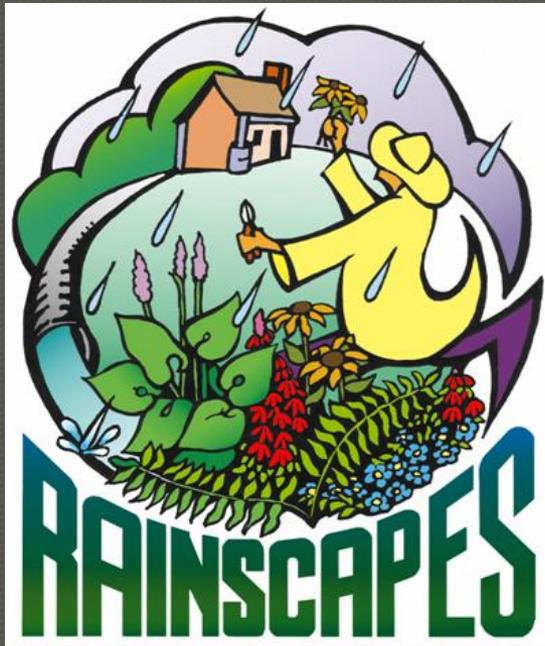


RainScapes

Healthy Watersheds Start at Home



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**
MONTGOMERY COUNTY • MARYLAND

Working together for a cleaner, greener
economically vibrant community

Garrett Park Update

March 23 , 2016

Today's Topics

- RainScapes Program Overview
- Garrett Park Projects
- Watershed Management
- Types of RainScapes and resources
- Thoughts on Next Steps





RainScapes

Getting to the Source



Residential Stormwater Management

- Reduce Stormwater Runoff
- Reduce Pollution from Neighborhoods
- Recharge Groundwater and Stream Baseflow

Water Conservation and Habitat Diversity

- Native Landscapes
- Rainwater Harvesting and Reuse

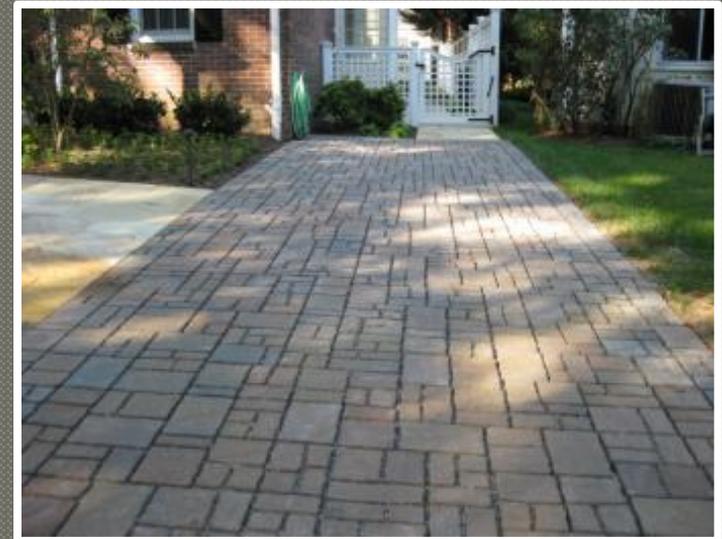
Empowering Individual Actions



RainScapes convert yard spaces into attractive and functional landscapes that soak up the rainwater



What was lawn is now a Rain Garden



Permeable Pavement after

Bigger Scales



Parking lot at a church



Steep slopes....



Larger harvesting projects

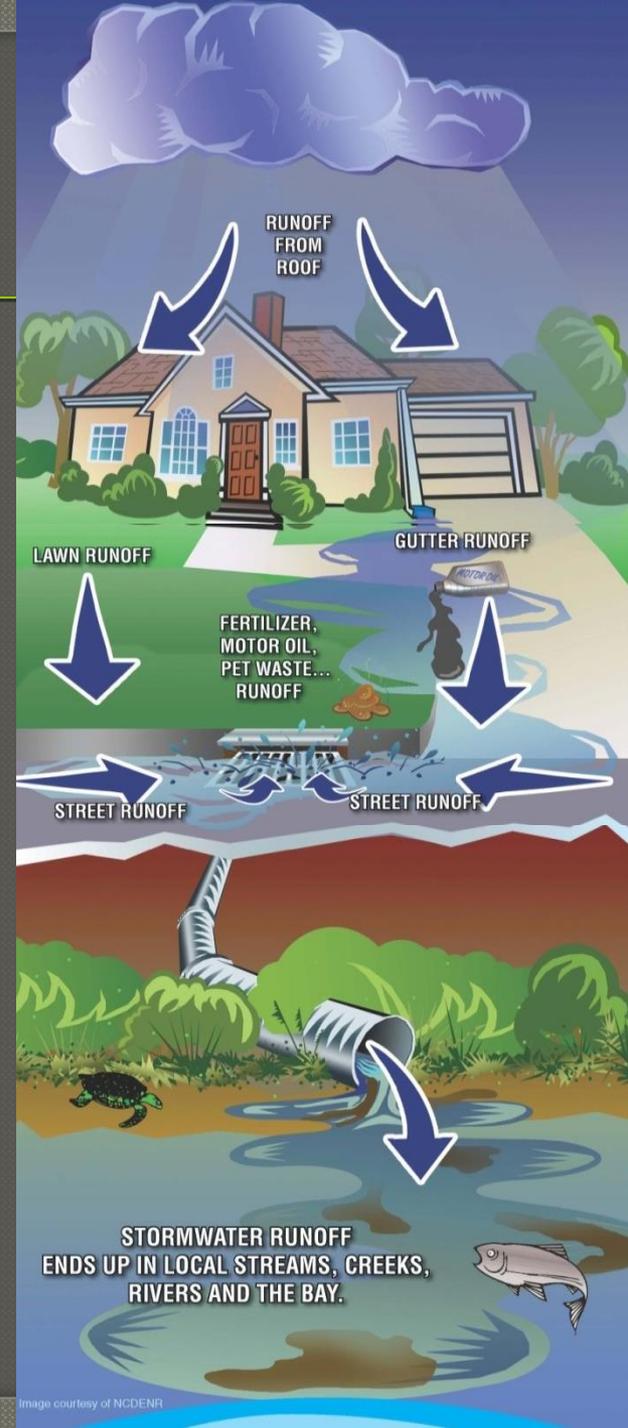
What is Stormwater?

Stormwater is RAIN and SNOWMELT that flows across the landscape during precipitation events. It flows:

- Directly into streams
- Into storm drain pipes, eventually leading to streams
- Into stormwater management facilities, then streams

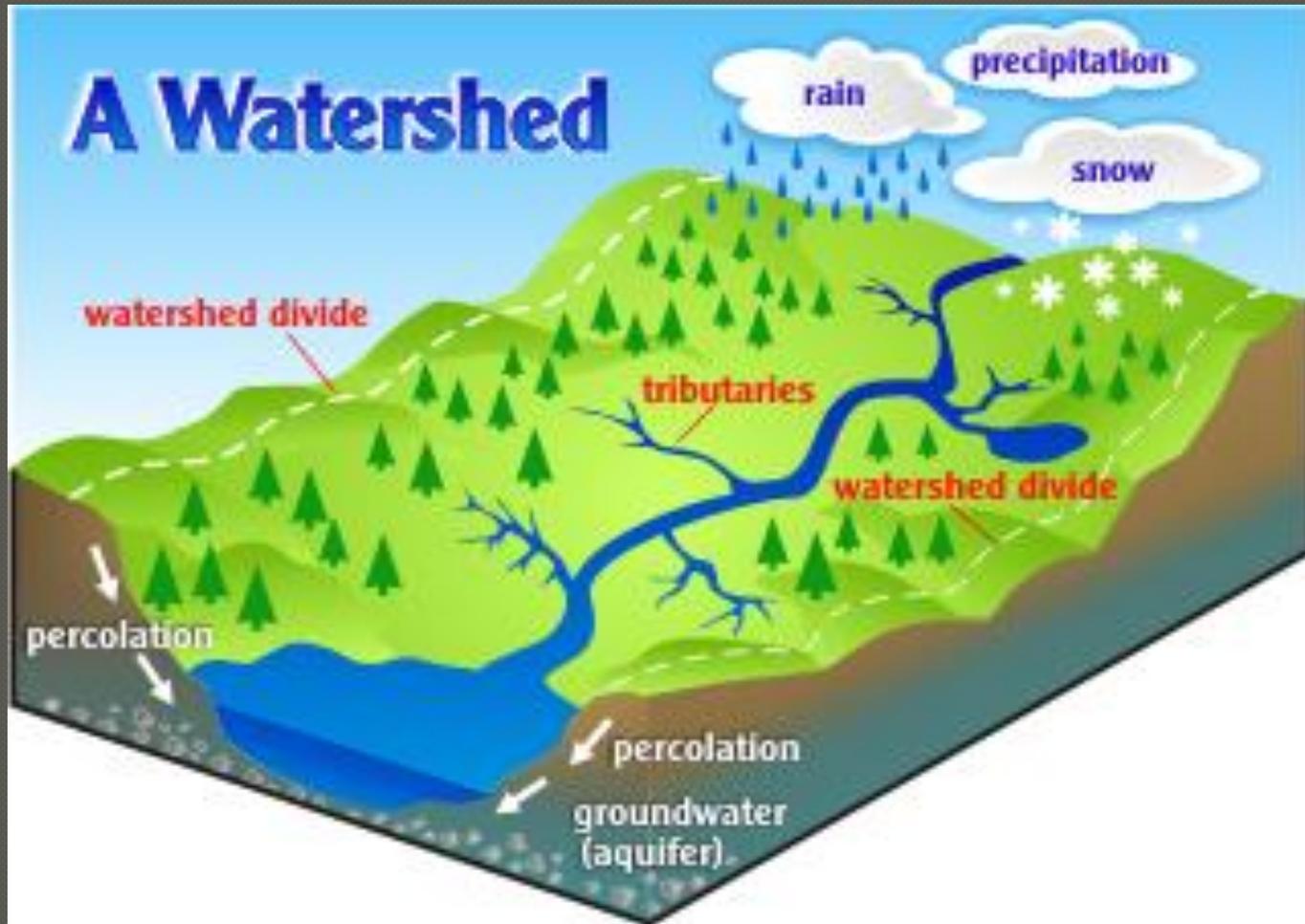
We are responsible for:

- What goes into our storm drain pipes
 - What comes out of them
- What flows into the streams



What is a watershed?

A watershed is an area of land that drains its stormwater into a body of water.



