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Down to Earth

NEWS FROM THE MONTANA ENVIRONMENTAL INFORMATION CENTER



**Victory for the
Smith River**

**The Fight for
Clean Air in
Butte**

**Last Opencut
Mine Victory
in the State?**

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Cover photo:
The Smith River by Grant McClintock.

MEIC is a nonprofit environmental advocate whose purpose is to protect Montana's clean and healthful environment.

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From a Board Member

by **Madison Hebner**

In this and future issues of Down to Earth, we'll be featuring pieces from all of our board members so you can get to know the extraordinary people who guide MEIC.

I've been fortunate enough to grow up in this beautiful state that many of us are lucky to call home. Early on, I was taught to appreciate the seemingly unlimited hiking, skiing, fly fishing and other outdoor activities in Montana. They have become a considerable part of my life, something I'm sure is familiar to many *Down to Earth* readers and listeners.

Unfortunately, with each new year, I've also observed negative environmental factors threatening this lifestyle. Rising global temperatures are projected to decrease snowpack and escalate flooding, which is a terrifying thought to us winter sports enthusiasts. It's likely that most of us have firsthand experience with the devastation of forest fires, and an exponential increase in temperatures and dryness is a literal time bomb. The irregularity and decrease of spring runoff will lead to heavier concentrations of pollutants in the water, affecting plant and animal life. By stating the previous, I am simply reiterating something I think we are all aware of – our state (and planet) is in grave danger.

However, all hope is not lost. My childhood experiences in Montana, coupled with my passion for climate justice, have cultivated ambition for all aspects of MEIC's mission to protect air and water quality and equitably transition to renewable and clean energy sources. Specifically, my past work as a climate justice lobbyist during the 2021 Montana Legislature fostered my passionate interest in working towards total clean and renewable energy, while considering the complicated factors that are involved – promoting coal community transition, remediation of contaminated sites, economic development, infrastructure, and community assistance.

Luckily, these are all issues that MEIC works tirelessly on. MEIC's work to reduce the use of dirty coal and promote a thoughtful transition to renewable and clean energy sources is one of the single most important

(in my humble opinion) things we can do to combat the gloom and doom of climate change.

How I see it, is that every person can play a role in fighting the climate crisis, no matter your field of expertise. As I wrap up my graduate degree in the seemingly unrelated field of microbiology, I am constantly considering how I can play a meaningful role working towards climate justice.

I've discovered that my role looks like understanding how climate change affects the biological ecosystem and human and animal disease. For others, it may involve voting for politicians who prioritize the energy transition, promoting research on alternative energy and farming practices, and elevating the needs of climate-impacted communities. It's easy to focus on the danger of where we're heading, but let's turn our attention to the difference we can be making instead. It's not over yet. 🌱

Madison Hebner has called Montana home for most of her life. Her time as a statewide legislative organizer and lobbyist with Forward Montana during the 2021 Legislative Session fueled her passion for expanding clean energy and maintaining Montana's clean air, land, and water. Along with her interests in climate science, Madison is also a biology enthusiast. She studied the wildlife-human interface of infectious diseases at Rocky Mountain Laboratories and is now completing a master's in Microbiology and Immunology at Montana State University in Bozeman. If you bump into Madison and her spunky dog Laika on a local trail, be sure to say hi!





Victory

A Major Victory for the Smith River

by Derf Johnson

After almost a decade of advocacy by our members, supporters, and partners, we've achieved an incredibly important milestone in the fight to protect the Smith River from a poorly planned copper mine. This past April, a Montana District Court judge ruled that the permit issued by the Montana Department of Environmental Quality (DEQ) was "arbitrary, capricious and unlawful." This ruling will significantly affect the viability of the Smith River mine, because without a permit there can be no mining. Of course, the fight is not over. The judge's ruling is almost certainly going to be appealed, and Sandfire (the company proposing to mine in the Smith headwaters) may also consider re-applying to DEQ for an amendment or another permit entirely. However, it's worth celebrating this milestone, because the wind is now at our backs and permanently protecting the Smith is one step closer to reality.

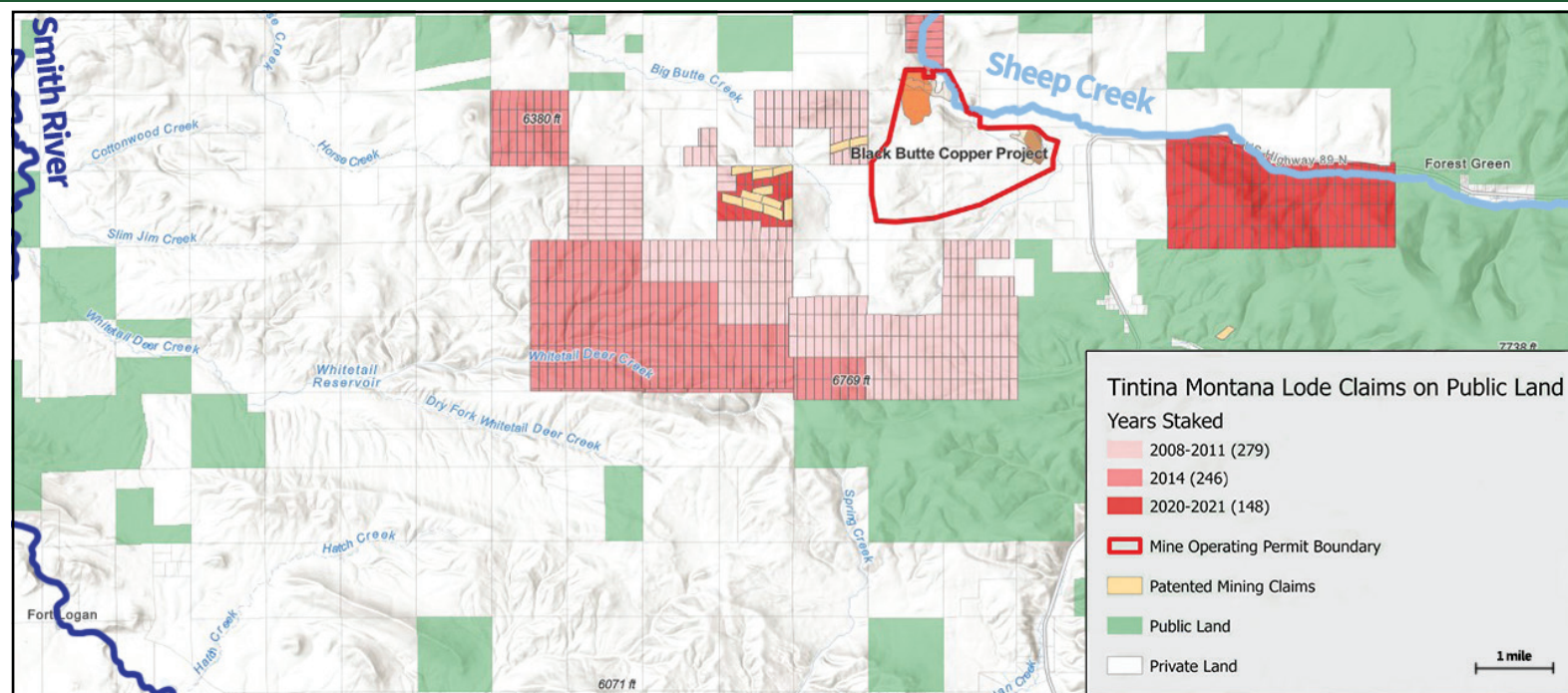
The judge ruled that DEQ failed to justify a number of aspects of the permit, including the efficacy and management of the tailings storage facility, the structural and safety considerations in the tailings storage facility, and alternative storage techniques for the extremely acidic tailings. DEQ did not adequately explain or address these failures.

This victory could not have been possible without you – our members and supporters. Every time a

public hearing was held, you showed up (big time). Every time a public comment period came around, you submitted important and valuable comments of opposition to the mine and of love for the Smith. Every time we (MEIC and our partners) needed funds to fight in the agencies, the courts, and the legislature, you wrote checks without hesitation. Without a doubt, the public opposition to this mine is steadfast and fierce, and the energy of Montanans (and Americans) who love the Smith has, for now, won the day.

In this campaign, MEIC was joined by a number of other organizations that care deeply about the Smith River, including our long-time partners Earthworks, Trout Unlimited (Montana and National), and American Rivers. Each organization put in the time, effort, and resources to bring us to this point. River guides and their employees also deserve recognition for speaking up about the valuable place the Smith holds in their hearts and in their businesses. Finally, Smith River landowners and water rights users (you know who you are) spoke clearly and articulately about the Smith and the risks the mine posed to their private property and communities.

A special thanks must go to Earthjustice, and specifically to attorneys Jenny Harbine and Ben Scrimshaw, who worked tirelessly to advance our legal claims through the judicial system and ultimately secured the judge's strong order against the permitting



While Sandfire has been selling Montanans, and residents of Meagher County specifically, on the idea that they are only contemplating a relatively small underground mine with an operating life of 12-14 years, the company has for years been acquiring mining claims and mineral rights in a very extensive area surrounding the project, both on public and private land. If the current permit is approved, it is nearly inevitable that the company would establish the permitted mine and begin the expansion process. One previous executive even boasted that the mine could result in a “50-year mining district” over thousands of additional acres.

In the past, we’ve noted that the mine has acquired mineral rights less than a mile away from the Smith River proper. It now appears that they are interested in potentially expanding to the east of the proposed mine site as well. Such an expansion would seriously threaten the clean water, wildlife, and recreation opportunities of this area by turning it into an industrialized zone. Please note that this map does not show private claims that have been leased or purchased. MEIC has highlighted the Smith River and Sheep Creek in this version of the map. Visit www.meaghercountystewardshipcouncil.org/what-we-do to explore the original version.

of the mine. Their steadfast attention to detail, the facts, and the law, helped to build our case.

