IGWA Bulletin

THE WATER—ENERGY NEXUS

The water-energy nexus refers to the interdependence between water and energy. As Idaho grows, drillers may find themselves increasingly at the crossroads of this water-energy nexus. Conflicts over how water is used to sustain and maintain our current and future way of life have become common place. Idahoans from all walks of life are engaged in preserving and protecting this valuable resource whether that involves increased storage, curtailment, recharge and recovery, and/or adjudication.

Presently state and federal entities, along with private citizens and special interest groups, are working to determine how best to meet future water needs in the Treasure Valley. One option is to increase our storage water supply by raising the Anderson Ranch Dam about 6 feet. The estimated 29,000 acre-feet of additional storage could be used to create a more reliable water supply. That supply could potentially be used to meet the needs of a growing population and economy, as well as shifting weather patterns and climate change.

The Treasure Valley is exploring options to increase its water supply. In the Magic Valley and eastern Idaho junior ground water users on the Eastern Snake Plain Aquifer (ESPA) are using demand reduction and recharge as mitigation tools to reverse aquifer declines. Some ground water users are potentially facing curtailment. A shortage of approximately 15,850 acre-feet is largely attributable to dry weather conditions. In the Panhandle, the state of Idaho is entering Phase 3 of the North Idaho Adjudications. According to IDWR, an adjudication protects the legal interests of water right holders against future competition for the resource, especially from out-of-state interests.

There are ten major aquifer systems in Idaho. While used for many purposes, ground water accounts for over 95% of the drinking water in the state. Conflicts over water quantity and quality result in litigation, mitigation, and regulation. Drillers face moratoriums on drilling new wells in areas of concern; are deepening existing wells where water levels are declining; and, in some instances, are hard-pressed to keep up with the demand for new wells as Idaho grows. Drillers can expect increased scrutiny over drilling practices as state, federal, and public entities are increasingly aware of and concerned about our ground water supply.

Not only do Idahoans rely on ground water for drinking, irrigating, and commercial purposes, Idaho is heavily dependent on water as an energy source. Increased consumer demand for clean, affordable energy is going to challenge drillers to install pumps that are more energy efficient and cost-effective. Consumers are also going to want information about new technologies such as solar pumps. Utilities across the state have conservation programs which could be beneficial to well owners in conserving both water and energy. You may want to become familiar with these products and programs as a marketing tool for your business.

Drillers are going to have to navigate the water – energy nexus in these changing times and conditions.

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MEMBERS' CORNER

IGWA's board of directors and Continuing Education Committee (CEC) are working with the Idaho Division of Building Safety (DBS) and Idaho Department of Water Resources (IDWR) and on the following issues.

Specialty license for pump installers: IGWA continues to work with the DBS to develop training for applicants who are working to obtain a limited contractor license for electrical and plumbing and/or to develop a limited pump installer license.

Idaho Rules & Regulation Credits: Last year when IDWR conducted its well drillers licensing review, several out-of-state drillers commented on IGWA's practice of offering only one (1) credit of Idaho rules & regulations at each of the four regional workshops. While IDWR contracts with IGWA to provide continuing education for licensure, the Department must ensure that the program is accessible and not overly burdensome to license holders. IDWR met with IGWA's board and CEC to discuss how to address their issue.

Three options were discussed.

- 1.) Develop an online rules and regulation course or possibly a webinar.
- 2.) Offer two credits at each workshop.
- 3.) Reinstating the two regional workshops eliminated ***(Nampa & Lewiston)*** for 2020.

The board position is that, if drillers need two credits in one year to meet their licensure requirements, they can

- attend the two-day (2) annual state convention;
- attend one day (1) at the annual state convention and one regional workshop;
- attend two (2) regional workshops.

A one-day registration at the annual convention has been available upon request, but not widely publicized. The board said it will more broadly publicize the one-day option. The board wants to encourage more attendance at the two day annual convention. This is partly in response to vendors who want the opportunity to meet with more drillers in one location and also to build community within the association.

IDWR Proposed Well Permit Fee Increase: IGWA has conditionally agreed to support IDWR's proposed fee changes to well permits. IDWR proposes to create a flat fee for all well permits. The proposal would require legislative approval. (*IDWR has since decided not to introduce this proposal in 2020 legislative session.)*

Well Tags: IGWA's board and CEC is asking IDWR to find an easier way to submit and purchase well tags online. IDWR said developing an online process would be contingent upon obtaining funding and access to IT time.

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Continued from page 4 Members' Corner

Proposed Changes to Class 1 & Class 2 Well Drilling Licenses: IDWR proposes to clarify and simplify the licensing rules for Class 1 and Class 2 licenses as follows: Class 1would refer to apprentices and/or helpers working under the supervision of a licensed driller; Class 2 would be a licensed operator/driller who can work unsupervised.

