# Clean Scapes:

# Keep the rain, not the runoff!

Residential Best Management Practice (BMP)
Incentive Program Criteria:

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### **Introduction:**

Thank you for your interest in protecting our local water by installing a <u>stormwater best management practice (BMP)</u>. We issue financial incentives in the forms of credits toward the annual Watershed Protection Fee and reimbursements to show our gratitude for your efforts. If you are thinking of installing a BMP, we recommend that you familiarize yourself with these requirements before proceeding. Underlined words in this guide are defined in the "definition of terms" section.



Rain garden at Franciscan Friars

### **Rain Gardens:**

Rain gardens are gardens filled with native plants and absorbent soil and shaped to collect and filter water when it rains. Rain gardens are not only beautiful and attractive to local wildlife, but can help solve drainage and pooling problems in your yard.



To be eligible for a 20% credit and reimbursement for up to 50% of that you paid, your rain garden must meet the requirements at the bottom of the page.

Note that "capacity" refers to the maximum volume of stormwater runoff which can be contained in the <u>ponding area</u>, which can be measured by multiplying the <u>ponding depth</u>, by the ponding area.

The drainage area must be <u>impervious surface</u> which is directed to the rain garden for treatment. Rain gardens must drain within a reasonable time (24-48 hours) to be considered for credit and reimbursement.

### **Rain Garden Minimum Requirements:**

Best Management						
Practice (BMP	Lot size/type	Drainage Area (ft²)	Capacity (ft <sup>3</sup> )	Other Conditions	Eligible for Credit and Reimbursen	Reimbursement Cap
	Condominium or			Rain garden must not contain design flaws, fail to treat water		
Rain Garden	Townhouse	250	14.84	quality, or create drainage problems	Υ	\$1,200
	Single Family Home on			Rain garden must not contain design flaws, fail to treat water		
Rain Garden	1/4 acre or Less	500	29.96	quality, or create drainage problems	γ	\$1,200
	Single Family Home on			Rain garden must not contain design flaws, fail to treat water		
Rain Garden	Greater than 1/4 Acre	1000	59.37	quality, or create drainage problems	Υ	\$1,200

### **Rain Barrels/Cisterns:**

Rain barrels and cisterns are large storage containers, often attached to downspouts, which collect precipitation during storm events. This water can be used for watering lawns and gardens.



Your rain barrel must meet the following criteria to be considered for credit and reimbursement:

# Rain barrel/cistern minimum requirements:

Best Management Practice (BMP	Lot size/type	Drainage Area (ft²)	Capacity (gallons)	Other Conditions	Eligible for Credit and Reimbursen	Reimbursement Cap
						\$500-maximum
	Condominium or					reimbursement is \$1/gallon
Rain Barrels/Cisterns	Townhouse	250	250		Υ	stored
						\$500-maximum
	Single Family Home on					reimbursement is \$1/gallon
Rain Barrels/Cisterns	1/4 acre or Less	500	296		γ	stored
						\$500-maximum
	Single Family Home on					reimbursement is \$1/gallon
Rain Barrels/Cisterns	Greater than 1/4 Acre	1000	592		Υ	stored

### **Conservation Landscaping:**

Conservation landscapes are gardens full of native plants soil amendment and de-compaction. These gardens allow for stormwater infiltration and treatment, but are not as intensive in design or construction as rain gardens.



# Conservation landscapes are eligible for *reimbursement only*. Your conservation landscape must meet the requirements below to be eligible for reimbursement of up to 50% of the cost incurred up to \$750.

Best Management						
	Lot size/type	Drainage Area (ft²)	Capacity (ft <sup>3</sup> )	Other Conditions	Eligible for Credit and Reimbursen	Reimbursement Cap
				75% (# of plants, not coverage area, size of each, or costs),		
				replacement of turf, invasive species, or impervious surface		
				only, no plants invasive to Maryland, 9" soil de-compaction, 2"		
				soil amendment tilled into the 9" of soil de-compaction,		
				Minimum 2" of mulch at initial planting (maintain mulch		
				coverage in future only in areas where there is no ground		
				cover), Minimum 250 SF of conservation landscaping, Planting		
	Condominium or			density to assume full coverage of landscaped area after a		\$250-750-maximum
Conservation Landscape	Townhouse	250	n/a	maximum of 5 years. Minimum planting area is 250 ft <sup>2</sup>	N; Reimbursement only	reimbursement is \$1/ft²
				75% (# of plants, not coverage area, size of each, or costs),		
				replacement of turf, invasive species, or impervious surface		
				only, no plants invasive to Maryland, 9" soil de-compaction, 2"		
				soil amendment tilled into the 9" of soil de-compaction,		
				Minimum 2" of mulch at initial planting (maintain mulch		
				coverage in future only in areas where there is no ground		
				cover), Minimum 250 SF of conservation landscaping, Planting		
	Single Family Home on			density to assume full coverage of landscaped area after a		\$250-750-maximum
Conservation Landscape	1/4 acre or Less	500	n/a	maximum of 5 years. Minimum planting area is 250 ft <sup>2</sup>	N; Reimbursement only	reimbursement is \$1/ft²
				75% (# of plants, not coverage area, size of each, or costs),		
				replacement of turf, invasive species, or impervious surface		
				only, no plants invasive to Maryland, 9" soil de-compaction, 2"		
				soil amendment tilled into the 9" of soil de-compaction,		
				Minimum 2" of mulch at initial planting (maintain mulch		
				coverage in future only in areas where there is no ground		
				cover), Minimum 250 SF of conservation landscaping, Planting		
	Single Family Home on			density to assume full coverage of landscaped area after a		\$250-750-maximum
Conservation Landscape	Greater than 1/4 Acre	1000	n/a	maximum of 5 years. Minimum planting area is 250 ft <sup>2</sup>	N; Reimbursement only	reimbursement is \$1/ft²

