

# In Northern Minnesota, Two Economies Square Off: Mining vs. Wilderness

**By Reid Forgrave**

Minnesota is home to some of the world's most ancient rocks, as old as 3.5 billion years. Earth has been around for only 4.5 billion years. About 2.7 billion years ago, basalt lava flowed underwater near what's now the state's border with Canada; the lava hardened, and the creep of geologic time turned it into a bedrock of greenstone and granite. On top of it, a layer of sedimentary rock rich in iron ore formed nearly two billion years ago, when the region was ocean floor. Then a billion years ago, Earth's crust cracked open, producing a 50-mile-wide fissure stretching from Lake Superior to Kansas. For the next 100 million years, lava bubbled up into what geologists call the Midcontinent Rift, forming a mineral deposit filled with copper and nickel. Settlers first made their way to the area in 1865 in a fruitless search for gold. What they did find was iron ore, and lots of it. Rails were laid for iron-ore transport, and the town of Ely was founded a few years later, in 1888.

Today Ely is home to a few thousand people, a place of long, hard winters that is, in the words of one resident, "not on the road to anywhere — we're literally the end of the road." People do not end up here by accident. For most of the town's history, the main reason they came was to make a living off the rocks. The ore supported abundant mining jobs for generations.

For almost as long, however, people have been coming to this area for another reason, too: to visit America's most popular national wilderness area, the Boundary Waters Canoe Area, which encompasses roughly a million protected acres and thousands of lakes and welcomes 150,000 visitors annually. The "Land of 10,000 Lakes" is actually a land of 11,842 lakes, and that figure counts only those bigger than 10 acres. They are a legacy of the glaciers that retreated from the region about 10,000 years ago. As a result, the state has a significant fraction of the world's supply of surface-available fresh water; 6 percent of Minnesota's surface area is water, more than any other state.

Geological coincidence makes Ely — one three-square-mile town in the northernmost reaches of the continental United States — a focus of a national debate about the proper use of public lands. The place also distills the political fault lines in today's America, pitting an angry working class against progressive activists. Just southeast of Ely, an international mining conglomerate has invested hundreds of millions of dollars during the past decade toward potential copper-nickel mines a few miles outside the Boundary Waters. The company — Twin Metals Minnesota, a subsidiary of the Chilean mining giant Antofagasta — has drilled 1.6 million feet of core samples out of 496 holes to explore the deposit from which it soon hopes to process 20,000 tons of mineralized ore a day. The company believes the area's valuable metals — copper, nickel, platinum, palladium, gold and silver — can be extracted in an environmentally responsible way

and can provide hundreds of jobs to the job-starved economy of Minnesota's Arrowhead Region, along the northwestern coast of Lake Superior.

But there's a generations-long rift in Ely — between those who believe minerals are the region's greatest asset and those who believe clean waters are — that has been laid bare recently. In December the Obama administration denied a renewal of Twin Metals' mining leases and put in place a moratorium while a two-year comprehensive federal study is being conducted on mining near the Boundary Waters. Depending on its findings, the stoppage could be a prelude to what conservationist groups here hope for most: a 20-year prohibition on mining in a 230,000-acre portion of the Rainy River Watershed that includes land surrounding the Boundary Waters. That could lead to a permanent end to mining around the Boundary Waters.

Now, mining supporters, among them Representative Rick Nolan, a Democrat who represents Ely's district in Congress, are trying to undo the moratorium. The battle is being fought on both moral and economic grounds. Mining advocates stress the hundreds of tangible construction and mining jobs this copper-nickel operation could create in the coming decades. Boundary Waters activists argue that the very presence of mining — its disruption of this area's natural character, not to mention the specter of pollution — could hamper the region's "amenity-based" development in a multitude of tangible and intangible ways, from destroying property values to stripping away jobs that feed off this area's natural beauty.

In the land of iron and water, opposition to copper-nickel mining is more than just a protect-the-wilderness stance; it also reflects a deeper desire to change the area's character, from hardscrabble mining region to tourist destination that prioritizes protecting the wilderness over creating more mining jobs. Central to the debate between the two camps is a philosophical question: What is the right kind of economy for a place like the Boundary Waters?

**For as far** back as he can trace it, Dan Forsman's family has lived here, where iron meets water. His great-great-grandfather migrated from Finland in the 1890s and homesteaded on a 474-acre lake. His great-grandfather, Emil Forsman, worked in the mines before opening a longtime Ely watering hole, Forsman's Tavern. Emil's son worked as a maintenance foreman in the crusher at an Ely mine. In 1947, Emil's eldest grandchild was born above Forsman's Tavern. That boy, Mike, grew up in Ely, worked for a canoe outfitter for \$1.25 an hour, volunteered to join the Marines in the 1960s and worked in the mines for 34 years. His youngest son was Dan. Dan grew up in awe of the giant machines that his mechanic father worked to fix. When he turned 20, after training at a two-year community college to become a heavy-equipment mechanic, he got a job at the same mine as his father.

