

# Nutrient Separating Baffle Box

- *Fits Within Existing Easements*
- *Hydrocarbon Removal*
- *Almost No Head Loss*
- *Always Treats Entire Flow*
- *Retrofits Existing Systems*
- *Easy & Quick To Install*
- *Meets NPDES Phase 2*

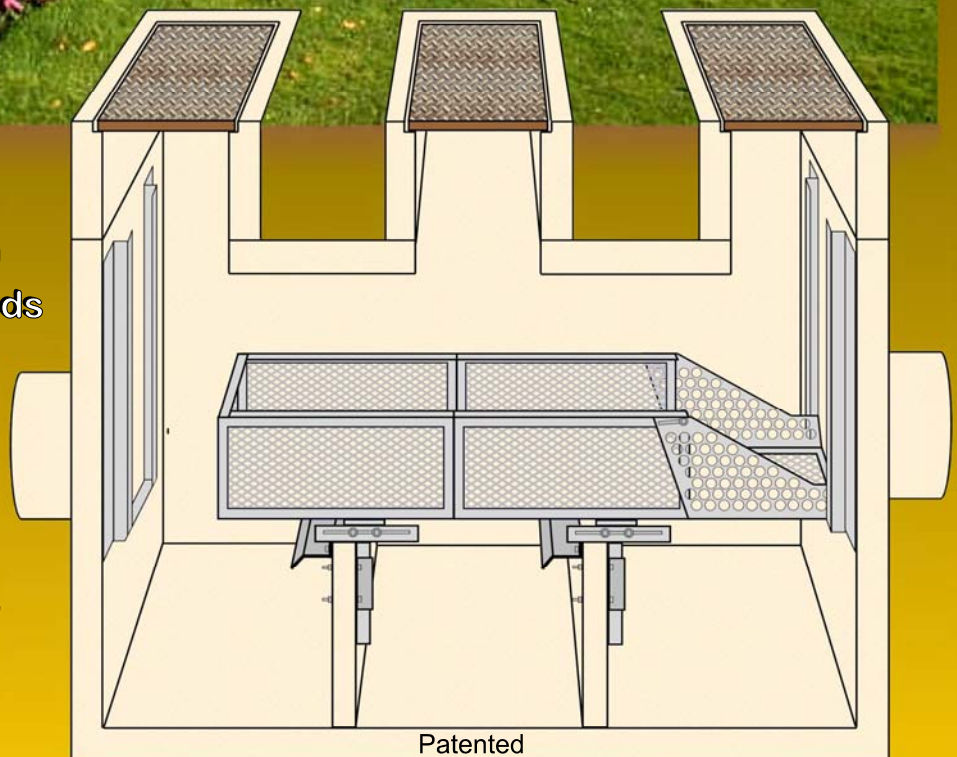
*The 2nd  
Generation  
Baffle Box*

Up To  
**90%** Removal  
Of Total Suspended Solids  
at less than half the  
cost of competing  
systems.

**Suntree**  
Technologies Inc.

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[www.suntreetech.com](http://www.suntreetech.com)

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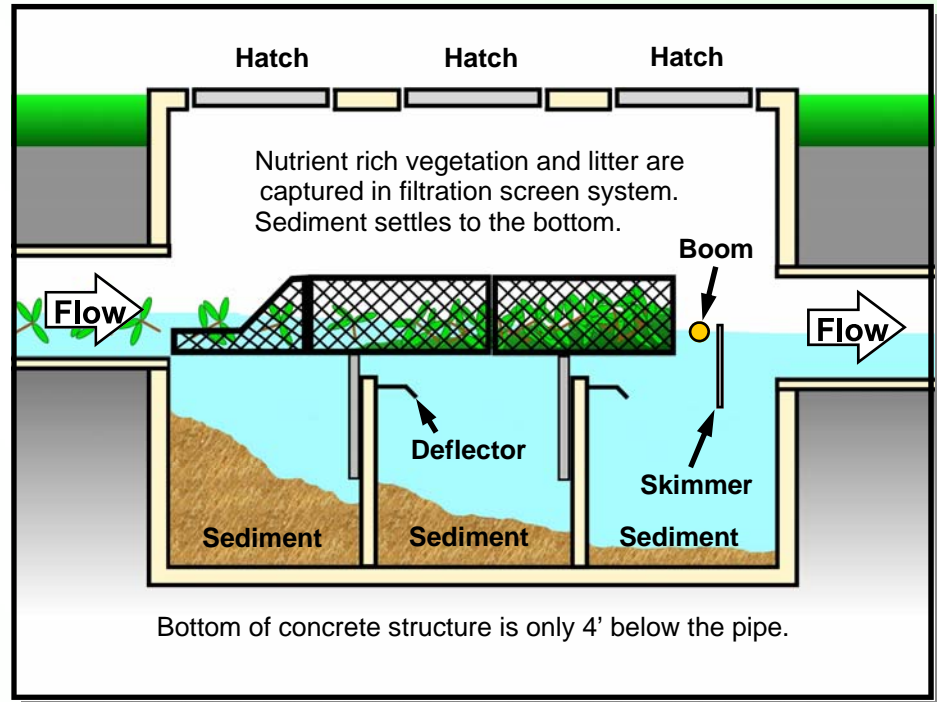
## Functional Description

