

*WWJ* thought it would be interesting to see what issues are impacting groundwater contractors in the United States as well as in England. Part 1 of a two-part series.

ave you ever had one of those workdays where you thought to yourself, "I'd like to pack up, move out, and start somewhere else."?

It's okay; we've all had them. But here's what's interesting. What caused you to grab your hair and want to pull it out is probably happening wherever you would have laid down new roots.

*Water Well Journal* recently spoke with groundwater professionals at a drilling firm in the heartland of the United States, as well as some at a business in the center of England. Interviewed were contractors who have been in the industry for decades as well as some who have been in the field for nearly 10 years or so.

As one would expect, the veterans and the drillers early in their career have some different views and approaches regarding the current state and future of



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#### By Thad Plumley

the industry. But regardless of what side of the pond the contractor was on, the answers were somewhat similar at times too.

This is the first of a two-part series in which we will look at the issues facing contractors in the United States and England. In this article, we talk with veteran contractors. The July issue will wrap up with comments from the semiseasoned professionals.

*WWJ* spoke with Tom Downey, CWD/PI, the president and CEO of Downey Drilling Inc. in Lexington, Nebraska, and Chris Dodds, a founding director of Dales Water Services Ltd. in Ripon, North Yorkshire, England, for this installment.

A lifelong industry professional, Downey began working as a water well driller beside his father. He has also been active in professional associations and was the National Ground Water Association president in 2006.



Tom Downey, CWD/PI

In 2012, he was awarded with NGWA's Oliver Award, the highest honor given by the Association for a lifetime of contributions to the groundwater industry.

Downey Drilling designs and installs complete water well systems for agriculture, domestic, commercial, residential, and municipal systems, and for geothermal loop fields. It also does well rehabilitation and pump efficiency work.

Dodds is perhaps one of the United Kingdom's leading authorities on borehole water supplies. Having been involved in water well supply systems since the 1960s, he has a vast understanding of what it



Chris Dodds

takes to deliver projects from smallscale domestic installations through large systems for industries and largescale farms. He is still involved in the day-to-day operations at Dales.

Dales Water Services was formed in 1979 and serves residential and indus-BOTH SIDES continues on page 26

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trial customers. It does drilling and pump installation as well as water treatment, maintenance, and geothermal work.

Here's what Dodds and Downey had to say on a variety of topics.

## *WWJ:* What is the most important issue you are dealing with as a water well contractor today?

**Dodds:** Over the past 20 years, health and safety have become the most important aspect of what we do. This has always been something that has been considered, but the part it plays in every job is now vastly increased with suitable risk assessment methods statements having to be produced for every individual site. The focus was previously on safety with little attention being given to work-related health conditions, which has also changed.

*Downey:* For us, and I imagine this is regionalized, it's the labor force. We've been extremely busy due to the drought, but we have struggled to find enough people—especially the right people, people who are willing to learn and work and move up the chain. The unemployment rate where we're at is less than 3 percent, so we've had to try some different avenues that we haven't tried in the past. You can have a lot of work and can buy equipment, but you need the right people.

### *WWJ:* How do you see the ground-water market today?

**Dodds:** Water is as important today as it was 20 years ago and consequently the industry is still thriving, but now it's a crowded and competitive marketplace. Several companies have come into the industry trying to make quick money at the expense of standards, the environment, and the customer. However, if the customer is sufficiently and honestly advised in part by the driller and engineer, they usually make the best decision.

*Downey:* For us in an agricultural-based area, irrigation is king. The drought has created a lot of work and I don't see it softening. We've added equipment; we

A borehole for a water well is drilled by a crew from Dales Water Services Ltd. on farm site owned by a stately home in England.



thought it was worth the investment and we were lucky and found more help. We are doing a lot of replacement pump work right now. That said, even if the additional work would soften, I think there are other avenues for the equipment we have.

