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# **An Assessment of Water Supply Alternatives In New Mexico**

## **2026 New Mexico Water Leaders Workshop**

Bruk Berhanu, Ph.D., PE  
Senior Research Specialist, Water Efficiency and  
Reuse  
Pacific Institute  
[bberhanu@pacinst.org](mailto:bberhanu@pacinst.org)

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# Background



# Project Advisory Committee Comprised of Experts Across New Mexico

**Diane Agnew**, Albuquerque-Bernalillo County Water Utility Authority

**Aron Balok**, Pecos Valley Artesian Conservancy District

**Nina Carranco**, The Water Foundation

**Cally Carswell**, NM Legislative Finance Committee

**John Fleck**, UNM, Utton Center for Transboundary Resources

**Vidal Gonzales**, NM Acequia Association

**Maurice Hall**, Environmental Defense Fund

**Kristina Ortez**, NM House of Representatives

**Bruce Thomson**, UNM, Department of Civil Engineering

**Stacy Timmons**, NM Bureau of Geology and Mineral Resources

**Tanya Trujillo**, NM Office of the State Engineer

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Thornburg Foundation

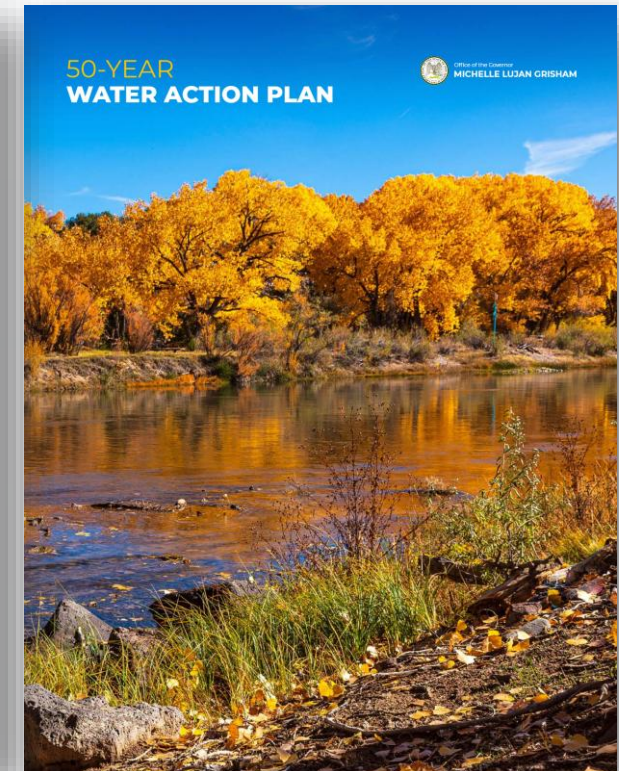
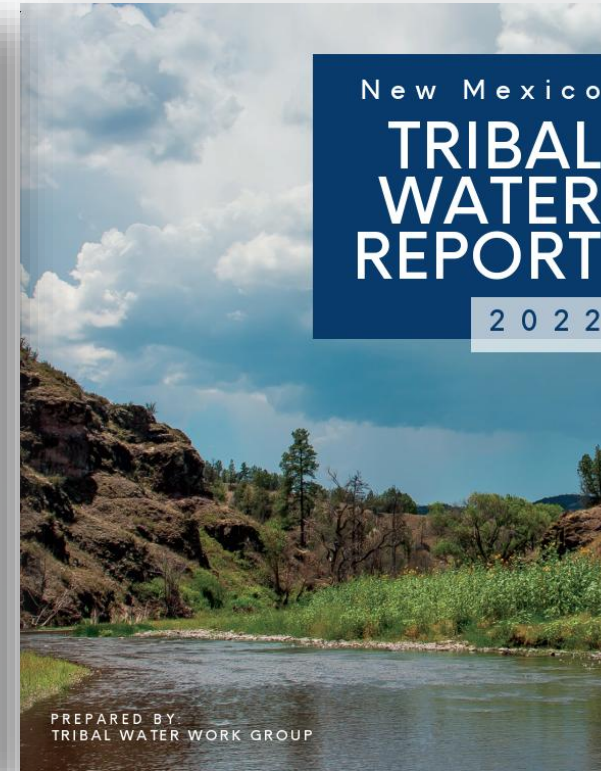
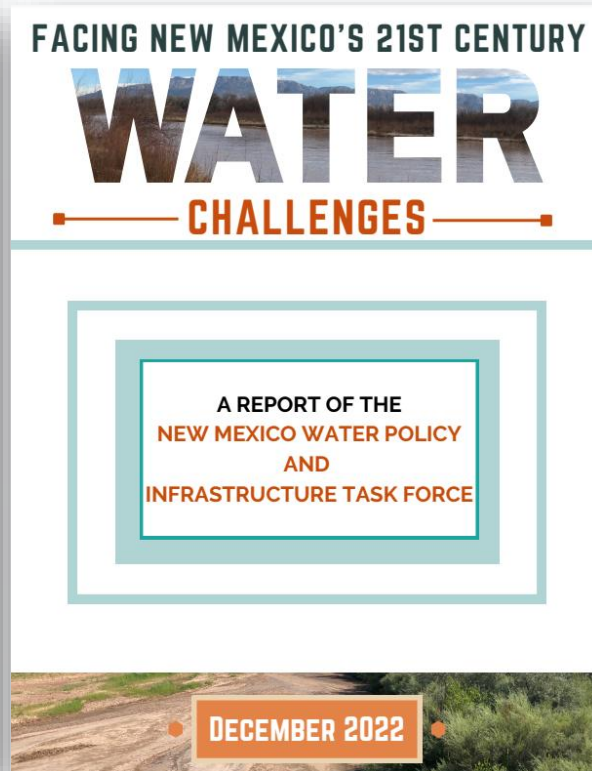
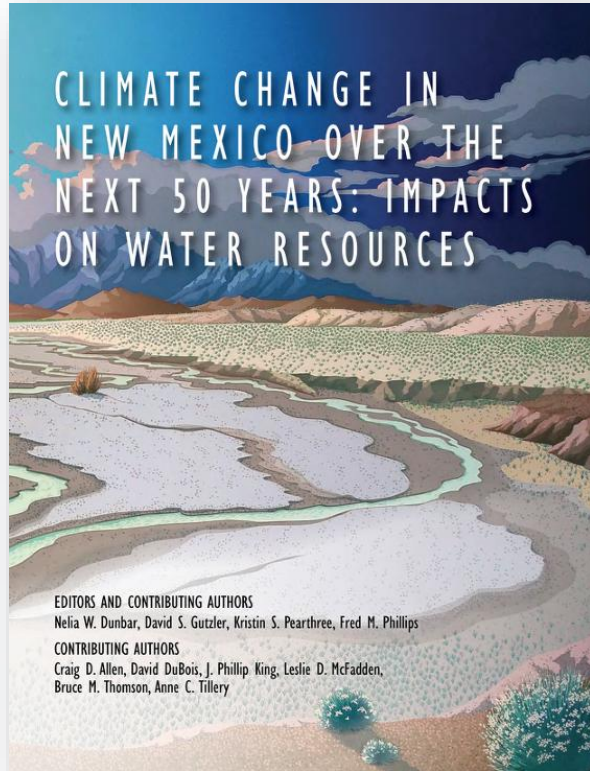


