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DEPARTMENT OF ENVIRONMENTAL PROTECTION



Oil and Gas Management

# **Infrastructure Investment and Jobs Act (IIJA) Implementation**

May 19, 2022

**Bureau of Oil and Gas Planning and Program Management**

# Agenda

1. A Pennsylvania Legacy
2. Federal Legislation Implementation
3. Developing Solutions
4. Key Contracting Elements
5. Summary



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# A Pennsylvania Legacy

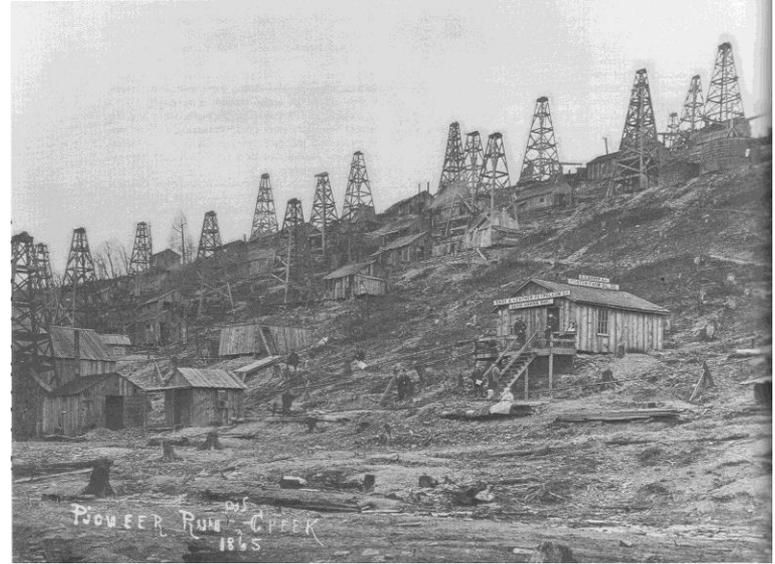
# A Pennsylvania Legacy

Pennsylvania has 26,908 abandoned/orphan (A/O) wells in known inventory with potentially hundreds of thousands that remain uncharted and mass abandonment a growing reality.

There are many documented cases of water supply impacts and public safety threats.

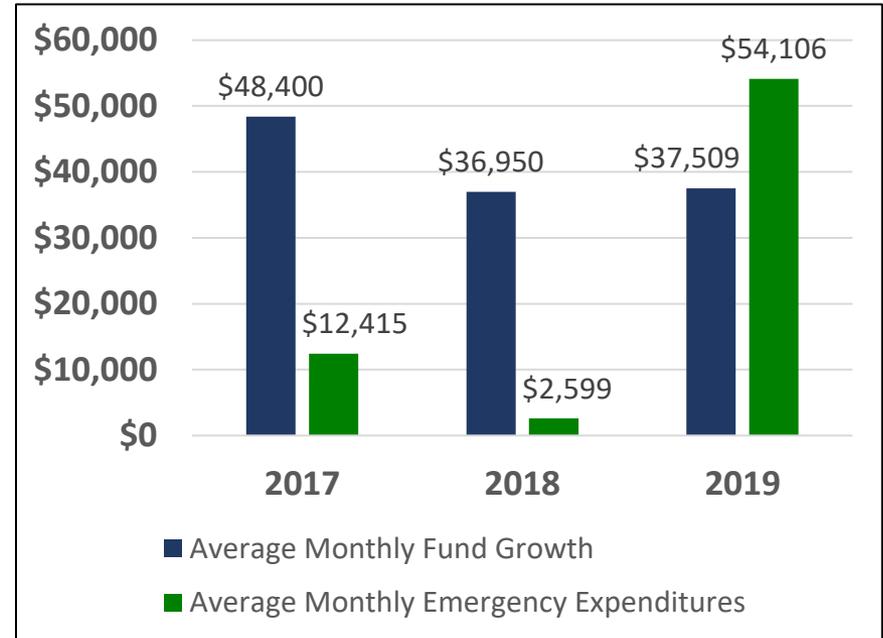
Wells are dynamic and so is the environment around them.

Well site access is challenging in many areas of the Appalachian basin.



# Recent Well Plugging Funding

States with funding shortfalls become risk managers, but the risk factors aren't always well understood or quantified.



A general lack of public awareness regarding the threats that wells pose can amplify risk.