As mentioned, the fight is not over. Most immediately, the judge has requested briefs from all of the parties by early June on the “remedy” that should implement her ruling (i.e., what she should do with the permit now that she has found it to be flawed). We’re actively working through these steps. Additionally, DEQ has already loudly proclaimed that it will appeal the ruling to the Montana Supreme Court, where another legal fight will have to take place. Finally, should the Supreme Court uphold the district court order, Sandfire could potentially apply once again to DEQ for an amended permit. Once again, **MEIC** and our partners are going to need your help. Mining fights are undoubtedly a marathon, not a sprint, and while we certainly should make time to celebrate, let’s all keep in mind that we need to be ready for the next round. 🦋

CALLING POTENTIAL BOARD MEMBERS

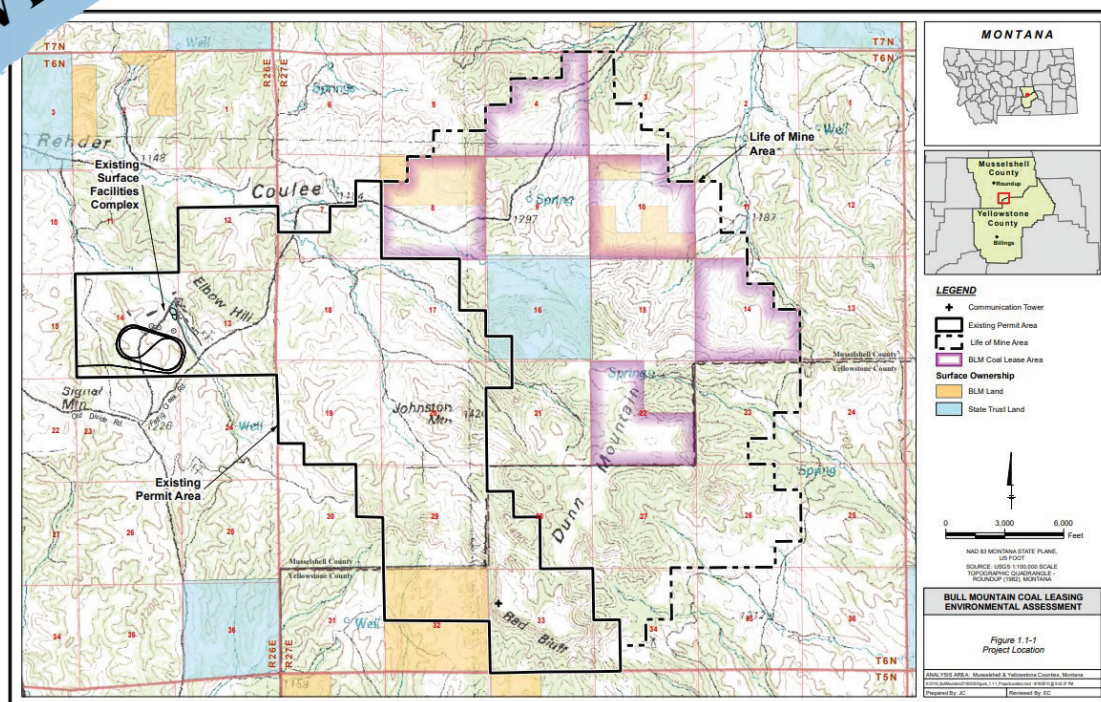
Do you have a passion for Montana's environment and want to bring your expertise or experience to one of the most dogged environmental organizations in the West? We'd love to work with you!

We're especially interested in working with folks with expertise in environmental justice, accounting, fundraising, public health, and/or land use issues.

Visit our website to see the rockstars currently on our board. Email MEIC Executive Director Cari Kimball to learn more: ckimball@meic.org

Victory

Victory at Bull Mountain - Again



Expansions to the Bull Mountain mine would make it the largest underground coal mine in the U.S. Map via U.S. Bureau of Land Management.

by Anne Hedges

Your quiz for today: What happens when government agencies inflate the benefits of a huge coal mine expansion but ignore the fact that permitting the mine will allow it to produce coal that, when burned, will emit more greenhouse gases than the largest single source of such emissions in the nation? The answer: **MEIC**, our partners, and our representatives at the Western Environmental Law Center (WELC), go to court.

On April 4, 2022, that strategy paid off with a victory at the federal 9th Circuit Court of Appeals. The court ruled in our favor on our challenge to an enormous expansion at the Bull Mountain coal mine near Roundup. The proposed expansion would have made Signal Peak's Bull Mountain mine the largest underground coal mine in the nation, and 97% of the extracted coal would be burned overseas.

The federal Office of Surface Mining (OSM) and the Montana Department of Environmental Quality (DEQ) are responsible for analyzing the impacts of mine expansion proposals before issuing permits for them, yet both agencies refuse to analyze the impacts that burning coal will have on the climate. DEQ argues that the Legislature has prevented it from analyzing

such impacts. That argument is being challenged separately (see next page). In this case, OSM claimed that analyzing the mine's climate impacts would be too difficult and uncertain. **MEIC** and, fortunately, the federal court, disagreed.

The federal court said that expanding the mine's operations by 7,161 acres and mining and subsequently burning the 176 million tons of coal in the mine's permitted area could add 190 million tons of greenhouse gases to the atmosphere (this is an underestimate). That's roughly the equivalent of the emissions from over 37 million gas vehicles driven for a year. **MEIC**, 350 Montana, Sierra Club, and WildEarth Guardians, represented by WELC, challenged OSM's decision in January 2019. We argued that it was illegal for OSM to refuse to complete an environmental impact statement under the National Environmental Policy Act and to adequately consider the impacts of the expansion on the climate crisis.

If this sounds familiar, it is. **MEIC** won a very similar case against OSM in 2017. In that instance, a federal district court found that OSM had "put its thumb on the scale by inflating the benefits of the action while minimizing its impacts" when it failed to analyze greenhouse gas emissions of the mine expansion.

Unfortunately, when OSM reanalyzed the climate impacts of this massive expansion, it again sidestepped the issue of the mine's potential greenhouse gas emissions. OSM only considered the emissions from mining the coal instead of considering the climate implications of its inevitable burning. Mining only results in relatively small emissions from operating the equipment. OSM concluded that there would be no significant impact because the greenhouse gas emissions from the mine expansion were negligible when compared to global emissions.

OSM admitted in its environmental analysis that the impacts of the climate crisis are dire. It stated that "this period is now the warmest in the history of modern civilization," and "[b]ased on extensive evidence, it is extremely likely that human activities, especially emissions of greenhouse gases, are the dominant cause of the observed warming since the mid-20th century."

Yet, despite the accurate depiction of the climate crisis, OSM refused to consider the impacts of burning

the mine's coal. The court, in **MEIC's** lawsuit, found OSM's admission of the crisis yet dismissal of the impacts from this enormous mine expansion "deeply troubling," adding "there is no cogent rationale that justifies excluding combustion-related emissions" from the analysis. As the court found, if OSM had compared the greenhouse gas emissions that would result when the coal from the mine was burned, it would increase Montana's annual emissions by 519%. When spread out over time, the court found that "every year the mine expansion operates, Montana's annual greenhouse gas emissions are expected to be about 45% greater than the state's projected 2020 emissions."

Once again, courts have been an important backstop for chicken-hearted regulators who acknowledge the climate crisis but don't want to do anything about it. This case has been returned to the federal district court to determine if mining must stop while the agency completes a legally sufficient analysis. 🌱

Montana Youths Go to Court for the Climate

There is no denying that the Montana Legislature, the governor, and State government entities such as the Public Service Commission are hostile to the reality of the climate crisis. That's why, in 2020, 16 young people from across Montana filed suit against the State for failing to protect them from climate catastrophe. They are rightfully arguing that the State has laws and policies in place that favor fossil fuel extraction at the expense of their future.

The lawsuit, *Held v. State of Montana*, challenges the State's energy policy that encourages the use of fossil fuels, thus contributing to the climate crisis. It also challenges the constitutionality of the exemption in the Montana Environmental Policy Act that says the State does not have to consider the impacts of projects if those impacts occur outside of Montana's borders or "are regional, national or global in nature." When this exemption was passed in 2011, the Legislature made clear that it was intended to prohibit the State from considering climate change when it analyzed the environmental impacts of projects.

The harm to Montana is widespread and significant, yet the State continues to ignore the crisis when it issues permits for large fossil fuel projects such as coal mines, coal-burning power plants such as Colstrip, oil and gas development, and more. This raises the question of whether the State is complying with Montanans' constitutional rights, such as the right to a clean and healthful environment, if it fails to consider the most serious threat facing humanity today, the impacts of pollution that continue to deepen the climate crisis.

Recently, the youth plaintiffs filed their expert reports in the case, which is set for trial in February 2023. The expert reports are well worth a read and should soon be available online. For example, Drs. Steve Running and Kathy Whitlock do an outstanding job of describing the impacts of climate change on Montana's environment. **MEIC** also filed an affidavit discussing the political context in which climate decisions have been made over the decades. The youth plaintiffs are represented by Our Children's Trust, Roger Sullivan, and the Western Environmental Law Center. Email ahedges@meic.org for more information.

NorthWestern Energy: Would You Want Them Next Door?



Construction crews at the site of the proposed Yellowstone County Generating Station. Photo by Carah Ronan.

by Anne Hedges

The news from Laurel, Montana, is not good for the climate, the Yellowstone River, or the unfortunate neighbors of NorthWestern Energy's proposed methane-burning gas plant. NorthWestern recently changed the name of the proposed 175-megawatt power plant to the "Yellowstone County Generating Station" in an apparent attempt to bypass the regulatory oversight of the Laurel City Council. NorthWestern is already living up to the community's fear that it will be a bad neighbor.

Earlier this year, NorthWestern asked the Yellowstone County Commission to allow it to place a high-pressure methane gas pipeline in the floodplain of the free-flowing Yellowstone River. When it encountered opposition to the pipeline's original location through a community park and historic site, NorthWestern proposed moving the pipeline's planned location to one adjacent to numerous residential homes, without notifying the neighbors. The neighbors

informed the County that NorthWestern had failed to comply with the law and notify them of the location change. The County then required NorthWestern to notify the neighbors of the new location before it would hold a hearing on the proposal.

That public hearing before the County Commission was held in late March, but throughout three hours of testimony, it became apparent that the hearing was meaningless. The County Commission ignored the thoughtful, technical concerns of neighbors, experts, and advocates for the Yellowstone River. The Commission did not ask a single question of the neighbors or their experts. As soon as the public comment period ended, the Commission asked the floodplain administrator, who had failed to consider the community and technical concerns and had recommended approval of the request, if he had changed his mind. When he replied, "No," the Commission, without discussion, voted to approve the project in just minutes.

