INFINITY WATER SOLUTIONS

JUNE
2024

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Start Slides

STATEMENT OF CONFIDENTIALITY

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WWW.WATER.ENERGY

CREATING A BLUE ECONOMY

Water scarcity is a concern in nearly every region of the world and though the challenge presents globally, the solutions (and opportunities) lie locally.

One of those water-thirsty regions is the Permian Basin – the American Southwest – the home to what is arguably one of the most prolific oil and gas basins in the World. But, the energy sector is more than just a purveyor of crude oil and natural gas. It is also, as a result of its success, one of the largest water consumers and wastewater generators (15 million barrels per day) in the world.

Historically, this produced water has been considered a byproduct of the industry, a waste stream often disposed of downhole – a practice now widely linked to seismicity.

Today, in light of many world-wide water shortages, this produced water is being reimagined, adopted across the Country as an invaluable, re-*new*-able water supply.

Uniquely positioned to take advantage of this opportunity, both sustainably and economically, is the State of New Mexico.

With a burgeoning technology scene, robust infrastructure on the horizon and an advanced energy ecosystem dedicated to innovation, New Mexico has the ability to create a blue economy. New Mexico *can* revolutionize the way water is managed, mined and manufactured if it prioritizes this opportunity properly. Infinity is leading the way.

Let's dive in,

Michael R. Dyson
CEO, Infinity Water Solutions

Learn More

INFINITY WATER SOLUTIONS

Presentation by:

MICHAEL DYSON

CEO/ CO-FOUNDER

A seasoned entrepreneur and venture capitalist, Michael Dyson has a proven track record of driving early-stage project growth and development. He has spent more than two decades working in the energy, water and technology space, often connecting all three.

INFINITY
WATER SOLUTIONS

About Us

INFINITY

Infinity Water Solutions is a fully-integrated, US-based sustainability, technology and water management company. A cross-industry pioneer, Infinity is reclaiming wastewater, reimagining how it is recycled, reused, manufactured and mined, world-wide.

Recycling Capacity
125K bpd

Year Founded
2019

MILLS RANCH 1
Infinity's Flagship Water Recycling Facility

TEAM INFINITY

Industry Veterans

From the public sector to Fortune 500 companies, the Infinity team has more than 100 years of combined operations, engineering and water management experience.

