

WATER FEATURE

Reed Street Yards contains a state-of-the-art water filtration demonstration project in the public plaza on Freshwater Way. The lively water feature pumps dirty canal water through a Watertronics Portable Ultra-Filtration unit, aerates it through a series of cascading streams, then delivers clean water back into the Menomonee Canal. The system cleans 15,000 gallons of canal water each day.

The water feature contains four major thematic elements that bring the canal water through the cleaning process: first, water is pumped from the canal to a mini water filtration unit using state-of-the-art membrane filtration technology to purify the water before pumping it into a 5,000 gallon storage cistern. The water is then time-released into a standing pool at the top of the water feature. On a regular basis, the standing pool is emptied into a series of pools and streams as a “storm event,” causing water to dramatically surge through the system. The stream tumbles and aerates the water, adding oxygen to system.

At the bottom of the water feature, a “delta” floods during each storm event, causing water to overflow the lower pool. Clean water is delivered back into the canal during each storm surge. Interpretive signage follows the canal water through the various elements. Meters and sensors collect water quality data, offering additional demonstration/educational opportunities. As a system, the water feature demonstrates both technology and natural processes in delivering clean water.



WATERTRONICS ULTRA-FILTRATION UNIT

- Built in Hartland, WI
- UF filters to 0.01 micron (virus level)
- Triple redundancy for disinfection
 - UF Filtration
 - UV disinfection (ultra violet light)
 - Residual chlorine disinfection
- Carbon filters for taste and odor
- 10 gallon per minute capacity
- UF flush water is neutralized before discharging to sanitary
- Applications
 - Disaster relief
 - Surface water clarification
 - Well water clarification
 - Cryptosporidium and Giardia removal
 - Wastewater reuse