



Infrastructure Investment and Jobs Act

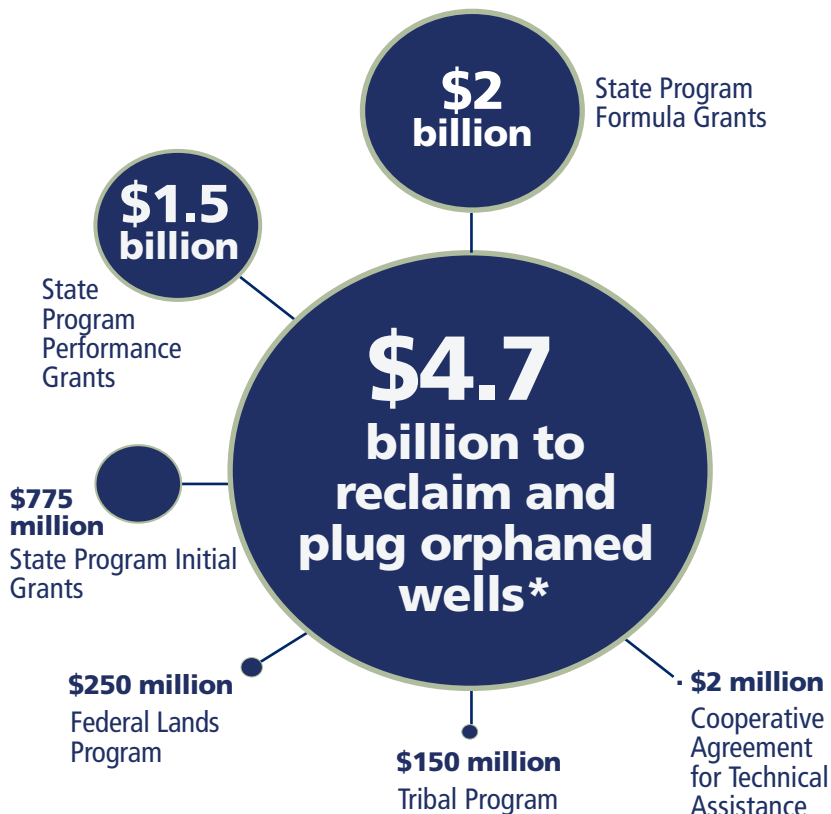


FLASH REPORT: ORPHANED WELLS PROGRAM

THE U.S. DEPARTMENT OF THE INTERIOR PREPARES TO SPEND \$4.7 BILLION

The President signed the Infrastructure Investment and Jobs Act (IIJA), Pub. L. No. 117–58, into law on November 15, 2021. The IIJA provides new funding for infrastructure projects, including programs to plug, remediate, and reclaim orphaned wells on Federal, State, tribal, and private lands. It also provides funding for technical assistance to support economic remedies for environmental problems caused by orphaned wells. The IIJA specifically authorized \$4.7 billion in appropriations for fiscal years 2022 through 2030 for the U.S. Department of the Interior (DOI) to administer its Federal, State, and tribal programs (see Figure 1). We are issuing this flash report to share information, promote transparency, and identify how the DOI plans to use the IIJA funding.

Figure 1: IIJA Authorized Funds to Address Orphaned Wells



*The U.S. Department of Energy is authorized an additional \$30 million for research and development activities.

Definitions

An **orphaned well** on **Federal or tribal land** is a well that is not used for an authorized purpose and for which no operator can be located. A well is also orphaned when the operator cannot plug the well or remediate and reclaim the well.

An **orphaned well** on **State land** is a well that a State describes as eligible for plugging, remediation, and reclamation by the State.

An **idled well** is a well that has been nonoperational for at least 4 years and for which there is no anticipated beneficial future use. (When not addressed, idled wells run the risk of becoming orphaned.)

An **operator** is any entity, including a lessee or operating rights owner, that is responsible for the oil or gas operation or any portion of the operation.

