

## Create Jobs by Addressing Legacy Drilling and Mining Pollution

**Jobs Protected or Created: 8,480 Total (5,400 for abandoned wells<sup>24</sup> & 3,080 for mine reclamation<sup>1</sup>)**

**Total Cost: \$673.2 million over 4 years (\$453.2 million for abandoned wells and \$220 million for mine reclamation)**

### **Framing Statement:**

Pennsylvania's oil drilling and coal mining industries have left Pennsylvania with significant legacy pollution issues that endanger lives, pollute water and air, and hold back economic development in the surrounding areas. Over 200,000 acres of Abandoned Mine Lands exist statewide, representing historic mining sites active prior to 1977 that were inadequately reclaimed or protected and are hazardous because of landslides, fires, air pollution, and water pollution caused by acid mine drainage.<sup>2</sup> Another 200,000 to 750,000 unplugged legacy oil and gas wells pockmark the state,

representing abandoned operations that were not properly encased and filled, potentially leaching methane, volatile organic compounds, and other pollution into the air and ground water. Any new economic development of these sites will cost private developers potentially millions of dollars in cleanup, making land reuse costly and, often, untenable.

Prior to the COVID-19 pandemic, the existing oil and gas well plugging workforce operated primarily as small businesses and directly employed 300 people. This small industry—backed by very limited state investment and further hampered by bankrupt or unknown well owners—is not operating at nearly the scale necessary (Weber, 2019). Econsult Solutions (2017, pg. 35) estimates that it will cost \$8.4 billion to properly address legacy oil and gas wells. For its part, the PADEP only has 9,000 priority, unplugged wells in its database, though statewide assessments have pinned the number at between 300,000 to 760,000 (PADEP, Sept. 2018). While a fully staffed well plugging mapping effort is still needed in Pennsylvania to properly locate and assess all abandoned wells, addressing the priority list is still a significant effort. Plugging the wells on the priority list would be a win-win: improving environment outcomes as well as supporting a diverse mix of construction and labor jobs, many of which could come from workers in the struggling fracked gas industry and construction workers who struggled during the stay-at-home lockdowns.

Abandoned mine reclamation is an equally significant job and economic opportunity. According to the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement, Pennsylvania's high priority mine reclamation projects are unfunded by \$3.9 billion (U.S. Department of Interior, 2020). The DEP believes the cost is closer to \$5 billion (Frazier, 2020).

Funding to address these projects is limited by federal policy. The Surface Mining Control and Reclamation Act of 1977 provided for the restoration of historic mine lands inadequately addressed before 1977. Existing mining operations were assessed a fee per ton of coal, which is placed in the national Abandoned Mine Reclamation (AML) Fund and provides annual funding to Pennsylvania and other historic coal states for reclamation projects. Annual allocations to the states continue, albeit lower today because Congress lowered the fee on coal mining.<sup>3</sup> There is a bipartisan movement in the U.S. Congress to pass the *Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More Act* (RECLAIM Act), which would front load \$1 billion from the AML Fund into larger allocations to coal





“PLUGGING OIL AND GAS WELLS...WOULD BE A WIN-WIN: IMPROVING ENVIRONMENTAL OUTCOMES AS WELL AS SUPPORTING A DIVERSE MIX OF CONSTRUCTION AND LABOR JOBS...”

states over 5 years. Based on the legislation’s allocation formula, Pennsylvania would gain roughly \$300 million for mine reclamation that must be tied to economic development projects.

Nonetheless, Pennsylvania should go beyond what the federal government and the RECLAIM Act would invest to boost mine reclamation and more quickly generate new economic opportunities for the Commonwealth. Reclamation projects around the state have shown the pollution and economic benefits of investing in these projects as quickly as possible. For example, in the Wyoming Valley, the Earth Conservancy has reclaimed nearly 2,000 acres of mine-scarred lands that are now available for commerce, attracting businesses such as Wegmans, Adidas, Spreetrail, and TruValue.<sup>4</sup> These projects also create ongoing operation and maintenance jobs when passive treatment systems are used (Hughes, 2019). Historically, Pennsylvania has invested in mine reclamation through *Growing Greener* funding and has proposed additional funding for projects through efforts like *RestorePA*.<sup>5</sup>

Creating jobs through addressing the backlog of legacy coal mining impacts and capping unplugged legacy oil and gas wells will spur economic development opportunities in communities hard hit by the pandemic as well as the recession.