Michael Dyson

CEO

Ashley Kegley-Whitehead

Chief Communications Officer

Jordan Kramer

Chief Commercial Officer

Dr. Zacariah L. Hildenbrand

Chief Scientific Officer

Christopher Caudill

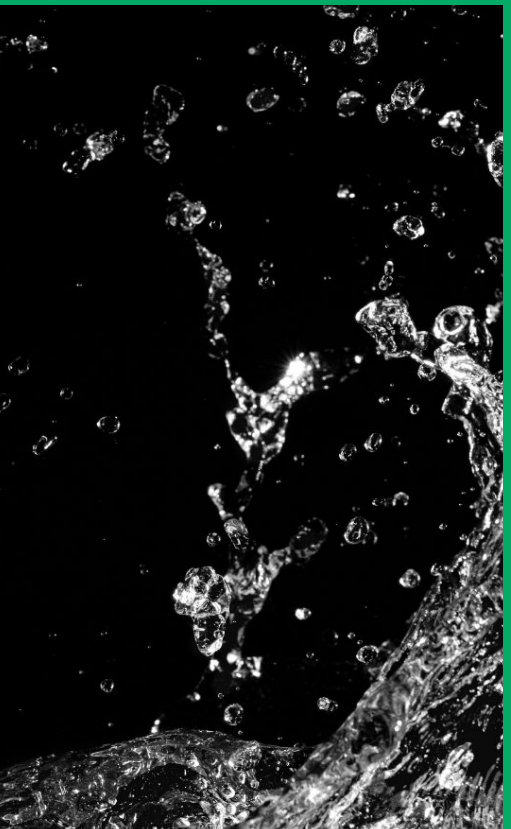
Chief Financial Officer

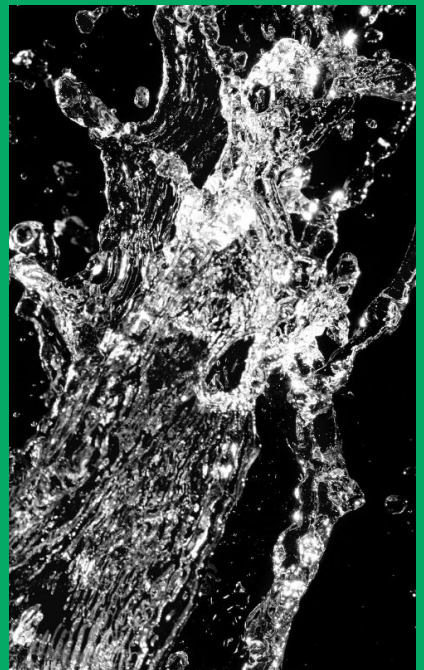
Whitney Dobson

Chief Operations Officer

WHAT DRIVES US

Sustainability With A Profit





MISSION

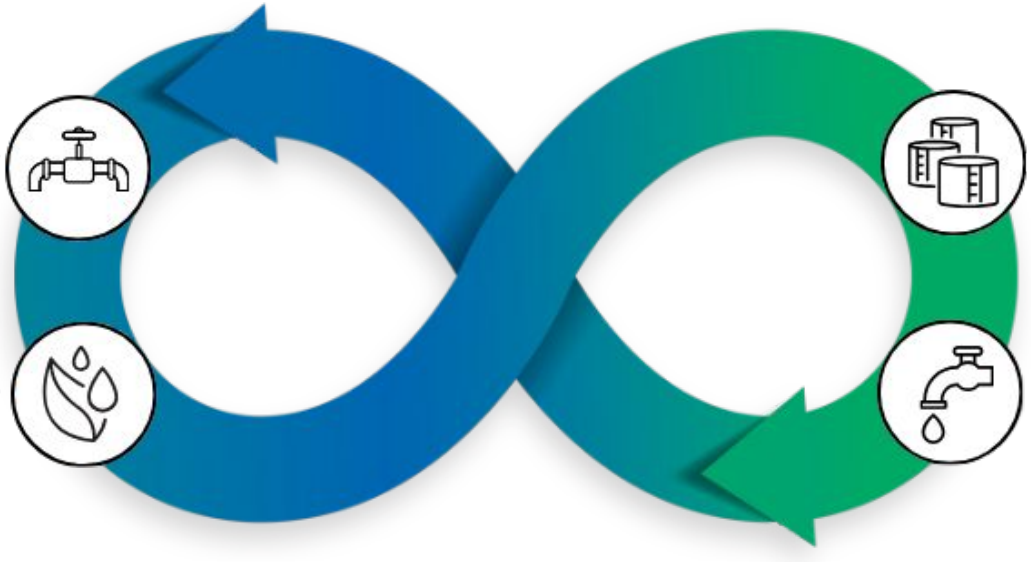
Accelerate the adoption and impact of green infrastructure and clean technology to enhance water security, sustainability and resiliency, globally.

VISION

We exist to create a more resilient water future.

CLOSED-LOOP WATER RECYCLING

Infinity's Sustainable Four-Staged Recycling Process



Water Gathering

Water recapture. Produced water intake in the Permian Basin.

Water Recycling

100% recycled water with 500 bwpd capacity by 4Q24.

Water Staging

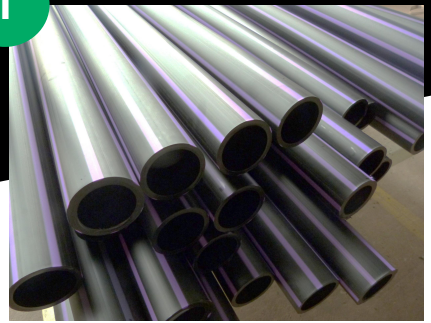
20MM barrels of staging capacity by 4Q24.

Water Sourcing

On-demand fulfillment. Water when you need it.

