



# **TxMCW Voluntary Well Plugging Program**

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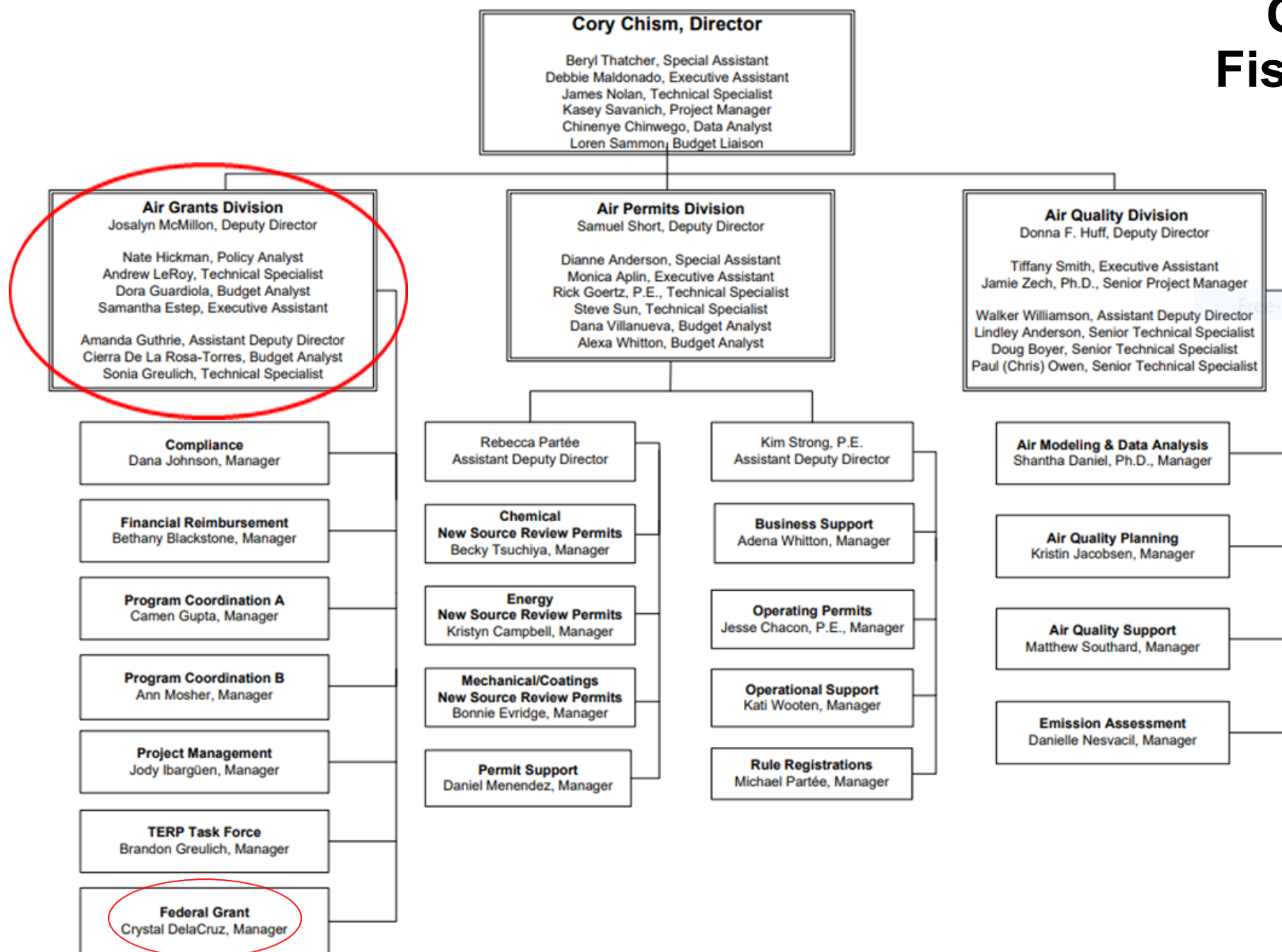
Air Grants Division

Advanced Air Permitting Seminar 2024

# Agenda

- Background
- TxMCW Overview
- TxMCW Goals
- Timeline
- Oil and Gas Wells in Texas
- Well Prioritization / Well Plugging / Methane Measurement
- Stakeholder Engagement and Community Benefits
- Get Involved

# Office of Air Fiscal Year 2024



## Air Grants Division

The Air Grants Division (AGD) administers the Texas Emissions Reduction Plan (TERP) Programs and the Texas Volkswagen Environmental Mitigation Program (TxVEMP) which provide incentive funding to reduce emissions from mobile and certain stationary sources operating in Texas.





