BUILDING IT BETTER

While driving north on I-65 in the fall of 2007, Doug Buch had an epiphany. So he pulled over, sketched up his innovative idea and today he’s the CEO of PaveDrain®—a Permeable Articulating Concrete Block (P-ACB) system that creates a performance pavement that integrates its patented arched reservoir to maximize on-site stormwater capacity. From his days working as a consultant for ECS (Erosion Control & Stormwater) Solutions, Buch knew the importance of infiltrating stormwater back into the ground and the micro-ecosystem that thrives in the open graded aggregate beneath permeable systems.

Buch knew that getting rainwater back into the ground was only part of the goal, and felt that developing a balancing act between green infrastructure and gray infrastructure was a great place to start. While aquifers all over the world are drying up, the PaveDrain® system allows for a more natural infiltration path, recharging local groundwater and reducing first flush pollutants.

But starting a business, developing a new technology and sharing the full story of a product can be daunting for an entrepreneur. That’s why PaveDrain®’s association with The Water Council (TWC) and its location in the Global Water Center in Milwaukee has been so beneficial. In fact, according to Buch, had it not been for his connection with The Water Council and his location at the Global Water Center, PaveDrain® may not have survived.

PaveDrain® can help the environment and create jobs all at the same time. “When you add in the short- and long-term economic savings PaveDrain® can have on both municipal and private land owners, it starts to have a positive effect on a lot of different social and economic groups.”

-Doug Buch

“l like to refer to the Global Water Center as the ultimate place to connect the dots; people, products, projects. I’ve made a ton of mistakes along the way, but deciding early on to be located in the Global Water Center was not one of them.”

Crews installing PaveDrain® at the Harley Davidson facility on Juneau Ave in Milwaukee.
After some very lean and tough years from 2011-2014, PaveDrain® received several orders for projects in the area that were a direct result of connecting with TWC. And, as the company began exploring overseas licensing opportunities TWC helped Buch secure a grant through the Wisconsin Economic Development Corporation (WEDC), which allowed him to attend Singapore International Water Week. As a direct result of the grant, the PaveDrain® team spent ten days in Singapore which ultimately led to their first international license in China.

Following the success in China, PaveDrain® went on to win the inaugural China BlueTech award for market readiness. The annual awards provide a platform for innovative water/wastewater technology companies to establish their industry leadership and access an ecosystem of Chinese industry experts, corporations and investors.

In 2015, PaveDrain® enhanced its overseas strategy by participating in ExporTech for Water Tech, a program delivered in partnership by TWC, WEDC and the Wisconsin Manufacturing Extension Partnership, at the Global Water Center. ExporTech helped PaveDrain® define both short- and long-term international goals by developing a customized global growth plan for the company's products in key markets.

Despite the ongoing success of the PaveDrain® system, the company continues to look for ways to improve. In January 2017, PaveDrain® won a $200,000 grant through the Pilot Program for small companies funded by TWC in conjunction with the Milwaukee Metropolitan Sewerage District, Fund for Lake Michigan and Wells Fargo. Through the grant, PaveDrain® will work directly with another proven technology and BREW Accelerator* graduate, MetaMateria Inc., to study phosphorous removal from stormwater runoff.

“By winning the China Blue Tech award and through my connection with The Water Council, PaveDrain® had the opportunity to exhibit in the Innovation Pavilion at WEFTEC (Water Environment Federation’s Technical Exhibition and Conference) where I was introduced to a BREW Accelerator participant from MetaMateria Inc.,” said Buch. “They had the technology but didn’t know where to go with it. We needed the technology and had a pretty good idea where to implement it. It has been a win-win for both of us.”

*The BREW (Business - Research - Entrepreneurship - in Wisconsin) Accelerator was created by The Water Council in 2013 to encourage water innovation by funding water technology startups with commercialization potential.