

Why Your Department Store Pays More for Water Than It Should — Without Adding a Single Square Foot



Water Flow Innovations LLC

Flow Conditioning Device (FCD)
waterflowinnovations.com

Your cooling tower, restrooms, and in-store food service all draw from the same municipal supply — but your meter counts more than actually flows. **HVAC cooling tower cycling, high-traffic restroom demand, and in-store restaurant operations create the conditions for air, gas, and turbulence to form in the line at your meter — and you're billed for all of it.** The FCD (Flow Conditioning Device) corrects the measurement. Your store operations don't change. 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 DEPARTMENT STORE WATER METERS OVER-READ

The Core Problem: Large-Format Stores Run a Continuous HVAC Cooling Load Most Retail Never Sees

Department stores carry a cooling load most retail formats never see — a cooling tower or chiller plant sized for a full sales floor, running continuously through warmer months. High-traffic public restrooms and, in many locations, an in-store restaurant add further simultaneous demand, all from the same supply meter. Each demand event generates air, gas, and turbulence in the line at the meter. You pay for it on every bill, every month, across every system running at once.

THE THREE OVER-READING SOURCES UNIQUE TO DEPARTMENT STORES



HVAC Cooling Tower & Chiller Plant Cycling

Makeup water pressure cycling in a large sales-floor cooling system creates continuous meter over-reading, especially during peak cooling season.



High-Traffic Public Restroom Fixture Demand

Large-format stores run multiple public restrooms with frequent on-off fixture cycling throughout operating hours.



In-Store Restaurant & Food Service Water Use

Locations with an in-store restaurant or food counter add dishwashing, prep sink, and handwash demand on top of the building's base water use.



The Sewer Bill Doubles the Impact — Even for Water That Never Entered a Drain

Municipal sewer charges are calculated as a percentage of metered water consumption. Every phantom gallon your meter over-registers generates a sewer charge alongside the water charge — even though that volume was never actually delivered. At a department store with HVAC, restroom, and food service demand all contributing to over-reading simultaneously, the sewer multiplier compounds the cost of every over-read event across every billing cycle. The FCD corrects the water meter reading, which automatically corrects the sewer charge on the same bill.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Cooling tower cycling inflates meter every season
- ✗ Restroom & food service demand compound over-reading
- ✗ Sewer charge tied to inflated meter reading
- ✗ Problem persists even after meter replacement



WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ HVAC demand reads accurately
- ✓ Restroom & food service demand measured correctly
- ✓ Sewer charge based on real water consumption
- ✓ Store operations, HVAC performance & customer traffic unchanged

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. HVAC cooling, restroom facilities, and in-store food service are effectively unchanged.

FREE SAVINGS ESTIMATE

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

waterflowinnovations.com/water-bill-savings-calculator

Water Flow Innovations LLC

2651 Route 412
Coopersburg, PA 18036
Info@WaterFlowInnovations.com
1-(844)-934-8258

CERTIFICATIONS

IAPMO NSF/ANSI/CAN 61 KIWA GMP SQF

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