# FLOOD-CON LLC

## We Build Real Solutions for Responsible Urban Development

## PRODUCT BROCHURE

### Automated Outlet Structures
*Our multi-patented technology truly mimics the pre-development flow rate, peak time, and volume for any storm event.*

### Website Console
*Every product reports events in real time in custom time intervals. This provides valuable data and ensure the device is healthy.*

### Environmental Monitors
*Environmental monitors provide real time flood monitoring and water quality monitoring on lakes, rivers, and streams.*

### Construction Site Monitors
*Site monitors save our customers money on wasted time for non-event and fines for being out of compliance.*

### Active Treatment Systems
*For construction sites in sensitive areas, stormwater must be monitored and actively treated before sending downstream.*

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# AUTOMATED OUTLET STRUCTURE (AOS)

Our AOS is a patented intelligent device that monitors rainfall and depth of pond then calculates how much water to allow to flow from the pond. It can mimic the natural runoff rate and volume and provides proper management of water quantity and quality. It sends storm event and vital information to our cloud via cellular connectivity.
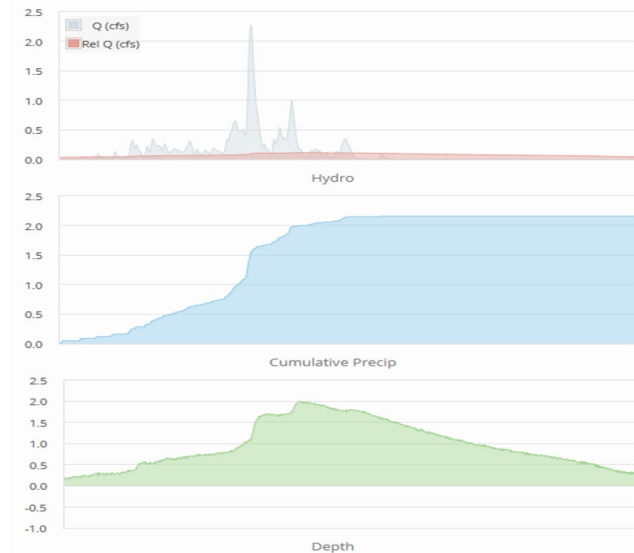
The feature most valued by our customers is its ability to **optimize the storage volume required for detention and flood control**. For above ground ponds this gives the customer more flexibility developing the property. For sites with underground ponds, it can save the customer substantial cost in underground detention systems.

## Capabilities & Features

- Meets or exceeds stormwater runoff and quality requirements.

- Significantly reduces the cost of stormwater infrastructure.

- Continuous monitoring system provides alerts for device health and exceeded thresholds for several environmental and hydrologic parameters.

- Records event data in the cloud and provides customers ability to prove regulatory compliance.

- 100% Solar powered and off-the-grid.

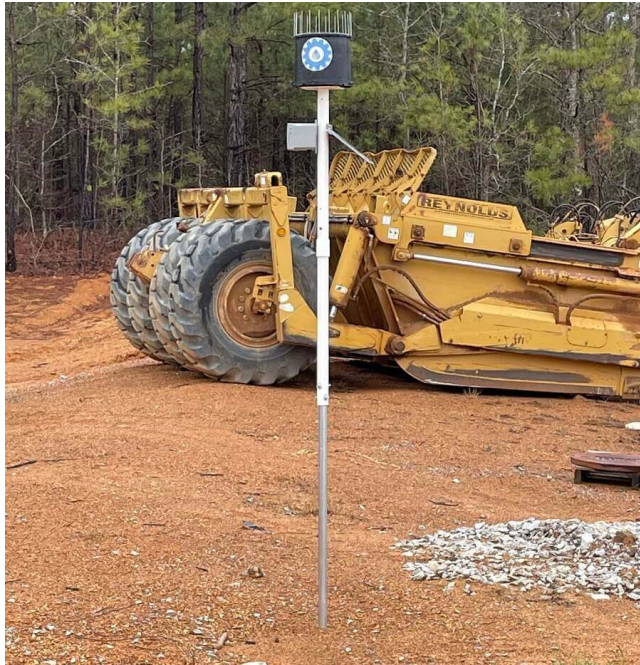- Uses SCS unit hydrograph, Clark, or Snyder Unit hydrograph methods and Mod. Rational Method.

## Real time Data Logging

Customers can see in real time the status of their products 24/7. All products communicate via cellular LTE. Cellular connectivity is not required for our Automated Outlet Structures to function properly. Event data is uploaded and stored on our website console for customer viewing and downloading.

*Customers can also receive SMS text messages of exceedance events to their mobile device including frequency storm, rainfall, pond depth, flowrates, velocity, turbidity, pre-developed flow rate, and more.*

# CONSTRUCTION SITE MONITOR

Construction Site Monitors save our customers time and money. Contractors no longer must waste time maintaining and checking old cylinder rain gauges that crack in the cold and require draining after every rain.