An orphaned well is **plugged** when it is filled and sealed to prevent contaminants from leaking into the environment.

An orphaned well is **remediated** when contaminants are managed and removed.

An orphaned well is **reclaimed** when the land is returned to its condition prior to development of the well.



Risk Areas

Orphaned wells pose public health and safety and environmental risks. According to the DOI, millions of Americans live within a mile of an orphaned gas or oil well. These wells can pollute residential and recreational areas and public spaces. As a result, orphaned wells have been a concern for residents, environmental groups, landowners, and State and Federal agencies for many years, and these stakeholders are directly affected by the outcome of the efforts to address orphaned wells, particularly through plugging. The cost of plugging a well can be affected by various factors such as depth, condition, location, and accessibility of a well. According to the Interstate Oil and Gas Compact Commission (IOGCC), the average cost ranges from \$2,400 to \$227,000.

The IOGCC stated in its December 2021 report, *Idle and Orphan Oil and Gas Wells: State and Provincial Regulatory Strategies*, that Pennsylvania, Ohio, Oklahoma, Kentucky, and Texas have the highest number of documented orphaned wells and that these States also have potentially large numbers of undocumented orphaned wells (see Figure 2).¹

50% increase in documented orphaned wells in 3 years

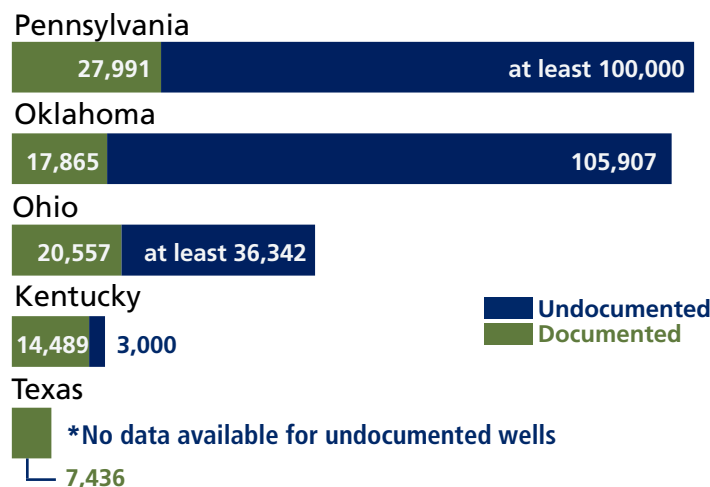
The IOGCC also reported that there was a 50 percent increase in the number of documented orphaned wells from 2018 to 2020. One of the largest factors contributing to the increase is the States' recent efforts to maintain more accurate inventories of orphaned wells. In the past few years, although States have removed wells from the inventory when they are

plugged or transferred to new owners, they have added wells that have been verified as orphaned. Even with the increase in documented orphaned wells, the IOGCC has estimated that the total number of undocumented wells is significantly higher than documented—between 310,000 and 800,000 higher across 15 States. These wells are sometimes identified when landowners discover leakage of oil on their properties.

The IOGCC is a multi-State agency, chartered by Congress in 1935. It states that it “champions the conservation and efficient recovery” of domestic oil and natural gas resources while protecting public health and safety and the environment. The IOGCC consists of 38 States as well as 7 Canadian provinces that participate as international affiliates.

The uncertainty of the estimates illustrates the challenges that Federal and State programs will face in plugging, remediating, and reclaiming orphaned wells. In addition, the DOI created a new Catalog of Federal Domestic Assistance number to manage the grants for State programs (15.018 – Energy Community Revitalization Program). Such a newly created grant program is an additional risk factor because the DOI has to learn to administer the program, and the recipients have to learn and comply with the new requirements. These factors contribute to the need for robust oversight for the success of orphaned wells programs.

