

THE COST OF STORMWATER MANAGEMENT

Sustainable Stormwater Management: Cost-Effective and Efficient



Best Management Practices (BMPs)



Stormwater BMPs include a variety of techniques which can effectively enhance infiltration of rainfall and filter out pollutants. In many cases, BMPs save money and increase property values.



How do BMPs save money?

- * *developers save money by replacing pipes, basins, and other infrastructure with a BMP*
- * *by reducing downstream sediment loads, BMPs reduce costly sediment removal*
- * *BMPs use less land than a detention basin*
- * *by stabilizing flooding, BMPs can prevent expensive property damage*

This adds up to real world savings:

- * Porous paving can save up to 38% compared to a detention basin.
- * Air Pegasus Airport in MD saved \$25,000 in infrastructure costs by retrofitting an existing sand filter to include a bio-retention area that captured additional runoff and provided water quality benefits.
- * Beltway Plaza, a busy mall in Prince George's County, MD, has used a bioretention filter successfully for years and has reported saving as much as 50% on infrastructure costs with no additional maintenance costs.

THE COST OF STORMWATER MANAGEMENT

Sustainable Stormwater Management: Cost-Effective and Efficient



Low Impact Design



Low impact design minimizes stormwater runoff by minimally disturbing the site so as to preserve its natural infiltration capacity. This is often less expensive than conventional



How does Low Impact Design save money?

- * *open space design is a strong selling point for buyers*
- * *preserving natural features such as wetlands and waterways enhances property values*
- * *"clustering" houses can reduce the cost of municipal services such as trash removal, street maintenance, water and sewer line maintenance, and lighting*

This adds up to real world savings:

- * In Bowie, MD, a housing development that used low impact design cost the same to develop as a conventionally designed site and took the same time to build.
- * Conserving forests on sites enhances property values by an average of 6-15% and increases the rate at which units are sold.
- * A subdivision in Bucks County, PA, that preserved 23% of the property as open space is the fastest selling subdivision in its price range with lots much smaller than those of competing projects.