Under the Governor's Red Tape Reduction Act, IDWR has the authority to simply its rules without initiating a negotiated rulemaking so long as the proposed changes are published in the Administrative Bulletin and there are no objections. IGWA's CEC Chairman Tom Richardson said he could support the change as long as there are enough steps to ensure qualified people are being licensed. If IDWR proceeds, the change would most likely become effective in 2020.

Currently Class 1 and Class 2 applicants take the same test. Under the proposed change only applicants who are ready to be licensed would be tested. IDWR indicated it is also planning to rewrite the test. IGWA said one of the biggest complaints from applicants is the availability of study and reference materials to prepare for the test. Applicants must demonstrate knowledge ranging from the administrative rules to geology, mapping, and well construction. Some of these topics can be incorporated in IGWA's educational programming. IDWR said IGWA could also prepare an outline of suggested study materials.

AEDS MAKE A DIFFERENCE

Seldom do you have a situation in your professional life where you experience something that makes you realize how fragile you really are. Below is a story about one of those times for me. I've known Mark since I started with Norco in 2006. He's a great guy and a consistent worker. The fact that his team came to his rescue and were equipped to help the way they did is a miracle, yes, but it has more to do with being prepared. The customer had trained their people, they had an AED (automatic external defibrillator) and everyone reacted calmly and professionally. Mark is alive because of that.

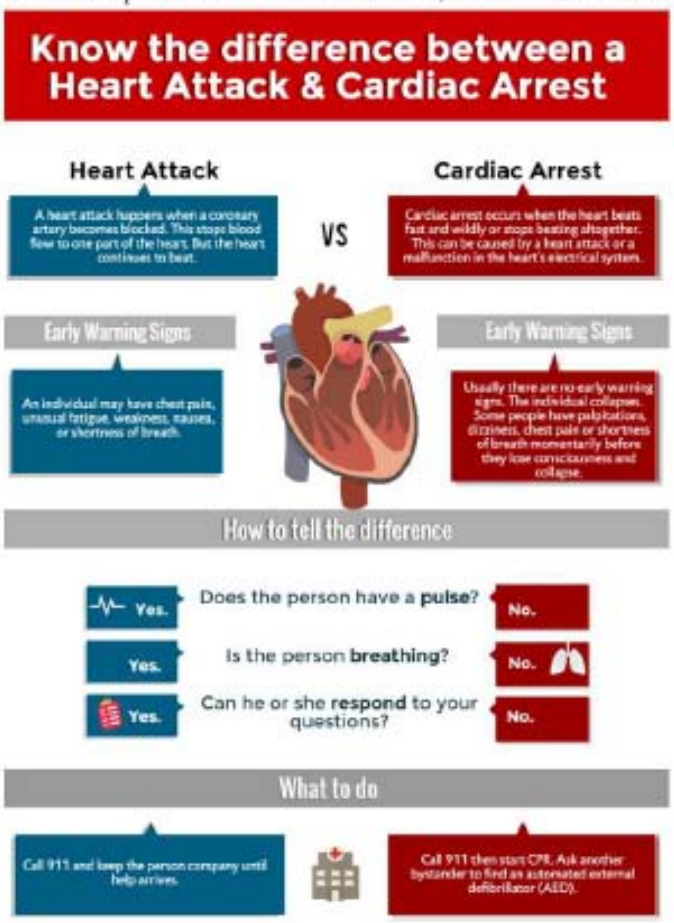
This is the first time in my sales territory that an AED we sold was used by the customer. They have a Defibtech Lifeline View. After the event, Defibtech helped us download data from the unit right away to create a timeline and quickly supplied new pads to get the unit back in service. The AED unit was used for approximately 12 minutes and administered a shock three times plus it continuously coached the users to perform chest compressions. As of August 1st, 2019, Mark is recovering at home and will likely return to work. Constant training, the correct tools and consistent practice contributed to saving his life.

Mark's team who performed CPR and ultimately saved his life.

"On July 11th, 2019 at approximately 12:30 pm one of our employees, Mark, collapsed and fell to the floor due to sudden cardiac arrest. His coworkers reacted immediately and got one of our first responder bags. After quickly assessing the situation, they realized Mark was not breathing right and he didn't have a pulse. CPR was started right away and 911 was called. They then started rescue breaths and went to get the AED which directed them to apply a shock.

All the while paramedics stayed on the phone with our crew, guiding them through the care that Mark needed. Our team continued providing CPR until the paramedics arrived about seven minutes later. They continued with CPR until he was stable and could be transported to the hospital. The paramedics and physicians were impressed by the team's quick reaction and calm approach. They said the fact that Mark's ribs and sternum were broken means the CPR was done properly.

