

Cleaner Air in Texas: An Overview of the Texas Voluntary Marginal Conventional Well Plugging Program (TxMCW)

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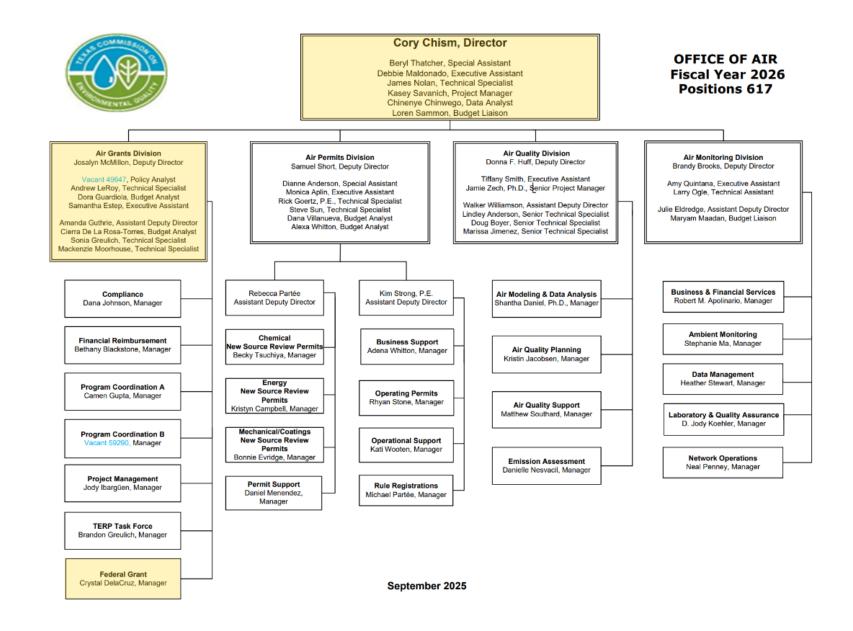
Agenda

- Introduction & Program Background
- Definitions & Key Concepts
- TxMCW Overview & Timeline
- Texas Wells & Plugging Process
- Well Prioritization Plan
- Methane Measurement Plan
- Stakeholder Engagement
- Current Status & Next Steps





Introduction & Program Background



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Federal Grant

Crystal DelaCruz, Manager

Air Grants Division (AGD)

Also administers:

- Texas Emissions Reduction Plan Program (TERP)
- Texas Volkswagen Environmental Mitigation Program (TxVEMP)







Inflation Reduction Act (IRA) Methane Emission Reduction Program (MERP): Mitigating Emissions from Marginal Conventional Wells (MCWs)



WHO: EPA, DOE

WHAT: \$134.1M in grant funding

WHEN: December 2023 + 5 years

WHERE: Texas

WHY: Reduce methane emissions

HOW: Voluntary MCW closures



Definitions & Key Concepts

Definitions

- Conventional Well
 - Vertical oil and gas well
- Marginal Conventional Well (MCW)
 - ≤ 15 barrels of oil equivalent per day (BOED), or
 - ≤ 90 thousand cubic feet (Mcf) of gas per day (1 BOE = 6 Mcf)
 - Known owner or operator
 - Can be producing or idle

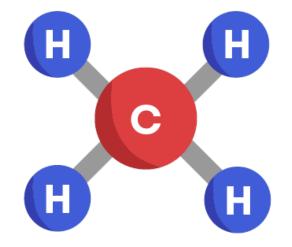
MCWs vs. Orphaned Wells

- Known vs. unknown owner or operator
 - Only wells with a known owner or operator are eligible under TxMCW
- Railroad Commission (RRC) tracks and plugs orphaned wells

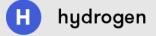


Harmful Emissions

- Methane
 - Carbon + hydrogen
 - Greenhouse gas that traps heat
- Volatile Organic Compounds (VOCs)
 - High vapor pressure
 - Low water solubility
- Hazardous Air Pollutants (HAPs)
 - Benzene, toluene, ethylbenzene, xylene (BTEX)
- Hydrogen Sulfide (H₂S)