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



**Who:** EPA, DOE

**What:** \$134M in noncompetitive grant funding; 10% for administrative costs.

**When:** 2024 + 5 years

**Where:** State of Texas

**Why:** Reduce methane emissions

**How:** Well closures

# TxMCW Overview

- The TxMCW will utilize \$134.1 million awarded to the State of Texas under the IRA MERP.
- Financial incentives will be awarded to participating owners and operators to voluntarily plug and abandon marginal conventional wells (MCWs) on non-Federal lands, based on prioritization criteria developed by TCEQ using stakeholder input.
- Awardees will measure methane emissions and will complete the environmental restoration required for full compliance with well plugging and abandonment regulations.
- TCEQ hosts a public website with project information, including well prioritization criteria, vendor contracts awarded, and emissions reduced.

# MERP Definitions:

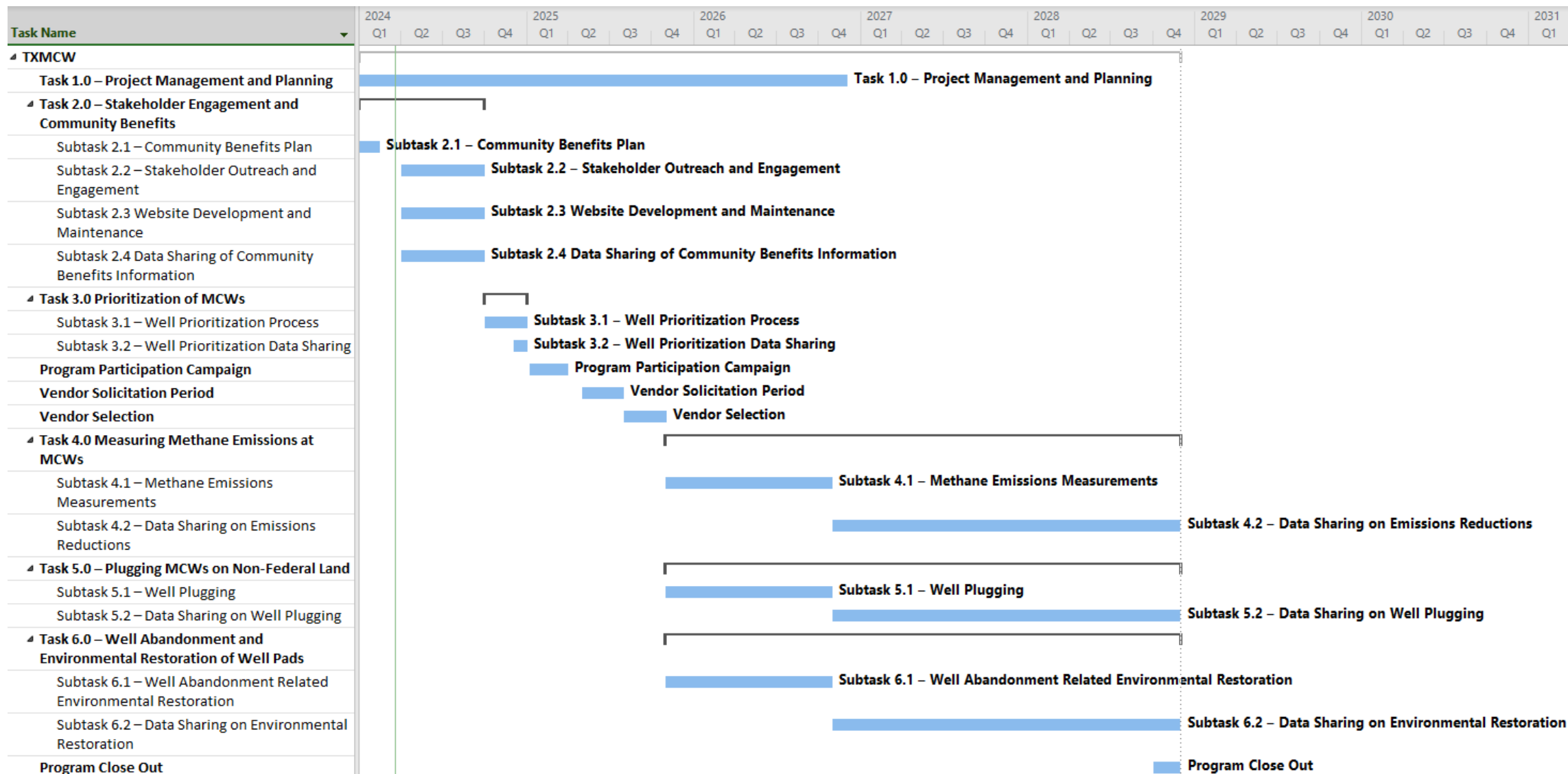
- **Conventional Well** – A vertical well producing oil or natural gas that is drilled into a geologic formation in which the reservoir and fluid characteristics permit the oil and natural gas to readily flow to the wellbore. This excludes deviated, horizontal, tight-gas, and mudrock or shale wells.
- **Marginal Conventional Well** – An onshore conventional well producing less than or equal to 15 barrels of oil equivalent per day (BOED), or less than or equal to 90 thousand cubic feet (Mcf) of gas per day (1 BOE = 6 Mcf) over a calendar year. These are producing or idle wells with known operators/well owners.

