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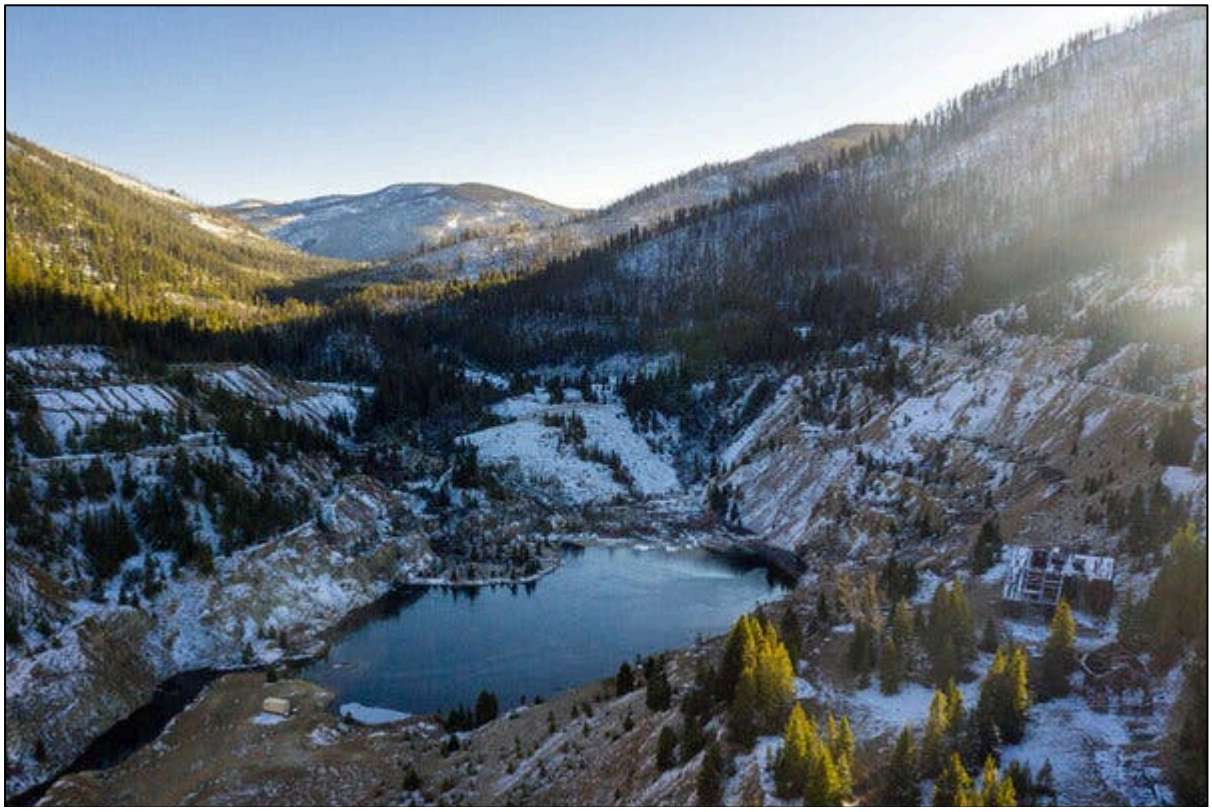
RACE TO THE FUTURE

As Miners Chase Clean-Energy Minerals, Tribes Fear a Repeat of the Past

Mining the minerals that may be needed for a green energy revolution could devastate tribal lands. The Biden administration will be forced to choose.



The Yellow Pine Pit, a legacy mining site that was used throughout the 20th century to mine for gold, tungsten, antimony and silver in the historic Stibnite Mining District of central Idaho.

By Jack Healy and Mike Baker
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YELLOW PINE, Idaho — Net in hand, Louis Reuben waded into the frigid waters where his ancestors once fished, long before Idaho's rivers were dammed and contaminated, before the Nez Perce were driven off their land when white miners struck gold.

"They used to say you could walk across the river on the backs of salmon," he said one rainy autumn morning as he tallied and measured the depleted stocks of young Chinook salmon that hatch in these mountain creeks. "Now, it's totally different. It's devastating, if you think about it."

President Biden came into office vowing to safeguard Native American resources like these and uphold the rights of tribes that have endured generations of land theft and broken treaties. But in the rolling headwaters of central Idaho, where mining interests have long overrun tribal rights, the administration's promise is colliding

with one of its other priorities: starting a revolution in renewable energy to confront climate change.

Deep in the Salmon River Mountains, an Idaho mining company, Perpetua Resources, is proposing a vast open-pit gold mine that would also produce 115 million pounds of antimony — an element that may be critical to manufacturing the high-capacity liquid-metal batteries of the future.

