THE WILDERNESS SOCIETY

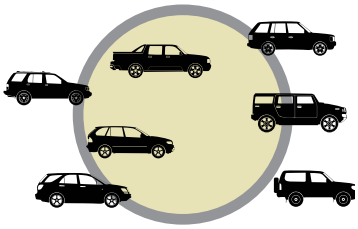
WE CAN'T WAIT:

Why we need reform of the federal coal program now

The far-reaching impacts of American coal mining have led to widespread deterioration of our land, water and climate, as well as communities that are economically reliant on coal. Forty percent of the coal produced in the United States comes from lands owned by all of us, predominantly the Powder River Basin in Wyoming and Montana.

The future of coal mining is without a doubt one of the most urgent contemporary environmental and social challenges facing the American West. The consequences of kicking the can on our broken and outdated federal coal program are vast:

Because of a decades-old royalty rate, every year American taxpayers lose out on **$62 million** of revenue from mining our publicly-owned coal.



Every year coal mining releases the pollution equivalent of **161 million cars.**

Insufficient rules and coal company bankruptcies will cost taxpayers up to **$2 billion** to clean up industry's existing toxic mess that is polluting our land and water.

Every year, the coal industry uses enough water for **43,000 households, or a town** the size of Billings, MT.

Fortunately, there are solutions to these challenges. But we can't afford to wait any longer to change how public coal is mined and valued. The impacts are piling up and the problem will not fix itself.

We can't wait for mining companies to clean up their mess on public land and waters

Five hundred seventy million acres of public lands are available for coal leasing, and coal companies are so far behind on cleanup that taxpayers might have to bail them out.

Coal mining wreaks havoc on the lands and rivers that Americans depend on for drinking water, hunting and fishing, and to find solitude in our increasingly busy world. During coal mining, coal companies excavate giant pits, clearing groves of trees, leveling once hilly and varied land, and blocking streams. When coal companies lease (essentially rent) public lands, they are legally obligated to restore land after mining operations are complete. However, coal companies continuously neglect to restore the land. A recent report from Natural Resources Defense Council, National Wildlife Foundation, and Western Organization of Resource Councils, "Undermined Promise," found that over decades of coal mining, 90 percent or 257,769 acres out of 287,442 acres, had not met the standards for restored land[1]. That's an area the size of Rocky Mountain National Park that coal companies neglect to restore but are legally obligated to clean up.

Augmenting to the problem of lands left unrestored, coal companies are now filing for bankruptcy at an alarming rate. While coal companies are supposed to ensure they have enough money for environmental cleanup, or reclamation, before beginning a new mining operation, the funds for clean-up are disappearing and acres of wild lands could remain scarred forever.[2] Those bankruptcies also mean that states and local communities could suffer the impacts and clean-up costs of abandoned mines. Currently, local communities and taxpayers are on the hook for nearly $2 billion in existing environmental cleanup.[3]

If the coal industry wants to make billions from mining American public lands, it has to live up to its responsibilities and clean up its mess. Nearly 570 million acres of public land that provides hiking trails, camping spots, and hunting areas, not to mention wildlife habitat for bears, wolves, elk, mule deer, and pronghorn antelope, are at risk of being irreversibly altered to make way for coal mines.[4]

Right now, the acres of new coal leases pending is 80,000 acres, roughly the size of Arches National Park in Utah. Photo: Neal Herbert, flickr.

Alton Coal Mine Expansion

Right now, a company has an application pending for an expansion of an existing mine in Utah. The proposed mine would be an additional 3,500 acres and would get close to the borders of Bryce and Zion National Parks. The impacts to the land, water and wildlife would irreparably harm important wildlands that depend on scenic and undisturbed natural wonders.

The Alton Mine in southwestern Utah is an example of how nearby cherished landscapes, like parks, are threatened when companies attempt to expand an existing mine. Photo: Southern Utah Wilderness Alliance

We can't wait to stop making bad investments in the coal industry

The coal industry is already sitting on 480,000 acres of public land, and 80,000 more acres are pending.

