WATER INDUSTRY

FINDING NEW WAYS TO COMBAT THE 'SILVER TSUNAMI'

We have all become familiar with the term "silver tsunami". The concept refers to the demographic shift in the workforce resulting from the retirements of the baby boomer generation, which leads to knowledge gaps and labor shortages in various industries.

In the context of the water and wastewater industry, the silver tsunami effect is magnified by an industry-specific labor shortage which existed before the baby boomer retirements began. Addressing these challenges requires proactive strategies to ensure a smooth transition and continuity in operations.

In 2019, Pennsylvania Municipal Authorities Region 1, which encompasses Bucks, Montgomery, Chester, Delaware, and Philadelphia counties, met to discuss the struggle with the industry's aging employee population and the lack of interested new parties. Six municipal authorities, in close proximity to each other, came together to discuss a unique program that introduces the industry to the next generation of workers to create a potential future workforce. The program's goals are to achieve this through a formal mentoring program, job-shadowing opportunities, and collaborative projects that foster knowledge sharing.

Each authority was encouraged to provide industry experts to mentor applicants with a passion for career paths such as environmental science, engineering, chemistry, mechanics, and construction. These industry experts would be requested to pass on their valuable knowledge and experience to these potential new workforce candidates.

Member Authorities including the North Wales Water Authority, Warwick Township Water & Sewer Authority, North Penn Water Authority, Montgomery Township Municipal Sewer Authority, Warminster Municipal Authority, and the Chalfont/New Britain Joint Sewer Authority developed and implemented the eight-week program known as the Water & Wastewater Internship Program (WWIP) where interns rotate through the six organizations gaining exposure to all aspects of water, wastewater and stormwater operations. A variety of potential candidates are targeted ranging from high school graduates, technical schools, community college students and students in four-year degree programs.

Unforeseen Circumstances

The initial tasks associated with developing the internship program addressed all aspects, including intermunicipal agreements, payroll, website design, recruiting, advertising, wages, etc. Everything was moving along nicely for a spring 2020 rollout when the COVID-19 pandemic arrived. The program was placed on hold indefinitely until 2022 when it was finally

implemented. The program's goals and initiatives are as follows:

- Work with state-of-the-art equipment and innovative technologies used in water and wastewater treatment. Gain hands-on experience in operating and maintaining wastewater treatment systems, learning about the latest techniques.
- Gain valuable experience and skills that are highly sought after in the industry and provide meaningful work experience for the interns that will expose them to various opportunities in the industry.

- Educate the interns on safety guidelines and provide necessary resources, protective equipment and materials required for them to perform their task or execute projects. Interns would not be placed in a hazardous or dangerous situation.
- Closely supervise the intern throughout their work time and appoint a staff member to oversee, guide and mentor them both professionally and personally.
- Provide industry "real world" exposure to the participants including operations, construction, regulatory compliance, laboratory training, GIS/SCADA, administration, etc.
- Provide networking opportunities to build strong connections within the water and wastewater industry and interactions with professionals from various organizations.
- Educate applicants about our industry and potentially develop a talent pipeline to ensure that critical positions are filled with capable individuals who can step into key roles as experienced employees retire.

The WWIP is currently in its second year of operation, and continues to develop and grow. The results of the program to date have far exceeded initial expectations. Several of the interns have gone on to secure rewarding positions within the participating organizations or at other leading companies in the field. As the program continues to unfold, our hope is that it will have a cascading impact on the industry. With continued growth and expansion of the program across the state, the water and wastewater industry can better navigate the silver tsunami, ensuring that there will be a competent and capable workforce ready to meet the challenges of the future. The program's creators would be glad to assist or answer questions for utilities that have a desire to participate or form their own program.

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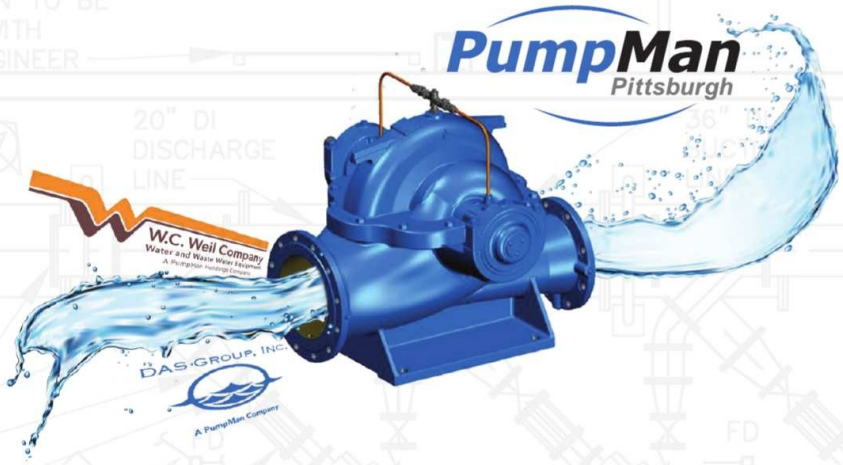

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Quotes from the Program Directors:

"This internship program is more than just an opportunity for aspiring professionals. It is a call to action for those who wish to become the guardians of water resources, driving positive change in our communities,"

– Mike Sullivan, NBCMA Executive Director

"The program was developed with a clear and consistent policy of not having the interns serve as our annual summer workers, typically completing tasks such as hydrant painting, mowing grass, washing vehicles, and providing low-cost labor. We have frequently spoken about the tremendous career opportunities available in this industry at local schools and career fairs. But we did not stop there, as we followed our words with action. The Internship Program has been a remarkable success in introducing a diverse group of intelligent and motivated group of individuals to our Authorities and the water and sewer industry – and it should certainly be continued."

– Robert Bender, NWWA Executive Director

"The internship program can serve as a critical step for individuals unclear of their future after the completion of high school. It exposes the next generation of workers to the expansive list of career paths available for many varied interests including stewarding the environment, working in construction, using technology such as robotics or graphical information systems, and of course sciences such as biology and chemistry. It provides so much insight to what your future can be."

– Shannon Drosnock, MTMSA Executive Director

"The 'silver tsunami' is real and is present at WMA. We have had five retirements in the last two years. For the five employees combined, we lost 154 years of experience. Succession planning is key to avoid any employments gaps, because in this industry, you cannot have operations interrupted. This internship program allows the younger generation to be exposed to industry needs for maintaining critical infrastructure. There will be more retirements industry wide, and we hope this program gains traction across the state to fill those gaps."

– Daulton George, WMA Assistant General Manager