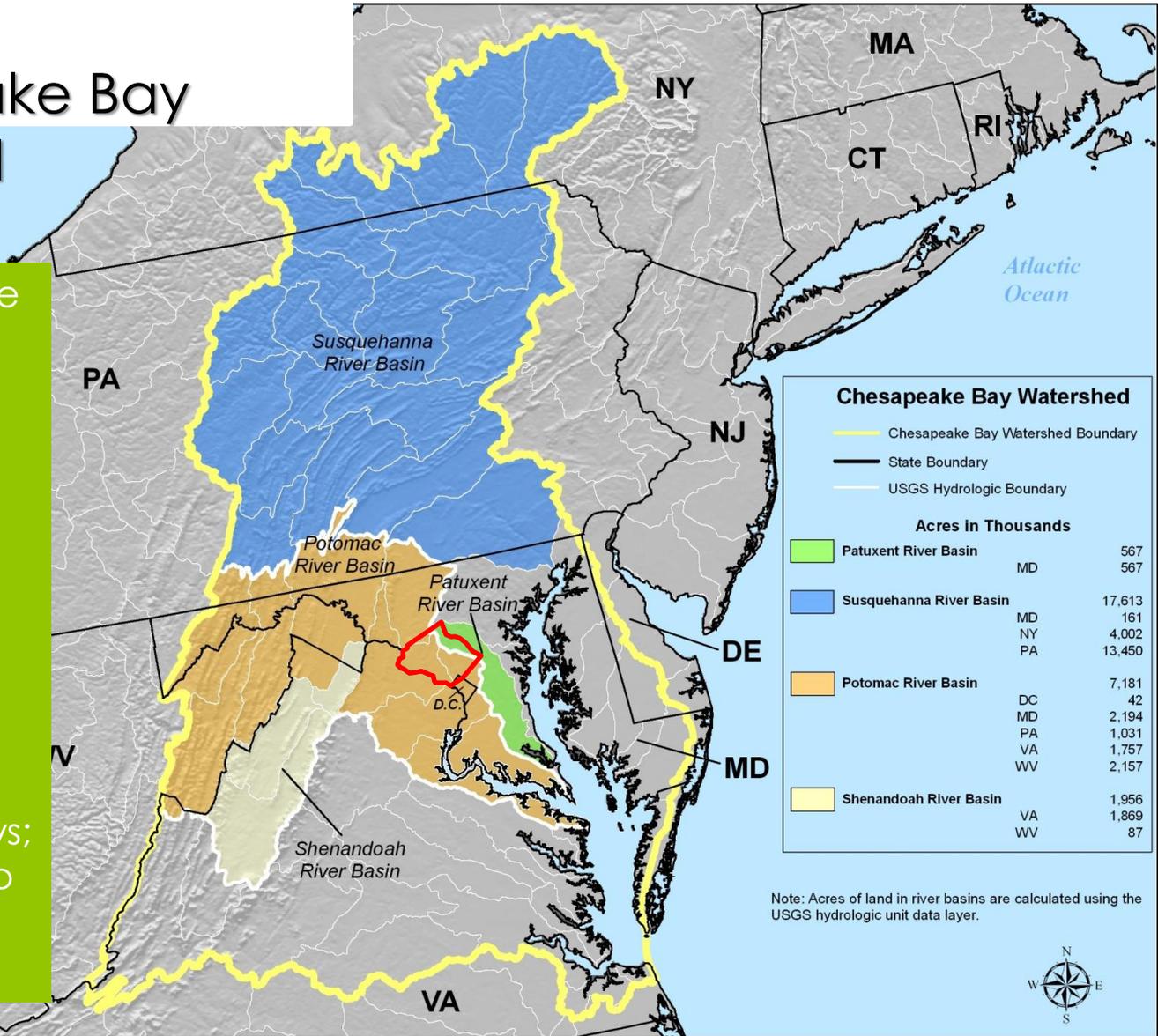
This is the Chesapeake Bay watershed

6 states and the District of Columbia

64,000 square miles of land

17 million people

Tidal estuary, slow moving, circulating flows; very sensitive to nutrient levels.



Chesapeake Bay Watershed

- Chesapeake Bay Watershed Boundary
- State Boundary
- USGS Hydrologic Boundary

Acres in Thousands

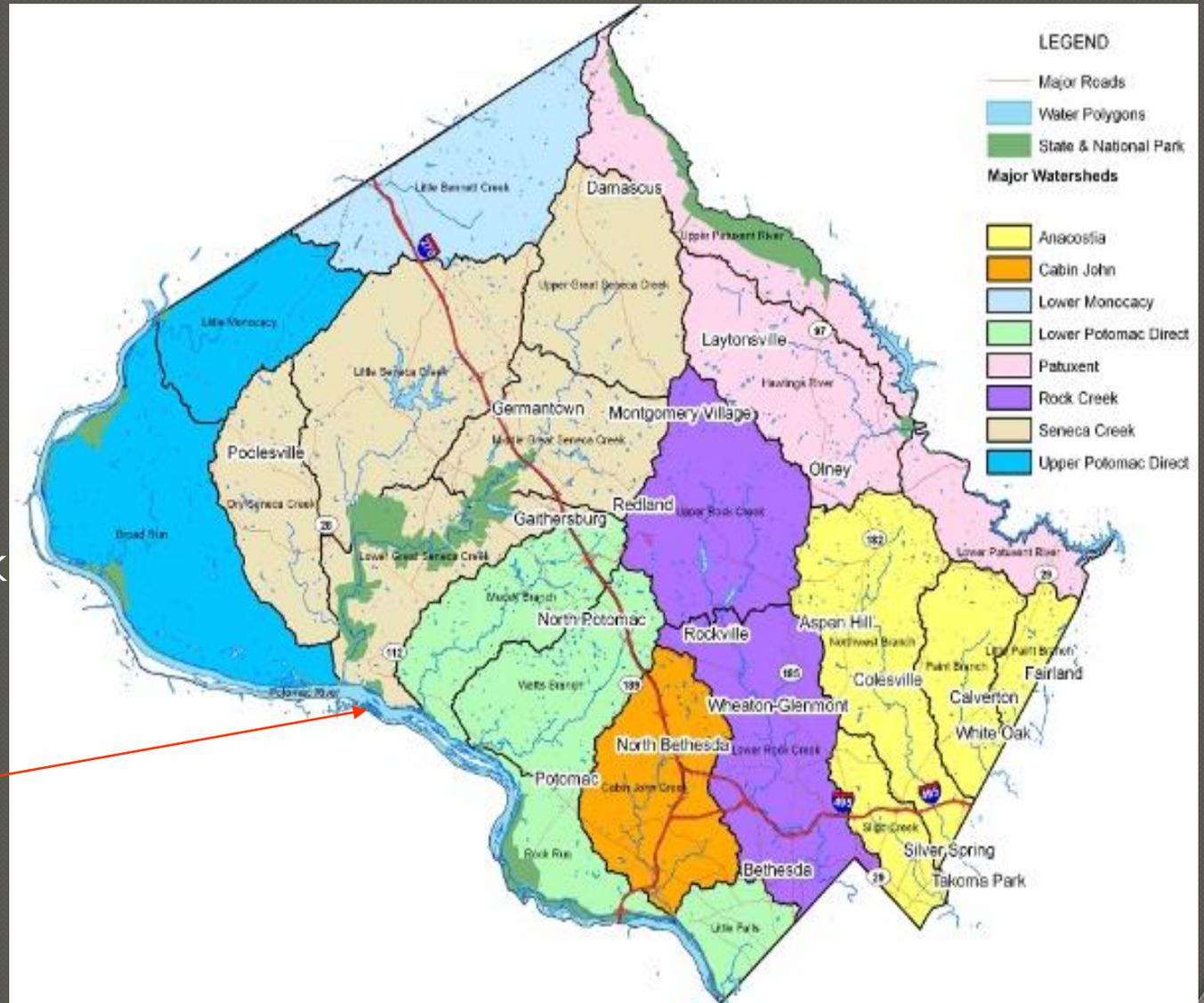
River Basin	State	Acres (Thousands)
Patuxent River Basin	MD	567
	MD	567
Susquehanna River Basin	MD	17,613
	NY	161
	NY	4,002
	PA	13,450
Potomac River Basin	DC	7,181
	DC	42
	MD	2,194
	PA	1,031
	VA	1,757
Shenandoah River Basin	WV	2,157
	VA	1,956
	VA	1,869
	WV	87

Note: Acres of land in river basins are calculated using the USGS hydrologic unit data layer.

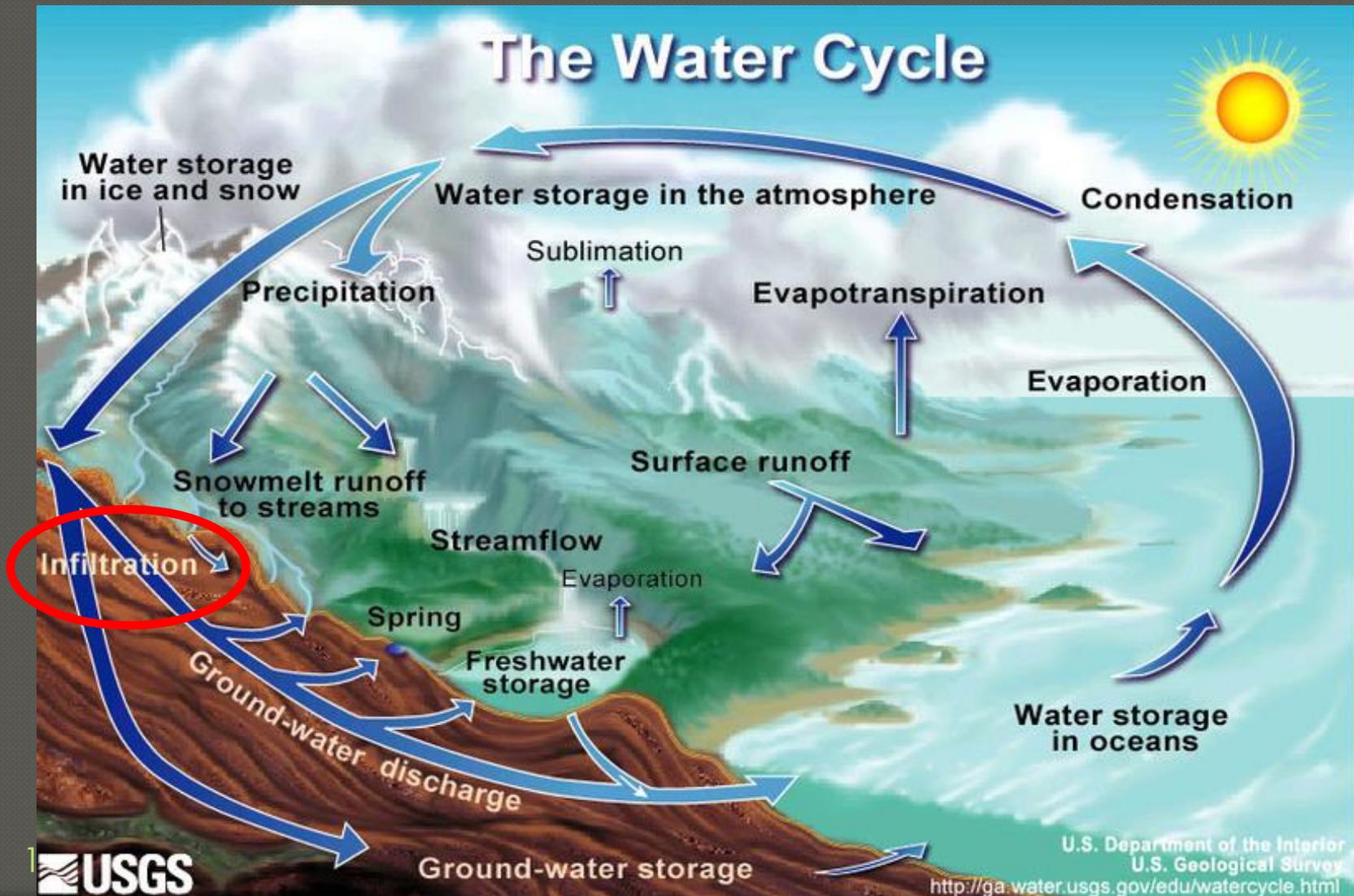


Montgomery County

1. Anacostia
 2. Cabin John
 3. Lower Monocacy
 4. Lower Potomac Direct
 5. Patuxent
 6. Rock Creek
 7. Seneca Creek
 8. Upper Potomac Direct
- Potomac River



Hydrology 101 – The Water Cycle is a CLOSED System



Infiltration!

