

# IGWA Bulletin



## THE NEXT GENERATION

Baby Stegan Baker, the next generation of Baker pump guys (Pump Service/Burley), Chase Bishop, Bishop Well Drilling (*lower left*) and Wade Wilson, Gary's Well Drilling (*lower right*) enjoy their first IGWA convention. Wade found out that well drilling continuing education pays. He won the \$100 gift card in the CEC Drawing.





Serving you is our BUSINESS



- Water Well Supplies
- Water Treatment
- Pipeline/Misc.
- Stock Waters
- Custom Build Programs
- Factory Fly In Tours
- Incentive Trips

- Phones forwarded "after" hours
- Calls Always Answered—24/7/365
- Free Delivery
- Hot Shot Delivery Service

[www.2mco.com](http://www.2mco.com)

2M Company, Inc.—Idaho Falls

5296 Heyrend Drive ▪ Idaho Falls, ID 83402

Toll Free: 877-982-7867

2M Company, Inc.—Meridian

130 East Victory Road ▪ Meridian, ID 83642

Toll Free: 800-235-7875

## IGWA 2016 Board of Directors

### President

Kenny Vollmer Jr. 2020  
Vollmer Well Drilling LLC  
vollmer@vollmerdrilling.com  
(208) 317-6314

### Vice President

Legrand Baker 2020  
Pump Service Inc.  
pumpservice@safelink.net  
(208) 300-9043

### Associate President

Marty Baker 2017  
Apex Drilling  
Marty.baker13@gmail.com  
(208) 312-2270

### Associate Vice President

Matt Baker 2018  
APEX Drilling  
matt6.7baker@gmail.com  
(208) 312-2270

### M & S President

Chad Draper 2017  
2M Company Inc.  
cdraper@2mco.com  
(208) 871-1602

### M & S Vice President

Seth Sheets 2018  
Robertson Supply, Inc.  
Nampa, ID 83653  
(208) 466-8907

### Table of Contents:

- 1 Next Generation
- 3 IGWA Board of Directors & Table of Contents
- 4 Legislative Update, *cont'd page 15*
- 5 America's SBDC Idaho
- 7 Proper Use of Casing & Lining, *cont'd 11 & 13*
- 9 NGWA: SplashLink.com
- 15 In Remembrance
- 17 Community Milestones
- 18 NGWA Seeks Volunteers
- 19 Submersible Well Pumps, *cont'd page 22*
- 20 CEC Calendar

### IGWA DIRECTORS

Tony Hackett 2017  
Down Right Drilling & Pump Inc.  
tony@downrightdrilling.com  
(208) 484-8472

Dave Adamson 2017  
Adamson Pump & Drilling Inc.  
adamsondrilling@gmail.com  
(208) 573-1723

Tom Richardson 2018  
H2O Well Service Inc.  
tomr@h2owell.com  
(208) 818-0588

Roger Buchanan 2019  
Andrew Well Drilling Services Inc.  
roger@andrewwelldrill.com  
(208) 681-3517

Dan Denning 2019  
Denning Drilling Inc.  
dennwell@gmail.com  
(209) 390-4600

### Past President

Eric Forsmann 2018  
Stuivenga Vessey Drilling  
eric@svdrilling.com  
(208) 451-4273

### Advertisers:

- 2 2M Company, Inc.
- 4 Water Recovery Services
- 6 Flomatic Corp.
- 8 Rockmore International
- 8 RJB Wholesale
- 10 Western Hydro
- 12 Baroid
- 14 2M Company, Inc.
- 16 H.D. Fowler Co.
- 18 Wyo-Ben
- 21 Mitchell Lewis & Staver



# IS YOUR WELL DYING?

**Don't Replace It — Rehabilitate It with AquaFreed™**

**AquaFreed™ CO<sub>2</sub> Treatment is the Fast and Economical Solution for Well Failures Resulting from Iron Bacteria, Mineralization, Contamination, and Mechanical Plugging.**

Only Water Recovery Services Inc. can offer you the safety and effectiveness of AquaFreed™.

- Complete Well Rehabilitation Services
- Water & Resource Protection Wells
- Serving Washington and Idaho

Contact us today to learn how WRS Inc. and Aqua Freed™ can keep your well functioning at optimum output.  
Call (509) 535-0525 or online: [WRWater.com](http://WRWater.com)



Call (509) 535-0525 | [WRWater.com](http://WRWater.com)  
Water Recovery Services, Inc.  
2209 South Cherry Lane | Spokane, WA 99223

*Well Rehabilitation Experts for Municipal, Agricultural, Commercial, Residential, and Environmental Protection Wells*

## IDAHO LEGISLATIVE

**UPDATE** Water quantity and water quality issues moved quickly to the forefront of this legislative session, starting with the Governor's *State of the State and Budget Address*. The Governor requested \$12 million for aquifer recharge activities and infrastructure, a figure that has since been revised upward to a one-time general fund appropriation of \$16.5 million spread over three years. Although some of this legislation does specifically address the Eastern Snake Plain Aquifer (ESPA), even the issues there are not solely related to agriculture, one aquifer or a specific geographic region.

Idaho needs to be committed to an on-going process to ensure aquifer levels are stable and sustainable. Many of our aquifer systems in Idaho face declining water levels, including the Treasure Valley, Mountain Home, Wood River, Bear River Basin, Rathdrum Prairie, Moscow-Pullman, and Lewiston aquifers. An estimated 95 percent of Idaho's drinking water comes from aquifers. Water quantity and water quality issues for these aquifers are critical to public health, economic development, and sustainable growth.

