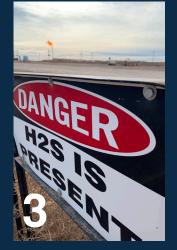


COMMUNITIES
UNDER
SIEGE One family's story when fracking came to town







**Mine Waste Crisis Protecting Wilderness Progress in New Mexico Speaking Out Globally** 



EARTHWORKS.ORG



**EARTHWORKS** 

Dedicated to protecting communities and the environment from the adverse impacts of mineral and energy development while promoting sustainable solutions.

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Editor - Phil Dickieson Design by CreativeGeckos.com • Printed by Ecoprint, Inc.

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### Meet the Newest Earthworkers

#### Benjamin Hitchcock

Making Clean Energy Clean, Just and Equitable Coordinator

Benjamin joined Earthworks in December 2019. He began his work with mining-affected communities with the London Mining Network, collaborating in various capacities with the network and several of its member organizations. He will focus on the need for energy transition that centers communities on the frontlines of extractivism as well as broader issues of



BENJAMIN HITCHCOCK

justice and equity. — "It is a privilege to be facilitating dialogue between communities, NGOs, researchers, and others at the intersection of mining and the energy transition."

#### Jan Morrill

#### International Mining Campaigner

Jan joined Earthworks in January of 2020 and will focus on supporting communities living in the shadows of mine waste dams, as well as responding to the social, environmental, and cultural disasters that result if they fail. She spent five years in El Salvador supporting the community-based and national organizations that pushed El Salvador to pass the first



JAN MORRILL

of its kind ban on all metallic mining. —"I'm excited to join the important work Earthworks is doing to support communities as they fight to protect their water, their homes, and their lives."

#### Raquel Dominguez

#### Policy Associate

Raquel joined Earthworks in February 2020 to create and support policies that protect frontline communities and hold energy companies accountable. She will work with several state and national coalitions to defeat anti-protest bills in various state legislatures.



**RAQUEL DOMINGUEZ** 

-"I'm excited to work at an organization that dedicates itself to intersectionality within the environmental justice movement."



## MINE WASTE DAMS ARE AN IMMINENT THREAT

By Payal Sampat and Jan Morrill

t's been a year since one of the world's deadliest mining disasters occurred at the Córrego do Feijão iron mine in Brazil. A tailings dam (filled with a slurry of mine waste) failed, killing 300 people, obliterating the community of Brumadinho, and flooding the Paraopeba River with toxins. The mine's owner, Vale, is the third largest mining company in the world.

The Brumadinho catastrophe (pictured above) was the third major disaster of its kind since 2014, including another Vale mine in Mariana, Brazil. Independent research shows that severe mining waste dam failures are occurring more frequently.

Even though Vale's CEO vowed "never again" in the wake of the Mariana failure, the Brumadinho disaster was a tragedy foretold.

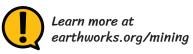
The Brumadinho disaster sent shock waves through the international community. In April 2019, a group of investors controlling \$10 trillion in assets, led by the Church of England's pension fund, requested 680 mining companies publicly disclose their dam failure risks. This was the first time investors had demanded transparency and disclosure from mining companies on this scale.

Soon after, investors together with the mining industry trade association and the U.N. Environment Programme established the Global Tailings Review, which seeks "to establish an international standard for the safer management of tailings storage facilities." Earthworks was invited to serve on the Advisory Group.

Communities and civil society groups are critical of the scope and recommendations presented in the draft standard. The draft standard fails to require that safety take precedence over cost, lacks accountability at the highest levels, and does not ensure community consent for all projects.

Establishing and enforcing safety protocols must be independent of company control. The mining industry cannot establish best practice requirements or police itself.







#### **DISASTROUS CONSEQUENCES**

Córrego do Feijão mine's owner, Vale, was unresponsive to auditor reports and employee alerts about the dam's risks, prioritizing costcutting and executive compensation over safety. The company's executives and auditors now face homicide charges in Brazil.