# Examples of A/O Well Emergencies



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# ▶ Access Challenges for A/O Well Plugging Examples



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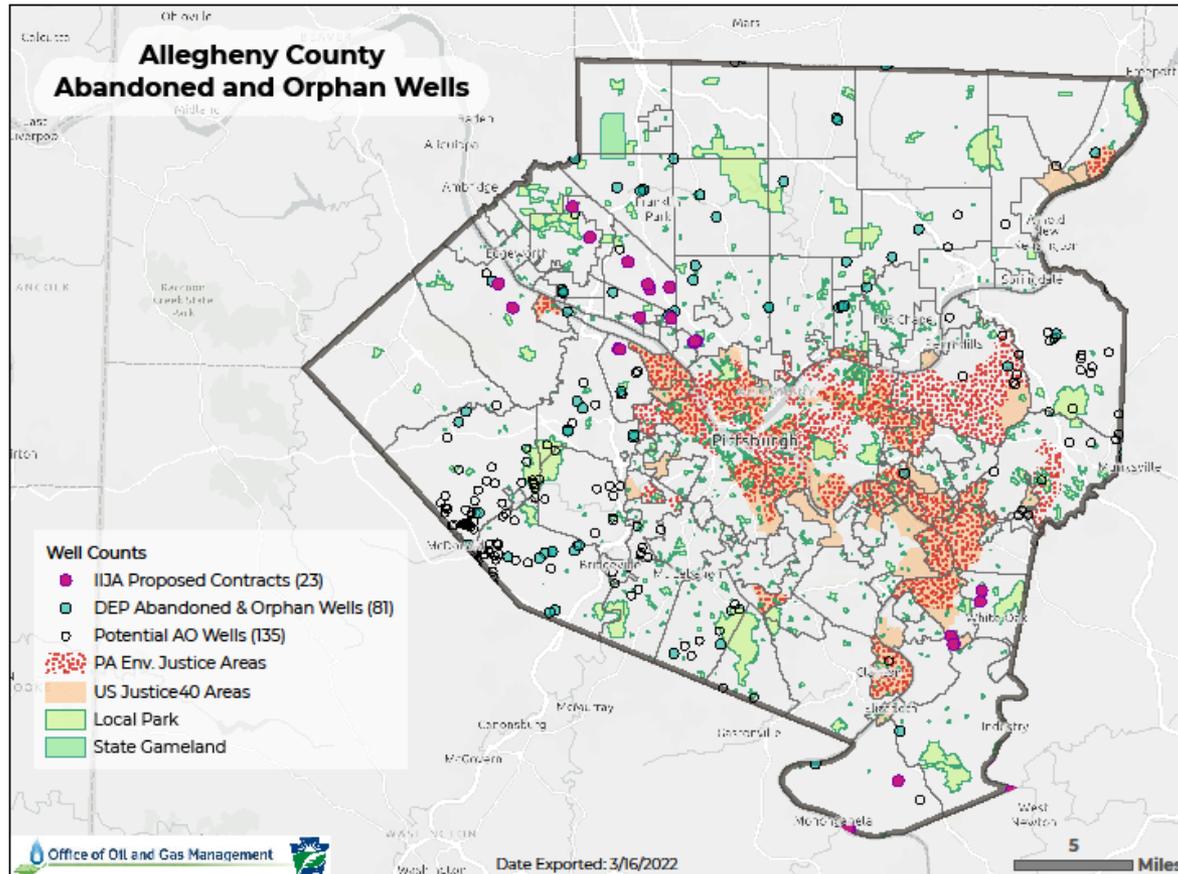
# Growing Inventory of A/O Wells

- Wells added to Abandoned/Orphan database each year
  - Inspection
  - Prioritization
  - Investigation
- Wells included on DEP's abandoned or orphaned list
- Wells associated with bankruptcies, deceased operators, or operators no longer doing business in PA
- Wells with incomplete production and integrity information
- Peer reviewed research and public databases

# Pennsylvania Orphan and Idle Well Counts

- Pennsylvania's orphan and idle well counts submitted to the Department of Interior (DOI) in December 2021:
  - *Group 1:* Wells associated with operators who are bankrupt, deceased, out-of-business, or no longer conducting business with the agency – 9,112 wells
  - *Group 2:* Wells identified by operators as abandoned in 2020 in accordance with the well identification provisions of Act 13, Section 3213 – 211 wells
  - *Group 5:* Wells identified by DEP field staff as abandoned – 4,382 wells
  - *Group 6:* 90000-series wells classified as “Abandoned” – pre-Act legacy wells generally reported in a historical oil and gas publication (William McGlade Study) that were field verified and never registered – 5,475 wells
  - Out of the above groups, reviewing available information for field coordinates for 12,252 wells
- **NOTE THAT THESE WELL CATEGORIES ARE IN ADDITION TO THE WELLS IN DEP'S ORPHAN/ABANDONED DATABASE (8,897).**
- **THE TOTAL WELL COUNT ON STATE AND PUBLIC LANDS REPORTED TO DOI IN DECEMBER 2021 IS 26,908.**