NorthWestern chose one of the most dangerous locations along the river to place its pipeline. It has now run the high-pressure pipeline along the neighbors' property lines and actually started drilling under the river only 175 feet from a quickly eroding bank on its south side. The north side of the river is rip-rapped, which has contributed to the river moving over 1,000 feet to the south over the last few decades. To make matters worse, NorthWestern cut down dozens of old cottonwood and other trees, eliminating the natural armor of the south bank. These trees had helped stabilize the southern bank for generations.

The Yellowstone River has had numerous pipeline disasters in recent years, including one in the same area. In 2011, an Exxon pipeline was exposed and ruptured after a flood event, damaging water quality and property downstream. Unfortunately, the Yellowstone County Commission seemed more interested in garnering the favor of NorthWestern than that of their own constituents.

Recently, NorthWestern also received a favorable, but inaccurate, assessment of its process when a contract

attorney for the City of Laurel overrode the previous opinions of the Laurel city planner and the Yellowstone County planner. She mysteriously concluded that NorthWestern does not need zoning approval from the Laurel City Commission to build the methane gas plant on its proposed site. The troubling decision, if it stands, would eliminate the need for NorthWestern to seek any permission at all from the City of Laurel to build the plant.

Late last year, Earthjustice filed a lawsuit on behalf of MEIC and Sierra Club against the Montana Department of Environmental Quality (DEQ) for its failure to consider the environmental implications of the proposed plant under the Montana Environmental Policy Act when it approved NorthWestern's air quality permit. We argued that DEQ failed to consider the climate implications of NorthWestern's proposal as well as the impacts from the increased air pollution, water pollution, pipeline impacts, and the noise of what will be as loud as 18 jet engines along the river near people's homes. That case is fully briefed and ready for the court to make a decision. 🌿

Reform the 1872 General Mining Act? It's up to you.

by Derf Johnson

The gridlock that's stalled virtually every attempt at Congressional reform of the 1872 General Mining Act has not gone away. And now, the failure to modernize the laws governing mineral extraction on public lands is taking center stage again. There is steadily increasing bipartisan pressure to ramp up mineral production in the U.S. and avoid geopolitical consequences of relying on fuel imports. This, coupled with a steady drumbeat by industry and its lobbyists that shifting to renewable energy "requires mining more metals," has led us to a critical moment of decision and some potentially big policy reforms.

Any new mining activity must be done "correctly" so that the water and the land, and the communities dependent upon these natural amenities, are adequately protected. But without Congressional action, the options

are limited, which only elevates the importance of the Department of the Interior's recent announcement that it is forming an "interagency working group to gather information and develop recommendations for improving Federal hardrock mining regulations, laws, and permitting processes, and is inviting public comments." Comments on how to reform mining on public lands can be submitted here: www.regulations.gov/document/DOI-2022-0003-0001.

In addition, the working group will also host a series of roundtables for different stakeholder groups. The dates are yet to be announced, but we highly encourage your comments and participation when the roundtables happen. This may be a once-in-a-generation chance to achieve some significant reforms, and so the working group needs to hear from you! 🌿

The Active Mine Next Door: Butte Neighborhood Demands Answers



by Derf Johnson

Dust from a blast at Montana Resources' open-pit mine in 2018. Photo by Megan Thompson.

More than anything, Butte is known for mining. It's so deeply ingrained in the identity of Butte that the two are effectively synonyms. Mining is not just the legacy of the city's past but is also its present and likely future.

What many people don't know is that Butte also has a currently operating mining company. Montana Resources extracts molybdenum and copper in the Continental Pit, an open pit east of Uptown, and plans to continue operations for the foreseeable future.

Due to geohistorical development and historic underground mining (requiring a large workforce), Butte is located adjacent to both historical and currently active mine areas. This is especially true in the Greeley Neighborhood, just south of the Berkeley Pit and literally right across the street from the active Montana Resources mine.

As you can imagine, having your home or business across the street from a very large hardrock mining operation can have serious negative consequences. In particular, Greeley community members have protested the large amount of dust coming from the mine site for years. The dust is kicked up by massive haul trucks; the crusher processing the unrefined ore;

the large surface area of exposed, barren land; and current and historic mining waste being managed at the nearby Yankee Doodle Tailings Pond. A few years ago, Montana Resources and the Butte Silver-Bow (BSB) local government took a step toward evaluating the issue by conducting an air quality analysis of potential impacts.

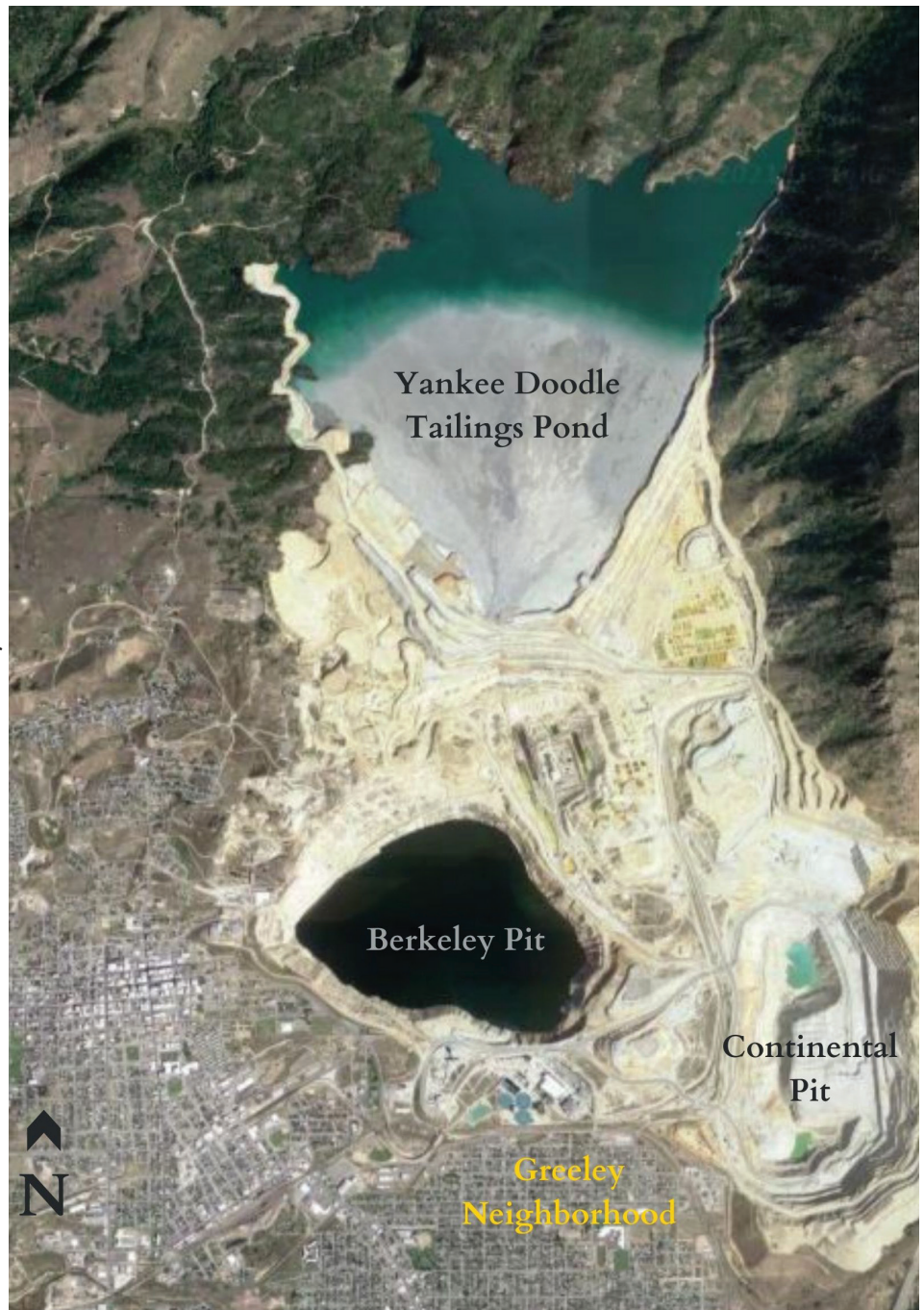
The results of the Montana Resources/BSB air quality study, released publicly in May 2021, concluded that the air was safe. However, on closer review, the methodology that led to the results raised more questions than answers. Due to concerns, the Greeley Neighborhood Community Development Corporation and MEIC retained an air quality expert, Dr. Ron Sahu, to provide a critical, independent eye and evaluate the conclusions of the study and the assumptions that went into the analysis.

On May 17, 2022, Dr. Sahu presented his analysis and professional critique to the BSB Health Study Advisory Committee. Dr. Sahu identified a number of shortcomings and faulty assumptions with the research. He ultimately concluded that the air quality analysis results could not determine whether the

community was being impacted nor whether the air quality was healthy. Dr. Sahu noted that the analysis did not include the mine operation and emissions data, which significantly hampered the analysis and ignored whether contemporary mining was contributing to air pollution. He also noted a series of “chain of custody” issues, concerns over the monitoring site, data intentionally omitted from the analysis, and finally the inappropriate comparisons to standards and data from other parts of the world.

Dr. Sahu offered a number of recommendations for moving forward, including that Montana Resources and BSB collect data coupled with information about the mine’s activities to better determine the active mine’s impacts on the community. He also suggested the Health Study Advisory Committee administer any future research through an independent third party and set up a steering committee of diverse local stakeholders (or further empower the Health Study Advisory Committee) to oversee this research and activity.

The Health Study Advisory Committee is currently evaluating Dr. Sahu’s findings and recommendations. Based upon statements during Dr. Sahu’s presentation, it is apparent that Montana Resources seems willing to provide resources to address a number of issues. However, the Committee doesn’t plan on meeting again until August, and some members sounded skeptical about conducting additional analyses to determine whether the Greeley Neighborhood was truly safe. In the meantime, Greeley residents continue to live, work, and play in potentially polluted air and metal-laden accumulated dust from the active mining



operation next door. Understandably, they’re less interested in talk and more interested in action.

