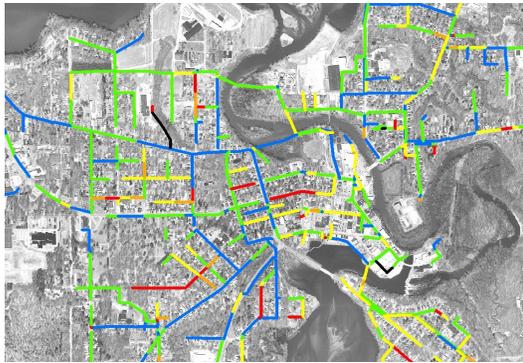


Smarter Planning for our Water, our Communities' Future

Leonardo da Vinci observed that “Water is the driver of nature.” Certainly, water is vital to sustain life and deserves our attention. While we cannot control the levels of our Great Lakes, we can and must be vigilant and proactive in managing our water distribution. The delivery of municipal drinking water is now in the spotlight of concern for many. How should we respond?

First we need perspective. According to the Centers for Disease Control (CDC), water treatment and disinfection have made U.S. tap water one of the greatest health achievements of the 20th century. One needs only to visit a third world country or an area ravaged by war or natural disaster to witness this truth.

But we can't stop there; over time our society has created complex water (drinking, waste, and storm) distribution systems underground throughout our communities, allowing water to be easily accessible and disposable. However, these networks of pipes and valves have a finite life expectancy. So, we need a plan to maintain



and replace our aging water infrastructure. These systems are vast, created over long periods of time, and designed and managed by a lot of different people. How do we determine what we have and the condition of the various parts of our underground systems?

At Prein&Newhof we applaud the State of Michigan's response to this challenge. In 2013, it initiated the Stormwater and Wastewater Asset Management Plan Grant Program. This program is making it possible for communities to inventory their systems by gathering current data regarding the condition of pipes, structures, and other assets in these systems, and compiling it into layered, 'smart' maps.

Laboratory Testing is Crucial for Water Management

Last year Prein&Newhof's Laboratory ran nearly 18,000 lead tests. That was before the discovery of lead in Flint's water supply.

Since 1974, our laboratory has been testing drinking water, well water, wastewater, groundwater, leachate, and surface water. We are Drinking Water Certified by the Michigan Department of Environmental Quality for microbiology, organic chemistry, inorganic chemistry, and metals, including lead and copper.

The Department of Environmental Quality also recently amended Michigan's Safe Drinking Water Act. Communities are now required to implement a Drinking Water Asset Management Program by January 1, 2018, for all functionally and financially significant assets in Michigan's water systems.

Asset management programs are vital for maintaining high-quality infrastructure for the lowest long-term cost. By identifying the location and physical condition of pipes, manholes, and stormdrains, community managers can make sound financial decisions. Routine maintenance and replacements are more affordable and ideally less disruptive to daily services than reacting to failures with costly emergency spending they typically demand.

Working Together is Top Priority

On May 13, 2016, Governor Snyder issued an Executive Directive to MDOT calling for more collaboration between local governments and utility companies on future infrastructure projects. He explains, “Modernizing Michigan's aging infrastructure requires significant investment, and we can minimize costs and disruption by enhancing collaboration on planning and projects.” He continues, “This directive aims to identify those opportunities where we can upgrade water and sewer infrastructure at the same time roads and bridges are being done.”

Collectively, we must recognize our ownership stake in our water systems (drinking, waste, and storm) and realize that we have been underfunding these services. By embracing the tools that help us coordinate and manage our utilities, we can wisely invest our money to uphold these essential public resources for future generations. As we make these improvements, let's see farther and take care of related road or bridge problems at the same time. Together we will improve our state's fiscal sustainability and responsibility.

Want to know more about asset management planning? Contact **Brain Vilmont, PE**, P&N Asset Management Specialist at 616-364-8491 or bvilmont@preinnewhof.com.

Waiting on test results can hold up your projects and distract you from important work. Let us take care of the details. You can count on us for high quality, well-documented and scientifically sound results. We offer a variety of sample collection options, and after testing we'll provide your results in the format you prefer.

For more information, contact P&N Lab Manager **Mary Lenardson** at 616-364-7600 or mtenardson@preinnewhof.com.

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The Michigan Water Environment Association selected Mark Prein, PE and Nate Ver Heul, PE (photo) as the 2016 James R. Rumsey Award recipients for their paper and presentation on the challenges associated with design, startup, and operation of a treatment facility required to meet strict phosphorous levels.



Do you know the locations of your underground pipes? How about prioritizing your replacements and repairs based on risk of failure and consequence of failure by rating the 'criticality' of each pipe?

Let us help you with your Asset Management plan.





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In Memory of Eric Westra, P&N Colleague and Friend

In May of 2016, Prein&Newhof lost a dear colleague and friend, Eric Westra. Eric joined Prein&Newhof in 2014, and worked with our municipal engineering team. During that time, he primarily focused on the Worth Township Sewage Disposal System Improvements project in Sanilac County, which involved approximately 150,000 lineal feet (roughly 28 miles) of sanitary sewer and force main pipe. As part of the planning process, Eric worked with the client and state agencies to acquire the permits necessary for construction. He also corresponded with residents to secure easements and to accommodate property owners.



“Eric’s technical abilities combined with his people skills helped him succeed in the vital, yet delicate task of properly communicating with countless members of the community. It was an honor to know and work with Eric for the time that he was with P&N. His faith, optimism, determination, and courage was unavoidable, especially during his fight against cancer,” said Team Leader Mark Prein. Eric is deeply missed by Prein&Newhof.

Prein&Newhof Welcomes Four More Professionals

Travis Siddall joined P&N in April as a Construction Observer. Travis graduated from Ferris State University with a bachelor’s degree in construction management and an associate degree in civil engineering technology. He has experience in construction management and coordination.

David Cadena joined P&N in May, working as a Construction Observer from our Muskegon office. David has experience working in the construction and health fields.

Cody Cantu joined P&N in May, after graduating from Western Michigan University with a bachelor’s degree in civil engineering. Cody is assisting with Structural Engineering from our Grand Rapids office.

Kayla Fournier joined P&N in May, as our Internal and Client Communications Specialist, working from our Grand Rapids office. She has a bachelor’s degree in social relations and policy from Michigan State University’s James Madison College.

Prein&Newhof specializes in:

- Civil & Environmental Engineering
- Environmental Consulting
- Surveying
- Geographic Information Systems
- Laboratory Testing

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