As it seeks the Biden administration's approval for its mining plans on federal lands, Perpetua is waging an aggressive campaign to cast itself as an ally in a new clean-energy economy. It says its Stibnite Gold Project would be the only American mine to produce antimony, which now largely comes from China, and would supply the metal to a Bill Gates-backed start-up that makes batteries that could one day store energy on solar-powered electricity grids.

"It's responsible, modern mining," Mckinsey Lyon, a Perpetua vice president, said as she led a tour up to the dormant mining site, still contaminated by decades of mining. She said Perpetua would clean up the mountainous basin while extracting "minerals our country needs for energy security."

The Biden administration has warned that failing to expand the nation's supply of rare-earth minerals, including antimony, could present a risk to the nation's energy and military preparedness. But deposits of antimony in the United States, unlike the one in Idaho, are generally small, and some of them locked away in mines that have been shuttered for decades.

Perpetua has launched a Washington campaign to press its case. In Idaho, it has made direct promises of money to neighboring communities, contingent on the project's success.

Residents in Yellow Pine support the proposed mine because of the employment opportunities it would bring to the area.

Members of the Nez Perce tribe's Department of Fisheries Resources Management track how many male and female coho salmon have returned to Lapwai Creek.

The clean-energy public relations campaign is the newest threat to the Nez Perce, who for generations have watched fish populations decline and pollution rise. Mining interests drove them out of their homelands and fouled their rivers and ancestral hunting grounds. For a community trying to preserve its culture and kinship with the territory, an effort that has involved millions of dollars invested in restoring fish stocks, the proposed mine represents another existential threat.

A review by the Environmental Protection Agency found that Perpetua's initial plan for a 20-year operation would inflict "disproportionately high and adverse impacts" on tribes, according to a November 2020 letter from the agency, and environmental groups have warned that the mine could damage or destroy huge swaths of fish habitat.

The Nez Perce are not alone. Across the American West, tribal nations are on the front lines of a new debate over how to balance the needs and costs of clean energy. Extracting the fuels of the future is a process that is often far from clean, and just as fights over the environmental costs of oil exploration helped define the fossil fuel era, conflicts like this one are creating the battle lines of the next energy revolution.

The push to unearth new minerals presents a hard choice for the Biden administration in politically divided Western states where mining remains an important source of jobs and political power. The choices are destined to grow more challenging as commodities like lithium, copper, cobalt and antimony become more valuable, and critical to the nation's future.

Perpetua says its Idaho mine holds enough antimony to one day power a million homes using hulking batteries that would capture and release energy created by solar farms. Perpetua and its partner, the battery-maker Ambri, say the batteries would last for 20 years and lose little of their power-storing capacity over their lifetimes, potentially revolutionizing America's power grids.

But the batteries are a new technology that have yet to prove their effectiveness in the real world. And it will likely be at least another five years before any Perpetua project is able to deliver any antimony to be made into batteries.

In the Santa Rita Mountains in Arizona, a Canadian mining company that is seeking federal approval to dig an open-pit mine over the objections of the Tohono O'odham, Pascua Yaqui and Hopi people has said its copper will provide "the key element to our green energy future."

The tribes say the mines would damage their hunting and fishing lands, siphon scarce water and desecrate burial grounds and ceremonial sites.

In Nevada, the Fort McDermitt Paiute and Shoshone are protesting a mining company's efforts to blast apart a dormant volcano to dig for lithium — a critical mineral used in batteries for electric cars. In the Big Sandy River Valley in Arizona, another lithium mining project could destroy a hot spring considered sacred by the Hualapai Tribe.

An hour outside of Phoenix, leaders of the San Carlos Apache have been reaching out to Democratic leaders to stop a copper mining project that the tribe says would destroy a swath of sacred ground called Oak Flat. The British-Australian mining giant Rio Tinto wants to dig an underground copper mine that would create a mile-wide crater in the earth, which Apache people say would destroy land where they pray and hold four-day ceremonies to usher girls into womanhood.

The Biden administration delayed the project by withdrawing an environmental review that was fast-tracked in the final days of the Trump administration. But the tribe wants the project killed.

Terry Rambler, chairman of the San Carlos Apache, said he had been calling Mr. Biden and Agriculture Secretary Tom Vilsack, whose agency oversees the Tonto National Forest where the proposed mining site sits. The tribe has vested special hopes in persuading Interior Secretary Deb Haaland, the first Native American cabinet secretary, to intervene.

"There's a lot of hope and trust in her," Mr. Rambler said.