MEIC will continue to monitor and evaluate the actions or inactions of the Health Study Advisory Committee and to advocate for clean air in the Greeley Neighborhood and Butte. The residents of Greeley and Butte, like the rest of Montana, deserve to breathe clean air, and have credible assurance that their industrial neighbors and local government are considering and safeguarding their health. 🌿

Colstrip Coal Plant Owner Talen Energy is in a Deep Hole

by Anne Hedges

The Colstrip power plant is an environmental and legal mess. As if the leaking ash ponds weren't enough of a disaster, the conflicts among the plant owners are becoming even worse. And that's not good news for Montanans, or the non-union workers at the plant and their pensions.

Talen Energy – the operator and part owner of the plant – was a company designed to fail. PPL Corp., a previous owner of the plant, created Talen in 2015 after years of complaining that its unregulated power plants were not as financially viable as its regulated plants. Thus, PPL was making more money when its power plants were subject to utility commissions' regulation because the commissions, in general, allowed it to charge power plant costs to captive customers. Sound familiar? It's similar to the way NorthWestern Energy – Montana's principal utility – passes off costs to its ratepayers. In states where PPL owned power plants whose electricity was sold to the highest bidder on the open market, the business wasn't doing as well. As a result, PPL created a new company named Talen Energy and transferred all of its unregulated power plants, including Colstrip, to the new company. At the time, it was clear that PPL was shedding its liabilities. As could have been expected, Talen sued PPL a few years later, arguing that PPL had left Talen "insolvent" and that it needed more resources to clean up the power plants and to fund worker pensions. PPL countersued. Since that time the lawsuits between the two companies have continued to stack up.

This story is all too familiar for Montanans who have seen companies shed uneconomic assets by creating new corporations and playing corporate shell games until the new company with the bad assets goes bankrupt. Sure enough, in early May 2022, Talen declared bankruptcy, saying it was \$4.5 billion in debt.



What does that mean for the Colstrip plant? The plant has six owners who are barely on speaking terms with one another. Talen only owns 30% of Unit 3 but it is the operator of the entire plant and holds inexplicable sway over Montana legislators. Talen hired bankruptcy counsel in April 2021 but never told the other owners that it was preparing for bankruptcy, even after the owners requested an update about Talen's increasingly dire financial situation.

The Pacific Northwest owners own 70% of the plant and also the transmission system that carries the electricity generated at Colstrip toward the West Coast. They want out as soon as possible, for a variety of reasons. Colstrip is an expensive power plant to operate, and the Pacific Northwest customers want to replace coal power with Montana wind power, which the transmission system could accommodate. Because of laws in their states, many of the owners will no longer be able to charge their customers for the costs



The Colstrip plant. Photo by Anne Hedges.

associated with the plant after 2025. Finally, the owners are facing increased scrutiny from their state utility regulators who want to make sure that their utilities aren't wasting customer money on investments that prolong the life of the plant past 2025.

Despite Talen and NorthWestern's success in convincing the 2021 Legislature to rewrite the terms of the 40-year-old private contract between the owners regarding plant operations and dispute resolution (**SB 265** and **266**), the federal court in Montana has not been so sympathetic. Last year, it put one of those laws on hold while it considered whether the law was constitutional, something the court indicated was doubtful. At another hearing in April, the court again expressed its concern about the constitutionality of both new laws. This is important because the outcome will dictate how disputes among the owners will be resolved.

Last year, NorthWestern and the Pacific Northwest owners requested arbitration to resolve the dispute among the owners regarding what vote is necessary to close the plant. Before the court could rule on the constitutionality of the new laws, Talen asked it to pause the litigation until the bankruptcy was completed. The other owners fired back, telling the court that it should proceed regardless of Talen's bankruptcy. Bankruptcy can take many months and sometimes years to resolve. The court set a hearing for early June 2022 to hear arguments on whether it is allowed to issue a decision before bankruptcy is complete.

To recap, here's what we know:

- There can be no certainty over the plant's future until the litigation among the owners is resolved and they know what rules will govern their disputes. Talen is doing everything in its power to stall that decision.
- Talen has told courts that it wants to move away from fossil fuels and into clean energy, yet it continues to tell Montana lawmakers that it is committed to the Colstrip plant.
- Talen has filed documents in court saying PPL owes it money so it can fund non-union worker pensions, yet it told the Montana Legislature that pensions weren't a problem.
- Talen has filed documents in court saying PPL also owes it money so it can fund remediation at Colstrip and its other power plants. If Talen doesn't pay its share of the hundreds of millions of cleanup costs at the Colstrip plant, the other owners and their customers could be forced to pay for Talen's share.
- Talen will likely emerge from bankruptcy with new owners, namely the bondholders to whom it owes billions of dollars. What Talen promises today could bear no resemblance to what Talen's future owners decide.

The Colstrip plant will close, but between now and when it does, a lot of corporate lawyers are going to get rich. MEIC will keep you informed of all the "exciting" — and potentially legally convoluted — future developments. 🦋

Community Action Works – at Least It Used To

by Katy Spence

In the 2021 Legislature, which was full of nasty bills, some Helena valley residents had personal connections with two hotly contested, but poorly-publicized, ones:

- **HB 599** (Rep. Steve Gunderson, R-Libby) rewrote opencut (i.e., gravel pit) mining laws to the detriment of local citizens.
- **HB 527** (Rep. Fiona Nave, R-Columbus) reduced the ability for impacted citizens and local governments to place reasonable conditions on gravel operations.

In 2019, a neighborhood coalition in the Helena valley, then called the Open Pit Group, began to defend its neighborhood against a proposed opencut operation slated for a large swath of unused land. The group used public participation opportunities in the opencut mining laws as they existed at the time, as well as citizen-initiated zoning (CIZ) to create a residential zoning district with regulations to exclude industrial mining operations. With the passage of these bills in 2021, it's unlikely that other communities will be able to protect their property and water resources as effectively by using the same approach to defeat neighboring opencut mines.

The Battle

After learning in June 2019 of a proposed opencut mine on 61.5 acres of the 70-acre pasture centrally located in his neighborhood, Archie Harper knew the community had limited time to act. The opencut mine proponent presented his plans to the Valley Floodplain



The proposed opencut mine was right in the middle of a Helena valley neighborhood. Image via Helena Independent Record.

Committee at its regular meeting that month. As a member of that committee, Archie realized that his neighbors had no idea what was being planned for the middle of their neighborhood. The land had originally been sold and slated for housing development, but the new owner filed a permit for an opencut mine. At the time, more than 600 residents lived within a half-mile of the site. Of those, approximately 50 homes were directly adjacent to the proposed boundary of the opencut mine. Two of those homeowners were Marty Stebbins and Bob Grudier.

Archie rallied his neighbors, starting a months-long process whose purpose was “to preserve and protect the area’s groundwater resources; minimize flood risk; and promote the residential character of the area, while enhancing the aesthetic character, property values, public health, safety, and welfare of the area.”

Initially known as the Open Pit Group, Archie and his neighbors executed a two-pronged approach

to fight the gravel pit: 1) members participated in the proposed permit's public process overseen by Montana Department of Environmental Quality (DEQ) and encouraged their neighbors to join, and 2) they pursued a CIZ district to preserve the area's residential character and the associated agricultural uses.

A CIZ is a community-led process in which the majority of landowners in an area work together to propose zoning an area in their collective interests. Before 2021, the process was meant to help communities determine what they wanted their neighborhood to look like, including the ability to place reasonable conditions on gravel pit operations. The Open Pit Group wanted a neighborhood that allowed urban and suburban residential development, as well as existing agricultural uses, but no mining. In order to submit a CIZ application, the group needed to establish a boundary of the area, get signatures from 60% of the property owners in the area, and raise \$500 for the application fee. They did so in just weeks.

Marty Stebbins and Bob Grudier purchased their home in the Helena Valley in the middle of this process. They were warned that the home they bought could soon have a neighboring gravel pit.

"At the time, I thought, 'What's a gravel pit?'" Bob said. He had no idea that he'd soon be testifying at the legislature about opencut mining laws.

As the CIZ process moved forward, DEQ finished reviewing the mine permit. In order for the neighborhood to have a chance to give public comment, people living in it had to collect signatures from 30% of the neighboring landowners to request a public meeting. Once again, they rallied.

In early 2020, the Open Pit Group became the West Valley Citizen Alliance Network. The Network rallied the neighbors to attend a February public meeting and voice their concerns. Several hundred homeowners attended the DEQ meeting to provide comments. Archie invoked the Montana Constitution's guarantee to "a clean and healthful environment," and a local hydrologist provided research about the imminent dangers to the water quality. Others noted septic impacts, noise and air pollution, road degradation, public safety, and exacerbated flood impacts in a neighborhood already at risk of frequent flood events.

After the meeting, DEQ extended the review

period to assess the residents' numerous and legitimate concerns. In its deficiency notice to the mining company, DEQ said the application did not "adequately protect the local groundwater and surface water resources" or "make adequate provisions for noise and visual impacts on nearby residents."

DEQ deemed the application "deficient" in May 2020, which meant that the company did not adequately provide solutions to public criticisms brought forth during the review period. In October 2020, the Lewis and Clark County Commission voted to adopt the proposed CIZ, and by July 2021, DEQ officially deemed the opencut mine application "abandoned and void."

The neighborhood residents want to see the 70-acre open parcel become public property via open space initiatives and, one day, a park to benefit the growing population in the area.

2021 Legislature

Following their victory against the proposed opencut mine, Archie, Marty, and Bob commented and sent messages during the 2021 Legislative Session on HB 599 and HB 527. It's not that they're against gravel – far from it.

"We need gravel, just like we need the products of mining," Marty said. "It's more of balancing the needs of the Montana people, nature, our whole ecology to make sure that our grandchildren have a healthy environment and also have the materials they need to live in that healthy environment."

While the West Valley Citizen Alliance Network was successful in using the CIZ tool and public participation allowed by the old version of the opencut mining laws, it was not an easy or straightforward process. And despite these tools being essential in the fight for community self-determination, Gov. Gianforte signed both HB 599 and HB 527 into law at the end of the legislative session.

