February, 2017

# Wyoming Water Well Contractor's Licensing News

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State Board of Examining Water Well Drilling Contractors and Water Well Pump Installation Contractors

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#### Wyoming Water Well Association Convention, Success!

The Wyoming Water Well Association held their annual water well convention January 18, 2017 thru January 20, 2017. This year they offered continuing education classes on Wednesday starting at noon.

They had some great classes including the

McElhiney Lecture on "Defining the Operational Age of a Well", members from the State Engineer's Office, and the guest speaker from the National Ground Water Association Director, David Heinrich.

The auction was a success and the money raised will

be added to the scholarship program.

The entertainment "Nick & Slick" included one of their own members Nick Bebout, who played the guitar and sang his heart out.

Great job WWWA!

#### Water Wells in Proximity to Natural Gas or Oil Development!

Hydraulic fracturing has captured headlines in areas where gas development is occurring. Hydraulic fracturing is a petroleum-industry process in which fluids, commonly made up of water and a small percentage of chemical additives, are combined with sand and pumped at very high pressure into geologic formations holding gas. The resulting fractures allows the release of

natural gas, which can be collected. NGWA has developed recommendations for testing well water before and after gas and oil production to monitor any changes in water quality related to hydraulic fracturing fluids.

NGWA suggests all water well owners regularly test their water quality because:

 Many areas of the United States have geologic conditions that release natural constituents into groundwater.

- Water quality in private wells is not regulated by the federal government or by many state and local governments.
- Below-ground activities such as oil and gas drilling can potentially affect their drinking water quality.

To read these information briefs and more, visit www.NGWA.org.

#### Learn more about Water Well Rehabilitation!

New book, <u>Operational</u>
<u>Stage of the Well</u>, was
just published by NGWA
Press.

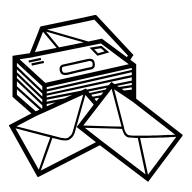
Authored by long-time industry professionals Thomas M. Hanna, PG,

Michael J. Schnieders, PG, PH-GW, and John H. Schnieders, Ph.D., CPC, it details how to understand various factors and how they impact well operation and maintenance. Through research, field

work, and laboratory work, they have developed a method for assessing the information and assigning a value to the well in regard to its health.

For more info visit www.NGWA.org





Happy February to everyone! The grace period for 2016 license renewals ended February 1st. Approximately 35 licensed contractors did not renew their licenses which made 2016 the largest year for unrenewed licenses since I started in 2010. I hope that some of you are staying busy.

I attended the Wyoming Water Well Association annual

convention last month. They had a good number in attendance and offered a variety of classes. It was good to see all who attended, which included some new faces.

For a couple of years now the Board has discussed changing the censure statute W.S 33-42-111. Senator Driskill presented the bill and it was assigned to the AG committee. You will be

happy to know that they tabled the bill, so the way the Board currently disciplines licensed contractors will remain the same. Maybe someday the Board will have a little more flexibility instead of having to suspend every licensed contractor who violates license law. Thank you to all who showed their support! Until next time, stay safe!

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## Large Precipitation Events are Critical in Replenishing Groundwater Resources.

Groundwater is a vital source of water in the western United States, and will be increasingly important with continued population growth and climate variability. Understanding the role of these large recharge events in replenishing aquifers and sustaining water supplies is crucial for long-term groundwater management.

This is one of the first studies in the region to investigate the effects of climate on groundwater resources. USGS scientists identified and analyzed large, multi-year, quasi-decadal groundwater recharge events in the northern Utah portion of the Great Basin from 1960 to 2013. Researchers evaluated groundwater levels and climate information and identified five large recharge events with a frequency of about 11 to 13 years. Findings show these events provide a significant amount of groundwater recharge and storage across the northern Great Basin, causing water levels to rise in aquifers. "Informed decisions for water management now and in the future rely on understanding the surface and groundwater resources within a river basin," Reclamation's Subhrendu Gangopadhyay said. "Understanding historical groundwater recharge provides context to better manage groundwater in the future under a variable climate."

There has been a considerable amount of research linking climatic variability to hydrologic responses; however, most of these studies focus on surface-water resources. The implications of this work indicate if the magnitude or frequency of these recharge events change there will be significant impacts on groundwater, specifically long-term availability, use and sustainability.

"These large recharge events are vital in replenishing and maintaining groundwater storage, especially after multiple years of below average precipitation across the region," said USGS scientist and lead author of the study, Melissa Masbruch. "Without them, groundwater resources become depleted."

Large groundwater recharge events are characterized by above-average annual precipitation and below-average seasonal temperatures, especially during the spring (April through June). Existing groundwater flow models were used to simulate changes in groundwater storage in several basins throughout the study area from these events.

Released October 11, 2016 at www.usgs.gov/news

#### Calendar

Continuing education opportunities for March and April: The codes in the first column are as follows:

WWWA - Wyoming Water Well Association

NGWA - National Ground Water Association

NWDA - Nebraska Well Drillers Association

CWWCA – Colorado Water Well Contractors Association

WARWS – Wyoming Association of Rural Water Systems

WWA- Wyoming Water Association

WWQ & PCA – Wyoming Water Quality & Pollution Control Association

The topic, date, time and location are given. Please refer to each respective association's website for more information on how to register, and/or for future educational opportunities.

BIDP - Baroid Industrial Drilling Products

AGWT - American Ground Water Trust

SEDC - Shallow Exploration Drillers Clinic

ISWD - International School of Well Drilling

**CPS - CPD Distributors** 

Goulds - Goulds Water Technology Factory School WebEx Training

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### CALENDAR OF EVENTS February - March

AGWT	Educational Videos and Books	Website	www.AGWT.org
ISWD	International School of Well Drilling Online Courses	Website	welldrillingschool.com
NGWA	Introduction to Groundwater Resources (#1012)	Website	Online self-paced course
REMTEC	National Driller Workshop - Colorado Convention Center	Denver, CO	March 7 - 9, 2017
Goulds	Typical Causes of Vertical Turbine Failure	Website	February 24, 2017
Goulds	Commercial Product Overview	Website	March 17, 2017
Goulds	Trouble Shooting Basics	Website	March 27, 2017

If you have any training opportunities you would like to be published in this newsletter please send them to the Board office.

Next Board Meeting scheduled for April 26, 2017, Parkway Plaza, Casper at 10:00 am.

Professionalism: " the skill, competence, or character expected of a highly trained profession."

Be a professional, call yourself a professional, work like a professional, and demand the same from everyone in your profession!