

September 2023

Waste in Wyoming II: Federal Oil and Gas Policies Fail Taxpayers in Wyoming

\$3.6 billion in forgone revenue under the 12.5% federal royalty rate, FY13-FY22.

\$90 million in lost rental revenue from outdated rental rates for federal leases, FY13-FY22.

\$88 million in potential reclamation liability for currently producible federal wells in Wyoming.

\$73 million worth of gas wasted by operators on federal lands, FY12-FY21.

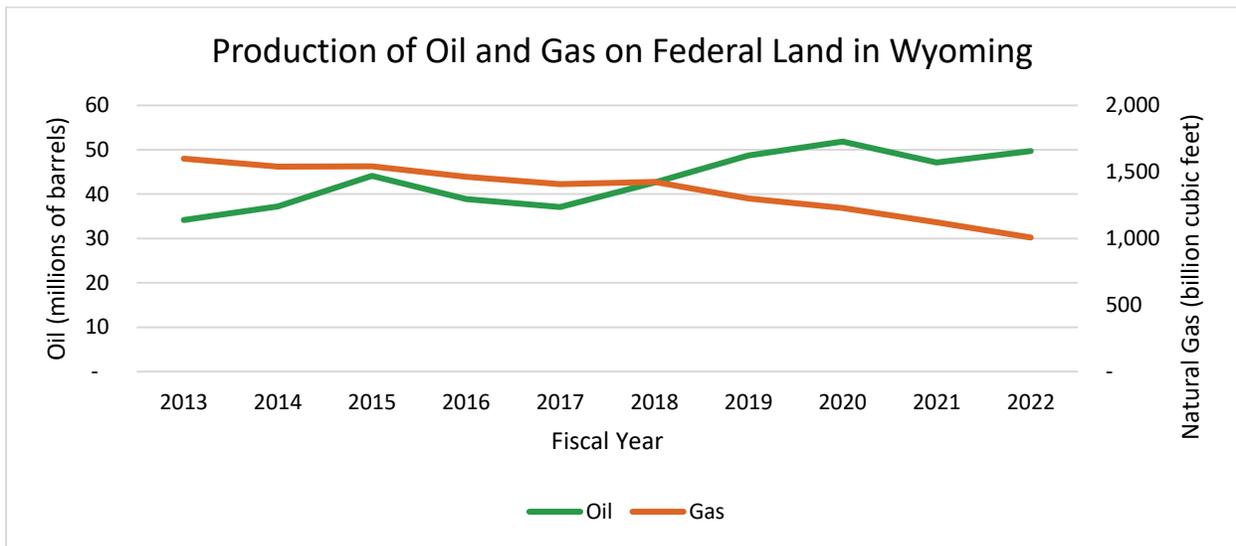
\$12 million in lost royalty revenues from gas waste.

The United States contains vast onshore mineral estates that are owned by American taxpayers. The Bureau of Land Management (BLM), within the Department of the Interior (DOI), is responsible for managing these resources and ensuring that taxpayers receive a fair return from their development. The federal onshore oil and gas leasing system fails to give taxpayers a fair return, instead leaving us with mounting financial and environmental liabilities. Over the last decade, taxpayers lost \$3.8 billion from outdated rates and fees in Wyoming. While recent reforms have improved the return taxpayers receive from leasing federal lands for oil and gas development, the current system still fails taxpayers through a below-market royalty rate, policies that allow federal gas to be released into the atmosphere royalty-free, and minimum bonding requirements that fail to capture the high costs of reclaiming oil and gas wells.

Oil and Gas Production in Wyoming

The Bureau of Land Management manages 18.4 million acres of surface land and 42.9 million acres of federal mineral estate in the state of Wyoming.¹ Much of this land is dedicated to oil and gas development. Wyoming has the most federal land leased for oil and gas development of any state in the country, containing nearly one third of all federal land currently leased for development.² At the end of Fiscal Year (FY) 2022, the Bureau of Land Management oversaw over 12,000 leases in the state, containing 7.7 million acres of federal land.

The majority of oil and gas production in Wyoming occurs on federal land.³ In FY2022, Wyoming was the country’s second largest producer of federal oil and natural gas, surpassed only by the state of New Mexico.⁵ From FY2013 to FY2022, operators on federal land in Wyoming produced 431.5 million barrels of oil and 13.6 trillion cubic feet of natural gas, which accounted for 17% of oil and 40% of natural gas extracted from federal lands. Over the last decade, oil production on federal lands in Wyoming has increased by 45% while gas production has decreased by 37%.