If it were not for his coworkers' immediate actions, Mark would not be here today. Sudden cardiac arrest, which is different than a heart attack, is the number three killer of Americans. The survival rate outside a hospital is just six percent and even when a patient is treated by first responders, only 11 percent survive. He came home from the hospital on July 23rd after receiving an internal defibrillator implant. Mark is doing well and is so very thankful for his amazing coworkers and his employer's dedication to the right tools, emergency training and consistent practice." *Cable Rhodes, Boise Outside Sales*



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IGWA welcomes a new contributor.

CARDIAC ARREST VS. HEART ATTACK

People often use these terms interchangeably, but they are not the same.

WHAT IS CARDIAC ARREST?

CARDIAC ARREST occurs when the heart malfunctions and stops beating unexpectedly.

Cardiac arrest is triggered by an electrical malfunction in the heart that causes an irregular heartbeat (arrhythmia). With its pumping action disrupted, the heart cannot pump blood to the brain, lungs and other organs.

Cardiac arrest is an "ELECTRICAL" problem.

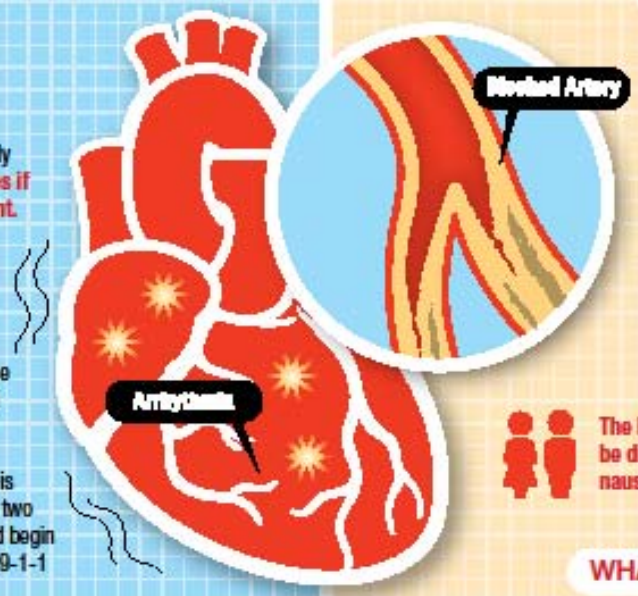
WHAT HAPPENS

Seconds later, a person becomes unresponsive, is not breathing or is only gasping. **Death occurs within minutes if the victim does not receive treatment.**

WHAT TO DO

Cardiac arrest can be reversible in some victims if it's treated within a few minutes. First, call 9-1-1 and start CPR right away. Then, if an Automated External Defibrillator (AED) is available, use it as soon as possible. If two people are available to help, one should begin CPR immediately while the other calls 9-1-1 and finds an AED.

Fast action can save lives.



WHAT IS THE LINK?

Most heart attacks do not lead to cardiac arrest. But when cardiac arrest occurs, heart attack is a common cause. Other conditions may also disrupt the heart's rhythm and lead to cardiac arrest.

Learn more about CPR or to find a course, go to heart.org/cpr

WHAT IS A HEART ATTACK?

A HEART ATTACK occurs when blood flow to the heart is blocked.

A blocked artery prevents oxygen-rich blood from reaching a section of the heart. If the blocked artery is not reopened quickly, the part of the heart normally nourished by that artery begins to die.

A heart attack is a "CIRCULATION" problem.

WHAT HAPPENS

Symptoms of a heart attack may be immediate and may include intense discomfort in the chest or other areas of the upper body, shortness of breath, cold sweats, and/or nausea/vomiting. More often, though, symptoms start slowly and persist for hours, days or weeks before a heart attack. Unlike with cardiac arrest, the heart usually does not stop beating during a heart attack. **The longer the person goes without treatment, the greater the damage.**

The heart attack symptoms in women can be different than men (shortness of breath, nausea/vomiting, and back or jaw pain).

WHAT TO DO

Even if you're not sure it's a heart attack, call 9-1-1 or your emergency response number. Every minute matters! It's best to call EMS to get to the emergency room right away. Emergency medical services staff can begin treatment when they arrive — up to an hour sooner than if someone gets to the hospital by car. EMS staff are also trained to revive someone whose heart has stopped. Patients with chest pain who arrive by ambulance usually receive faster treatment at the hospital, too.

American Heart Association.

IDWR ISSUES CURTAILMENT ORDER TO EASTERN SNAKE PLAIN GROUND WATER USERS FOR 2019 IRRIGATION SEASON

BOISE - (June 13, 2019) - The Director of the Idaho Department of Water Resources (IDWR) has issued a curtailment order predicting a 15,850 acre-foot shortfall will occur to water users with senior priority surface water rights in the Eastern Snake River Plain Aquifer (ESPA) region in the 2019 irrigation season.

