

Choosing the Right Stormwater BMP: Green vs. Engineered Solutions

New Jersey's stormwater management rules require developers to use approved Best Management Practices (BMPs) to control stormwater runoff. These practices are designed to satisfy three primary standards: improving water quality, managing water quantity (flood control), and promoting groundwater recharge.

Green Infrastructure (GI): Nature-Based Solutions

Bioretention is a multi-purpose powerhouse.

Bioretention and infiltration basins can satisfy all three regulatory standards simultaneously.



Water Quality



Water Quantity



Groundwater Recharge



Pervious Paving tackles runoff at the source.

This practice manages runoff quantity while also allowing for groundwater recharge.

Not all GI is created equal.

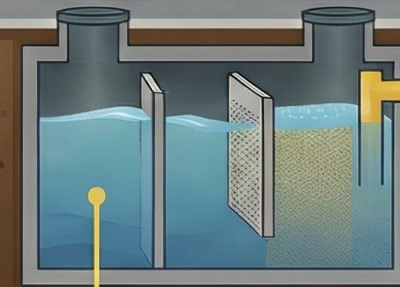


Some BMPs like green roofs target quantity, while others like grass swales focus on quality.

Comparing Regulatory Functions of Common GI BMPs (NJDEP Standards)

	Runoff Quality (TSS Removal)	Runoff Quantity Control	Groundwater Recharge
Bioretention System: 80% or 90%	✓	✓	✓
Pervious Paving System: 80%	✓	✓	✓
Green Roof: 0%	✗	✗	✗
Grass Swale: 50% or less	✗	✗	✗

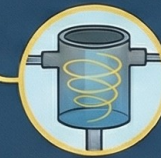
Manufactured Treatment Devices (MTDs): Engineered Solutions



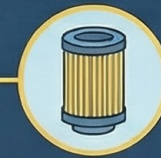
MTDs are essential for space-constrained sites.

They are often used in dense redevelopment projects where large GI systems are not feasible.

MTDs are grouped into three main categories



Hydrodynamic Separators



Media Filters



Retention/Detention/
Recharge Chambers



Certification ensures performance.

MTDs must be certified by the NJDEP to verify their pollutant removal claims.