

Advancing Water Treatment. A Multi-Barrier Approach.

Research and Discovery

GCWW's water quality team used a collimated beam unit to test the effectiveness of UV.

In 1993, more than 400,000 people became sick and nearly 100 deaths were linked to an outbreak of *Cryptosporidium* in Milwaukee, Wisconsin. This incident sparked years of research both in the water industry and at GCWW to find the most effective method to protect against microorganisms found in source water.

GCWW's water quality team began working with national and international scientists and water technology experts in the early 2000s to determine the best available technology to enhance GCWW's renowned water treatment system.

Following a decade of research and discovery, ultraviolet disinfection (UV) was found to be the best complementary treatment.

UV, when combined with GCWW's rapid sand filtration and granular activated carbon (GAC) treatment processes, creates a multi-barrier to protect public health against emerging microorganisms.



UV Facility

- \$30 million project
- 19,600 square foot facility
- Treats up to 240 million gallons of water per day
- 25,000 cubic yards of earthwork
- 325 tons of reinforcing steel in building, concrete floors and walls
- 1,300 linear feet of 6½-foot diameter concrete pipe
- Eight medium pressure UV treatment units, 4 foot in diameter
- 4,500 cubic yards of concrete
- 198 solar panels



Energy Efficiency

The roof of the GCWW UV facility is equipped with 198 solar panels that utilize the sun's natural energy to offset electricity usage and help realize greater savings on energy costs.