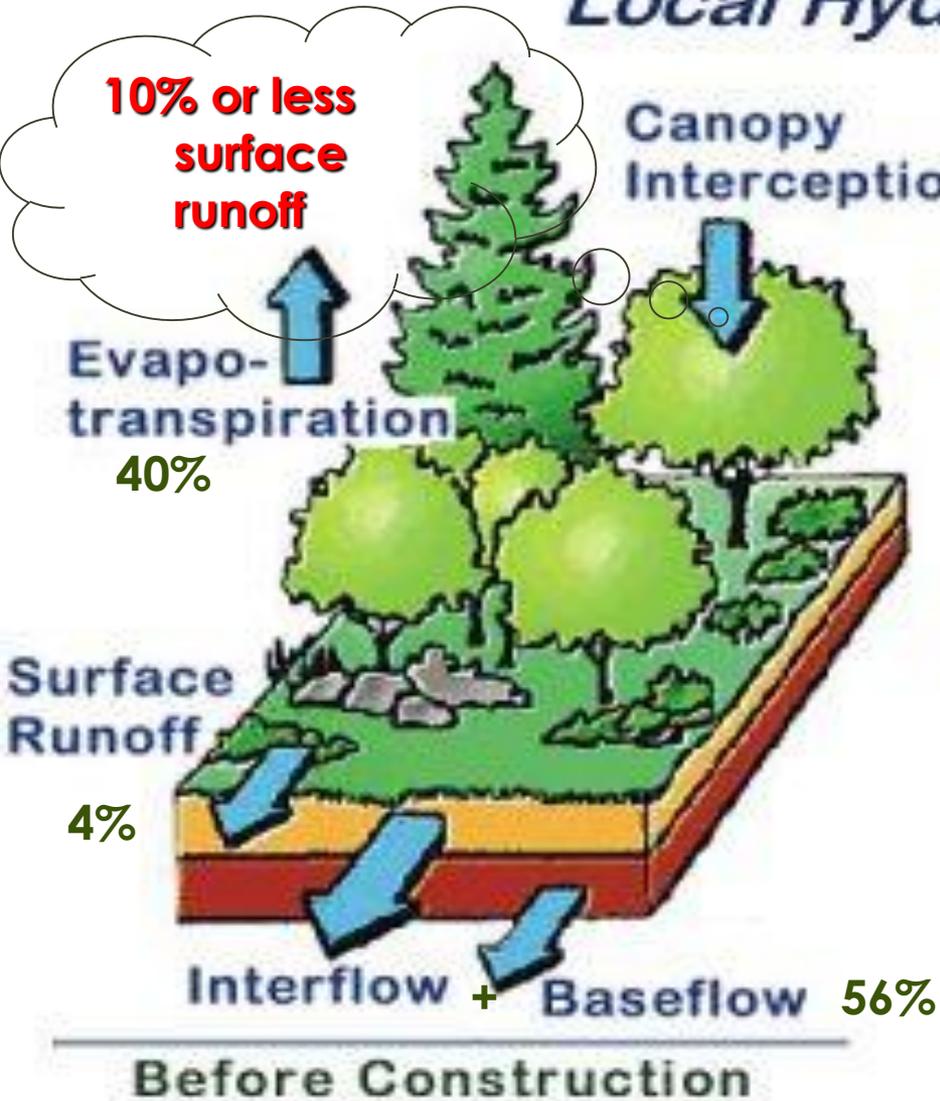
Soil is Mother Nature's Filter

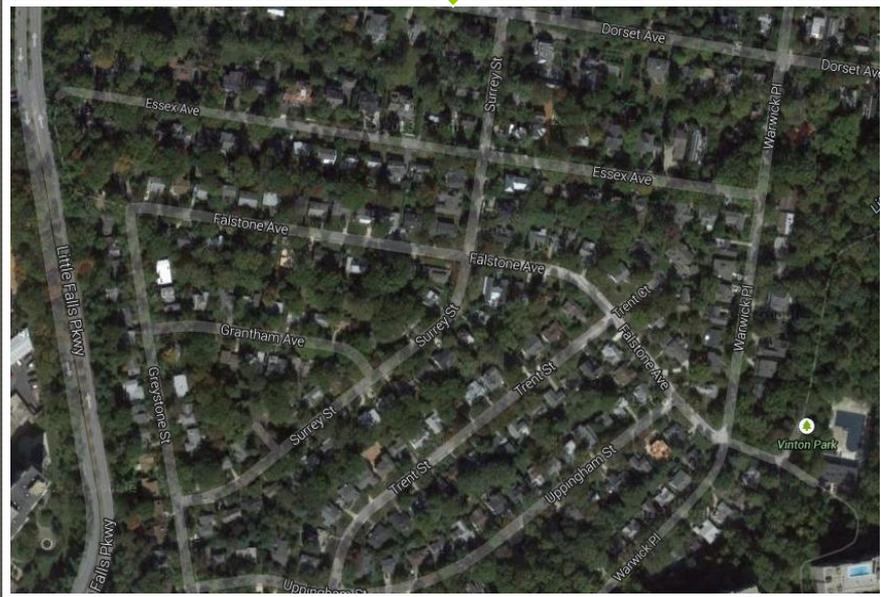
- The minerals in soil act as a filter.
- Soil is full of carbon from decaying plants and animals. Carbon is a great filter.
- Healthy soil is full of micro organisms that can help break down pollutants such as excess nutrients and heavy metals.



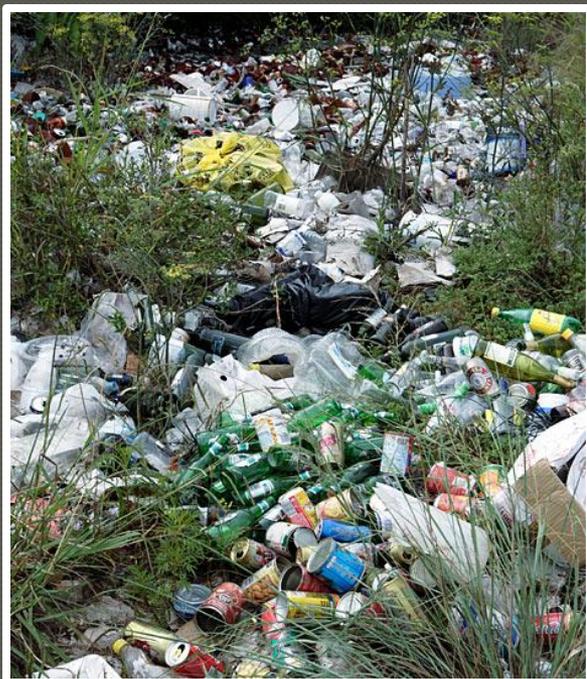
HOW did our current stream conditions occur?

Local Hydrologic Cycle





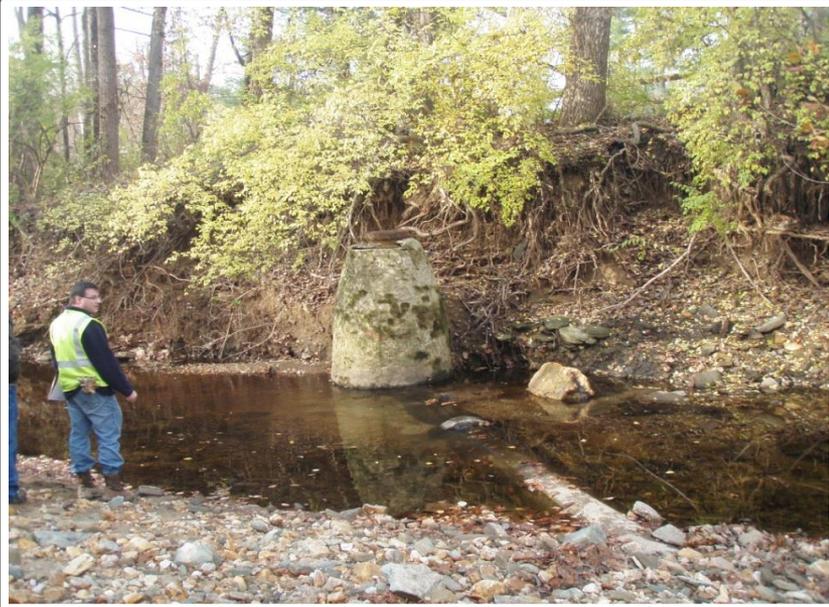
What is in stormwater runoff?



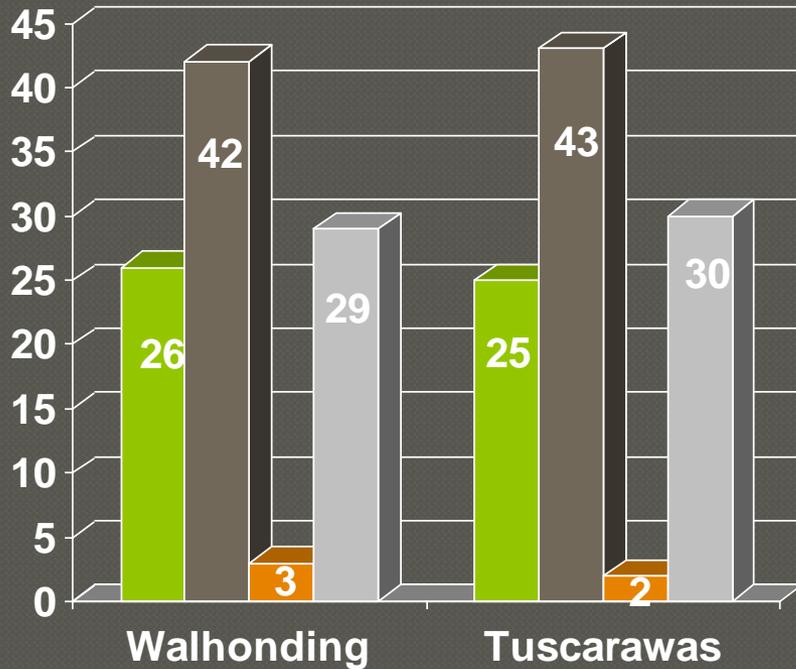
Don't forget about water volume and velocity!



Infrastructure Impacts



Where is all the imperviousness ??