**Lynn Trujillo**  
Project Sponsor  
Water Policy Officer

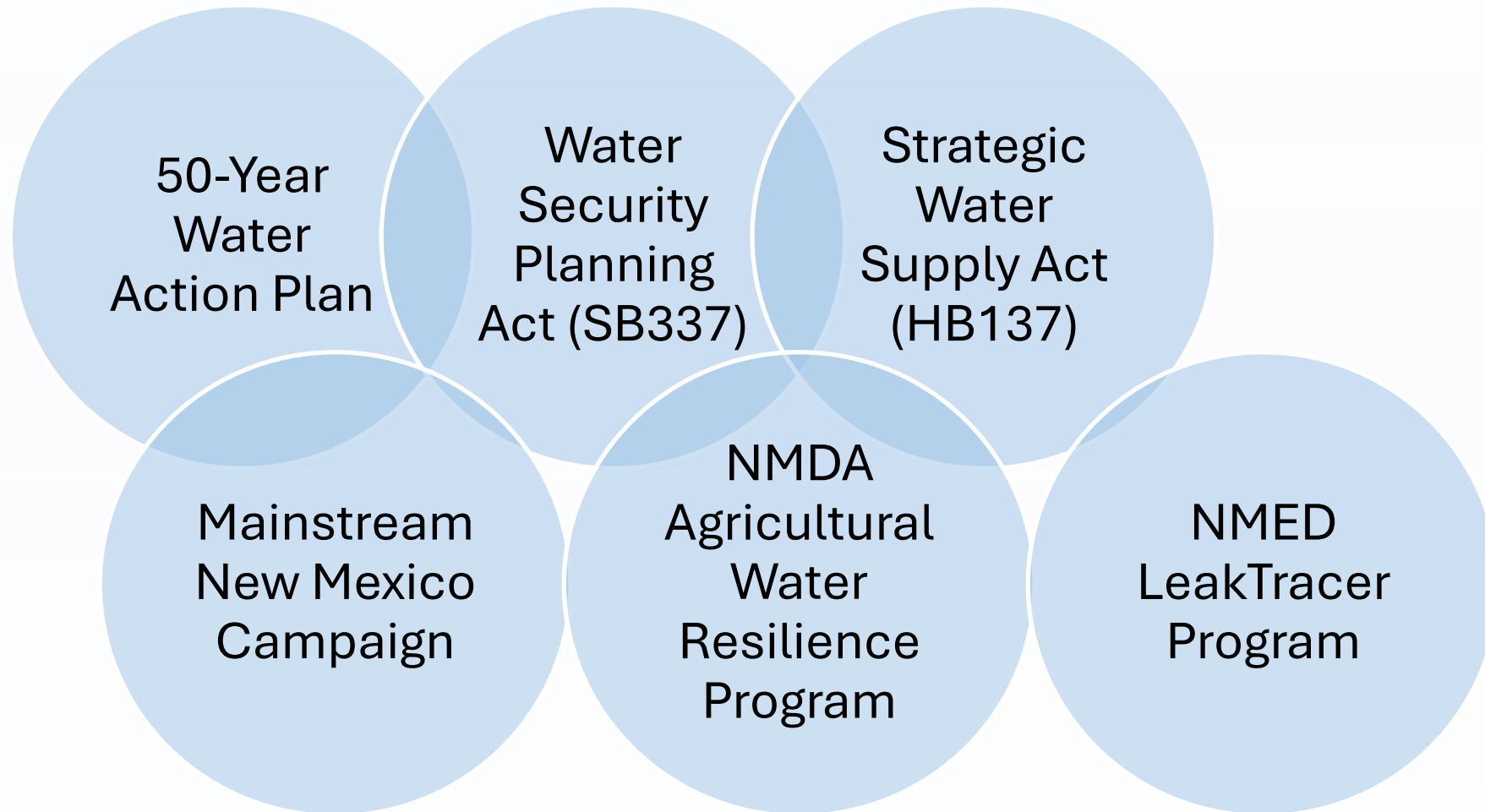


**Patrick McCarthy**  
Project Sponsor  
Water Policy Officer

# New Mexico's Water Supply Is Diminishing...



# ... New Mexico Is Taking Proactive Steps To Support Long-Term Water Resilience



# Project Overview



# Project Approach

## Water Supply Alternatives

### Conservation

- Municipal & Industrial
- Agricultural

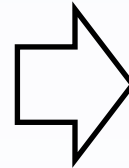
### Reuse

- Treated Wastewater
- Urban Stormwater Runoff

### Produced Water

- On-Site Recycling
- Off-Site Reuse

### Brackish Groundwater Desalination



## Analysis

### Technical Potential

- Maximum annual volume saved/generated
- State- and Basin-Level Estimates

### Levelized Cost

- Life cycle costs/savings
- Practical Implementation Options

# Key Findings

<u>Category</u>	<u>Water Supply Alternative</u>	<u>Technical Potential (AFY)</u>	<u>Levelized Cost (\$/AF)</u>
<b>Conservation</b>	Agricultural	268,000 – 676,000	\$160 - \$3,400
	Municipal & Industrial	164,000 – 196,000	\$-4,830 - \$8,520