These issues will affect the future of the welling drilling industry in Idaho. The legislature and public need to know that water is the lifeblood of Idaho – necessary for human health and economic development. The State and stakeholders must do a better job of managing Idaho's water. Whenever possible decisions about managing our water need to be made by Idahoans, understanding the far-reaching impacts of these issues here and across the West.

*continued on page 15*

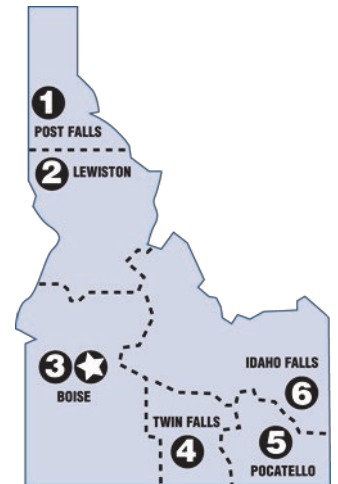


## Idaho's Small Business Development Center (SBDC) is here for your business!

The Idaho Small Business Development Center (SBDC) is a statewide, university-based organization that helps small businesses succeed. SBDC consultants provide guidance in developing and growing a successful business. With six offices located throughout Idaho and affiliated with one of Idaho's universities or colleges, the SBDC is uniquely positioned to link together partners from higher education, the private business community, and federal, state, and local governments.

The Idaho SBDC assistance is available to anyone interested in expanding or starting a private small business in Idaho. Approximately, 98% of all firms in Idaho qualify as a small business and therefore are eligible for assistance from their nearest SBDC office.

Idaho's SBDC provides three key services to Idaho's start up and entrepreneurial communities:



**Consulting:** SBDC's primary service is no-cost confidential consulting tailored to individual businesses' needs. Coaches are available by appointment to help solve any business concern. Most coaches have earned a Master's in Business Administration, or a related degree, and have often owned their own small business.

**Training:** SBDC offers a variety of affordable trainings focused on practical business skills with consultants and local business professionals serve as instructors. Classes complement coaching sessions and help clients progress at an elevated speed.

**Resources:** The SBDC serves as the focal point for coordinating with other programs and services, both public and private, to bring additional expertise and resources for client assistance. They also help clients build strong professional teams to support and advance the business.

Please contact the SBDC if you want to: start a business and need help; expand a business; improve your current business operations; hire employees; develop and market an innovation or new technology; consider exporting.

For contact information for one of the six locations, visit: <http://idahosbdc.org/locations/>

For more information on the SBDC, visit: <http://idahosbdc.org/>

*This concludes a three-part series on the Small Business Administration, Idaho Procurement Technical Assistance Center, and Idaho Small Business Development Center. Our thanks to contributors Larry Demirelli, Gary Moore, Lee Velten, & Katie Sewell.*



# FLOMATIC® VALVE

High Quality Valves Built to Last...



## New VFD Enviro-Check® Valve with a 5 - year warranty

Now Available 1" - 4" Patented VFD Check Valves

(Also available in Ductile Iron and Stainless Steel 1" thru 8")

America's First Choice

New patented submersible pump check valve for use on variable flow demand (VFD) systems and applications. Standard check valves will "chatter" and be noisy when the system goes to low flow, causing eventual failure. The unique Model 80E VFD and 100E VFD valves are designed to minimize flow losses and hydraulic shocks in the pumping system.



Composite Poppet



Stainless Steel Poppet

Flomatic's valves are used by more pump manufacturers than any other valve on the market. This new, exclusive poppet system ensures that the valve smoothly and automatically adjusts to flow changes and is noiseless at even very low flows. Call for complete information at 800-833-2040 or visit us on the web at [www.flomatic.com](http://www.flomatic.com)



FLOMATIC VALVES

High Quality Valves Built To Last...



Flomatic Corporation

15 Pruyn's Island Drive  
Glens Falls, NY 12801

Phone: (800) 833-2040 • (518) 761-9797

Fax: (518) 761-9798 • [www.flomatic.com](http://www.flomatic.com)

Email: [flomatic@flomatic.com](mailto:flomatic@flomatic.com)



# PROPER USE OF CASING AND LINER

BY TOM NEACE, PGE

Inspections and discussions with drillers over the past several years have shown a number of problems related to the improper use of liners in wells. The Idaho Well Construction Standards Rules (Rules), IDAPA 37.03.03 provides a number of key definitions when evaluating casing versus liner. Relevant definitions to this discussion include:

**Casing.** *The permanent conduit installed in a well to provide physical stabilization, prevent caving or collapse of the borehole, maintain the well opening and serve as a solid inner barrier to allow for the installation of an annular seal. Casing does not include temporary surface casing, well screens, liners, or perforated casing as otherwise defined by these rules.*

**Liner. a.** *A conduit pipe that can be removed from the borehole or well that is used to serve as access and protective housing for pumping equipment and provide a pathway for the upward flow of water within the well. b.* *Liner does not include casing required to prevent caving or collapse, or both, of the borehole or serve as a solid inner barrier to allow for the installation of an annular seal.*

**Unstable Unit.** *Unconsolidated formations, and those portions of consolidated formations, that are not sufficiently hard or durable enough to sustain an open borehole without caving or producing obstructions without the aid of fluid hydraulics or other means of chemical or physical stabilization.*

**Screen (Well Screen).** *A commercially produced structural tubular retainer with standard sized openings to facilitate production of sand free water.*

**Artificial Filter Pack.** *Clean, rounded, smooth, uniform, sand or gravel placed in the annular space around a perforated well casing or well screen. A filter pack is frequently used to prevent the movement of finer material into the well casing and to increase well efficiency.*

