



ENVIRONMENTALLY FRIENDLY

DULUTH-BASED ENVIRONMENTAL TROUBLESHOOTERS HAS GROWN INTO A FULL-SERVICE FIRM

To understand Craig Wilson's passion for his profession, you have to go back about 50 years. It was a spring day in 1976, and Wilson found himself peering over the Lester River Bridge on London Road. Below, he observed several steelhead trout swimming in circles. Duluth was immersed in a drought, and the river's low water level prevented the fish from making their way further upstream to spawn.

A 9-year-old Wilson was captivated.

"That's how the whole thing started," Wilson, now 57, says with conviction.

"Over the years, we've just kind of morphed into new markets, either because our clients encouraged us or we saw an opportunity. And also because I like to do new things."

- CRAIG WILSON, ENVIRONMENTAL TROUBLESHOOTERS

Thus began a mutually beneficial relationship with the outdoors. After encountering the steelhead, Wilson became a familiar face at Lester River, working the murky water for trout and salmon.



PHOTO BY STEVE ISOLA, ADMAX



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"That was the way I spent my childhood," he says. "Pretty much every waking moment, much to my parents' chagrin, I spent fishing – every day I could in the spring and fall. So I have a real passion for what I do."

What Wilson does – and has done for the past 29 years – is own Duluth-based Environmental Troubleshooters, a comprehensive environmental consulting and contracting firm. Wilson founded the company in 1995, a decade after he graduated from Duluth Cathedral. In between, he earned a bachelor's degree in biology and a master's in industrial hygiene from the University of Minnesota Duluth.

The prospect of being a business owner had long appealed to Wilson. He just didn't know exactly what the process would or should look like.

"That was always my desire," Wilson says. "I just didn't know exactly how it was going to work. It was something I wanted to try if ever I had the opportunity."

Opportunity arose, Wilson seized it and Environmental Troubleshooters was born. Humble beginnings could best describe its infancy, which isn't atypical for an upstart business. Wilson didn't try to be a jack-of-all-trades early on. Rather, he focused on a couple areas in which he was especially well-versed – wetland consulting and industrial health and safety. At the time, he was strictly

consulting, from his own home, and not yet doing any of the actual remediation or restoration.

Wilson was finding his niche.

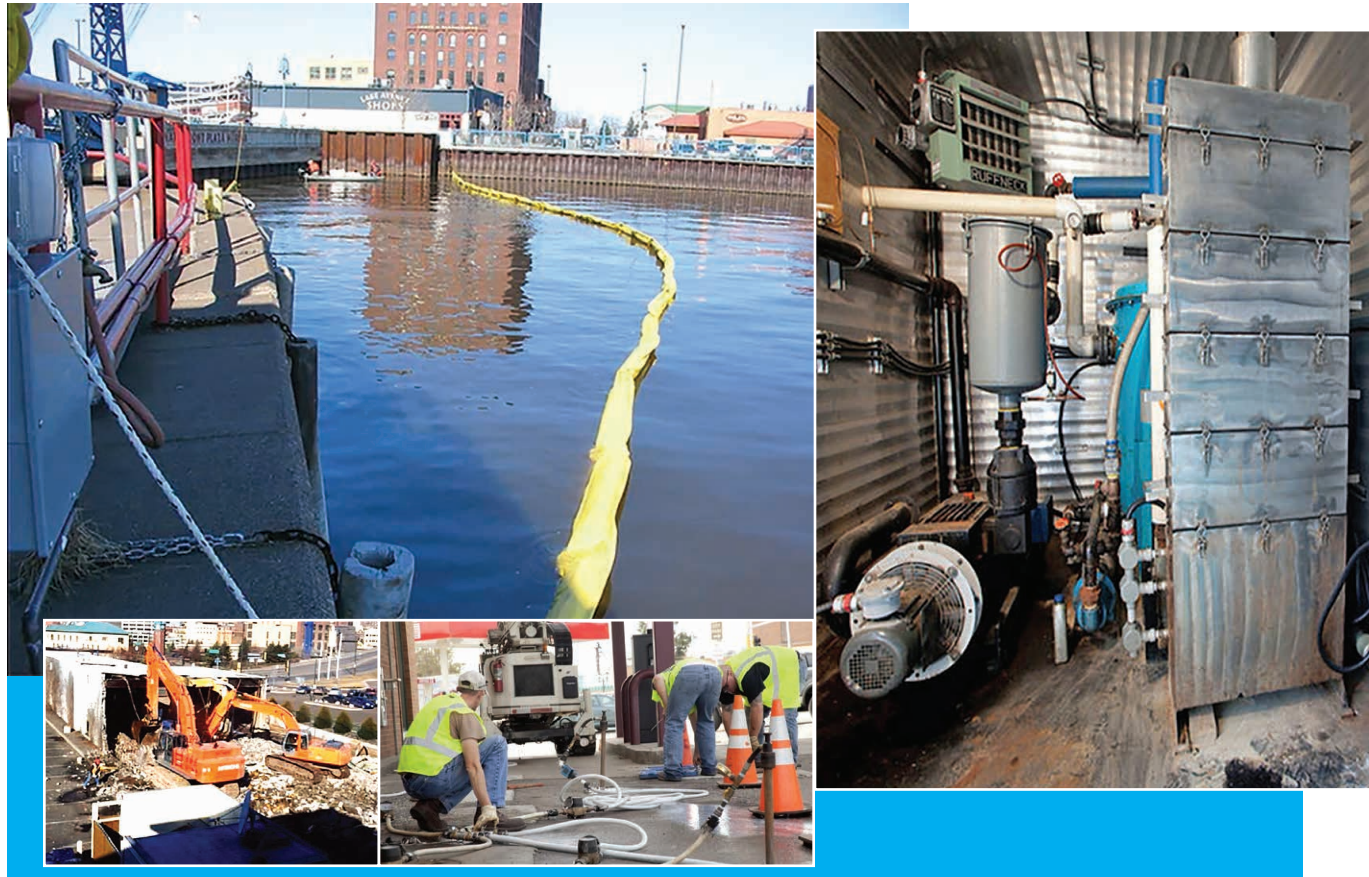
"I knew plants and could identify them to a certain degree, and I had a master's in health and safety, so I had some knowledge," he says modestly.

