

# Environmental Technology Verification (ETV):

- a few more take-aways.

Proprietary Filter SOC Meeting

October 10, 2018

Jim Bachhuber

# Background: ETV Monitoring Program

- ☁ USEPA Program – conducted by NSF International
- ☁ Standard monitoring protocol for all devices
- ☁ Voluntary for commercial technologies
- ☁ Not research
- ☁ Get objective, credible performance data to buyers
- ☁ Purpose: verify vendor claims
- ☁ Program is no longer active



# ETV Monitoring Program

Total of 10  
Verification Reports  
through ETV  
Program

Arkal Filter	filtration
Baysaver	hydrodynamic settling
CrystalStream Vault	hydrodynamic settling
Catchbasin StormFilter	filtration
StormFilter (2)	filtration
StormScreen	screening
Terre Kleen	hydrodynamic settling
Vortechs	hydrodynamic settling
DownStream Defender	hydrodynamic settling

# Field Monitoring Requirements

## 1. Define Qualified Event:

- Set minimum rain depth ( $< 0.2''$ )
- Set minimum # of sub samples ( $\geq 5$ )
- Duplicates and Field Blanks meet QAPP

## 2. Minimum # of Events

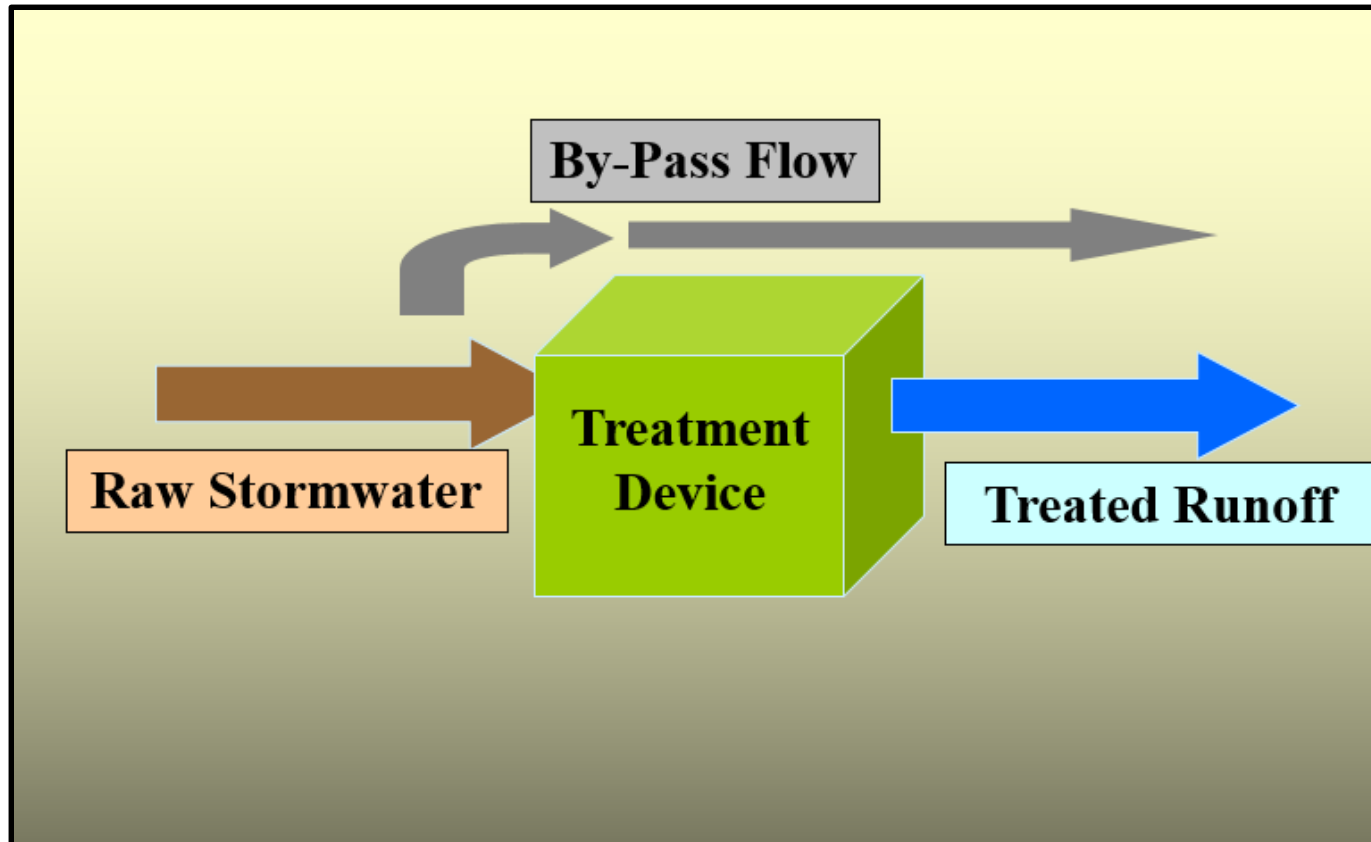
- 15 qualified events

## 3. Measure:

- Flow (area / velocity)
- Water Quality
- Rain

# Field Monitoring Requirements

## 4. Measure all runoff and treatment



# Field Monitoring Challenges

## 1. Define Drainage Area



# Field Monitoring Challenges

## 2. Watershed Changes



# Field Monitoring Challenges

## 3. Equipment





# Questions?



**Stormwater Experts Figuring Out Where Water Flows**