*continued on page 11*

Figure 1

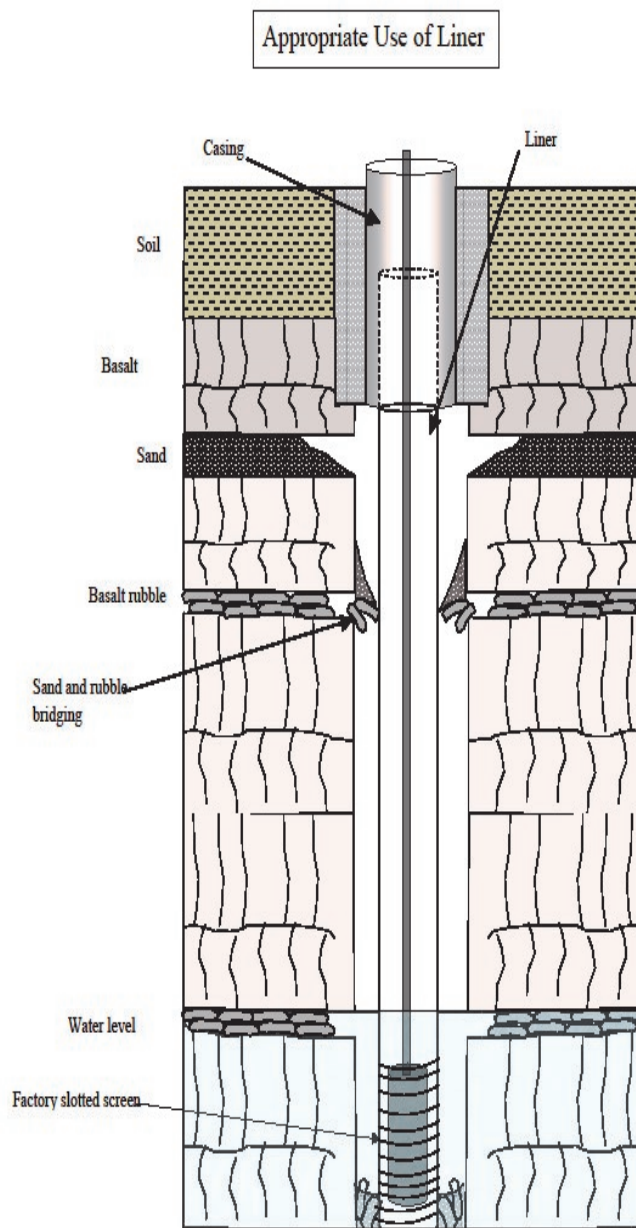


Figure 1 shows an appropriate use of a liner. There should be minimal sediment and or rock that falls between the liner and borehole wall. The liner should be able to be removed from the well and reinstalled if necessary. Manufactured well screen was installed in this example to limit sediment production.



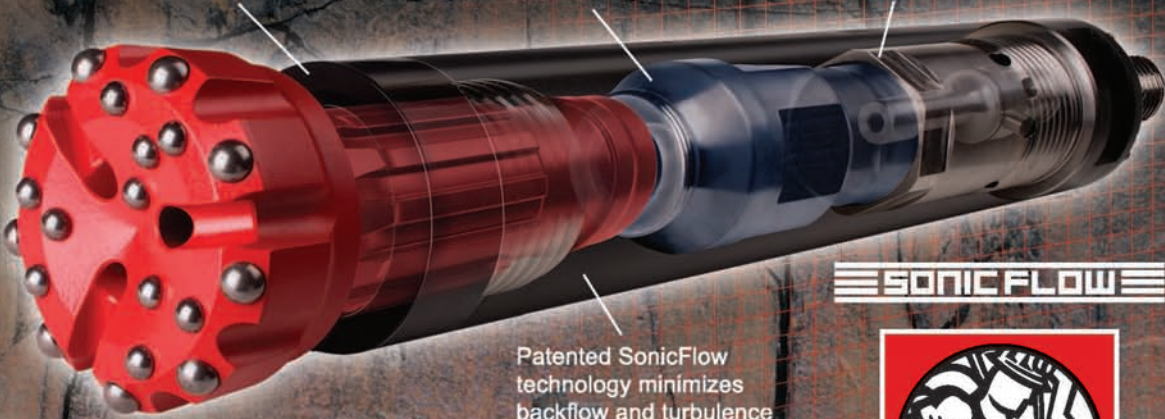
# DRILL MORE

with Rockmore's High Performance DTH Hammer featuring SonicFlow Technology - The ROK Series

Streamlined design means fewer parts, easier maintenance

New piston geometry for more impact energy

Optimized air channels deliver more energy to the piston



Patented SonicFlow technology minimizes backflow and turbulence

**SONICFLOW**



**ROCKMORE**  
INTERNATIONAL

*Rock Drilling Tools*



Rockmore International  
Wilsonville, Oregon, USA  
(503) 682-1001  
Judenburg, Austria  
+43 3572-86300

[www.rockmore-intl.com](http://www.rockmore-intl.com)



TM®

Serving WA, OR, ID, MT, NV  
Northern CA, AK, and B.C.