# TxMCW Goals

- The program will target the following goals:
  - mitigate methane, volatile organic compounds (VOCs), Hazardous Air Pollutants (HAPS) including benzene, toluene, ethylbenzene, and xylene (BTEX), and, in some areas of the state, hydrogen sulfide (H<sub>2</sub>S) by assisting operators to voluntarily identify and permanently plug MCWs;
  - measure methane emissions from MCWs prior to and following plugging and abandonment to quantify mitigated emissions; and
  - support elements of environmental restoration required for full compliance with applicable state or federal well plugging and abandonment standards and regulations.



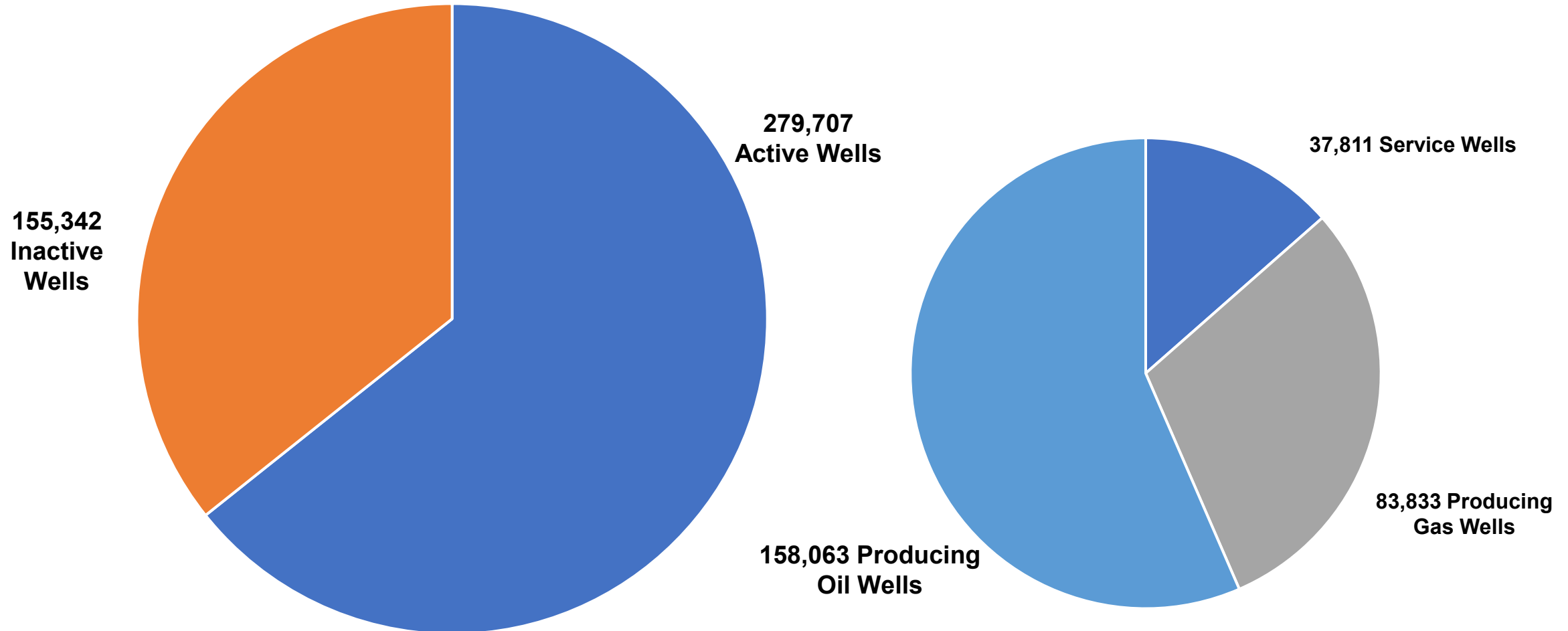
# Program Timeline



# Oil and Gas Wells in Texas

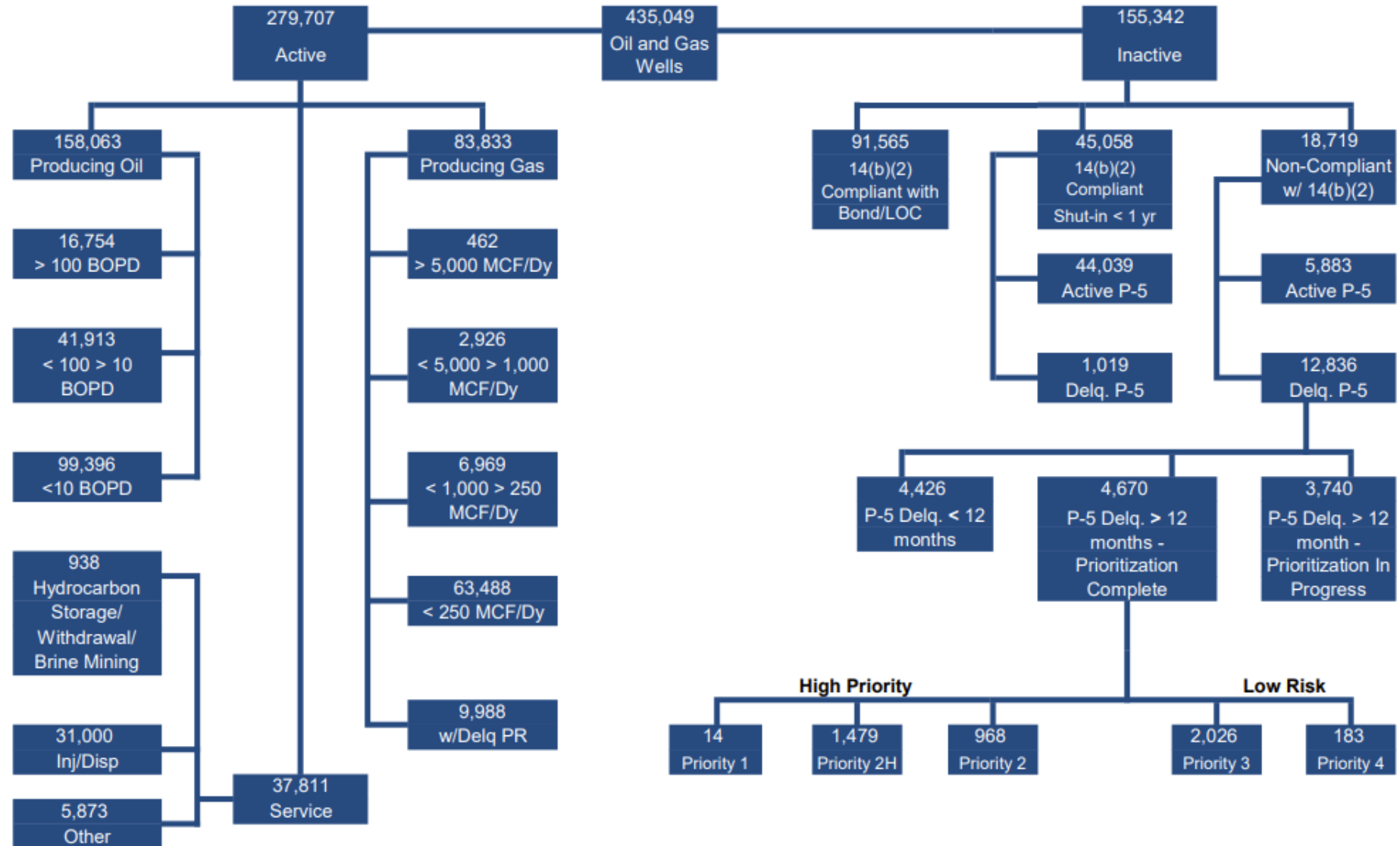
As of July 31, 2024

**435,049 Oil and Gas Wells**



# Wells Monitored by the Railroad Commission

As of July 31, 2024



# Well Prioritization Plan

Per Department of Energy (DOE) guidance, the primary goal is to maximize methane emissions reductions and to provide benefits to disadvantaged communities.

- **Prioritization Criteria:**
  - Focus on wells with higher methane emissions based on existing data or initial screening.
  - Proximity to disadvantaged communities using DOE's Climate and Economic Justice Screening Tool (CEJST).
  - Wells located on Tribal land.
- **Access to Criteria:**