### **Pavement Removal:**

Pavement removal is direct removal of <u>impervious surface</u>, which will help to slow down and spread out runoff, if replaced with an appropriate alternative, like a conservation landscape or a rain garden.



Pavement removal is eligible for reimbursement of 50% of the cost incurred up to \$1200. The pavement removal must meet the criteria below to be eligible for credit or reimbursement.

Best Management Practice (BMP		Drainage Area (ft²)	Canacity (ft <sup>3</sup> )	Other Conditions	Eligible for Credit and Reimburseme	Reimhursement Can
•	Condominium or	promue o med fre		Must return area to a natural planted state, or cover with	Englishe for Greate and Hermisaliseme	nemioursement oup
	Townhouse	250		permeable pavers; minimum removal of 100 ft <sup>2</sup>	Υ	\$600-\$1200
	Single Family Home on			Must return area to a natural planted state, or cover with		
Pavement Removal	1/4 acre or Less	500	n/a	permeable pavers; minimum removal of 100 ft <sup>2</sup>	Υ	\$600-\$1200
	Single Family Home on			Must return area to a natural planted state, or cover with		
Pavement Removal	Greater than 1/4 Acre	1000	n/a	permeable pavers; minimum removal of 100 ft <sup>2</sup>	Y	\$600-\$1200

### **Permeable Pavers:**

Permeable pavers are a more environmentally-friendly way to hardscape your yard or driveway when compared to traditional pavement options, such as asphalt or concrete. Permeable pavers help runoff to gradually re-enter the water table through several inches of gravel, carefully designed to prevent compaction. We do not recommend installing this practice on your own; please contact a certified professional if you are interested in this practice.



Permeable pavers are eligible for reimbursement of 50% of the cost incurred up to \$1200. The installation of pavers must meet criteria defined in the Maryland Stormwater Design Manual, chapter 5. Permeable pavers must also meet the criteria below to be considered for reimbursement or credit.

Best Management						
Practice (BMP	Lot size/type	Drainage Area (ft²)	Capacity (ft <sup>3</sup> )	Other Conditions	Eligible for Credit and Reimburseme	Reimbursement Cap
				Must be installed by certified contractor; must have		
	Condominium or			underground storage system and significant layer of gravel;		
Permeable Pavement	Townhouse	250	14.84	minimum paved area of 100 SF	Y	\$1,200
				Must be installed by certified contractor; must have		
	Single Family Home on			underground storage system and significant layer of gravel;		
Permeable Pavement	1/4 acre or Less	500	29.96	minimum paved area of 100 SF	Y	\$1,200
				Must be installed by certified contractor; must have		
	Single Family Home on			underground storage system and significant layer of gravel;		
Permeable Pavement	Greater than 1/4 Acre	1000	59.37	minimum paved area of 100 SF	Y	\$1,200

### **Dry Wells:**

Dry wells are underground cavities, often surrounded by gravel, that capture stormwater runoff from gutters and then gradually allow it to infiltrate into the ground water table.

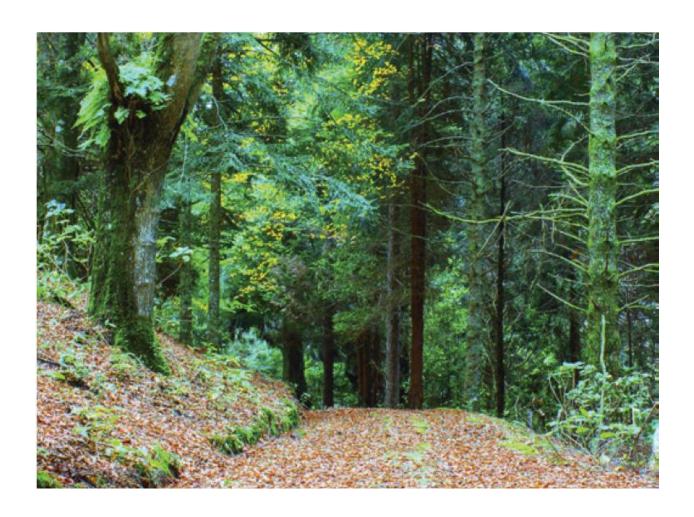


Dry wells are eligible for reimbursement for 50% of the cost incurred up to \$600. Only internal, open capacity of the dry well will be considered toward the overall capacity. Please see the credit and reimbursement eligibility below.