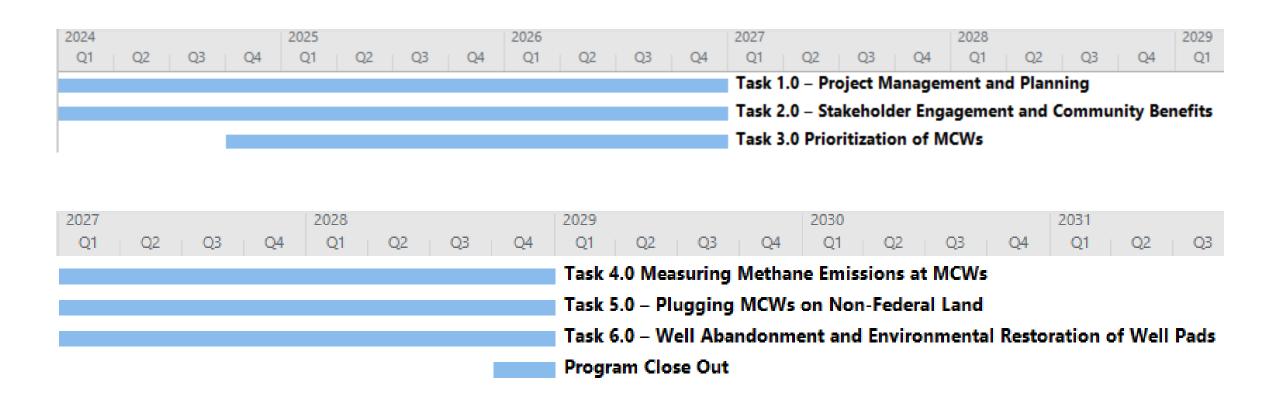


TxMCW Overview & Timeline

TxMCW Overview

- Voluntary plugging and abandonment of marginal conventional wells (MCWs)
- Goals
 - Plug MCWs to mitigate environmental pollutants
 - Measure methane emissions
 - Support environmental restoration
- Public website: <u>www.txmcw.org</u>