<b>Reuse</b>	Urban Stormwater Runoff	55,500 – 56,500	\$790 - \$2,460
	Treated Wastewater	103,000 – 122,000	\$2,550 - \$25,000
<b>Non-Renewable Sources</b>	Brackish Groundwater Desalination	Unknown	\$521 - \$2,880
	Produced Water (On-Site Recycling / Off-Site Reuse)	3,210 / 28,900 - 109,000	\$-1,480 / \$22,500- \$70,600

# Considerations for Implementation



# Comparison of Water Supply Alternatives – Tradeoffs That Can Influence Feasibility



All water in New Mexico is already accounted for, no “new” renewable supply.

Some water supply alternatives represent a reallocation from one existing use to another.

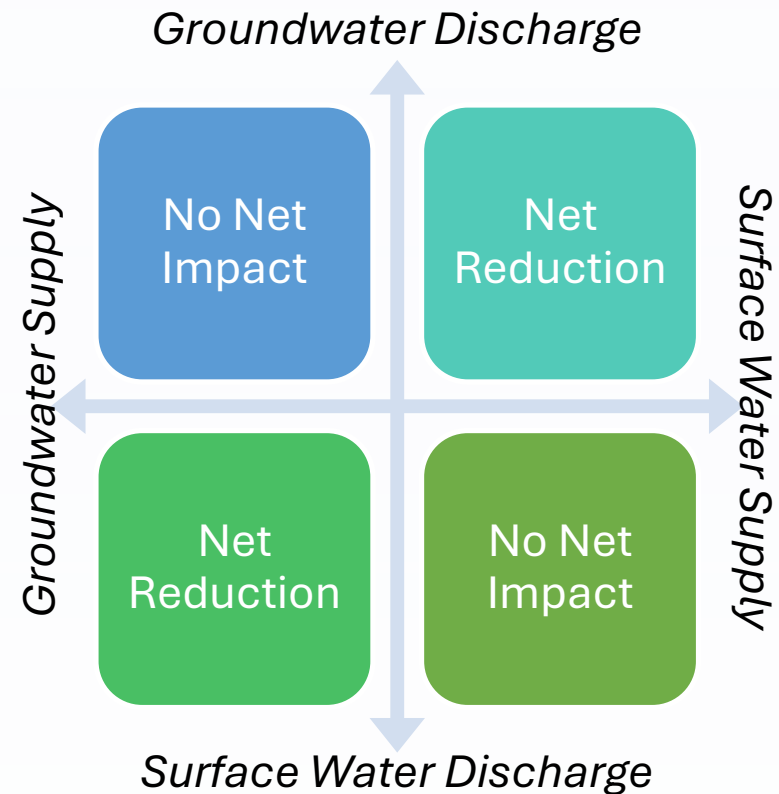
Institutional barriers to implementation must be addressed.

# Conservation and Reuse Strategies Provide a Way to Adapt to Supply Reductions, Often At Lowest Cost

Reducing consumptive use makes more water available for other uses and minimizes negative downstream impacts.

Potential tradeoffs between water supply longevity and downstream flow impacts for non-consumptive use.