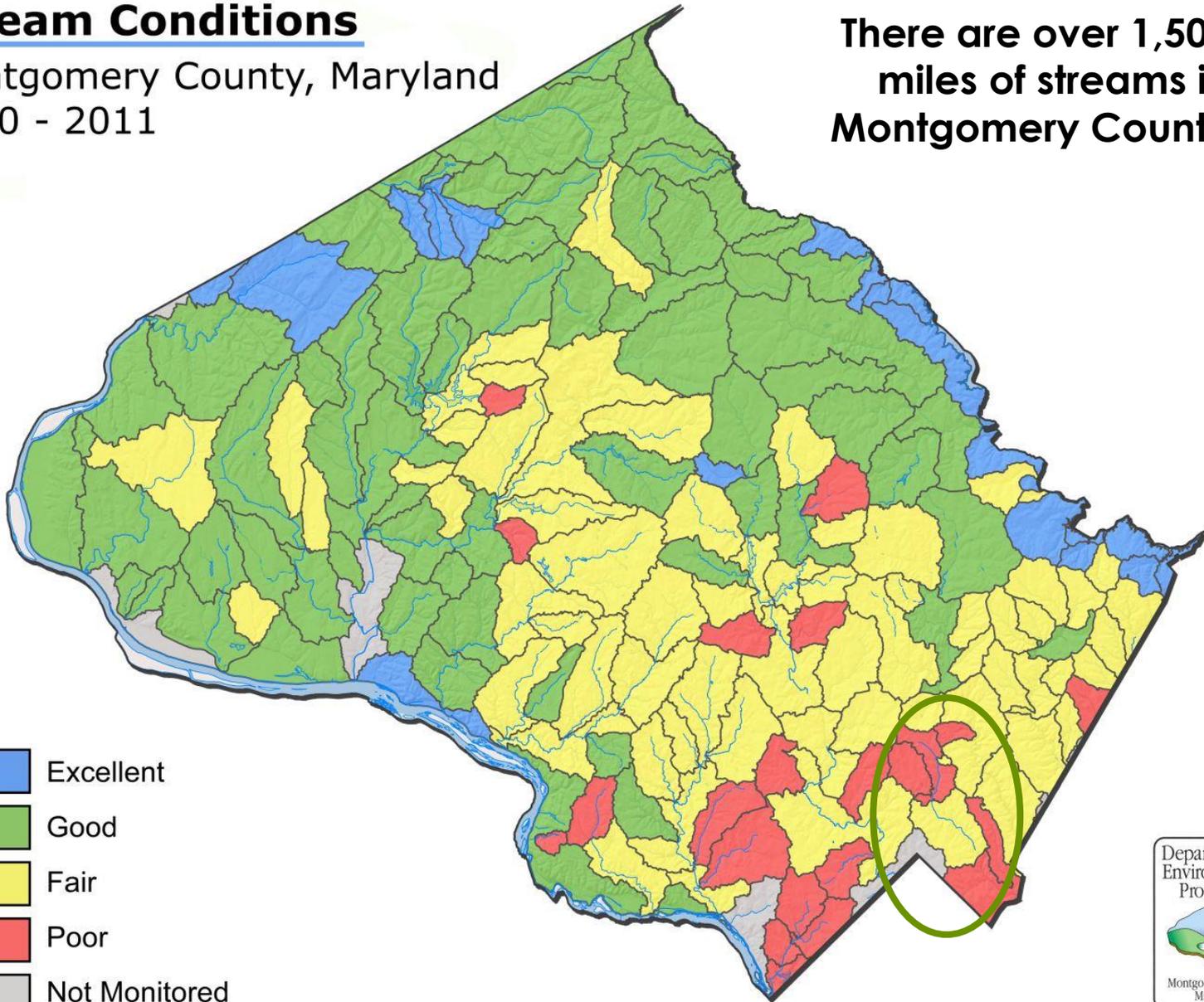
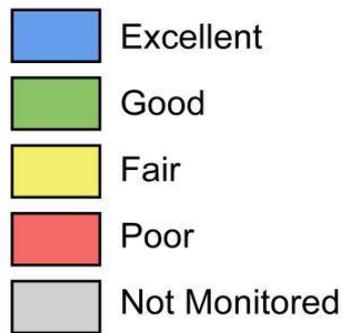


- driveway
- rooftop
- on-street parking
- roadway

Stream Conditions

Montgomery County, Maryland
2000 - 2011

There are over 1,500 miles of streams in Montgomery County



Interested in your local stream conditions?

Find Your Watershed Map

Legend Basemap

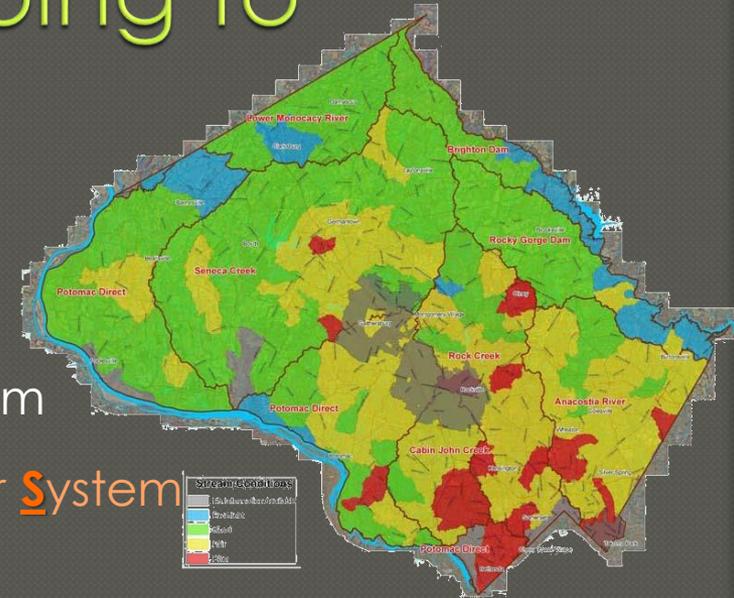
(1 of 5)

Stream	This area drains to Little Falls - Middle Mainstem, which drains to Little Falls Branch, which flows into Potomac Direct, and eventually into the Potomac River. The stream condition is considered to be Poor. Stream condition was last evaluated in 2007.
Watershed	Little Falls Branch is one of the County's most urban and altered stream systems. Most of the upper reaches have little or no riparian buffers and

[Zoom to](#)

What is the County doing to protect our Streams?

- Must meet regulatory requirements
 - Federal Clean Water Act permit program
 - **MS4** = **M**unicipal **S**eparate **S**torm **S**ewer **S**ystem
- County programs
 - Restore our streams and watersheds
 - Meet water quality protection goals
 - Educate and engage all stakeholders
 - Focus on watersheds showing greatest impacts
 - CIP Program – Pond retrofits, stream restoration
 - Green Streets
 - RainScapes for Private Property
 - Pollution Reduction Plans and Enforcement Programs



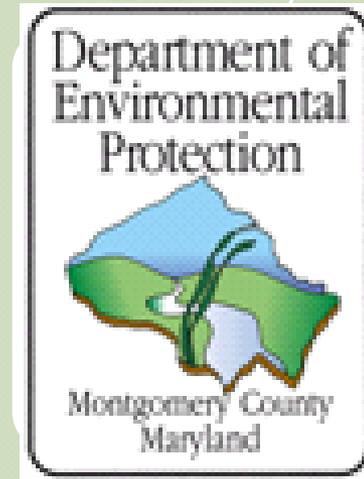
Federal



State



County



EPA

Clean Water Act

1972

Expanded to
require
municipalities to
get permits for
stormwater runoff
discharge