Image



Dan Forsman in the heavy-equipment shop at the mine where he works. Credit... Christopher Payne for The New York Times

At 4:40 a.m. on a chilly late-spring morning, I pulled up to Dan Forsman's house to drive with him to work. The diesel engine of his 2002 Chevy Silverado pickup was already growling. He had gotten up 12 minutes earlier, thrown on torn jeans, a T-shirt and a camouflage hunting jacket and packed a lunch: turkey and American cheese on white bread, a banana and a Little Debbie Cosmic Brownie. The 29-year-old tugged down on a cap that advertised the brand of nitrous oxide he uses to soup up car engines. A block away, he steered past his father's house and the garage where he learned to tinker. His prized car is a 1979 Chevy Camaro; he can get it up to nearly 150 miles per hour on a nearby drag strip.

Forsman drove up the hill of Ely's business district. Some people call this a mining town, others a tourist town, but East Sheridan Street shows it to be both. There's the grilled-cheese shop frequented by tourists and the grocery store that stocks the hot smoked bologna local residents swear by. There are liquor stores that boycotted a local brewery after the brewery publicly sided with clean-water advocates, but down the street is a stylish new wine bar serving that same beer. More than a dozen local canoe outfitters that organize trips into the Boundary Waters are based here. Neighboring storefronts display yard signs: "We support mining. Mining supports us."

"There are two Elys, two different realities, different visions," Tom Coombe, the editor of *The Ely Echo* and a fourth-generation Elyite, told me.

As Forsman's truck rumbled to the top of the hill, we passed a two-story building that used to be Forsman's Tavern. Now it's occupied by Piragis Northwoods Company, a successful canoe outfitter and outdoor store. Steve Piragis has run this shop a decade longer than Dan Forsman has been alive, but Forsman's family still considers Piragis an outsider — a "packsacker," the local term for people who moved here for wilderness instead of mining.

Past the city limits and into the heart of Minnesota's Iron Range, fog lifted over white pine trees. A ring-necked pheasant strutted alongside Wolf Creek Pass. As Forsman parked in the same lot his father used to park in — 52 minutes door to door — steam poured from four chimneys.

Forsman is proud of his part in this 360-employee mining enterprise. He's proud that his labor makes something tangible: Huge chunks of rock become tiny bits of rock, which are ground and baked into half-inch pellets containing 67.5 percent iron, which leave this processing plant on the rails at a rate of 8,500 tons a day. The pellets are loaded onto ships in Duluth, where they float along Lake Superior to the other Great Lakes. At the bottom tip of Lake Michigan, just east of Chicago, tons of these pellets are fed into the largest blast furnace in the Western Hemisphere and smelted into steel, eventually becoming cars or trucks or household appliances or plate steel for ships and armored vehicles.

Up a flight of metal stairs, Forsman entered the locker room, put on his blue coveralls and laced up his steel-toed boots. Everything in his workplace seems improbably enormous. The mining trucks, with their 12-foot-tall tires, can haul 240 tons of rock

from the open-pit mines into the processing facility. Miles away, off a gravel road as wide as a six-lane highway, 280,000 pounds of explosives had been loaded into 132 16-inch-diameter holes in a mining pit — it was blast day. The explosions would shake the earth, breaking up rock for the processing facility. The pit looked like a gray moonscape.

“To make money, you have to make something that wasn’t there,” Forsman told me. “You dig it up or you grow it. Without those things, you’re just making nothing. Without the basic minerals to make a phone, you can’t make an app for the phone. Because there’s nothing there.”

Forsman says he loves and wants to protect the Boundary Waters. He also believes copper mining and clean water can coexist. Then again, the mine that Forsman works in is a taconite mine, not the type of copper-nickel mine that environmentalists decry as a threat to this watershed. But what matters most to Forsman is the need for jobs in this hollowed-out region. Ely’s population has shrunk 30 percent since 1980; school enrollment is a third of what it was in the late 1960s. “If they stop this new mine, what’s the draw to be up here if there’s no jobs?” Also, he notes, those who oppose new mining jobs — “elitists” and “hypocrites,” Forsman calls them — benefit from the same metals that blue-collar workers like him produce. “People don’t understand where things come from anymore,” he said.