## Downstream Flow Impacts of Reducing Non-Consumptive Use

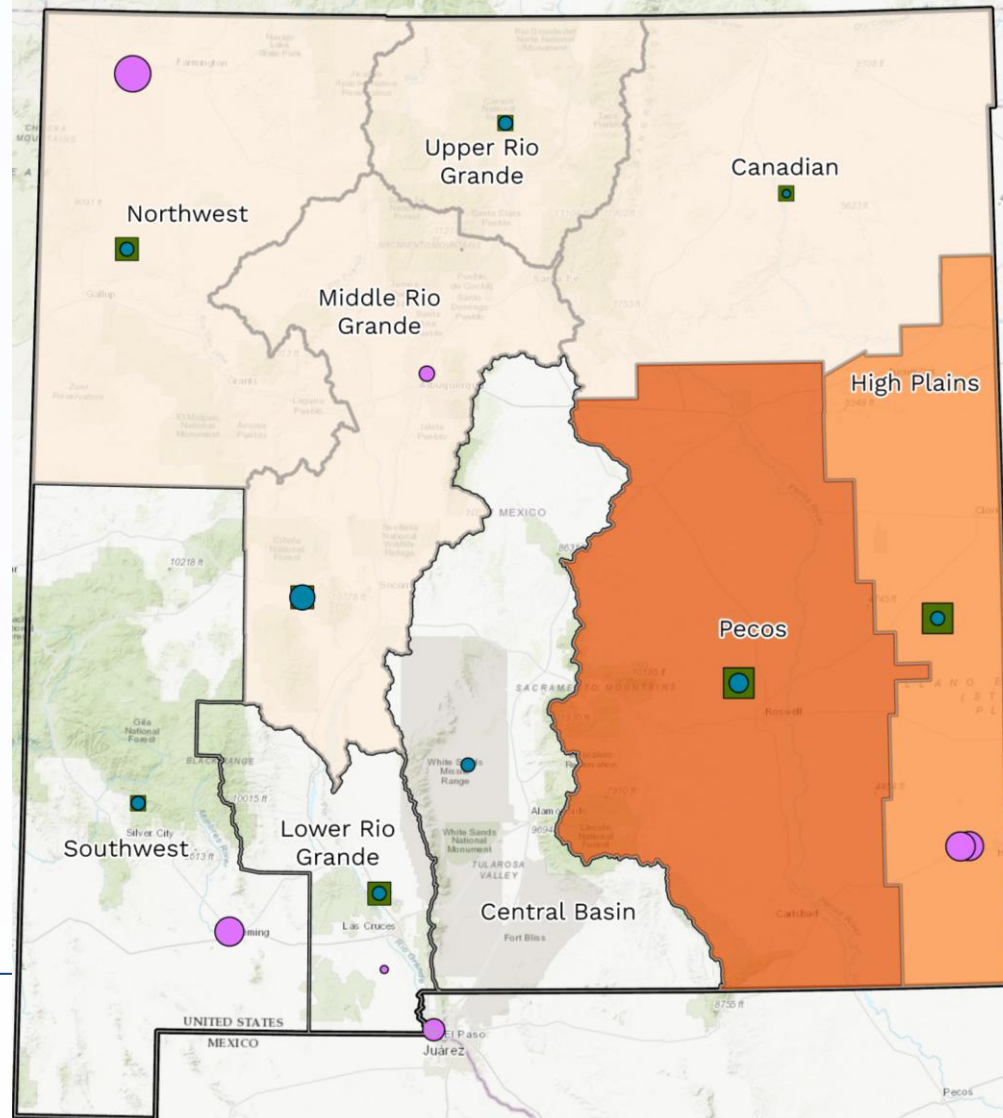


# Produced Water Volume Is Substantial, But Expensive and Spatially Concentrated

No comparable examples of full-scale reuse in the U.S.

Uncertain future availability, non-renewable.

Transportation is a significant cost.