### Recommended Policy Interventions

- Invest \$450 million over 4 years in the DEP’s *Abandoned & Orphan Well Program* to clear out the 9,000 well backlog. Doing so will also require an additional \$3.2 million investment in the DEP program to hire eight full-time positions to administer and manage the program.<sup>6</sup> In addition to new state funds, the legislature could shift funds from Act 13 that are transferred to the Commonwealth Financing Authority back to DEP to partially support this effort.
- Appropriate \$220 million over 4 years to the DEP to increase the number of mine reclamation projects and accelerate addressing the backlog of legacy coal mining impacts. This equates to providing a state match on federal investments in mine reclamation through the AML Fund, or \$55 million per year. This would double the number of projects and allow existing projects to be completed quicker rather than be segmented over multiple funding cycles.<sup>7</sup>
- By pressuring Pennsylvania’s elected federal policymakers, support and pass the RECLAIM Act, which would provide at least \$300 million in mine reclamation funding to the state.

## Endnotes

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- 1 Dixon & Bilbrey (2015) calculated the economic benefit of abandoned mine reclamation by using the Department of Interior (DOI) annual economic benefit reports. For FY2012, 7,817 jobs were created from \$490 million in AML investment and 4,761 jobs were created in FF2013 on \$322 million. Respectively, this equates to 15.9 and 14.7 jobs created per \$1 million invested in abandoned mine reclamation. A more recent FY2018 DOI economic report provides data that suggests 2,027 jobs were created in Pennsylvania on \$55.7 million in AML grants, or 36.4 jobs per \$1 million investment. Using a more conservative estimate—14 jobs created per \$1 million invested—it's estimated that \$220 million in investment would create 3,080 new jobs.
- 2 Pennsylvania has mined coal since 1790, beginning just 14 years after the Declaration of Independence was signed. Coal and mining was essential to this state, to families and to communities, and to the success of the country, but its hey-day is past. It has left a bewildering legacy of harm: Tens of thousands of lives have been lost in mining accidents and many more have been lost to a horrendous disease called black lung.
- 3 In 2008, Congress reduced the per ton fee on surface mined coal by 10 percent to 31.5 cents and underground mined coal by 10 percent to 13.5 cents. In 2013, the fees were reduced again to 28 cents and 12 cents respectively. Combined with an industry-wide reduction in coal mining, Pennsylvania's share of AML funds has fallen from a high of \$67 million in 2012 to \$33 million in 2019.
- 4 For a look at some of Earth Conservancy's reclamation projects, see: <https://www.earthconservancy.org/projects/>
- 5 For more information on Growing Greener, see: <https://pagrowinggreener.org>. For more information on RestorePA, see: <https://www.governor.pa.gov/newsroom/governor-wolf-releases-seven-detailed-white-papers-on-restore-pennsylvania-initiative/>
- 6 Through conversations with DEP, the approximate cost of properly plugging each abandoned well will cost \$50,000. To clear out the 9,000 well backlog on DEP's priority list, it would cost \$450 million or \$112.5 million per year over 4 years. Eight new DEP full-time employees to support managing this program would each cost \$100,000 per position for 8 positions or \$800,000. The total cost over 4 years would be \$3.2 million.
- 7 According to the DEP, AML Fund grants to Pennsylvania were \$33 million in 2019 and are projected to increase to \$55 million in 2020 and \$54 million in 2021.



## PennFuture

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PennFuture is leading the transition to a clean energy economy in Pennsylvania and beyond. We are protecting our air, water and land, and empowering citizens to build sustainable communities for future generations.

Citizens for Pennsylvania's Future—PennFuture—was created in 1998 as a statewide environmental advocacy organization. Since our founding, we have achieved significant legal and policy victories that reduce pollution and protect the environment. We have provided millions of dollars in pro bono legal services while setting critical precedents and enforcing environmental laws across the commonwealth.

Our team is working daily to protect public health, restore and protect natural resources, and move Pennsylvania toward a clean energy future. With offices in Harrisburg, Pittsburgh, Philadelphia, Erie, and Mt. Pocono, our team litigates cases before regulatory bodies and in local, state, and federal courts; advances legislative action on a state and federal level; provides public education; assists citizens in public advocacy; engages with grassroots citizenry to support environmental causes; and engages with communities to increase participation in democratic processes.