

# EARTHWORKS JOURNAL



## The end of free rein? CHANGING THE 1872 MINING LAW



EARTHWORKS



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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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Grand Canyon Trust



## In the news

**Bloomberg Environment**  
ENVIRONMENT & ENERGY NEWS INSIGHTS  
Please Log In  
News  
Brazil Dam Catastrophe Sounds Alarm for U.S. Waste Ponds  
Posted Feb. 4, 2019, 7:02 AM

Photo: Lula, Brazil. An agency photo of the remains of the 25-metre-tall dam belonging to Vale's iron mining company. (AP Photo/Marcelo Piuvallo) (Photo: Marcelo Piuvallo/AP Photo)

Program Director Bonnie Gestring said that, **"Tailings dams have to last forever...they're in the landscape in perpetuity."** — Reported by Bloomberg Environment, 2/4/2019

**The Dallas Morning News** — "Wilson, a senior organizer for the environmental group Earthworks and a longtime critic of fracking, is working to prove that those invisible emissions are worse than originally thought. The impact of those gases ranges from exacerbating global climate change to polluting the air." — Reported by The Dallas Morning News, 12/14/2018

Reporters from the *The Dallas Morning News* visited Midland, Texas, with Senior Organizer Sharon Wilson and Strategic Communications Director Alan Septoff for an inside look at the pollution residents of the Permian Basin experience every day. Sharon, a certified thermographer, showed them the invisible pollution from oil and gas facilities. These facilities spewing invisible toxins, and few regulators are doing anything to stop them. With your support, we can continue to expose operators, site by site, state by state, in an effort to put an end to pollution.



Read more here:  
[earthworks.org/news](http://earthworks.org/news)



## EARTHWORKS JOURNAL

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# Transitioning to a Truly Clean Renewable Energy Future

By Payal Sampat

**T**ransitioning to a 100% renewable energy future is absolutely essential in order to keep our global temperature rise below 1.5 °C and avert the most disastrous impacts of climate change. Technological advances in photovoltaics, wind, and battery storage have made the shift possible. But the lifecycle of these technologies begins with mining for minerals like copper, nickel, lithium and cobalt, whose extraction generates toxic waste, violates human rights, pollutes freshwater, and threatens ocean health through the risky practices of mine waste dumping and deep-sea mining.

## For example:

- Most of the world's cobalt, used in rechargeable batteries for electric vehicles, is mined in the Democratic Republic of Congo, often by children working in unsafe conditions.
- Earlier this year in Brazil, the collapse of two mining waste dams at Vale's Brumadinho iron ore mine killed hundreds of workers and local residents. Catastrophic dam failures are occurring more frequently and are predicted to continue to increase in frequency.
- We face the threat of deep seabed mining for cobalt and manganese – with unknown, potentially disastrous consequences for marine species and deep-sea ecosystems.

**Making Clean Energy Clean, Just & Equitable.** Earthworks has been proactively working to grapple with the implications of this dual need: to dramatically accelerate the transition to clean, renewable energy sources – while simultaneously ensuring that people and the environment are at not at risk from destructive mining. Earthworks' newly launched *Making Clean Energy Clean, Just & Equitable* project aims to ensure that the transition to renewable energy sources is powered by responsibly and equitably sourced minerals that minimize the need for new extraction and move the mining industry toward more responsible practices.

**Electric vehicle and battery industries have the most urgent need for scarce minerals and must avoid negative impacts.** New research by Earthworks and the University of Technology, Sydney's Institute for Sustainable Futures (UTS) shows that as demand for the necessary but scarce minerals skyrockets, environmental and human impacts are likely to rise steeply as well. The metals of highest concern considering projected demand, supply risks, and environmental and social impacts are: cobalt and lithium, followed by nickel, silver and rare earths.

**Now is the time to scale up clean, renewable energy sources, while scaling back dependence on dirty mining. Doing so will require a concerted commitment from businesses and governments to:**

- Dramatically scale up the use of recycled minerals.
- Use materials far more efficiently.
- Require mining operations to adhere to stringent, independent environmental and human rights standards (such as those developed by the Initiative for Responsible Mining Assurance).
- Prioritize investments in electric-powered public transit.
- Make lower-impact transport and consumer choices.