While companies fall behind reclaiming and restoring land that they have already damaged, they continue to demand more leases from the BLM and the American public who owns our public lands. The coal industry's unquenchable appetite for new lands to exploit combined with the failure of the BLM to manage its lands for multiple uses – like recreation, wilderness, agriculture and wildlife habitat – has led to the reality we face today: 300 current coal leases on our public lands, taking up over 480,000 acres of land.[5]

Worse still, **there are more than 80,000 acres of new leases pending before the BLM, an area about the size of Arches National Park in Utah.**[6] These leases include places that Americans love, like southwestern Utah where the Alton Mine wants to expand into a cherished landscape. Many of these leases will destroy more land for less coal than coal mining has in the past. As the high concentration coal seams or low hanging fruit have been depleted, coal companies have pursued coal in harder to reach places and lower grade concentrations – meaning they are digging deeper for less and less. This means digging deeper and impacting more land and water for less coal.

The use of public lands is changing. American people value lands for much more than places to mine, like recreation, cultural and historical preservation and conservation of our resources and habitats. According to the Outdoor Industry Association, public lands contributed over $646 million in consumer spending in 2012 alone.[7] That is money going straight to local communities. But when lands are used for energy extraction, like coal mining, that land is no longer available for other uses, like recreation or conservation.

> *"... there are more than 80,000 acres of new leases pending before the BLM, an area about the size of Arches National Park in Utah ..."*

When the BLM signs a lease with a coal company, they have a responsibility to make sure that company cleans up their mess and does as little damage as possible to the places we care about on public lands. Before a company can lease any more coal, it should have to prove that it has properly restored its existing mine sites and has the resources to pay for future cleanup. Otherwise Americans pay the price. Accountability is key in moving forward with the reform process.

We can't wait to get a fair return for taxpayers

Every year taxpayers lose more than $62m on the federal coal program. That's almost $170,000 every day.

American taxpayers are not seeing a fair return from coal mining on public lands. According to a report from the Inspector General of the Department of the Interior, taxpayers lost at least $62 million from undervalued leases and lost bonus bid revenues, in 2012 alone.[8] This money, owed to taxpayers and states, will not be recouped as long as the system is broken.

There are three ways that state governments and the federal government are paid when coal is sold:

1. royalty rates, which are a percentage of the price of the resource;
2. bonus bids, which are what companies bid in a competitive sale to lease the land; and
3. rental rates, the price for renting federal land for coal extraction.

Forty percent of coal is produced in the sprawling and expansive mines of the Powder River Basin in Wyoming and Montana. Credit: WildEarth Guardians, flickr.

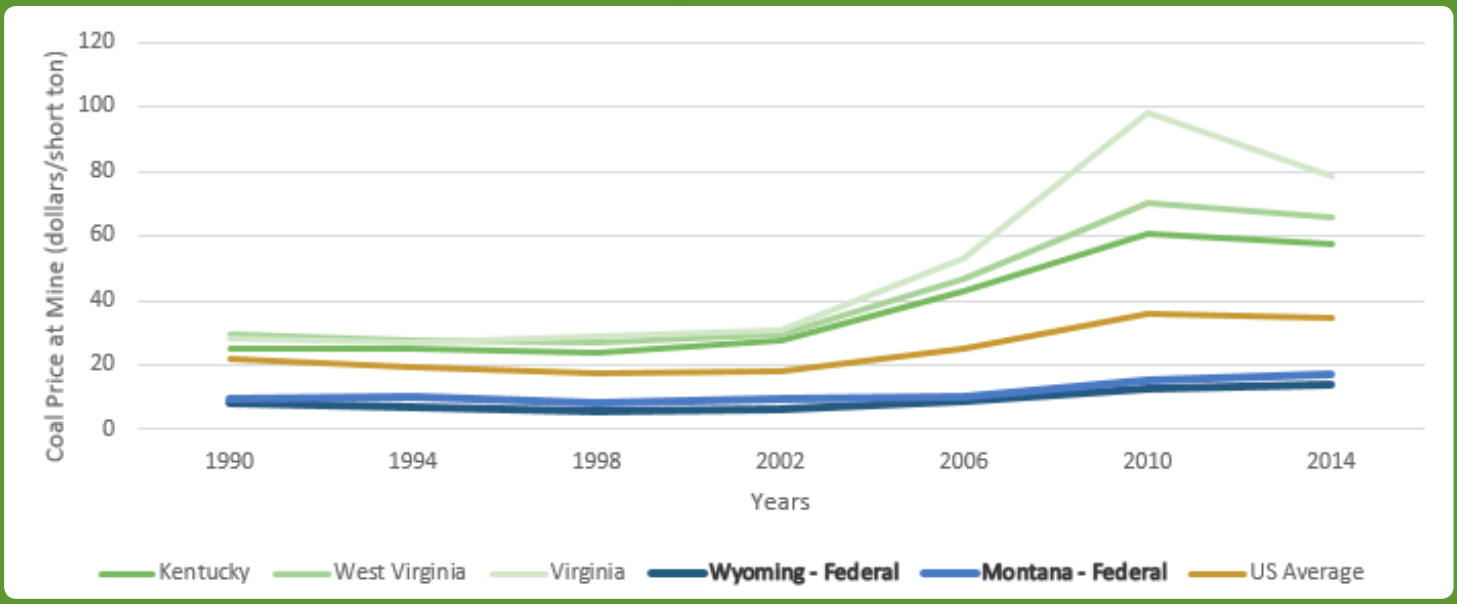
At all three of these points, the federal government is required by law to obtain fair market value for the resource. But the federal government is not obtaining fair market value for taxpayers' coal. Over the last thirty years, there have been more than 16 reports from government agencies and NGOs that make a clear case that the Department of the Interior must change the way companies pay for federal coal.[9] These reports call out the loopholes, deductions, artificially low rates and other disruptions that distort how much states and the federal government actually receive for coal owned by all of us. Yet for decades, nothing has changed.

