### SUNTREE NSBB<sup>TM</sup> PROVEN SOLUTIONS for Stormwater Treatment



### WATER QUALITY TREATMENT SYSTEM

### NUTRIENT SEPARATING BAFFLE BOX™

The Nutrient Separating Baffle Box (NSBB) is an advanced stormwater treatment system utilizing screening and hydrodynamic separation to capture pollutants.

The patented screening system, suspended above the sedimentation chambers, captures and stores trash and debris in a dry state. Dry state storage of trash and debris minimizes nutrient leaching, bacterial growth, bad odors, and allows for easier removal.



LEAN WATER

SUSTAINABLE

67

The NSBB's triple chamber design provides higher removals of total suspended solids over a wide range of particle sizes, including the finest particles. Fine sediments carry large amounts of heavy metals, nutrients and other harmful pollutants.

The patented deflector shield system ensures no scouring of captured sediments during high flow. This feature allows the system to be installed inline, thus eliminating the need for diversion structures.

The oil skimmer with hydrocarbon booms traps and absorbs oil into a polymer based media for permanent removal.

In use since 1994, it is a widely accepted stormwater treatment solution among civil engineers, municipalities and developers nationwide.



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# PROVEN EXPERTISE HOW IT WORKS

SCREENING SYSTEM

#### TURBULENCE DEFLECTORS

#### SkimBoss™ MAX

## operation

- Filtration Screen– Collects and stores trash, debris,organics, and oxygen demanding substances above standing water in a dry state.
- Turbulence Deflectors– Prevents re-suspension of captured pollutants.

#### SEDIMENT CHAMBERS

- Sediment Chambers– Maximizes TSS removal and eliminates scouring during extreme flow rates.
- Skimmer & Boom- Collects hydrocarbons and controls flow velocity which improves removal efficiency.

# installation



Low Pick Weights: Delivered in a top & bottom to minimize weight



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**1 Hour Set Time:** Internal components are installed prior to delivery



**Minimal Excavation:** Bottom of structure less than 4 ft. from invert of pipe

### CAPTURES FOLIAGE, LITTER, SEDIMENT, PHOSPHORUS, DEBRIS HYDROCARBONS... EVERYTHING

### **DURING** STORM EVENT

- Nutrient rich vegetation and litter are captured in filtration screen system.
- Sediment settles to the bottom.



Bottom of concrete structure is only 4' below the pipe.



### AFTER STORM EVENT

- Vegetation and litter is above the static water and dries out between storm events.
- With the organic pollutant load separated from the water, the system does not go septic.

During servicing, the screen system hinges off to the side to give easy access to the sediment collected in the lower chambers.

# No Chance for Bacterial Discharge!

## **m**aintainence



**Easy Access** Clean out using vacuum truck -access through manholes or hatches at the top of the structure



**Bottom screens** are hinged to allow full access to the lower sediment chambers



**Upper screen Lids** prevent loss of debris during high flow rain events

# **NSBB** OPTIONS

#### SUNGATE™

Whether your pipes are submerged or there is a significant base flow the SunGate<sup>™</sup> will isolate your treatment system for servicing.

The SunGate<sup>™</sup> is available in several varieties and all pipe sizes, including custom sizes.



### SUNTREE OBSERVATION COVER™

When placed in a setting such as a public park, the Suntree Observation Cover<sup>™</sup> is an excellent tool to reach out to the community and increase stormwater pollution awareness.



### SkimBoss™ FILTRATION SYSTEM

The SkimBoss™ Filtration System removes dissolved phosphorus and nitrogen from stormwater runnoff without clogging typically associated with many other media type filtration devices.

Hydro-Variant<sup>™</sup> Technology

The SkimBoss® Filtration System automatically adjusts to accomodate variations in water flow.

During peak flow conditions head loss is negligible

#### **STORMBOOM™ MEDIA** HYDROCARBON ABSORPTION BOOMS Suntree manufactures various storm booms designed for stormwater applications.

- » Type 1 Absorbent W : A wide spectrum absorbent with large sieve covering. Capable of absorbing chemicals other than hydrocarbons
- » Type 2 Melt blown polypropylene with a large sieve size covering. Will not biodegrade. Absorption is limited to hydrocarbons.
- Type 3 50-50 blend of Absorbent W and melt blown polypropylene with a large sieve size covering. This boom offers wide spectrum absorption with an extra emphasis on hydrocarbon absorption.
- » Type 4 Polymer crumb filler with a fine sieve size covering. The polymer crumb filler will not absorb water and can float indefinitely, and it will not biodegrade.

### PROVEN SUCCESS IN THE FIELD

- No need to enter the confined space of the catchbasin to service.
- Multi-stage Filtration Captures everything from hydrocarbons, sediment, grass clippings, and litter.
- · Easily serviced by vacuum truck without tearing.
- Will not cause street flooding All filters are designed with adequate bypass to meet design flows of the inlet.
  - Does not need replacement unlike pesky cartridges or bag filters.



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