Delivery to your door by  
Our fleet of trucks

**WHOLESALE**  
INCORPORATED

## **Pipe - Drilling Supplies**

**Steel Pipe 1/8"-36"**

**Well Casing**

**Well Screens**

**Black, Galvanized & Plastic Pipe**

**Bentonite**

**Drive Shoes 4"-24"**

**Well Supplies, Fittings & Valves**

**Since 1973**

(425) 823-1444  
Fax (425) 821-7353  
(800) 875-0431

P.O. Box 2849  
12418 N.E. 124th St.  
Kirkland, WA 98083

[www.rjbwholesale.com](http://www.rjbwholesale.com)

**Members-WSGA, OGWA, IGWA, MWDA, AWWA, BCWWDA**



## NGWA Launches Exciting New Partnership with SplashLink.com

NGWA and SplashLink.com, an online “one-stop” for the water industry, announced a partnership that will give NGWA members easier access to industry bids and projects, as well as funding opportunities throughout North America.

“SplashLink.com provides a resource that is unique in the water industry,” says NGWA Membership Director Trisha Freeman, “We are always looking for ways to simplify our members’ lives, and SplashLink.com is the only service to put projects and funding in one easy-to-use Internet resource.”

SplashLink.com is built exclusively for the water industry and not only provides access to millions in funding as well as thousands of projects, but also has search tools that make it easy to find just the kind of opportunities that are of most interest to each subscribing member.

“The National Ground Water Association is at the forefront of groundwater policy, education, and solutions,” notes SplashLink.com CEO Ebie Holst. “We are proud to partner with them to put new tools at their members’ fingertips.”

NGWA serves more than 11,000 members, has 42 state affiliates, and relationships with dozens of domestic and international partners relevant to groundwater issues.

“The scope of NGWA is impressive, but what is even more impressive is their commitment to their members,” says SplashLink.com Vice President Jason Wuliger. “We share their passion for the industry.”

Two of the many SplashLink.com features that will now be available to subscribing NGWA members are customizable email alerts and enhanced visibility within the marketplace through the SplashLink.com directory.

“We were impressed by SplashLink.com’s ability to help our members avoid missing projects they could be working on,” Freeman adds. “Part of our core mission is advancing the success of our members, and SplashLink.com is a way for NGWA to do just that.”

*NGWA members can now get an extra two weeks free on a SplashLink.com subscription by using promotional code NGWA-Splash16.*

To learn more, visit <http://info.ngwa.org/servicecenter/splashlink.cfm>.

**WESTERN HYDRO** offer's complete custom fabrication of Goulds, Franklin and Berkeley centrifugal, submersible and lineshaft turbine pumps at one of our 5 machining and assembly locations.

Call the Turbine team toll free at (866) 446-9898  
or email your requirements to [turbine@westernhydro.com](mailto:turbine@westernhydro.com).



**Contact the stocking location nearest you!**

- |  |                                  |
|--|----------------------------------|
| • Salt Lake City, UT<br>(801) 886-3434 | • Lacey, WA<br>(360) 456-0544    |
| • Burlington, WA<br>(360) 428-4704     | • Portland, OR<br>(503) 723-5021 |
| • Pasco, WA<br>(509) 546-9999          | • Medford, OR<br>(541) 773-6966  |



As a 'Green' alternative, we offer complete pumping systems for pools, agriculture, residential and commercial applications from Lorentz and Franklin. Solar systems can save thousands of dollars in electrical costs annually!

Toll Free - 800-972-5945

**Western Hydro locations carry:**

- Casing, Pipe and Fittings
- Drilling Fluids and Expendables
- Water Conditioning Equipment and Supplies
- Pump Cable
- Valves
- Fittings
- Meters
- Switches
- Monitoring Supplies





The Department has received multiple complaints regarding problems with thermoplastic pipe. In some cases a plastic liner was used in fractured bedrock, which later collapsed as a result of rock movement in an unstable unit. The well described in this situation should have steel casing installed because of the unstable unit.

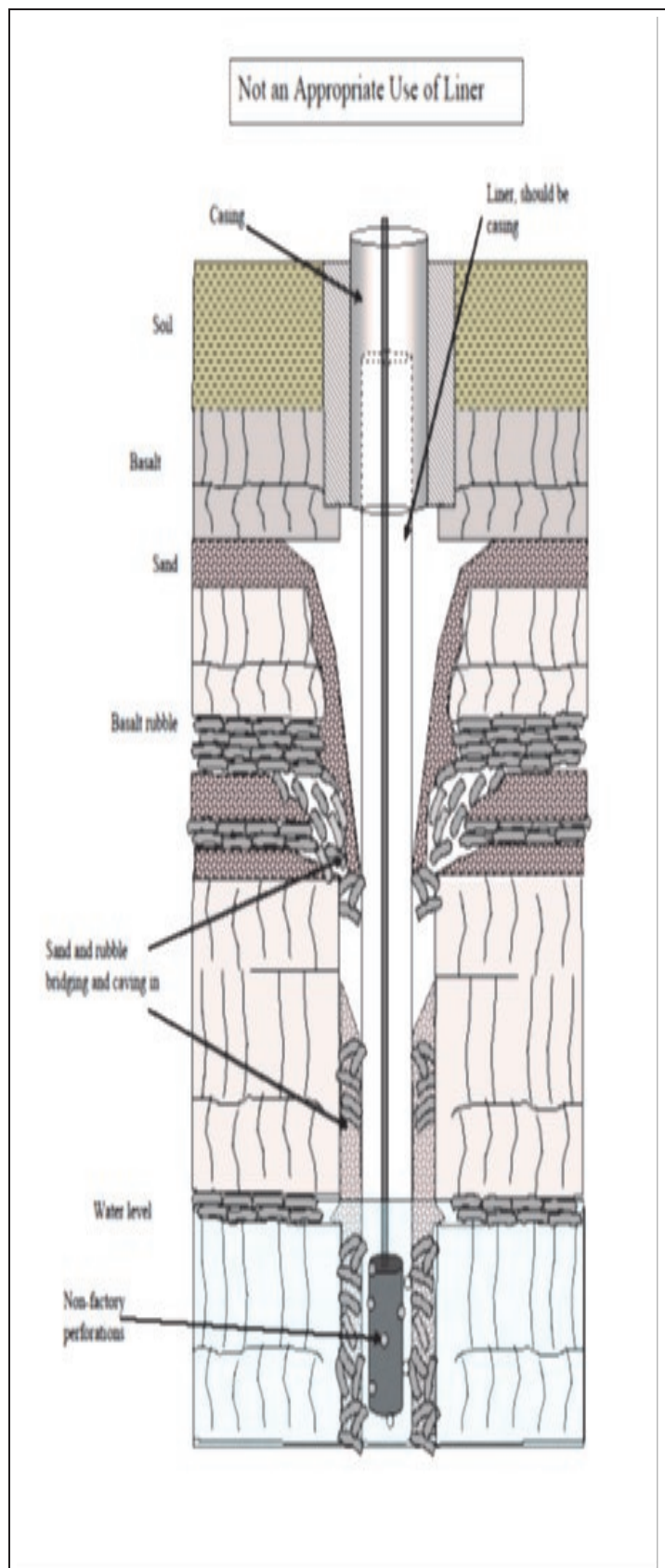
Other complaints have involved PVC pipe used as liner in an open hole within unconsolidated sediments. This construction has caused excess sand production in some wells. Manufactured screen and an artificial filter pack should be used to manage sediment production if necessary. The Rules limit sand production to less than 15 parts per million.