# A Pennsylvania Legacy



# Financial Liability of Pennsylvania's A/O Wells

- Documented “orphan” wells = 26,908
- Estimated plugging costs = \$68,068 per well
- Unfunded plugging liability is somewhere between **\$1.9 billion and \$13.6 billion**

# Risks Associated with A/O Wells

- Surface/ground water impacts
- Drinking water supplies impacted
- Methane migration/public safety
- Climate change
- Hazardous air pollutants (HAPs)



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# Federal Legislation Implementation

# Permissible Uses of Funds

- Plug, remediate, and reclaim orphaned wells located on State-owned or privately-owned land;
- Identify and characterize undocumented orphaned wells on State and private land;
- Rank orphaned wells based on factors including public health and safety, potential environmental harm, and other land use priorities;

# Permissible Uses of Funds

- Make information regarding the use of funds received available on a public website;
- Measure and track emissions of methane and other gases associated with orphaned wells;
- Measure and track contamination of groundwater or surface water associated with orphaned wells;

# Permissible Uses of Funds

- Remediate soil and restore native species habitat that has been degraded due to the presence of orphaned wells and associated pipelines, facilities, and infrastructure;
- Remediate land adjacent to orphaned wells and decommission or remove associated pipelines, facilities, and infrastructure;

# Permissible Uses of Funds

- Identify and address any disproportionate burden of adverse human health or environmental effects of orphaned wells on disadvantaged communities, including communities of color, low-income communities, and Tribal and indigenous communities; and
- Administer the program of work identified in its grant agreement.

# Grant Review: Initial Grants

- Up to \$25 million available – PA will request \$25 million.
- DEP must make the request within 180 days of enactment **(by MAY 13, 2022)**.
- Funds must be made available by DOI within 30 days of certification by DEP.
- DEP must certify that it will use 90% of the funds to issue new/amend existing contracts or issue grants for plugging/remediation within 90 days of receipt.
- DEP must obligate funds within 365 days of receipt.

# Grant Review: Formula Grants

- Formula funding is based on 2 factors:
  - Job losses in the oil and gas industry in PA between March 1, 2020 and enactment of IJA; and
  - The number of documented orphaned wells in PA and the projected cost to plug/reclaim these wells.
- DEP submitted a Notice of Intent in December 2021.
- DOI published Phase 1 grant amount for Pennsylvania (\$79 million) on January 31, 2022.
- Potential for \$300+ million allocation.
- Currently no application deadline or guidance.
- DEP must obligate funds within 5 years of receipt.

# Grant Review: Performance Grants

## Regulatory Improvement Grant

- Up to \$40 million available:
  - \$20 million for improved plugging standards; and
  - \$20 million for improved financial assurances.
- Funds available 180 days after Initial Grant; No application deadline.
- Funds made available by DOI within 60 days of completed DEP application.
- DEP must reimburse Federal government in entirety if regulations or laws are enacted that roll back plugging standards or financial assurances over the 10-year period following disbursement.

# Grant Review: Performance Grants

## Matching Grants

- Up to \$30 million available over 10 years.
- Funds available 180 days after Initial Grant and annually thereafter; No application deadline.
- Funds made available by DOI within 60 days of completed DEP application.
- Based on state spending for plugging proposed for upcoming fiscal year compared to average annual spending for plugging from 2010-2019.



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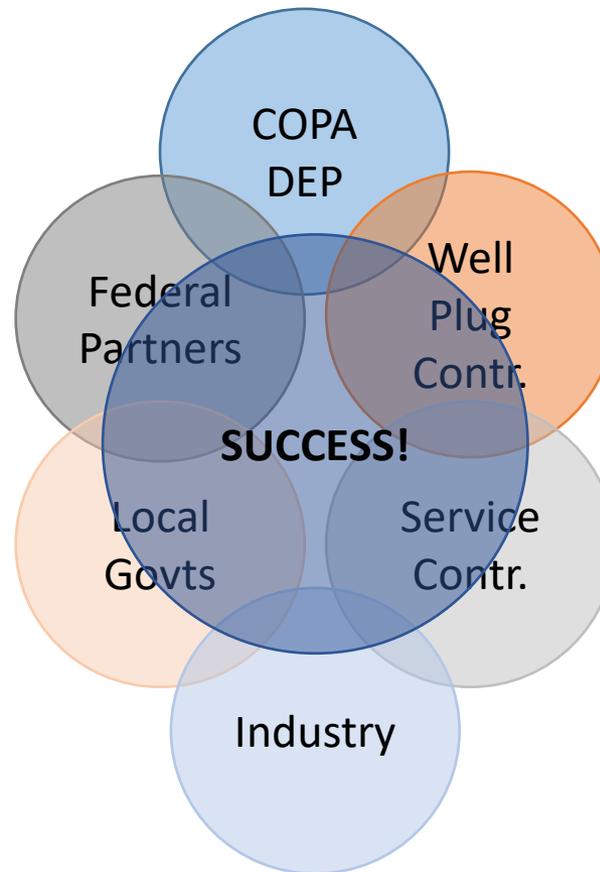
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# Developing Solutions