Inspectors get notified only when needed and we help insure they are done on time to avoid fines.

Our customers have unlimited access and unlimited group alerts and access to our website console.

## Capabilities & Features

- Our site monitors provide real time rainfall monitoring through our website console, so our customers are always aware of how much it is raining.

- Every Site Monitor is powered by a solar panel and a lithium-ion rechargeable battery, so you NEVER have to worry about charging it even on cloudy or rainy days.

- Our customers receive an email notification when a BMP inspection is required and when an inspection report is completed.

- An online form field inspection report is available for use in the field with digital signature capability.

- Diagnostics - Our Site Monitors send back battery voltage and other important information to remotely manage our monitoring unit even when it is not raining.

- 100% solar powered and off-the-grid.

- Customers can link up any number of personnel to access the website console.

## Real time Data Logging

### Event Details

**Encompass Health** - Event starting on 11/11/2020 10:54 AM CST - Ended 11/12/2020 10:49 AM CST
**Rain Event Ended:** 11/12/2020 8:44 AM CST
**Duration:** 21 hours, 49 minutes

[Export Data] [Delete Event] [View ADEM Report]

| Time | Precip | Cumm Precip |
|---|---|---|
| 11/11/2020 10:54:43 AM | 0.02 in. | 0.02 in. |
| 11/11/2020 11:04:43 AM | 0.01 in. | 0.03 in. |
| 11/11/2020 11:09:43 AM | 0.01 in. | 0.04 in. |
| 11/11/2020 11:14:43 AM | 0.02 in. | 0.06 in. |
| 11/11/2020 11:19:43 AM | 0.02 in. | 0.08 in. |
| 11/11/2020 11:24:43 AM | 0.01 in. | 0.09 in. |
| 11/11/2020 11:29:43 AM | 0.01 in. | 0.1 in. |
| 11/11/2020 11:34:43 AM | 0.02 in. | 0.12 in. |
| 11/11/2020 11:39:43 AM | 0.01 in. | 0.13 in. |
| 11/11/2020 11:44:45 AM | 0.04 in. | 0.17 in. |
| 11/11/2020 11:49:43 AM | 0.03 in. | 0.2 in. |
| 11/11/2020 11:54:43 AM | 0.04 in. | 0.24 in. |
| 11/11/2020 11:59:43 AM | 0.03 in. | 0.27 in. |
| 11/11/2020 12:04:43 PM | 0.03 in. | 0.3 in. |
| 11/11/2020 12:09:43 PM | 0.02 in. | 0.32 in. |
| 11/11/2020 12:14:43 PM | 0.06 in. | 0.38 in. |
| 11/11/2020 12:19:43 PM | 0.02 in. | 0.4 in. |
| 11/11/2020 12:24:43 PM | 0.08 in. | 0.48 in. |
| 11/11/2020 12:29:43 PM | 0.05 in. | 0.53 in. |
| 11/11/2020 12:34:43 PM | 0.31 in. | 0.84 in. |
| 11/11/2020 12:39:43 PM | 0.2 in. | 1.04 in. |
| 11/11/2020 12:44:43 PM | 0.11 in. | 1.15 in. |
| 11/11/2020 12:49:43 PM | 0.08 in. | 1.23 in. |
| 11/11/2020 12:54:43 PM | 0.01 in. | 1.24 in. |
| 11/11/2020 12:59:43 PM | 0.02 in. | 1.26 in. |
| 11/11/2020 1:09:43 PM | 0.02 in. | 1.28 in. |
| 11/11/2020 1:14:43 PM | 0.02 in. | 1.3 in. |
| 11/11/2020 1:29:43 PM | 0.01 in. | 1.31 in. |
| 11/11/2020 1:34:43 PM | 0.01 in. | 1.32 in. |
| 11/11/2020 1:39:43 PM | 0.01 in. | 1.33 in. |
| 11/11/2020 2:49:43 PM | 0.01 in. | 1.34 in. |
| 11/11/2020 2:59:43 PM | 0.01 in. | 1.35 in. |
| 11/11/2020 3:04:43 PM | 0.01 in. | 1.36 in. |
| 11/11/2020 3:14:43 PM | 0.01 in. | 1.37 in. |
| 11/11/2020 3:19:43 PM | 0.01 in. | 1.38 in. |
| 11/11/2020 3:24:43 PM | 0.01 in. | 1.39 in. |
| 11/11/2020 3:29:43 PM | 0.01 in. | 1.4 in. |
| 11/11/2020 3:34:43 PM | 0.01 in. | 1.41 in. |
| 11/11/2020 3:39:43 PM | 0.01 in. | 1.42 in. |
| 11/11/2020 3:44:43 PM | 0.01 in. | 1.43 in. |
| 11/11/2020 3:49:43 PM | 0.02 in. | 1.45 in. |

*Customers can also receive SMS text messages of exceedance events to their mobile device including frequency storm and rainfall.*

# ENVIRONMENTAL MONITOR

Flood-Con provides self-contained, solar-powered Environmental Monitors for rain fall, flood stage, flow rate, and pollutant detection for water quality.

