Public Education and Outreach

ACCOMPLISHMENTS AND 2023-24 GOALS AND OBJECTIVES

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Rose Galbraith, New Mexico Department of Health

NM STATE NEW MEXICO PRODUCED WATER RESEARCH CONSORTIUM

Public Education and Outreach

- To “inform” key audience segments (i.e. membership, participants and the public)
  - Meetings and Presentations
  - Web-based Communications
  - Planning
  - Share Consortium operations, activities and highlights
  - Outreach to Public to improve public understanding of research and expected impacts to public and environmental health and safety for fit-for-purpose reuse of treated PW
    - Fact sheets, workshops, website, podcasts, survey

Public Education and Outreach Team

- Industry Members
  - Louis Salazar (ConocoPhillips), Ashley Wagner (ExxonMobile), Rick McCurdy (Select Energy), Kurt Anderson, Stuart Mussler (Chevron), David Burnett (since retired), Dr. Stephen Hightower
- State of NM,
  - NMDOH: Rose Galbraith
  - NMED: Jason Herman, Kathleen Murphy, Lei Hu
- Consortium:
  - Mike Hightower, Deborah Dixon

Accomplishments

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Public Education and Outreach Website

Website Expansion

- Home
- About Us
- Membership
- Research
- Resources
- News and Events
- Sponsorship
- Contact Us

- Public Information and Presentations
- Reference Documents
- Fact Sheets
- Publications

Public Education and Outreach Workshops

- Community Outreach
  - Hobbs: May 24-25, 2022
- State Fair – September
- Pre-meeting Espanola

Public Education and Outreach

- **Strategy for reaching the target audience(s)?**
  - Community workshops, print materials, online resources
- **Evaluation**
  - Are we reaching who we want? Workshop participation/feedback, online metrics
  - Are we developing the message we want to? Workshop questionnaire
  - What adjustments can be made? Workshop questionnaire, other stakeholder engagement opportunities, other?
  - How do we continually evaluate and improve? Public Education and Outreach WG, Consortium Communication Plan

Public Education and Outreach

- **Public Questionnaire**
  - NM 2022 State Fair
  - 120 Responses

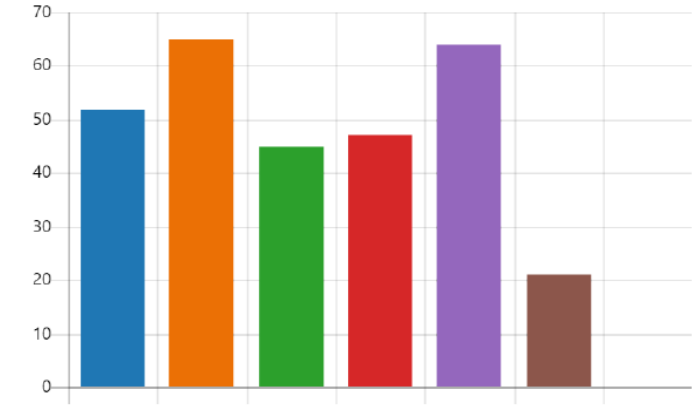
Public Questionnaire Responses

1. Are you aware of water scarcity issues in New Mexico?

Not at all aware	11
Moderately aware	46
Extremely aware	63

2. Which of the following treatment methods and water sources are you aware of that NM could utilize to develop new water supplies?

Desalination of brackish (salty)...	52
Municipal wastewater treatme...	65
Industrial wastewater treatme...	45
Agricultural wastewater treat...	47
Stormwater capture, treatmen...	64
Not aware of any potential ne...	21
Other	0



Public Questionnaire Responses

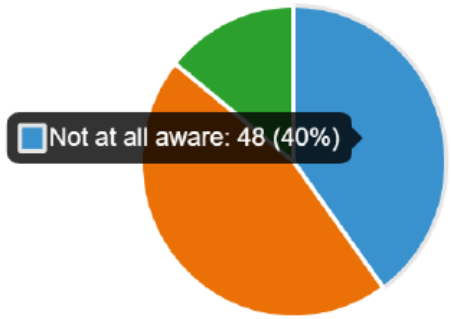
3. Select each of the new water sources that you would support if the water source were treated (cleaned) and used for applications other than for drinking water, providing it is scientifically proven to be safe? For example, industrial uses - such as industrial operations and construction; agriculture uses - such as non-edible crop irrigation (e.g., cotton); or municipal uses - such as irrigation of parks and golf courses, street sweeping, etc.?