# Multi-Stakeholder Coordination and Cooperation

- DEP Office of Oil and Gas Management and agency partners
- Federal Partners (Department of Interior, Forest Service)
- Local Governments
- Industry
- Well Plugging Contractors
- Service Providers
- Others (?)



# Immediate Action Items

- Broaden the Workgroup stakeholders responsible for various aspects of a successful program and engage various internal and external stakeholders.
- Continue field verifying potential project wells and characterize accessibility and well conditions (i.e., prep “shovel-ready” projects).
- Continue “registering” all available and interested contactors via questionnaire.
- Engage U.S. Forest Service for potential plugging and identification of additional orphan wells in Allegheny National Forest.

# Immediate Action Items

- Assess staffing needs across the Department.
- Evaluate and develop appropriate processes for erosion and sediment control.
- Engage other land-owning and land-managing agencies at the state level (i.e., DCNR) to identify additional orphan wells.
- Consider options for other procurement of services (i.e., implementing “Request for Proposal” contract model).
- Evaluate Justice40 requirements associated with Federal Government guidance.

# Current Action Items

- Finalization of Initial Grant projects - Invitation for Bid
  - Anticipate up to 50 contracts to address 500+ wells or until initial funding is exhausted.
  - Release will be calendar year 2022.
- Development of Request for Proposals (RFPs) under Section 513 of the Commonwealth Procurement Code for contracts involving services other than well plugging.
  - Methane emission quantification
  - Courthouse due diligence work
  - Engineering services and permitting
  - Site remediation and clean up
  - Anticipate release will be calendar year 2023.



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# Key Contracting Elements

# Bonding

- PA DEP Oil and Gas will be following the **GENERAL CONDITIONS FOR CONSTRUCTION 2016** for bids.
- CONTRACT BONDS shall mean the bonds required by the contract documents which must be executed by one or more surety companies legally authorized to do business in the Commonwealth. The following as required by the Department:
  - 1) Performance Bond
  - 2) Payment Bond
  - 3) Maintenance Bond

# Bonding

- PERFORMANCE BOND shall mean the approved form of security furnished by the contractor and its surety as a guaranty of good faith on the part of the contractor to execute the work in accordance with the terms of the contract.
  - In the sum of one hundred percent (100%) of the contract amount.
- PAYMENT BOND shall mean the approved form of security furnished by the contractor and its surety as a guaranty of good faith on the part of the contractor to pay promptly or cause to be paid promptly in full such sums as may be due for material furnished and/or labor supplied or performed, and/or for equipment rental, or for services rendered by public utilities or other required services during the prosecution of work in accordance with the terms of the contract.
  - Also in the sum of one hundred percent (100%) of the contract amount.

# Bonding

- MAINTENANCE BOND shall mean the approved form of security furnished by the contractor and its surety as a guaranty of good faith on the part of the contractor to correct defects which may develop within the warranty period, in accordance with the terms of the contract.
  - In the sum of ten percent (10%) of the contract amount.

# DOI Guidance Special Requirements

- Davis Bacon – Federal Prevailing Wage rates apply.
  - PA Department of Labor & Industry (L&I) provides Prevailing Wage Project Rates.
  - L&I rates will be provided in Bids.
- Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's Workers*, requires awardees and sub-awardees of federal financial assistance awards to maximize the use of goods, products, materials, and services from sources that will help American businesses compete in strategic industries and help America's workers thrive.



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# Summary

# Summary

- Federal legislation for abandoned and orphan well plugging has opened up access to unprecedented levels of funding and the opportunity to significantly reduce the environmental, public safety, and financial liabilities associated with abandoned and orphan wells in the Commonwealth.
- To be successful, DEP must continue to develop the well plugging program with input from interested parties, citizens, local governments, contractors, consultants, other states and federal partners to effectively, efficiently and economically begin to address Pennsylvania's oil and gas legacy.



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# Thanks! Questions?

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**[Rewriting Pennsylvania's Legacy \(dep.pa.gov/legacywells\)](http://dep.pa.gov/legacywells)**