When Forsman refers to these “people,” he’s often referring to one person in particular. Her name is Becky Rom, and she is the head of the Campaign to Save the Boundary Waters. What makes him most angry is Rom’s condescension, her moral certainty: “The way she comes off, her attitude and way of doing this, it’s part of the problem.”

“**Danny Forsman drives** to the mine in his truck, comes home and watches TV, and he doesn’t know this world exists,” says Becky Rom, a 68-year-old lawyer who returned to her childhood home after retirement and now leads the environmental campaign. One afternoon this spring, I stood on a dock with Rom and her husband, Reid Carron, as they lowered a canoe into the South Kawishiwi River. Rom dangled her feet over the water, which was a couple miles of portages, rivers and rapids from the southwestern border of the Boundary Waters. Chokecherry and juneberry trees were in bloom. Sometimes Rom sees moose, otters, timber wolves or black bears. Today a blue jay hopped along the shore near where a beaver had built a lodge of alder limbs. Rom guessed newborn beavers were inside.

Rom has an energy that can be difficult to keep up with, whether she’s channeling it into hourlong soliloquies about the history of the Boundary Waters or a breakneck march into the wilderness. Rom slid into the canoe, her husband in back and me in the middle. The water beneath us was nearly black, tannin-stained, jarringly cold. A few years ago, an environmental group cited the South Kawishiwi as one of America’s 10 most endangered rivers because of the possibility that Twin Metals would begin mining for copper-nickel nearby.

Rom has become the most prominent foe of copper-nickel mining near the Boundary Waters. She makes frequent lobbying visits to St. Paul and Washington to drum up

support from administrative and elected officials. Her group commissions studies and opinion polls; she takes part in public debates. But even the miners who hate her most wouldn't dare call her a packsacker. Rom's family has lived in Ely as long as the Forsmans. Her grandfather, Caspar Rom, emigrated from Slovenia in the 1890s. In December 1917, three weeks after his ninth child was born, Caspar Rom was leaning over an ore car when a cave-in crushed his head. That newborn son was Bill Rom, Becky's father. He hunted and fished with his brothers to help his mother put food on the table. In 1946, he opened Canoe Country Outfitters, soon one of the most successful outfitters around. Three years later, Becky was born.

Her father became a leader in the fight for the federal Wilderness Act, whose passage in 1964 helped create federally designated wilderness areas. During the battles over the tightening of the Boundary Waters Canoe Area Wilderness regulations in the 1970s, Bill Rom became a symbol among local residents, who for generations had enjoyed this land with few restrictions, of environmentalism run amok. Under new rules, airplanes were banned, which meant no more flying seaplanes into remote lakes. Resorts were torn down. Motorboat use was limited. Resentful local residents harassed Rom. In 1975, logging trucks blockaded his business on two of the busiest weekends of the year. Snowmobiles buzzed around his house at night to keep the Roms from sleeping. Becky's brother camped inside the family business with their dog and a gun. Eventually, Rom sold his business rather than endure protests from people he grew up with.

But his cause left a lasting imprint on his daughter. After Rom and her husband, Reid Carron, retired from the largest law firm in the Twin Cities — she was a commercial real estate lawyer, he a management labor lawyer — they moved north in 2012 to a modern log cabin they had built on land her father bought decades before on Burntside Lake. Today a copy of the 1964 Wilderness Act signed by President Lyndon B. Johnson hangs on Rom's bedroom wall.

Rom maneuvered the canoe toward the other side of the river. Docks jutted into the water, evidence of homes hidden in the trees. She lifted her paddle and gestured toward some white pines: "This would be all mines," she said. "The noise, the lights, the dust, it would be everywhere." A woodpecker pounded its beak into a tree. A smallmouth bass hunting mayflies broke the river's surface.

The edge of the Boundary Waters is several miles from three mineral deposits that Twin Metals hopes to develop and just a half-mile from a fourth one. The deposits are near or under lakes and rivers that stream directly into the Boundary Waters. Acid mine drainage could potentially flow past 30 resorts, outfitters and campgrounds, as well as hundreds of homes, before reaching the Boundary Waters at Fall Lake. From there, water enters Basswood Lake, a popular fishery that straddles the Canadian border, then Canada's Quetico Provincial Park and then Voyageurs National Park and Rainy Lake. All told, polluted water could theoretically affect up to 2.3 million acres of American and Canadian public lands, according to a peer-reviewed study published in the *Journal of Hydrology*. Pollution could harm fish, wild rice and property values. (This sounds alarmist to those who support underground copper-nickel mining near Ely; the

multiyear process of planning the mine and clearing it with regulators would, they believe, set up ample safeguards against pollution.)