Help make sure that new mining operations are clean, just and equitable.  
Read more at [earthworks.org/MCECJE](http://earthworks.org/MCECJE)

**Working together, renewable energy advocates, mining activists, and environmental campaigners have the unique prospect of jointly fostering a truly clean, just and equitable renewable-energy powered future.**

**The life cycle of these new technologies begins with mining for copper, nickel, lithium and cobalt, whose extraction generates toxic waste, violates human rights, pollutes freshwater, and threatens ocean health.**



Salinas Grandes lithium deposits, Argentina.

PHOTOS: Lithium – Ksenia Ragozina / Shutterstock.com; Leaves – Fahkamram / shutterstock

# MINING REFORM

## TOXIC POLLUTERS, NOT TAXPAYERS, SHOULD PAY FOR MINE CLEANUP

By Jessica Doughty and Aaron Mintzes

Families across the country live with pollution from irresponsible mining, and taxpayers – not polluters – too often pay for cleanup bills reaching into the billions of dollars.

**Threatening our National Treasures** — According to the General Mining Law of 1872, public land managers favor hard rock mining, regardless of competing land uses. Proposed mines currently threaten national treasures with great historic, cultural, and conservation value – such as the Grand Canyon, the Santa Rita Mountains in Arizona, and the Cabinet Mountains Wilderness Area in Montana. And the assaults on our land are the result of exploitation of that law.

Earthworks was founded in 1988 as the Mineral Policy Center to reform the 1872 Mining Law. And now, in 2019, we have a chance at dismantling the 1872 Mining Law and replace it with strong, 21st century regulations. In the 116th Congress, we are positioned to pass mining reform through the House of Representatives. The Senate will also consider a similar measure introduced by Sen. Udall (D-NM).

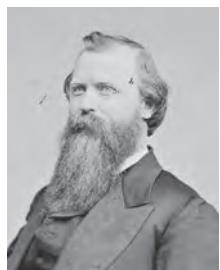
### SETTLING THE WEST: THE ORIGINAL LAW

The 1872 Mining Law governs the mining of hardrock minerals on federal public lands. It was

signed into law over a century ago when Ulysses S. Grant was President and the nation was promoting settlement of the West. Although the West was long

ago settled, the law remains virtually unchanged.

PHOTO: Sen. Stewart, father of the original law.



Austin Nunez, Chairman of the San Xavier District of the Tohono O'odham Nation, spoke out on behalf of indigenous communities threatened by the recently approved Rosemont Mine. The mine threatens sacred land belonging not only to Tohono O'odham, but also the Pascua Yaqui and Hopi tribes. Going back many generations, indigenous communities have used their lands to harvest plants, perform rituals, worship, and recreate. *An open pit copper mine, positioned near the Santa Rita Mountains on ancestral tribal land, threatens to destroy many of these sacred areas.*

### THE REFORM BILL WILL:

- Give Americans a fair return for our minerals by establishing a royalty between 8–12.5% on all hardrock minerals.
- Level the playing field, allowing Americans more choice among land uses that compete with hardrock mining.
- Make certain lands off-limits to hardrock mining, and establish strong reclamation standards.
- Set a dedicated “polluter-pays” fee to clean up abandoned mines.



(L-R) Hilary Cooper, San Miguel County, CO Commissioner; Gwen Lachelt, La Plata County Commissioner, CO; Sen. Michael Bennet, CO.



(L-R) Rep. Raul Grijalva (AZ) and Austin Nunez, Chairman of the San Xavier District, Tohono O'odham Nation.



US House of Representatives Briefing on the 1872 Mining Law, March 5, 2019.

## 147 YEARS LATER: A DIFFERENT WORLD

**Foreign mining companies now take advantage of the law to claim our lands, take our resources, and leave the mess.**

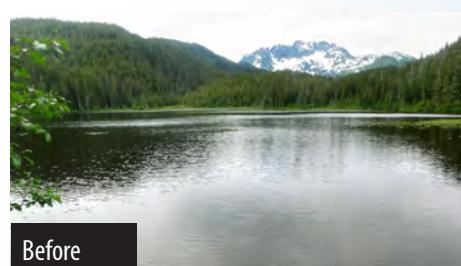
**Building Momentum** — Rep. Grijalva (AZ) will formally introduce his reform measure this May. These changes to the law would hold polluters accountable, provide revenue for clean up, and give our government the authority to deny a mine where it does not belong. Ultimately, mining reform returns the power to the people, giving taxpayers more land-use choices.