The following diagrams illustrate the proper use of casing and liner. *Figure 1* shows an appropriate use of a liner. There should be minimal sediment and/or rock that falls between the liner and borehole wall. The liner should be able to be removed from the well and reinstalled if necessary. Manufactured well screen was installed in this example to limit sediment production.

*Figure 2* shows an inappropriate use of a liner. In this case the formation is unstable and significant collapse of rock and sediment surround the liner. Large holes were drilled into the bottom of the liner to allow for water to flow into the pump chamber. Sand and small rock fragments enter into the liner through the large drilled holes preventing removal of the pump and/or the liner

*continued on page 13*

Figure 2





*The Sign of Service.  
The Symbol of Quality.*

- Grouts •
- Drilling Fluids •
- Well Cleaning Chemicals •

Local Contact:

***Kirby Donald*** (503) 702.5731  
***Vince Hazelton*** (406) 672.4681  
***Jack Sowers*** (425) 501.5230

**Baroid Industrial Drilling Products**  
Product Service Line, Halliburton

P.O. Box 1675 Houston, TX 77251  
(877) 379.7412 or (281) 871.4613  
[www.baroididp.com](http://www.baroididp.com)

© 2014 Halliburton. All Rights Reserved



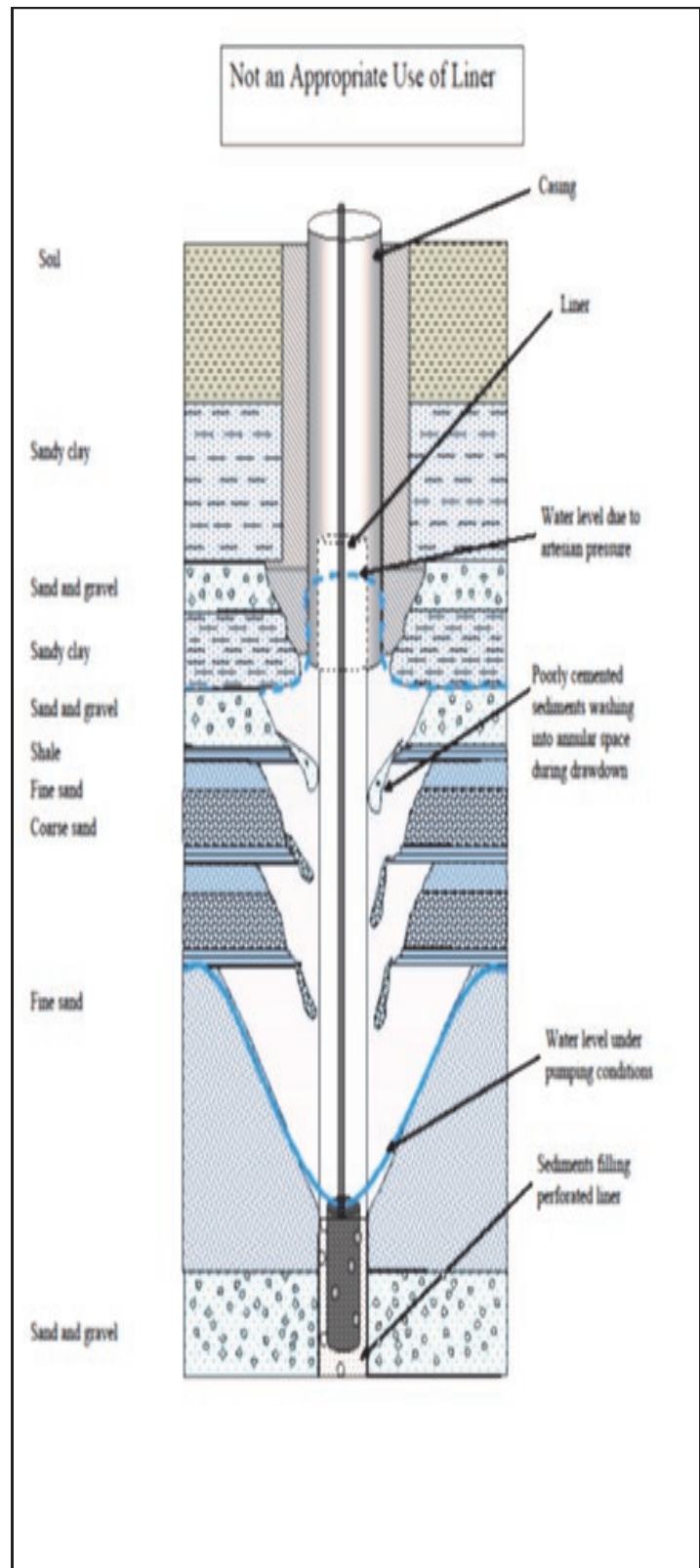
Figure 3 shows an example where a well is drilled into unconsolidated sediments and a liner is set. The water level moves significantly down as the pump comes on and comes back up when the pump shuts off. This results in significant sediment filling in the liner and pumping sediment into the water system.