Each Environmental Monitors is calibrated and provides real-time monitoring through our website console. These monitors can be combined in multiple ways to provide data for studies, alerting, and regulatory compliance.

## Capabilities & Features

✚ Our Environmental Monitors provide real time water quality monitoring in streams, lakes, and rivers. Parameters include flow, stage, dissolved oxygen, temperature, conductivity, ph, glycol and turbidity.

✚ Readings are time stamped and displayed our online web application on one (1) minute intervals or longer. Data is easily exportable into excel file format.

✚ Customers receive SMS text alerts for customized exceedance limits of each environmental parameter.

✚ Diagnostics - Our Site Monitors send back battery voltage and other important information to remotely manage our monitoring unit even when it is not raining.

✚ 100% solar powered and off-the-grid.

✚ Our website console can be tailored to every customer's specific preference for view, alerting, downloading, and branding.

## Real time Data Logging



*Customers can also receive SMS text messages of exceedance events to their mobile device including frequency storm, rainfall, stage, flowrate, and any monitored water quality parameter, including PH, dissolved oxygen, conductivity, temperature, and turbidity.*

# ACTIVE TREATMENT SYSTEM (ATS)

For construction sites in sensitive areas, stormwater must be monitored and actively treated before sending downstream.

Our ATS can treat influent flowrates of up to 1,500 gallons per minute with less than a 40-minute treatment time.

Our Active Treatment System monitors incoming water quality, treats it, then sends it downstream or recirculates it based on resulting clarity. Results are logged locally and sent to our Website Console for monitoring and alerting.

ATS provides a smart, fast, reliable solution that is significantly more cost effective than the competition.
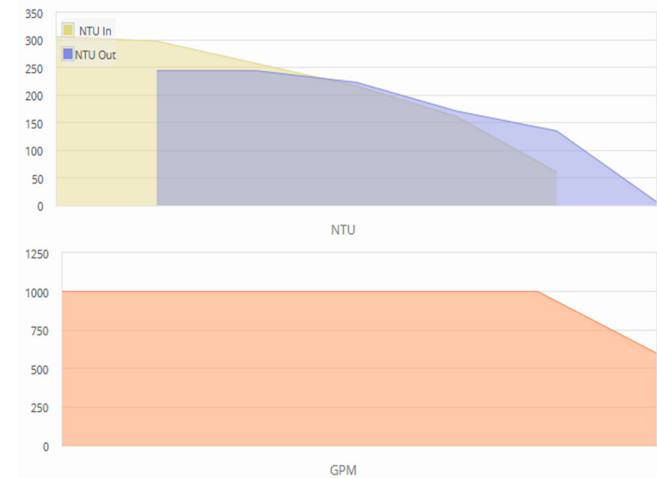
## Capabilities & Features

- Our automated ATS treats construction site stormwater using polymer injection, retention, and filtration methods. Components include a frac tank, static mixer, sand filter, polymer pumps, rain gauge, flow meter, actuator valves and turbidity sensors.

- Rainfall, flow, turbidity (influent/effluent), gate status (open/close) are time stamped and displayed our online web application on 15-minute intervals. Data is easily exportable into excel file format.

- Discharges to receiving stream only when turbidity meets the minimum required and recirculates when the minimum is not met.

- Customers receive SMS text alerts for customized exceedance limits of each environmental parameter.

- Diagnostics - Our ATS sends back battery voltage and other important information to remotely manage our monitoring unit even when it is not raining.

- 100% solar powered and off-the-grid.

- Website console can be tailored to every customer's specific preference for view, alerting, downloading, and branding.

## Real time Data Logging



**Event Details**

ATS -SR 181 Spanish Fort - Event starting on 2/12/2021 11:53 AM CST - Ended 2/12/2021 12:43 PM CST
Duration: 50 minutes

| Time | Valve Status | NTU In | NTU Out | GPM |
|------|--------------|--------|---------|-----|
| 2/12/2021 11:53:05 AM | Recycle | 306 NTU | 244 NTU | 1000 GPM |
| 2/12/2021 12:03:05 PM | Recycle | 298 NTU | 244 NTU | 1000 GPM |
| 2/12/2021 12:13:05 PM | Recycle | 257 NTU | 223 NTU | 1000 GPM |
| 2/12/2021 12:23:05 PM | Recycle | 217 NTU | 171 NTU | 1000 GPM |
| 2/12/2021 12:33:05 PM | Recycle | 161 NTU | 135 NTU | 1000 GPM |
| 2/12/2021 12:43:05 PM | Drain | 60 NTU | 7 NTU | 600 GPM |



*Customers can also receive SMS text messages of exceedance events to their mobile device including frequency storm, rainfall, stage, flowrate, and any monitored water quality parameter, including PH, dissolved oxygen, conductivity, temperature, and turbidity.*