



# NM Produced Water Act: Treatment and Reuse Outside the Oil and Gas Industry


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# NMED and Produced Water Act

1 AN ACT  
2 RELATING TO NATURAL RESOURCES; ENACTING THE PRODUCED WATER  
3 ACT; ESTABLISHING CONTROL AND RESPONSIBILITY FOR PRODUCED  
4 WATER; ALLOWING THE USE OF TREATED OR RECYCLED PRODUCED  
5 WATER; DECLARING CERTAIN CONTRACT PROVISIONS RELATING TO  
6 PRODUCED WATER VOID AGAINST PUBLIC POLICY; AMENDING AND  
7 ADDING DEFINITIONS; AMENDING THE DUTIES OF THE OIL  
8 CONSERVATION DIVISION OF THE ENERGY, MINERALS AND NATURAL  
9 RESOURCES DEPARTMENT AND THE WATER QUALITY CONTROL  
10 COMMISSION; MAKING CONFORMING TECHNICAL CHANGES; A  
11 OIL AND GAS ACT REGARDING VIOLATIONS; PROVIDING F  
12 PENALTIES; REQUIRING ANNUAL REPORTS; AMENDING AN  
13 SECTIONS OF THE NMSA 1978.  
14  
15 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF NEW MEXICO  
16 SECTION 1. A new section of Chapter 70, NMSA, to be  
17 enacted to read:  
18 "SHORT TITLE.--Sections 1 through 5, NMSA, to be  
19 cited as the "Produced Water Act"."



**STATE OF NEW MEXICO**  
**WATER QUALITY CONTROL COMMISSION**  
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**CONSTITUENT AGENCIES**

- Environment Department
- Game and Fish Department
- Department of Agriculture
- State Parks Division
- Bureau of Geology and Mineral Resources
- State Engineer & Interstate Stream Commission
- Oil Conservation Division
- Department of Health
- Soil and Water Conservation Commission
- Members-at-Large



# Key Provisions of the Produced Water Act

- Protects water quality by closing important regulatory gaps with respect to produced water transportation, storage and treatment.
- Clarifies regulatory jurisdiction. When produced water is:
  - Reused or recycled for use in the oil and natural gas industry, EMNRD has jurisdiction of these activities.
  - Treated for use outside of the oil and natural gas industry, the New Mexico Environment Department (NMED) has jurisdiction of these activities.
- Requires NMED to draft regulations to present before the Water Quality Control Commission (WQCC) that address the discharge, handling, transport, storage, and recycling or treatment of produced water or byproduct thereof outside the oilfield.



# Produced Water and Water Quality Act

- In adopting regulations, the Water Quality Act **requires** the WQCC to consider:
  - ▣ **Character and degree** of injury to or interference with health, welfare, environment and property;
  - ▣ **Public interest**, including the social and economic value of the sources of water contaminants;
  - ▣ **Technical practicability and economic reasonableness** of reducing or eliminating water contaminants from the sources involved and previous experience with equipment and methods available to control the water contaminants involved;
  - ▣ **Successive uses**, including domestic, commercial, industrial, pastoral, agricultural, wildlife and recreational uses;
  - ▣ **Feasibility** of a user or a subsequent user treating the water before a subsequent use;
  - ▣ **Property rights and accustomed uses**; and
  - ▣ **Federal water quality requirements.**



# NMED Implementation Activities

## Public outreach and targeted tribal outreach

- ❑ Started in October 2019 and ongoing
- ❑ FAQs posted January 2020 (available at <https://www.env.nm.gov/new-mexico-produced-water/faq-page/>)

## NMED's path for produced water regulations:

- ❑ Beginning in 2020, develop rules that:
  - Prohibit untreated produced water use outside of the oil and natural gas industry (e.g., crop irrigation) and
  - Require companies to analyze and disclose the chemical constituents in produced water intended for treatment and reuse outside of the oil and natural gas industry.
- ❑ Over time and as the science dictates, develop rules for the “discharge, handling, transport, storage, and recycling or treatment of produced water or byproduct thereof outside the oilfield” (excerpt from Produced Water Act, HB 546).



# NMED Partnership with NM State University

Examples of NMED's research questions related to filling the science and technology gaps:

- What contaminants are in the produced water generated in NM?
- How can the produced water be treated to be safe?
- What changes are needed to our state water quality standards to protect water resources and human health?



# NM Produced Water Research Consortium

A screenshot of the website for the New Mexico Produced Water Research Consortium (NM-PWRC). The browser address bar shows the URL https://nmpwrc.nmsu.edu. The website header includes the New Mexico State University logo and the slogan "BE BOLD. Shape the Future. New Mexico State University". A navigation menu contains links for Home, About Us, Membership, Sponsorship, Research, and News. The main content area features a large image of a scientist in a lab coat and safety glasses working with laboratory equipment. Overlaid on this image is the title "New Mexico Produced Water Research Consortium". Below the image, there is a section titled "Advancing Scientific and Technological Solutions in Treatment and Reuse of Produced Water" with two paragraphs of text. To the right of this section is a "Quick Facts" box containing a bulleted list of key information.

← → ↻ https://nmpwrc.nmsu.edu

**NM STATE** BE BOLD. Shape the Future.  
New Mexico State University

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## New Mexico Produced Water Research Consortium

### Advancing Scientific and Technological Solutions in Treatment and Reuse of Produced Water

The New Mexico Produced Water Research Consortium (NM-PWRC) is a collaboration between the New Mexico Environment Department (NMED) and New Mexico State University (NMSU). Through this consortium, New Mexico will continue to lead the country in advancing scientific and technological solutions related to the treatment and reuse of produced water generated by the oil and gas industry.

The consortium will develop a framework to fill scientific and technical knowledge gaps necessary to establish regulations and policies for the treatment of produced water. Such regulations and policies must be protective of public health and the environment while encouraging the oil and natural gas industry to rely less on fresh water and more on reuse of produced water. "The multidisciplinary research approach that we are proposing is specifically needed to fill existing data gaps to inform policy decisions," said NMSU Chancellor Dan Arvizu. "NMSU is excited to be at the very forefront of research in this area."

#### Quick Facts

- In 2018, over 42 billion gallons of produced water were created in New Mexico's Permian Basin.
- House Bill 546, includes the Produced Water Act, and went into effect July 1, 2019.
- New Mexico Environment Department (NMED) and New Mexico State University (NMSU) entered into a memorandum of understanding on

Details available at <https://nmpwrc.nmsu.edu/>.



# For More Information

- NMED contacts for treatment of produced water for off-field use:
  - Rebecca Roose, Water Protection Division Director,  
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  - Annie Maxfield, Assistant General Counsel,  
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- Sign-up for NMED updates on Produced Water at  
<https://public.govdelivery.com/accounts/NMED/subscribe/new>.