That "knowledge" became a sought-after commodity as his portfolio progressively grew. In the mid- to late 1990s, he says, there was a big push to remove big underground storage tanks (like the ones that hold gasoline). Wilson was certified to do that, so it became a natural addition to his service line. Eventually, those clients told Wilson they wanted to hire him not only to pull the tanks from the ground but also to do the site-investigation and remediation work. "Well, why not?" Wilson thought.

Pretty soon, he added emergency response. If there was a spill, leak from those tanks or some other accident bordering on catastrophe, it made sense for Wilson and his team – already familiar with the site – to do more than investigate and consult. They were there and, depending on the time of day, it could take a while to track down another contractor willing to come in and get things under control. Wilson started buying the necessary equipment and hiring the right people.



PHOTOS COURTESY OF ENVIRONMENTAL TROUBLESHOOTERS



Environmental Troubleshooters was transitioning into a full-service firm. It was both a consultant and a contractor.

On its website, the company lists the following services: 24-hour emergency response; site investigation and remediation; due diligence; regulatory compliance; environmental construction services; industrial services; stream restoration; wetland consulting; hazardous/regulatory materials; and COVID-19/coronavirus disinfecting.

Today, Wilson says, Environmental Troubleshooters often does the consulting, the design work "and then we can go out and actually do the implementation and construction." Some projects involve one aspect or the other, but "in some cases it makes more sense" to do it all.

"For emergency response, you don't have time to draw up a work specification," Wilson explains. "You're working on the fly and you need to be able to multitask and problem-solve in real-time. You have to assess the situation, devise a quick scope of work and then direct people to implement a solution. Often, you need to do that immediately to avoid additional environmental damage."

One of the lessons Wilson and his colleagues have learned is the importance of being proactive. Any project that is going to disrupt the earth or alter nature has the potential to unleash unforeseen obstacles – extremely contaminated soil, for example. Thus, Environmental Troubleshooters would rather be engaged early on so the team doesn't have to devise a work plan "on the fly." Being involved on the front end allows for a thorough

evaluation of the site while there's still time for a course correction. Any remediation can occur before a project starts, rather than having to pause it midway through.

In other words, it helps to mitigate surprises, which can save time, money and heartache.

"The best way to do this is in advance so you can hopefully plan a lot of these contingencies in a more smooth, phased approach," Wilson says. "That way, everybody knows what's coming as we go into the project, and you minimize setbacks."

"Being able to plan upfront in the investigation phase is really important in making a plan and making decisions."



Environmental Troubleshooters has been involved in more than 2,000 projects across Minnesota, Wisconsin, Michigan, North Dakota, South Dakota and Illinois. They have included Superfund sites, petroleum remediation, brownfields, underground and aboveground storage tanks, resource conservation and recovery, Clean Water Act initiatives and asbestos removal.

Among the higher-profile projects: rehabbing and restoring the renowned Knife River as a prized fishery; preparing the former Atlas Cement site in Morgan Park for redevelopment; a gasoline leak in Ely, in which thousands of gallons leached into the city's sanitary and storm sewer system; and a tanker truck losing control in downtown Duluth and, following an accident with other vehicles, emptying hundreds of gallons of vegetable grease into St. Louis Bay.