Rom and her husband climbed out of the canoe. Back in town, they pointed out thriving enterprises. One family company makes outerwear, which nicely complements the family's other business, a lodge that runs winter dogsledding trips. An outfit called Crapola makes cranberry-apple granola. An art gallery displayed prints from a nature photographer. A fancy new restaurant, a spa, a gift shop that also sells saunas, a renovated historic theater looking for a tenant — Rom regards all these small businesses as evidence that the future here will not replicate the mining past. The jobs may be seasonal or not pay as well as mining jobs; on the other hand, they are not as backbreaking and they foster a local creative class. Last year, National Geographic Adventure ranked Ely as one of the world's nine best outdoor towns, citing its proximity to vast public lands. Only one other American community — Moab, Utah, near Arches and Canyonlands national parks — made the list.

“Resentment is the primary driver of the pro-mining crowd here — they are resentful that other people have come here and been successful while they were sitting around waiting for a big mining company,” Carron told me. “They want somebody to just give them a job so they can all drink beer with their buddies and go four-wheeling and snowmobiling with their buddies, not have to think about anything except punching a clock.”

“We’ll never change a Dan Forsman’s mind,” Rom said. “We’ll never change his father’s mind. Because they’re not open to a conversation.”

**At the heart** of this conflict lie several complicated questions: How do you put an economic value on public lands? How do you weigh the competing claims of outdoorsmen and a mining company that supports hundreds of good-paying jobs? And beneath it all: To whom does this land and its natural resources belong?

Part of the problem of judging the worth of the outdoor industry is figuring what exactly it comprises. It includes ski resorts and canoe outfitters, obviously, as well as outerwear manufacturers and climbing-gear retailers. But many other ancillary businesses benefit from Americans’ desire to go outdoors, like hotels, restaurants and gas stations. Antofagasta, in contrast, can talk up the \$400 million it has invested in and around Ely in the past seven years for proposed copper-nickel mines. The company can call attention to a 2012 study that suggested copper-nickel mining would add \$220 million annually to the local economy.

Representatives from Twin Metals emphasize that their project is not an open-pit mine but an underground one, which poses less risk of sulfide-bearing ore and water combining to produce toxic drainage. Maybe mining officials can promise Rom that they are 99.9 percent sure nothing will go wrong with their operations. But even that level of risk is unacceptable to Rom and, apparently, to many Minnesotans. A telephone survey that Rom’s organization commissioned from Fabrizio Ward, a polling company that worked for the Trump campaign, found that state residents oppose sulfide-ore copper mining near the Boundary Waters by more than two to one. In arguing that mining is



too unpredictable, Rom cites the 2014 Mount Polley disaster in British Columbia, in which six billion gallons of waste slurry from a tailings pond was released into lakes and rivers. More jobs would be good, Rom acknowledges, but not at such a cost.

And Rom sees that cost as literal: One of the ways that her activism differs from her father's is that her argument is fundamentally economic. A study by Key-Log Economics, a Virginia-based consultancy commissioned by Rom's organization, reported that a copper-nickel mine within the watershed could set back growing economic activity in the region. Copper-nickel mining could result in the loss of 4,490 jobs and \$288 million annually in visitor spending, more than \$344 million in diminished property values and more than \$400 million in annual revenue if a mine "suppresses or reverses overall amenity-based growth at the heart of the Arrowhead's recovery" that has occurred since a 1980s mining bust devastated the region.

Conservation activists nationwide are pushing similar calculations. The Outdoor Industry Association has taken a stab at estimating the economic output of federally owned lands that make up more than a quarter of the country's terrain. Outdoor recreation accounts for \$887 billion in consumer spending annually in the United States and supports 7.6 million jobs, according to an association report earlier this year. Proponents of the outdoor industry point to how it fared during the recent recession — a growth rate of 5 percent annually from 2008 to 2011, according to an analysis cited by the association — as a reason an outdoor-centric economy is more sustainable than one based on extractive mining. They say that outdoor recreation supports more American jobs than oil, natural gas and mining combined, and note that jobs in recreation can't be outsourced — you may be able to get cheap Chinese steel, but China can't sell recreational opportunities on American soil.

But they don't often acknowledge the different type of uncertainty that comes with an outdoor economy. Business owners may reap enough profits to live comfortably year round, but the jobs they create are often seasonal, with pay suitable only for younger workers. A recent analysis commissioned by Mining Minnesota showed that the average mining job pays four times as much as the average tourist-industry job and has a greater impact in other sectors of the economy.