An easy way to significantly increase revenue is to raise royalty rates, which are currently at 12.5 percent for surface mined coal, the vast majority of federal coal. These rates are considerably out of date and haven't been updated in decades. Gradually raising the rates to 18.75 percent, the same rate that offshore oil and gas developers pay, would contribute an **extra $300 million per year by 2025,** according to the administration's Council on Economic Advisors.[10]

This money should be put to work improving roads and bridges, funding public education and enhancing emergency services in local communities. It should also be invested in new economic opportunities in communities that have been dependent on coal jobs for decades and are now suffering due to business decisions made by mining executives.

Competitive lease sales are another effective way to ensure that taxpayers receive a fair return for federal coal. According to the Government Accountability Office, **between 1990-2013, nearly 90 percent of the 107 lease sales that took place involved only a single bidder.**[11] When the lease auctions are noncompetitive, it drives down "bonus bids" that are based on market competition. Coal companies are allowed to deliberately design tracts of land for bid that they know will have little competition. Raising the minimum bids, or increasing opportunities for multiple bidders by not allowing the industry to design their own tracts of land for bidding, will significantly raise the amount of money going to taxpayers. During the 23 years of the GAO's study, even with little competition, an average of $335 million was generated from bonus bids, suggesting that thanks to this loophole, **millions of dollars were left on the table that could have helped communities and funded other programs.**

Federal coal from Wyoming and Montana has remained artificially cheap over time



Data: Energy Information Administration

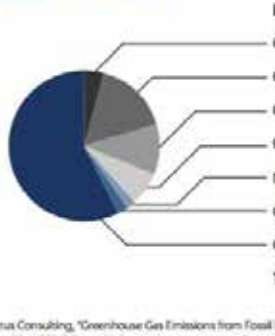
Our shared lands and resources are too valuable and important to be given away at rock bottom prices. In contrast, the price of coal from private lands in Appalachia have increased, while public coal from Wyoming and Montana has stayed low. In the 1990s, prices for private Eastern coal was between $15-30 per ton, while Western coal was about $10 per ton. Now coal in the east can be as high as $100 per ton, while in the west it has stayed steady at $10 per ton, in part due to the subsidies provided to public coal.[12] It is clear that every day we wait to make these changes, we are losing money.

We can't wait to stop irresponsible carbon pollution

Every year, the emissions from federal coal are responsible for more than 769 million metric tons of CO2, equivalent to 161 million cars on the road.