Figure 2. The Estimated Number of Undocumented Orphaned Wells for the Identified States Is Significantly Higher Than the Documented Total



This orphaned well on the Deep Fork National Wildlife Refuge was found to be leaking oil in April 2021. Photo courtesy of the U.S. Fish and Wildlife Service (FWS). The public should not approach an orphaned well due to safety risks from methane gas and other hazardous debris and material that may cause severe bodily harm. All photos and videos in this report were taken by or under the supervision of trained professionals and should not be recreated.



¹ The IOGCC report cites limitations to the data used. It states that wells on private and State lands are included in the orphaned well counts, but some States may or may not include wells on Federal or tribal lands in their counts. In addition, some tribes defer to States for regulation, while others keep exclusive authority and may not share that information with State agencies.



Federal, State, and Tribal Programs

The DOI Office of Environmental Policy and Compliance (OEPC) is responsible for administering the authorized funding for the Federal, State, and tribal programs. The Bureau of Land Management (BLM) serves as the technical lead for the Federal program and works cooperatively with the OEPC in its implementation.

Federal Program

The IJA required the DOI to establish a program to plug, remediate, and reclaim orphaned wells on Federal land. This orphaned wells program must include methods to identify, characterize, and inventory orphaned wells and associated pipelines, facilities, and infrastructure on Federal land. The program must moreover prioritize orphaned wells based on public health and safety, potential environmental harm, subsurface impacts, and other land-use priorities. The DOI is required to distribute funding for activities based on these prioritization decisions. Some of the activities for which the funds are to be used include:

- Plugging orphaned wells.
- Remediating and reclaiming associated well sites and facilities.
- Remediating soils and restoring native species' habitats that have been degraded due to the presence of orphaned wells and associated infrastructure.
- Providing a public accounting of the costs of plugging, remediation, and reclamation.
- Seeking to identify the parties responsible for orphaned wells and attempting to obtain reimbursement for expenditures.
- Measuring and tracking methane emissions and groundwater and surface water contamination leaking from unplugged wells.
- Identifying and addressing the disproportionate burden of adverse health or environmental effects on underserved communities.

As required by the IJA, the DOI will periodically review the inventory of idled wells on Federal land and take action to reduce the total number, thus preventing them from becoming orphaned in the future.

To successfully address orphaned and idled wells on Federal lands, the DOI will need to coordinate with the U.S. Department of Agriculture, Indian tribes, and each State that has Federal lands. The DOI is required to consult with the U.S. Department of Energy (DOE) and the IOGCC to carry out the Federal program.

State Programs

The DOI's OEPC has responsibility for managing distribution of funding to States for orphaned wells programs through initial grants, formula grants, and performance grants. States can use the funds for:

- Remediating and reclaiming orphaned wells on State or privately owned lands.
- Identifying and prioritizing wells.
- Providing information on a public website about the use of the funds.
- Tracking emissions and groundwater contamination leaking from unplugged wells.
- Remediating soil and restoring native species and adjacent land.
- Identifying and addressing disproportionate burdens to underserved communities.

No more than 10 percent of funds can be used for administrative costs.



This well, which is leaking gas, is located in Ohio Township, PA. The Pennsylvania Department of Environmental Protection assessed the well, which may be eligible for the State orphaned wells program. It is on a steep, wooded hill and will require an access road to get the plugging rig to the well's location to properly plug and remediate. We recorded this video on May 11, 2022.



Federal, State, and Tribal Programs

Initial Grants

The DOI plans to provide up to \$25 million through initial grants to each State that submits a request for funding. The DOI issued its initial State grant guidance on April 11, 2022. The IJA explains that the States' requests must include:

- Estimates for the number of jobs that will be created or saved through IJA funding.
- Certification that the State is an IOGCC member; has one or more documented orphaned wells; and will use at least 90 percent of funds for contracts, amendments, and issuance of grants for plugging, remediation, and reclamation work.

The DOI also plans to grant \$5 million to States that request funding but do not receive the initial grant of \$25 million. However, States must certify that they have a program in effect to plug, remediate, and reclaim orphaned wells or the capacity to initiate one. If not, they must certify that the funds will be used for carrying out administrative actions to apply for formula or performance grants, which are described below.