HB 599 eliminated DEQ's authority to limit noise, hours of operation, water runoff, fire mitigation, and in many instances, public participation. Developers will be able to classify their own operations as "dry" and DEQ will only have 20 days to issue a permit.

story continues on pg. 16

This time period isn't long enough to allow for a public hearing let alone to allow neighboring landowners to hire experts or have substantive input.

HB 527 reduces the ability of citizens to place reasonable restrictions on gravel pits through CIZs. Specifically, HB 527 states that a CIZ may not prevent the complete use, development, or recovery of any mineral. While "complete use" is still undefined and will need to be hashed out in the courts, it's clear that the legislative intent of this law was to strip citizens of the ability to adequately plan for an opencut mine moving in next door.

The combination of these new laws makes a repeat of the success in Helena Valley much more difficult for other groups in Montana.

"It was challenging, but it worked," Archie said. "But they made it even worse, almost to the point where it would make it virtually impossible for local citizens to unite in a timely fashion to head off [a neighboring opencut mine]."


Moving Forward

Marty and Bob said **MEIC**'s role in helping inform the public played a big role for them during the 2021 Legislative Session and will continue to do so during the rulemaking process for HB 599.

"That's where **MEIC**'s mission of making sure information gets out there is really critical, because it was obvious in the last Legislature that our usual ways of getting information out to the public were not happening," Marty said.

When DEQ starts rulemaking and implementing these new laws, Marty and Bob hope for some more balance and responsibility.

"I think we do have mine owners who are responsible," Marty said. "But we're also having to deal with a history of mine owners who are focusing just on taking the resources, and they don't care about the immediate properties or about what the grandchildren are going to inherit."

DEQ will soon take the new opencut law through a public rulemaking process and will be looking for input from Montanans. See below. 

Opencut Rulemaking Update

DEQ's opencut program is drafting new rules that most likely will interfere with the State's obligations to guarantee the public's constitutional right to participate, inform adjacent landowners about what is being permitted near their homes, ensure that all lands be reclaimed, and guarantee the right to a clean and healthful environment for all Montanans. The rules will probably make an already disastrous State reclamation program even worse.

- Nearly 800 opencut operations have expired reclamation dates as of this writing;
- 169 opencut mine operators report that they are still mining despite having an expired reclamation date in their permits; and
- nearly 30 operations have canceled, expired or forfeited bonds.

The proposed rules are likely to address none of these problems. Instead, the rules will probably eliminate DEQ's consideration of water-related issues when issuing an opencut permit. DEQ and mine developers disingenuously argue that if the members of the public are concerned about water issues, they can get involved when DEQ issues a water discharge permit. But most water discharge permits for opencut mines are "general permits," meaning there is no public comment period. Currently DEQ has no plans to assure that the public has the opportunity to comment on water-related issues related to opencut operations that may impact their daily lives, despite the fact that these operations can have profound impacts on water resources.

Join **MEIC**'s action alert list so you can provide comments on what almost certainly will be an unfair and unconstitutional process when DEQ issues a draft rule for public comment.



EPA Nixes Major Parts of Montana's Nutrient Pollution Plan

by Derf Johnson

Our rivers don't stop at the state line. The water cycle is an intricately connected, complex system that all life is tethered to and dependent upon, one way or another. Water pollution in Montana will have consequences for more than just the environment and citizens of Montana. Further, in our modern, hyper-industrialized and highly populated society, we generate an enormous amount of toxins and pollutants, much of which ends up in our waterways. This pollution must be prevented in order to avoid impacting our health, that of our neighbors, and the environment.

Recognizing this quandary, the U.S. Congress passed the Clean Water Act (CWA) in 1972. While the CWA allows for the federal government to delegate its authority to states, it also sets national standards that all states must meet so that pollution can be controlled and prevented. This means that a state, such as Montana, can administer the CWA regulation and enforcement program, but must do so in a way that meets the national standards. The U.S. Environmental Protection Agency (EPA) is also charged with approving (or denying) virtually all water quality regulations and permits that are proposed to carry out the CWA.

This specific authority and responsibility of the EPA may have saved our bacon in regard to nutrient pollution and **SB 358**. We have written extensively about SB 358, a bill that passed in the 2021 Legislative Session which moved Montana from numeric standards for regulating nutrient pollution to a far more subjective, narrative-based standard. From its inception, **MEIC** raised concerns about a reversion back to narrative nutrient standards and its ability to protect Montana's water quality in conformance with federal law. These concerns went unheeded.

On May 10, EPA finally notified the Montana Department of Environmental Quality (DEQ) that it was denying major aspects of the legislation as not being protective of "beneficial uses" of water quality. Beneficial uses include activities such as fishing, swimming, and drinking. This step is significant, as the EPA has now made clear that, for the time being, numeric nutrient standards are the law of the land. It also puts DEQ on notice that the agency risks its "primacy" if it continues down the path of an unlawful narrative standard. Primacy is the ability for DEQ to administer the CWA. Should the state lose its primacy, all or parts of the clean water protection program would be transferred to and administered by the Region 8 Office of EPA in Denver.

However, EPA's directive does not resolve the dispute over whether narrative standards are appropriate or legal for regulating nutrients in Montana. This is because the EPA did not prevent the state from continuing to develop narrative regulations for a later submittal, along with further justification that the standards would be protective of water quality. For now, numeric standards remain in place, but DEQ plans to continue the rulemaking process for certain portions of SB 358, including development of an adaptive management program, the eventual repeal of numeric standards, and the details for implementing the narrative standards.

MEIC and our partners will continue to be involved in this process and will be dogged in making sure that Montana's water quality is protected. We will let our members and supporters know if and when there are relevant public comment periods or meetings, and ask that you show up in support of strong regulations that protect and enhance the fishable, swimmable, and drinkable water quality across our great state. 🌿

“Magic Internet Money” Undermines Climate Progress

by Anne Hedges

Cryptocurrency tends to attract people who distrust the banking system and are looking for a decentralized, alternative currency. Whatever you may think of it, the most common way to get cryptocurrency is incredibly electricity-intensive, so much so that cryptocurrency “mining” is actually negating climate progress.

According to a 2021 report from the International Energy Agency, the global carbon footprint from Bitcoin (the most well-known cryptocurrency) mining in 2020 exceeded the total greenhouse gas emission reductions of electric vehicles that year. And Bitcoin is just one of hundreds of cryptocurrencies that rely on energy-intensive computing processes.

Unfortunately, Montana feels like ground zero for this emerging, unregulated, shadowy, international monetary system. When China’s central bank declared last September that cryptocurrency transactions would be illegal, the interest in mining crypto in the U.S. skyrocketed along with the value of the digital currency.

The meteoric rise in the price of Bitcoin and other cryptocurrencies corresponded with rising emissions and more frequent operation of the coal-fired Hardin Generating Station, a 115-megawatt coal-fired power plant just north of Hardin, Montana (see story in the March 2022 issue of *Down to Earth*). After Marathon Digital Holdings teamed up with the Hardin plant owner to power cryptocurrency mining in 2020, carbon dioxide emissions from the plant skyrocketed by 850%, nitrogen oxide emissions increased 842%, sulfur dioxide increased 508%, and all of the other harmful byproducts of coal production, such as toxic coal ash waste, increased as well.

Uneconomic dirty coal plants around the country are firing up again to serve the insatiable energy demand of crypto operations, and the industry isn’t just interested in old coal-fired power plants. One company in Montana, Crusoe Energy, wants to use flared gas from oil and gas wells to generate electricity for its crypto mining. Crusoe recently received 11

different air pollution permits from the Montana Department of Environmental Quality to generate electricity using flared methane gas. Gas flaring wastes resources that should be used for heating homes and businesses, yet cryptocurrency mining has created an incentive to continue flaring these harmful greenhouse gases.

As if the volatility of this industry and its gigantic energy demand weren’t enough, companies are now offering incentives such as cryptocurrency IRAs — all of which are unregulated with no fallback protections in the case of failure.

In January, Congress held hearings about the energy impact of cryptocurrency mining. In March, the Biden Administration issued an executive order directing agencies to investigate digital currencies, and his Office of Science & Technology Policy requested input on what to do about digital assets.

Earthjustice and **MEIC**, along with six other Montana-based organizations, submitted comments expressing strong concerns about the energy demand of this industry. The good news is there is a compromise for those who distrust the banking industry and want to engage in this new monetary system. The energy-intensive process used in crypto mining is called proof-of-work mining, but there is a lower energy way to mine called proof-of-stake mining.

MEIC and our allies believe that this Administration needs to push the industry to engage in the less energy intensive proof-of-stake operations. If it doesn’t, companies such as Talen Energy, the recently bankrupt operator and part owner of the Colstrip plant, may do what it did at its uneconomic nuclear plant in Pennsylvania and try to turn the Colstrip plant into a crypto operation. The climate requires cryptocurrency regulation before such a disaster is allowed to proceed. 🌿



MEIC Taking on Oil & Gas, from Cradle to Grave

by Derf Johnson

Reducing and eliminating the combustion and use of oil and fracked gas must occur in order for the world to avoid the worst impacts associated with climate change. However, the industry is complex, and the sources of emissions are diffuse and diverse.

Recognizing this reality, MEIC has prioritized oil and gas drilling, transportation, and combustion. In regard to extraction and transportation, MEIC is focusing strategically on some of the major decision points that allow the industry to extract oil and gas on public lands and transport it for later combustion. We've included the status of some of this work here, which will certainly be ongoing as we further pressure the government and the industry to transition to cleaner and renewable sources.

Litigation of Lease Sales

MEIC and our partner organizations legally challenged a number of lease sales for Montana which were conducted by the Trump Administration from July 2019 through Sept. 2020. The challenge was based upon the Bureau of Land Management's (BLM) failure to analyze water and climate impacts associated with the potential sales. The Western Environmental Law Center (WELC) and Earthjustice are representing MEIC and our allies. This lease challenge follows on the heels of earlier litigation, where a federal district court judge in May 2020 found that BLM had cut corners in regard to its evaluation and analysis of climate impacts. More information is to come, but we are confident that the BLM can't simply ignore oil and gas impacts on the climate when conducting lease sale activity.

Protest of New Lease Sales

While President Biden has talked a big game about his Administration's desire to address the climate crisis, his actions do not necessarily match his rhetoric. In

fact, U.S. oil production during President Biden's first year in office was higher than in two of the four years Donald Trump was president.