The effects of climate change are well documented. Increased storms, wildfires, droughts, loss of habitat and sea level rise are underway, and the federal coal program is a major contributing factor. Federal coal makes up 40 percent of the country's total coal supply, accounts for 10 percent of our greenhouse gas emissions, and makes up 57 percent of fossil fuel emissions. When it comes to combatting climate change, we are in a unique positon, with federal coal serving as not only a problem but also a solution if we choose to act. In 2012, burning federal coal resulted in an estimated 769 million metric tons of carbon dioxide, the equivalent to 161 million cars.[13] Studies have shown that that each ton of carbon released into the atmosphere costs the country roughly $36 in damages related to changes in the climate.[14] Simple math tells us that emissions from the **federal coal program will amount in $30 trillion in costs due to climate change**.

Estimated GHG emissions by fossil-fuel resource extracted on federal lands and waters in 2012



Fossil fuel	Total MTCO2e	Percent of total
Onshore oil	57,311,142	4%
Offshore oil	217,212,051	16%
Onshore natural gas	144,587,927	11%
Offshore natural gas	98,158,313	7%
Natural gas liquids	26,563,487	2%
Coalbed methane	31,070,559	2%
Coal	769,155,909	57%
Total	1,344,059,388	100%

Another important part of coal development and production's climate emissions is methane gas released during the mining process. Methane is an extremely powerful greenhouse gas, 86 times more potent over a 20-year period than carbon dioxide. Methane gas forms

in coal seams and is released as the coal is extracted. According to the Environmental Protection Agency, in 2012, coal mining was responsible for methane emissions that equal 55.8 million tons of CO2, or the amount spewed by roughly 12 million cars on the road for a year.[15] In monetary terms, that means that **future damages from methane released from 1 year of coal mining totals over $2 billion**. Coal mine methane waste needs to be dealt with in order to reduce climate change stemming from coal extraction on federal lands.

Coal pulled from public lands, and the subsequent emissions, will be an integral part of the solution to reduce the United States' climate footprint. We are already seeing climate impacts on a global scale, we cannot wait any longer to reduce harmful emissions from federal coal.

Coal mining heavily impacts nearby water resources, polluting waterways with toxic heavy metals that kill aquatic wildlife and harm local communities. Photo: Matt Wasson

We can't wait to stop polluting our drinking water and rivers

Surface mining wastes 4.7 billion gallons of water every year.

No matter the coal mining method, there is a need for immense amounts of water to pressurize the rock in order to release the coal. In the West, where surface mining is common, the average mine uses about 10 gallons of water for each ton of coal.[16] Considering that in 2014, leases on federal land produced 470.8 million short tons of coal, that's 4.7 *billion* gallons of water used for coal mining in a year, or an average of 12.9 million gallons of water per day.[17] In total, that's enough water to supply all the households in the entire city of Billings, Montana for a year.[18]

With the recent droughts and water crisis in the Western U.S., there has been increasing worry about coal's effect on the water supply. It's important to reform the federal coal program now in order to protect the quantity and purity of the water we do have.

In addition to using surface water to access coal, the mining process often rips through aquifers that supply locals' wells. Some of these mines can be so water dependent, they can empty wells five miles away, and locals have had to dig more than 1,000 feet deeper to reach potable water.[19] Hard working Americans who used to have guaranteed places to go for water for their livestock and agricultural production, now face limited resources as a result of coal mining. These aquifers are critical for the livelihoods of many communities, but when coal is mined nearby, these important resources are diverted, used up and polluted.

Coal mining also impacts our water quality. Remaining streams and aquifers are often polluted with toxic heavy metals such as cadmium, selenium, and arsenic, all of which are harmful to drink. Consequently, there are countless examples of drinking water turning a reddish color in household water wells since large-scale coal bed methane production began.[20] Acid mine runoff (also known as drainage)—the creation of sulfuric acid through a chemical reaction when water runs across exposed rocks containing sulfur—is the most common and severe water pollutant from coal surface mines.[21] The toxic drainage seeps into our rivers and creeks,

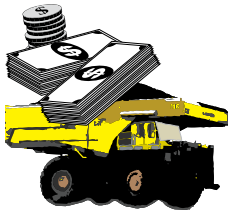
killing aquatic wildlife that locals fish. Whether the contaminants from coal mines harm our drinking water or fish that we rely on for food, coal mining has tangible impacts that are beyond the radius of the mining site.