1987

MS4 Permit
Program

Maryland
Stormwater Act
2007

requires

ESD to the MEP
effective May
2009 with new
Chapter 5

Maryland
Stormwater Design
Manual

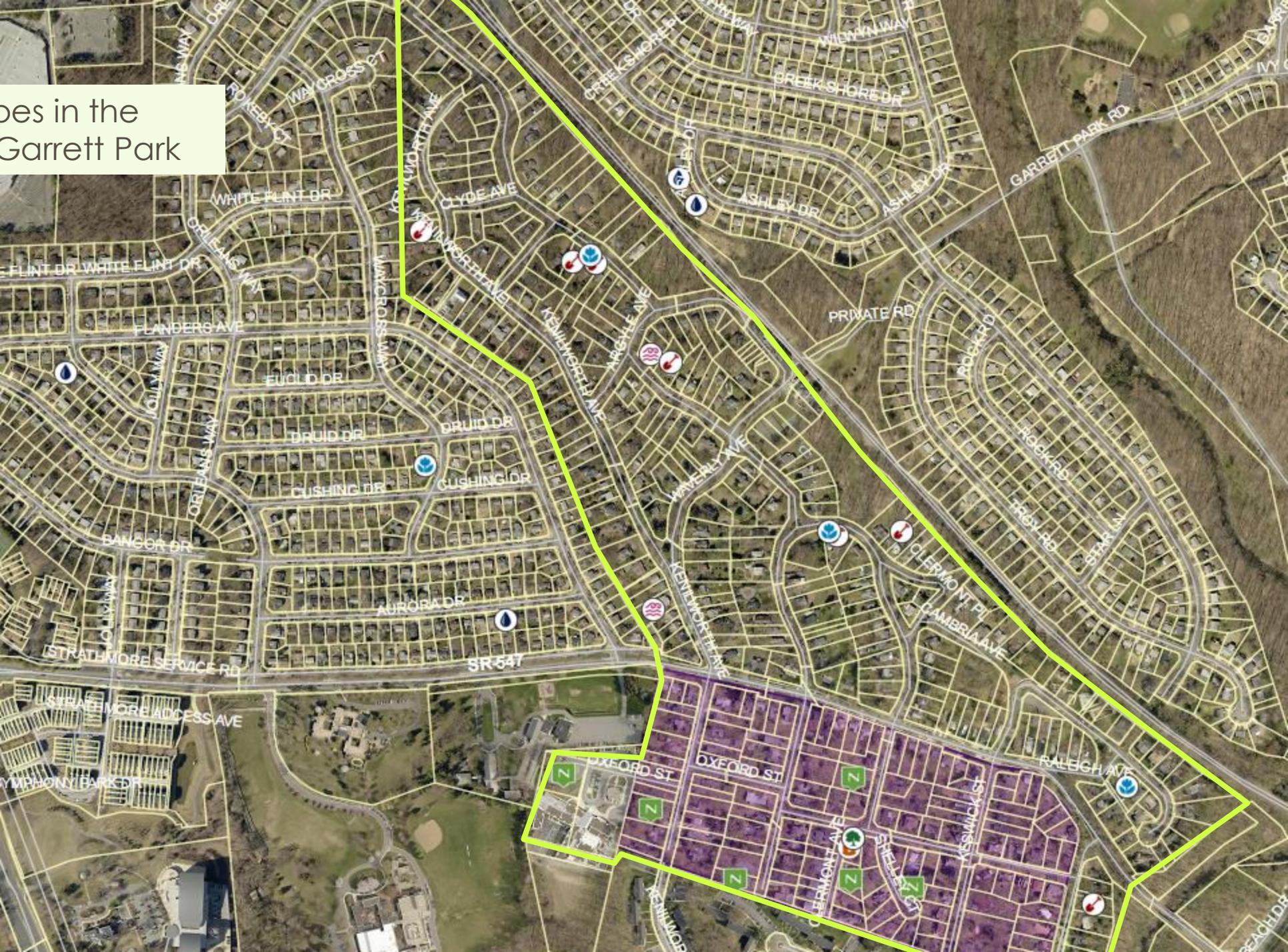
Montgomery
County

NPDES MS4

Stormwater
Discharge Permit

2010-2015

houses in the
Garrett Park















306527



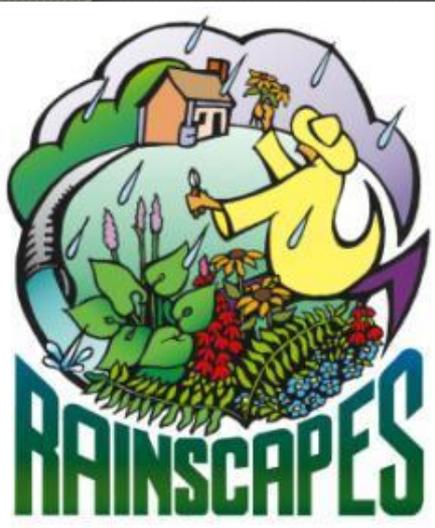


Before



After



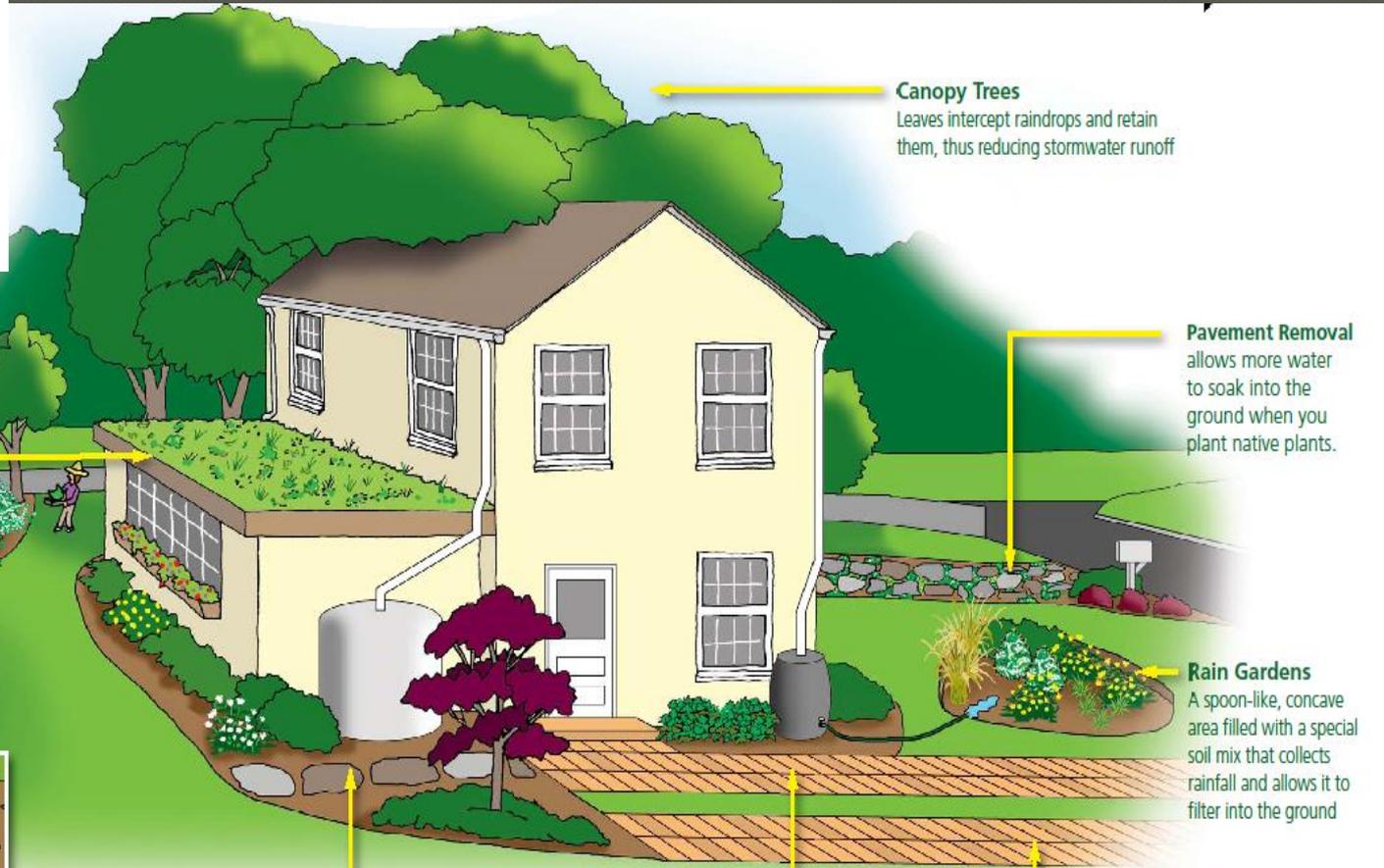


Rainscapes Techniques in Action

Green Roof
 ".623 gallons of water falls on each sq. ft. of roof during the during a normal rainstorm of 1". A 1000 sq. ft conventional roof can shed 623 gallons when there is an inch of rain. Green roofs reduce and clean this stormwater runoff before it hits the ground.

Conservation Landscape
 Loosened and improved soil, planted with easy-to-maintain native plants that soak up the rain.

Dry Well
 collects stormwater from rooftops or driveways and filters the rainwater through a small stone-filled pit, then into the underlying soils



Canopy Trees
 Leaves intercept raindrops and retain them, thus reducing stormwater runoff

Pavement Removal
 allows more water to soak into the ground when you plant native plants.

Rain Gardens
 A spoon-like, concave area filled with a special soil mix that collects rainfall and allows it to filter into the ground

Cistern
 Larger than a rain barrel, cisterns perform the same water harvesting benefits and are no more aesthetically intrusive than an air conditioner.

Rain Barrels
 collects and stores rain water from rooftops

Permeable Surfaces
 allow rainwater to rapidly infiltrate and enter the ground where it is naturally filtered

RainScapes Rewards Incentive Program

- **Rebates for single family residences:**
 - \$2,500 per property
with lifetime project caps
- **Rebates for multi-family/commercial / institutional:**
 - \$10,000 per property
with lifetime project caps
- All County property owners **outside** of municipalities Rockville, Gaithersburg and Takoma Park are eligible for rebates



Rewards Rebate Program: Rain Gardens

- Residential: **\$1,200** per garden or a square foot amount based on soil depth , which ever is greater
- Commercial : **\$2,500** per garden or a square foot amount based on soil depth, which ever is greater
- Sized for 1.2" rainfall volume minimum
- 75% plants must be native
- **Site must pass a perc test**