"Over the years, we've just kind of morphed into new markets, either because our clients encouraged us or we saw an opportunity," Wilson says. "And also because I like to do new things."

In addition to Duluth, Environmental Troubleshooters has an Eveleth location and one in the Twin Cities. The firm employs between 10-15 people at any given time. Some of them, Wilson says, have been with him almost since the beginning. Along the way, they've seen measured growth and a willingness to evolve based on local needs and trends.



There's a lot more variety beyond wetland development and industrial health and safety. Wilson seems to be the kind of guy who embraces new challenges.

"In Duluth, you don't have the luxury of saying, 'I just want to do this and specialize in this.' Because the market isn't big enough," he says. "We've been able to adapt as the market has changed. We've been able to offer new products to solve problems, and that has developed new market opportunities."





PHOTO BY STEVE ISOLA, ADMAX

2008 AMENDMENT PROVIDED KEY FUNDING FOR OUTDOORS PROJECTS

Already humming along with an established name and reliable reputation, a key event in 2008 would spur myriad opportunities for Environmental Troubleshooters. That year, the Minnesota Legislature passed the Clean Water, Land and Legacy Amendment. The bill added three-eighths of a percent to the state sales tax, with the additional revenue distributed into four funds – clean water; outdoor heritage; arts and cultural heritage; and parks and trails. It has resulted in more than \$4 billion being contributed in support of outdoors projects in Minnesota that emphasize conservation, restoration, preservation and enhancement.

The Lessard-Sams Outdoor Heritage Council is responsible for making recommendations to the Legislature on how best to appropriate the outdoors money. The council gets its name from former Minnesota Senator Bob Lessard of International Falls, a determined advocate who spent 10 years trying to get the tax proposal on the ballot.

The amendment's success has been well-documented. Projects that previously did not have financial backing – no matter how important they were – suddenly had somewhere to turn for funding.

Exhibit A: The \$5 million Knife River rehabilitation. That effort, to bring back an impaired ecosystem in which the water had turned cloudy, ended up improving miles of the river, according to the Duluth News Tribune. In a 2019 story, the newspaper noted that the Knife River was one of “several habitat restoration projects on North Shore streams in recent years, and more are in the planning stages.”

An emphasis on improving the environment boded well for an outfit named Environmental Troubleshooters.

“This funding was a way for (Lessard) to say, ‘Hey, if we invest money in these projects, we should have better hunting and fishing in the future,’” Wilson says. “He had the foresight to make these funds available for projects. Rivers and lakes and wetlands and prairies have had issues for centuries, but there was not a lot of money to restore that lost habitat or to restore clean water.”

While every project his firm completes is important and receives Wilson's full attention, the ones that allow him to improve streams or other natural habitats mean just a little bit more given his almost-life-long relationship with hunting and fishing. If Wilson is an expert on anything, that just might be it.

“If you do something for 40 or 45 years, you would hope that you have a little bit of knowledge,” he jokes. “My passion in life has been to duck hunt and fish for steelheads, and I like to think I know a little bit about those two things.”



