

Orphan Wells in New Mexico

NEW MEXICO OIL CONSERVATION DIVISION (OCD) OF THE ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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OCD Statutory Jurisdiction

- The New Mexico Oil and Gas Act (Act) gives OCD jurisdiction to:
 - Protect correlative rights of O&G mineral rights owners
 - Prevent waste of O&G natural resources
 - Protect human health and the environment
- Act requires OCD to collect financial assurance (FA) for well plugging and remediation
- Act creates a “Reclamation Fund,” OCD administers for well plugging and abandonment (P/A) of orphan wells
 - Funds come from percentage of Oil and Gas Conservation Tax and forfeited bonds (general fund not used to plug)
 - Requires OCD to P/A wells as funds become available (Fund subject to legislative appropriation)
 - Allows OCD to: (1) contract personnel to survey orphan wells and associated facilities; and (2) P/A orphan wells and remediate associated facilities;
 - HB 2 limits Rec. Fund appropriation for OCD employee(s) to \$194,100
 - OCD is not responsible for plugging federal or tribal wells
- Majority of wells in the state are plugged by active operators, OCD only P/A wells when they have been orphaned
 - Operators plugged 451 wells in 2021
 - OCD plugged 49

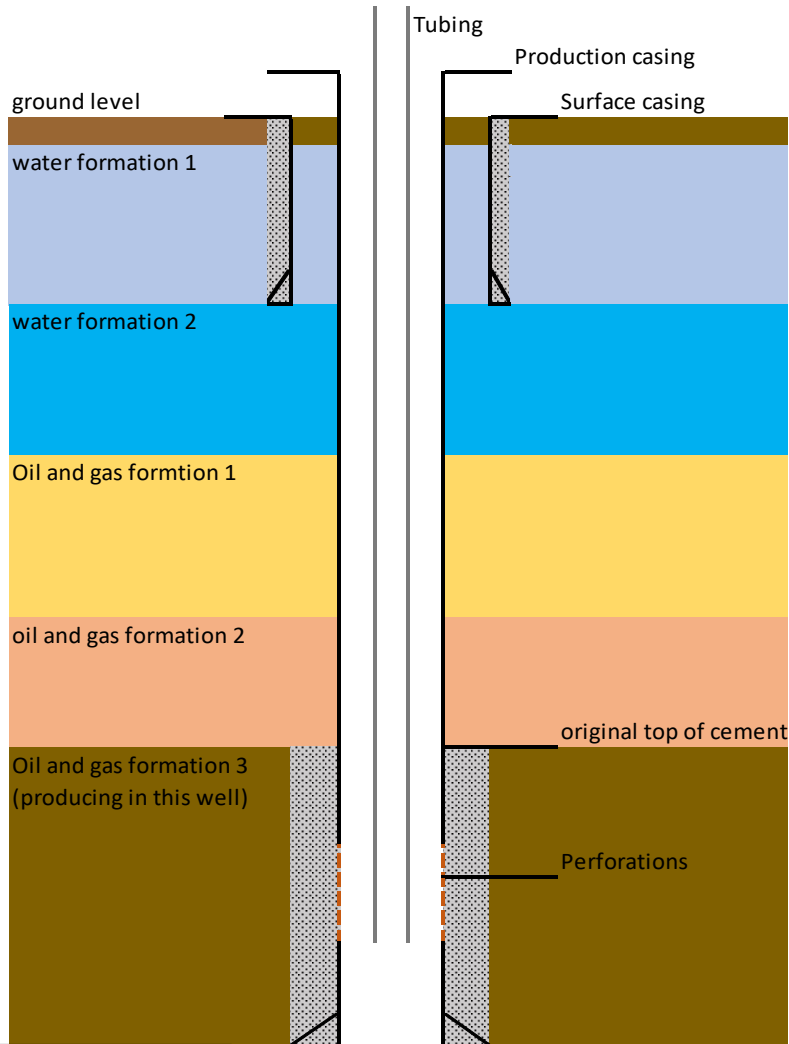
Orphan Wells

- What is an orphan well?
 - OCD does not have a definition of orphan well
 - Subset of inactive wells
 - No viable operator of record, often due to bankruptcy
- There are approximately 1700 orphan wells statewide on state and private land
 - 209 having plugging orders
 - 220 additional sites have been previously plugged but still in need of remediation and reclamation
- It currently costs approximately \$70,000 on average to plug each of these wells
- Assessment, remediation and reclamation costs combined average \$230,000 per site but can vary widely
- Reclamation Fund
 - Fund Balance as of 6/30/22 is \$21,336,291
 - OCD is appropriated a certain amount to use for reclamation work each year
 - The fund is continuously replenishing itself