Drilling and well completion in an area underlain by unstable units should be cased with steel well casing to minimize problems from subsurface movement of rocks and sediment. Wells in some areas of the State produce sand because of the presence of fine unconsolidated sediments. Commercially produced well screens along with the appropriate filter pack can eliminate or control sand production.

###

*Thomas Neace is a registered professional geologist in Idaho since 1990 and has over 25 years of experience in hydrogeology, geology, ground water remediation and well construction. He is Manager of the Ground Water Protection Section at the Idaho Department of Water Resources since 2006 regulating well construction, driller licensing, injection wells and geothermal drilling/development.*

Figure 3





[www.2mco.com](http://www.2mco.com)

## Simplified Water Treatment Systems

It's hard to beat our line of high-quality and affordable water treatment systems.

- Comprehensive range of quality water treatment products and accessories
- Water Softening for scale
- Iron filtration for staining and metallic taste
- Sulphur removal for odors
- Conditioners to remove bacteria
- Reverse osmosis drinking water systems
- Whole-house filtration systems



# WaterRight®

2M Company, Inc.—Idaho Falls

5296 Heyrend Drive ▪ Idaho Falls, ID 83402

Toll Free: 877-982-7867

2M Company, Inc.—Meridian

130 East Victory Road ▪ Meridian, ID 83642

Toll Free: 800-235-7875



## *In Remembrance*



### **Lynn Douglas Bartholomew**

**June 26, 1946 - January 4, 2016**

Lynn Bartholomew, 69, of Spokane, WA passed away on January 4, 2016. The Memorial Service will be held January 30th, 3:30pm at Linwood Seventh-day Adventist Church, 6525 N Monroe St, Spokane, WA. Lynn was born in

Spokane, WA on June 26, 1946. He graduated from Upper Columbia Academy and continued on to receive a degree in Aircraft Mechanics from Spokane Community College. Lynn was married to Kathie on June 8, 1969; they were married 46 years. Lynn worked as Owner/Operator of Northwest Hydro-Fracturing for 30 years. Lynn is survived by his wife Kathie, children: Jeff (Carolyn) Bartholomew, Janell (Paul) Bailey, Sangi (Paul) Knouff and Dan (Ann) Bartholomew and 9 grandchildren. His brother Gary (Angie) Bartholomew, sister-in-law Carol Harvey, brother-in-law Ron (Marian) Schultz, 6 nieces & nephews and other family and friends. In lieu of flowers memorial donations may be given to Spokane Countryside SDA Church, Security Camera/Sign Fund. Gifts may be sent to 12107 W Seven Mile Rd, Spokane, WA 99224

---

### **LEGISLATIVE UPDATE**, *continued from page 4*

One such issue is recharge. Incidental recharge occurs naturally when water returns to the aquifer from precipitation, snowmelt, river losses, and even irrigation practices such as canal seepage. Managed recharge is different from incidental recharge in that it changes the timing and location of when and where water returns to the aquifer. Both are beneficial.

As for the session itself, the rules review process is winding down. The deadline for rule adoption or rejection is March 4<sup>th</sup>. The Joint Finance-Appropriations Committee (JFAC) finished its budget hearings in mid-February. The budget setting process is underway in JFAC with a tentative completion date of March 11<sup>th</sup>. This is one of the sure-fired indicators that this legislative session is passing its mid-point. To date, no major problems or conflicts have surfaced to delay or extend the session.

IGWA opposes S1243 that would allow certain irrigation districts to enter into contracts to construct or deepen wells. With no consensus in the water community, it is most likely this bill not be heard this session. On the energy front, three oil and gas bills were introduced recently, one in the House and two in the Senate. They address recordkeeping and procedures relating to permitting and drilling of oil and gas wells. HO454 amends and adds to existing law to create the Damage Prevention Board and to provide for its duties regarding the prevention of damage to underground facilities passed the House and is now in the Senate.

Follow the Idaho legislature on the internet at <https://www.legislature.idaho.gov/>



# H.D. FOWLER COMPANY

Much more than pump materials.

H.D. Fowler Company is the oldest and largest independent distributor of waterworks, irrigation, pumps and wastewater treatment equipment in the Pacific Northwest, and one of the largest in America.