The DOI must distribute funds to qualifying States no later than 30 days after they submit their requests. States are required to reimburse the DOI for any unobligated funds that exist 1 year after receipt of funds. In addition, no later than 15 months after receiving funds, States must submit a report to the DOI that describes how they used funds.

Formula Grants

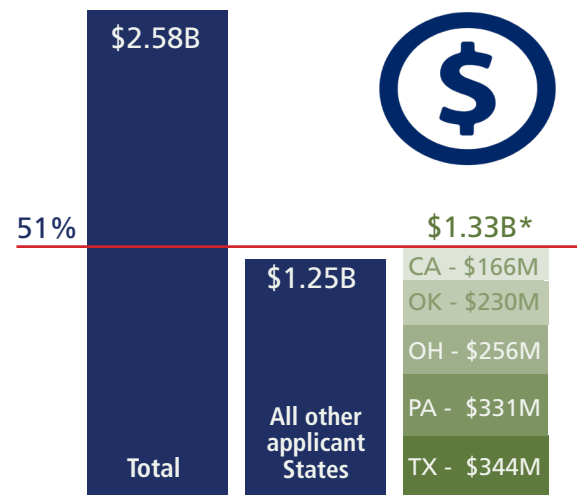
States may also apply for grants that the DOI plans to distribute based on an eligibility formula, which the IJA refers to as formula grants. The DOI's formula considers the following factors to calculate the amount States are eligible to receive:

- Job losses in the oil and gas industry beginning March 1, 2020, and ending November 15, 2021.
- Number of documented orphaned wells in the State.
- Projected costs to plug the wells, reclaim adjacent land, and decommission or remove associated infrastructure.

In addition to using the formula, the DOI is required to consult with the Environmental Protection Agency, the DOE, and the IOGCC to determine State eligibility.

Twenty-six States submitted notices of intent to apply for formula grants by the December 30, 2021 deadline. Each State submitted data to the DOI to calculate the estimated formula grant amounts. The DOI published the estimated amount each State is eligible to receive under the formula on January 31, 2022. According to the DOI's estimates, 5 of the 26 States that are eligible to receive the most funding could receive more than 51 percent of the total estimated amount to be distributed (see Figure 3).

Figure 3: The Estimated Funding for the Top 5 States Accounts for More Than 51% of Total Funding



*Top 5 States include Texas (TX), Pennsylvania (PA), Ohio (OH), Oklahoma (OK), and California (CA)

State applications for a formula grant must include:

- Descriptions of the State program to plug, remediate, and restore orphaned wells and alternate terminologies for those activities, if applicable.
- Descriptions of legal authorities and processes the State will use to identify and prioritize orphaned wells and the readiness of the State to carry out proposed activities using the grant funds, including which procurement mechanisms it will use.



Federal, State, and Tribal Programs

- Descriptions of planned activities to use the grant funds and the associated health, safety, habitat, and environmental benefits and how the State will share information publicly.
- An estimated number of orphaned wells and the definitions and processes the State used to identify them.
- Projected costs for plugging, remediating, and reclaiming wells and adjacent land and decommissioning related facilities and pipelines.
- Projected costs that will be offset by forfeiture of financial assurance instruments, salvage value of well site equipment, or other proceeds from orphaned wells and adjacent land.
- The estimated number of jobs that will be created or saved and the amount of grant funding to be spent on administrative costs.
- Certification that the State will use any financial assurance instruments available (for example bonds and security deposits) to cover costs.

The DOI plans to distribute funds to States no later than 60 days after the date they submit the completed application, subject to the availability of appropriations. The States must reimburse the DOI for funds they have not obligated 5 years after receiving the funds.

Performance Grants

The DOI plans to provide performance grants to States applying for funds to increase their spending on orphaned wells programs, improve their regulation of oil and gas wells, and decrease unemployment and improve conditions in economically distressed areas.

