

# **A new uranium mill was proposed outside Green River nearly 2 years ago. What's happened since then?**

A Canadian company said it expected to “produce significant quantities of uranium” in 2025. But progress has been slower than that.



Emery County boomed as it welcomed two coal-fired power

plants in the 1970s, then saw its population drop. Slower growth and reversals since then, Green River Mayor Ren Hatt often says, have meant his community's top export, like "a lot of rural towns, is its children."

Now, producers eager to develop carbon-free energy are rediscovering Emery County.

Moving to make the most of its natural resources, companies want to tap its [lithium-rich groundwater](#) to create rechargeable batteries, the [sunlight that warms its desert stretches](#) for solar power and the uranium veins concentrated underground to fuel nuclear reactors.

Western Uranium & Vanadium Corp. [announced in January 2023](#) that it planned to build a new uranium mill just miles from the city of Green River, to process ore from its own mines in Utah and Colorado and from other mining businesses.

Approaching two years later, earlier timelines for starting up the proposed Maverick Minerals Processing Plant have been delayed from 2025 and 2026. In a recent interview, CEO George Glasier said that 2028 is "more realistic based on our progress so far."

He now estimates the mill will cost \$100 million to build. But the company claims its patented technology for separating

uranium from rock will reduce its costs and make its plant more efficient than the [only other conventional uranium mill](#) in the country — White Mesa Mill, about 150 miles away in San Juan County.



(Brittany Peterson | AP) Ren Hatt, the mayor of Green River, poses for a photo, Friday, Jan. 26, 2024.

“Our mill will be a tenth the size of the White Mesa Mill,” Glasier said, “and produce almost the same amount of uranium because of the new technology we’re going to employ.”

The mill’s design plans, [according to the company’s recent quarterly report](#), continue to target producing 1 million pounds a year of yellowcake — the concentrated uranium

that becomes powerful fuel for nuclear energy.

Green River's City Council hopes the mill will be a good source of well-paying jobs. It also, council member Kent Nelson acknowledges, might not be built.

"Green River, because of our location and our wanting something to happen here, we're very susceptible to speculative things. Anything that comes in," he said, "I always say I don't believe it until I see something happening."

Western Uranium does not yet have the permits it will need — including from the Utah Division of Waste Management and Radiation Control — to build and operate the proposed mill.



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This year, the company has continued to gather baseline data it needs to apply for permits, including wind and atmosphere readings from meteorological towers at the site and finishing a plant and animal study, according to the

recent company filing.

If Western secures permissions, Glasier said, building the mill itself would take about a year and a half. And it could become one of two the company owns: Earlier this month, Western announced [it had also acquired the site of a prospective uranium mill](#) in Montrose County, Colo., from a private investor group Glasier previously headed.

Nelson has reason to doubt that the uranium industry has staying power. Though the price of uranium now is high — due to international instability and a national push to reduce dependence on fossil fuels like coal — the state's largest electricity provider [walked back its plans](#) to replace Emery County's two 1970s-era coal-fired plants with nuclear power plants in April. And just last year, a plan to power small Utah cities with nuclear power [went bust after a decade of planning](#).





(Rick Egan | The Salt Lake Tribune) The Hunter Power Plant in Emery County, in 2022.

And while nuclear power doesn't produce earth-warming gases like the burning of oil, natural gas or coal, the mining and milling of uranium come with their own environmental and public health concerns — including radioactive dust and waste.

Out-of-towners, Hatt said, have been vocal about not wanting the uranium industry revived in Green River. But the area needs steady jobs, Hatt said — not only to attract new families, which is vital to the town's survival, but to sustain the residents already there.

"It's like, 'don't do that, just sit in the same exact place that you are without any real growth,'" he said.

"You don't live here. You don't fully understand what the economic concerns are," Hatt continued, "and you're just telling us not to do something that would be very economically advantageous because you don't like it."

## **The proposed uranium mill**

Nelson grew up in the area on a small farm near the east side of the Green River, the largest tributary to the Colorado River. Both of his grandfathers moved to the region when they were young, and his father worked in local uranium mines in the 1970s.

"Being a rural — very rural — community, which are struggling everywhere in the United States, we're looking for an economic boost," Nelson said.

The new mill "could be a good thing for Green River, something that we need to explore further," he added, "and something that we shouldn't say no to just because of the uranium scare."



(Brittany Peterson | AP) A grocery store sign is displayed near a church on Friday, Jan. 26, 2024, in Green River.

Western Uranium & Vanadium is a Canadian company headquartered in Nucla, Colo., just across the Utah state line. Last year, [the company acquired about 500 acres](#) in the Green River Industrial Park, about ten miles from the town itself, to build its proposed mill. It added that it selected the site, in part, "based on the support of local municipal and county officials."

Some of the land was purchased from the state by a Western subsidiary, Maverick Strategic Minerals Corp., through a public auction by the Utah Trust Lands Administration (formerly known as SITLA, the School and



Institutional Trust Lands Administration). The state agency leases and sells its land to make money for Utah public schools.

“Emery County has been very supportive of our leases for uranium prospecting,” said a Trust Lands Administration spokesperson.

The White Mesa Mill, owned by mining company Energy Fuels Inc., has recently been processing uranium ore mined in Utah and Arizona. But when demand for uranium was lower, it had started started processing rare earth elements — [essential](#) for cellphones, hard drives, electric vehicles and televisions — and plans to make them the focus of their operations moving forward, the mill’s manager said.