"You cannot make a living on the Boundary Waters," Tom Rukavina, a longtime Democratic politician from the region, told me. "The 100 miners that live in Ely, Minnesota, are what keep that town going nine months a year. Otherwise when tourists come in summertime, there'd be nothing there: no restaurants, no hospitals." Whether or not Rukavina is right, the lowest rungs of tourism work will never feel like career options for the longtime Ely residents (mostly men) who stand to benefit from mining work. They see it as fundamentally a question of dignity for families that have worked blue-collar jobs for generations. As Rukavina puts it, "I don't want to be anybody's Sherpa."

**Inside Dan Forsman's** football-field-size maintenance shop, his eight-hour shift was coming to an end. Nearby, sparks flew where a welder changed track pads on a bulldozer. A Trump-Pence flag still hung in the rafters. Bumper stickers read "Hillary for



Prison 2016” and “Bend over, here comes the change.” The politics inside this maintenance shop have indeed changed in the past generation; this part of Minnesota was once a Democratic stronghold. One toolbox displayed a worn campaign sticker for Paul Wellstone, the liberal United States senator from Minnesota who died in a plane crash in 2002; another was decorated with a sign of a wild-eyed collegiate protester: “Happiness is pissing off a liberal.” In 2016, Minnesota’s Eighth Congressional District was one of 12 nationwide that elected a Democratic congressman but swung for Trump — by a huge 16-point margin — despite having gone for Obama by six points in 2012.

Several miners mentioned a single Hillary Clinton comment about clean energy as the reason for their support of Trump. “We’re going to put a lot of coal miners and coal companies out of business,” Clinton said during one campaign stop. Miners across the country — like Forsman and his colleague John Daby — reacted much like Bill Rom’s opponents did in the 1970s: They took it as a personal slight, evidence of a Democratic Party pandering to a radical, politically correct environmental fringe. “They’re preaching to us about global warming when these elites are flying around the world in their private jets, burning more fuel in a day than we did in a year,” Daby told me. “People living in a gated community, telling us how to live our life! A lot of people woke up to that this election.”

Kris Hallberg, a retired World Bank economist who moved here several years ago from Washington, dissected the town’s mentality for me: “Somebody who used to go to the mines, have a good-paying job supported by a labor union, and then you tell them, ‘Well, the economy has changed, now you’re going to clean houses for the summer-cabin people — and make a fraction.’ But even if it were the same money, the loss of respect is a big deal. That’s a microcosm of the U.S., the loss of industrial jobs that at least gave men permanent employment, respect in the family, respect in the community.”

As we pulled out of the mine’s parking lot, I asked Forsman about Becky Rom. What if she was right? Certainly, mining jobs could help Ely’s economy in the short term, but her argument was that the presence of mining and the possibility of acid drainage could destroy the region in the long term. “I just don’t see it being that hard to contain these kinds of things,” Forsman said. “Yeah, something catastrophic can happen. But it can usually be taken care of.”

Forsman drove us past the lake where his great-great-grandfather had homesteaded. He turned into town and parked in his driveway. I brought up something that Jane Koschak, whose family owns the picturesque River Point Resort, across the South Kawishiwi from a proposed copper-nickel mine, told me: “We know we are on the right side for the future of our earth. Mother Earth is bleeding and suffering all over the world. We do not want our clean water and clean air destroyed.”

Forsman thought about what Koschak had said. The issue, he said, was the same as it was with Rom: the moral certainty of the other side. His voice trailed off. Then he said: “Becky wants to complain that this is destroying everything, and she says she’s against this happening, but who is she bashing? She’s bashing every person who has a chance of having a job there.”

The sun was getting low, and I had a long drive back to the Twin Cities. I shook his hand and walked to my car. I pressed the button on my Toyota Prius, with its nickel-based battery. I plugged in my iPhone, which contains nickel and copper, lithium and aluminum. I drove past Minnesota's first iron-ore mine, which closed more than 50 years ago, and down the spine of the Iron Range, which provided much of this region's wealth. Soon enough I reached the sprawling suburbs of the Twin Cities. Commercial jetliners flew overhead.

As I drove, I thought of Forsman's older sister, Brandy, who does contract work as an analytical chemist in Duluth. She tried to move back to Ely but couldn't find a job. She is concerned about what sulfides from the mines could do, especially to Minnesota's wild-rice crop, which she calls a "canary in the coal mine" for environmental damage. She wants the Boundary Waters protected. But she feels the pull of her own heritage, and that of her homeland, to mining. "I've got some really liberal friends, some hippie friends, then I go home and talk to my family, who are all serious mining supporters," she told me. "I do feel like there is a middle ground, and I often feel very trapped in the middle."

Her words stuck with me because she spoke the language of each side — and she saw how little common language those sides shared. At family dinners, when the topic comes up, Brandy mostly stays quiet.