**Boise**  
**208.846.8366**

**Idaho Falls**  
**208.522.3466**

**Jackson**  
**307.733.0355**

**Twin Falls**  
**208.734.8838**

**Bozeman**  
**406.388.1169**

## What you need when and where you need it.

- Solar pumping solutions
- Now stocking Octave Meters- IDWR approved
- Ask about our Boise Pump-Build Program





# COMMUNITY MILESTONES

## 2016 AUCTION RAISES \$7156

**Our thanks to all who donated, bid, and supported  
IGWA'S CRISIS FUND!**

---

**IGWA would like to thank** everyone who helped make the 2016 Annual Convention & Trade Show a success: the attendees, vendors, board, CEC Committee, and a final shout-out to our **Platinum Sponsors**



**& Silver Sponsor**



**Other CEC opportunities:** If you need credits to **relicense** in 2016, check out **IGWA's CEC Workshops on March 11th in Nampa and March 17th in Fort Hall**. More information on page 20 or at [www.igwa.info](http://www.igwa.info).

Another option is the **Pacific Northwest Ground Water Expo in Portland, OR on March 18-19th** at Red Lion Hotel on the River - Jantzen Beach

**IGWA Member Business Listings:** Have you checked out your business listing on IGWA's website? It's conveniently located on the Membership tab. Click on the gold box, explore the features, and see your website! If you are new member, your listing will be posted later this spring. IGWA is helping customers find you!

## PRODUCTS TO DEVELOP AND PROTECT IDAHO'S GROUNDWATER



### DEVELOP

*using High Performance Drilling Fluid Products*

### PROTECT

*with ENVIROPLUG® Well Sealants*

#### POLYMERS/ADDITIVES

- UNI-DRILL®, liquid mud and hole conditioner
- WYO-VIS®, HP liquid polymer
- WYO-VIS®, DP dry polymer

#### GROUTS

- TD-16®, Time Delay granular bentonite
- ENVIROPLUG® GROUT
- ENVIROPLUG® MEDIUM & COARSE
- THERM-EX GROUT®

#### LOSS CIRCULATION MATERIAL

- PLUGZ-IT™/MAX

#### MUD THINNER AND WELL DEVELOPMENT

- THINZ-IT®

#### DRILLING MUD AND FOAMS

- EXTRA HIGH YIELD™ GEL
- AIR FOAM®

**WYO-BEN, Inc.**  
**1.800.548.7055**  
**www.wyoben.com**



## NGWA SEEKS VOLUNTEERS FOR WATER WELL PUMP SYSTEMS STANDARD DEVELOPMENT

NGWA is calling for professionals to volunteer their time as subject matter experts in the creation of a new American National Standards Institute third-party-accredited standard for water well pump systems.

Volunteering on committees and task groups can be used toward continuing education requirements for NGWA Certification—including working on draft standards.

More information about the Water Well Pump Systems Standard is available at [www.ngwa.org/Professional-Resources/standards/Pages/Water-Well-Pump-Systems.aspx](http://www.ngwa.org/Professional-Resources/standards/Pages/Water-Well-Pump-Systems.aspx).

Meetings will be hosted online via collaborative software, conference calls, and email communication. While all of these are helpful, the only technology necessary to participate in task group work is a telephone and preferably a fax machine or email address.

Interested volunteers are asked to respond as soon as possible by filling out the Standard Development Task Group application located at the link above.

For more information, contact Jessica Michell at [jmichell@ngwa.org](mailto:jmichell@ngwa.org) or (800) 551-7379 (614-898-7791), ext. 511.



## Issue: Use of Submersible Well Pumps in Bodies of Water

Warren Wing, Electrical Program Manager, Idaho Division of Building Safety

**Background:** Recently, the Division of Building Safety (DBS) became aware of the fact that the submersible well pumps being installed in bodies of water are not listed by the pump manufacturers for that application. For many years, these pumps have been routinely utilized to provide both domestic water and irrigation for properties bordering lakes and rivers, primarily in north Idaho.

### Baseline requirements for utilization of electrical equipment in Idaho:

1. Title 54 chapter 10 §54-1001, Idaho Code states: “From and after the taking effect of this act, all installations in the state of Idaho of wires and equipment to convey electric current and installations of apparatus to be operated by such current, except as hereinafter provided, shall be made substantially in accord with the National Electrical Code”. Idaho has currently adopted the 2014 edition of the National Electrical Code.

2. Article 110.3 of the 2014 National Electrical Code relating to the examination, identification, installation, and use of equipment stipulates:

“(A) **Examination.** In judging equipment, considerations such as the following shall be evaluated:

(1) Suitability for installation and use in conformity with the provisions of this *Code*

*Informational Note: Suitability of equipment use may be identified by a description marked on or provided with a product to identify the suitability of the product for a specific purpose, environment, or application. Special conditions of use or other limitations and other pertinent information may be marked on the equipment, included in the product instructions, or included in the appropriate listing and labeling information. Suitability of equipment may be evidenced by listing or labeling.*

(B) **Installation and Use.** Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling.”

**Certification and approval of electrical products and materials:** All electrical materials, devices, etc. are required to be approved for the use intended. IDAPA 07.01.10 § 011 states the following:

### 011. CERTIFICATION AND APPROVAL OF ELECTRICAL PRODUCTS AND MATERIALS.

In the state of Idaho, all materials, devices, fittings, equipment, apparatus, luminaires, and appliances installed or to be used in installations that are supplied with electric energy shall be approved as provided in one (1) of the following methods:

**01. Testing Laboratory.** Be tested, examined, and certified (Listed) by a Nationally Recognized Testing Laboratory (NRTL). (3-20-14)

**02. Field Evaluation.** Non-listed electrical equipment may be approved for use through a field evaluation process performed in accordance with recognized practices and procedures such as those contained in the 2012 edition of NFPA 791 - Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation published by the National Fire Protection Association (NFPA).

