

Texas Water Recycling Association

The voice for water recycling in Texas

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Nothing is softer or more flexible than water, yet none can resist it. – Lao Tzu

Setting the Record Straight: The Texas Energy Industry's Leading Role in Water Conservation

By Commissioner Christi Craddick

As Texas grapples with the implications of one of the worst droughts in recent memory, a surprising leader has emerged in the area of the water conversation: the oil and gas industry. Turns out the same companies that have been fueling our state's economic boom are driving innovation in technologies that drastically reduce fresh water usage. I look forward to the long-term impact of those same technologies on our state's water challenges across the board.

Thanks to a federal government set on undermining our State's energy industry and a concerted effort by environmental activists, many people are being led to believe that oil and gas producers consume a disproportionate share of water, specifically in the hydraulic fracturing process, or "frac-ing." In the course of the typical frac-ing project, which involves injecting water mixed with chemicals and sand into rock formations to release trapped minerals like oil and natural gas, a company will use between two and five million gallons of water. When viewed in comparison to other human activities, in light of the benefit to our economy, and with an eye to the increasing amount of recycled water, that's a drop in the bucket.

According to recent data from the Texas Water Development Board, the oil and gas industry uses less water than any other category in their Water Use Survey. A 2013 report found that irrigation is the biggest user of water, accounting for 61 percent. Municipal use, manufacturing, steam electric power, and livestock make up

the next 38 percent. The last 1 percent of water use is made up of oil and gas and other mining activities.

When it comes to our economy, Texas energy producers create some of the highest-paying jobs in Texas and carry a large portion of our state's tax burden. In fiscal year 2013, Texas producers paid \$4.5 billion in severance taxes on the production of oil and gas, which expanded the state's Rainy Day Fund. The industry also pays far more in state and local taxes and royalties on a per-worker basis than the average private-sector company, so the 2.1 million direct and indirect jobs it has created in Texas have a bigger than average impact on funding for Texas public schools, roads and first responders.

Oil and gas producers are also driving desalination technology that promises to bring down the cost of converting salt water to fresh water for broader applications worldwide. Texas producers are adopting heat distilling or filtration processes that allow the reuse of up to 80 percent of the returned fracture fluids typically unusable due to its high salt content. Other companies are reporting the successful development of a fully closed loop production system, using 100 percent recycled water.

Water recycling has gradually become a way of life for most Texans since education and conservation efforts began at the turn of the century. While the Texas Legislature and other state officials work to execute the statewide and regional water plan to

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The Railroad Commission Isn't Broken

By John Tintera, President, TWRA

Texas has won big in energy decade after decade. In our oil fields, state-regulated capitalism has proven to be a dramatic success and the model envied by other states and countries trying to recreate the Texas Energy Renaissance. The recent advancements in drilling technology have created thousands of good jobs and led to an increase in energy supplies that now may actually result in American energy independence.

Anyone who thinks this stellar performance has not attracted political opposition is naïve. One frequently employed tactic for advancing a particular political agenda, whether red, blue or purple, is to attack elected regulators that have a party affiliation. Call them broken. Infer they are not doing their jobs. Discredit them to Texas voters.

As a result, any commentary on Texas oil and gas must be viewed through a political prism. I suggest to the San Antonio Express News readers who may have seen your recent op-ed, "Railroad Commission is Broken" (May 9, 2014), to recognize that prism in your writing. (And by all means, please feel free to use this prism on my own commentary.)

But now... let's take a moment to list some of the many successes of the Railroad Commission of Texas that were negligently absent from your opinion piece:

- Ten of thousands of orphaned wells, many from our grandfathers' generation, plugged with industry funds (778 orphaned wells plugged in the last fiscal year)
- Thousands of abandoned orphaned sites remediated (280 cleanup activities completed, including eight major cleanups, last fiscal year)
- New information technology systems implemented
- Record numbers of permits issued, fully

vetted, with no shortcuts in quality

--- A documented record of success in the Groundwater Protection Council annual publication, where thousands of industrial pollution sites are listed but only a small fraction comes from oil field sources

--- Updated water-recycling rules to encourage conservation and reuse at a critical time in Texas history

--- Updated and strengthened well completion rules effective January 1, 2014

--- Significant outreach efforts to the public (In FY 2013, the Commission hosted 14 statewide Oil and Gas Division workshops, three regulatory conferences and participated in more than 50 conferences)

--- Timely response to public concerns regarding possible induced seismicity through hiring of an agency seismologist, despite scientific complexity

--- Thousands of severance orders issued to producers, which halt the selling of oil from a lease until the violation is corrected without the delays of a formal administrative hearing -- an unrecognized effort that provides a tremendous incentive for industry compliance

--- A new "self-funding" mechanism for the agency, with virtually all budget dollars coming from regulatory fees on the oil and gas industry, not from citizen tax dollar

--- An established hydraulic fracturing fluid disclosure rule

--- A mature, comprehensive regulatory framework that is the envy of the world.

And there are many more.

Is there room for improvement at the Railroad Commission? Of course. And with every new Commissioner that is elected through a long-standing and cherished democratic privilege – the ballot box – new ideas, leadership and spirit comes into the agency. Some Commissioners are good, some are great, some have erred, but all are mortal and all have been chosen by the

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TWRA Extends Gracious Thanks to our Members

Without members, TWRA would be just another good idea in solving the water woes challenge. We thank our members for joining the effort to help us develop positive, sustainable solutions to Texas' water challenges. We welcome all industries and technologies to discuss and implement strategies to minimize freshwater consumption necessary for industries to safely prosper yet remain environmentally friendly. Welcome to our recent members: **Citrus Strategies** and **Shale Water Solutions**.


Just a few of the other benefits of membership in TWRA include:

 Timely news and updates through our communications program, including the e-newsletter and other resources to enhance collective outreach efforts.

