

Source Water Protection at the Strategic Level

G. Tracy Mehan III



The concept of source water protection for potable water—embodied in AWWA’s Utility Management Standard G300, *Source Water Protection*, and originally highlighted in the 1996 amendments to the Safe Drinking Water Act (SDWA)—is making a comeback. Yet so many challenges to the provision of healthy drinking water are out of the control of utility operators. Per- and polyfluoroalkyl substances (PFAS) are a group of persistent, bioaccumulative toxins (commonly referred to as “forever chemicals”) that are driving new regulations at the state and federal levels, most particularly under the SDWA and Superfund program, which will materially affect utility operations. Inevitably, these regulations will affect customers because of increased costs related to treatment, carbon residue disposal, and long-term operations and maintenance. All of these PFAS compounds found in source waters are the result of industrial and consumer products that have been commercially available for decades.

And while PFAS tend to get a lot of media attention, recall the shutdown of the Toledo water system in 2015 due to harmful algal blooms in Lake Erie, largely the result of unregulated agricultural runoff that polluted the city’s source water. Added to the list of source water threats are deforestation, forest fires, wastewater discharges, stormwater, and bromide from power plants trying to comply with the Clean Air Act. In all of these cases, drinking water systems are at the mercy of other parties over whom they have no control or influence. Utilities are dependent on a collection of watershed and out-of-watershed players who may not be doing their part to protect sources of safe drinking water. These players include regulators in areas outside of drinking water. For instance, bromide discharges from power plants might be regulated under the Clean Water Act (CWA), and PFAS should have been addressed before entering commerce under the Toxic Substances Control Act (TSCA).

AWWA has provided technical comments to the US Environmental Protection Agency (EPA) on the opportunities for protecting drinking water from PFAS under TSCA, and we will continue to press the case in that program, which is not part of EPA’s Office of Water. This is not to discourage the efforts of many AWWA members who labor at the watershed level to practice sound source water protection, using their own resources, expertise, and the networks of related partners. But a strategic

focus on source water protection by industry, government, agriculture, and municipalities can put the wind at the backs of these local efforts in ways that utilize these sectors’ own knowledge, financial assets, and in the case of regulators, regulatory authorities.

AWWA’s Government Affairs office in Washington, D.C., has worked for several years now to operationalize strategic source water protection at the federal level. For example, the revisions embodied in the 2018 Farm Bill recognized the importance of source water protection for the first time in conversations at the US Department of Agriculture (USDA), and the bill mandated an allocation of 10% of its funds specifically for source water protection. Before the 2018 revisions to the Farm Bill, USDA focused almost entirely on CWA goals pertaining to ambient water quality that centered on impaired waters (“the worst first”) and total maximum daily loads for pollutants allowed to enter a water body. But implementing these new provisions of the Farm Bill has not been easy. It takes time to build relationships with each state conservationist and his or her State Technical Committee, and mutual understanding between the agricultural and water sectors requires hard work and patience. Still, drinking water utilities now have a seat at the table, and many are benefiting financially from several conservation programs. Discussions are also underway for the next reauthorization of the Farm Bill, and there’s focus on how to more fully optimize source water protection.

Not forgetting about the opportunities under the CWA, AWWA has also provided comments on EPA’s Preliminary Effluent Guidelines Program Plan 15. Effluent limitations guidelines (ELGs) can work to manage pollutants at the source, or at least upstream of a drinking water intake, and can protect receiving waters as part of the comprehensive protection of source waters. Unfortunately, the average age of an ELG is more than 30 years, and the program merits a review with a focus on current issues, and most urgently, source water protection.

Source water protection needs to be implemented at the strategic level to maximize the benefit to the nation’s drinking water supply and keep water affordable for consumers. ♦

G. Tracy Mehan III is executive director of government affairs at AWWA. He may be contacted at tmehan@awwa.org.

<https://doi.org/10.1002/awwa.1974>