### During The Storm Event

Captures foliage, litter, sediment, phosphates, hydrocarbons...  
**Everything!**

*Turbulence deflectors prevent captured sediment from re-suspending.*

Hydrocarbons collect in front of skimmer and are absorbed by Storm Boom.



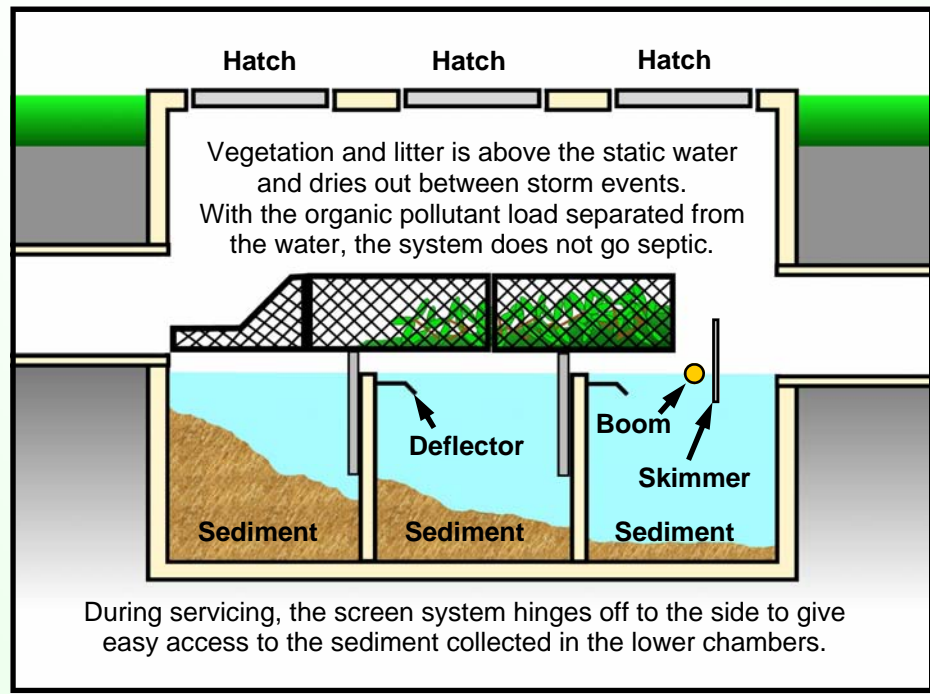
Patented

### The System Stays Healthy!

*Nutrient pollutant load is not lost to static water and flushed out at the next storm event.*

Separating organic matter from the static water prevents bacterial buildup.