**Next Steps** — Following introduction of the bill, the House Committee on Natural Resources plans to hold a legislative hearing in Washington, D.C. This hearing will provide an opportunity for advocates and communities to press Congress on the need for reform.

The support we build together this year, will benefit us in the next Congress.

## A SNAPSHOT OF UNFETTERED MINING

Our landscape, water and national heritage are at risk.



ABOVE RIGHT: Alaska's Lower Slate Lake before it was turned into a mining waste dump for a gold mine. BELOW RIGHT: The lake after being drained and transformed into a dumping ground. ABOVE LEFT: The Grand Canyon – one of the many areas at risk of exploitation by mining companies. Grand Canyon photo by Gary M. Smillie/stock.adobe.com.

## What Does Fracking in the UK Look Like? Sharon Wilson traveled there to find out

This February, Earthworks' Sharon Wilson visited the United Kingdom with an optical gas imaging camera to film oil and gas facilities in the UK for the first time. Travelling through England and Scotland, Sharon captured hours of footage – likely the first non-industry OGI thermographer to visit the sites.

A fracking moratorium has been in place in Scotland since 2015 – and the policy will be finalized this year. In England, it's a different story: fracking is set to resume after years of inactivity. Activists invited Sharon to show the risks of fracking to air and health – and there was a lot to see.



An activist at a "Protection Camp" at a fracking site in England.

### Notes from the UK

England doesn't have many fracking/acidification sites because the public puts up fierce opposition against each site. "Protection Camps" are established at each site and the protest is relentless.

The sites that are in operation look quite similar to what we see in the US. There are emissions from all the combustion sources and emissions that are intentionally vented. The industry flimflam is also the same. At one event I attended, a resident read from an industry press release claiming that there have been one million wells fracked in the U.S. without one single problem – an outright lie.

— Sharon Wilson

# PLASTICS

## The Movement Continues to Grow

By Priscilla Villa

**A**s the oil and gas industry invests and constructs more petrochemical infrastructure, the movement to shift away from plastics and organize to stop the buildout is quickly growing.

Together with Texas Environmental Justice Advocacy Services (TEJAS), Earthworks has been helping coordinate 30+ groups to stop the petrochemical buildout in Appalachia, Texas, and Louisiana.

**BUILDING A NETWORK** — In Texas, the coalition has kicked off the first of a series of grassroots action tours that are aimed at building a network for organizers across the Gulf Coast in preparation for the wave of proposed petrochemical facilities. The coalition will elevate community voices and community challenges while building the narrative around plastics and the many impacts it causes. Two documentaries on plastics, fracking, and the communities they impact are slated to come out early this summer and later this fall – stay tuned!

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### RESEARCHING THE IMPACTS

*Plastic & Health: The Hidden Costs of a Plastic Planet* — a report led by Center for International and Environmental Law and co-authored by Earthworks and other organizations, brings together research on the human health impacts at every stage of the plastic lifecycle, from extraction of fossil fuels, to consumer use, to disposal and beyond. We are currently implementing the findings from this report to inform communities on the ground and across the plastics supply chain and help them get involved in the fight against plastics.

### BREAKING FREE FROM PLASTIC

In addition to working with TEJAS and organizers around the country, Earthworks is proud to be a part of the *Break Free From Plastic* movement to transition society away from all single-use plastics and reduce demand for the related oil, gas and petrochemical production. We are keeping a watchful eye on plastics and the petrochemical industry, and with your help, we can organize and take a stand against unnecessary, wasteful, and harmful plastic production.



TEJAS, Texas Environmental Justice Advocacy Services, organizers stand in front of petrochemical facility near Pasadena, Texas.

Photo by Juan Parras, TEJAS

Visit [earthworks.org/plastic](http://earthworks.org/plastic) to learn about the fight!

Learn MORE

# LEAVE YOUR Legacy

As a reader of *Earthworks Journal*, you already know that Earthworks stands for clean air, water and land, healthy communities, and corporate accountability. Your support makes it all possible.

Earthworks Legacy Circle members are a group of loyal and dedicated individuals who have chosen to support Earthworks' mission through a bequest intention, charitable gift annuity, charitable trust or other planned giving arrangement. If you have remembered Earthworks in your estate plans, please let us know so that we can welcome you as a member of this key group of supporters!

