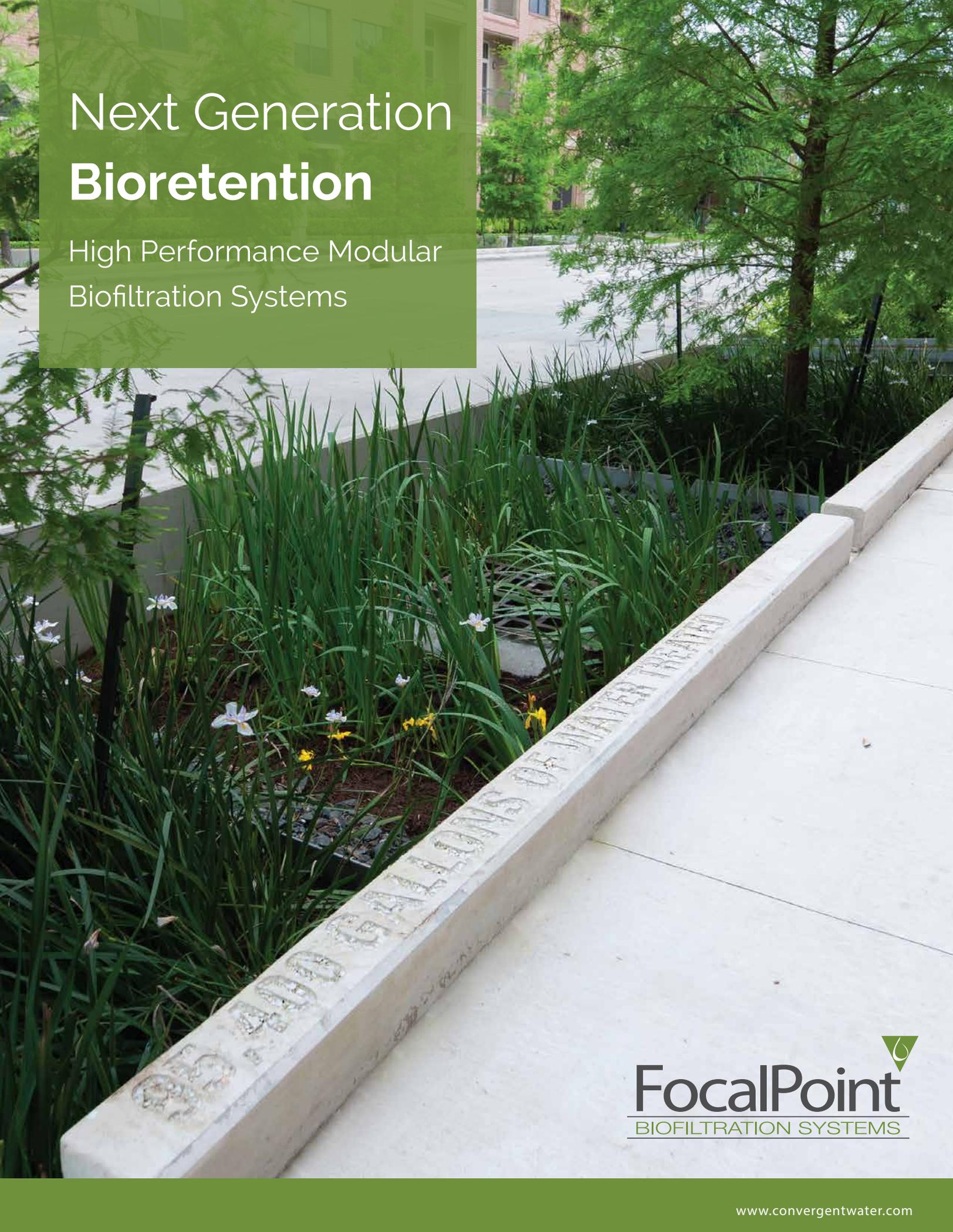


Next Generation Bioretention

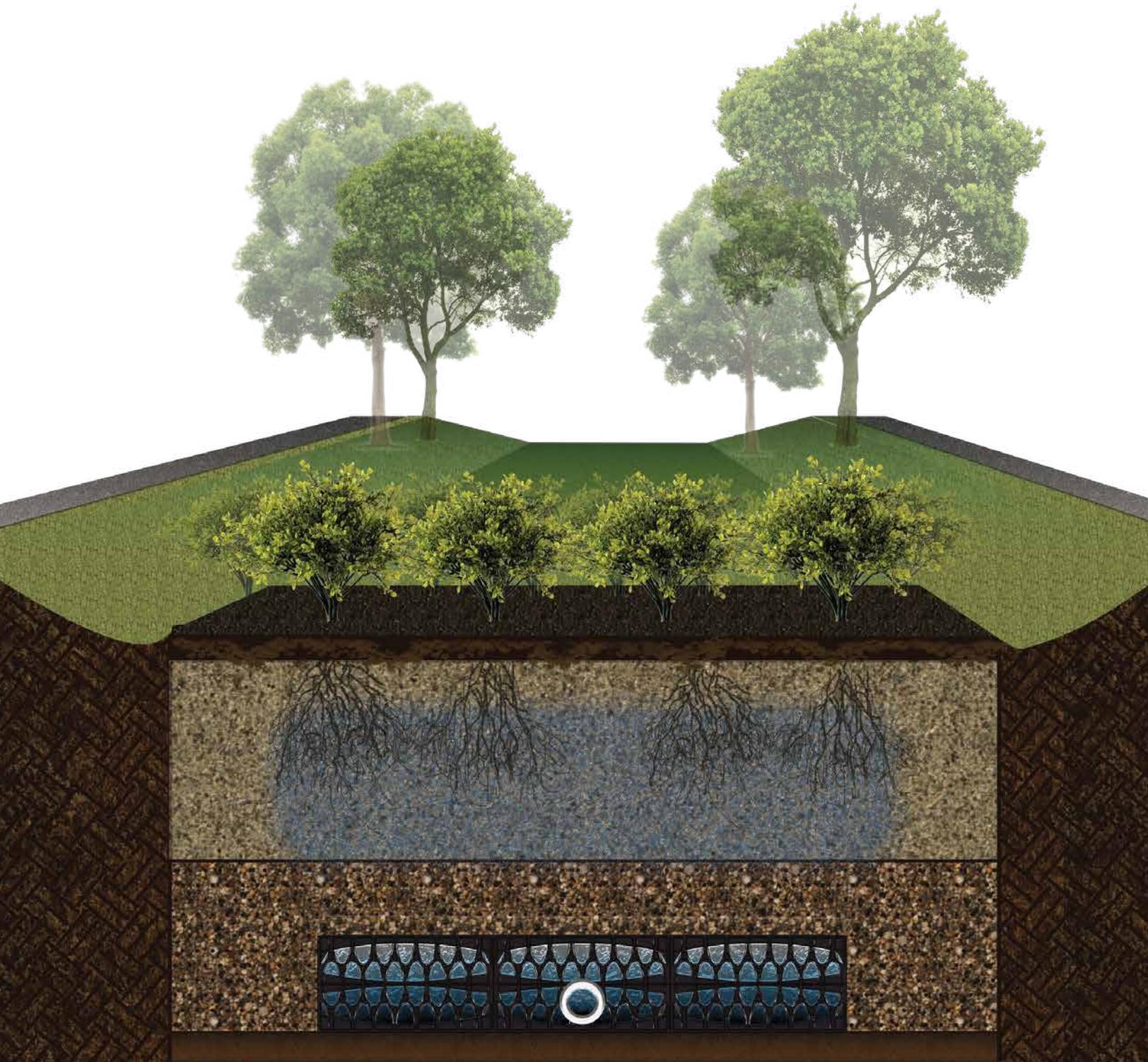
High Performance Modular
Biofiltration Systems




FocalPoint
BIOFILTRATION SYSTEMS



FocalPoint High Performance Modular Biofiltration Systems (HPMBS) is a scalable biofiltration system which combines the efficiency of high flow rate engineered soils with the durability and modularity of a highly pervious expandable underdrain/storage/infiltration system. The modular FocalPoint HPMBS is a complete, integrated system with a demanding specification that insures functionality, performance and maintainability. With rigorous quality assurance standards and post-construction in-situ performance verification, FocalPoint HPMBS provides guaranteed performance.





Uniquely Specified, Site Built

System Components

High Flow Media

At the heart of every FocalPoint HPMBs is its high performance engineered soil blend. Developed by LID pioneer, Larry Coffman, advanced high flow rate biofiltration media utilizes physical, chemical and biological mechanisms of the soil, plant and microbe complex, to remove pollutants found in stormwater runoff. Infiltration rates at 100" per hour or more, overcome many of the challenges inherent in traditional slow flow rate media and creates design flexibilities that drive lower costs and greater application opportunities.