Best Management						
Practice (BMP	Lot size/type	Drainage Area (ft²)	Capacity (ft <sup>3</sup> )	Other Conditions	Eligible for Credit and Reimburseme	Reimbursement Cap
	Condominium or			Demonstrate A or B Hydrologic Soil Groups or 0.52-inch per hour		
Dry Wells	Townhouse	250	14.84	or greater within 50-feet of the proposed drywell	γ	\$600
	Single Family Home on			Demonstrate A or B Hydrologic Soil Groups or 0.52-inch per hour		
Dry Wells	1/4 acre or Less	500	29.96	or greater within 50-feet of the proposed drywell	γ	\$600
	Single Family Home on			Demonstrate A or B Hydrologic Soil Groups or 0.52-inch per hour		
Dry Wells	Greater than 1/4 Acre	1000	59.37	or greater within 50-feet of the proposed drywell	γ	\$600

## **Tree Canopy:**

Trees are a beautiful and habitat-building way to help improve water quality.



Tree canopy is eligible for *reimbursement only*. Your tree canopy must meet the requirements below to be eligible for reimbursement of up to 50% of the cost incurred up to \$600.

Best Management						
Practice (BMP	Lot size/type	Drainage Area (ft²)	Capacity (ft <sup>3</sup> )	Other Conditions	Eligible for Credit and Reimburseme	Reimbursement Cap
	Condominium or			Deciduous: minimum 2 inch caliper, Evergreen: minimum 6 ft		
Urban Tree Canopy	Townhouse	250	n/a	tall	N; Reimbursement only	\$600 total; \$150 per tree
	Single Family Home on			Deciduous: minimum 2 inch caliper, Evergreen: minimum 6 ft		
Urban Tree Canopy	1/4 acre or Less	500	n/a	tall	N; Reimbursement only	\$600 total; \$150 per tree
	Single Family Home on			Deciduous: minimum 2 inch caliper, Evergreen: minimum 6 ft		
Urban Tree Canopy	Greater than 1/4 Acre	1000	n/a	tall	N; Reimbursement only	\$600 total; \$150 per tree

## **Green Roofs:**

Green roofs are vegetated roofs with soil amendment that help to treat runoff at its source. Green roofs also help to improve air quality.



If you are interested in installing a green roof, please speak with a professional. Green roofs must follow all guidelines offered in the Maryland Stormwater Design Manual, chapter 5. The maximum reimbursement for this practice is \$1200, with a minimum roof area.

Best Management Practice (BMP	Lot size/type	Drainage Area (ft²)	Capacity (ft <sup>3</sup> )	Other Conditions	Eligible for Credit and Reimburseme	Reimbursement Cap
	Condominium or					
Green Roof	Townhouse	300 or 1/4 of roof	n/a	Must be installed by certified contractor	Υ	\$600 total; \$150 per tree
	Single Family Home on					
Green Roof	1/4 acre or Less	300 or 1/4 of roof	n/a	Must be installed by certified contractor	γ	\$600 total; \$150 per tree
	Single Family Home on					
Green Roof	Greater than 1/4 Acre	300 or 1/4 of roof	n/a	Must be installed by certified contractor	γ	\$600 total; \$150 per tree

### **Definition of Terms:**

Berm: A mound at the edge of a rain garden which detains rain water within the ponding area for infiltration.

<u>Impervious Surface</u>: A hard or compacted surface which stormwater runoff cannot percolate into. Some examples of impervious surfaces include: traditional rooftops, driveways, and sidewalks.

<u>Ponding Area</u>: The concave temporary storage area located interior to the pre-treatment area and berm of the rain garden

<u>Ponding Depth</u>: The depth of the ponding area, measured from the lowest point of the ponding area to the top of the berm.

Stormwater Best Management Practice (BMP): A practice, such as a rain garden, which improves water quality, often by removing sediment and excess nutrients.

#### **Other Considerations:**

- Best Management Practices installed at development are not eligible for credit or reimbursement.
- Best Management Practices installed before November of 2011 are not eligible for reimbursement
  - Current homeowner must have installed practice to be considered for reimbursement
  - The Howard County Office of Community Sustainability retains the right to reject any BMP for credit, if it does not provide a water quality treatment benefit.

Please contact Rachel Beebe, <u>rbeebe@howardcountymd.gov</u> with any questions related to this material.