**There are many types of legacy gifts, including naming Earthworks in your:**

- Will or Living Trust
- Retirement Plan
- Life Insurance Policy
- Charitable Remainder Trust
- Donor Advised Fund

If you would like to learn more about joining Earthworks' Legacy Circle, visit:

- [earthworks.org/legacy](http://earthworks.org/legacy)
- Contact Ann Corbett at 202-887-1872x106 [acorbett@earthworks.org](mailto:acorbett@earthworks.org)



Photo by Edward Moismann, Creative Geckos

# methane

ONE DECADE TO REACH NET ZERO CARBON

## Holding Industry Accountable

By Justin Wasser

The world's climate scientists warned us that we have little more than a decade to reach net zero carbon pollution. Without action, catastrophic climate change will occur in our lifetimes. One of the greatest threats to any plans to hold global temperature rise to below 1.5 °C is methane pollution.

**Atmospheric methane concentrations are skyrocketing, and are 86 times more potent than CO<sub>2</sub>. Studies point to oil and gas as the problem. The world cannot afford to trust the promises of an industry that has lost all credibility. The time is long overdue for industry to put up or shut up about their pervasive problem with methane pollution.**

**Methane is a greenhouse gas** at least 86 times more potent at warming the planet than carbon dioxide. For most of the previous century, methane concentrations increased steadily. But since 2007, atmospheric methane concentrations have skyrocketed. A NASA study suggests that oil and gas is responsible for at least half of that recent rise.

Methane is the main component of natural gas, and it leaks at every step of the oil and gas production process. Methane is also released intentionally, along with other associated toxic air pollution, as common industry practice.

### COMPANIES PROMISE CHANGE, BUT RARELY DELIVER

Many companies – including BP, Shell, ExxonMobil, and Chevron – have made public promises to cut methane and combat climate change. Some of these companies have established the Oil and Gas Climate Initiative (OGCI) and pledged to reduce methane pollution to zero throughout the entire oil and gas supply chain. Shell and BP have both made commitments to support the Paris Agreement. ExxonMobil has gone as far as explicitly endorsing the need for federal regulation of oil and gas industry methane leaks and releases.

The actions of the oil and gas industry fail to back-up their promises. Worse yet, last year some of the world's largest oil and gas companies lobbied the Trump administration behind closed doors to weaken federal methane pollution rules while publicly touting themselves as partners in combating climate change.

### KEEPING A WATCHFUL EYE

Earthworks' staff are in the field nearly every month using optical gas imaging cameras – the same tool used by regulators and industry – to document methane pollution from very companies that have committed to reduce and eliminate it. The same companies making ambitious promises cannot even abide by current laws on the books.

Earthworks is tracking and monitoring these industry claims. With limited time left to avoid the worst of climate change, we will demand nothing less than proof of immediate efforts to eliminate methane pollution from oil and gas operations.



Pete Dronkers, Southwest Circuit Rider for Earthworks, documenting emissions.

Last year some of the world's largest oil and gas companies lobbied the Trump administration behind closed doors to weaken federal methane pollution rules while publicly touting themselves as partners in combating climate change.

Companies promising to reduce methane are failing to back-up their promises. Earthworks is tracking and monitoring these industry claims.



UPPER PHOTO: An optical gas imaging camera exposes invisible pollution venting off a tank in New Mexico. LOWER: A worker stands in the plume.



[earthworks.org/frackinggas](http://earthworks.org/frackinggas)



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## Dancing For Dollars

By Paul Jolly

Earthworks is sustained by a wide variety of people. But last month we got a unique call from a new supporter, Brad Stasell, a union electrician from Joliet, Illinois. He had just generated \$1,000 in pledges during a 24-hour dance marathon. After he caught up on sleep, he contacted us about making a contribution. He explained his concern for the environment this way: "Some things bigger than me, really worry me, and I don't know what to do. Earthworks seems to be doing something about it. So, I just hope that by doing what I can do, it helps them do what they can do."

***Our thanks go to Brad, with hopes for continuing grace on the dance floor, and to all the rest of you who keep Earthworks strong.***



ON THE COVER: Twin Creeks Mine in Winnemucca, Nevada—an open pit gold mine owned by Newmont Mining Corporation. The mine is located in part on federal public land.

Cover Photo by Ecoflight; electric car by navee/stock.adobe.com;  
hands holding plastic © Marco Garcia/Greenpeace