## Community

Environmental protections continue to be slashed

By William Northrop and Aaron Mintzes

ust nine days into the new decade, the Council on Environmental Quality (CEQ) announced a notice of proposed rulemaking titled "Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act [NEPA]." The proposal is not an update - it is a substantial rollback of NEPA, a bedrock of American environmental policy.

When a public hearing was announced for Denver, the sudden surge of interest crashed the online registration in under two minutes, then crashed twice more for the next offering of tickets.

Why the tremendous interest in a seemingly minor "update" to NEPA? Because for fifty years, NEPA has been the way for the people to share their voice in our government's environmental decisions.

This rollback is one more attempt by the Trump administration to undo current environmental laws. policies, and protections.



NEPA works. Losing it threatens the democratic **process.** NEPA ensures that all of us can take part in the review of projects affecting our social, economic, and environmental health. It provides an opportunity for impacted communities to learn about proposed mines and oil and gas infrastructure, while also offering agencies the chance to receive valuable public input. If this rollback is finalized by the Trump administration, the government will no longer consider cumulative impacts such as climate change or local air pollution in their reviews.

CEQ gave us only 60 days to comment on this proposal. Those 60 days have passed. We asked for an extension on the comment period and for at least five public hearings so we could fight the proposed rollback, but got neither. Now, with the public comment deadline in the rear view, we will continue the fight and will not allow this undemocratic proposal to become final.

# More than explosions and evacuation

Under Siege: An Ohio Family's Story

By Leann Leiter

Fallen equipment severed an XTO Energy (a subsidiary of Exxon) gas well in Powhatan Point, Ohio in February 2018, causing an explosion seen for miles. Approximately 100 residents were evacuated from their homes. An estimated 5,000 gallons of untreated wastewater spilled into a nearby waterway. A geyser of toxic substances spewed into the air for almost three weeks. Earthworks knew the gas release was a big deal when we filmed it with our optical gas imaging (OGI) camera – but it took some time for the magnitude

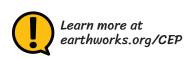
to sink in. We now know that XTO's Powhatan Point blowout caused one of the largest documented methane release in U.S. history.

This massive explosion over the hill was only the latest problem to plague Allen Young, who thought he'd given his family a tranquil, rural lifestyle.

#### AN ONGOING DISASTER

A year and a half after the XTO blowout, researchers at SRON Netherlands Institute for Space Research answered an important question: did the XTO blowout have a discernible climate impact? Yes – their study analyzed satellite data showing that this single event released a higher volume of greenhouse gases than most European countries do in a year.

This event at Powhatan Point clearly couldn't be glossed over as a simple "operator error" or "unforeseen circumstances" at the well site. The Powhatan Point blowout holds the unfortunate distinction of being one of the largest single methane releases ever recorded. Earth-



works' data contributed directly to this horrifying revelation - SRON's peer reviewed study cited Earthworks' OGI footage. Our OGI footage also garnered attention from the Washington Post, E&E News, and the Columbus Dispatch.

Large-scale blowouts are unfortunately not rare, but this study showed how they can

> quickly become climate disasters. Our on-theground OGI work affirms that the gas industry in Ohio contributes to our climate crisis every day.

We are documenting leaks and unbridled pollution across Ohio and across the nation. Ohio has well over 100,000 gas facilities. 3.2 million residents live within a half-mile radius of those facilities, according to the Oil and Gas Threat Map developed by Earthworks and partners.

At the same time, alarmingly, the voracious petro-plastics industry has targeted the Ohio River Valley for intense development. This would usher in even more extraction, pipelines, and pollution. Earthworks has already partnered with regional groups and community members to appeal air permits for one of the massive plastics plants proposed for Belmont, Ohio.

In Ohio and throughout the U.S. we're working with communities in the fight of their lives, and we won't back down.





Allen Young and his family were less than two miles from the XTO blowout.

XTO's blowout released the equivalent of a quarter of Ohio's annual reported oil and gas methane emissions. Earthworks captured the true extent of the pollution with optical gas imagery.

## **Constant Worry PERSISTENT HEALTH PROBLEMS**

All this new oil and gas development is bad news for the already beleaguered Young family in Powhatan Point, Ohio.

