Source water protection is more important than ever—especially in Florida—as an average of approximately 900 net people per day are populating our state. The better the quality of our source water, the less expensive the capital and operational costs of our water treatment systems are to provide the highest quality drinking water to customers. Additionally, maintaining and protecting high-quality source water reduces risks for contamination of a drinking water supply.

The support of the American Water Works Association (AWWA) of this premise is noted in its official policy statement on the quality of water supply sources:

“AWWA strongly supports securing drinking water from the highest quality sources available and protecting those sources to the maximum degree possible” (AWWA, 2010).

The AWWA also strongly encourages “implementation of proactive approaches by utilities to safeguard, maintain, or improve the quality and/or quantity of drinking water sources and their contributing areas” (AWWA, 2022).

Per a U.S. Geological Survey study (Water Withdrawals, Uses, and Trends in Florida, 2015; U.S. Geological Survey, 2020), in 2015 approximately 15,319 million gallons per day (mgd) of water were withdrawn in Florida, of which approximately 63 percent (9,598 mgd) was saline water and approximately 37 percent (5,721 mgd) was freshwater. Of the saline-water withdrawals, surface-water sources accounted for approximately 98 percent of the withdrawals, while groundwater sources accounted for approximately 2 percent. Of the freshwater withdrawals, groundwater accounted for approximately 3,604 mgd (63 percent) and surface water accounted for the remaining 2,117 mgd (37 percent).

The primary goal of AWWA is to support water utilities in the evaluation and improvement of their water quality, operations, maintenance, and infrastructure. A key provision is the AWWA standards program, which has existed for more than 100 years to produce peer-reviewed standards for the materials and processes used by water and wastewater utility industries. These standards, which are approved by the American National Standards Institute (ANSI), are recognized worldwide and have been adopted by many utilities and organizations. The AWWA standards program is designed to assist water and wastewater utilities and their service providers in meeting the expectations of their customers, investors, and government regulators. The standards developed under the program are generally intended to improve a utility’s overall operations and service.

One of these standards, ANSI/AWWA Standard G300, Source Water Protection, is for a drinking water facility to use to protect its drinking water supply sources. The G300 is a standard within AWWA’s utility management standards program. The first edition of ANSI/AWWA G300 became effective on July 1, 2007, was revised on June 1, 2014, and is currently being updated, with a revised edition expected in 2022.

The G300 identifies six key components of a successful local source water protection (SWP) program, including:

- Program Vision
- Source Water Characterization and Assessment
- Program Goals and Objectives
- Action Plans Development
- Action Plans Implementation
- Program Metrics Evaluation

Stakeholders play an important part in source water protection. As highlighted by AWWA, “Involvement of relevant outside stakeholders is usually essential for development and implementation of a successful source water protection program” (AWWA, 2022). Utilities may already have partnerships with relevant stakeholders, and the formation of new partnerships at the watershed and local levels is essential for effective source water protection.
an effective approach to engage stakeholders. These stakeholders may be very diverse and include those financially impacted by the cost of drinking water treatment.

What gets measured gets done. Additional source water protection resources have been developed recently by AWWA and are available free of charge on the www.awwa.org website, including:

- Operational Guide to ANSI/AWWA G300 (AWWA, 2017)
- Source Water Protection Justification Toolkit (AWWA, 2018)
- Source Water Protection Performance Metrics (AWWA, 2021)
- Source Water Protection Performance Metrics Tool, including Excel file, users guide, and training presentation (AWWA, 2021)

The AWWA Technical and Education Council (TEC) funded the development of the 2021 source water protection performance metrics publication to serve as a guide for measuring source water protection metrics. The publication identifies example quantitative and qualitative performance metrics for a range of source water protection measures.

In addition, AWWA initiated the first-ever Source Water Protection Week in 2021 during the last week in September to raise awareness about the importance of protecting drinking water sources.

Other national resources include the Farm Bill passed by the U.S. Congress in 2018 and administered by the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). The Farm Bill is offering approximately $4 billion dollars over the next 10 years to conservation practices that protect sources of drinking water. Financial assistance programs offered by NRCS in Florida through the Farm Bill (https://www.nrcs.usda.gov/wps/portal/nrcs/main/fl/programs/) include the Conservation Stewardship Program (CSP) and the Environmental Quality Incentives Program (EQIP).

If you are passionate about source water protection in Florida, please reach out to me, and the FSAWWA TEC and FSAWWA Water Utility Council (WUC), as we expand our footprint utilizing AWWA's and other national and local resources to help safeguard water quality at the source in ever-growing Florida.