The predicted shortfall means that certain ground water users may be subject to curtailment during the irrigation season if they are not already participating in – or are not in compliance with – an approved mitigation plan. A list of the junior users who are not participating in a mitigation plan indicates that approximately 85 water users may face curtailment.

The IDWR curtailment order states that junior ground water users with priority dates of April 12, 1994, will be subject to curtailment, and enlargement water rights with priority dates of March 14, 1971, will be subject to curtailment in the ESPA region, if they are not already participating in an approved mitigation plan.

Currently, there are six approved mitigation plans for the ESPA surface water delivery call. These plans benefit members of the Idaho Ground Water Appropriators, Inc. (IGWA), A&B Irrigation District, Southwest and Goose Creek Irrigation Districts, and certain cities referred to as the "Participating Cities."

"By law, we have to keep people with senior water rights whole, and we need to notify affected junior ground water pumpers that despite the recent historic settlement agreements between the Surface Water Coalition, IGWA, and the Participating Cities, if an affected junior ground water pumper is not already participating in an approved mitigation plan they will be curtailed this year," said Mathew Weaver, Deputy Director of IDWR. Much water litigation has resulted over conflicts between Snake River surface water users who have senior water rights under the basic principal of Idaho water law — first in time, first in right — and ground water users with junior water rights in the ESPA. Consequently, the Director of IDWR is required to issue an order at the beginning of the irrigation season, determining any shortfall in water supply to the senior surface water right holders, and determining the obligations of junior ground water pumpers to curtail water use or mitigate for depletions to water users with senior priority water rights.

Overall, the water conflicts have arisen because water levels in the ESPA have been declining since the 1950s. Declining aquifer levels have affected spring flows and surface water flows in the Snake River, particularly in the Blackfoot to Milner reach of the Snake River and the Thousand Springs region near Hagerman.

Although ground water levels have partially recovered due to state-sponsored recharge, ground water pumping reductions, and ample water years, aquifer water levels have not yet recovered to levels necessary to avoid conjunctive management. As a result, IDWR will predict shortfalls to the senior surface water right holders even in years such as 2019, when federal storage reservoir operators forecast near-normal runoff and full reservoir supplies. The April 1 joint forecast prepared by the United States Bureau of Reclamation and the United States Army Corps of Engineers predicted 3.2 million acrefeet of runoff from April to July at the Heise gauge of the Snake River, which is 99 percent of normal.

The mitigation plans of IGWA and the Participating Cities allows participating ground water users to avoid curtailment this year and in the future, as well as avoid future litigation issues related to water use in the ESPA area that could affect cities, commerce, industry, agriculture and the Southern Idaho economy.

Contact: Mathew Weaver, Deputy Director, Idaho Department of Water Resources, 208-287-4800

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Oral Arguments Scheduled for Supreme Court Groundwater Case

The U.S. Supreme Court has scheduled oral arguments for November 6 in the case of *County of Maui, Hawaii v. Hawaii Wildlife Fund*.

In the case, the court will consider the question of whether the Clean Water Act requires a permit when pollutants originate from a point source but are conveyed to navigable waters by a nonpoint source, such as groundwater.

Maui County injects wastewater into injection wells near the ocean. The wastewater is added to groundwater, much of which then makes its way into the ocean, a navigable water body. The question is whether this "indirect" discharge requires a National Pollution Discharge Elimination System (NPDES) permit. A permit is clearly required if a discharge is made directly to navigable waters, but lower courts have split on whether a permit is required in this situation. In this case, the U.S. Court of Appeals for the Ninth Circuit found the county needed an NPDES permit.

NGWA and the Water Systems Council filed an amici curiae (friends of the court) brief in the case in May.

The WSC/NGWA brief argues that the release of pollutants by Maui County is covered by the nonpoint source provisions contained in 33 U.S.C. § 1329 of the Clean Water Act. Applying the NPDES provisions in the Clean Water Act to releases to groundwater would both disrespect the clear structure of the act and prove difficult in practice, according to the brief. Other federal and state laws already apply to releases to groundwater and adding the NPDES permit to the list would further fragment an already fragmented system of regulation.. Alternatively, 33 U.S.C. § 1329 contemplates a cooperative effort between the federal government, states, and Indian tribes to address discharges to groundwater. Given the diversity of geology, climate, and use of groundwater resources, states should play the lead role in regulating these releases.

The WSC/NGWA brief contends that if any releases to groundwater require NPDES permits, those releases should be limited to releases to groundwater that flows in identifiable channels or conduits. State water rights often depend on the distinction between percolating groundwater and groundwater in identifiable channels.

A decision by the Supreme Court is expected in early 2020.