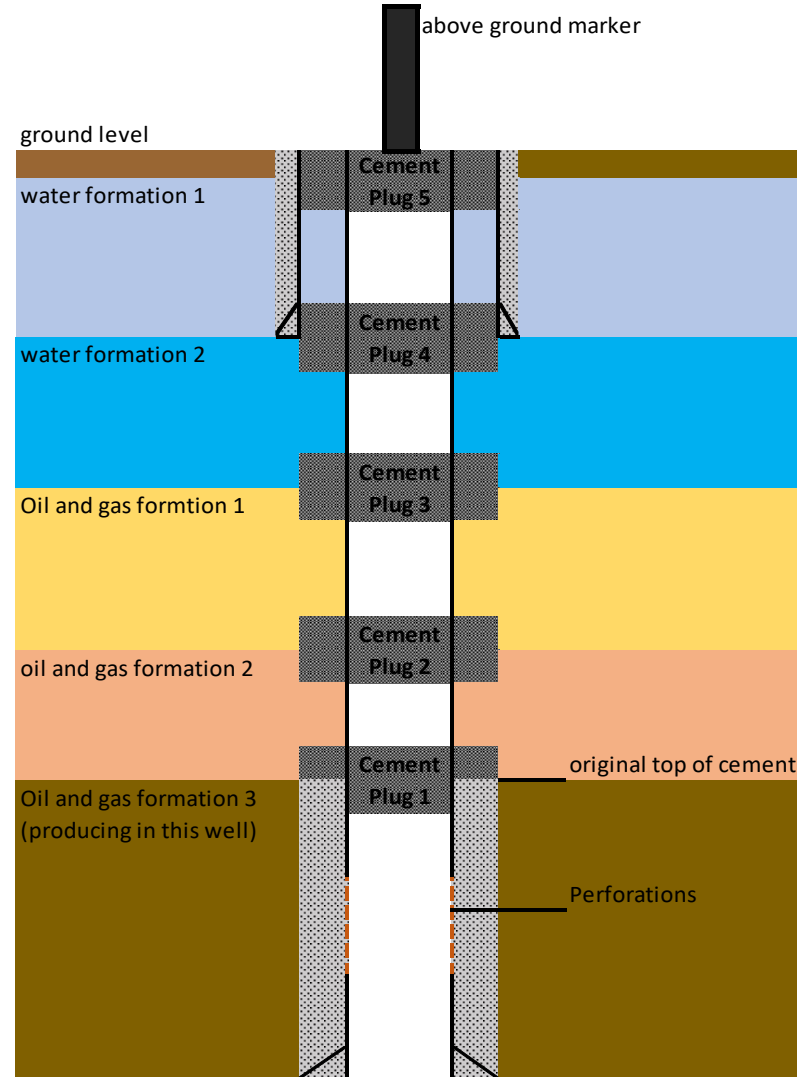


Plugging Example

Before



After



- Cement plugs are placed between each formation and at the surface
- This permanently isolates the oil, gas, and water zones from each other and the surface.

Orphaned Site Remediation

Before



After



OCD Bonding Requirements

- Production, injection and service wells are required to have FA to plug wells and remediate location
- FA comes in several forms: cash bond, surety, letter of credit, plugging insurance
- Bonding amounts were increased by the legislature in 2018 and OCC enacted a rule to implement the increase in 2019

Active well “single”: \$25,000 plus \$2 per foot of the projected depth of a proposed well

Active well “blanket” (Note: 70-2-14 set “blanket bond” limit at 250k):

- \$50,000 for one to 10 wells;
- \$75,000 for 11 to 50 wells;
- \$125,000 for 51 to 100 wells; and
- \$250,000 for more than 100 wells

Inactive well “single”: \$25,000 plus \$2 per foot of the depth of an existing well

Inactive well “blanket”:

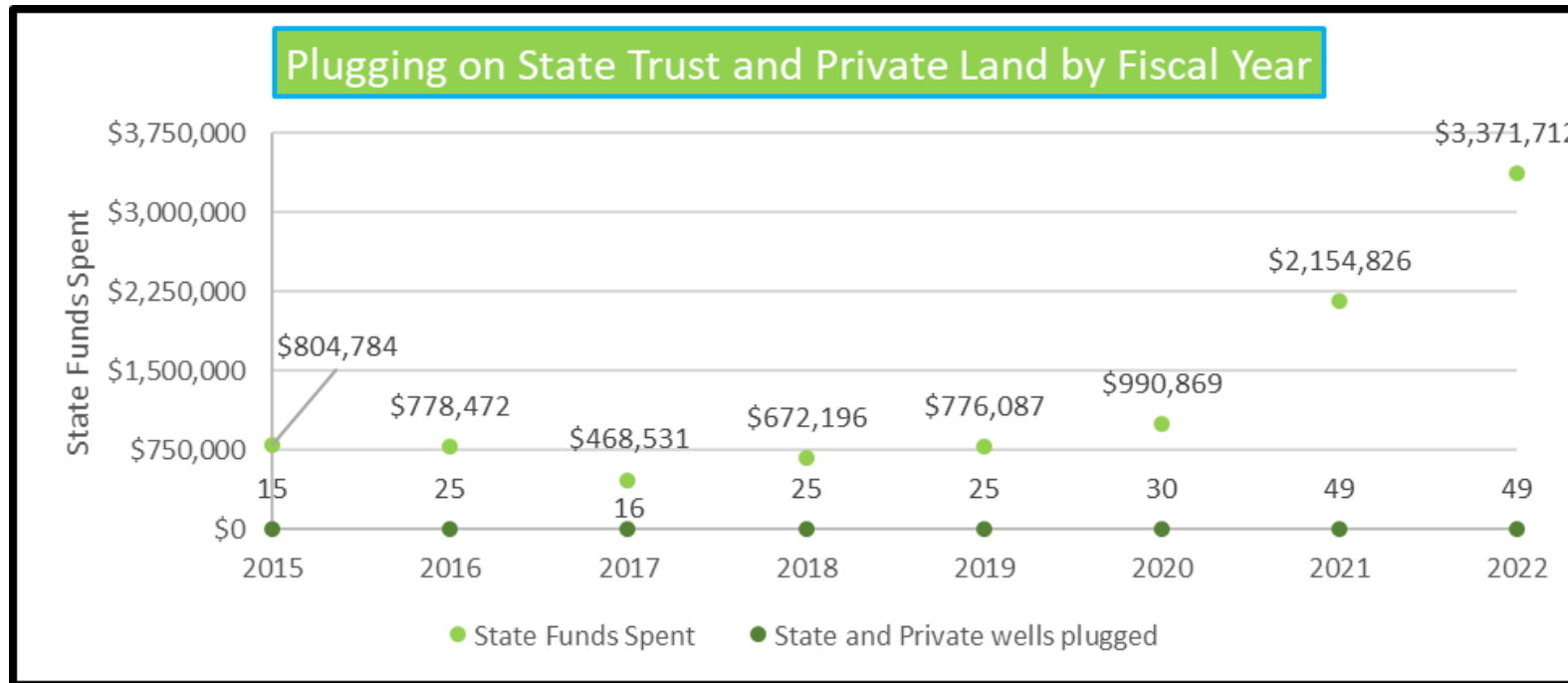
- \$150,000 for one to five wells;
- \$300,000 for six to 10 wells;
- \$500,000 for 11 to 25 wells; and
- \$1,000,000 for more than 25 wells

Well Plugging Prioritization

- Highest priority wells are those which threaten human health or the environment
 - Wells with integrity issues including active leaks
- Other wells are reviewed using the following criteria:
 - Adjacent to occupied structures or within a municipal boundary
 - History of integrity issues or non-compliance with OCD rules
 - Lack of water protection casing
 - Abnormally high well pressure
 - Located in an agricultural area
 - Age of well and last date of production
 - Presence of hydrogen sulfide and/or naturally occurring radioactivity
 - Proximity to a water supply well
 - Proximity to other higher priority orphan wells (for cost efficiency)