¹ “What We Manage: Wyoming.” Wyoming | Bureau of Land Management, n.d. <https://www.blm.gov/about/what-we-manage/wyoming>.

² “BLM Oil and Gas Statistics.” Bureau of Land Management, n.d. <https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics>.

³ In 2022, federal land accounted for 57% of oil and 79% of natural gas produced in the state. “Natural Resources Revenue Data.” US Department of the Interior, <https://revenue.data.doi.gov/query-data/>

⁴ “County Production.” Wyoming Oil and Gas Conservation Commission, n.d. <http://pipeline.wyo.gov/countyreport.cfm>.

⁵ “BLM Oil and Gas Statistics.” Bureau of Land Management, n.d. <https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics>.

The Federal Oil and Gas Program

The federal government possesses the opportunity to capture fair market value for taxpayers throughout the leasing process. Initially, DOI auctions leases to the highest bidder in a live auction, with the resulting revenue termed as “bonus bid” revenue. Following this, the federal government imposes rent on leaseholders for holding the land before production commences. Once leases begin to produce oil and gas, leaseholders are charged a fixed percentage of the production’s value, known as a royalty. Under the previous leasing system, which has only recently been updated, taxpayers lost valuable revenue at each stage of the process.

For decades, the federal government employed the same, below-market royalty rate, rental rate, and minimum bid for onshore oil and gas leases. The 12.5% royalty rate on federal lands was set by Congress as the legal minimum over 100 years ago, remaining unchanged until last year. This rate was significantly less than what is charged in federal waters (18.75%) or on many state lands (up to 25% in Texas, and 16.67% in Wyoming). The previous rental rate for holding land not currently under development – \$1.50/acre per year for years one to five of the lease and \$2/acre per year after – and minimum bid – \$2/acre – had remained unchanged for decades before being updated last year.

After production ends, oil and natural gas producers operating on federal land are required to plug their wells and clean up the surrounding sites. To guarantee that the cleanup of these potentially hazardous and environmentally harmful sites is paid for, producers must post a bond before they start drilling. If a company abandons its wells on a federal lease or goes bankrupt, the bond is intended to cover the reclamation expenses. However, for leases on federal land, the required bond amounts have not changed in over 60 years and do not cover the full cost of cleanup. Consequently, taxpayers are left paying millions of dollars to reclaim thousands of abandoned wells scattered across federal lands.

Recent Reforms

Recent legislation addressed many of these outdated and below-market fiscal terms, heralding a new era of financial returns for taxpayers. The FY2022 budget reconciliation bill, signed into law in August 2022, included several critical updates to oil and gas leasing rates for the next decade.

Under the new reforms, until August 2032, the federal onshore royalty rate will be 16.67%; rental rates are raised to \$3/acre for the first two years, \$5/acre for years three to eight, and then no less than \$15/acre for years nine and ten; and the minimum bid has been raised to \$10/acre. After August 2032, these rates will become the statutory minimum and the rental rates and minimum bids are subject to inflation adjustments.

DOI's current plans include additional updates to rules and policies to further secure fair returns. In late July, DOI released a proposed rule that would codify reforms made by Congress in the FY2022 budget reconciliation bill, as well as other recommendations from the Department of the Interior's Report on the Federal Oil and Gas Leasing Program.⁶ In tandem with fiscal revisions, the proposed rule would increase the minimum lease bond amount to \$150,000 and the minimum statewide bond to \$500,000, and eliminate nationwide and unit bonds. The rule would also direct oil and gas leasing away from sensitive areas. These continued efforts aim to enhance taxpayer returns, protect taxpayers from shouldering the oil and gas industry's liabilities, and potentially further reduce speculative leasing.

Additional agency rulemakings on the horizon will contribute to assuring taxpayers a fair return on valuable oil and gas resources, such as improving the capture and royalty collection of vented and flared methane from federal wells.

Revenue Losses from Onshore Leasing Terms

While recent actions have helped bring the federal onshore oil and gas leasing system into the 21st century, they are still inadequate at protecting taxpayers and ensuring a fair return from the sale of taxpayer-owned resources. Taxpayers have lost millions of dollars and, without permanent reform, may continue to lose millions more from outdated and below-market royalty rates and rental rates. Current federal policies on lost gas and bonding benefit the oil and gas industry at the expense of taxpayers, burdening the nation with growing long-term liabilities.