New NGWA Press Book Gives Comprehensive Overview of Well Systems: NGWA Press recently published *The Art of Wells* by Marvin Glotfelty, RG, the 2012 NGWA Distinguished McEllhiney Lecturer. The goal of the book is to be a comprehensive overview of well systems ideal for everyone working in the groundwater field.

It provides practical information on water wells—covering everything from site selection to design, drilling methods, economics, and more—and is written in a fashion that is understandable, technically accurate, and applicable to real-world situations.

At more than 170 pages and featuring numerous drawings, photos, tables, and appendices, it is designed to be a valuable resource for well designers, contractors, engineers, water managers, and hydrogeologists. The book is available in the National Ground Water Association Bookstore at *www.NGWA.org/Bookstore*.

Glotfelty was interviewed about the book in the July issue of *Water Well Journal*. You can read the interview online at *waterwelljournal.com/water-well-journal-qa-12*.

PROPER DECOMMISSIONING OF WELLS IN IDAHO

TOM NEACE, MANAGER
GROUND WATER PROTECTION PROGRAM

Decommissioning of water wells is regulated by the Idaho Department of Water Resources through the Well Construction Standards Rules, IDAPA 37.03.09 (Rules). Well owners are responsible for maintaining and properly decommissioning unused or unusable wells to prevent waste and/or contamination of the ground water resource. The Director may require decommissioning of a well in compliance with the provisions of these rules, if the well:

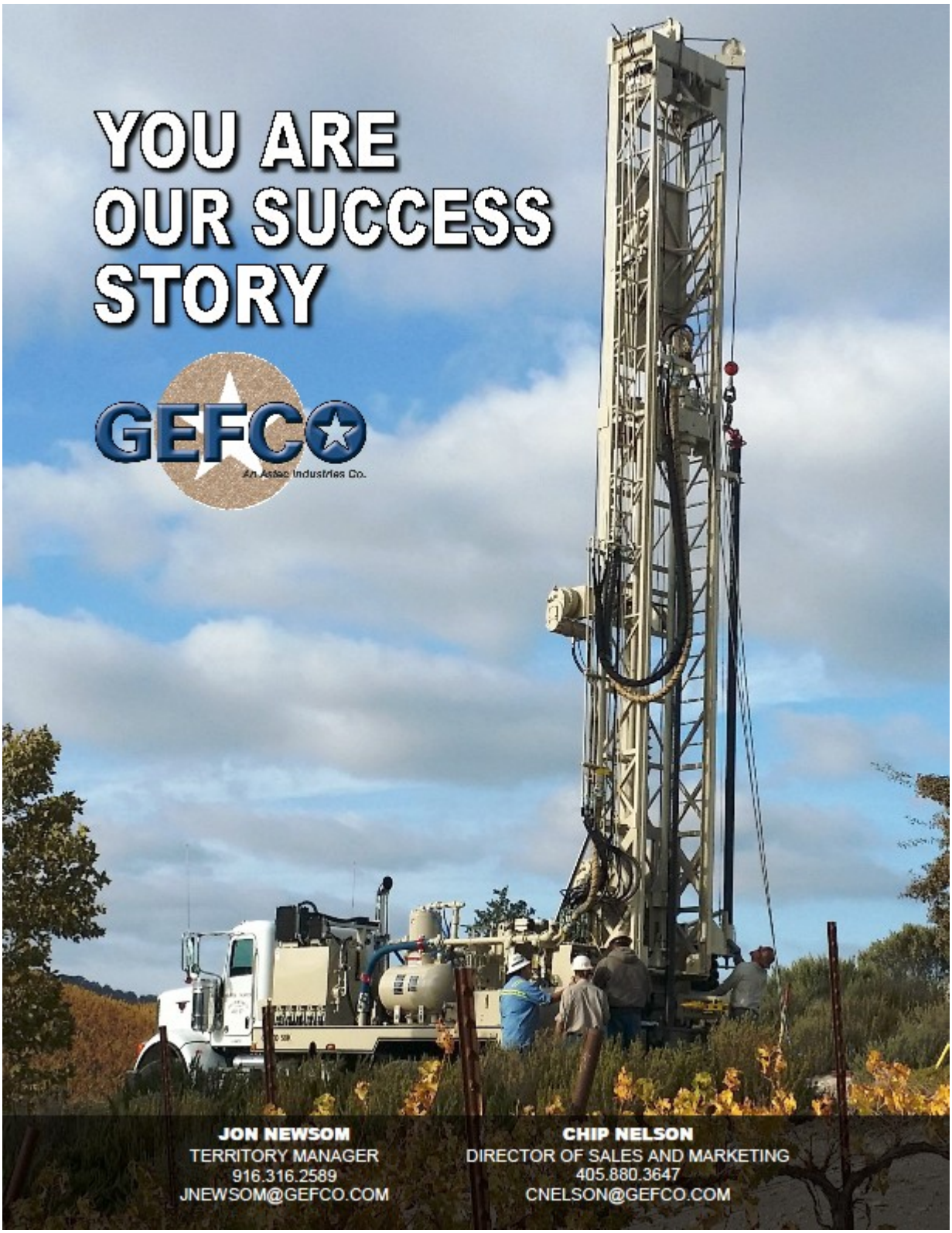
- Does not meet minimum well construction standards
- Meets the definition of an unusable well
- Poses a threat to human health and safety
- Is in violation of IDAPA 58.01.11, "Ground Water Quality Rule"
- Has no valid water right or other authorization acceptable to the Director for use of the well.

