DETENTION/RETENTION
PERMEABLE SOLUTIONS
HARVESTING/REUSE
BIORETENTION/BIOFILTRATION
MEDIA FILTRATION
HYDRO_DYNAMIC SEPARATION
INLET FILTRATION
TRASH CAPTURE
Stormwater management protects our environment. Stormwater runoff is generated when precipitation flows over land or impervious surfaces and does not percolate into the ground. As the runoff flows over paved streets, parking lots, and building rooftops, it accumulates sediment, metals, nutrients, petroleum hydrocarbons, trash, debris, and other pollutants that could adversely affect downstream water quality if the runoff is discharged untreated. Large volumes of runoff can also cause stream bank erosion if flow rates are uncontrolled. To control stormwater discharges, the EPA recommends implementing best management practices (BMPs), and most local agencies require BMPs to comply with the NPDES permitting program.

Oldcastle Stormwater Solutions offers a comprehensive line of BMP products for runoff and pollutant reduction, along with full engineering support. We're experts in the constantly changing regulations that protect our environment and can help design a stormwater management system for any project site. We'll work with you to develop the best solution to keep you in compliance with local regulations while providing the consistently high quality products and service you’ve come to expect from Oldcastle.
Oldcastle Stormwater Solutions offers stormwater storage products to control runoff volume from developed sites. This prevents unwanted environmental impacts such as stream channel erosion and habitat degradation. Depending on the project’s requirements, our products can either detain stormwater for controlled management or retain it for infiltration and groundwater recharge or harvesting and reuse. For small sites and shallow applications, the CUDO® Water Storage System, which is lightweight, made from the highest quality plastic resins, and offers superior strength, is an ideal solution due to its compact size and low profile. For larger volumes and increased structural loading requirements, we offer StormCapture® precast concrete underground storage modules which are perfect for deeper applications and extreme loading conditions. StormCapture and CUDO’s modular designs can be easily configured for project-specific layouts, and they can be combined with our pre- and post-treatment products to further ensure downstream water quality is preserved. Both solutions allow for maximization of developable land by placing the full complement of stormwater management solutions efficiently underground.
**PERMEABLE SOLUTIONS**

For heavily developed sites that need to meet Low Impact Development (LID) requirements and store a substantial volume of stormwater runoff, PermeCapture™ is the perfect solution. Our PermeCapture system combines the advantages and versatility of StormCapture® structural precast concrete underground storage modules with the aesthetics and performance of Belgard® permeable interlocking concrete pavers. The system also minimizes the need for conventional stormwater collection methods by allowing water to pass directly into below grade storage.

**PERMECAPTURE**

PermeCapture provides a stand-alone, maintainable, green solution for total stormwater management. Stormwater is filtered from the surface down through the pavers to collection in the StormCapture modules for controlled management.

**Harvesting / Reuse**

Harvested stormwater can be used to reduce or replace the consumption of municipal water for landscape irrigation, toilet flushing, and cooling towers. Our water harvesting systems are complete packages that combine our stormwater storage products such as StormCapture and CUDO with our pretreatment products like the Dual Vortex Separator and PerkFilter™. Through our partners, we provide controls, pumps, and valves, all delivered on a pre-assembled pallet and ready for installation.

**Harvesting/Reuse**

Water harvesting and reuse can provide LEED points for Sustainable Sites and Water Efficiency as well as being a Low Impact Development (LID) and sustainable building design practice.

* Please see product inserts in back of folder for more information on specific product solutions.
Oldcastle Stormwater Solutions offers both modular and single structure precast concrete bioretention cell systems: the BioMod® Modular Bioretention System and the TreePod™ Biofilter for soil-based filtration and Low Impact Development applications. Both systems remove solid phase and dissolved pollutants including sediment, metals, nutrients, and petroleum hydrocarbons, as well as the gross solids and trash normally found in stormwater runoff. BioMod is a modular, prefabricated, structural system that comes in standard shapes and sizes and is engineered for use with local agency bioretention cell designs and their approved low flow soils. Made from high quality precast concrete, BioMod provides the most economical bioretention solution. For jurisdictions that allow the use of proven high flow soils, TreePod is a great solution as it allows a designer to reduce the size of the treatment facility. TreePod is also made from precast concrete and comes as a complete package with our high flow soil media.