TxMCW Program Timeline



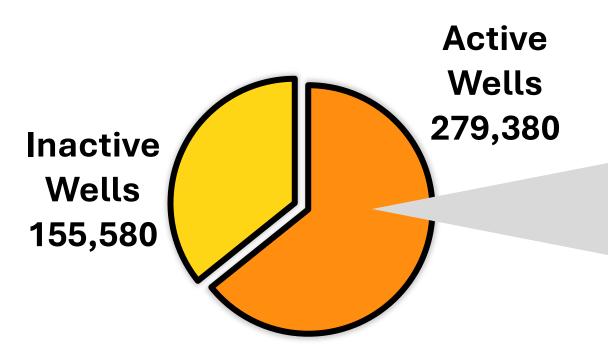


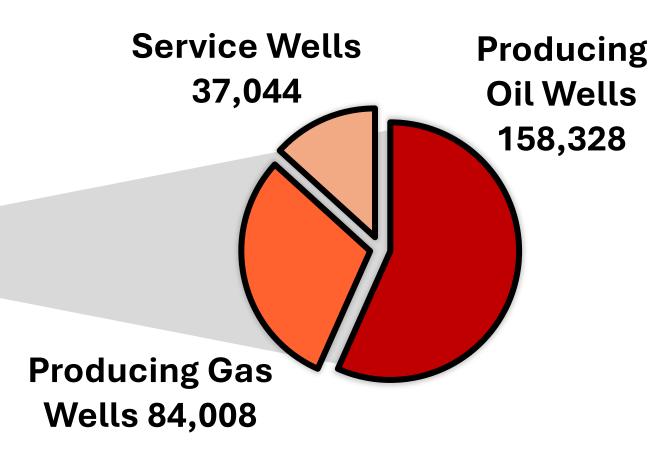
Texas Wells & Plugging Process

Oil and Gas Wells in Texas

As of July 31, 2025

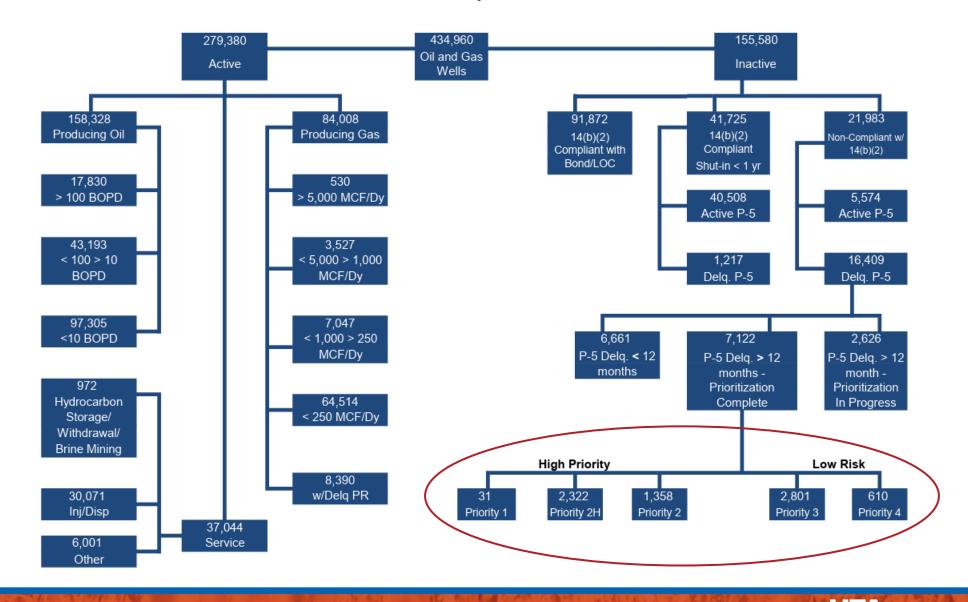
434,960 Oil and Gas Wells



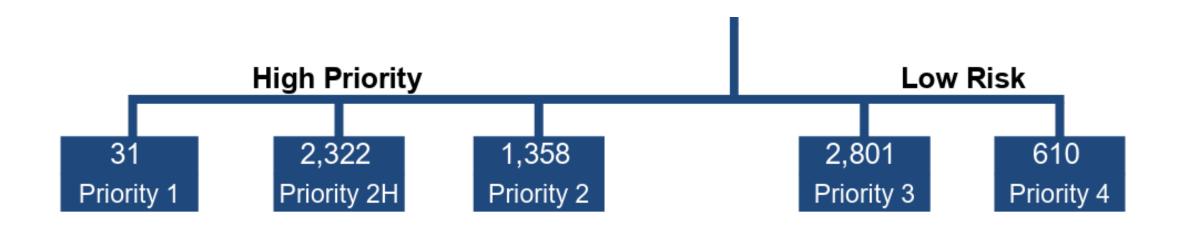


Wells Monitored by the Railroad Commission

As of July 31, 2025



High Priority & Low Risk Wells



Well Plugging & Abandonment

- Railroad Commission requirements:
 - Notice and Supervision
 - Review and Approval
 - Cementing
 - Methods
 - Additional Requirements
 - Post-Plugging

TxMCW Plugging & Abandonment Activities

- Preparation of well pad
- Removal of well bore casing
- Placement of cement plugs
- Excavation around well head and well capping before surface restoration
- Support of activities necessary for plugging



Well Prioritization Plan

Well Prioritization Plan

- Goal
 - Minimize methane and other environmental pollutants
- Criteria
 - Prioritize wells with higher methane emissions
 - Production rates
 - Number of wells by owner
 - Human health impacts
 - Water quality and flood resilience
- Weighted criteria imported into PRIMO tool



Methane **Measurement Plan**

Methane Measurement Plan

- Measurement of methane emissions prior to plugging
- Approaches
 - Qualitative
 - Must use established survey
 - Quantitative
 - Minimum detection limit of less than 100 grams/hour (g/h)
- Verify plugged wells are no longer emitting methane

Qualitative Methane Measurement





Stakeholder Engagement

Stakeholder Engagement



Texas has a multitude of marginal conventional wells



TCEQ participates with stakeholders



Air Grants Division hosts in-person and online events



TxMCW staff engages with MCW stakeholders



The program is conducting outreach efforts



Current Status & Next Steps

Current Status

- Program Launch
- Outreach Efforts
- What's Next







Katy Drake

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