Well decommissioning must be performed by an Idaho licensed driller, unless a waiver is granted by the Department. Authorization is required from the Director prior to decommissioning any well. Following the decommissioning of the well, a report must be sent to the Department describing the procedures and seal materials utilized.

The Rules require cased wells without a continuous seal from the top of the intakes or screen to be perforated every five (5) feet from the bottom of the casing to within five (5) feet of the surface. Perforations made must be adequate to allow the free flow of seal material into any voids outside the well casing. There must be at least four equally spaced perforations per section circumference. Approved grout must be pressure pumped to fill any voids outside of the casing. A sufficient volume must be used to completely fill the well and annular space. Alternatively, the driller can fill the borehole with approved seal material if the casing is being removed.

Uncased wells must be completely filled with approved seal material. Dry hole wells or wells from which the quantity of water to meet a beneficial use cannot be obtained must be decommissioned with approved seal material in accordance with the Rules.

A number of wells have not been abandoned due to costs of decommissioning and customer resistance to complying with the Rules. Some drillers and well owners have ignored the Rules regarding decommission of wells or dry holes which should have been properly decommissioned. The Department does have Enforcement Authority to issue Notice of Violations with penalties to both well drillers and well owners for not complying with the Rules regarding decommissioning of wells. If your customer questions the decommission requirements or refuses to comply with the Rules, please bring it to our attention so that we can properly protect the resource. The Department is willing to consider alternative decommissioning plans if the resource will be adequately protected.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Lock-out Tag-out
Really, is that needed?

Hello my friends.
I hope that you have had a great summer full of profit and not so full of accidents.

Today I wanted to talk about the Lock-out Tag-out system. Now, I won't get into major details telling you what OSHA thinks about the system. But, I would like to tell you a little story.

While working on a beet piler, this young man's job was to make sure that the piler would swing from side to side to form a nice pile of beets.

On the third day into the campaign, there was a malfunction. The piler was stopped and this man went to the source of the problem. In the middle of the swing arm was a large gear system that swung the belt back and forth.

The mechanism reminded me of a circle jack for those that know a little bit about cable rigs. Anyway, something had jammed the gear and after he removed the obstruction, he was hanging on the bottom gear to inspect the other side. This is when a co-worker decided to see if the arm was free to move.

When the arm swung to the left, it rolled the top gear over the place that the young man was hanging on to while inspecting. The tons of weight that was on the piler, of course, made short work of this young man's hand. At the hospital, much reconstructive work was done, but let's just say he had to find a new way to play the guitar.

Now, I am being flippant. That is one of the first things that he said when he was waking up from the operations. Was this an accident? Yes! Could this have been avoided? Absolutely!

As we place pressure on our employees and expect more work done in shorter time, accidents can occur. I believe it is our greatest task to have people slow down and think before doing things.

NEWS FEATURE

Shutting down the engine and making sure that no one is around the controls while the machine is being worked on is a must. Do you need all the fancy equipment that is sold with the Lock-out Tag-out system? Well, they would be nice; however, you can just place in the employee instructions booklet things to show that you know the dangers and are working to keep your employees safe.

Example: While I work on a piece of equipment that does not need to not run while I am working on it, I remove the key. Sometimes I just drop it on the floor and sometimes I put it in my pocket. My employees know that if a key is removed from the ignition, they are to find me and ask what I want them to do.

There are other ways to make the job site safer and each one of you have many stories to tell. The short version is teaching them to think about what they are doing; look out for their co-workers; and, keep safety in mind every day. Train and teach!

The young man in the story is my nephew and it changed his life. It is amazing how much you do and how much you cannot do with only a few fingers on your right hand. It was a life's lesson.

Have a great summer and let's be safe out there!

Mike

Mike Lewis, a certified EMT for over 25 years, grew up on a dairy farm in southern Idaho and traveled the world before returning to Idaho where he farmed with his family

IDWR SCHEDULES PUBLIC MEETINGS ON SEPT. 9-11 TO PROVIDE UPDATES ON PHASE 3 OF THE NORTHERN IDAHO ADJUDICATIONS

COEUR D'ALENE – (Aug. 14, 2019) - The Idaho Department of Water Resources (IDWR) will hold a series of six public meetings on Sept. 9-11 in northern Idaho to provide updates on Phase 3 of the Northern Idaho Adjudications.

