March 9, 2026

Eric Weimer, Owner
KeyStone Pavers
127 Cypress Street
Centreville, MD 21617

Sustainable Stormwater Management Practices Supporting Maryland's Chesapeake Bay Restoration Goals

My name is Eric Weimer, and I am the owner of KeyStone Pavers; a family-owned small business here in Maryland. I am in favor of bills SB688 & HB1465.

Our company is a contracting firm specializing in exterior construction projects that incorporate environmentally responsible solutions, including permeable pavements, green roof systems, and bio-retention installations.

These types of projects are particularly rewarding for our team because each member understands that the work we perform benefits not only our clients but also the environment and the communities we serve. Permeable pavement systems, green roofs, and bio-retention solutions contribute directly to improving environmental conditions while also supporting local economic growth. Our company hires locally and takes pride in employing Maryland residents who work hard to support their families and contribute to our state's workforce. Their dedication and passion for this industry are truly inspiring, and every project we complete is the result of a collaborative team effort.

From a technical standpoint, each project presents unique challenges. No two sites are exactly the same, and successful installation requires careful consideration of factors such as water runoff patterns, soil composition, site conditions, and overall environmental impact.

Our team relies on years of professional experience, combined with the expertise of our engineering partners and manufacturer specifications, to design and install systems capable of meeting the demands of each individual project.

One of the most significant benefits of these installations is their ability to reduce or even eliminate stormwater runoff that would otherwise burden municipal stormwater management

systems. Permeable pavement and bio-retention systems can capture and retain substantial volumes of water that would typically flow from impervious surfaces into existing drainage infrastructure.

Through the use of specialized materials and engineered systems, we are able to manage runoff by allowing water to gradually infiltrate into the subsoil or by capturing it within underground storage systems designed to control release rates. In many cases, these systems prevent stormwater from entering nearby streams and waterways altogether, significantly reducing environmental impact.

We also have access to extensive data and science-based studies demonstrating the water storage and absorption capacities of these systems. These systems are designed to manage large volumes of water through engineered storage cells and infiltration rates that support sustainable stormwater management.

Effective water management is critical not only during heavy rain events but also during winter thaw conditions. Properly designed permeable systems can help reduce issues associated with snowmelt runoff and pooling water, which can contribute to unsafe walking conditions and increase the risk of slips and falls.

Our company remains committed to implementing environmentally responsible construction practices that support Maryland's long-term environmental goals while strengthening local businesses and employment opportunities.

Environmental Benefits of Permeable Pavements, Green Roofs, and Bio-Retention Systems

Modern stormwater management practices are increasingly focused on reducing the environmental impact of impervious surfaces and improving water quality within our watersheds. Systems such as permeable pavements, green roofs, and bio-retention installations are proven solutions that help manage stormwater at its source while providing long-term environmental and community benefits.

Permeable Pavement Systems

Permeable pavement systems, such as those installed using Techo-Bloc permeable pavers, allow stormwater to pass through the surface and into a specially designed base system below. This base layer temporarily stores water and allows it to gradually infiltrate into the subsoil or be directed into controlled drainage systems. This approach significantly reduces surface runoff and helps relieve pressure on municipal stormwater infrastructure.

Techo-Bloc is widely recognized as one of the leading paver manufacturers in North America,

known for its innovation, advanced technology, and technical expertise within the hardscape and permeable pavement industry. Their permeable pavement systems are engineered to meet rigorous environmental and stormwater management standards while providing durable, high-performance surface solutions.

According to **Techo-Bloc,** the top five reasons to utilize permeable paver systems include:

1. Stormwater Management – Permeable pavers allow rainwater to infiltrate directly into the ground rather than flowing across impervious surfaces, helping reduce flooding and runoff.

2. Improved Water Quality – As stormwater filters through the stone base and soil layers, pollutants such as oils, sediments, and debris are naturally filtered before entering groundwater systems.