Desalinated Brackish Groundw...	67
Reclaimed Municipal Wastewa...	72
Reclaimed Industrial Wastewat...	58
Reclaimed Agricultural Waste...	78
Other	2

Public Questionnaire Responses

4. Generally speaking, how aware are you that the reuse of treated industrial wastewater from the oil and gas industry, called treated produced water, is being looked at nationwide by various federal and state agencies (such as the US Environmental Protection Agency, US Department of Energy, and the US Bureau of Reclamation) to conserve freshwater resources?

Not at all aware	48
Moderately aware	55
Extremely aware	17

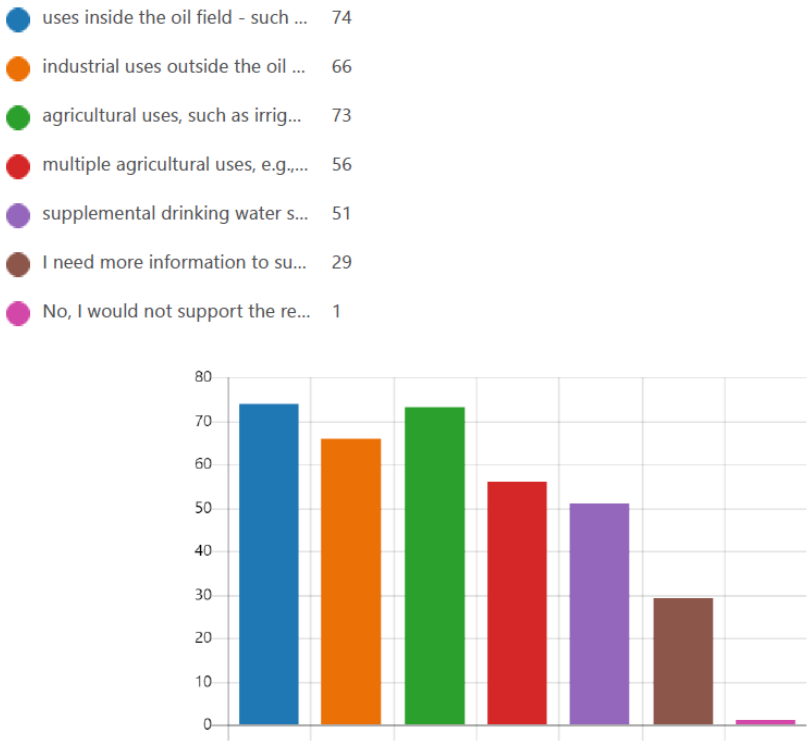


5. How aware are you that the 2019 New Mexico Produced Water Act (HB546) authorized the NM Environment Department to study the safe treatment and fit-for-purpose reuse of produced water outside the oil and gas sector to supplement and save freshwater resources?

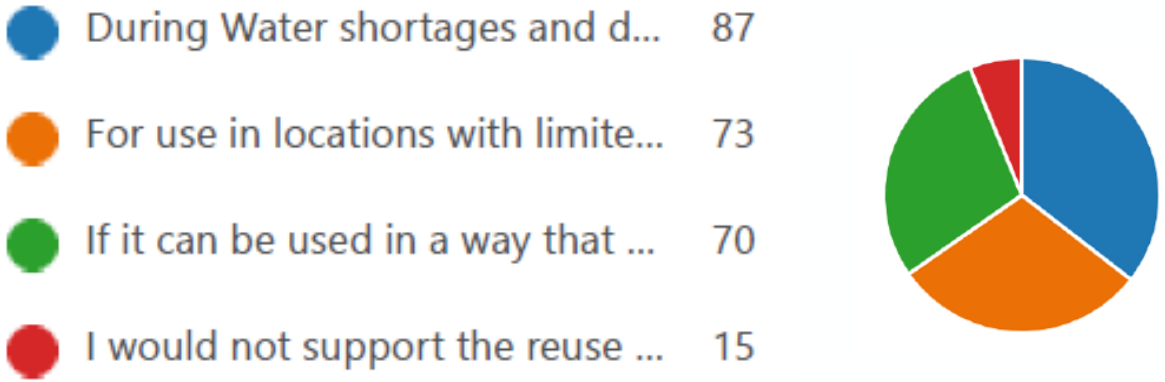
Not at all aware	65
Moderately aware	39
Extremely aware	16

Public Questionnaire Responses

7. Identify all potential reuse applications that you would support for the use of treated produced water to conserve the use of New Mexico's freshwater supplies, if the water is treated and regulated to standards that prove it to be safe to use and to protect human health and the environment?