### *WWJ:* Where do you see the market going in the coming years?

*Dodds:* With client focus now on renewable energy, cost minimization, and long-term infrastructure thinking, there is no reason that the groundwater industry will not continue to thrive in coming years. The market will no doubt remain competitive, but as long as those who want to carry out work to the highest standards maintain their efforts, those companies should be able to deliver high-quality projects and make good livings.

*Downey:* There are some areas (in Nebraska) that have opened up (for agricultural work) and I don't see more opening up. That will go away and some other new stuff may soften, but I'm optimistic that replacement work will continue. We're working on the next generation of equipment because this land was developed in the late '60s and '70s. The market is going to continue to grow for a while.

WWJ: What do you think has made the biggest impact in the water well drilling industry in the last 20 years? Is it a new innovation, technology, rule, something other? Downey: That's a tough question; it's hard to pick one thing. But collectively in the last 20 years I would say on the positive side it would be VFDs (variable frequency drive systems) and what you can do with them. They are now impacting every aspect of the industry. They were around more than 20 years ago, but they have really been refined in the last 20 years. We have them on everything from what is watering the cattle all the way to the wastewater systems.

*Dodds:* Prior to April 2005 in England and Wales, Scotland being under a different system

and regulator, every borehole or water well drilled required an abstraction licence from the Environment Agency. This requirement gave absolute control to the regulatory authorities over what activities took place in the groundwater industry. It created additional paperwork, but also protected groundwater resources.

In April 2005, deregulation took place so that any individual or company could abstract up to 20 cubic meters per day (approximately 4400 gallons) without the requirement for an abstraction licence from the Environment Agency. This had positive and negative impacts in England and Wales.

Positively, many sites fell out of regulation, such as domestic householders who really did not require high-level regulation and monitoring. People who may have previously been put off from having a water well supply because of regulatory requirements were now interested in having a supply, thus increasing demand.

However, negatively, the groundwater industry was inundated with companies who were out to make a fast buck with little care for the customer, the environment, or the regulator. These companies have taken the relaxation of the law into their own hands and taken full advantage of a scheme that was in place to save the regulator, customer, and contractor additional paperwork in a water-rich country. Customers have had poor installations, the environment has been impacted, and contractors and customers are drilling water wells and boreholes and saying that the supply is for less than 20 cubic meters per day when they are actually abstracting much more water. Legitimate contractors who advise of the correct procedures and requirements are consequently more expensive and they lose business.

## *WWJ:* How is contractor safety different now than when you first started in the water well industry?

*Downey:* When I started, I don't think you thought about it. Perhaps it was exposure or awareness; it was actually probably both. But it goes back to the workforce. When I started, people were coming off of farms to work and they had been driving a tractor since they were big enough to see over the steering wheel. They had a good working knowledge of equipment. That's not necessarily the case today and the approach to safety is much different. It's the first thing you think of now and you think about it every day.

*Dodds:* In the 1970s, the relationship with health and safety was considerably different to how it is now. It was there, but was there as a secondary issue to getting the job done. This is definitely no longer the case. With the introduction of modern laws and modern thinking, the primary responsibility of any work that we undertake is now to do it safely so that everyone can go home at the end of a working day in the same state that they arrived at work in.

#### *WWJ:* How big an impact have government rules and regulations been on the industry in your time as a driller?

*Dodds:* Government rules and regulations have had a considerable impact on the industry, and that will no doubt continue well into the future. Some of the regulations brought in to control, moni-

Tom Downey, CWD/PI, the CEO of Downey Drilling Inc., mans the controls of a rig on a job site in Nebraska.



tor, and improve things have definitely been of value.

The Water Resource Act, to protect the water environment, or the Private Water Supplies Regulations, to maintain standards of infrastructure and water quality for householders, have definitely been positive moves and have impacted the industry positively without being overbearing. However, occasionally the government has gotten things wrong, and as a consequence those in the industry who want to do things properly have suffered.

*Downey:* We've been more impacted by the truck stuff (Department of Transportation regulations). (Water well drilling) licensing in Nebraska happened in my time and we're better because of it. We're licensed in six states and I don't think anything is extreme. The good thing is a lot of the folks writing those rules are from the industry. From that standpoint, I think our industry has really stepped up.