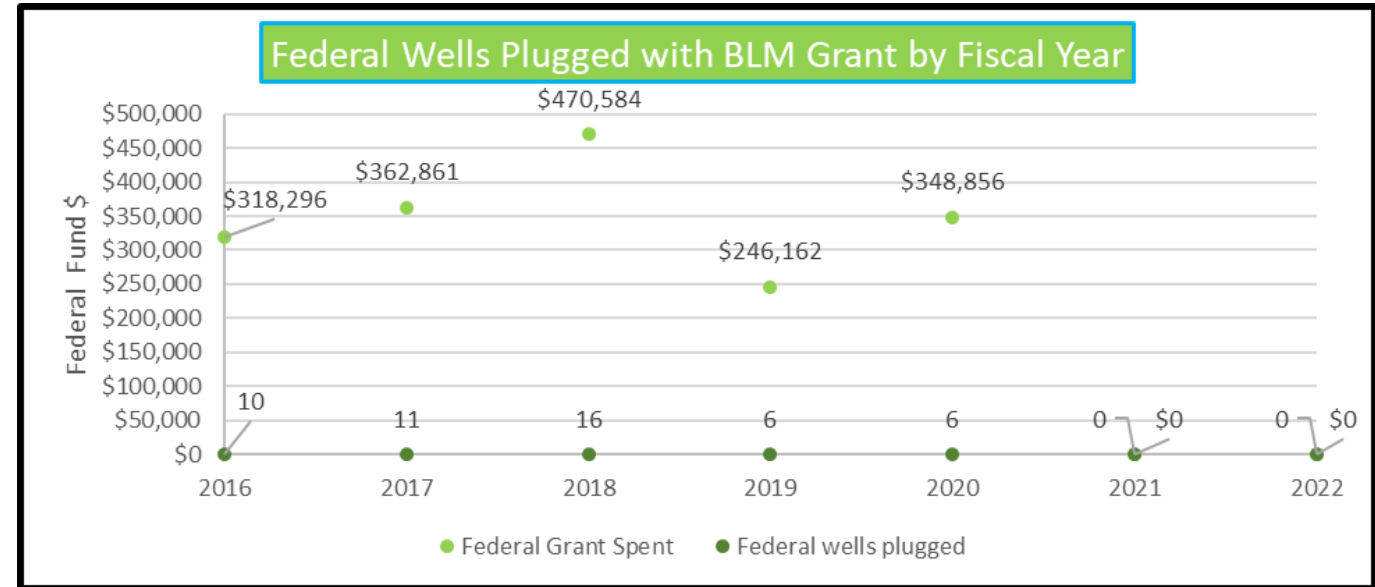
Plugging on State and Private Land

- Since 2015, OCD has plugged 234 wells on state and private land – OCD uses local, NM contractors to perform the work
- Since 2015, OCD has spent approx. \$10 million to P/A wells on state and private land
 - In 2022 OCD spent \$1,591,321 Rec funds and \$1,780,391 other state funds on well plugging



Plugging on Federal Land

- OCD receives grant from BLM for P/A and reclamation on BLM lands
- OCD does not make plugging decisions for federal wells
- A total of \$1,746,761 was spent from the BLM Grant from 2015-2021
- 49 wells plugged on BLM lands
- Grant for up to \$5,000,000 over the next five years
- No federal wells plugged under the BLM Grant in FY 21 and FY22 – as BLM indicates there are currently no orphan wells on federal land.
- Practically we know this not true, BLM simply hasn't completed its review process.



Plugging Challenges

- Common challenges when plugging orphaned wells
- Locating the wells
 - Historical wells may not be properly surveyed or permitted
 - Often requires consultation with other agencies (OCD needs to be authorized by the BLM to plug wells on federal land)
- OCD must obtain legal orders by hearing (notice and opportunity to respond for operator)
- Wellsite access
 - For wells on private land, OCD must negotiate access through private entry and private property
 - OCD can have to re-builds roads to well sites which have been neglected
- Downhole plugging issues
 - Neglected wells have unknown issues including casing collapses and equipment downhole
- Environmental contamination
 - Contamination onsite must identified, evaluated, and remediated
 - Orphan sites often have unknown environmental issues which may result in significantly greater costs



Abandoned well
previously buried
underground

Oil and Gas Orphan Well Clean-up

Division D, Section 40601 Orphaned Well Site Plugging, Remediation, and Restoration

- DOI directed to establish programs to fund the proper closure and cleanup of abandoned oil and gas wells and facilities on federal, state, tribal, and private lands.
 - **Total appropriation = \$4,700,000,000**

What does this opportunity mean for New Mexico?