Get Creative





FIGURE A:
Rain Garden Details

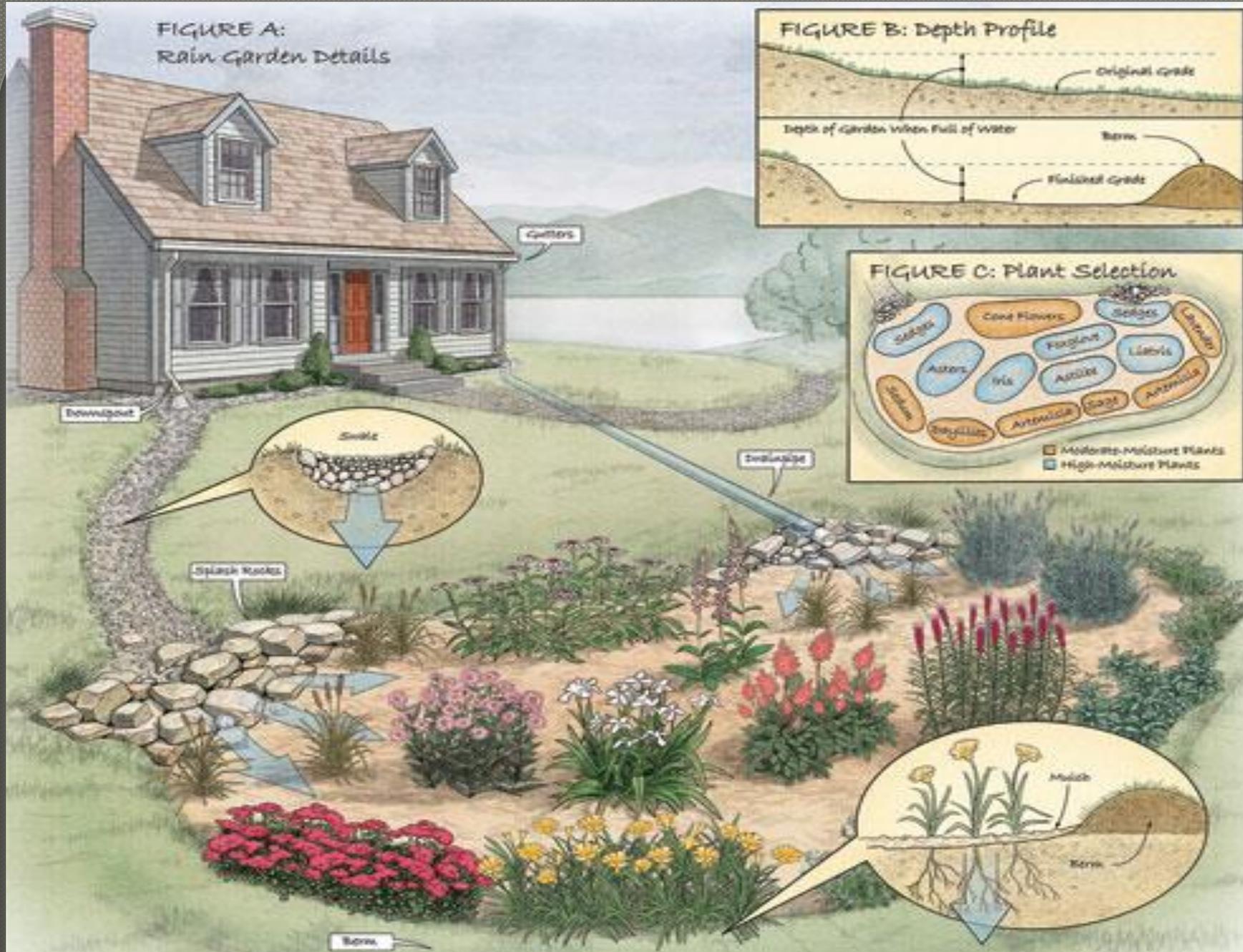


FIGURE B: Depth Profile

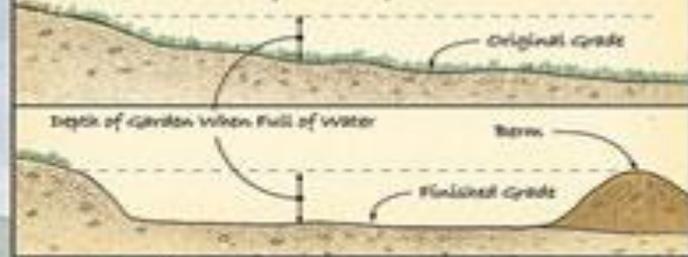
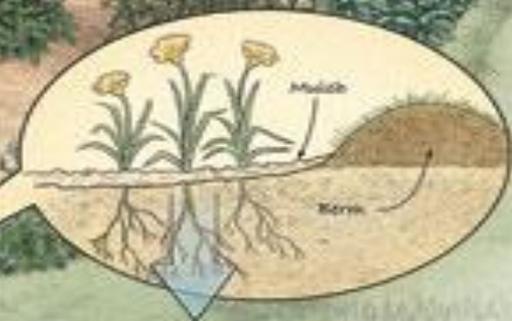
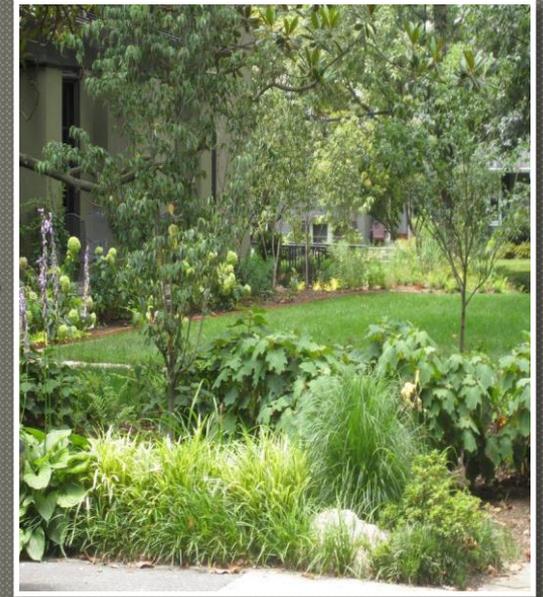


FIGURE C: Plant Selection



Rewards Rebate Program: Conservation Landscaping

- **\$2.00-\$3.00 per square foot/microberms**
- Minimum 250 square foot conversion of turf area or invasive species.
- Impervious surface must drain into site
- 75% Native Plants



Tough turf to Green oasis



Rewards Rebate Program: Tree Canopy Basic Requirements

- Will eventually shade or cover impervious surface-reduces heat pollution
- 10'-15' away from permanent buildings
- Tree is on our published canopy trees list
- Planted between September 15 and April 30th
- Root flare is exposed
- \$200.00/tree



Rewards Rebate Program: Permeable Paver Retrofit

- Installed by a certified ICPI contractor with an additional certification in PICP
- Replaces existing impervious surface
- A downspout filter must be used if the downspout is connecting into the pavement.
- If downspout is connected to the system add \$4.00/sq ft of impervious surface that downspout is handling.



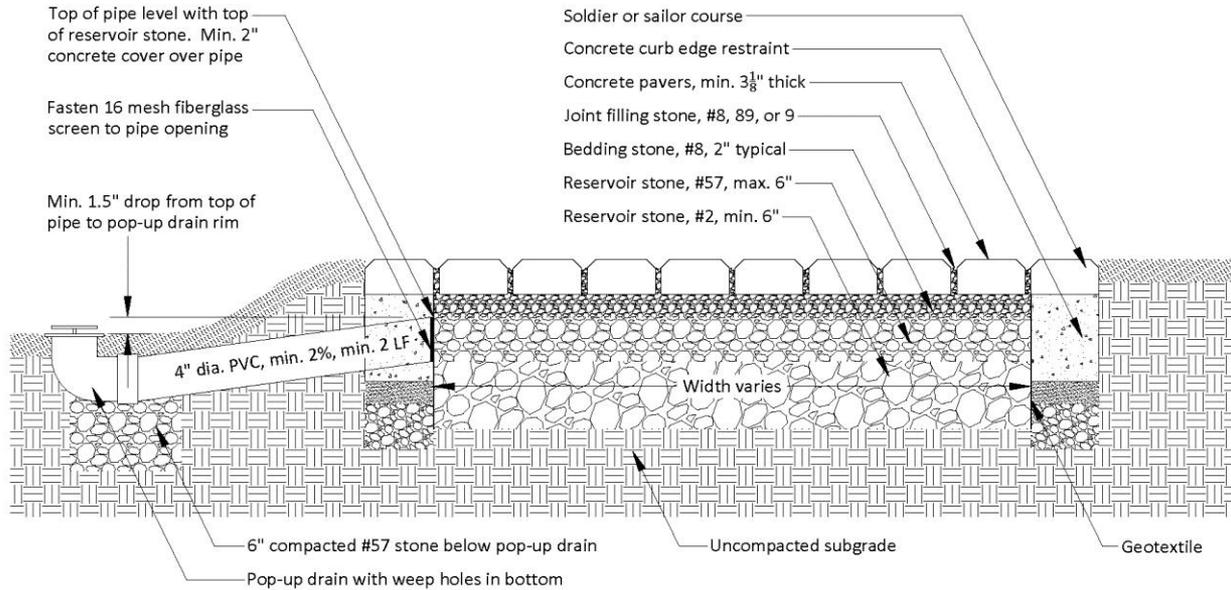
\$1,200 or \$4.00 a square foot IA treated.

Whichever \$ amount is greater.





Figure 2. Cross-section at downslope end of driveway.
Permeable driveway with concrete curb edge restraint and piped overflow



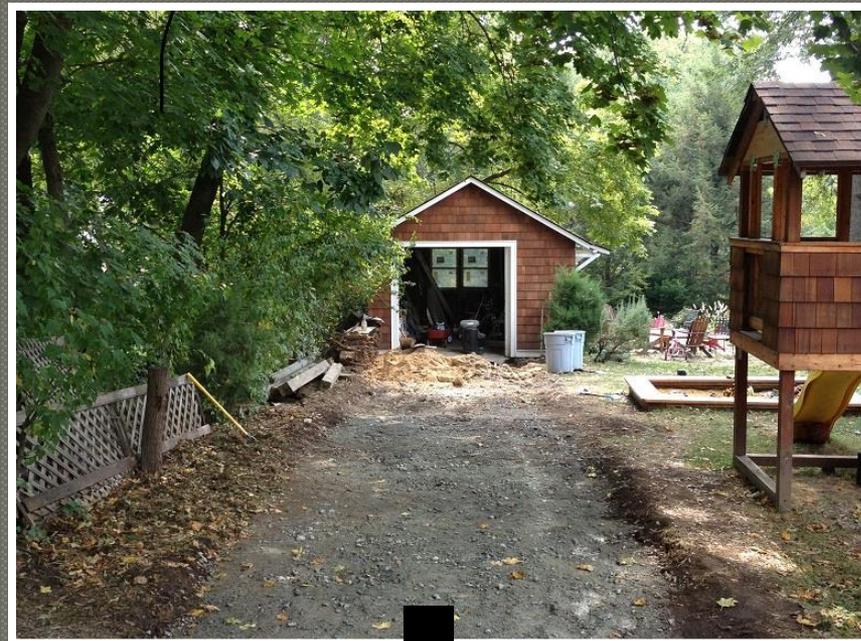
Notes:

1. Concrete curb must be 4-8" wide and min. 9" deep (including thickness of soldier/sailor course, if used). Use CR-6 base with mortar to adjust slope.
2. Adhere curb to paver above (as shown) with mortar or polymer or construct curb level with paver surface.
3. Stabilize disturbed soil with sod or mulch. Do not use grass seed. Use sod or gravel around pop-up drain.
4. Overflow pipe must connect to pop-up drain in yard (as shown) or to adjacent storm drain.
5. Bottom of excavation must slope toward the street at 1-2%. Maximum cross-slope is 0.5%.
6. Place and compact reservoir stone in lifts up to 6" in thickness.

Rewards Rebate Program: Pavement Removal

\$4 per square foot for conversion to a conservation landscape

\$2 per square foot for conversion to turf.



Rewards Rebate Program: Green Roofs

- **\$10/ SF**
- Minimum 250 square feet
- *Must be on an existing roof*



Rewards Rebate Program: Rain Barrels

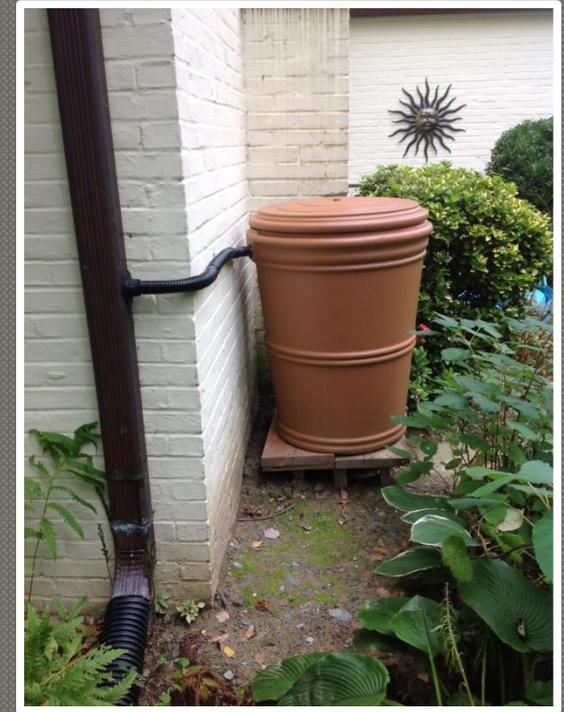
- \$1.00 per gallon
- \$250 maximum per property
- *must capture 200 gallons*



Rebate Program: Rain Barrels

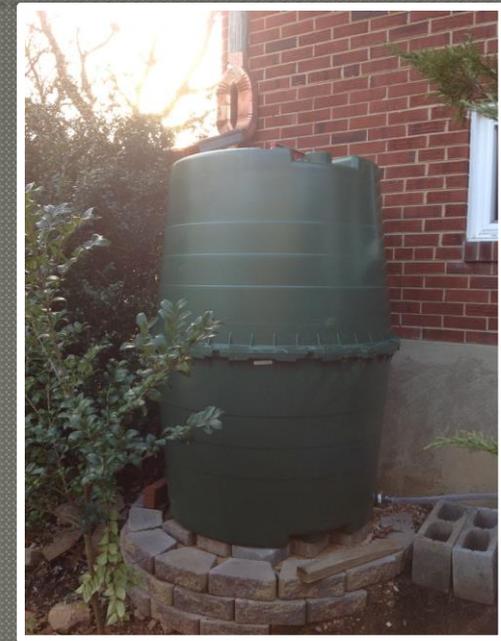
- \$250 per property
- Must capture 200 gallons
- Maximum rebate is \$250; \$1/gal.

Remember, your rain barrel only works if you use it
– so After the Rain, Let it Drain!



Rewards Rebate Program: Water Harvesting: Cisterns

- \$1 per gallon
- 250 gallon minimum
- \$500 maximum rebate



Did you know? With every 1" of rain on 1,000 square feet of roof area you can collect around 600 gallons!