Within 180 days of a State's application, the DOI plans to provide a regulatory improvement grant with a maximum value of \$20 million if the State can demonstrate that, in the 10 years prior to its application date, it has met one of the following criteria:

- Strengthened plugging standards and procedures designed to ensure wells in the State are plugged effectively to protect groundwater, natural resources, public health and safety, and the environment.
- Improved programs to reduce future orphaned well financial burdens.

This photo of an idled natural gas well in the Lower Rio Grande National Refuge was taken in February 2014. The liquid in the pipe is likely a mixture of flood waters and residual natural gas chemicals. A 2010 flood caused damage to wells in the area and washed away infrastructure; most of these wells were not rebuilt or brought back into production.

Photo courtesy of the FWS.





Federal, State, and Tribal Programs

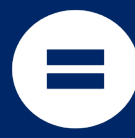
To encourage States to focus their resources on orphaned wells programs, the DOI intends also to provide matching grants to States that certify to the Secretary that they will expend increased funds to address orphaned wells in the fiscal year the grant is received. The matching amount equals the amount the State certifies it will spend minus the average amount the State spent annually on similar efforts during fiscal years 2010 through 2019. The DOI may not issue more than one matching grant per State per fiscal year, and the total may not exceed \$30 million during fiscal years 2022 through 2030.

Matching Grants Formula

Amount certified
to spend in
applicable fiscal
year



Average annual
amount spent by
the State between
2010 and 2019



The matching
amount

Tribal Program

The IIJA also requires the DOI to establish a program to provide grants to tribes for orphaned well plugging, remediating, and reclaiming activities or, upon a tribe's request, to administer and carry out those activities on its behalf. The DOI plans to carry out these activities, subject to appropriations, and the OEPC plans to manage distribution of funds to the tribes. Administrative costs cannot exceed 10 percent of grant funds received during a fiscal year; however, if funds are used to develop a tribal orphaned wells program to carry out activities, administrative costs can exceed the 10 percent limitation. Application requirements for tribes to receive IIJA funds are to be included in forthcoming tribal grant guidance.



This photo of an orphaned well was taken on June 28, 2018, in the Upper Ouachita National Wildlife Refuge.

Photo courtesy of the FWS.



Spending Plan

The DOI submitted its initial orphaned wells program spending plan to Congress on February 14, 2022. The plan summarizes the direct funding the DOI is anticipated to receive and breaks down its initial obligation plan over the fiscal years covered in the IJJA.

The spending plan also provides the DOI's plan for prioritizing orphaned wells as well as implementation strategies for the Federal and State programs. The DOI plans to work with other agencies that have subject matter experts in the field of orphaned wells—including the U.S. Environmental Protection Agency, the DOE, and the IOGCC—to develop standard procedures for monitoring programs, collecting and reporting data, as well as identifying innovative techniques for reclamation activities. The OEPC is drafting program guidance for internal control reviews and defining and capturing key metrics to monitor program progress.



\$4,677,000,000

The DOI's total spending through FY 2030* (in thousands)

	FY22 (\$)	FY23 (\$)	FY24 (\$)	FY25 (\$)	FY26 (\$)	FY27–FY30 (\$)	Total
State Formula Grants	220,000	400,000	400,000	400,000	400,000	180,000	\$2,000,000
Performance Grants	20,000	187,500	187,500	187,500	187,500	730,000	\$1,500,000
State Initial Grants	525,000	250,000	0	0	0	0	\$775,000
Federal Program	41,000	109,000	100,000	0	0	0	\$250,000
Tribal Grants	15,000	96,429	38,571	0	0	0	\$150,000
IOGCC Cooperative Agreement	2,000	0	0	0	0	0	\$2,000
Total	823,000	1,042,929	726,071	587,500	587,500	910,000	4,677,000*

*The IJJA provides up to 3 percent (\$140.3 million) to be available for administration efforts and 0.5 percent (\$23.4 million) to be available for the DOI OIG for oversight of the orphaned wells program.