WATER REUSE: ADDITIONAL BENEFITS

1



Infrastructure

Reduced Carbon Footprint

Infinity's infrastructure has eliminated thousands of truck trips and equivalent volumes of CO_2e emissions – improving safety and reducing wear and tear on already stressed New Mexico county roads.

2

Direct Reuse

Reduced Freshwater Consumption

For every barrel of oil, there are two to six barrels of wastewater collected. This is both a tremendous responsibility and opportunity. By recycling what is gathered, we preserve fresh water sources for its highest and best use – human consumption.

3

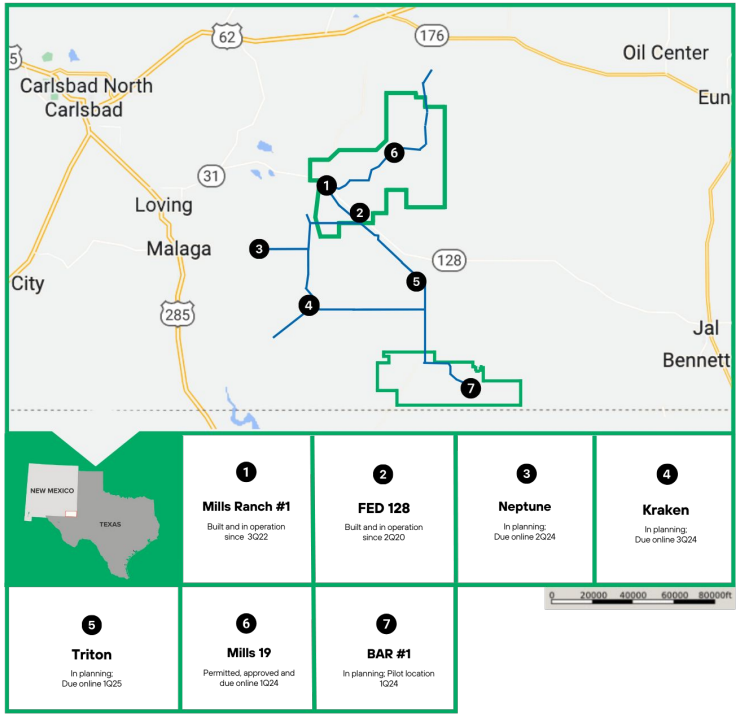
Closed-Loop

Reduced Seismicity

Unlike most midstream models, Infinity diverts produced water that is traditionally reinjected via saltwater disposal (SWD) facilities. Closed-loop recycling relieves pressure and minimizes the likelihood of seismicity across the region.

ECONOMIC IMPACT

Infrastructure at-scale



Working with major and independent operators, Infinity is building a “peer-to-peer” water-sharing network, so there is water sourcing when customers need it and produced water gathering when they don’t.

Our current operations call for a build-out of seven networked facilities. By 2025 Infinity will have more than 500,000 barrels of daily throughput capacity with more than 20 million barrels of staging.

ECONOMIC IMPACT OF OUR INFRASTRUCTURE:

- Jobs Created: 2,250 in New Mexico, plus head office jobs in TX.
- Jobs Filled by New Mexicans: 70%
- Existing Jobs Retained: 300 in New Mexico

CONSTRUCTION

WHAT IS PRODUCED WATER?