IDWR officials plan to request fiscal authorization from the 2020 Idaho Legislature so that it can proceed with a water rights adjudication in the Clark Fork - Pend Oreille Basin. The state is also currently seeking public input on whether to ask the Legislature to authorize an adjudication of Kootenai River Basin water rights.

Already this summer, IDWR officials have met with state legislators from District 1 and District 7, as well as Bonner and Boundary County commissioners to discuss Phase 3 of the Northern Idaho Adjudications.

IDWR has been working through the Coeur d'Alene-Spokane River Adjudication since 2008. About 12,000 water rights claims have been filed in that adjudication, which should be completed in 2020. IDWR also has started working on the Palouse River Basin Adjudication. About 1,200 water rights claims have been filed so far in that basin.

The public meetings will be held in Clark Fork, Sandpoint, Bonners Ferry, Coolin, and Priest River over three days as follows:

Monday September 9, 2019
11:00 a.m. – 1:00 p.m.
- Clark Fork Public Library, 601 Main St. Clark Fork, ID

6:00 p.m. – 8:00 p.m.
- Best Western Edgewater Inn, 56 Bridge Street Sandpoint, ID

Tuesday September 10, 2019
1:00 p.m. – 3:00 p.m.
- Bonners Ferry Gateway Visitors Center 6373 Bonner St. Bonners Ferry, ID

6:00 p.m. – 8:00 p.m.
- Bonners Ferry Gateway Visitors Center 6373 Bonner St. Bonners Ferry, ID

Wednesday September 11, 2019
1:00 p.m. – 3:00 p.m.
- The Inn at Priest Lake, 5310 Dickensheet Rd. Coolin, ID

6:00 p.m. – 8:00 p.m.
- Priest River Senior Center, 339 E. Jackson Ave Priest River, ID

Why is an adjudication needed: Water rights adjudications help protect the legal interests of existing property owners. Confirming the legal water rights of landowners, farmers, ranchers, and commercial and industrial businesses helps those existing water users protect their investments against future competition.

Population growth and development can lead to conflicts over resources. In times of shortage, water rights are distributed via a priority system of "first in time, first in right." Under the Prior Appropriation Doctrine, the older, more "senior" water right entitles its holder to fully divert water before any younger, or "junior" water right holder can divert water. Adjudicated water rights establish priority dates, which determine who gets to use the water resource in a time of shortage.

There are several important considerations to keep in mind regarding the Northern Idaho Adjudications. First, water users may defer the filing of claims for the diversion of surface or ground water for domestic or stockwater use for up to 13,000 gallons a day until a later time. Also, although northern Idaho is often considered to be an area of abundant water supplies, much of the water used is diverted from smaller more finite water resources such as springs, small tributary streams, and aquifers.

Some background on the Clark Fork-Pend Oreille Basin water use:
- Of the approximately 2,613 existing water right filings in the basin, only 394 are from the Pend Oreille River or Pend Oreille Lake.
- By comparison, 480 filings are from a spring or springs and 663 are from ground water.
- 794 water right records are unconfirmed statutory claims. It is likely many other uses are unrecorded. Delay makes it more difficult for longtime water users to substantiate the origins (priority dates) of their claims.

Some background on water rights in the Kootenai River Basin:
- Of the approximately 925 existing water right filings in the basin, only 44 are from the Kootenai and Moyie Rivers.
- By comparison, 261 filings are from a spring or springs and 213 are from ground water.
- 229 water right records are unconfirmed statutory claims. It is likely many other water uses are unrecorded. Delay makes it more difficult for longtime water users to substantiate the origins, or priority dates of their claims.

For more information, contact Doug Jones, IDWR Regional Manager, 208-762-2800.

COMMUNITY MILESTONES

CALLING DRILLERS & PUMP GUYS

WATER FOR LIFE NEEDS YOUR HELP THIS WINTER

How thankful we can be for safe water! In the developing countries there ae hundreds of thousands yet without safe water and thousands die daily because of contaminated water or simply because of the lack of water. The little tykes under the age of five are the most vulnerable. Water for Life International (www.h20forlife.org) is 15 years old now and we've recently been successful importing a reconditioned Mayhew 1000 mud rotary into Guatemala; we hope to have an air package there to use this winter also. What fun it was to drill six wells in eight days rather than drilling one well per week with the cable tools. There is still a place for the cable rigs and we will continue using them but our focus this winter, January through March, is to have drillers come back to back for a couple weeks each and keep the rotary turning.

