he said, he looked closer at the land bureau's environmental impact statement.

Rancher Edward Bartell is concerned about mine waste and available water for the rye his cattle feed on. *Photographer: Daniel Moore*

In an almost 18,000-acre area, the operation would disturb more than 5,600 acres of land, including impacts to golden eagles and some sage grouse habitat. Trucks would haul sulfur within feet of the elementary school where his wife, Brenda, teaches.

The sulfur would be burned and mixed with water to produce as much as 5,800 tons of toxic sulfuric acid each day. Two 350-foot-high dumps with a capacity of 354 million cubic yards of mine waste would tower over the dirt road he uses to check on his grazing cattle in the mountains.

"They put this eco-friendly label on it," Bartell said. "We see it as an environmental nightmare."

He also sees a threat to his livelihood. Two neighboring ranches have sold Lithium Americas the water rights for their properties. Bartell says the drawdown will threaten his field of shoulder high wild rye that taps into the groundwater and sustains his cattle through the late summer and fall.

In February 2021, Bartell and his ranch sued the bureau over its decision, alleging "irreparable harm" to fish, wildlife, wetlands and streamflows, including the habitat for the Lahontan cutthroat trout, listed as threatened under the Endangered Species Act.

By last summer, the People of Red Mountain and two other tribal groups had joined the case, echoing Bartell's claim that the government had improperly rushed to approve the project and asking a federal judge to halt it. So did the Great Basin Resource Watch, an environmental group.

"It's an enormous impact – in fact, it will change that community forever," said John Hadder, the organization's executive director. "Regardless of whether it's a gold mine or lithium mine, our permitting process should be just as rigorous."

The US Department of the Interior, which oversees the Bureau of Land Management, has declined to discuss the pending litigation or its outreach efforts. In court filings, Biden administration lawyers said it conducted proper outreach to tribes, took a "hard look at environmental impacts" and "provided a reasoned explanation for its decision." They urged Judge Miranda Du to dismiss the suit.

If Du, who sits in Reno and is the chief judge for the federal courts in Nevada, declines, the court battle could rage on. If she accepts their argument, mining could begin in months.

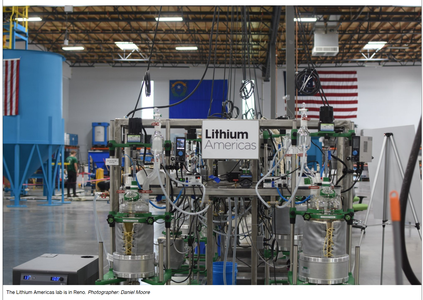
Company officials say they have worked hard to earn local support.

Maria Anderson, a member of the Te-Moak Tribe of Western Shoshone Indians, was hired in November 2019 to serve as a community relations manager for Lithium Nevada, the subsidiary overseeing operations in the state.

Working out of a strip mall office in Winnemucca, Anderson has launched training initiatives for a variety of jobs, including construction and heavy equipment operators. She's also met individually with 35 tribal members to discuss skills and look over their resumes, and after the approval last year teamed with Lithium Americas vice president Tim Crowley – who joined the company after leading the Nevada Mining Association – to host weekly meetings with residents.

"It's terrible and it's unfortunate that some mining companies didn't do what they're supposed to do" in the past, Anderson said, "but now we are."

In July, Lithium Americas unveiled a 30,000-square-foot laboratory in Reno, where it showcases the extraction process, a draw for politicians, potential business partners and academics. Workers grind up rock samples and send them through stations that separate the clay and pull out the lithium, which ends up in a labeled glass jar.



The Lithium Americas lab is in Reno. *Photographer: Daniel Moore*

Glass jars containing different substances involved in the extraction process are on display in the lab. *Photographer: Daniel Moore*

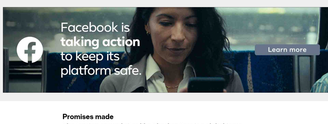
The state's governor, Democrat Steve Sisolak, and its previous governor, Republican Brian Sandoval, wore grins and touted oversized scissors at the ribbon-cutting ceremony.

The company has also had a flurry of meetings with battery makers and potential customers, Jonathan Evans, chief executive officer of Lithium Americas, said.

Those efforts are getting boosts from Washington. The $369 billion climate-and-tax law enacted in August includes tax credits for electric vehicles that, by the end of 2023, source 40% of their battery minerals from North America or US trade partners. That portion increases to 80% of battery minerals by 2027.

In May, Energy Secretary Jennifer Granholm pledged to support efforts to streamline permitting of mines. The Energy Department's revamped Loan Programs Office is also weighing a loan for Lithium Americas.

"You'll see a lot of investment in the coming months and years to get where we want to go," Evans told Bloomberg Law in an interview. "You'll see more private capital moving off the sidelines because there's a confidence that there's bipartisan support for these kinds of investments."



Promises made
The tension around sites like Thacker Pass is a global issue, according to Aimee Boulanger, the executive director of the Initiative for Responsible Mining Assurance, which crafts independent global standards and counts Lithium Americas as a pending member.

"I do think the industry is hearing what's being asked of them and is changing," Boulanger said.

The group plans a new standard, due in mid-2023, for exploration and development that aims to bake sustainability into the design of a new mine.

But the conversations will be difficult, she said, because opponents believe they hear hollow promises identical to those made during the gold and silver rushes.

"So when they hear the same about new lithium proposals, they don't trust it," Boulanger said.

For tribal member Daranda Hinkey, the Thacker Pass project has been a possible blessing in disguise. It brought the 24-year-old college graduate home to the reservation where her father grew up and has mobilized people who never before had been active in indigenous rights movements.

Even if Thacker Pass clears its legal hurdles, it has awakened activism, Hinkey said. Tribal members are now monitoring lithium exploration even closer to the reservation and following chatter about gold and uranium development and its impact.

Hinkey, meanwhile, plans to stay firmly rooted on the reservation: She wants to teach science at McDermitt High School, educating students on the value of protecting Mother Earth.

"In our ceremonies, we pray to water, we pray with water," she said, sitting outside a coffee shop called Somewhere Out West as the sun set over the Montana Mountains. "The environmental concerns are cultural concerns. I don't see the line between them."

Daniel Moore is a reporter for Bloomberg Law.