### After The Storm Event



**No Chance For A Bacterial Discharge!**

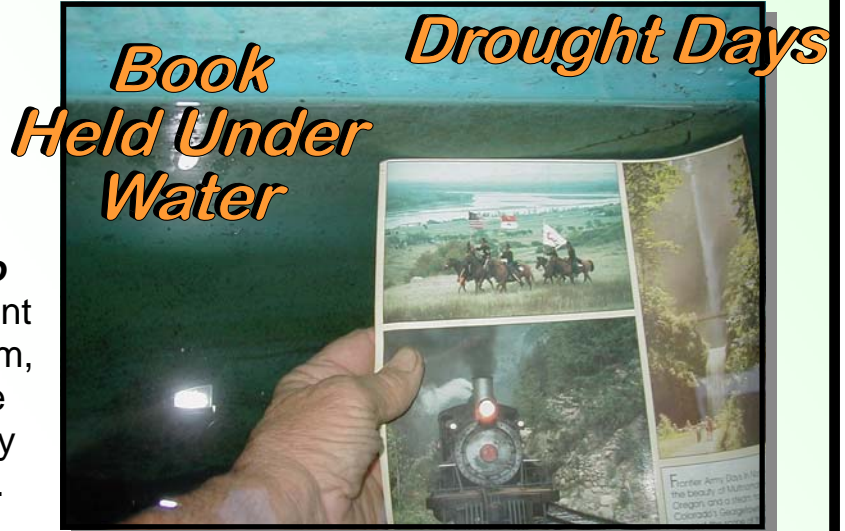
# Nutrient Separating Baffle Box

## Captured Debris

### *Not All Stormwater Systems Are Created Equal*

To the right is a photo of the back page of a road atlas being held 10" underwater in a *Nutrient Separating Baffle Box*.

**After a couple of months with no rain, the water still has no smell and is clear.** The sediment can be clearly seen on the bottom, and small fish and critters have established a happy and healthy ecosystem within the structure.



**If you are reluctant to touch the water in your stormwater filtration system because it is septic, then you have a problem because the next storm event will flush out your system into the environment.**

### *5790 Pounds In 30 days*



To the left is a view of 5790 pounds of sediment collected in a *Nutrient Separating Baffle Box* just 30 days after installation.

To the right is a view of foliage and litter collected within the screen system of a *Nutrient Separating Baffle Box*.



### *After 45 Days*

## ***Sizing The Nutrient Separating Baffle Box***

Because the entire flow is always treated and head loss is so minimal, determining the appropriate size of ***Nutrient Separating Baffle Box*** for a project is more often an element of pipe size than flow rate.

Model #	Inside Width	Inside Length	Standard Height *	Recommended Pipe Sizes
NSBB-2-4	2'	4'	5'	4" to 12"
NSBB-3-6	3'	6'	7'	8" to 18"
NSBB-4-8	4'	8'	7'	12" to 18"
NSBB-5-10	5'	10'	7'	12" to 30"
NSBB-6-12	6'	12'	7'	18" to 36"
NSBB-8-14	8'	14'	8' 4"	36" to 54"
NSBB-10-14	10'	14'	8' 4"	42" to 60"
NSBB-10-16	10'	16'	10' 5"	48" to 72"
NSBB-12-20	12'	20'	11'	54" to 72"

Custom sizes are available.

\*Height can vary as needed

### ***Please Call Suntime For Assistance Or Advice***

- Because water flow is not ducted off line for treatment, head loss is minimal and comparable to a large square catchbasin. Because of this, existing stormwater systems can be retrofitted with a Nutrient Separating Baffle Box, without compromising the original design specifications of the existing stormwater system.
- All structures are load rated for at least H-20. Standard wall construction of the structure is 6" thick steel re-enforced concrete. Concrete wall thickness can be more heavily reinforced and thicker upon request.
- A wide variety of manhole lids and hatches, and dampers to block off water flow during servicing, can be incorporated into the structure.
- Screen systems have stainless steel screens bolted into a heavy duty aluminum framework. The screen systems are hinged to give easy access to the lower chambers, and have a wide range of adjustments to accommodate unforeseen variables during installation.

## **Pre-assembly Of The Nutrient Separating Baffle Box**

***The internal components are installed prior to delivery to the job site.***



**Turbulence deflectors are attached to the tops of the baffles with stainless steel bolts. Several bolts per deflector are required.**



**Four brackets, held in place with 4 stainless steel bolts each, secure the screen system to the baffles. The screen system includes a wide range of positional adjustment.**



**Suntree  
Technologies Inc.**

## Setting The Structure

# Installation Of A Nutrient Separating Baffle Box In Perry Florida

### As Easy to Install As A Large Square Catchbasin

The hole was dug starting at 10:00am. By 3:00pm the same day, the entire structure was set in place with most of the backfilling done.

### Less Expensive To Install Than Other Systems

Because installation is so fast, the risk of washouts when retrofitting existing stormwater systems is dramatically reduced.

### No Problem For Custom Configurations

Notice the custom pipe fitting on the inflow end. It is designed to accommodate two 18" RCP side by side. To block off the water flow of submerged or partially submerged pipes during servicing, internal damper systems are available.

**A Suntree representative is always available to oversee installation to ensure a successful project.**

Step 1: Set lower half



Step 2: Hook up pipes



Step 3: Put sealant on joint



Step 4: Set upper half



Ready to position inflow pipe and seal pipes with grout



Set In  
Less Than  
30 Minutes



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