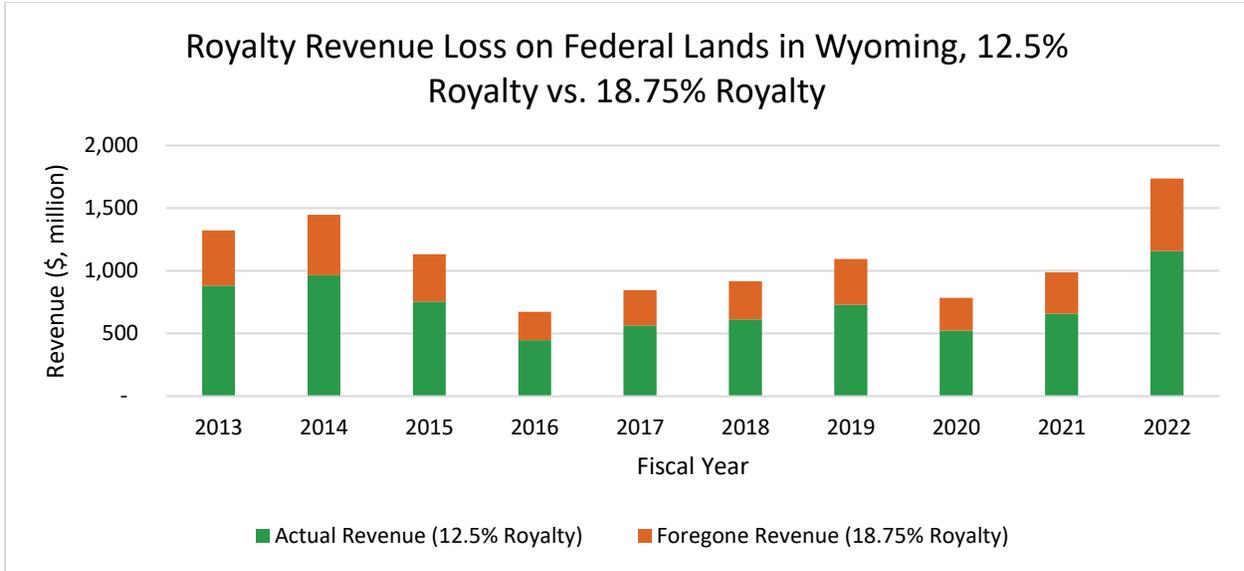
Royalty Rate

Over the last decade, FY2013-2022, taxpayers received \$7.3 billion in revenue from oil and gas royalties under the old royalty rate of 12.5%.⁷ This is far below what the federal government charges in federal waters (18.75%) and what Wyoming charges on state land (16.67%). If the current royalty rate of 16.67% had been applied to oil and gas production over this period, taxpayers would have received an additional \$2.4 billion in revenue.⁸ And if a royalty rate more in line with what is charged on development in federal waters, 18.75%, had been applied to this production, taxpayers would have received an additional \$3.6 billion in revenue.

⁶ "Report on the Federal Oil and Gas Leasing Program." U.S. Department of the Interior, November 2021. <https://www.doi.gov/sites/doi.gov/files/report-on-the-federal-oil-and-gas-leasing-program-doi-eo-14008.pdf>

⁷ "Natural Resources Revenue Data." U.S. Department of the Interior, n.d. <https://revenue.data.doi.gov/query-data/>.

⁸ Lost royalty and rental revenue estimates are calculated by TCS using ONRR data.



Rental Rate

Taxpayers have also been shortchanged by outdated rental rates. Over the last decade, lease holders that were not actively producing oil or gas on federal leases were charged a mere \$1.50/acre or \$2/acre annually, depending on the length of the lease. Before August 2022, those rates had not been adjusted since 1987.

Between FY2013 and FY2022, the Office of Natural Resource Revenue (ONRR) reported \$81.1 million in revenue from rental fees in Wyoming.⁹ Had the rental fees been updated for inflation, taxpayers would have received an additional \$90 million in revenue, more than double what was actually collected.¹⁰ A new proposed rule at DOI would require that base rental rates be updated annually for inflation.

Federal Bonding Requirements

Federal reclamation bonds are supposed to ensure that the costs of plugging wells and cleaning up federal land after oil and gas production are left to operators, not taxpayers. However, inadequate minimum bonding requirements have burdened taxpayers with mounting liabilities.