Separation Layer

A wide aperture mesh layer is utilized to prevent bridging stone from entering the underdrain system. A separation layer which utilizes the concept of 'bridging' to separate the biofiltration media from the underdrain without the use of geotextile fabrics.

Open Cell Underdrain

A modular, high infiltration rate underdrain/storage system which is designed to directly infiltrate or exfiltrate water through it's surface. The modular underdrain overcomes the limited collection capacity of traditional stone and pipe underdrains. A 95% open surface area accepts water significantly faster and can be extended to accommodate any volume needs.

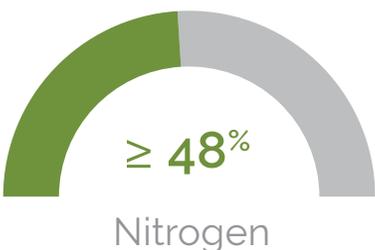
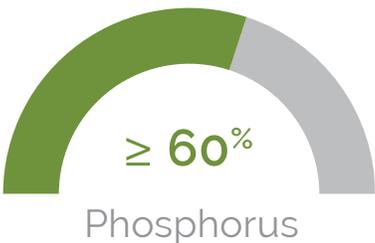
Mulch

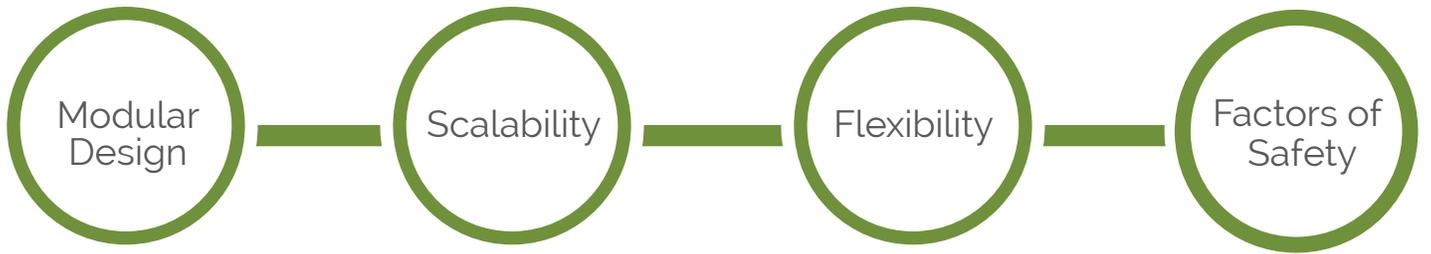
Shredded, hardwood mulch acts as a pre-treatment mechanism, capturing silt, sediment and certain other pollutants, and preventing trash from entering the system. Removal and replacement of mulch is typically necessary at 6-12 month intervals and is the most significant maintenance activity required with the FocalPoint HPMBs.

Plants

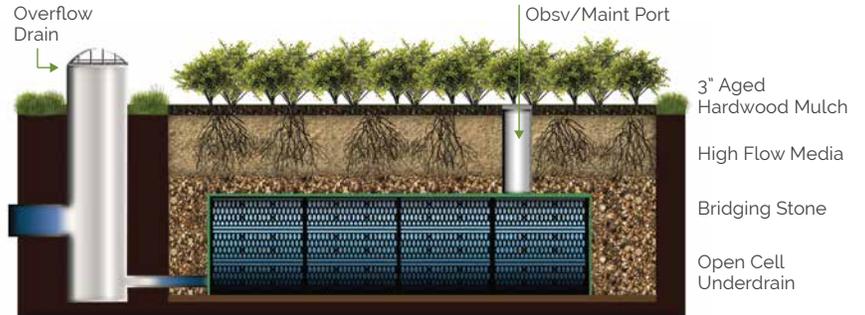
Native plants are preferred, but a broad palette of plants which thrive in FocalPoint HPMBs systems exist. They are typically characterized by rhizomatous root systems and tolerate both drought and inundation.

Pollutant Removal Efficiency



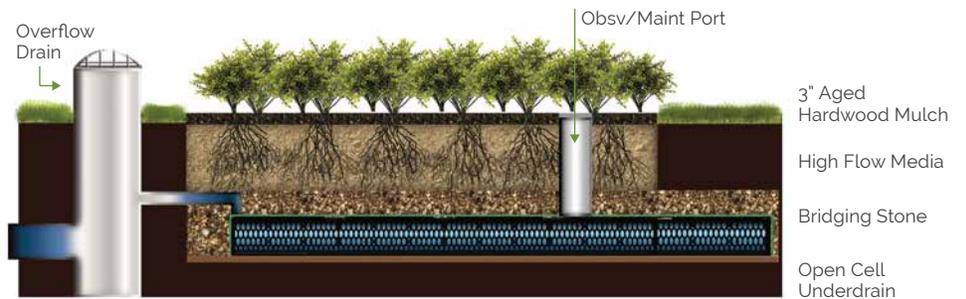


The FocalPoint's modular underdrain, unlike a traditional perforated pipe, not only supports the flow rate of the media, but can be expanded beyond the footprint of the media bed to provide unlimited underground detention, infiltration and/or storage for water reuse/infiltration.