8. Identify any of the reasons you would be willing to support the use of treated produced water outside the oil and gas industry, if the water is treated and regulated to standards that make it safe.



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Question 9 – Additional Comments

- I feel I need more information for an educated opinion to further support
- The oil and gas industry should be required to disclose all chemicals, proprietary or not, used in produced water before reuse is considered.
- I believe more can be done to help with water shortages and water can be utilized in more ways than we are currently using
- I have concerna about reusing water that has had manmade chemicals for example pesticide use hormojne and pharmaceticals
- Water supply is in jeopardy., we need to save as much watr as we cam
- Thank you for doing this research.

Public Questionnaire Responses

11. What is your age range?

18 - 26	8
27-45	56
45-57	22
58-76	33
Over 77	1

12. What is the highest level of education that you have completed? (optional)

No traditional education com...	3
High School	22
Trade/technical/vocational trai...	25
Bachelor's degree	38
Graduate degree	31

2023 Goals and Objectives

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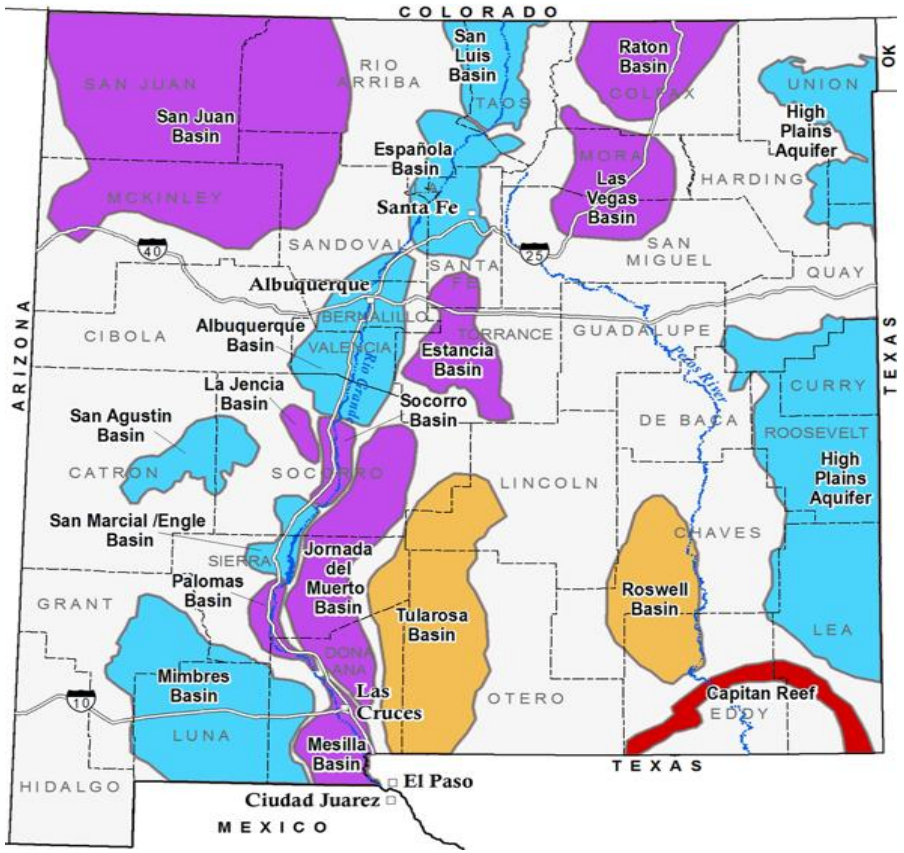
Public Education and Outreach in 2023

- Enhance Educational Materials
  - Fact Sheets
  - Website
  - On-line Workshops
  - Tech Talks

Public Education and Outreach in 2023

- Additional Community Outreach
  - Roswell
  - Artesia
  - Espanola
  - All Indian Pueblo Council
- Venues to Further Obtain Public Questionnaire Responses
  - Ideas



Contact Information

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NMPWRC Podcast Series 1

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Public Education and Outreach Podcast

- ***"Seize the Opportunity to Solve Water Challenges with Innovation and Collaboration "***
- Schedule for Series 1 – 6 episodes
- Episode Titles

Contact Information

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