# On the Water Front

February 2018 | **A Message from John Balliew, P.E., President/CEO**

## EPWater embraces technology, evolves for future of El Paso

Technology is making waves at El Paso Water, as the utility modernizes for the future by embracing emerging innovations that save both time and money. The MiniDozer, a robotic crawler known as the G3 and trenchless technologies are changing the way EPWater conducts business to manage El Paso's aging infrastructure.

Horacio Martinez, General Services Lead Worker, operates the Mini Dozer and is responsible for the machine and its maintenance.

EPWater's push for modernization comes, in part, from strategic directions prioritized in our 10-year Strategic Plan. Specifically, we are committed to improving El Paso's water and stormwater infrastructure, and modernizing equipment and technologies that contribute to increased efficiencies and productivity. The following creative solutions have helped us cut costs and improve our essential service to customers.

### MiniDozer

Our Stormwater operations employees rave about the MiniDozer, which can carry a half-ton of debris and do the work of a six-person crew to clear waterways. The MiniDozer also makes it safer for Stormwater employees who work year-round to keep systems free of debris.

Previously, clearing El Paso's miles of waterways to prevent flooding meant sending in a crew of about six workers with wheelbarrows and shovels. All it takes now is a crew of about three workers, with one operating the MiniDozer via a remote control that resembles a video game control with joysticks.

### G3 Robot Crawler

The G3 crawler uses electromagnetism to detect potential breaks in EPWater's major water mains. The tethered robot crawls along the bottom of a water line, recording video for inspection of the pipe's interior.

The cost-effective technology allows our crew members to get to the root of problems quickly and avoid service disruptions. The remote-controlled robot can pinpoint problem areas, helping crews to avoid costly replacement of entire pipes.

### Trenchless Technologies

EPWater employees also consider trenchless technologies another low-impact and money-saving option to repair our stressed infrastructure. In recent projects, we have employed pipe bursting and Insituform.

- In pipe bursting, specialized equipment pulls a bullet-shaped metal cone through the old pipe, bursting it along the way. The new pipe is fed through the space, and the shards of the old pipe are safely left buried. The process only requires digging up a small area on either end of the pipe, substantially decreasing road closures. The process is twice as fast as the traditional cutting method and offers a 30 percent cost savings.

- Insituform uses cured-in-place pipe technology – a pipe within a pipe – with little to no digging. This more environmentally friendly technology has renewed pipelines beneath interstates and busy roadways without disrupting traffic. This technology was recently used to replace a collapsed stormwater pipe on Belvidere Street in west El Paso.

EPWater's technological toolbox will continue to grow as we explore innovative techniques to best serve customers, manage facilities and fund infrastructure improvements. Customers can trust in the utility to take proactive measures to prevent service disruptions, property damage and water loss. We count on technology because it helps us be good community partners and makes good economic sense.

On the Water Front is a publication of El Paso Water.
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