With the DOT stuff, it seems like we are always working hard to keep up on everything, but people can still find something. I think it all comes down to awareness.

# *WWJ:* I've heard fair and accurate pricing has been an issue in the industry for decades. Do you still think it's a problem? What can solve it?

*Downey:* I don't think it's as prevalent a problem as before. In the boom years, a lot of companies came and went and

some just went. And when they did, they didn't retire with anything in the pot because of their prices. You have fewer companies now, and with that, you have bigger companies. With that, you often get better benefits. Someone is always going to be cheaper, but I think people are more aware of the cost of doing business today.

*Dodds:* This industry is unique. Drilling for groundwater is part exploration every time despite good scientific knowledge through hydrogeology. This, among other things, affects price both for the company and customer involved. However, things are improving as better ways of commu-

nication with customers explain the different pricing options that face them.

*WWJ:* Do you find customers more aware of details about their water system than 20 years ago? Do you feel they're more educated because of information that can be found online? *Dodds:* The Internet is useful; it provides a bank of data and information that can be accessed quickly and assist in delivering the project. The chances are that if you are facing a technical problem that you haven't seen before and that can still happen even after 20 years—then someone somewhere in the world will have also faced it and perhaps put a helpful hint on the Internet.

However, this is a double-edged sword. Customers are definitely more educated than they were 20 years ago and a lot of this is derived from searching the Internet. It is often the case that customers are far from selective as to where they attempt to source information from. They're more aware of their water system than they were 20 years ago, but often they have taken something as gospel when they read it online, and (a) it is incorrect, or (b) it may be correct but is not correct for their situation. This leads to them making poor decisions, becoming unwilling to listen to advice from people who have been doing this for a long time, and wanting a system that will never work.

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Downey: Customers are more educated in all phases of the industry. We have people coming in building a house and wanting a residential system who know what a VFD is. On the geothermal loop field side, we have people knowing what a loop field is and asking us questions about the up-front costs. They've learned something from a power company and are asking us questions about it. On the agriculture side of the business, we have farmers who are so big they're operating their pivots on a computer or with their phone. They know all about how things work. Everyone we deal with is more educated now because of the Internet.

#### *WWJ:* How have you seen the importance of professional development and trade associations change in your time?

**Dodds:** Personal professional development for staff and management has become very important. Having a highly skilled, varied, and knowledgeable workforce is now key to winning and completing jobs successfully. People also want this for themselves; it is no

### "Over the past 20 years, health and safety have become the most important aspect of what we do."

longer just about take-home pay as it was more than 20 years ago. Don't get me wrong; that is still important, but people now want a package to include their development and knowledge base to improve them personally.

**Downey:** From a personal standpoint, I think at the beginning (of being in an association) I wanted to soak it all in, learn as much as I could, and build relationships. I didn't realize at the time the value of those personal relationships. Now I know that they're invaluable. I used to call people when I had a problem and it helped me out so much. Now years later, people are calling me and that's all right; that's a cool thing.

With (continuing education points), certification, and licensing, associations have been valuable at getting people better. It's like a doctor—you have to continue to train and learn how to do things the right way.

#### *WWJ:* Do you still remember a piece of advice you received early on in your career? Who told it to you and what was it?

*Dodds:* Harry Wilson, a driller during the Second World War and into the 1960s, always told me, "If you're going to do it, do it right." It's something that I still live by today on every contract I'm involved in.

**Downey:** I don't know if I can pick one thing by one person. I was taught by my dad to work hard, and from competing in and officiating high school sports I learned that every night I want to get better. Our approach here at the company has always been that every day we want to get better.

One thing I have lived my professional and personal life by is: Always be firm, fair, and consistent in everything you do. *WWJ* 

Water Well Journal thanks staff members at Downey Drilling Inc. and Dales Water Services Ltd. for participating in this series. Look for part 2 in your July issue of WWJ.