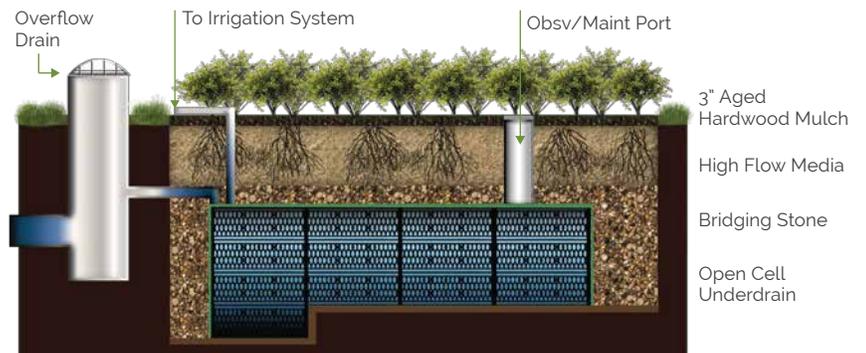
Expanded Detention

FocalPoint HPMBS gives designers maximum flexibility in meeting both water quality and volume requirements



Expanded Infiltration

The system can be used in combination with traditional LID BMPs such as grassy swales and vegetated depressions. It enables implementation of green streets using urban sidewalk planters; which because of the small footprint can support designs with large trees. These systems are also used for downspout planters, replacing underground treatment systems and are an easy retrofit for failed traditional bioretention systems. FocalPoint provides unlimited application opportunities for new construction and redevelopment.



Rainwater Harvesting

'Cap & Seal' Protection

During Ongoing Construction Activity

Protecting the FocalPoint HPMBs during construction is of the utmost importance. The 'Cap & Seal' protection ensures a viable system regardless of the construction sequencing by sealing off the media bed until the contributing drainage area is stabilized. Solving this problem solves one of the most problematic issues in bioretention. Due to its small scale, FocalPoint HPMBs can be capped and sealed, allowing installation to take place early in the project construction cycle when other site utilities are installed.



Convergent Water Technologies guarantees post-construction performance and we make sure your client gets it.



Performance Guaranteed

Post-Installation Verification

The first year's maintenance is included in all FocalPoint HPMBs installations to insure that the system is given the best opportunity to succeed, and low cost annual maintenance contracts are available.

The potential of failure for most LID/GI BMP's is highest within the first year and success and failure is often dependent on whether the system is being properly inspected and maintained. Convergent's commitment to system success doesn't stop when the installation is complete.

Maintenance In Mind

Simple & Cost Effective

This hydraulic conductivity test procedure measures the entire media profile under saturated conditions to produce a reliable and accurate result.

To ensure the highest level of effectiveness, Convergent specifies that the FocalPoint HPMBs be tested within 90 days of activation and we recommend the system be tested annually thereafter to provide ongoing quality assurance.

RAIN GUARDIAN PRETREATMENT FOR BIORETENTION

STORMWATER MANAGEMENT

Rain Guardian keeps trash, leaves and other debris out LID Systems such as Swales, Filtration Basins, Infiltration Basins, and Bioretention Systems.



Rain Guardian simplifies maintenance by collecting sand, leaves, grass clippings, and other debris in a confined location. Rain Guardians make pretreatment maintenance quick and easy, while improving the water quality benefits of treatment practices. With efficient, simplified maintenance, Rain Guardians are a must for any rain garden.

Maximize Capacity & Extend Effective Life

- Grate/filter/chamber combination captures sediment and debris
- Overflow points prevent inlet debris from causing bypass before bioretention reaches capacity

Simplify Maintenance

- Sediment and debris removed from chamber with shovel
- Drop-in filter cleaned with broom or hose

Easy Installation

- Placement and securing take only minutes
- New construction or retrofits



ADVANTAGES:

- Simplify Maintenance
- Easy Installation
- Extend the Life of Bioretention Systems