Recently, President Biden proceeded with another quarterly oil and gas lease sale, including parcels here in Montana, totaling 144,000 acres across the West. MEIC and our partner organizations, represented by WELC, filed official protests regarding these lease sales, noting that BLM is not legally required to proceed with the leasing activity and that the leases are antithetical to the President's stated goal of preventing catastrophic climate change.

RMP Litigation

As part of its process for determining how lands should be managed, BLM is required to develop Resource Management Plans (RMPs), which provide a big-picture analysis of which lands will be dedicated to specific activities, including for fossil fuel exploitation. BLM's Montana Field Office developed an RMP that was riddled with errors, including a failure to fully analyze alternatives for decreased leasing of acreage for fossil fuel exploitation. After its issuance, MEIC and our partner organizations, represented by WELC, challenged the RMP in federal court. A hearing was held in March 2022, and we are now awaiting the judge's decision.

Nationwide Permit

Once oil and gas are extracted through drilling, they need to be transported, primarily via pipelines. Pipeline impacts to water are often permitted under a "nationwide" permitting scheme administered by the U.S. Army Corps of Engineers. This "one size fits all" permitting scheme allows for pipeline developers to fast-track permit development with little to no analysis and no public input. This scenario played out with NorthWestern's proposed pipeline under the Yellowstone River for the Laurel gas plant and lack of opportunity for public comment. MEIC and our partner organizations are challenging the use and application of the nationwide permitting scheme for its failure to comply with the National Environmental Policy Act and Endangered Species Act. A hearing is scheduled for early June. 🌱



Legislative Committee Hears About Energy Choices for Montana

by Ian Lund

In May, the Montana Legislative Energy & Telecommunications Interim Committee heard from utilities and experts on an array of pressing energy topics. Along with refreshing spring weather, it seemed that decarbonization was in the air, as legislators dug into important questions regarding useful applications of renewable energy and battery storage, capturing the value of energy efficiency, and the costs of developing experimental nuclear technology.

Renewable Energy and Battery Storage

The first panel featured exciting emerging decarbonization technologies. Form Energy, an energy storage company founded by former Tesla employees, is developing a new “iron-air” battery that will be able to store and discharge energy for up to 100 hours. This is a significant improvement over the current best-in-market chemical storage technology, lithium-ion, which can only sustain about four hours of continuous energy delivery before needing to recharge. If Form proves that its technology meets expectations in its first demonstration project next year, it will be a significant step forward for distributed energy resources.

NorthWestern Energy’s spokesperson spoke about renewables and battery storage and inadvertently made a case for the usefulness of more advanced battery technology. He delivered typical talking points about how renewable energy could not reliably deliver adequate supply during peak events, especially in the winter. He also bemoaned the limitations of four- and eight-hour battery storage, given that they could not meet multi-day high-demand during winter cold spells. NorthWestern is not considering Form’s 100-hour battery in its current Resource Procurement Plan, but more data and continued demand for renewable energy may push it to consider better battery storage in its 2024 Resource Procurement Plan.

Advanced Metering

Advanced meter infrastructure (AMI) has the potential for two-way communication between the utility and residential and commercial buildings. Property owners get more visibility into and control over their real-time energy consumption and costs.

Chris Villarreal, president of Plugged In Strategies, presented numerous potential benefits that AMI can unlock for utility customers, while noting that almost all utilities that have deployed AMI have not maximized its benefits for end-users. The opportunities to use energy more efficiently with AMI technology are significant but if they aren’t utilized, it could be a very expensive lost opportunity.

NorthWestern is rolling out a new line of advanced meters to measure how customers use electricity. Advanced meters collect data on energy usage in regular 15- to 60-minute intervals, whereas legacy meters must be manually read once a month. The data generated from electricity users can be very valuable in terms of grid modernization and decarbonization efforts if properly utilized. The question is, will NorthWestern develop the necessary programs to make use of the many customer and efficiency benefits that AMI offers?

John Thurmond, NorthWestern’s Director of Customer Interaction, reported that NorthWestern was focusing on operational benefits for itself, such as using the meters to improve awareness of and response to outages.

“AMI provides support for new regulat[i]ons and policy to support electrification, renewables, conservation programs, distributed automation, and demand response,” Thurmond said. However, he added that NorthWestern currently does not have concrete plans to leverage AMI data to deliver benefits to customers. NorthWestern is going to conduct a conservation potential assessment, which will quantify the energy conservation opportunities in its territory. **MEIC** is pressuring NorthWestern to make sure that the assessment includes customer benefits from AMI.



Energy Efficiency

Diego Rivas of the Northwest Energy Coalition and Weston Berg of the American Council for an Energy Efficient Economy advocated the development of an Energy Efficiency Resource Standard at the meeting. Energy efficiency is a low-cost alternative to building new methane gas plants for utilities. Cost-effective efficiency reduces the need to build new generation, transmission, and distribution infrastructure, and has no operating or maintenance costs. For utilities such as NorthWestern, which are concerned about having enough electricity supply to meet demand, efficiency reduces demand and the utility's need to procure more supply. By reducing energy losses and demand, efficiency also reduces the utility's exposure to volatile energy and gas prices. Rivas said efficiency is the fastest and cheapest to build, as well as being the cleanest resource. As the saying goes, the cleanest electricity is the electricity you don't use.

Nuclear Energy

Given the very real possibility of the Colstrip plant's closure in the near future, lawmakers passed a bill during the 2021 Session to study the feasibility of building a small modular nuclear reactor (SMR) at the site. At this meeting, expert witnesses from all sides made their case for and against the hefty cost of building a new nuclear facility.

David Schlissel of the Institute for Energy Economics and Financial Analysis and Dr. Mark Cooper of Vermont Law School spoke about the exorbitant costs and unreliable estimates for SMR projects based on their extensive experience and research. Rusty Cannon, president of the Utah Taxpayers Association, said his organization strongly opposes Utah municipal utilities spending more ratepayer money to develop nuclear power technology.

According to these speakers, SMRs are not yet a commercially viable technology. They are far from cost-competitive with fossil fuels, especially when compared to existing carbon-free resources such as wind and solar. The speakers argued that ratepayers should not have to shoulder the costs of these experiments because the SMR costs are both high and unpredictable.

Schlissel focused on how the only predictable thing about nuclear power is that after a five- to 15-year construction period, ratepayers are almost guaranteed to owe far more than the initial estimates.

Ed Davis of the Pegasus Group, a consultant with the Department of Energy's loan program, and Matt Crozat of the Nuclear Energy Institute, a nuclear industry front group, spoke as proponents for investing in nuclear energy. Davis said that nuclear power currently provides 23% of the U.S.' electricity and more than 50% of its carbon-free energy. He also emphasized the federal government's support of new nuclear plants as a decarbonization strategy. Crozat also leaned on decarbonization, citing a study that found that achieving 100% carbon-free energy with just renewables, storage, and transmission, would be more expensive than with including nuclear energy. He pointed out that TVA and Duke Energy both included nuclear power in their decarbonization plans.

Schlissel countered, saying that TVA and Duke have 10 million and 1.6 million customers respectively, whereas NorthWestern only has about 500,000. This makes NorthWestern customers more exposed to increased rates than customers of those larger utilities.

The specter of ballooning costs was enough to make legislators think twice about whether making Montanans pay for nuclear power is a good idea. Even Sen. Terry Gauthier said he would consider supporting a "cost-cap" provision in a nuclear bill, limiting the amount of money ratepayers would be expected to pay on their energy bills for a new nuclear plant. For example, this could guarantee that ratepayers would only be on the hook for the original sticker price, but any cost overruns would be paid by the utility's shareholders and not be recoverable from ratepayers.

It's still unknown whether NorthWestern Energy may be interested in building a nuclear power plant, or acquiring electricity from one if it were built. It plans to model SMRs in its next Resource Procurement Plan (see article on pg. 23). 🌱

You can watch the recording of this meeting on the Montana Legislature website: leg.mt.gov/committees/interim/etic/

Show Us How You'll Get to Net Zero, NorthWestern

This is an op-ed by MEIC's Ian Lund that was published in papers around Montana.

In most states, a large utility announcing its commitment to achieve net-zero carbon emissions would be a huge win. With average temperatures in Montana having already risen about 2.5 degrees Fahrenheit since 1900, we need ambitious action. However, NorthWestern Energy's "Net Zero by 2050" announcement rang hollow, because it failed to show the utility was serious about doing its part to address the climate crisis.

Here's how NorthWestern's announcement fails:

1. NorthWestern's announcement explicitly states that the utility will continue building new fossil fuel power plants and pipelines. NorthWestern intends to build a new methane gas plant in Laurel, Montana, in the next few years and makes no indication it will be their last. The press release states NorthWestern will only cease procuring carbon-emitting resources after 2035.
2. NorthWestern makes no commitments, promises, or indication that it will invest in renewable energy. Although it credits wind energy as making the net-zero goal feasible, NorthWestern did not reveal any plans to procure additional renewable energy resources. How does NorthWestern intend to become carbon neutral without increasing its carbon-free electric generating capacity, especially as it builds more methane gas plants? When Dominion Energy in Virginia set its sights on a 100% carbon-free portfolio by 2045, it released plans to eliminate 75% of gas plant capacity it was planning to build and quadruple the amount of solar, wind, and energy storage it wanted to acquire.
3. The announcement did not include plans to retire any existing fossil fuel plants. Despite the fact that Colstrip owners in neighboring states are seeking to unplug from the plant as early as 2025, NorthWestern leadership continues to


assume the plant will remain open until 2042. We cannot afford to wait 20 more years to start decarbonizing our energy system. Without retirements and with the additional gas capacity it's planning, NorthWestern intends to increase its emissions in the next decade, not decrease them.

4. Finally, NorthWestern Energy failed to include a single benchmark between now and 2050 to measure progress toward its net-zero goal in regards to electricity generation. In contrast, when the Western utility Xcel Energy released its net-zero plan in 2018, it set clear benchmarks for measuring progress, such as committing to reduce its carbon emissions to 80% of 2005 levels by 2030. If NorthWestern leadership is serious about decreasing emissions, the utility should commit to a steady emissions drawdown schedule and not wait until 2050 to determine whether it can meet its goal.

