

OCD Bonding Requirements and Orphan Wells

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
 - Allows OCD to contract personnel to survey orphan wells and associated facilities; P/A orphan wells and remediation
 - HB 2 limits Rec. Fund appropriation for OCD full time employee(s) to \$153,000
- Majority of wells in the state are plugged by active operators, OCD only P/A wells when they have been orphaned

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

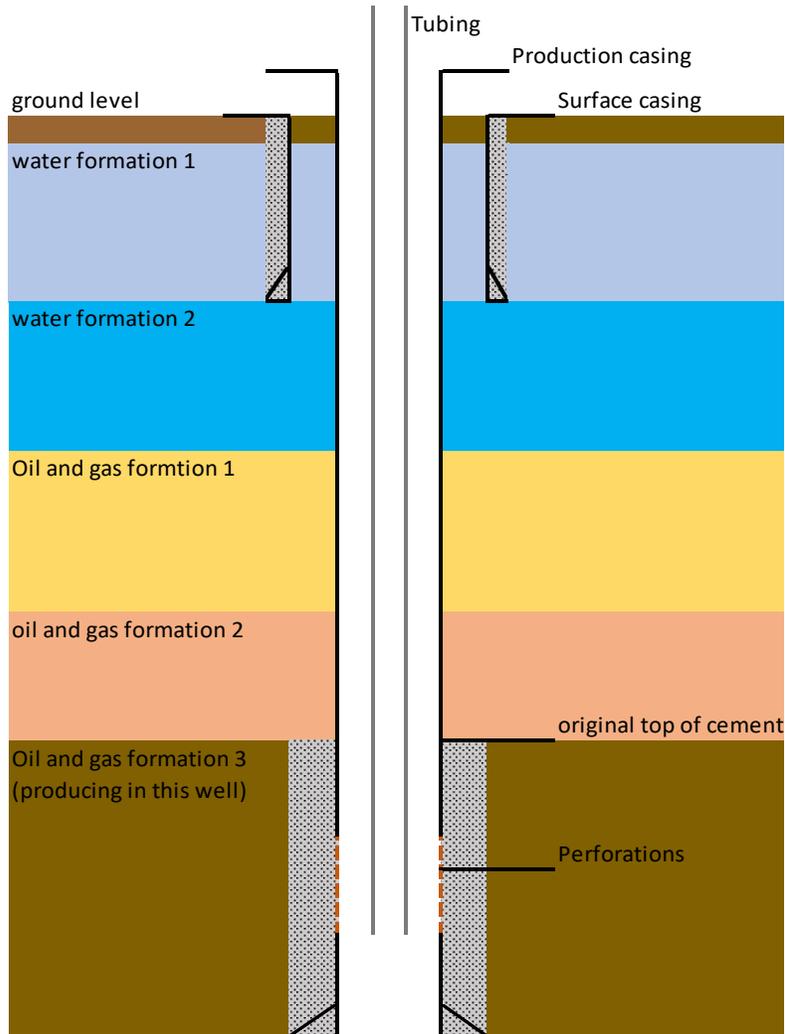
Orphan Wells

- What is an orphan well?
 - No current operator of record, often due to bankruptcy
 - Not properly plugged or remediated
- Approximately 312 orphan wells in NM on state and private land
 - Costs \$35,000 on average to plug a well
 - Total liability to plug those wells is approximately \$10.9 million
 - OCD has approximately \$2.2 million available in financial assurance to plug the wells leaving a gap of \$8.7 million
 - This does not include remediation costs
 - Additional 293 orphan wells on federal land
- Reclamation Fund
 - Fund Balance as of 6/23/2021 is \$7,434,424
 - OCD is appropriated a certain amount to use for reclamation work each year
 - The fund is continuously replenishing itself
- Legislature appropriated OCD appx. 5 million from Reclamation Fund for plugging in FY21
- \$2 million from the Reclamation Fund was assigned to pay for the Carlsbad Brine Well project in FY21