<http://www.harvestingrainwater.com/imagesvideoaudio/image-gallery/contemporary-water-harvesting-art/>



Rewards Rebate Program: Dry Wells



- \$1.00 per Gallon
- \$600 **per property**
- May be linear drywell – DIY
OR
- conventional drywell – contractor installed

Rebate Schedule on line

RainScapes Technique	Maximum Residential Rebates \$2500/parcel	Maximum Commercial, Multi-Family, HOA common land, and Institutional Rebates \$10,000/parcel
Canopy Trees	\$200/tree; # trees determined by space on parcel. Must shade or cover impervious area	\$200/tree; # trees determined by space on parcel. Must shade or cover impervious area
Conservation Landscaping - Replacement of turf or invasive species	\$2.00/square foot with no ponding \$3.00/square foot with 2" of ponding Project must replace turf or invasives Project needs to intercept runoff 250 square foot minimum	\$2.00/square foot with no ponding \$3.00/square foot with 2" of ponding Project must replace turf or invasives Project needs to intercept runoff 350 square foot minimum
Dry Wells	\$1.00 per gal ; \$600 maximum	\$1.00 per gal; \$600 maximum
Green Roofs	\$10/square foot, 250 square feet minimum	\$10/square foot; 300 square feet minimum
Permeable Pavers and Porous Concrete	\$4/square feet or \$1200, whichever is greater; 100 square feet minimum	\$4/square feet or \$5000, whichever is greater; 100 square feet minimum
Pavement Removal	\$4/square foot if replacing with conservation landscaping \$2/square foot if replacing with turf 100 square feet minimum	\$4/square foot if replacing with conservation landscaping \$2/square foot if replacing with turf 300 square feet minimum
Rain Garden	Based on square foot of ponding area and soil replacement (media)depth: 1' of media: \$5/ square foot 2' of media: \$7/square foot 3' of media; \$9/square foot or \$1200/ rain garden, whichever is greater – see RS design manual for sizing charts	Based on square foot of ponding area and soil replacement (media)depth: 1' of media: \$5/ square foot 2' of media: \$7/square foot 3' of media; \$9/square foot or \$2500/ rain garden, whichever is greater – see RS design manual for sizing charts
Water Harvesting: Cisterns	\$1/Gallon (minimum 250 gallons, up to 500 gallons)	\$1/ Gallon (minimum 250 gallons, up to 2000 gallons)
Water Harvesting: Rain Barrels	\$250 (must capture 200 gallons if single family home; 100 if Townhome); \$1/gallon	\$250 (must capture 200 gallons); \$1/gallon

RainScapes website: www.rainscapes.org

County Home

Alerts Translate [A- | A | A+]



Montgomery County, MD

Environmental Protection

Search

DEP Website County Site

Home ▾ Water ▾ Trash & Recycling ▾ Energy ▾ Trees & Air ▾ Sustainability ▾ Have a Problem? ▾



What are RainScapes?

The RainScapes program promotes and implements projects which reduce **stormwater runoff** volume and improve water quality on properties within Montgomery County. The County offers technical and financial assistance (in the form of RainScapes Rewards Rebates) to encourage property owners to implement eligible RainScapes techniques on their property.

A RainScape is a landscape or design technique that helps reduce stormwater runoff from individual properties.

RainScapes can be installed on any kind of property, but those on private residential, institutional, and/ or commercial properties may be eligible for a **RainScapes Rewards Rebate**.

RainScapes is a program of the Watershed Restoration section of the Montgomery County Department of Environmental Protection. RainScapes are a vital component of the County's watershed restoration efforts, which are **required by law**.



Rain gardens are a common RainScape

On this Page...

[RainScapes](#)

[Types of RainScapes](#)

[Benefits of RainScapes](#)

[Who Can Participate?](#)

[Resources and Calendar](#)

[Partnerships](#)

Related Links...

[RainScapes Rewards Rebates](#)

[RainScapes for Landscape Professionals](#)

Getting Started with RainScapes

RainScapes Rewards Rebates

How to Apply

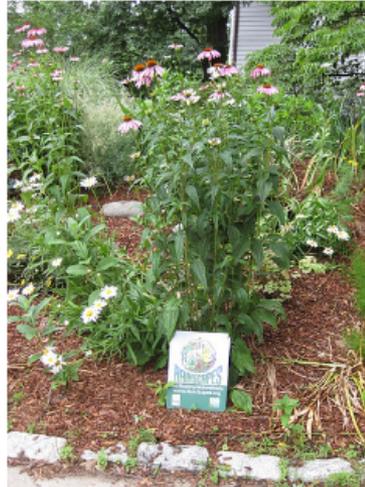
Before any work has begun an application has to be submitted for the RainScape Rewards Rebate you've picked for your property. The online application is a quick process and begins with you entering your name, address and tax ID number. **The tax ID number** is how we track the RainScapes rebates that your property has received.

After the application is submitted you can expect a response email detailing the next steps within 1-2 weeks depending on the season. **For more information please refer to our "How to Apply for a Rebate" fact sheet** (PDF, 238KB) that details all of the steps of the rebate process.

Once the project is complete, and passes a final inspection, you can expect a check in the mail within 4-6 weeks. Please keep in mind that this is not a tax credit but an actual check.

After RainScapes project are completed, most of them are eligible as credits off the annual **Water Quality Protection Charge**. This is on top of the RainScapes rebate!

Apply Now!



Outreach

As part of the rebate agreement, the applicant may be asked to participate in public outreach activities associated with the RainScapes project, including allowing DEP to place signage, take and use photos, and completing a follow-up evaluation. This requirement is noted on each application. "In the ground" projects are great examples for others who may be considering a RainScapes on their property, and help to build a network of community members with project experience.

Project Tours

Each application includes a question about voluntary participation in tours of the RainScapes projects conducted by DEP. Project tours will help DEP educate others about the benefits and beauty of these projects, and we ask that RainScapes Program project participants agree to allow reasonable access to the project site for periodic tours organized by the County.

On this Page...

[Rewards Rebates Program](#)

[Rebates by RainScape Technique](#)

[How to Apply](#)

Related Links...

[What is a RainScape?](#)

[RainScapes for Landscape Professionals](#)

[RainScapes for Schools](#)

[RainScape Neighborhoods](#)





RainScapes Rewards

[Apply Online](#)[My Application\(s\)](#)[Preview Application Forms](#)[Contact Us](#)

RainScapes projects are designed to slow the speed of rainwater runoff, increase the groundwater supply by making it easier for water to soak into the ground and reduce the total amount of dirty water which ever reaches our streams. Rain Gardens, Conservation Landscapes and Canopy trees, as well as projects such as Permeable Paver Retrofits are examples of types of projects which have multiple benefits and are particularly well suited to soaking water into the ground and reducing stormwater runoff. Additional environmental benefits from those projects and other RainScapes projects such as rain barrels, cisterns and green roofs include reduced energy costs, reduced potable water consumption and improved air quality in our neighborhoods. Dry wells are also an option, and are particularly useful when combined with other types of RainScapes projects such as conservation landscaping and rain gardens.

Before you decide to implement a RainScapes project most suited to your environmental goals, please download and read the Requirements and Guidelines document(s) located in the 'Resources' box on the right. When you are ready to apply for a rebate, please use the links below.

All rebate projects, except rain barrel projects, must be preapproved prior to installation.
Rain Barrel projects must meet our criteria, but can be submitted for rebate without preapproval.

The money for rebates is allocated on a first-come, first-served basis.

[I am applying for RainScapes rebates, for the first time..](#)

[I have already applied for RainScapes rebates..](#)

Resources

[RainScapes Terms](#)

Requirements & Guidelines

- [Cisterns](#)
- [Conservation Landscaping](#)
- [Dry Well](#)
- [Green Roof](#)
- [Pavement Removal](#)
- [Permeable Pavers](#)
- [Rain Barrel](#)
- [Rain Garden](#)
- [Tree Canopy](#)

Check out our website for more info on designs



RainScapes

Environmentally Friendly Landscapes for Healthy Watersheds

Overview

The RainScapes Program



RainScapes are watershed-friendly ways to reduce rainfall runoff. The County's RainScapes Program provides information and guidance to County property owners who are interested in protecting the environment. When it rains in Montgomery County, some of the water soaks in the ground. Unfortunately, most of that stormwater flows across hard surfaces like driveways, roofs and patios collecting pollution along the way and reaching our streams. Runoff from hard

surfaces can account for 60 percent of the stormwater runoff in some areas. Runoff enters the County storm drain (a.k.a. storm sewer) system, and then enters our streams causing damage to the streams and ultimately the Bay by causing erosion, and mixing in other pollutants such as trash, nutrients and pet waste.

RainScapes projects are designed to slow the runoff, and reduce the amount of runoff and pollutants entering our streams. Stormwater that soaks into the ground is filtered by the soil and replenishes groundwater and stream levels, and keeps our streams healthy and able to support a wide

range of functions. Additional environmental benefits of these projects include reduced energy and water consumption and improved air quality in our suburban landscape.

The Montgomery County Department of Environmental Protection (DEP) is offering rebates to encourage property owners (residential, commercial, and private institutional) to reduce runoff from their properties by using RainScapes techniques for natural drainage projects. RainScapes techniques are onsite stormwater management tools that reduce stormwater runoff, improve the County's water quality, and add value to your property.

The RainScapes Rewards Rebate Program

The Montgomery County DEP RainScapes Rewards Rebate Program offers financial incentives in the form of rebates to property owners who install RainScapes techniques.

- Eligible drainage projects include:
- Planting rain gardens
 - Replacing turf grass with conservation landscaping
 - Planting new tree canopy
 - Replacing existing hard surface with permeable pavers

- Installing rain barrels, cisterns, dry wells or a green roof to replace an existing roof
- Removing pavement

A property is eligible for a rebate whether it is residential property or commercial, multi-family, or institutional property. Annual funds for the programs are limited, so rebates will be awarded on a first come first served basis. This manual provides planning and installation guidance for homeowners about the voluntary stormwater management practices

highlighted in the County's RainScapes Program.

The RainScapes Program is funded by the County's Water Quality Protection Program. You must submit your project to DEP for approval prior to the construction of your project. After completion of an approved project, you will submit your receipts to receive your rebate check in the mail.

For more information or to submit an application, please visit www.rainscapes.org

Overview

page 1 of 7

www.rainscapes.org



RainScapes

Environmentally Friendly Landscapes for Healthy Watersheds

Rain Gardens

Why should I install a rain garden?

One inch of rain falling over a 1,800 square foot home on a small lot can produce over 6,000 gallons of stormwater runoff. Typically, roof downspouts release runoff directly onto lawns or hard surfaces such as driveways, patios, and sidewalks that prevent the water from soaking into the ground. When water cannot soak into the ground, it flows over the surface and enters storm drains that flow to streams. As it flows over hard surfaces and lawns, the stormwater picks up pollutants such as sediment, grease and oil from cars, and pesticides and fertilizers from lawns. The storm drain pipes collect the stormwater and send it into the streams in surges, which can cause downstream erosion, flooding, and stream habitat problems.

Rain gardens are functional landscaping features. In addition to making your landscape look more attractive, they can address flooding and erosion problems to your yard and neighborhood.

(continued on page 2)

What is a rain garden?