The Biden administration already has put limits on exploration, going to court to disrupt the Pebble Mine project in Alaska and barring new oil and gas leases in Chaco Canyon in New Mexico. Other projects are also getting renewed scrutiny, but the administration has not closed any doors.

Steve Feldgus, the Interior Department's deputy assistant secretary for land and minerals management, said in a statement that the department was committed to building a clean-energy economy while also protecting communities.

Environmental groups worry that the mine could be devastating to fish habitat in the area.

"We recognize that as demand for clean energy technology increases over the short- and medium-term, an increased supply of critical minerals and materials will be necessary to meet national and global climate goals," he said. The agency will be engaging with a variety of groups, including tribes, to "ensure critical minerals production is sustainable and responsible," he said.

A 150-year-old mining law

Members of the San Carlos Apache and other tribes have filed lawsuits to fight the mines, but they face a legal system forged by century-old laws and court decisions that have favored the mining companies.

Federal mining law grants private companies enormous power to stake claims and dig on public lands, often despite arguments that mines violate treaty-guaranteed rights to fish, hunt and collect plants. Tribal members have also tried unsuccessfully to argue that mines would illegally prevent them from praying and practicing their religions on sacred public lands.

But the legal ground may be shifting. A 2020 Supreme Court decision expanded tribal sovereignty in Oklahoma and ordered the federal government to uphold the commitments it made in treaties with the Muscogee (Creek) Nation. Under the decision, the State of Oklahoma could lose its power to oversee coal mining on tribal

lands, and tribes elsewhere are making reinvigorated legal arguments that proposed mines violate their treaty rights.

“They should have a decisive say on any federal action that impacts their people, their land, their territories and especially their sacred sites,” said Fawn Sharp, president of the National Congress of American Indians.

In Idaho, a 19th-century treaty between the Nez Perce and the U.S. government could prove critical to the fight against the Stibnite Gold Project.

Mark Wilson, a hatchery maintenance supervisor, passes a female fall Chinook salmon that is ready to spawn into a holding trough at the Nez Perce Tribal Hatchery Complex.

The Nez Perce historically had a network of villages across some 16 million acres, from the ridge of the Bitterroot Mountains in the east to the Blue Mountains in the west. But as settlers poured in along the Oregon Trail, the federal government and the Nez Perce struck a treaty in 1855.

The Nez Perce gave up about half of their ancestral lands while retaining a right to hunt and fish in their “usual and accustomed places.”

Soon after, though, gold was discovered within the reservation. With prospectors flocking to the region, the U.S. government initiated a new treaty negotiation that shrank the reservation by 90 percent. Among the Nimiipuu, as tribe members refer to themselves, the 1863 agreement became known as the Steal Treaty.

With dams, mining, pollution and development now spread through much of the land, salmon, the signature species that has always been a bedrock of the environment in the Pacific Northwest, are struggling. Just 44 adult sockeye salmon

completed the 900-mile journey this year from the Pacific Ocean to the Sawtooth Basin in Idaho. The Nez Perce now spend millions of dollars each year on restoration efforts, with hatcheries, testing and trucks to carry salmon past dams that produce some of the region's hydroelectric power.

The Idaho mountain basin at the center of the latest fight is currently a dormant gash in the Payette National Forest.

The mine, in the ghost town of Stibnite, once produced gold and metals that hardened American munitions and armor in World War II. It now reflects the legacy of thousands of shuttered mines that have polluted waterways and soil across the West. Heaps of mine waste are contaminated with arsenic and heavy metals. A flooded mining pit slices a portion of the South Fork Salmon River in two, preventing fish from swimming upstream.

Perpetua has won over many nearby residents by promising to repair the damage done by more than a century of mining. It says it will restore creeks now channeled into rock-lined ditches and reconnect the severed section of river so fish can swim freely. There have been years of cleanup efforts at the site, but Perpetua says it alone is willing to undertake a full-scale restoration that could cost $100 million.

A stretch of Meadow Creek, which has been contaminated by waste from 20th century mining operations, is seen near the Stibnite Gold Project site

Willie Sullivan stands outside his home in Yellow Pine.

“Nobody wants it in their backyard,” said Willie Sullivan, who manages the water system in the tiny nearby village of Yellow Pine. “But have the environmentalists stopped using phones or computers? The things that are required to develop these modern technologies all come from the ground.”

The Nez Perce and environmental activists say the mine will do lasting damage over the next 20 years.

Perpetua would vastly increase the footprint of the mine, digging three pits hundreds of feet deep. It would divert creeks and a river, potentially harming more than 20 percent of the area’s salmon and trout habitat, according to analyses by environmental critics. (The company disputes those assessments and says it would actually increase salmon habitat by restoring damaged rivers.) The Environmental Protection Agency has said the mine could produce mercury pollution and long-lasting contamination in the streams and groundwater.