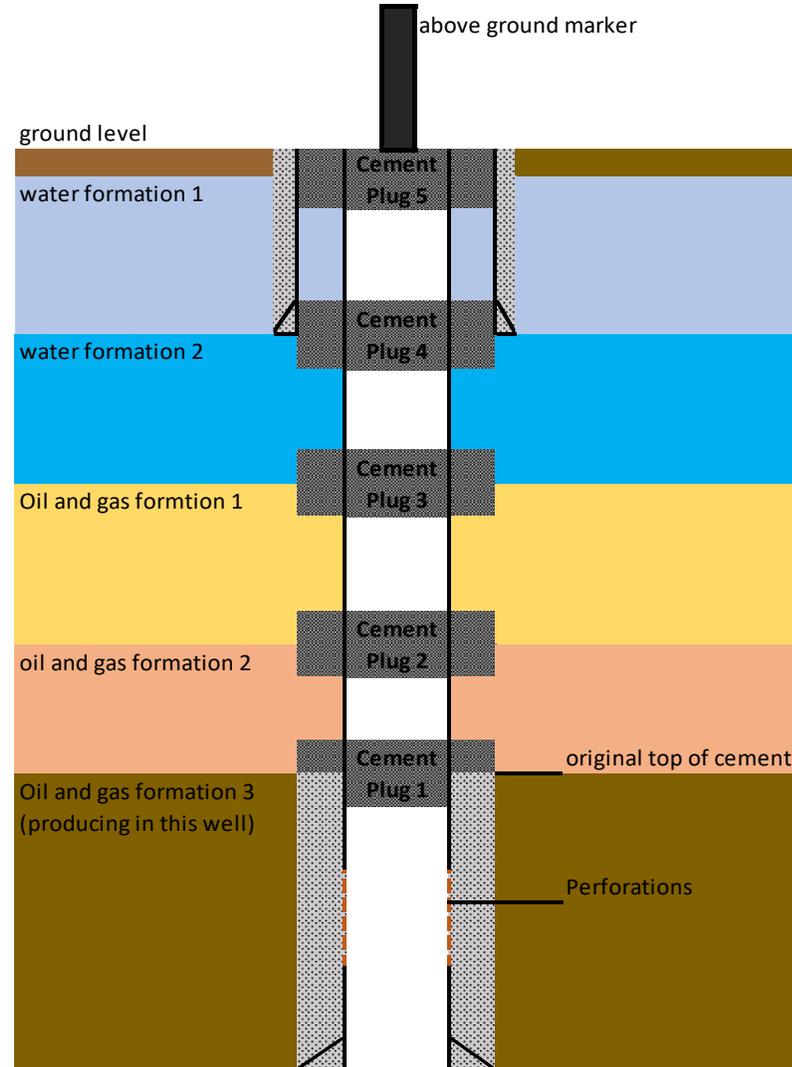


Plugging Example

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 Well Site Remediation

6000-7000 yards of contaminated soil removed

Before



Remediated with clean soil

After

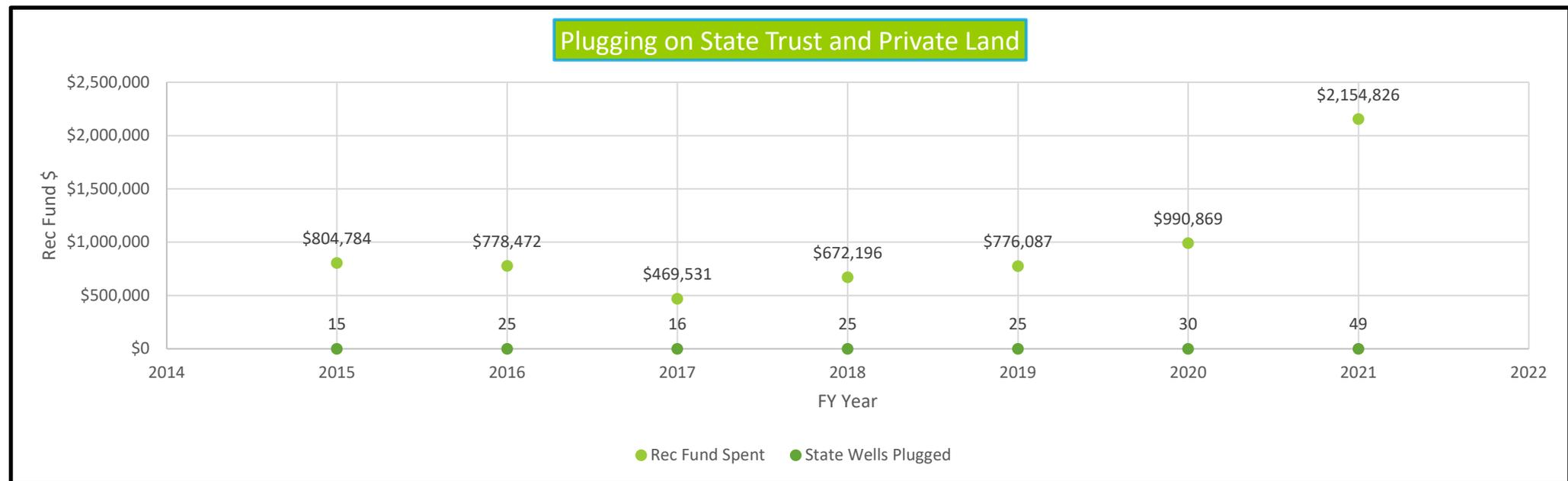


Ranking Well Plugging Priority

- Highest priority- wells which threaten human health or the environment
 - Wells with integrity issues
- Other wells are reviewed using the following criteria:
 - Available bonding from operator to plug well
 - Proximity to other wells (for efficient well plugging)
 - History of well issues or non-compliance
 - Age of well (risk of integrity issues)
 - Duration well has been abandoned (risk of integrity issues)