## Legend

Municipal & Industrial Water Demand

AFY (By Planning Region)

- < 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 620,000

Agricultural Water Demand

AFY (By Planning Region)

- 50,000 - 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 620,000

Thermal Power Plants  
2024 Water Withdrawals (AFY)

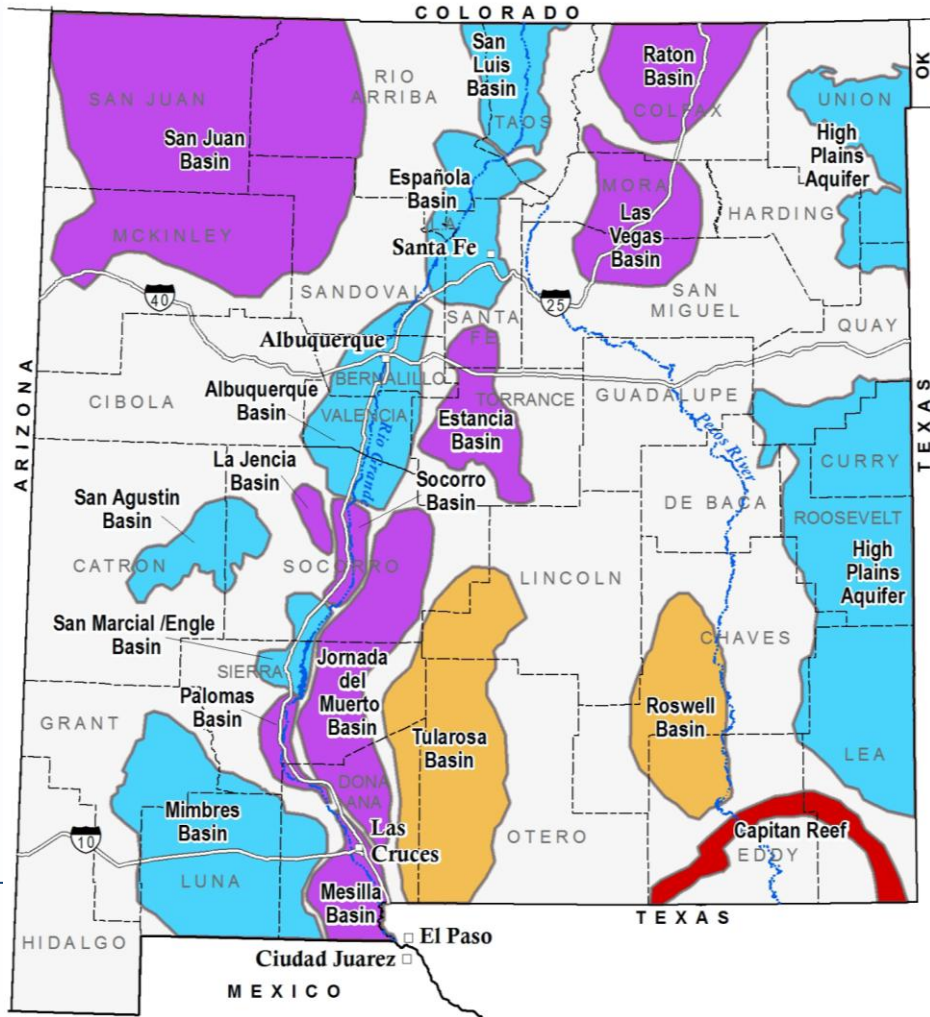
- 125
- 600
- 2,000
- 2,001 - 2,500
- 18,700

Produced Water Generated  
AFY (By Planning Region)

- <10,000
- 50,000
- 100,000
- 250,000
- 500,000

# Brackish Groundwater Is Largely Uncharacterized and Predominantly Non-Renewable

## Brackish Groundwater Aquifers In **Magenta**



Recoverable volume requires further investigation.

Wide range of reported costs, depending on quality and transport distance.

Potential as emergency option for water supply augmentation.

# Key Takeaways

- Water supply alternatives can play a key role in bringing demand into balance with supply.
- Implementing projects requires more granular investigation at the basin-level.
- Conservation and reuse can offer substantial water savings, often with lowest cost.
- Non-renewable sources could play a unique role in New Mexico's water supply, but there are still several unknowns.



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*Final Report Will Be Released May 2026*

**Thank You!**

**Questions?**

*Bruk Berhanu, Ph.D., PE  
Senior Research Specialist  
Pacific Institute  
[bberhanu@pacinst.org](mailto:bberhanu@pacinst.org)*