All Americans should have access to clean water. It is a fundamental right. Water is too precious a commodity to be disproportionately used for coal mining. Without new protections to keep water clean and clear and abundant, the problems will only intensify.

We can't wait for A Cleaner Future

Every day we wait for reform of the federal coal program, Americans lose. Money disappears from taxpayers' and local governments' pockets. Irreplaceable lands are forever changed. Drinking water is drained, polluted and wasted. Climate change-causing pollution spills into the atmosphere. **Reforming and modernizing the current federal coal program is the only way to stop these destructive impacts.**

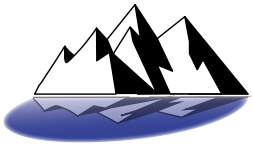
Without immediate policy changes from the BLM, in five years' time:



$10 billion in taxpayers' money will go to cleaning up land damaged from coal mining;

$310 million in lost money for states and taxpayers due to undervalued lease sales;

more than $150 trillion in climate damages [22] related to the burning of federal coal; and



23.5 billion gallons of water will be wasted. That's enough to fill New York's Lake Placid.

Photo: Mason Cummings, BLM

These damages underline the need for a major overhaul in federal coal policy. At the same time, the coal industry is also at a crossroads. Coal is facing a declining global market. Burning coal for electricity hit an all-time low in January 2016 at only 29 percent of U.S. electricity production. While we wait, the market is reflecting the new reality that mining and transporting America's remaining coal is getting more expensive and the impacts are becoming increasingly difficult to account for, especially compared to other cleaner and less damaging resources.

Instead of waiting, we need to take action now to move toward a 21st century program with modern, commonsense standards for what any future coal development on public lands looks like. Instead of continuing to invest in an old, broken program and its disastrous consequences, we should invest in emerging western industries that can breathe new economic life into communities that are currently reliant on coal. We cannot afford to wait any longer. **THE TIME TO CHANGE IS NOW.**

1 http://www.underminedpromise.org/UnderminedPromiseFS1.pdf

2 http://wilderness.org/press-release/why-reform-federal-coal

3 "Undermined Promise II" by Natural Resources Defense Council, National Wildlife Foundation, and Western Organization of Resource Councils

4 http://wilderness.org/blog/5-reasons-americans-must-speak-fix-our-broken-coal-program

5 http://www.blm.gov/wo/st/en/prog/energy/coal_and_non-energy/coal_lease_table.html

6 http://www.blm.gov/style/medialib/blm/wo/Communications_Directorate/public_affairs/news_release_attachments.Par.16330.File.dat/Status%20of%20Pending%20Leases.pdf

7 https://outdoorindustry.org/images/researchfiles/OIA_OutdoorRecEconomyReport2012.pdf

8 https://www.doioig.gov/sites/doioig.gov/files/CR-EV-BLM-0001-2012Public.pdf

9 Wilderness.org/sites/default/files/TWS%20Coal%20Reform%20Timeline.pdf

10 https://www.whitehouse.gov/sites/default/files/page/files/20160622_cea_coal_leasing.pdf

11 http://www.gao.gov/products/GAO-14-140

12 https://www.whitehouse.gov/sites/default/files/page/files/20160622_cea_coal_leasing.pdf

13 http://wilderness.org/sites/default/files/PublicLandsEmissions-brief.pdf

14 https://www3.epa.gov/climatechange/EPAactivities/economics/scc.html

15 https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2014-Chapter-Executive-Summary.pdf

16 https://www.sciencebase.gov/catalog/item/5140abbbe4b089809dbf533c

17 https://www.eia.gov/electricity/data/eia923/

18 https://suburbanstats.org/population/montana/how-many-people-live-in-billings

19 https://www.northernplains.org/wp-content/uploads/2013/06/Coal-postal-patron-mailer_2013-3-27.pdf

20 http://wilderness.org/blog/drilling-what-cost-our-science-shows-us-public-lands-hold-tiny-amounts-energy

21 http://policyintegrity.org/files/publications/Coal_fair_market_value.pdf

22 769 million metric tons of CO2 per year at $39 per ton of CO2 per year over 5 years

Our mission is to protect wilderness and inspire Americans to care for our wild places.

THE WILDERNESS SOCIETY

1615 M Street N.W.
Washington, D.C. 20036

(202) 833-2300

wilderness.org