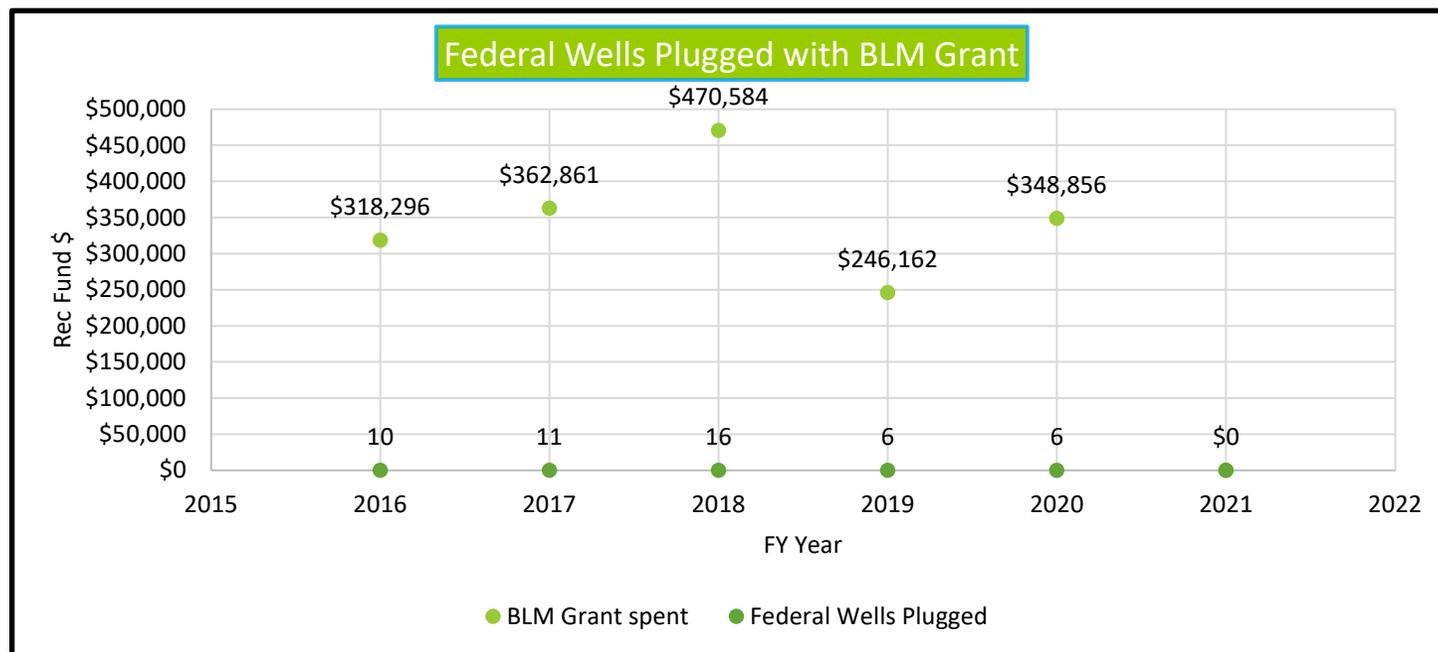
Plugging on State and Private Land

- Since 2015, OCD has plugged 185 wells on state land – OCD uses local, NM contractors to perform the work
- Since 2015, OCD has spent approx. \$6.6 million of Rec. Fund to P/A wells on state and private land



Plugging on Federal Land

- OCD receives grant from BLM for P/A and reclamation on BLM lands
- 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 to focus on 49 state and fee wells



Plugging Challenges

Common challenges when plugging orphaned wells

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



Abandoned well
previously buried
underground

Questions?