Between 2014 and 2019, the Wyoming Oil and Gas Conservation Commission (WOGCC), which is charged with preventing the waste of oil and gas and protecting correlative rights in the state,

⁹ "Natural Resources Revenue Data." US Department of the Interior, n.d. <https://revenue.data.doi.gov/query-data/>

¹⁰ Lost royalty and rental revenue estimates are calculated by TCS using ONRR data.

reported plugging 2,361 orphan wells at an average cost of \$5,389 per well.¹¹ However, reclamation costs varied greatly, ranging between average costs of \$1,371 and \$146,217 per well depending on the project.¹² While these costs are below federal estimates of \$35,000 to \$200,000 per well,¹³ they still surpass the average bond amount held by the federal government, which supposedly should cover cleanup costs. In 2019, the Government Accountability Office reported that the average value of bonds held by DOI was a mere \$2,122 per well.¹⁴

There is limited information available on the number of orphaned wells on federal lands in Wyoming. In June 2023, the Wyoming Bureau of Land Management Field Office received funding through the Infrastructure, Investment, and Jobs Act (IIJA) to reclaim 12 orphaned wells on federal land.¹⁵ However, some reporting estimates that there are more than 1,000 orphaned wells on federal land in the state.¹⁶

Federal taxpayers are not only paying for currently orphaned wells on federal land in Wyoming, but also face potential reclamation costs from currently producing wells that carry the same, outdated bonding minimum requirements. At the end of FY2022, there were 26,794 active oil and gas wells on federal lands in Wyoming.¹⁷ If we assume that DOI holds the same average bond value as it did in 2019, these wells carried total bonds worth \$57 million. Using the WOGCC average cost of well reclamation, federal bonds would fail to cover the full costs of reclamation, leaving taxpayers to cover \$87.5 million in potential future costs.

The taxpayer costs of orphaned well reclamation extend beyond federal lands, as federal taxpayers have and will likely continue to assist state and local governments in funding well reclamation on nonfederal lands. The IIJA provided a total of \$4.275 billion for orphaned well cleanup programs on state and private lands: \$775 million in initial grants, \$2 billion in formula grants, and \$1.5 billion in performance grants.¹⁸ In August 2022, Wyoming received \$25 million

¹¹ "Orphan Wells Cost to Present." Wyoming Oil and Gas Conservation Commission, September 26, 2019. <https://drive.google.com/file/d/19dlfOmzhCvjTxLcdWXOoHdg39x24EOqf/view>.

¹² This estimate is consistent with other reclamation spending in Wyoming. The IOGCC reports that between 2018 and 2020, Wyoming spent \$11.2 million reclaiming 1,928 orphaned oil and gas wells, at an average cost of \$5,798 per well. Source: "Idle and Orphan Oil and Gas Wells: State and Provincial Regulatory Strategies 2021." Interstate Oil and Gas Compact Commission, October 2021. https://iogcc.ok.gov/sites/g/files/gmc836/f/iogcc_idle_and_orphan_wells_2021_final_web.pdf.

¹³ According to the BLM, the costs to plug a well and reclaim the surface ranges from \$35,000 to \$200,000, with an average cost of \$71,000. Source: "Fluid Mineral Leases and Leasing Process." The Federal Register, July 24, 2023. <https://www.federalregister.gov/documents/2023/07/24/2023-14287/fluid-mineral-leases-and-leasing-process>.

¹⁴ "Oil and Gas: Bureau of Land Management Should Address Risks from Insufficient Bonds to Reclaim Wells." Government Accountability Office, September 18, 2019. <https://www.gao.gov/products/gao-19-615>

¹⁵ "Biden-Harris Administration Announces \$64 Million to Address Legacy Pollution on Federal Lands and Waters, Create Good-Paying Jobs through Investing in America Agenda." U.S. Department of the Interior, June 9, 2023. <https://www.doi.gov/pressreleases/biden-harris-administration-announces-64-million-address-legacy-pollution-federal>.

¹⁶ Bleizeffer, Dustin. "Millions Flow to Wyoming to Plug Orphaned Oil and Gas Wells." WyoFile, September 6, 2022. <https://wyofile.com/millions-flow-to-wyoming-to-plug-orphaned-oil-and-gas-wells/>.

¹⁷ "BLM Oil and Gas Statistics." Bureau of Land Management, n.d. <https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics>.