Mining machinery on site will crush millions of tons of ore, then use cyanide to extract the gold. The waste, a contaminated sludge of 100 million tons of earth and water, will be stored in a mountain valley behind a 450-foot rock dam. Perpetua says it is a secure design, fortified by liners and a huge rock buttress, but a spill or leak could harm fragile fish populations and do long-term environmental damage.

To transport thousands of construction workers, miners and support crews to a remote site up twisting, rutted dirt roads, Perpetua plans to carve a new road on the fringes of pristine wilderness. Heavy trucks will make dozens of trips every day for years. Some residents who have watched drivers lose control and tumble down the

mountains, their trucks landing in the streams, say they are terrified about the environmental consequences of a roadside spill.

A Washington lobbying campaign

Perpetua has spent hundreds of thousands of dollars wooing nearby communities and burnishing its image as a mining company that can help produce the technology to wean America off fossil fuels.

The company's largest shareholder is the billionaire investor John Paulson, a supporter of former President Donald J. Trump, but Perpetua has reached across the aisle to lobby politicians in Washington. The company has spent $200,000 on Washington, D.C., lobbying, retaining the services of a former Obama energy-policy official and an aide to former Senator Harry Reid, a powerful Nevada Democrat with deep ties to the mining industry.

The company has also gone to unusual lengths to build support in local communities. It brought a plan to local officials promising to award grants from a nonprofit foundation it created to support community projects, with the company contributing more funds each time the project reached a new milestone — after getting federal approval, after getting final permits, after starting construction and after starting production.

Colby Nielsen, the council president in the town of McCall, said that many locals were opposed to the project, and that he felt the company's proposal was improper.
"I think the benefit agreement was just their attempt to buy people off, essentially, in a legal way," Mr. Nielsen said.

Downtown Cascade, Idaho, a town that would receive financial support from the mine if the project moves forward.

McCall did not sign on to the agreement. But a series of other local communities did. The mayor of Cascade wrote that the project could bring “some much-needed economic stimulus.” Officials in Adams County wrote that the project “will provide substantial benefits.”

Idaho’s Republican-controlled Legislature is also supporting the project.

In interviews in the tiny town of Yellow Pine, residents said they supported the mine’s promises to create hundreds of jobs and clean up decades of environmental contamination.

The company’s charity has given $30,000 in grants to Yellow Pine — to build a helipad, to improve the dirt roads, to help the volunteer Fire Department upgrade its hoses and fittings. Residents said the company has included them in planning discussions and listened to their concerns about truck traffic.

“You do have a sense of, ‘Am I being bribed into this?’” said Merrill Saleen, deputy chief of the Yellow Pine Fire Department, which applied for $17,000 in grants from the company. “But it is without strings.”

The U.S. Forest Service, which has the authority to greenlight the mine, is conducting another environmental review of the project after the company changed its mining plans. An earlier analysis released during the Trump administration was criticized by conservation groups and other federal agencies as flawed and full of holes. The Trump administration had allowed the company, then known as Midas Gold, to write the biological assessment for its own project.

“The Forest Service continues to work with the mine proponent, cooperating agencies and other stakeholders regarding concerns about fisheries and aquatic-related issues,” the Forest Service said in a statement. The agency said it was “making every effort to mitigate for concerns expressed by the tribes.”

Perpetua says its updated plans would shrink the size of the site by about 13 percent and reduce higher water temperatures — which can be deadly for fish — by planting trees and bushes. The new environmental analysis is expected early next year, and could be the starting point for years of lawsuits and regulatory fights.

Along the banks of the Clearwater River, Shannon Wheeler, the Nez Perce vice chairman, walked next to a pair of hatchery pools, watching salmon as they flopped in the water, acclimating to the water conditions and preparing for a journey out to the ocean. Just up the gravel road was another pool, filled with larger salmon that had made it home. But they were covered in white fungus, scarred by the challenges of traveling through dams and a river warmed by an extreme heat wave stoked by climate change.

A group of children attend a contemporary powwow dance class at Lapwai High School on the Nez Perce Reservation.

Shannon Wheeler, vice chairman of the Nez Perce Tribal Executive Committee, in Lapwai.

The tribe's stories tell of how the salmon saved the Nez Perce, Mr. Wheeler said. Those stories have been passed through generations, affirming a bond and an ancient covenant with the salmon.

“Salmon saved us,” Mr. Wheeler said. “When he saved us, he also said that he would give himself to us, and when he gave himself to us, he would lose his voice. And so then we would have to be his voice.”

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