**[Read more: [Utah has the last conventional uranium mill in the country. What does it do?](#)]**

Glasier sees an opportunity in that shift. “There’s got to be another mill that’s going to primarily process uranium and vanadium,” he said.



(Lauren Gustus | The Salt Lake Tribune) A colorful welcome sign greets visitors to Green River, Thursday, Oct. 24, 2024.

The proposed Maverick Minerals Processing Plant also differs from the White Mesa Mill in how it will process uranium, Glasier said. Conventional uranium mills usually must transport and grind large volumes of rock to separate out uranium-bearing ore before processing.

But Western's patented kinetic separation process, Glasier said, blasts rock inside a mine with sand to grind it away from uranium ore, meaning that what is transported to the mill is more concentrated with uranium. The process is entirely physical, not chemical, he said, and has been used in phosphate mining, but not yet for uranium.

The company plans to process 3 million pounds of uranium

ore per year from uranium mines across the region, Glasier said, including the San Rafael Uranium Project, a mine it owns just miles from the proposed mill location.

In its quarterly report, the company said the Bureau of Land Management has given its approval for Western to do initial mineral and groundwater exploration at the mine site, which is a precursor to applying for a mining permit. But the report said Western is awaiting a permit from Utah's Division of Oil, Gas & Mining before it can begin that work.

A spokesperson for the state agency said it gave tentative approval in August, but is awaiting a bond from the company before it gives full approval.

The mine will cost \$30 million to develop, Glasier said. Hatt noted it also could provide steady jobs for Green River residents. "I know people who have worked in both," Hatt said, "and they've said, 'I would much prefer to be in a uranium mine versus a coal mine.'"

**[Read more: [Here's what a Utah uranium mine is like today.](#)]**

[Recent research](#) shows that coal miners are still dying from diseases caused by inhaling coal dust, including black lung and chronic obstructive pulmonary disease

Uranium mining is often considered by miners to be cleaner work, but workers also risk exposure to radioactive gases

and diesel exhaust, both known to cause cancer. Today's effective ventilation significantly reduces that risk, [experts and regulators agree](#).

The proposed mill will also be designed to recover vanadium, a metal used in nuclear reactors and steel alloys, and cobalt, a metal used in rechargeable batteries that power phones and electric vehicles.

As of June 30, Western reported, the company had an accumulated deficit of \$23.9 million and working capital of \$8.2 million.

## Revisiting the past



(Trevor Christensen | The Salt Lake Tribune) The sun sets on the Green River disposal site on Wednesday, August 14th, 2024. The site was once the

location of a uranium mill owned by Union Carbide Corporation. During its three years of operation the mill generated an estimated 114,00 cubic yards of radioactive tailings. Remediation of the site was completed in 1989. The site sits just outside Green River, Utah.

This isn't the first time Glasier has tried to get a uranium mill up and running — nor the first time Green River has had a uranium mill.

Before leading Western, Glasier was the CEO of Energy Fuels. In that role, he bought property in 2007 near Naturita, Colo., and proposed building what was called the Piñon Ridge uranium mill, [which environmental groups opposed](#).

The mill was never built, and Energy Fuels eventually sold the land to a private investor group led by Glasier. Now that Western has acquired the property, Glasier wants to give building the uranium mill there another go.

Owning mills in both Emery County and western Colorado, Glasier explained, would cut down the cost of transporting uranium ore.

"The whole attitude towards nuclear power has changed drastically in the last 15 years," he said, "and now, the economics have changed considerably."

In Green River, a pile of rock that resembles a low black pyramid stands as a legacy of the uranium mill that operated there from 1958 to 1961. It covers about 114,000 cubic yards



of radioactive waste.

Union Carbide Corporation owned the site until 1988, when the state of Utah bought it. The U.S. Department of Energy moved the mill's waste into a disposal cell on the site, which is now [covered by a barrier](#) to contain carcinogenic radon gas, a layer of coarse sand and the rock.



(Trevor Christensen | The Salt Lake Tribune) The sun sets on the Green River disposal site on Wednesday, August 14th, 2024. The site was once the location of a uranium mill owned by Union Carbide Corporation. During its three years of operation the mill generated an estimated 114,00 cubic yards of radioactive tailings. Remediation of the site was completed in 1989. The site sits just outside Green River, Utah.

Another uranium mill cleanup project nearby "employs a pretty good chunk of Green River residents," Hatt said. At

the [Crescent Junction Disposal Cell](#), waste from the former Atlas mill near Moab is stored and covered with a 9-foot layer of soil and rock.

## Where to go from here

Representatives from Western Uranium & Vanadium [attended a Green River City Council meeting in January](#), where the community discussed whether to write a letter that the company could use while raising money.

"A lot of these businesses are figuring out that having local support is incredibly important to foreign investors," Hatt said.

At that meeting, Hatt said, "most of the people who spoke out were from out of town. ... We had very little public comment from actual Green River residents."

Critics, according to meeting minutes, raised concerns about the mill's potential environmental and public health impacts. [Uranium Watch](#) leader Sarah Fields and other environmental advocates are watching the proposed mill's progress.

Hatt responded that the letter isn't binding. Nelson said regulations for the uranium industry are better now than in past decades. Council member Guy Webster said the city isn't in a position to turn away potentially high-paying jobs.

Ultimately, the council voted unanimously to approve the letter of recommendation for the proposed mill and its site — where, for now, travelers driving by on U.S. Highway 191 pass quiet desert.