

At-Source Trash and Sediment Capture



The EnviroBasin™

The EnviroBasin™ is an 'at-source' sediment and trash capture device.

The EnviroBasin incorporates the LittaTrap® inlet filter, certified by the California Water Board for 100% capture of litter and greater particles with an Enviropod-patented Energy Deflector to capture sediment.

Tested to the Canadian ETV Oil and Grit Separator protocol, the EnviroBasin is ISO 1400 verified at removing >60% TSS.

The EnviroBasin™ is an alternative to the conventional catchbasin, providing stormwater treatment as well as the collection and conveyance of stormwater flows into the stormwater system.

The EnviroBasin™ is a pre-engineered and manufactured solution.

Supplied with the following pre-installed components, the EnviroBasin™ is a 'Plug and Play' solution for stormwater treatment.

- Standard concrete catch basin structure with a maximized storage capacity.
- · Easy access cast iron gate and frame.
- Enviropod LittaTrap® FC with Energy Deflector.
- PODBox™ outlet baffle.
- · Adjustable outlet boot.

The EnviroBasin eliminates the need for downstream oil and grit separators, as it treats the stormwater at the source before it enters the stormwater system.



Field Trials



EnviroBasin™ Components



EnviroBasin™ Grate Inlet

WHY ENVIROBASIN?

- Using the EnviroBasin instead of traditional OGS systems reduces the number of stormwater assets installed and maintained, providing significant savings to the land developer and the end-user.
- The EnviroBasin is available in a variety of sizes and configurations.
- The EnviroBasin is a pre-manufactured and easy handled product saving the drainage contractor time and expense in installation.
- The system is easy to maintain with a large sediment storage volume and separate trash storage.
- The EnviroBasin efficiently conveys peak stormwater flows without resuspension.

APPLICATIONS

- As a pre-treatment device or as a stand-alone alternative to a catch basin, the EnviroBasin can be used in carpark roads, retail, industrial sites and other high contaminant generating areas.
- Ideal for pre-treatment to Low Impact Design or infiltration using EnviroBasin allows a distributed entry into these drainage structures.
- Ideal for urban coastal areas such as waterfronts, marinas and ports where catch basins often directly discharge into the ocean or lake.

Operation

Water flows are diverted into the EnviroBasin™ grated inlet in the same manner as a standard stormwater inlet. Once the flows have dropped below the grate, stormwater is diverted through the gross pollutant basket, where it is intercepted by the patented Energy Deflector. The Energy Deflector reverses the direction of flow, distributing the inflow evenly across the surface area of the sump as shown in Figure 1.

This process enhances settling and reduces resuspension of sediment while retaining and storing gross solids in a dry environment.





Figure 1: Turbulence in sumped stormwater inlet (left) and EnviroBasin™ (Right)

FEATURES

- · High flow, dry gross solid capture.
 - » Enhanced nutrient removal.
 - » Reduced contaminant release.
- Enhanced energy deflection and flow distribution.
 - » >60% sediment removal.
 - » No resuspension.
- No confined space entry.
- · Large storage volume.
- · Trialled and tested in Canada.



ISO 14034 ETV VERIFIED





EnviroBasin™ Lab Testing

Maintenance

Routine maintenance of LittaTrap by hand or vactor truck (3–12 months dependent on site specific loading).

Periodic maintenance by Vactor truck maintenance of the EnviroBasin[™] sump (2–3 years depending on site specific loading).



LittaTrap™ Basket Hand Maintenance

It is recommended the Litta $Trap^{TM}$ basket be emptied when 75% full (generally every 3–12 months). To empty the basket, simply "Lift, Tip, Reuse". The following steps detail hand maintenance:

- Establish a safe working area per typical catch basin service activity.
- 2. Remove grate/access cover.
- Remove the basket with two lifting hooks or lift by hand through the loops on the top of the basket.
 Excess debris should be scooped out first if the basket is over half full.
- 4. Pour contents of the basket into a disposal container.
- 5. Replace grate.



EnviroBasin™ Sump Vactor Maintenance

Steps for vactor maintenance are as detailed below:

- 1. Establish a safe working area per typical catch pit service activity.
- 2. Remove grate/access cover.
- 3. Vacuum accumulated debris from the basket.
- 4. Vactor the contents from the sump of the catch basin (if required).
- 5. Inspect the Littatrap™ and EnviroBasin™ for any damage. Reinstall the LittaTrap basket.
- 6. Replace grate/access cover.



Enviropod offers a free design service where the cumulative performance of several EnviroBasin's can be modelled for a specific project based on local rainfall and treatment needs. This service allows stormwater consultants to optimize the number and the location of EnviroBasin's for their projects.



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For further information please see www.enviropod.com

