# STORMWATER SEDIMENT SOLUTION

The most cost-effective sediment capture & retention device  
**20-Year Guarantee**

SAFL Baffle is a fraction of the cost of hydro-dynamic separators with 10 times the flow rate

## Typical comparison found on over 1,000 projects

<table>
<thead>
<tr>
<th>SAFL Baffle</th>
<th>Hydrodynamic Separators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost: $5,200</td>
<td>Cost: $24,000</td>
</tr>
<tr>
<td>TSS Removal: 84%</td>
<td>TSS Removal: 85%</td>
</tr>
<tr>
<td>By-Pass Flow Rate: 80 CFS</td>
<td>By-Pass Flow Rate: 8 CFS</td>
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<tr>
<td>Materials: All Stainless Steel</td>
<td>Materials: Plastic in Concrete</td>
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<tr>
<td>Full Guarantee: 20 Years</td>
<td>Guarantee: ?</td>
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</tbody>
</table>

**Operates by stopping the natural vortex**

The SAFL Baffle stops the natural vortex, dissipating hydro energy and causing sediment to drop to the bottom of the sump. As sediment collects, the SAFL Baffle prevents scouring and resuspension, retaining all previously captured sediment, even during high-flow storm events **up to 80 cubic feet per second**.

**Operates by creating a vortex**

Hydro Dynamic Separators operate with flows between **2 to 8 cubic feet per second**. At greater flows, stormwater bypasses the device and **does not capture any sediment**.

Internal plastic parts often vibrate and break.

| SAFL Baffle installs in standard sump structures | All parts fit through a standard manhole for new or retrofit projects |
The Problem:

Standard sump structures alone can capture up to 30%* TSS

The problem is “Washout”. During high flow events, vortex action scours the sump clean, washing out previously captured sediment.

Sediment devices must be tested for both Capture and Retention (Washout) or the overall performance of the device is unknown.

* TSS (Total Suspended Solids) percentage is calculated based on sump size, pipe diameters, drainage area & rainfall

Capture and Retention

Both capture and retention, at high flow rates, are required to adequately manage sediment.

What good is a sediment capture device, if the previously captured sediment washes out during a heavy storm?

With the SAFL Baffle installed in a standard sump structure, sediment capture and ability to retain this captured sediment, exceeds 80%

Vortex action is stopped, and washout does not occur.

Both capture and retention are required. The SAFL Baffle provides both.

Retrofittable – Can be installed in existing sump structures with a 24-inch minimum opening.

View a video demonstration: upstreamtechnologies.us/products/safl.shtml

The SAFL Baffle is a patented device and may not be reproduced.

www.upstreamtechnologies.us

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