- Preventing the waste of a natural resource
- Identifying and remediating environmental issues
- Enhancing grazing, hunting, recreational use, and wildlife habitat.
- Providing the opportunity to grow existing businesses and establish new ones



Infrastructure Grant Opportunities

3 Separate Grant Programs

- Initial
- Formula
- Performance

To support OCD’s application, **legislature appropriated \$3.5 million over FY22-25** “for orphan and inactive well planning, identification, and program implementation.” Funding enables OCD to:

- Hire staff; and
- engage contractors.
- *Both of which can occur in advance of federal grant funding*

Grant Type/Subtype	Per State Grant Amount	Section of Infrastructure Act	Eligibility/Qualifications	Application/Funding Deadline	Expenditure Deadline	Other Requirements
Initial Grants (\$775 million appropriation)	Up to \$25 million.	349(c)(3)(A)(i)	State estimates the number of jobs that will be created or saved and certifies that state: <ul style="list-style-type: none"> <input type="checkbox"/> Is an IOGCC member, <input type="checkbox"/> Has at least one documented orphaned well, and will obligate at least 90% of the funds within 90 days of receipt 	State must submit request for funding by May 15, 2022. DOI must distribute within 30 days of request	State must return unobligated funds one year after date of receipt. Appropriated funds remain available to Secretary until	Within 15 months of receipt of funds, state must report to Secretary how funds were used in accordance with state’s certification.
Formula Grants (\$2 billion appropriation)	Formula determined by DOI accounting for these factors: <ul style="list-style-type: none"> <input type="checkbox"/> Oil and gas job losses between 3/1/2020 and date of enactment. <input type="checkbox"/> Number of documented orphaned wells and projected costs of plugging and remediation. 	349(c)(4)	Act specifies contents of application. See 349(c)(4)(B).	State submitted Notice of Intent as required prior to 12/30/2021 Within 75 days of enactment, DOI must publish amount each state is eligible to receive. Application period is open ended. DOI must issue funds within 60 days of receiving complete application.	State must return unobligated funds one year after date of receipt. Appropriated funds remain available to Secretary until September 30, 2030. See 349(h).	
Performance Grant (\$1.5 billion appropriation)	Up to \$20 million	349(c)(5)(E)(i)(I)	State strengthened plugging standards and procedures.	States may submit applications beginning 180 days after receipt of initial grant. Application period is open ended. Secretary must issue funds within 60 days of receiving complete application.	Appropriated funds remain available to Secretary until September 30, 2030. See 349(h).	Performance grants have a 10-year lookback period.
Regulatory improvement grants	Up to \$20 million	349(c)(5)(E)(i)(II)	State reduced future orphaned well burdens.			
Performance Grant (1.5 billion appropriation)	Total of \$30 million	349(c)(5)(F)	State increased amount of state funds to be expended on plugging and reclamation.			Not more than one grant per fiscal year 2022 through 2031.
Matching grants						

Current and Future State

➤ Initial Grant

- Initial Grant application submitted to the US Department of the Interior (DOI) on May 13, 2022
- Awaiting public announcement of \$25M initial award – expecting in coming weeks
- Grant effective date expected to be October 1, 2022
- Requirement that methane emissions be determined from each well prior to, and post-plugging
- Contractor and subcontractor wages must be at US Department of Labor/NM Workforce Solutions prevailing wage rates for the counties in which the work occurs.
- As part of its application, OCD had to identify sites to plug and remediate that would fully obligate this funding

➤ Formula Grant

- Notice of Intent to apply for Formula Grant funding submitted to the (DoI) on December 22, 2021
- Based upon Notice of Intent OCD expects an additional ~ \$75 million under the Formula Grant
- OCD intends to apply for a formula grant later in FY23

➤ Performance Grant

- Incentivizes states to make regulatory improvements to prevent orphan wells in the future
 - New Mexico expecting to qualify through bonding increase in 2018
- Incentivizes states to continue to spend state funds for orphan well plugging and reclamation
 - Grant funding to match states expenditures which exceeds the previous 10-year average
- OCD intends to apply for a performance at a later date

Questions?