While this announcement is refreshing from a utility that has been historically resistant to address the climate crisis, it leaves a lot to be desired. Personally, I'm looking forward to seeing whether NorthWestern includes a path to net-zero carbon emissions in its next Resource Procurement Plan, which should be issued later this year. That will be the first test of whether NorthWestern is serious about becoming a modern electric utility.

The second test will be whether it cancels its current plan to build a new fleet of methane gas plants, starting with the Yellowstone County Generating Station. Anything less is posturing to sway investors who are increasingly hesitant to invest in utilities that ignore the clean energy economy.

NorthWestern doesn't have a long time to get this right – the most recent IPCC report projects that if we continue emitting at current levels, we could surpass 1.5°C global temperature rise as early as the 2030s.

If NorthWestern leadership is serious about "working together to deliver a bright future," as they say in their plan, I've got the first four steps for them right here. 

NorthWestern Energy Resource Procurement Planning is Underway

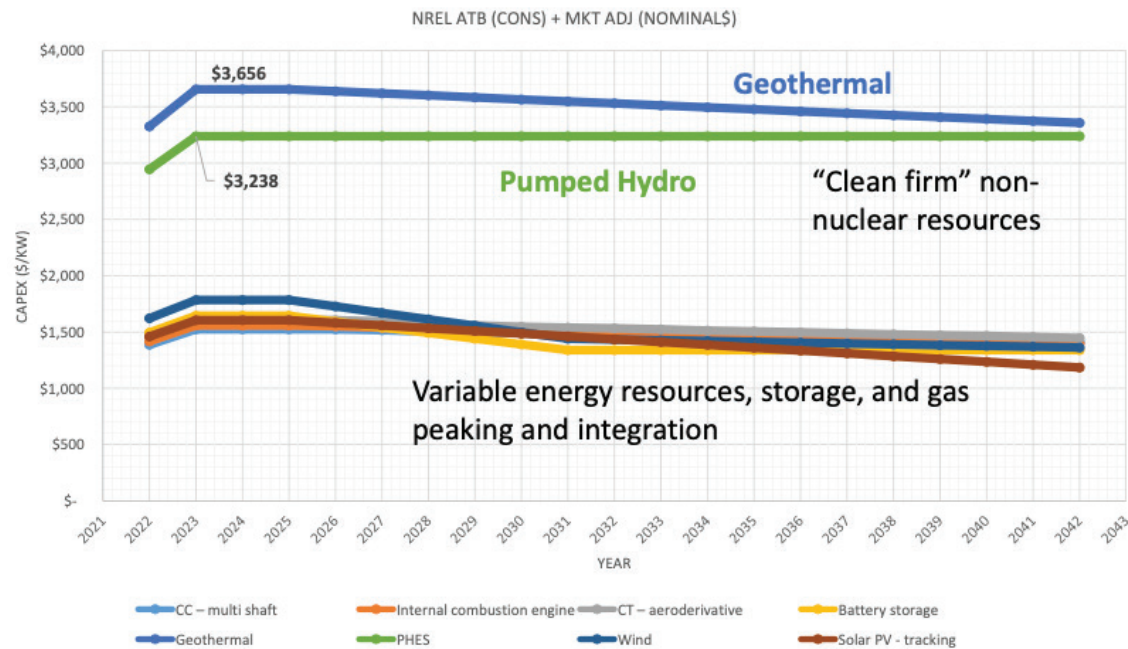
by Ian Lund

NorthWestern Energy is developing its latest Resource Procurement Plan, set to be finalized in December. This document is the end result of a reliability and economics planning exercise that Montana electric utilities are required to conduct every three years.

The planning process begins with the utility evaluating its generation resources against forecasted load growth (energy consumption). When long-term planning, the utility's chief concern is reliability of its energy resources, rather than sustainability. The utility must have enough generation resources in reserve, such that it can always provide electricity to customers and avoid blackouts. This is known as resource adequacy planning. When power plants close and population and economic growth demand more energy, utilities may find that they do not have enough resources to meet demand. This is known as a capacity deficit.

Once the capacity deficit is identified and quantified, the utility needs to figure out how to close the gap. Computer modeling software evaluates what resources would be most economically efficient to meet a utility's projected needs. The model can select from a variety of resources, including wind, solar, battery storage, natural gas, geothermal, hydro, and — new this year in NorthWestern's analysis — nuclear, in the form of small modular reactors (SMRs). For each resource, the utility inputs into the model assumptions about how much the resource will cost to build and operate, and how much it can rely on each resource during events of peak energy demand.

There are two ways to align supply and demand: increase the supply by building new power plants



NorthWestern Energy's estimates for what it would cost to develop various energy resources.

(what NorthWestern traditionally wants to do) or decrease demand (what it ought to do). However, NorthWestern continues to ignore ways to reduce electricity consumption through either energy efficiency programs (to reduce the total energy used on a day-to-day basis) or through demand-side management programs, which reduces the amount of energy used during peak events. Energy efficiency and demand side management are two inexpensive methods utilities commonly use to help decrease electricity demand and avoid the need for new, expensive power plants. NorthWestern is even ignoring the Public Service Commission's criticism of its previous plan by refusing to analyze buying power from companies that own resources that are already built and ready to deliver power.

We have been asking NorthWestern to model the closure of Colstrip Units 3 and 4 in its resource plans for the last two planning cycles, and it appears that the winds of change are finally lifting their sails. The 2022 Resource Procurement Plan will include three scenarios in which the Colstrip plant is retired: in 2025, 2030, and 2035. Given that closure is likely to happen

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Nuclear Electricity Generation – How Does It Work?

by Katy Spence

With all the legislation, research, and advocacy about nuclear energy, we thought it could be helpful to take a step back and explain how nuclear reactors work and highlight the areas that make us hesitant to believe they are a climate solution for Montana or the country.

Nuclear energy is produced by splitting atomic nuclei in a process called fission. It is also possible to produce energy by fusing nuclei, though this isn't yet commercially available.

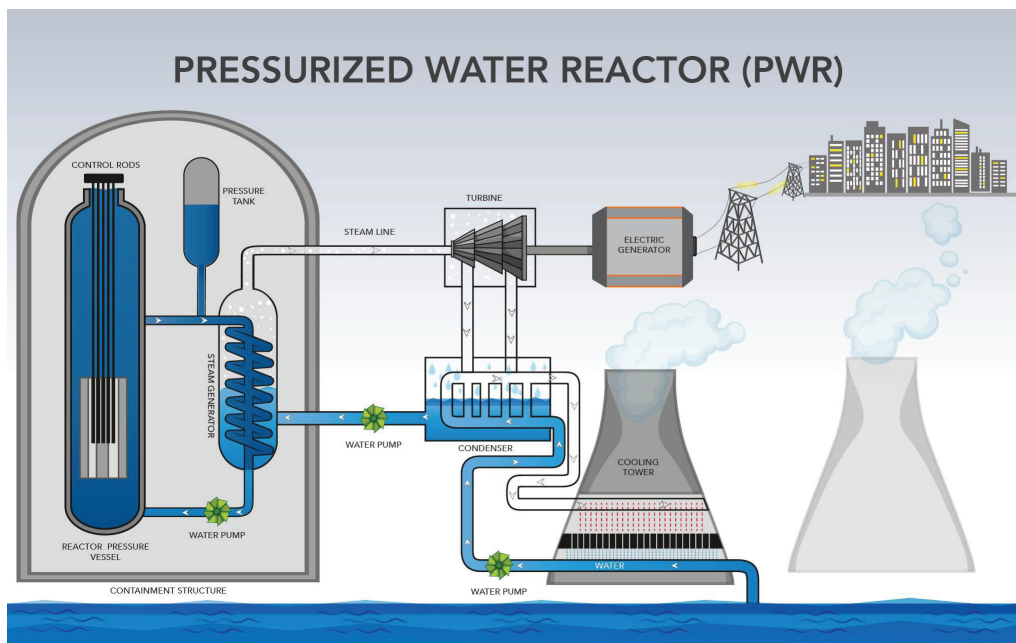
The most common nuclear energy plants are pressurized water reactors (see diagram). The reactors are built to contain and control fission reactions to harness energy. A fuel inside the reactor's core undergoes fission, causing a chain reaction of splitting atoms. These splits bombard each other with extraneous particles and as each atom splits, it releases energy in the form of heat.

A cooling agent, typically water, is pumped in to keep the reactor core stable while the water is also heated into steam. The steam moves through pipes and rotates turbines to create electricity. The steam then condenses and returns to the cooling tower, creating the familiar giant steam emission towers.

In theory, nuclear energy is a source of reliable, long-lasting, low-carbon electricity. However, the reality is that water use, waste storage, cost, and more make nuclear a poor energy solution at this time.

Water Hogs

Large pressurized water reactors can use up to 1 billion gallons of water each day, so they're typically built on or near a water source, such as a river or a lake. The water is usually cycled through the system a few times and eventually may be returned to the source.



Pressurized water reactors are the most common nuclear energy plants. Image via Office of Nuclear Energy.

However, if discharged at too hot a temperature, the returning water can dangerously increase the temperature of the source, harming aquatic organisms and plant life.

Since water is such an essential part of cooling a nuclear reaction, siting a nuclear facility in a place prone to drought shows serious lack of foresight. In addition, significant amounts of water are required to store spent fuel.

In fact, fuel is problematic in a number of ways.

The Problem with Fuel

Two naturally-occurring isotopes of uranium are used as nuclear fuel: uranium-235 and uranium-238. These must be mined and, in some cases, enriched in order to be used in fission reactors.

Uranium mining carries many of the same issues as other kinds of mining: contamination of air and water with dangerous toxins and gases, as well as emission of radioactive particles that can cause cellular damage to humans, wildlife, and plant life.

In addition, a large proportion of uranium deposits being discovered are on Indigenous land around the

world, exacerbating existing extraction, water, and sovereignty issues. Montana has numerous uranium deposits, creating a potential for uranium mining in the state. If the State's past oversight of hardrock and coal mining is any indication, there is reasonable concern that uranium mining oversight would be similarly lax.

Then there's the issue of nuclear waste.