Allen's wife first alerted the local elementary school principal of the nearby XTO blowout when she rushed to pick up her kids. Allen said that when they got home, his young son and daughter "went around packing a garbage bag full of clothes and toys, scared to death that they were going to have to evacuate." For weeks after the explosion, the kids kept their bags

> ready by the bedroom door.

For the Young family, the biggest methane release in Ohio's history wasn't the first thing on their minds three large natural gas compressor stations located within close view and ear-shot of their backyard were. When Earthworks visited in the weeks before XTO got the gushing well un-

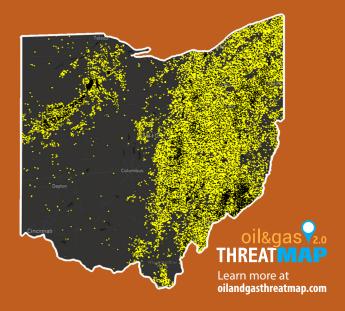


Allen's children had been suffering unexplained nosebleeds, while other family members developed adult-onset asthma.

der control, we used our OGI camera to reveal not only the horrific extent of the blowout, but also the pollution emanating from those compressor stations.

For months, Allen's children suffered from unexplained nosebleeds, while other family members developed adult-onset asthma. Both of these problems have been scientifically established to be potentially linked to oil and gas pollution. With this in mind, Allen and Earthworks filed complaints with the Ohio Environmental Protection Agency and the Ohio Department of Health, submitting medical information and photos of the kids' nosebleeds.

After months of back and forth, those agencies promised to conduct air testing. Then, operators made changes to the sites that reduced the intense noise that for over a year had made the Young's backyard sound like the interior of a manufacturing plant.



## OHIO HAS 100,000+ OIL AND GAS FACILITIES 3.2 MILLION PEOPLE THREATENED

While the Young family's health problems aren't fully resolved, regulators and operators are now on notice. Earthworks continues to advocate and serve as a bridge, connecting people on all sides of the oil and gas issue. By linking field work to academia, communities to regulators, and the experiences of individuals to the broader energy debate, we're reaching lawmakers, the media, and the public.

We will continue and grow our presence in the gas fields of Appalachia and nationwide to catch polluters in the act and make sure they are held accountable. Families like the Youngs deserve no less.

Map above: The dots indicate the density of oil and gas infrastructure in Ohio, with the eastern edge of the state  $showing \, particularly \, in tense \, development. \, 3. \bar{2} \, million \, people$ live within ½ mile of a facility.



## Speaking out Around the World

#### **Fighting for Indigenous Rights**

In November, Earthworks accompanied Xinka leader Luis Fernando García Monroy on a speaking tour in Pan American Silver's

home province, highlighting the company's many shortcom-

ings. Luis Fernando called on the company to ensure respect for Xinka rights. For the first time in the country's history, Guatemalan courts ordered the silver mine to remain suspended while a consultation with the Xinka people over the future of the

- Ellen Moore

#### **Bringing the Permian** to the Global Stage

mine takes place.

Earthworks coordinated a delegation of frontline and grassroots Permian and Gulf Coast leaders to the U.N. climate negotia-

tions in Madrid, Spain. The top story coming out of COP25 was that limiting fossil fuel production is absolutely necessary if we hope to limit global warming to 1.5°C. Community and indigenous leaders shared their experiences of living with the

daily impacts of the biggest U.S. drilling boom, the expansion of pipelines, and the need to prevent natural gas expansion.

— Nathalie Eddy and Ethan Buckner

#### The Permian Crisis: **Building a Coalition**

New Mexico, Texas, and Louisiana face an onslaught of proposals for new petrochemical plants, processing facilities, hydrocarbon export terminals, and pipelines. Earthworks organized the first-ever Permian Gulf Coast Convening to address this growing crisis. Organizers, community

members, and advocates came together to confront the looming petrochemical buildout, forming a coalition ready to fight new development threatening to irreversibly damage our climate.