You can help if you're a mud driller (or if you know someone who is)? We rely on volunteers to accomplish our work. If you feel you're too old and broken down please consider coming to assist in training Edgar who is learning the profession. He's a great mechanic and welder and is quick to learn and would benefit from your expertise and experience. Let him do the work and you supervise. You, as a professional driller, have the knowledge necessary to provide a lot of benefit to these destitute people. I guarantee you'll come home and have a greater appreciation for what you have here.

Many of you have told me, "Gary, when you get a rotary down there let me know" so now's the time. Feel free to bring your wife also. The same goes for pump men—we need more of you involved to install hand pumps, submersible pumps, and solar pumps. Translators are always welcome also. If you want to escape winter for a couple weeks (or more) please contact me. You'll need a passport, no visa, no shots, and you'll be rewarded when the water begins flowing in a village, or when villagers tell you "Thank you for the well last year, this is the first year we've lost none of our babies."

This last drilling season one volunteer pump technical ran a test pump with a generator for 2 hours @ 21 gallons per minute in preparation for installing the solar pump. He said very little of the water hit the ground as villagers were there carrying the precious liquid into their humble homes. Need I say more...?

Best regards,

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ESPA WATER VOLUME DECREASES SLIGHTLY; UP 1.8 MILLION ACRE-FEET SINCE 2015

REXBURG, Idaho - (July 25, 2019) – The Eastern Snake Plain Aquifer (ESPA) water level dropped slightly in the last year, but aquifer spring flows are showing a general upward trend overall, indicating that the aquifer is still rebounding as a result of wet winters, ESPA recharge flows, water reductions by ground water irrigators and other measures, hydrologists told the Idaho Water Resource Board on Wednesday afternoon.

The ESPA water level dropped by approximately 50,000 acre-feet based on the mass measurement of 377 ground water wells in late March and early April, said Mike McVay, hydrologist for the Idaho Department of Water Resources.

Last year, McVay reported that ESPA volume increased by 1.4 million acre-feet of water – the largest single-year increase in 80 years. In the epic winter of 2016-17, the ESPA water level rose by 660,000 acre-feet. Changes in aquifer levels often take time as water slowly percolates into the ground and recharges natural springs, he said.

“I think we’re still doing a good job,” McVay said, referring to the board’s ESPA recharge program, which sent 362,400 acre-feet of water into the aquifer in Winter 2018-19, and water use reductions of 240,000 acre-feet by ground water pumpers via the 2015 water settlement agreement. “Most of the ground water well levels on the Eastern Snake Plain were holding steady or increasing slightly.”

The big bump realized in 2018 was largely a result of the big winter of 2017, when hefty snowpack levels in the mountains and on the plain filtered into the aquifer over time. Over the last 5 years, the ESPA water levels have increased by 1.8 million acre-feet, he said. “We are trending in the right direction,” McVay said.

Hydrologists always have known that the ESPA “leaks” as spring flows emerge at Thousand Springs near Hagerman and into the Snake River in multiple locations. “That means aquifer storage can be fleeting,” he said.

Vince Alberdi, a Twin Falls-based board member, said the underlying message is “we have to pray for snow. Despite everything we’re doing, big winters trump everything else. Mother Nature holds the aces.”

“We’ve got to stay on course and keep at this,” added Roger Chase, chairman of the Water Board. “We’re learning more about the aquifer every day, but we are on the right trend line.”

Brian Olmstead, general manager of the Twin Falls Canal Company, agreed that long-term trends are what matters. “After a year like 2017, you’re going to see a decrease, but the year by year data isn’t as important as the long-term trend.”

In looking at the discharge of 17 different springs in the Thousand Springs region near Hagerman and river reach gains from Blackfoot to Minidoka, the overall trend is going in an upward direction, said Matt Anders, a hydrologist for IDWR. He showed a number of hydrographs from the various springs, all showing an uptick over the last several years. For example, the discharge of springs at Thousand Springs increased to 4,500 cubic feet per second from 4,250 cfs in 2016, he said.

Box Canyon springs, Bridal Veil springs and Devils Washbowl are all showing an upward trend, he said.

IDWR is continuing to refine the measurement process to give the most accurate picture possible, officials said.

Contact: Brian Patton, Chief, Planning Bureau, Idaho Water Resource Board, 208-287-4800

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CEC WORKSHOPS

NOVEMBER 5, 2019
Tuesday

CEC Workshop - Coeur d'Alene
Best Western Plus/Coeur d'Alene Inn
506 Appleway Ave

MARCH 4,2020 (*pending*)

CEC Workshop - Pocatello
Clarion Inn
1399 Bench Rd.

IGWA Annual Convention

Nampa Civic Center
JANUARY 22—23, 2020
311 3rd St Nampa, ID
Additional information on our ***website*** and in our ***E-Newsletter*** ***www.igwa.info***

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2020 PACIFIC NORTHWEST GROUND WATER EXPOSITION
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