3. Reduced Strain on Municipal Infrastructure – By capturing stormwater at the surface level, permeable pavement systems reduce the burden on existing stormwater drainage systems, pipes, and retention basins.

4. Durability and Structural Strength – Permeable pavers are engineered to support heavy loads while maintaining their infiltration capabilities, making them suitable for residential driveways, commercial applications, and pedestrian areas.

5. Environmental Sustainability – These systems help restore the natural hydrologic cycle by allowing water to infiltrate the ground where it falls, reducing erosion and protecting nearby waterways.

Green Roof Systems

Green roofs provide another valuable environmental solution, particularly in urban environments where traditional roof surfaces contribute to heat absorption and stormwater runoff. By incorporating engineered soil systems and vegetation layers, green roofs are able to capture rainwater and release it slowly through evapotranspiration.

Benefits of green roof systems include:

- Reduction of stormwater runoff volume
- Improved building insulation and energy efficiency
- Reduction of urban heat island effects
- Improved air quality

- Creation of habitat for pollinators and beneficial insects

These systems can capture and retain significant amounts of rainfall before it reaches traditional drainage systems, helping reduce peak stormwater flows during heavy rain events.

Bio-Retention Systems

Bio-retention systems, often referred to as rain gardens or bio-filtration areas, are designed to collect and filter stormwater runoff from surrounding surfaces. These systems use engineered soil, vegetation, and stone layers to slow down water flow and allow it to be naturally filtered before entering groundwater systems.

Bio-retention areas provide several key benefits:

- Removal of pollutants and sediments from stormwater
- Reduction of runoff volume and velocity
- Improved groundwater recharge
- Creation of functional landscape features that support native plant species

These systems are particularly effective when integrated with permeable pavement installations, creating a comprehensive stormwater management strategy that captures water at multiple stages of the runoff cycle.

Integrated Stormwater Management Approach

When permeable pavements, green roofs, and bio-retention systems are implemented together, they create a highly effective, layered approach to stormwater management. These systems help reduce the environmental impact of development while improving water quality, protecting local waterways, and supporting sustainable infrastructure solutions.

By incorporating these environmentally responsible construction practices, projects can significantly reduce stormwater runoff, improve watershed health, and contribute to long-term environmental sustainability within the State of Maryland and throughout the Chesapeake Bay region.

Supporting Maryland's Chesapeake Bay Restoration and Stormwater Management Goals

The use of permeable pavements, green roof systems, and bio-retention installations directly supports Maryland's ongoing commitment to improving water quality within the Chesapeake Bay watershed. Excess stormwater runoff from impervious surfaces is widely recognized as one of the primary contributors to nutrient pollution, sediment transport, and degraded water quality within the Bay and its tributaries.

By capturing stormwater at its source and allowing it to infiltrate naturally into the soil profile, permeable pavement systems significantly reduce the volume and velocity of runoff entering municipal stormwater systems and nearby waterways. When paired with green roof and bio-retention systems, these practices create a comprehensive approach to stormwater management that aligns with Maryland's Municipal Separate Storm Sewer System (MS4) permit requirements, as well as broader watershed restoration efforts.

These environmentally responsible construction methods help reduce nitrogen, phosphorus, and sediment loads that would otherwise enter storm drains and ultimately flow into the Chesapeake Bay. In doing so, they contribute to the state's long-term goals of improving water quality, restoring aquatic habitats, and protecting one of Maryland's most valuable natural resources.

Beyond environmental protection, these systems also support community resilience by reducing localized flooding, improving groundwater recharge, and minimizing strain on aging municipal stormwater infrastructure. When implemented across residential, commercial, and municipal projects, permeable pavements and bio-retention practices play a critical role in helping Maryland meet its stormwater management and watershed restoration targets.

As a Maryland-based contractor committed to sustainable construction practices, we take great pride in contributing to solutions that both support our local economy and advance the environmental goals of the State of Maryland and the Chesapeake Bay region.