To complement our bioretention products, we offer the SwaleGard® Pre-Filter and Overflow Filter to enhance treatment performance and extend the service life of natural swales and bioretention facilities.
MEDIA FILTRATION

Our media filtration product, the PerkFilter™, has been proven to remove and retain the toughest pollutants from stormwater runoff. PerkFilter is a comprehensive filtration BMP that uses filter media housed in removable cartridges to treat polluted stormwater coming from developed urban and suburban sites. The PerkFilter system features a pretreatment chamber and replaceable filter cartridges to capture sediment, metals, nutrients, and petroleum hydrocarbons, as well as gross solids and trash, to significantly reduce the total pollutant discharge load. The system can incorporate a variety of media to address site-specific pollutants of concern and is available in multiple configurations, including catch basins, vaults, and manholes, allowing the designer maximum flexibility. Our engineers can help size a system to ensure it meets the site’s treatment flow rates or volumes and jurisdictional permitting requirements.

MEDIA FILTRATION

PerkFilter media filtration systems are designed to capture target constituents including, but not limited to: sediment, metals, nutrients, and petroleum hydrocarbons, as well as gross solids and trash, to significantly reduce the total pollutant discharge load.

* Please see product inserts in back of folder for more information on specific product solutions.
Oldcastle Stormwater Solutions’ hydrodynamic separation product, the Dual Vortex Separator (DVS), provides enhanced gravity separation of stormwater pollutants in a compact configuration. The DVS offers an innovative and economic alternative for BMP implementation in new and retrofit applications where space is limited and effective stormwater treatment is required. The DVS unit can be used to help meet Total Maximum Daily Load (TMDL) requirements for removal of sediment, gross solids, petroleum hydrocarbons, and trash. The unit can also be a critical component of a comprehensive LID strategy, providing pretreatment to help increase the service life of detention, retention, and infiltration systems as well as other stormwater treatment BMPs. In the DVS, particle settling is enhanced by centrifugal forces induced by circular flow patterns in the twin vortex chambers. Settled solids are collected in an isolated storage area at the bottom, while floating trash, debris, and petroleum hydrocarbons are retained behind the baffles that contain the vortex chambers. The DVS contains an internal high-flow bypass weir system which diverts excess flows around the settling chamber, minimizing the risk of resuspension of pollutants and allowing for both online and offline configurations.

The DVS is available in a range of sizes and is constructed as a precast concrete manhole or small vault structure with durable stainless steel components mounted inside. The system is typically delivered as a complete unit for installation by the contractor.
**Inlet Filtration**

Our inlet filtration products act as screening devices in drainage inlets and are designed to remove sediment, gross solids, trash, and petroleum hydrocarbons from stormwater runoff. Our FloGard® line includes several varieties of inserts for different applications and inlet types: catch basin insert filters, a downspout filter, a trench drain filter, and a trash and debris guard. Most products include a high flow bypass feature which allows water to bypass the device while retaining sediment and debris, enabling sustained maximum design flows under extreme weather conditions. Filters are available in sizes to fit most industry-standard drainage inlets.

**Trash Capture**

Most of our products inherently capture and retain trash and gross pollutants through their designs while also providing higher levels of treatment. However, our Net Tech Gross Pollutant Trap is purely a trash capture device that can be fixed to stormwater outfalls. When the net is completely filled with trash and debris, it cinches closed and detaches, ready to be emptied and reused.

*Please see product inserts in back of folder for more information on specific product solutions.*
ENGINEERING & MAINTENANCE SERVICES

Engineering & Design

Let us help you design a stormwater management system for your next project. Our staff of engineers, regulatory experts, and technical sales specialists will help you navigate local regulations, design the most efficient and effective system for your site, and help you meet your permitting requirements.

Oldcastle has professional engineers licensed in all 50 states.

Maintenance

Our team of maintenance specialists will help you develop a customized maintenance program to prolong the life of your system and keep you in compliance with federal, state, and local regulations.