

CamVIEW

Stormwater Trash Monitoring System

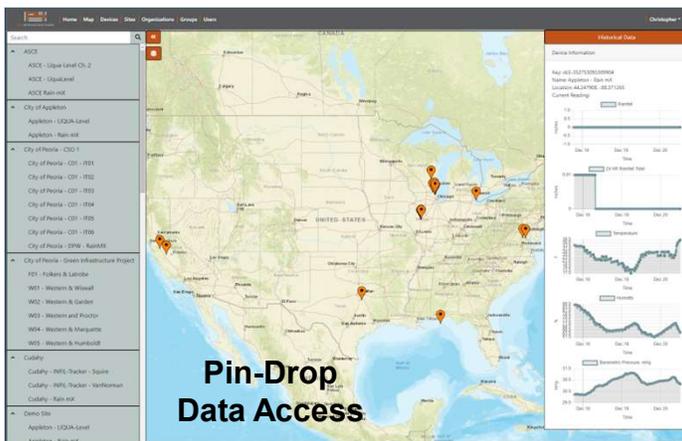


CamVIEW is a robust autonomous image capture system for stormwater trash collection infrastructure.

Coupling CamVIEW with P4's LIQUA-Level, VELO, and Rain-mX systems gives a trash loading rate, documentation, and maintenance system for stormwater trash collection systems.

Battery health and (solar) re-charging cycles are documented and displayed.

Wireless data transmission.



- Applications & Value
- Performance documentation**
- Trash Loading Rate**
- Loading-Rate Seasonality**
- Public Awareness**
- Data-driven maintenance**

Data

4-Hr interval (standard)

Synching with other sensors



Nationwide cellular connectivity (LoRa and WiFi possible)

Image documentation & coupling:

- Trash loading rate
- Seasonality of loading
- Maintenance triggers
- Rainfall event coupling
- Flow velocity & depth coupling



Browser-based dashboard (viewing and data download). Advanced notice of potential problems. Data visualization. Data-driven maintenance notification.



Trash monitoring system to compliment other systems (synchronized data)

CamVIEW – Specifications

Communication

- Cat-M1 cellular (2G, 3G, 4G LTE compatible)
- Wi-Fi option
- Long Range WAN (LoRa) option

Installation & Measurement

- During or post-construction installation
- Easy removal and replacement
- 4-hr acquisition rate (std) – user-defined

Power

- Voltage – 12V DC
- Battery – 5,000 mAh NiMH pack (modular)
- No external power required
- Remote battery health monitoring
- Solar re-charging with remote monitoring

Maintenance

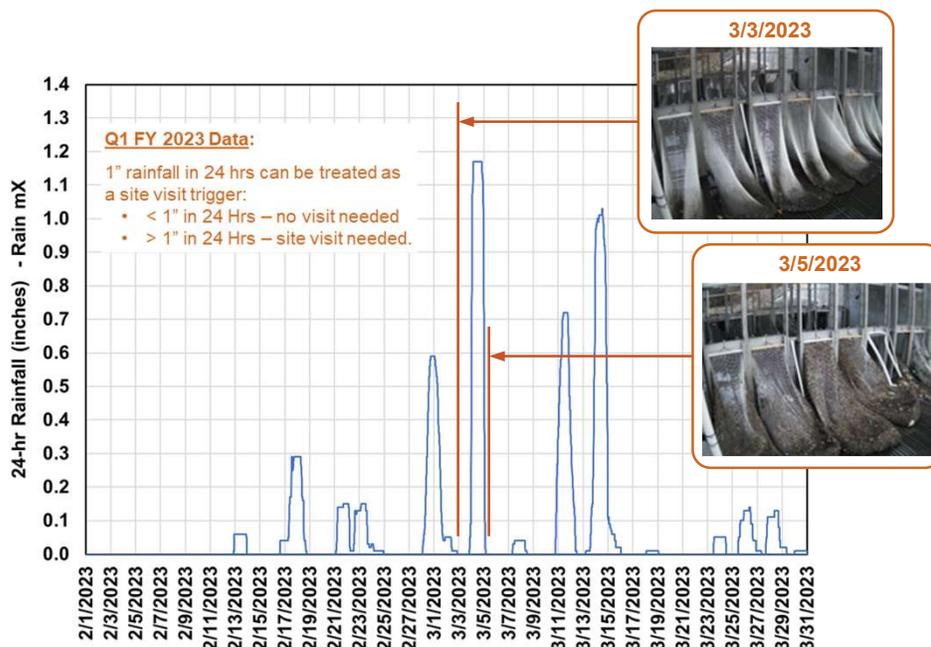
- Modular system (camera, computer, battery)
- Remote battery health monitoring
- Solar panel cleaning (every 6 months – location dependent)
- Camera inspection – annual

Operating Temperatures & Compliance

- Fahrenheit: -30 °F to 120 °F
- Celsius: -34 °C to 49 °C
- FCC and RoHS

User Interface & Data

- Browser-based access and display
- JPG and CSV downloading
- Mobile via iOS and Android
- 90% data reliability



How do you know when to change trash bags?

How do you know if spring loading is worse than fall loading?

How can you determine trash loading rates?

CamVIEW