  - Final criteria will be posted on the program webpage prior to accepting applications. If additional rounds of applications are launched, criteria will be updated before the next submission period.

# Well Plugging and Abandonment

The Railroad Commission (RRC) regulates oil and gas activities in the state, and has adopted rules that operators must follow to ensure safe abandonment of wells:

- **Notice and Supervision:** Operators must notify the RRC and directly supervise cementing operations.
- **Review and Approval:** RRC approves plugging plans; operators can request modifications.
- **Cementing:** Cement plugs must isolate water zones and productive horizons, using API-approved cement. Alternative materials allowed with RRC approval.
- **Methods:** Approved methods include circulation or squeeze. Only RRC-approved cementers may conduct operations.
- **Additional Requirements:** Based on well type and conditions, extra plugs may be necessary.
- **Post-Plugging:** Operators must fill openings, remove equipment, and restore the site to ensure environmental safety.



# Methane Measurement Plan

- Measurement of methane emissions (in accordance with the DOE methane measurement guidelines for MCWs) prior to and following the plugging and abandonment of any MCW,
- Quantification of the methane emissions mitigated for plugged wells, and
- Verification that plugged wells are no longer emitting methane emissions as required for full compliance with applicable State or Federal well plugging and abandonment standards and regulations.

# Measurement Requirements

## Pre-Plugging Measurement

- Detect and quantify methane emissions.
- Use qualitative approaches with established surveys.
- Quantitative methods must have a minimum detection limit (MDL) of less than 100 grams/hour (g/h).

## Post-Plugging Measurement

- Verify that methane emissions are below detection limits.
- Utilize qualitative methods (e.g., Optical Gas Imaging) to confirm no emissions.

**TxMCW Measurement Plan Coming Soon!**

# Stakeholder Engagement and Community Benefits



Texas hosts hundreds of MCW owners and operators that span the state.



TCEQ engages with industry and environmental stakeholders across sectors, including oil and gas.



Air Grants Division holds in-person and online events statewide to provide public workshops and webinars.



TxMCW staff will engage MCW owners, operators, and organizations through workshops and webinars.



The program will conduct outreach to encourage participation and gather community input.

# Get Involved

Sign up for updates:

<https://www.tceq.texas.gov/airquality/txmcw>

Contact us:

[TxMCW@tceq.texas.gov](mailto:TxMCW@tceq.texas.gov)

# Contact Information

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