american geosciences institute
connecting earth, science, and people

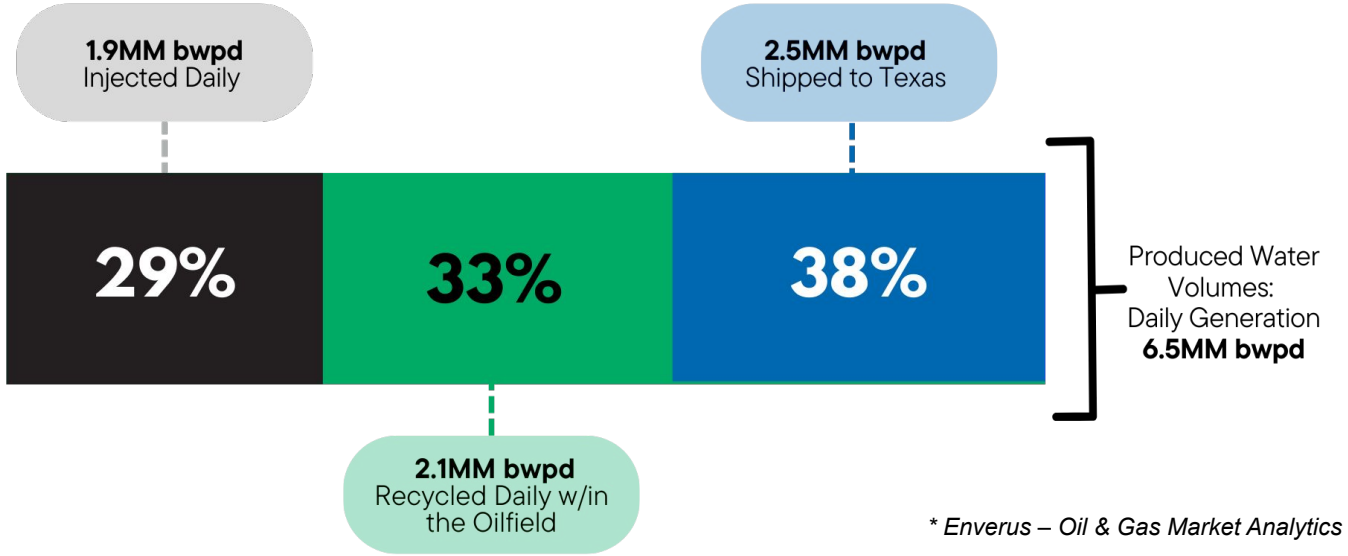
Produced water is naturally occurring water that comes out of the ground along with oil and gas.

“Most oil- and gas-bearing rocks also contain water. When the oil or gas is extracted from these rocks, the water comes out too. This “produced water” is a byproduct of almost all oil and gas extraction, though the amounts of produced water can vary widely in different places or over the lifetime of a single well.[1] When hydraulic fracturing (“fracking”) has been used, some of the frac fluid may also return to the surface. This is sometimes called “flowback water” to distinguish it from the naturally occurring produced water that is extracted from the rock formation.[2]”

Necessity is the Mother of all Innovation

PRODUCED WATER VOLUMES

Water is a critical part of the fracking process. Less realized, though, is the tremendous amount of water generated on the backend, during well production. And, while some (an incredibly small fraction) of that produced water is the same water used at the onset, the vast majority of that water – **almost 273 million gallons daily*** – is *new* water. Water that is trapped within the same rock as oil, and in quantities so large, it far exceeds any amount of hydrocarbons recovered.



** Enverus – Oil & Gas Market Analytics*

COOPERATIVE LANDSCAPE

The produced water market is a competitive landscape, shaped by approximately eight key players: Infinity, Aris, NGL, Select, Goodnight, OWL, Waterbridge and XRI. Collectively, these companies dominate the industry – driving innovation, sustainability and efficiency across the Permian.