Storing Nuclear Waste

According to the U.S. Department of Energy, there are roughly 98,000 tons of used commercial nuclear fuel "temporarily" stored at nearly 80 sites in 35 states, some of which dates back to the 1980s. Due to the volatile nature of spent fuel, researchers are still looking for ways to better reuse this waste. However, even the most optimistic nuclear proponents will admit that this is an ongoing problem without viable solutions so far.

When Accidents Happens

Part of the reason nuclear waste is concerning is that exposure to radiation can negatively impact human and ecosystem health. In both Chernobyl, Ukraine, and Fukushima, Japan, for example, a nuclear accident caused mass evacuations and "red zones," or areas that will not be inhabitable for hundreds of years until the radioactive contaminants decay to levels safe for human exposure. By that time, however, the ecosystem will likely have been changed at a genetic level due to

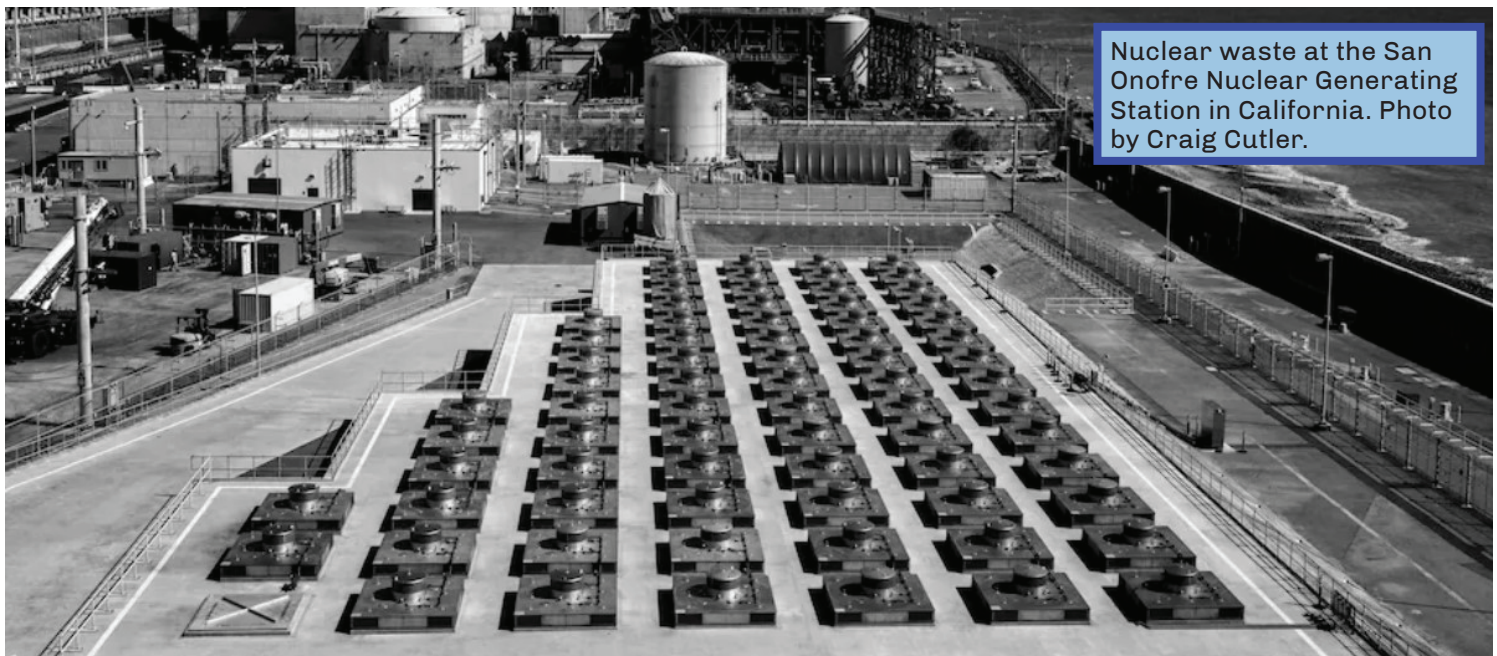
generations of exposure to harmful radiation. While most nuclear plants have operated for years without significant issues, the chance of catastrophic disaster is too high.

The Next Generation?

As we've written about previously, small modular reactors (SMRs) are a theoretical new type of reactor that will be simpler, cheaper to operate, and safer than pressurized water reactors. While we're interested in the benefits of this technology, it's clear from numerous examples around the country (such as in Utah) that SMR technology is still in the expensive development phase and may not be ready for affordable commercial use for another decade or more (see article on pg. 20).

MEIC's Stance

If nuclear power could have the benefits that proponents suggest, MEIC would consider supporting it. As it is, cost, permitting and development timeframes and oversight, safety, and waste issues merit hefty skepticism. Since energy efficiency, solar and wind energy, and storage technologies are already commercially available with rapidly decreasing prices, investing in this infrastructure — not in nuclear power plants — makes the most sense to meet Montana's energy needs and work towards decarbonizing our energy sector in the immediate future. 🌱



Nuclear waste at the San Onofre Nuclear Generating Station in California. Photo by Craig Cutler.

Helena Residents Want City Action on Climate Change

by Ian Lund

In 2021, Helena's former city manager demoted the City's part-time sustainability coordinator to the Public Works department. The sustainability coordinator is responsible for city-level decarbonization, identifying operational efficiencies, and helping Helena achieve its 100% clean electricity by 2030 goal. Helena needs an empowered, full-time employee working on these issues. Bozeman and Missoula, which share Helena's climate goals, each have multiple city employees making meaningful progress on sustainability issues.

In May 2022, **MEIC** delivered a petition signed by 100 Helena residents, businesses, and organizations to the Helena City Commission as it deliberated over what to include in the Fiscal Year 2023 budget. The petition asked the Commission to do the following things:

1. Fund the Sustainability Coordinator as a full-time position in the City's FY 23 budget.
2. Reprioritize the position, returning it to the city manager's office, not burying it deep within the Public Works Department.
3. When hiring a new city manager (which Helena will do after finalizing the budget), make sustainability and decarbonization efforts part of the job description and interview process.



Helena residents worked hard on the Ready for 100 campaign in 2020. Photo from the archive.

The Commission reviewed the preliminary FY 23 Budget on Monday, June 6. In the draft budget, the sustainability coordinator position was upgraded from a part-time position to a full-time one, though still housed in the Public Works Department.

The Helena City Commission will hold a public hearing on June 27 at 6:00 pm at which it will receive public comments and may propose amendments for the final budget. If you live in Helena, please contact the city commissioners and ask them to prioritize the sustainability coordinator position. 🌱

Resource Plan *(continued from page 23)*

in the near future, this modeling is overdue. While it is a relief to see Colstrip plant closure considered, closure means that 200 MW will be taken offline and need to be replaced. In two "sensitivity" runs, the utility will consider the economics of replacing the Colstrip plant with SMRs. Another sensitivity run will add the social cost of carbon to each resource, which will require consideration of the true costs of fossil fuels such as methane gas and coal.

Supply chain woes and inflation have increased the projected cost of all generation technologies, but solar,

wind, and battery storage were hit harder than their fossil fuel counterparts.

MEIC will continue to participate in NorthWestern's process to develop its new plan and argue for robust modeling of a broad mix of clean energy resources. NorthWestern's commitment to a clean energy system needs to be more than just a PR campaign. Planning for a clean energy future is an essential first step in that direction.

Sign up for our Action Alerts list for ways you can provide input and get involved in this process. 🌱

Right Here, Right Now.

by Cari Kimball

June 6 marked the 50th anniversary of the ratification of Montana's Constitution, and we're taking a moment to reflect on some aspects of that historic document that have aged particularly well since 1972.

Clean & Healthful Environment (Article II, Section 3). "It's your right, our mission!" It's pretty special that Montanans have a constitutional right to a clean and healthful environment as an inalienable right. Only three other states enjoy this; our 1972 Constitutional Convention delegates were ahead of their time. Many of you know that **MEIC** was crucial in "breathing life" into that right through a 1999 Montana Supreme court decision in our suit challenging the Seven-Up Pete Mine that threatened Montana's beloved Blackfoot River. We lean on that right and the resulting legal decision (*MEIC v. Montana DEQ*) today and so do others. For example, the current *Held v. Montana* lawsuit challenges the failure of Montana's government to address climate change as a violation of younger Montanans' right to a clean and healthful environment. This is exactly the sort of use of *MEIC v. Montana DEQ* that we love to see — for the health and well-being of our communities to come before profits for corporate polluters.

Right to Know (Article II, Section 9). **MEIC's** work for government accountability is impossible without transparency. One of our most recent applications of the "Right to Know" constitutional provision is over the Gianforte Administration's failure to enforce the Bad Actor law against Phillips Baker of the Hecla Mining Co. Montana's Bad Actor law was inspired by the Zortman-Landusky mining pollution that Baker's former employer (Pegasus) created. At its most basic level, the law is this: mining companies and executives in Montana must clean up their pollution (or pay for that cleanup) before they mine in Montana again. Seems pretty reasonable, right? That's why today, **MEIC** and our partners have sued the Gianforte Administration to get answers to some crucial questions. For example, why should a perpetual pollution creator such as Baker get off scot-free when other people have to follow the law? Something smells fishy, and it's time to shine some disinfecting sunlight on the situation.

Right to Participate (Article II, Section 8). On (at least) a monthly basis, **MEIC** turns to our constitutional Right to Participate in decision-making at the state and local levels in our work. At any given moment, people across the state go to **MEIC's** online action center to make their voices heard. We've asked Montanans to exercise their right to participate by urging the State to limit selenium pollution in our water and mercury pollution in our air, and to give communities the flexibility to adopt building codes that can significantly lower future lifetime carbon emissions in our homes and offices. During the legislative session, **MEIC** leans on our community of activists and rabble rousers (folks like you!) to participate by speaking up for Montana's environment.

Cheers to the Constitutional Convention delegates and Montana voters for bequeathing us these rights and the benefits we enjoy today because of them! 🌿





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GOT OPINIONS?

WE WANT TO HEAR FROM YOU

What environmental work in Montana is most important to your family?

What do you think MEIC should be working on?

Does MEIC send you too much mail or not enough?

MEIC will be sending out a member survey this summer through snail mail and email. We're looking forward to hearing from you!