— Ethan Buckner

#### **Shaping a Renewable Energy Future**

Earthworks convened the first Making Clean Energy Clean, Just and Equitable Strategy Day with partners and allies to advance social and ecological justice at the intersection of mining and the energy transition. Indigenous community members and local advocates joined human rights and environmental organizations to share stories, create strategies, and work towards a responsible transition to a fossil fuel free economy.

— Benjamin Hitchcock



## **Confronting the Methane Crisis:**

### PROGRESS IN NEW MEXICO By Phil Dickieson

Our climate crisis is being driven in large part by methane, a potent gas that's 86 times more damaging to our climate than carbon dioxide over a 20-year time frame. Addressing that is our focus. In New Mexico we are:

Forcing regulators to take notice: In response to our complaints using optical gas imaging evidence, the New Mexico Environment Department alerted seven oil and gas companies of potential violations. Operators must now demonstrate that they are not illegally polluting or else face enforcement action.

Elevating community stories: New Mexico has begun to take much more aggressive steps to rein in the oil and gas industry and advance climate solutions. Earthworks sent community members and organizers to four state hearings on methane in 2019. Community members spoke directly with regulators and shared their stories – a critical step in raising awareness.

Shaping new regulations: We submitted comments to the NM Methane Advisory Panel in response to a recent report. Establishing a dialogue with the state and sharing evidence is the first step toward state methane rules.

#### Collaborating with grassroots organizations:

We are engaging grassroots groups and coalitions in New Mexico and across in the Permian Basin, working to address every step of the supply chain responsible for emitting methane. We're working to stop pipelines, petrochemical buildouts, and other infrastructure that would inevitably lead to even more methane emissions.

#### WE'RE IN THIS FIGHT TOGETHER

**Major victories in New Mexico** demonstrate that we can successfully address the climate crisis!

## Protecting WILDERNESS, WILDLIFE, AND WATER

By Bonnie Gestring

n the far northwest corner of Montana lies one of the first wilderness areas ever established by Congress – a narrow strip of glaciated peaks and cedar-forested valleys known as the Cabinet Mountains Wilderness. It is refuge for threatened grizzly bears and bull trout, and the source some of the cleanest water in the nation.

Earthworks has joined with conservation allies to defend this American treasure against the Rock Creek and Montanore Mines. These two major mining projects propose to tunnel into the wilderness and dispose of vast amounts of mine waste on adjacent public lands - smack dab in the middle of grizzly bear habitat.

**EVERY BEAR COUNTS** — The grizzly bear population in the Cabinet Mountains is hanging on by a thread. It is one of only five remaining populations in the lower 48 states of the U.S., and is essential for the recovery of the species. Bears need undisturbed lands to thrive – something that is incompatible with large-scale industrial activity. The U.S. Forest Service found that the Montanore Mine alone would displace up to three guarters of the adult female grizzly bears from their preferred habitat. Yet, the agency gave the project the green light.



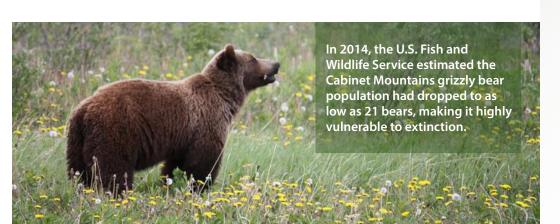
Two major Montana mining projects propose to tunnel into the Cabinet Mountains Wilderness and dispose of vast amounts of mine waste on adjacent public lands – smack dab in the middle of grizzly bear habitat.



**PROTECTING CLEAN WATERS** — Decades of heavy logging and mining in the surrounding national forest lands have degraded rivers and streams in the region, yet those originating in the Cabinet Wilderness still provide cold clean water for the communities downstream and habitat for threatened bull trout.

The environmental review, released by the Forest Service, found that the two mines would reduce stream flows in the overlying Wilderness rivers and streams for more than 1,000 years – in some areas as much as 97%.

WINNING IN COURT — Earthworks and our allies won two major legal victories last year, preventing the mines from unnecessarily polluting and dewatering wilderness rivers and streams. Hecla, the mining company behind the two projects, has appealed the decisions to the Montana Supreme Court, and we will be defending our hard-fought wins in court this year.