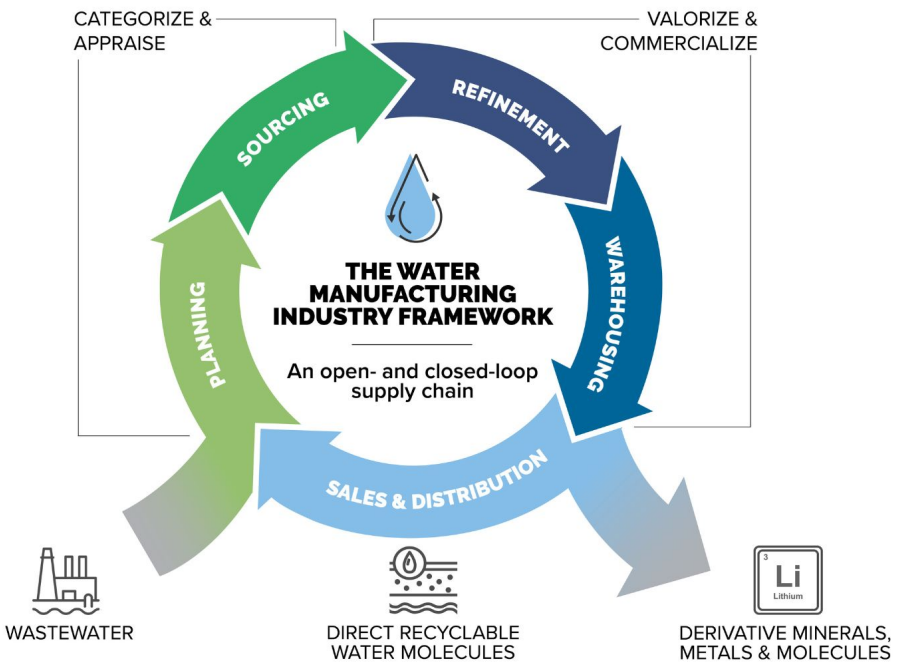
ECONOMIC DIVERSIFICATION

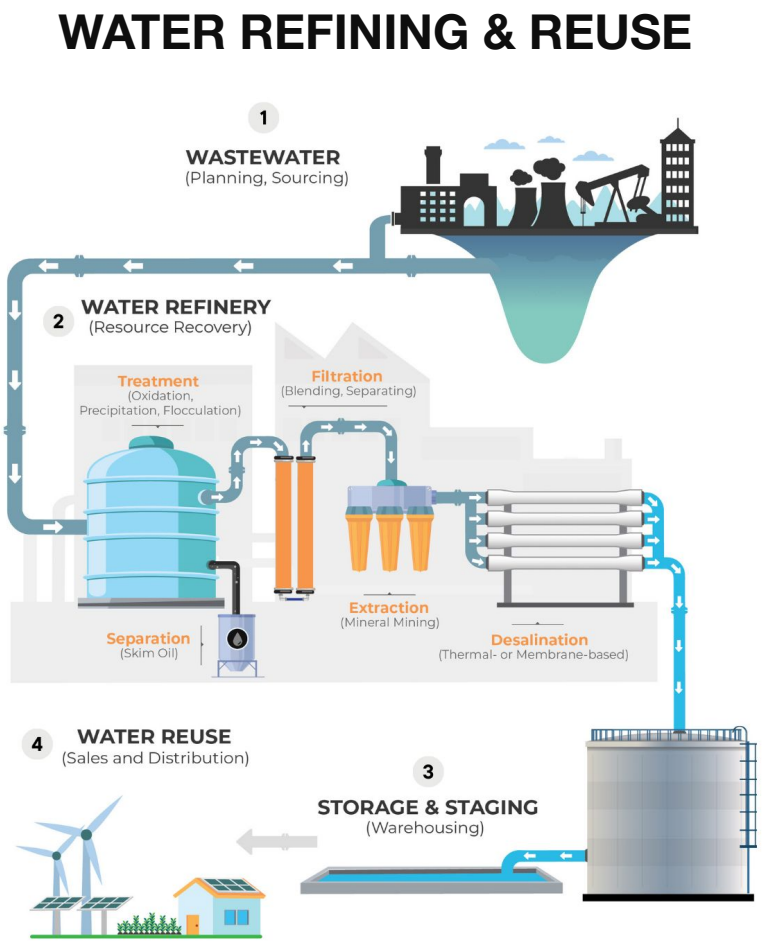
Not all water companies are created equal, nor do they participate equally in every facet of the supply chain. Excelling in water treatment alone is no longer sufficient.

As this industry grows, we must collectively explore every aspect of the open- and closed-loop water manufacturing process. From resource planning and sourcing to reuse sales and distribution, this model offers the Industry (and the State) significant levels of economic diversification, sustainability and resilience.

INDUSTRY FRAMEWORK:

An Open and Closed-Loop Supply Chain





Resource Recovery

USHERING IN A BLUE ECONOMY

At Infinity, our focus goes beyond direct water reuse; we also value the derivative minerals, metals and hydrocarbons found within the same “waste” stream. It is these ancillary byproducts – resources recovered during refinement – that provide a greater level of economic assurance and help subsidize the cost of water treatment. It is the full value chain of water that offers a more sustainable water future.