Rain gardens are attractive landscape features constructed to capture stormwater runoff from hard surfaces such as your driveway, patio, or sidewalk. A rain garden is a garden with a shallow depression that collects and drains stormwater. Rain gardens typically are planted with native plants with deep roots that loosen the soil, so stormwater can soak into the ground more easily. Rain gardens help to meet the RainScapes' goal of using innovative natural approaches to reduce water pollution, stream channel erosion, and drainage problems caused by stormwater runoff.



Left: Rain garden. Right: Rain garden. Both growing season, after a rain event.



Left: Rain garden.

Rain Gardens

page 1 of 11



RainScapes

Environmentally Friendly Landscapes for Healthy Watersheds

Conservation Landscaping Techniques

Why should I implement conservation landscaping?

Each year, agricultural and residential lawns in the United States spend countless hours tending to over 20 million acres of grass on their lawns. Millions of pounds of pesticides and millions of tons of fertilizer are applied annually. Lawn mowers use a quart of gasoline each hour and emit as much as 10 times the amount of hydrocarbons as a typical car. Thousands of gallons of water are used to water a single yard during one summer. On the East Coast, an estimated 30 percent of residential "waste" water use is for lawn irrigation. Traditional lawn and garden care takes time and uses non-renewable resources. What if there was a way to reduce these practices while maintaining a healthy, aesthetically pleasing landscape? In Montgomery County, much of the native topsoil is eroded during the development process, and if that soil is not carefully replaced, many homeowners are left with soil that is mostly compacted clay. The clay is typically planted with non-native turf grasses which lack the deep roots to penetrate compacted

(continued on page 2)

What is conservation landscaping?

Conservation landscaping is a type of landscaping that benefits the environment by improving water quality, preserving native species, and providing wildlife habitat. Conservation landscaping replaces some of the turf grass in a traditional lawn with native plants that have adapted to Montgomery County's local rainfall and soil conditions and require less water and maintenance than the lawn grasses. Montgomery County, Maryland is located in the Piedmont region.

The Chesapeake Conservation Landscaping Council defines conservation landscaping through "Eight Essential Elements":

1. Is designed to benefit the environment and function efficiently and sustainably for human use and well being
2. Uses locally native plants that are appropriate for site conditions
3. Includes a management plan for the removal of existing invasive plants and prevention of future invasive plant incursions
4. Provides habitat for wildlife
5. Promotes healthy air quality and minimizes air pollution
6. Conserves and cleans water
7. Promotes healthy soils
8. Is managed to conserve energy, reduce waste, and eliminate or minimize the use of pesticides and fertilizers.



Left: Garden bed and central water feature.

Conservation Landscaping Techniques

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Tree Canopy

Why should I plant trees?

Planting trees in an area attracts water to the ground.

What is a tree canopy? A tree canopy is the crown of one or many trees that create an overhead cover of leaves, twigs and branches. Canopies provide uniform, such as sidewalks, driveways, and patios, reducing the amount of stormwater runoff. Trees and bushes also provide shade for the water that hits the ground and soaks into the soil. These plants are very beneficial to the health and well-being of communities.



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Environmentally Friendly Landscapes for Healthy Watersheds

Green Roofs

Why should I install a green roof?

Typical rooftop surfaces that absorb stormwater contribute to stormwater runoff and increase pollution in streams.

What is a green roof? A green roof is a roofing partially or completely covered with a specially designed soil and vegetation system. Green roofs create long green spaces on top of buildings and structures that help to reduce runoff and reduce stormwater runoff. The installed water may be used to irrigate plants in streams.

Extensive green roofs are designed to absorb water and to maximize the performance and environmental benefits.



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Environmentally Friendly Landscapes for Healthy Watersheds

Dry Wells

Why should I install a dry well?

Directing roof or driveway runoff to a dry well is an effective way to divert runoff from your property because you are capturing the

What is a dry well? A dry well collects stormwater from rooftops or hard surfaces and stores it in an underground pipe-drain tunnel that not discharges into the dry well. The dry well is an underground structure that has a hole at the bottom that allows the water to pass through the stone or gravel and then seeps into the ground. Dry wells can be used to help to keep water from the street and surrounding soil. Dry wells reduce stormwater runoff, prevent sediment and pollutants from entering streams, and filter pollutants. Conserving property storage space is used to increase storage efficiency and decrease the footprint of the dry well.



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Environmentally Friendly Landscapes for Healthy Watersheds

Permeable Pavers

Why should I choose permeable pavers for my hard surfaces?

Permeable interlocking pavers allow water to infiltrate into the ground.

What are permeable pavers? Permeable interlocking pavers allow water to infiltrate into the ground. Permeable pavers are made of materials such as stone or concrete that allow water to pass through them.



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Environmentally Friendly Landscapes for Healthy Watersheds

Rain Barrels and Cisterns

Why should I install a rain barrel or cistern?

One inch of rain falling on a 1,800 square foot home can produce over 6,000 gallons of stormwater runoff.

What are they? Rain barrels and cisterns collect rainwater from your roof. The rainwater is stored in a barrel or cistern and can be used for watering plants, cleaning, and other uses. Rain barrels and cisterns are a simple and effective way to collect and store rainwater.



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Environmentally Friendly Landscapes for Healthy Watersheds

Pavement Removal

Why should I remove pavement from my property?

Removing pavement with turf grass allows water to infiltrate into the ground.

What are the benefits and incentives? The RainScapes Rewards Rebate Program offers a rebate payment for removing a minimum of 100 square feet of property used for residential purposes and a maximum of 500 square feet for a commercial or institutional site. For each square foot of property removed, you will receive a rebate of \$1.00. For each square foot of property removed, you will receive a rebate of \$1.00. For each square foot of property removed, you will receive a rebate of \$1.00.



Pavement Removal

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RainScapes Landscape Professionals List

-Attended RainScapes Training-

Updated on:
Monday, March 11, 2013

Firm	# of Rainscapes	RainScapes Installed	Company Website	E-Mail	First Name	Last Name	Phone
Stadler Nurseries	80	Tree Canopy	http://www.stadlergardencenters.com/index.php	debbie.fried@gmail.com	Debbie	Friedmann	301-944-1190
Goshen Enterprises, Inc.	20	Tree Canopy	www.goshenenterprises.com	kevin@goshenenterprises.com	Kevin	Bohrer	301-869-8544
Backyard Bounty	9	Rain Garden, Conservation Landscape	www.backyardbounty.net	info@backyardbounty.net	Edamarie	Mattei	301-221-4931
John Shorb Landscaping Inc.	7	Rain Gardens, Conservation Landscapes	http://jsli.com	rasma@johnshorblandscaping.com	Rasma	Plato	301-897-3603 x105
American Plant Landscape Division	6	Rain Garden, Dry Well, Conservation Landscape, Tree Canopy	susy@apfgarden.com	dsaltmann@gmail.com	Susana S.	Altmann	301-351-9909
Father Nature Restorative Landscaping	5	Rain Garden, Conservation Landscape, Rain Barrels		info@father-nature.com	Luke	Jessup	240-602-1235
Fine Earth Landscape, Inc.	4	Conservation Landscape, Permeable Paver Retrofit	www.fineearth.com	Joel@fineearth.com	Joel	Haffner	301-370-0470
J & G Landscaping Design, Inc.	4	Permeable Paver Retrofit, Pavement Removal, Dry Well	www.jglandscape.com	jpotter@jglandscape.com	Jeffrey	Potter	301-476-7600
Matts Habitats	4	Conservation Landscape, Tree Canopy		thenaturalcapital@gmail.com	Matt	Cohen	202-841-1874
Rain Barrels by Aquabarrel.com	4	Rain Barrels, Cistern		info@aquabarrel.com	Barry	Chenkin	301-253-8855
American Plant	3	Rain Garden, Conservation Landscaping		donnae@apfgarden.com	Donna	Evans	(cell) 240-388-3752
AW Landscapes	3	Rain Garden		Alan@awlandscapes.com	Alan	Walcoff	

Water Quality Protection Charge (WQPC) Credit Program

Once you install a RainScapes project you are eligible to apply for WQPC credit to reduce this annual charge (included with your property taxes)

Montgomery County Department of Environmental Protection
WATER QUALITY PROTECTION CHARGE
SINGLE FAMILY RESIDENTIAL CREDIT APPLICATION
Regulated by the Code of Montgomery County Regulations (COMCOR) 19.35.01.05

**APPLICATION MUST INCLUDE A COPY OF PROPERTY TAX BILL AND
SUPPORTING DOCUMENTATION INCLUDING PHOTOS OF THE PRACTICES FOR THE CREDIT**

EMAIL TO:
WQPC.Credits@montgomerycountymd.gov

MAIL TO:
WQPC Credits, Dept. of Environmental Protection, 255 Rockville Pike Suite 120, Rockville, MD 20850

I am the (check one): Owner Authorized Agent
(If Authorized Agent, please attach copy of document creating authorization)

Property Account No: (eight digit number)

Owner Name:

Premise Address:

Owner/Agent Address:

Phone Number:

Phone Number (Premise):

Email Address:

Application Checklist

1. Complete the stormwater treatment calculator
2. Complete the maintenance checklist/agreement
3. Provide photos of stormwater treatment

Print and sign the credit application and submit all required and supporting documentation by either email or mail. The email and mailing addresses are listed on this page and on the instructions.

Include photographs of each stormwater management facility or system. At least one of the photographs must feature a picture of the entire house showing the location(s) of each facility or

Ready | Instructions | Application | SFR Credit Calculator | Maintenance Checklist

Next Steps in Garrett Park?

- ◉ Getting the word out – rule of 7
- ◉ Tour?
- ◉ Community survey of stormwater perceptions
- ◉ N2N
- ◉ Future – grant program

Who needs clean water?



Turtle hatchling



Peeper frog



Baltimore Checkerspot caterpillar



Northern Green Frogs



Cambarus diogenes





RainScapes

On-line
application

www.rainscapes.org



RainScapes HelpDesk:

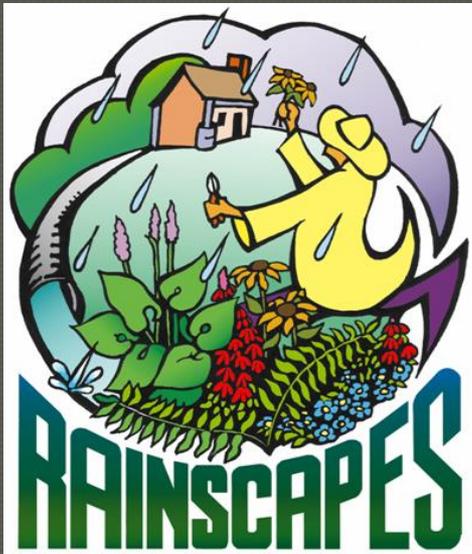
RainScapes@montgomerycountymd.gov

pamela.rowe@montgomerycountymd.gov

RainScapes Team

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RainScapes: improving site
ecological function one project
at a time

RainScapes mission:

To educate and incentivize private property owners to act to reduce impervious surface stormwater runoff pollution from their property that is contributing to the degradation of our streams and the Chesapeake Bay.

