I recently returned from the ACE16 conference in Chicago, which is the largest conference in North America sponsored by the American Water Works Association and features more than 500 exhibitors, 1000 presentations, and hundreds of opportunities to interact with other water professionals from the United States, Canada, and around the world.

I attended several committee meetings, division meetings, and many great presentations. I had the opportunity to attend the H2Open Forum, which featured Tracy Mehan, AWWA executive director of government affairs, and Peter Grevatt, director of the U.S. Environmental Protection Agency’s Office of Ground Water and Drinking Water. It was a conversation between two seasoned professionals on a wide variety of topics and I was impressed by some of the things Peter had to say.

Since 2014, which was the 40th anniversary of the Safe Drinking Water Act, there have been three major water quality events that have rocked the drinking water world. They include the release of toxic chemicals into the source water of Charleston, W.Va., in January 2014 when a tank near the Elk River leaked 4-methylcyclohexanemethanol (MCHM) into the source water of the city, resulting in a “do not use” order for West Virginia American Water’s system. Shortly thereafter, in August 2014, the City of Toledo experienced a cyanotoxin contamination event in its source water from Lake Erie after an algal bloom. And, most recently, the Flint, Mich., water crisis has dominated drinking water conversations after lead was found in the water system and in the bloodstreams of children in Flint’s service area.

Each of these events impacted consumer trust and confidence in the drinking water in our country. As water professionals, we think we should be able to do a better job to ensure that our supplies and our customers are protected. In all of these cases, EPA responded with additional testing requirements, additional monitoring guidelines, and additional health advisories.

All of these additions to the guidelines will remain a part of our lives as water professionals for many years to come. They highlight new concerns or initiatives that we now need to consider and prioritize as members of the water industry. The first is source water protection. We need to look harder at what is allowed to be built and stored near our water supplies. We need to understand that natural phenomena, such as drought and climate change (including increased water temperatures and sea-level rise), may impact our source water and may increase future algal blooms. And we need to acknowledge that our customer population may be changing and shifting.

In the case of Flint, the demographics have changed significantly over time and the customers remaining are financially disadvantaged and fewer than before. Water age, changing populations, and financial issues, including an ability to pay for water treatment and improved water quality, are all real issues in today’s water world.

The last takeaway from this conversation between Peter and Tracy was the need to be aware of social justice issues in our profession. As EPA or state regulators issue health advisories for new or emerging contaminants (which may have always been there, or we just learned how to measure or detect them), we need to respond. We need to be able to explain to our customers what the advisories are about, what they can do to protect themselves, and what we are doing to improve water quality and protect our source water. We need to figure out how to supply safe water to those who may not have the ability to pay.

Drinking water programs are driven first and foremost by protection of public health. Issuing health advisories at the federal level is a much quicker way to get information out to the public and the regulated community when there is a new or emerging contaminant or a contamination event. This process does not include significant opportunity for public comment. When Tracy asked Peter why EPA has recently issued more health advisories than regulatory determinations, he stated that it gets the information to the public and water professionals faster. Whether advisories become regulations will be determined over time. The regulatory process takes, on average, 12 years from start to finish, but health advisories can be issued in months.

Whether they become law or not, EPA plans to continue on this path, and as water professionals, we will need to react, get current and accurate information and education on the issues, and respond to our customers. Remember that what we do every day first and foremost is the business of protecting public health.