

EcoStream™ BioFilter

EcoStream BioFilter is designed to capture and retain a variety of pollutants including sediment, nutrients, heavy metals, phosphorous, and hydrocarbons while helping to meet green infrastructure objectives. This high flow, low impact system incorporates the processes of sedimentation, filtration, adsorption, and biological.

Features

- High filter media area and flowrate
- Low elevation change between inlet and outlet
- Superior removal mechanisms utilizing physical unit operations and biological processes
- Living plant component on the surface of the unit
- Internal bypass
- Optional external high flow bypass available in most configurations
- Multiple configurations to meet specific requirements
- Scalable systems allow for treatment rates starting at 66 GPM
- Surface loaded filter that can receive water via inlet pipe or curb inlet

Benefits

- Compact footprint without sacrificing flowrate
- Can utilize regional plant life in the plant growth section
- Simple, efficient, cost-effective design
- Maintainable system with access to remove accumulated pollutants before full media replacement is required
- Supports designs both with and without a plant growth section



EcoStream BioFilter Specification

Materials and Design

- Concrete Structures: Designed for H-20 traffic loading and applicable soil loads or as otherwise determined by a Licensed Professional Engineer. The materials and structural design of the devices conform to ASTM C857 and ASTM C858.
- Internal components are constructed of proprietary media blends, recycled polyethylene and an underdrain.

Performance

- The EcoStream BioFilter is an inline unit capable of conveying 100% of the design peak flow and can bypass (internally or externally) excessive flow rates.
- Up to 66 GPM in a 4' x 4' (1.2 x 1.2 m) unit, with larger units available for higher treatment flowrates
- Greater than 85% removal of TSS and 84% removal of phosphorus

EcoStream Model	NJCAT/DEP Treatment Rate gpm/cfs (L/s)	Mass Capture Capacity lb (kg)	Sample Configuration
ES16	66 / 0.147 (4.2)	271 (123)	4 x 4
ES24	99 / 0.221 (6.3)	407 (185)	4 x 6
ES32	132 / 0.294 (8.3)	542 (246)	4 x 8
ES40	165 / 0.368 (10.4)	678 (308)	4 x 10
ES48	198 / 0.441 (12.5)	813 (369)	4 x 12 or 6 x 8
ES36	149 / 0.331 (9.4)	610 (277)	6 x 6
ES60	247 / 0.551 (15.6)	1016 (461)	6 x 10
ES72	297 / 0.662 (18.7)	1220 (553)	6 x 12
ES80	330 / 0.735 (20.8)	1355 (615)	8 x 10
ES96	396 / 0.882 (25.0)	1626 (738)	8 x 12
ES112	462 / 1.029 (29.1)	1897 (860)	8 x 14
ES128	528 / 1.176 (33.3)	2168 (983)	8 x 16

Installation

EcoStream should be activated after a site is stabilized to prevent uncontrolled stormwater runoff from the construction site from entering the system. Installation of the EcoStream BioFilter unit(s) shall be performed per manufacturer's installation instructions. Such instructions can be obtained by calling Advanced Drainage Systems at (800) 821-6710 or by logging on to www.adspipe.com.

