

A mining company is hunting for lithium, right on the edge of wildlife refuge

July 14 2023, by Colton Lochhead, Las Vegas Review-Journal



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The modern-day gold rush in the race to a greener economy is knocking on the door of a long-protected oasis in the middle of the Nevada desert.



Rover Metals, a Canadian minerals exploration company, plans to drill up to 30 deep holes in a remote patch of public land in southern Nye County as it hunts for large deposits of <u>lithium</u>, a key mineral in the production of electric vehicle batteries.

But the boundary of the project sits just a few thousand feet from the northern springs inside Ash Meadows National Wildlife Refuge, sparking backlash from environmentalists, local officials and more who are sounding alarms over worries that the drilling could decimate the refuge's fragile ecosystem and the federally protected species that call it home.

"It takes one miscalculation, one bad drill hole, one uncontrolled flow. That's all. And that could have permanent, irreparable damage," said Mason Voehl, executive director of the Amargosa Conservancy, a local environmental preservation group helping lead the charge against Rover's drilling.

Rover Metals' Let's Go Lithium project puts Nevada once again at the epicenter of the clash that has splintered environmentalists over how to extract the lithium needed for a decarbonized world without severely disrupting the surrounding ecosystems.

But given the drilling operation's close proximity to the refuge, the stakes in this lithium fight are even higher than some of the previous fights that have played out in court, Voehl said.

"If we're willing to mine this close to the refuge, then it doesn't seem like we'll have any limits in terms of where else we're willing to mine," he said.

'Need to fast-track'



Rover Metals plans to drill 10 exploration holes this summer to test for lithium content in the ground, with follow-up drilling on 20 more sites in the area this fall or early next year, according to an exploration notice filed with the Bureau of Land Management in January.

Each drill hole will be 250-300 feet deep. Rover says it expects each drill hole to hit the groundwater table, and it plans to plug each hole to standards set by the state.

Judson Culter, CEO of Rover Metals, said the company has worked in recent months with Bureau of Land Management staff to ensure that the drilling operations won't disrupt the groundwater table.

The company is still in the "research and data aggregation" phase of the project, he added, and it does not plan to start drilling on the initial 10 holes until late summer or early fall of this year.

He said the ultimate goal is to increase lithium production in Nevada in the supply chain to electric-vehicle manufacturer Tesla, which operates a massive lithium-ion battery manufacturing factory outside of Reno.

Culter stressed the need to scale up lithium extraction in North America quickly. Industry research shows that the demand for lithium is likely to outpace global production as more electric vehicles hit the roads in the coming years, he added.

"We see the need to fast-track and try to develop the project as soon as possible," Culter said.

Nevada, with its wide swaths of undeveloped land of dried, ancient lake beds, happens to be chock-full of the silvery-white metal at the heart of that transition.



Hotbed for lithium

Lithium has long been used for rechargeable batteries in cellphones and laptops. But it's becoming increasingly more valuable as the Biden administration pushes vehicle manufacturers to ramp up electric vehicle production as part of the president's "clean energy" agenda.

The Silver State is home to the only currently active lithium mine in the country—Silver Peak in Esmeralda County. Two other projects—Rhyolite Ridge and Thacker Pass—continue to move closer to starting extraction operations after lengthy court fights with tribal and <u>environmental groups</u>.

"The reality is that the Western part of the U.S. has a lot of lithium," Culter said.

Ash Meadows, established as a wildlife refuge in 1984, is home to four endangered fish species and eight threatened plant species. That includes the Devils Hole pupfish, which lives in a single pond on the refuge and is considered the world's rarest fish.

Opponents of the project fear a <u>worst-case scenario</u> could happen if one of Rover's drills hits the carbonate aquifer that feeds Ash Meadows, an event that they say could effectively drain the ancient springs inside the refuge and devastate the dozens of endemic species that rely on them.

A U.S. Geological Survey paper from 2011 noted models that showed the water from Ash Meadows' springs "may have traveled 100 miles or more underground, possibly as far away as central Nevada, passing through (or around) mountain ranges and interconnected basins."

Other studies also show that the three northern-most springs on the refuge—Fairbanks, Longstreet and Rogers—discharge water that is



somewhat cooler than the other thermal springs, which suggests "that they may be fed by shallower flow paths from the north or northeast," according to a 2014 U.S. Fish and Wildlife Service water resource inventory report for the refuge.

The list of concerns goes beyond just that worst-case water scenario, though. Opponents worry that some of the drill sites could be within a few thousand feet of Fairbanks Spring on the refuge's northern end, close enough that vibrations from heavy drilling equipment and haul vehicles and an increase in blowing dust could harm the fish.

Should the site eventually become a full-scale lithium mine, concerns about its impact on the nearby refuge would only grow, Voehl said.

Erika Gerling, chair of the Beatty Town Advisory Council, wrote a letter last week asking for the Bureau of Land Management to halt the project until "the proper environmental, hydrological, and other applicable studies can be completed."

"The increasing demand on Nevada from industries that are environmentally impactful and public access limiting is of grave concern to us," Gerling wrote.

But the agency says its hands are tied for now.

No environmental review required

Because Rover's project will disturb less than five acres of land, the company was required only to provide the BLM with a notice of its intent to drill.

Such notices do not require approval from the federal agency, which also means there are no triggers to initiate environmental-impact reviews



through the National Environmental Policy Act, Endangered Species Act or other law, BLM spokesman Rudy Evenson said in an email Wednesday.

The company is required to submit a bond to the BLM as a sort of insurance in case it fails to remediate the mining or drilling sites. That bond has been submitted, and the agency said it is working on an acceptance letter. Once that letter is received, the company has the green light to start drilling.

Evenson said the BLM has consulted with Rover Metals to ensure that the drilling happens outside of the refuge and "Areas of Critical Environmental Concern" that immediately surround the refuge's boundaries.

Culter, the CEO of Rover, said the company is aware of some of the concerns raised over the project, and that he hopes to host a townhall with Amargosa Valley residents next month.

He added that the company revised its plan for the first 10 drill sites, which he said would be situated farther away from the northern boundaries of Ash Meadows and closer to the middle of the company's claim block.

Push for oversight

Opponents hope to slow the project down, but the lack of required federal environmental reviews limits the options at their disposal.

Voehl and nearly two dozen environmental and Native American advocacy groups are urging the Department of Interior and BLM to require the company to submit a more robust plan of operations and give the public a chance to be heard before drilling starts this summer, and



plan to submit a letter to Interior Secretary Deb Halland formally making those requests in the coming days.

"We want to see senior leadership say this is an exceptional situation, that we have to be careful here," Voehl said. "We just want to see transparency, and we want to see things slow down so that we give the public that chance."

Voehl said nearly 1,200 individual letters have been sent to federal officials urging them to require a more robust monitoring plan for the drilling operations, as well.

Beyond that, the only real recourse for the project's opponents would be through asking the courts to get involved in a lithium fight once again.

That could mean that another long legal battle over lithium is in store and likely not the last one for Nevada.

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Citation: A mining company is hunting for lithium, right on the edge of wildlife refuge (2023, July 14) retrieved 20 May 2024 from <u>https://phys.org/news/2023-07-company-lithium-edge-wildlife-refuge.html</u>

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