**Conclusion:** Submersible Well pumps are listed (approved) for specific purposes. Per Underwriters Laboratories, submersible well pumps approved under UL 778 have not been evaluated for use in bodies of water where swimming, boating, and other recreational activities take place. Therefore, the listing of submersible well pumps under UL778 does not suffice to allow the Idaho Division of Building Safety to approve these types of pumps for applications other than those addressed in the listing of the equipment in question. Further, UL approvals are contingent on any listed equipment being utilized in conformance with the manufacturer’s instructions for installation and use.

*Continued on page 22*

**2016 Pacific Northwest  
Ground Water Exposition**

**March 18-19**

**Red Lion Hotel on the River  
Jantzen Beach—Portland, Oregon**

Phone 503-283-4466 for reservations

[www.PNWGWA.org](http://www.PNWGWA.org)

800.551.7379



614.898.7791

An advertisement for Digline. It features a black wheelbarrow with a white shovel stuck in it. The text "Call 811 Before You Dig!" is written on the wheelbarrow. Below the wheelbarrow, the text "Digline has a New Number!" is written in red. Underneath that, a paragraph explains the service: "Before you plant a tree, excavate a foundation, install a sprinkler, install a fence, or dig a hole for any reason, protect yourself by calling 811 two working days in advance. This is a free service!". At the bottom, there are two logos: the Digline logo with a red circle and a white shovel, and the 811 logo with a white shovel and the text "Call Before You Dig".

**IDAHO GROUND WATER ASSOCIATION**  
**2016 CONTINUING EDUCATION EVENTS**

**MARCH 11, 2016 REGISTRATION NOW OPEN**

CEC Workshop - Nampa  
Hampton Inn  
5750 E Franklin Rd

**MARCH 17, 2016 REGISTRATION NOW OPEN**

CEC Workshop - Pocatello  
Shoshone-Bannock Hotel  
I-15 Exit 80

**April 29, 2016**

CEC Workshop Lewiston  
Red Lion Hotel  
621 21st. Street

\$100 Member Registration; \$150 Non-Member Registration  
\$15/\$200 At the Door

Agenda & Registration Forms available at [www.igwa.info](http://www.igwa.info)



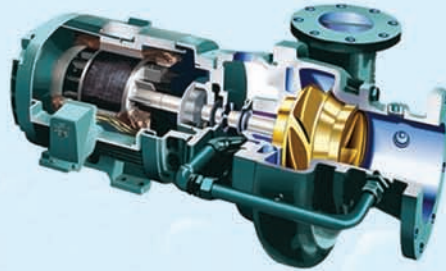


**PUMPS • PARTS • MOTORS • CONTROLS • SERVICE**

Since 1882, Mitchell Lewis & Staver has served the Pacific Northwest, providing superior products and service.

Today, Mitchell Lewis & Staver provides top quality pumps, turbines, drives, panels, water systems & conditioning along with packaged systems to the Agriculture, Municipal, Industrial and Residential markets.

Mitchell Lewis & Staver is a proud member of the IGWA. This year, we're excited to announce the addition of Cornell Pumps. Call or visit us online for more information!



**Featuring:**



**866-748-8077**  
**www.mitchellewis.com**



**Meridian, ID**  
800-325-8168

**Midvale, UT**  
800-733-6065

**Spokane, WA**  
800-938-0196



Idaho Ground Water Association

P.O. Box 2624 Boise, ID 83701-2624

4477 W Emerald, Ste C-250 Boise, ID 83706-2000

P: (208) 381-0294 E: [www.igwa.info](http://www.igwa.info)

## **Submersible Well Pumps,** *continued from page 19*

The Division of Building Safety has been searching for another accepted standard that would apply to submersible well pumps being utilized in a body of water, but has been unable to identify such a standard. The Division encourages interested parties to bring forward any information relative to an applicable standard and pumps that have been tested and listed for utilization in the circumstances discussed in this paper.

Employing an approved field evaluation testing agency to conduct a field evaluation of the pump for utilization in the proposed application is not a viable option unless/until a proper standard can be identified to facilitate the review process.

Other pumping equipment can be utilized in conformance within the listing parameters of alternative pumps to safely provide domestic and irrigation water to lakeside properties.

### **Policy:**

As a result of this investigation process the Division of Building Safety is adopting the following policy.

1. Submersible Well pumps are not listed for use in swimming or marine areas, and such an application of the submersible pump typically conflicts with the manufacturer's installation and usage instructions. Therefore, The Division of Building Safety cannot approve the installation of submersible well pumps and associated wiring in bodies of water where swimming, boating, and other activities take place that could place the public in danger.
2. When existing submersible well pumps located in bodies of water where swimming, boating, and other activities take place that could place the public in danger are replaced, any replacement pumps must be approved for the application and be installed in conformance with the manufacturer's installation instructions.
3. Installations of approved equipment, installed in accordance with labeling, listing and manufacturer's instructions, used to withdraw water from bodies of water will be approved in accordance with Idaho Division of Building Safety's standard permitting and inspection procedures, in accord with adopted rules, statutes and the National Electrical Code as adopted by the State of Idaho.

If you have any questions or concerns, please let me know.

### **Warren Wing,**

Electrical Program Manager  
Idaho Division of Building Safety,  
1090 E. Watertower St., Ste. 150  
Meridian, ID 83642  
(208) 332-7147  
[Warren.wing@dbs.idaho.gov](mailto:Warren.wing@dbs.idaho.gov)