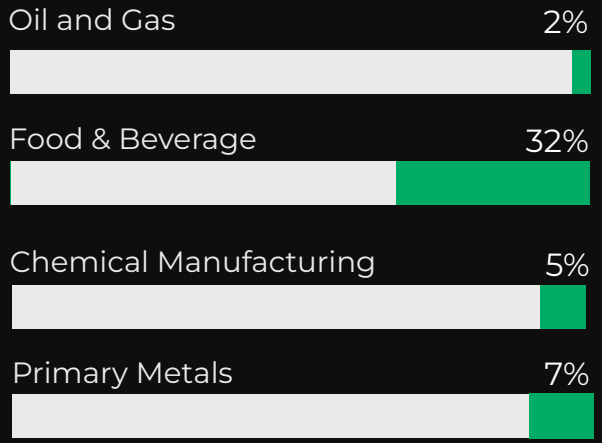
We call it a blue economy – an economic renaissance propelled by water – and currently, it stands as a more imminent reality than a mere figment of imagination.

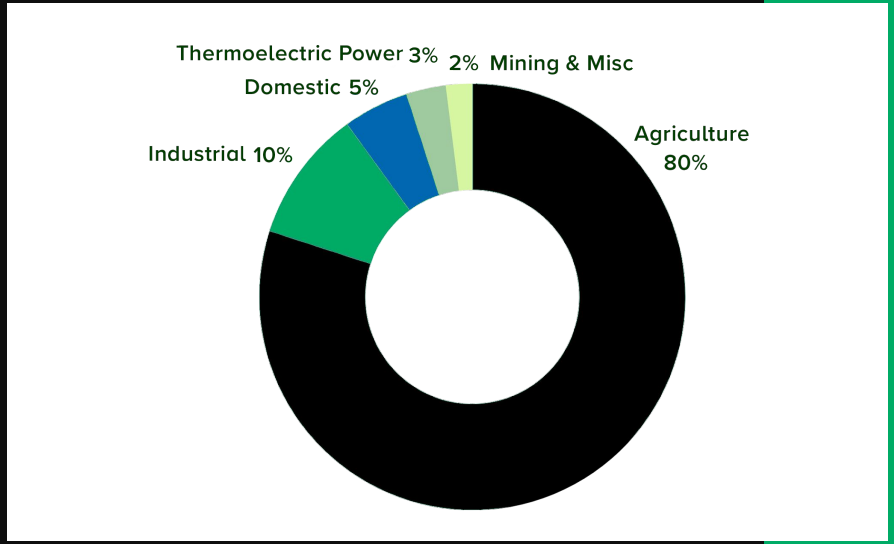
Industrial Reuse Opportunities

FIT-FOR-PURPOSE

Around the world, freshwater is a fundamental commodity found in nearly every step of the manufacturing and production process. For many of these sectors, there is a far better, more environmentally-friendly and economically-feasible alternative: **recycled wastewater**. In New Mexico, produced water can help offset a number of industrial water requirements while driving economic development in the process.

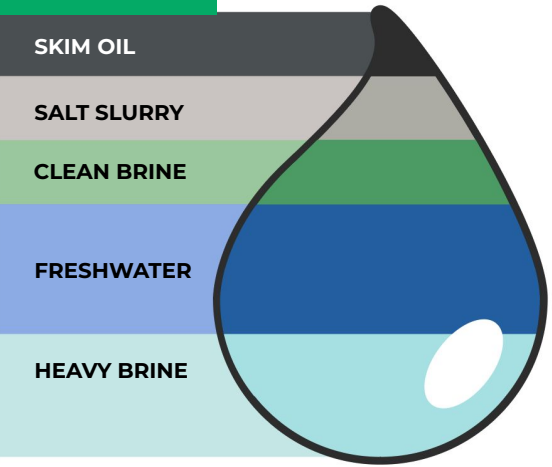
TOP INDUSTRIAL WATER USERS:

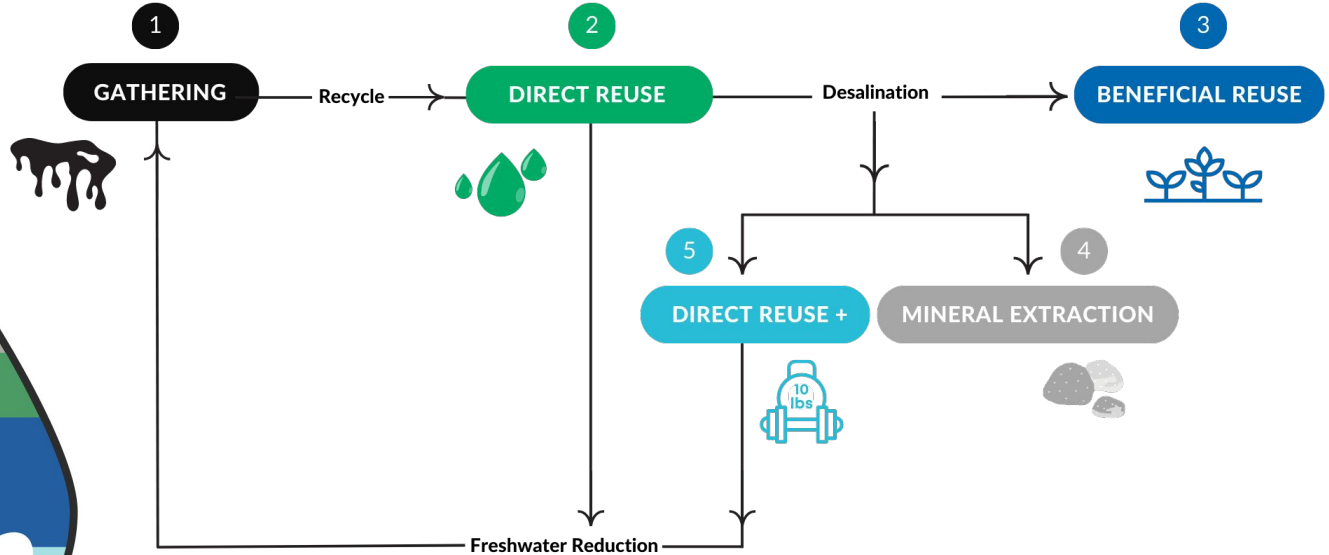




FROM WASTE SOURCE TO RESOURCE

Cracking a barrel of produced water





TREATMENT TECHNOLOGY

Our Partnership with WaterTectonics

The strength of our solutions is rooted in the expertise of our technical leadership. Our team has a deep understanding of water treatment in temporary and permanent applications.

- Our system is low-cost, robust and adaptive.
- Our safety record is A and we are part of ISNetworld and VeriForce.
- Plug-n-play process equipment to match your specified flow rate.
- Experience treating water volumes in excess of 100,000 BPD; cumulatively we've treated more than 50 million barrels.
- Proprietary treatment technologies and processes meet even the most stringent industry KPIs.

Process Flow: See Appendix, Slide 54

Proprietary Hard Tech

HYPEROZONATION

We are dedicated to ongoing research and development to support innovation in treatment technologies, environmental monitoring and water logistics.

Infinity's proprietary HO process introduces ozone in a novel way and is just one way we're expanding our product offerings to address to an array of challenges, while also expanding the value chain.

U.S. Patent No.
11.520,156

U.S. Patent No.
11.827,546

Patents
2 Pending

REUSE IS NOT A NEW CONCEPT

States like **Wyoming, Colorado, Pennsylvania, Texas and California** have pioneered the reuse of produced water for more than three decades, integrating it into many industrial and agricultural processes and allowing surface discharge into navigable and seasonal waterways.

This practice not only conserves freshwater, but also enhances sustainability, reduced injection and minimizes seismicity. By recycling produced water, these states are setting a benchmark for innovative water reuse standards. It's time for New Mexico to follow.

"Faced with water shortages and a 2014 law that puts limits on groundwater use, farmers have increasingly turned to oilfield wastewater. **The water irrigates 95,000 acres of cropland** in California's southern San Joaquin Valley, according to the California Regional Water Quality Control Board."