Scope and Methodology

We conducted our inspection in accordance with the Quality Standards for Inspection and Evaluation as put forth by the Council of the Inspectors General on Integrity and Efficiency. To accomplish our objectives, we identified the IJJA's orphaned well requirements; obtained prior and current work related to orphaned wells; gathered data about idled and orphaned wells; discussed program details with DOI management to determine how funds will be spent and how data will be managed; and obtained an understanding of Federal, State, and tribal orphaned wells programs.

Infrastructure Investment and Jobs Act Milestones in Year 1

December 30, 2021	Deadline for States to submit notice of intent to apply for formula grants	Complete
January 14, 2022	Establish Federal program to plug, remediate, and reclaim orphaned wells and associated pipelines, facilities, and infrastructure on Federal land	Complete
January 29, 2022	Publish the amount each State is eligible to receive in formula grants on a public website	Complete
May 14, 2022	Deadline for States to apply for initial grants funding	24 States completed applications for initial grants
November 15, 2022	First annual report due to Congress describing programs established and grants awarded under the IJJA	TBD





LOOKING AHEAD

The DOI has stated that it will award most of its IJJA funding through contracts and grants. As we have experienced in other contexts, given the large amount of funding that is being quickly distributed, there is an increased risk of fraud and misuse. Our current and planned oversight efforts of the orphaned wells program include the following:

Current Oversight Efforts

- We are reviewing the status of recommendations in an evaluation (Report No. 2016-EAU-061, *Bureau of Land Management's Idled Well Program*) of the BLM's idled well review policy and data entry in its Automated Fluid Minerals Support System. This system is used to track oil and gas information on public and tribal lands.

Planned Oversight Efforts

- We plan to review bureaus' data availability and accuracy for monitoring and reporting on orphaned well activities and perform data analysis to identify potential weaknesses, risk areas, and other orphaned wells data concerns.
- We plan to issue a flash report documenting the DOI's responsibilities across various orphaned wells scenarios on Federal, State, and tribal lands.
- We plan to review contract and grant cost oversight and compliance with Federal regulations, award terms, and the IJJA.



To prevent fraud, waste, and abuse, our office anticipates that we will regularly:

- Host discussions and provide training to DOI employees, grant recipients, and contractors.
- Enhance detection through data analysis and the development of sources of investigative information.
- Improve investigation through focused training of investigators, auditors, and inspectors.
- Coordinate audits, inspections, and investigations throughout the Inspector General community and share results and trends.



REPORT FRAUD, WASTE, ABUSE, AND MISMANAGEMENT

The Office of Inspector General (OIG) provides independent oversight and promotes integrity and accountability in the programs and operations of the U.S. Department of the Interior (DOI). One way we achieve this mission is by working with the people who contact us through our hotline.



If you wish to file a complaint about potential fraud, waste, abuse, or mismanagement in the DOI, please visit the OIG's online hotline at **www.doioig.gov/hotline** or call the OIG hotline's toll-free number: **1-800-424-5081**

Who Can Report?

Anyone with knowledge of potential fraud, waste, abuse, misconduct, or mismanagement involving the DOI should contact the OIG hotline. This includes knowledge of potential misuse involving DOI grants and contracts.

How Does it Help?

Every day, DOI employees and non-employees alike contact the OIG, and the information they share can lead to reviews and investigations that result in accountability and positive change for the DOI, its employees, and the public.

Who Is Protected?

Anyone may request confidentiality. The Privacy Act, the Inspector General Act, and other applicable laws protect complainants. Section 7(b) of the Inspector General Act of 1978 states that the Inspector General shall not disclose the identity of a DOI employee who reports an allegation or provides information without the employee's consent, unless the Inspector General determines that disclosure is unavoidable during the course of the investigation. By law, Federal employees may not take or threaten to take a personnel action because of whistleblowing or the exercise of a lawful appeal, complaint, or grievance right. Non-DOI employees who report allegations may also specifically request confidentiality.