## COMMUNITIES Are Standing up to Ocean Dumpers

By Ellen Moore

Each day, Papua New Guinea's Ramu mine dumps roughly 14,000 metric tons of toxic mine waste into the ocean near the Coral Triangle. This biologically diverse hot spot is home to nearly 600 different species of reef building corals, thousands of reef fish, and endangered marine turtles. Last August, the processing plant overflowed, turning Basamuk Bay red.

Initial reports from experts show that the harms of the Ramu mine extend well beyond the spill, including contamination of air and fresh water. This independent information is critically important for those directly impacted, and for neighboring communities facing another mine. If built, the Wafi-Golpu project would impact five species of endangered turtles that make their home just south of the planned dumping site.

Earthworks partners in Papua New Guinea are on the frontlines of organizing and information sharing. "What is happening at the Ramu mine is an environmental and community health disaster. Communities need information and support. That's why we are working with diverse stakeholders, like Earthworks, to end to this harmful practice," said Christina Tony of the Bismark Ramu Group.





## Earthworks IN THE NEWS



#### Mining Company Actions Raise Questions

Earthworks called on the SEC (Security and Exchange Commission) to investigate possible insider trading of Northern Dynasty shares, the company behind the proposed Pebble Mine in Alaska. The stock prices rose dramatically shortly before the EPA (Environmental Protection Agency) announced that it was considering removing protections put in place by the Obama administration.

In one transaction, more than 1 million shares were purchased on June 20 by a company "insider" and the director of an offshore investment firm, records show." - CNN



#### **Methane Super Emitters Revealed**

Earthworks Senior Organizer Sharon Wilson led New York Times reporters on a tour of the Permian Basin, using an optical gas imaging camera to identify oil and gas infrastructure leaking methane.

Immense amounts of methane are escaping from oil and gas sites nationwide, worsening global warming, even as the Trump administration weakens restrictions on offenders ..." - The New York Times



ON THE COVER: Earthworks Pennsylvania and Ohio field Advocate Leann Leiter and Ohio community member Allen Young observing oil and gas infrastructure near his home.

JOIN IN THE CONVERSATION AND SPREAD THE WORD









You Tube earthworksaction



Read both articles at earthworks.org/news

## Jewelry that doesn't harm the Earth: Knitting the Solution By Ann Corbett

#### Fourth grader Chelsea Dao loves

to finger knit and spends her free time making bracelets and necklaces with colorful yarn.

One day she asked her mother why she doesn't wear much jewelry. Her mom replied that the metals used in jewelry come from mining, which pollutes water and scars landscapes. Chelsea read up on gold mining disasters, rainforest destruction, perpetual water pollution, and waste dam disasters.

Inspired to combine her love of knitting with her commitment to environmental responsibility, her company EarthSaver was born after she joined Girls Crushing It, a program building girls' leadership and entrepreneurship skills.

"Bracelets made of precious metals may have come from harmful mining...Mining pollutes our environment and destroys land and forests. My bracelets are a nice substitute to fancy bracelets made with precious metals. And my bracelets don't harm the earth at all."

In December, Girls Crushing It organized a Winter Pop Up shop. Chelsea was there with her bracelets and a tri-fold poster board filled with articles and pictures about mining. More than 600 shoppers came that day. Some stopped to take photos of Chelsea's display and learn more about the impacts of mining while they tried on bracelets.

Chelsea pledged to give 60% of her profits to Earthworks "because I want to be part of the solution." Her parents agreed to underwrite her business costs so that she could maximize her donation. Some of her customers told her to keep the change or gave extra money for Earthworks. Chelsea raised \$106 for Earthworks and put \$68 in her savings jar.

Chelsea was energized by the experience. "Thank you Earthworks for working so hard to protect our planet." We say thank you, Chelsea, for inspiring us!

Chelsea pledged to give 60% of her profits to Earthworks, "because I want to be part of the solution." Here she displays one of her bracelets.