¹⁸ P.L. 117-58, title VI, §40601

in initial funding to “plug, remediate and reclaim as many documented orphaned wells as possible, to complete remediation or reclamation actions where such work was not completed after plugging, and to locate and characterize undocumented orphaned wells.”¹⁹ Wyoming is also eligible for an additional \$40.6 million in formula funding.²⁰

This recent spending may still not be enough to reclaim the high number of orphaned wells across the state. WOGCC is currently tracking 1,545 orphaned wells in Wyoming, which, using recent reclamation spending in the state, may carry reclamation costs of between \$2.1 million and \$226 million.²¹ And this is just the universe of current orphaned wells; WOGCC reports that there are 27,100 active wells and 11,600 idle wells on federal and nonfederal land in Wyoming, raising potential future costs into the billions.²² While federal taxpayers will not pay these full costs, they will likely continue to supplement state program funding.

Royalty-Free Gas

During oil and gas production, operators regularly vent (release), flare (burn), and leak natural gas, releasing it into the atmosphere. Over the last decade, oil and gas operators on federal land in Wyoming reported releasing 23 billion cubic feet of methane, worth \$73.3 million, 90% of which was flared.²³ Only 15% of this wasted methane was charged a royalty rate.

Between FY2012 and FY2021, ONRR reported collecting \$1.6 million in royalties - the equivalent of 2.5% of the value of all reported lost gas.²⁴ If the royalty rate at the time, 12.5%, had been applied to all recorded gas lost, taxpayers would have received an additional \$7.6 million in revenue. If the current royalty had been applied to the same level of emissions, taxpayers would have received an additional \$10.6 million. And if a royalty rate that was more in line with what is charged in federal waters, 18.75%, had been applied, taxpayers would have received \$12.2 million more than what was actually collected over that period.

¹⁹ “Through President Biden’s Bipartisan Infrastructure Law, 24 States Set to Begin Plugging over 10,000 Orphaned Wells.” U.S. Department of the Interior, June 5, 2023. <https://www.doi.gov/pressreleases/through-president-bidens-bipartisan-infrastructure-law-24-states-set-begin-plugging>.

²⁰ “Biden-Harris Administration Invests \$660 Million for States to Plug Orphaned Oil and Gas Wells through President’s Investing in America Agenda.” U.S. Department of the Interior, July 10, 2023. <https://www.doi.gov/pressreleases/biden-harris-administration-invests-660-million-states-plug-orphaned-oil-and-gas-wells>.

²¹ “Orphan Well Program.” Wyoming Oil and Gas Conservation Commission, Accessed July 24, 2023. <http://pipeline.wyo.gov/OrphanWells.cfm>

²² “County Production.” Wyoming Oil and Gas Conservation Commission, Accessed July 31, 2023. <http://pipeline.wyo.gov/countyreport.cfm>.

²³ All information regarding methane emissions on federal lands was obtained through the Office of Natural Resources Revenue via a Freedom of Information Act Request by TCS. Gas value calculations used monthly average Henry Hub Natural Gas Spot Prices obtained from the Energy Information Administration. Source: <https://www.eia.gov/dnav/ng/hist/rngwhhdM.htm>

²⁴ “Natural Resources Revenue Data.” US Department of the Interior, n.d. <https://revenue.data.doi.gov/query-data/>.

Conclusion

The federal government has not only failed to ensure taxpayers a fair return from the development of valuable, federal oil and gas resources, but has also burdened taxpayers with mounting financial and environmental liabilities in the form of orphaned wells. Over the last decade, oil and gas leasing in Wyoming has cost taxpayers \$3.8 billion in potential revenue from royalties and rental fees. Oil and gas development in Wyoming has also allowed \$73 million worth of taxpayer-owned gas to be released into the atmosphere, keeping valuable gas from interested consumers, costing taxpayers millions of dollars in lost revenue, and contributing to the growing taxpayer costs of climate change. Federal policies on bonding have also left taxpayers with growing liabilities from orphaned wells in Wyoming; active wells on federal land in the state pose \$88 million in potential reclamation liability and more federal funding is likely to be directed to Wyoming to address orphaned wells on state and private land as well.

Reforming the federal oil and gas leasing system will benefit federal and state taxpayers, providing millions of dollars in new revenue every year and limiting federal expenditures on orphaned wells.

Natrona County, Wyoming | David Korzilius, BLM