 Listing in and access to TWRA's online directory of other leading industry professionals.

 Professional recognition through commitment to TWRA's Code of Ethics and best practices.

Membership in TWRA consists of two primary levels: Full and Affiliate.

 Full membership – for water recyclers – encourages your voting participation on committees along with Board eligibility, including the Executive committee. Full dues are \$5,000 per year.

 Affiliate membership – for users of water recycling and other interested parties – allows committee participation. Voting Affiliate dues are \$4,000 and Non-voting Affiliate dues are \$2,500.

We are exploring membership options for Municipal, Educational and Research institutions. If you are interested in working with TWRA in one of those capacities, please let us know.

Your membership enables access, collaboration, and representation: access to policy makers and water recycling industry leaders; opportunities to discuss best practices in the recycling and conservation of water; and legislative and regulatory representation supporting industry efforts to recycle and conserve water. Join TWRA today.

Keep up with TWRA Happenings.

Connect with us on Facebook, LinkedIn and Twitter!

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TexasWaterRecyclingAssociation



LinkedIn.com/company/
texas-water-recycling-association



Twitter.com/TXWRA



Added Benefits for TWRA Members

TWRA President John Tintera will be meeting with executive leadership of the TWDB in July to discuss SWIFT funding and proposed new water rules. Members will receive an update at the annual meeting.

TWRA is working on streamlining the vocabulary used in the recycling industry. Drafts of this terminology will be distributed to members in the coming days for review and discussion at the annual meeting.

Atlantic Council White Paper - Coming Soon

In June, 2013, the Atlantic Council convened a two day conference, "Produced Water: Asset or Waste?" at which participants discussed the potential for US energy independence, which hinders on public acceptance, and how the water and energy industries can collaborate on water management issues to ensure the continued success of the oil and gas industry. Sustainable water management is at the forefront of public acceptance, as the oil and gas industry's use of water for hydraulic fracturing has increased significantly in recent years. It became clear at this meeting that further discussion was necessary, and the Atlantic Council partnered with Tintera Energy to examine this issue specifically in Texas as the first in a series of white papers that will examine water management strategies in various energy producing states.

To be released later this year, this first report will focus on Texas and provide an overview of oil and gas production in Texas, water-related issues specific to Texas, and the potential for recycling, reuse, and use of non-freshwater sources. The report will also examine what Texas has done well and what could be improved, and will provide recommendations and conclusions as to how the industry and regulators can encourage sustainable water management solutions. These conclusions are specific to Texas, but have the potential to be applied in other areas of the nation encountering similar issues.

Annual Membership Meeting

Save the date! Our upcoming annual membership meeting will be held in Austin, Texas, the afternoon of Thursday, August 14, 2014.

Members will have the chance to network and be

updated on interim activities, current initiatives, presentation opportunities and recent developments.

Arrangements will be finalized in the coming days so watch your email for details.

Setting the Record Straight, *cont'd from page 1*

assist those efforts, the energy industry is working diligently to reduce water demand. To their credit, the oil and gas industry in Texas has managed to improve and incorporate water recycling technology in its production processes in just the past 2-3 years.

Once again, Texas has assumed a leadership role on a pivotal issue—that water conservation and energy production can and must co-exist. With continued careful stewardship by energy companies and sensible oversight by state government, Texans can expect to enjoy the benefits of both our water and underground mineral deposits, for years to come.

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people of Texas.

A final reminder: the Sunset Review is a political process. Anyone who does not recognize that may need his or her political prism adjusted.

John Tintera, an oil-and-gas consultant at Sebree & Tintera, is a former executive director of the Texas Railroad Commission.

The American Water Summit 2014: Smashing Silos

TWRA is honored to work with Global Water Intelligence on the 5th annual American Water Summit in Houston. A new strand dedicated to discussing the most crucial issues that the energy industry is facing concerning water will be unveiled at the conference. Texas Railroad Commissioner Christi Craddick will be participating in the opening plenary along with Carlos Rubinstein, Chairman of the Texas Water Development Board.



The program will start on Wednesday afternoon, October 22nd with a workshop:

Connecting Water Technologies with the Oilfield: What are the latest industry needs and how are technologies evaluated and selected?

As a part of this Water and Energy workshop you will hear focused presentations by E&Ps and oilfield/water service companies reflecting on their immediate water management chal-

lenges, technology choices and procurement decisions that will help you better understand end-user needs and how you can succeed in the oilfield.

Panelists:

- Tom Pankratz, Editor, Water Desalination Report
- John Tintera, President, Texas Water Recycling Association – Key Note
- JP Welch, Global Water Business Director, Halliburton
- Lisa Henthorne, CTO, Water Standard

Who should attend?

- Water technology and service providers
- E&P and oilfield companies
- Business Development Directors
- Investors
- Consultants, Policy Makers and Regulators

Other sessions of interest to TWRA members include:

Water & Energy: Keeping pace with water treatment needs in the North American oil and gas sector

Moderated by Amanda Brock, CEO, Water Standard, this session will discuss how water treatment services and technology need to work smart in order to catch up with the

booming on and offshore energy sectors.

Water & Energy: The Economics of Water Reuse in Unconventionals

Brent Halldorson, COO, Fountain Quail Water Management, will lead a discussion on the challenges faced by those trying to introduce water reuse into the oilfield in many parts of the US.

Water & Energy: Planning For The Future

Rebecca Tomasek, Upstream General Manager - Water Business Group, CH2MHILL, will lead a group of representatives from downstream, upstream, power and regulatory sectors in discussing the immediate technology, solutions, investment and cross-sector partnerships to make new water solutions happen.

For a complete agenda and delegate booking information please visit: www.americanwatersummit.com.