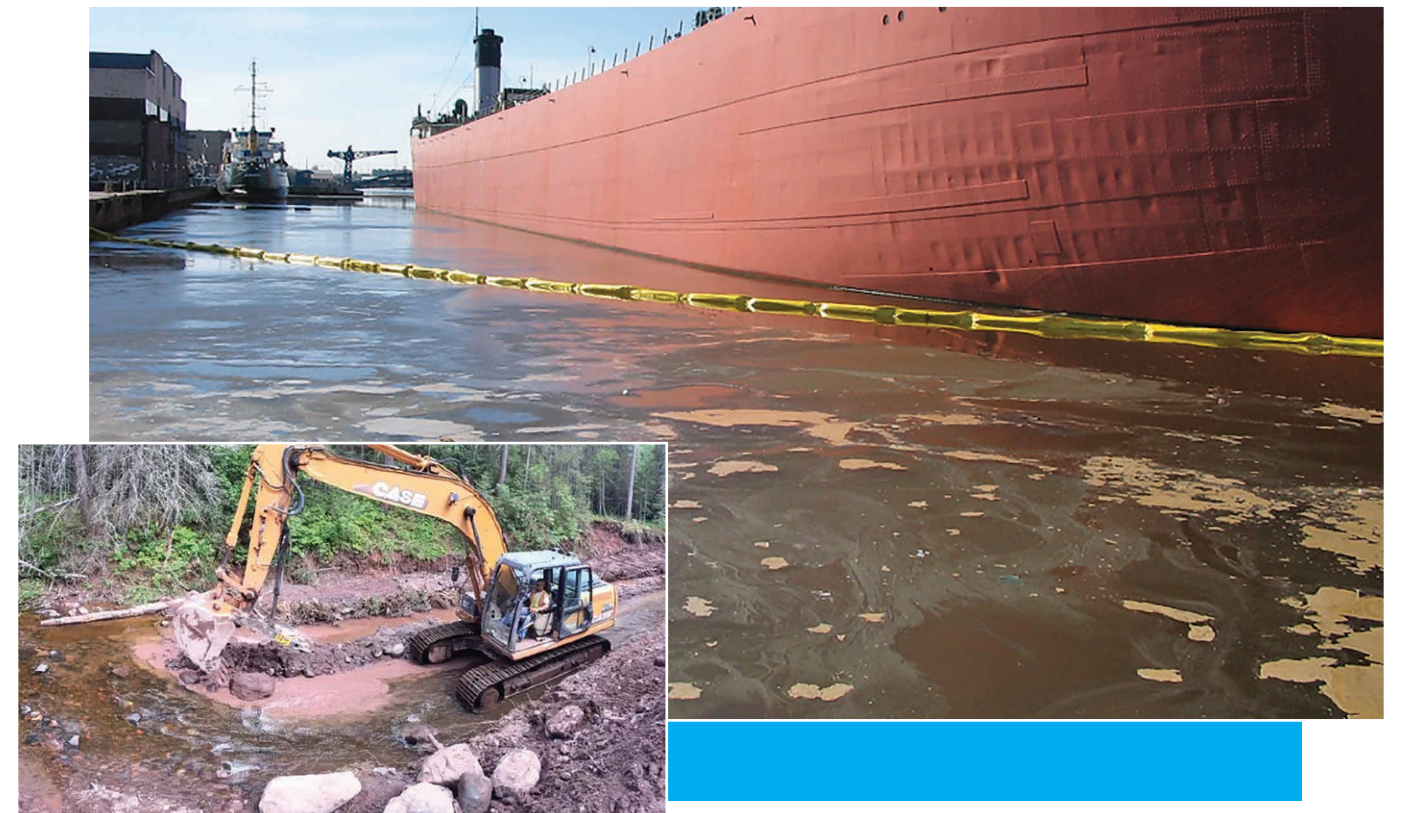
That passion is what got Wilson started on his career path.

“I began getting interested in environmental concerns because I enjoy fishing and hunting,” he says. “I gravitated toward a biology degree because of that. The outdoors was an interest of mine, and it still is.”

“You're seeing some of the habitat work we've done generate improvements to the fisheries. It's pretty rewarding.”

LEVERAGING TECHNOLOGY TO IMPROVE WATER QUALITY

Also rewarding has been the emergence of a potentially transformative technology centered on water quality. The system, developed by Water Quality 3D, LLC (WQ3D) – a company Wilson started along with a few other folks – “restores the natural fundamental chemical equilibrium of water without the use of chemicals,” according to a story Wilson previously wrote for the Duluthian.





WQ3D has numerous applications, including lakes, rivers, groundwater and irrigation water. It has proven to be remarkably impactful on farms. Yields have nearly doubled in some instances in which the WQ3D technology has been deployed. Similarly, it has led to an improvement in the health of cows on dairy farms, which has paid off via more milk and an increased butterfat content.

"And that's all from a better water source, a better water quality," Wilson says.


Restoring water's chemistry using WQ3D's patented cavitation technology has helped some troubled Minnesota lakes thrive by mitigating algae, bacteria and other invasive species. Overall ecosystems improve. Native plants are rejuvenated while fish growth and quality are enhanced. Odors are eliminated and water clarity is upgraded. All of these changes foster an uptick in recreational use as lakes become purer.

WQ3D debuted in 2017, following three years of research and development. Pilot projects hinted at the



benefits of the system. Now, about seven years in, there's a growing body of data that underscores its effectiveness. Wilson and his colleagues have partnered with the State of Minnesota to reverse years of degradation at some lakes, and the United States Department of Agriculture has expressed interest in a collaboration to further examine agricultural benefits.

hazardous algae blooms, and this device we think could take care of that." The company is wholly separate from Environmental Troubleshooters, but Wilson has the option

to buy a full licensing agreement if he's working on a project in which the technology can be used. 

Louie St. George III is a Duluth-based freelance writer.



Other applications involve using WQ3D to reduce corrosion of submerged metal, or treating water that has been infected by chemical and fertilizer runoff from farms.

The possibilities seem endless, like WQ3D is just starting to scratch the surface in identifying how its system can be used. Does Wilson think there are other uses lurking out there that have yet to be explored?

"We think there will be, yes," he says. "You hear a lot about the



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Environmental Troubleshooters, Inc.
3825 Grand Avenue
Duluth, MN 55807 218.722.6013
www.environmentaltroubleshooters.com