



# Why Your Municipal Facility Pays More for Water Than It Should — and How to Fix It

Water Flow Innovations LLC

Flow Conditioning Device (FCD)  
waterflowinnovations.com

Your treatment plant, pump stations, and facility HVAC all draw from the same supply — but your meter counts more than arrives. **Backwash cycles, chemical feed demand, and cooling water cycling create the conditions for air, gas, and turbulence to form in the line at your meter — and you're billed for it.** The FCD (Flow Conditioning Device) corrects the measurement. Treatment processes and every operational parameter stay the same. Your water bill drops — and so does your sewer bill, because sewer charges are calculated from the same inflated meter reading. One device. Two bills fixed.

## WHY MUNICIPAL WATER WATER METERS OVER-READ

### The Core Problem: Water Treatment Plants Pay for Water to Treat Water — Making Every Over-Read Dollar Operational Budget Waste

Municipal water and wastewater treatment facilities draw municipal supply for filter backwash, chemical dilution, seal water, and facility HVAC — all from the same supply meter. Each high-velocity demand event generates air, gas, and turbulence in the line at the meter. The FCD corrects that measurement without affecting any treatment process, permit compliance parameter, or operational setpoint downstream.

## THE THREE OVER-READING SOURCES UNIQUE TO MUNICIPAL WATER & WASTEWATER UTILITIES



### Filter Backwash Cycling

Filter backwash cycles create large, high-velocity demand events on every backwash sequence — generating air, gas, and turbulence at the supply meter on every backwash activation throughout every operating day.



### Chemical Feed System Demand

Chemical dilution water and chemical feed system demand cycling creates variable demand events — compounding backwash over-reading throughout every treatment shift and every billing cycle.



### Facility HVAC & Cooling Demand

Treatment plant HVAC and cooling water cycling with facility load creates continuous variable demand — adding a third compounding over-reading source on top of backwash and chemical feed demand.



### Your AWWA Water Audit & EPA WIFIA Project Water Balance Are Better Than Your Meter Shows

AWWA water audit methodology and EPA Water Infrastructure Finance and Innovation Act project reporting both reference metered intake for non-revenue water calculations and water balance documentation. When the supply meter over-reads, non-revenue water calculations are skewed. After FCD installation, metered intake more accurately reflects actual use — improving the accuracy of AWWA audit and operational efficiency reporting.

## BEFORE & AFTER THE FCD

### WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Backwash cycles inflate meter on every sequence
- ✗ Chemical feed demand compounds over-reading
- ✗ AWWA water audit non-revenue water skewed
- ✗ Sewer charge tied to inflated meter



### WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ Backwash cycles read accurately
- ✓ Chemical feed demand measured correctly
- ✓ AWWA water audit baseline more accurate
- ✓ Sewer charge based on real usage

**5–30%**

Average water & sewer bill reduction

**46%**

Highest documented single-site reduction

**~1 Hour**

Install time — water off about 1 hour

**6-Mo**

Money-back, no questions asked · install non-refundable

### How the FCD Works — Four Steps

**1**

Installs between two pipe joints right after your water meter — water off about one hour

**2**

Creates a slight back-pressure that extends back through the meter, reducing air, gas, and turbulence

**3**

Delivers a laminar-like flow profile through the meter — the condition it was calibrated to read

**4**

Meter reads accurately. Bill drops. Every treatment process, permit compliance parameter, and operational setpoint is effectively unchanged.

### FREE SAVINGS ESTIMATE

Instant estimate — takes 30 seconds, no contact info required.

[waterflowinnovations.com/water-bill-savings-calculator](https://waterflowinnovations.com/water-bill-savings-calculator)

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### CERTIFICATIONS

IAPMO NSF/ANSI/CAN 61 KIWA GMP SQF

316L Stainless Steel · Made in USA  
Under 0.8 psi pressure loss  
Lifetime Transferable Warranty