Inside Climate News

Pulitzer Prize-winning, nonpartisan repor
biggest crisis facing our planet.

Fossil Fuels

In a Dry State, Farmers Use Oil Wastewater to Irrigate Their Fields, but is it Safe?

A recent study found chemical concentrations in the wastewater met safety standards in one California county. But activists say more testing is needed.

By Abby Weiss
September 15, 2020

Grapes growing in vineyard near Delano in Kern County, California. Credit: Citizens of the Planet/Education Images/Universal Images Group via Getty Images

WATER QUALITY COMPARISON

BASIN, STATE	TOTAL ORGANIC CARBON (TOC)	TOTAL DISSOLVED SOLIDS (TDS)	BACTERIA	METALS	ABILITY TO TREAT TO NON-POTABLE FRESH WATER STANDARD	BENEFICIAL REUSE
SAN JOAQUIN, **CA**	>200 mg/L	1,000 – 10,000 mg/L	YES, ABUNDANT	YES, ABUNDANT	YES	YES
EAGLE FORD, **TX**	>200 mg/L	35,000 – 55,000 mg/L	YES, ABUNDANT	YES, ABUNDANT	YES	YES
POWDER RIVER, **WY**	>200 mg/L	120,000 – 160,000 mg/L	YES, ABUNDANT	YES, ABUNDANT	YES	YES
UTICA, **NY/PA/WV**	>200 mg/L	200,000 – 290,000 mg/L	YES, ABUNDANT	YES, ABUNDANT	YES	YES
PERMIAN, **NM**	>200 mg/L	120,000 – 160,000 mg/L	YES, ABUNDANT	YES, ABUNDANT	YES	**TBD**

Upcoming Pilot Project

RESEARCH

In an effort to further regulators' (and the whole world's) body of knowledge on beneficial reuse to support policy creation of **Phase II of the Produced Water Act**, Infinity is planning the following closed-loop field scale pilot program using treated produced water.

Using two pretreatment technologies in conjunction with a desalination system, Infinity plans to treat raw produced water to a non-potable fresh water state. Once treated to this standard, the fresh water will then be applied to three different hemp crops to assess the effects on the peripheral environment, as well as the yield and phytochemical content of the crop. The control plot will be watered using local groundwater.

To our knowledge, this research represents some of the first efforts to understand the appropriateness of using treated produced water for beneficial reuse outside the oilfield.

How Government Can Support Water Reuse

MARKET ASSURITY

1. Regulatory Framework

- **Set Environmental Standards:** Set water quality standards and enforce regulations that encourage the reuse of wastewater in industrial, agricultural and commercial applications to protect and preserve freshwater resources for human consumption.

2. Infrastructure Investment

- **Modernize Water Infrastructure:** Invest in the construction and maintenance of efficient water supply and wastewater treatment systems. This includes pipelines, reservoirs, and recycling and reuse facilities.

3. Research and Innovation

- **Fund Research and Development:** Facilitate collaborations between government agencies, private companies, and academic institutions to develop and deploy new water technologies.

4. Financial Incentives

- **Grants and Tax Incentives:** Offer financial support or deductions to businesses and individuals who invest in water technologies and innovative water management practices.

5. Education and Outreach

- **Public Awareness Campaigns:** Launch educational campaigns to inform the public about the importance of water conservation and ways to reuse wastewater to support communities and businesses.

6. Integrated Water Management

- **Adopt Integrated Water Resources Management (IWRM):** Promote an integrated approach to managing water resources that considers the interconnections between different wastewater uses and the broader ecosystem.

7. Climate Resilience

- **Plan for and Promote Water Resilient Practices:** Encourage practices that increase resilience to water-related climate impacts.

8. Regional Cooperation

- **Transboundary Water Management:** Collaborate across the Permian with neighboring states on the management of shared water and wastewater resources to reduce conflict and ensure sustainable practices are implemented.

Questions or comments?

CONTACT US

Thank you for your questions and time. We look forward to sharing more about Infinity Water Solutions and working with you to create a more resilient water future.

Call us
(512) 710-1863

Website
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INFINITY
WATER SOLUTIONS

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