

# STORMWATER, TREES AND OUR DRINKING WATER

*The Borough of Media is proud to present this brochure about the importance of trees in preventing stormwater runoff, improving the quality of our drinking water and preserving the environment.*

**WATER RESOURCES EDUCATION NETWORK**

# STORMWATER

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## 1. What is stormwater runoff?

Stormwater from rain, snow or ice flows across the ground and pavement and “runs off” into streams through storm drains and culverts..

## 2. Where does the stormwater go?

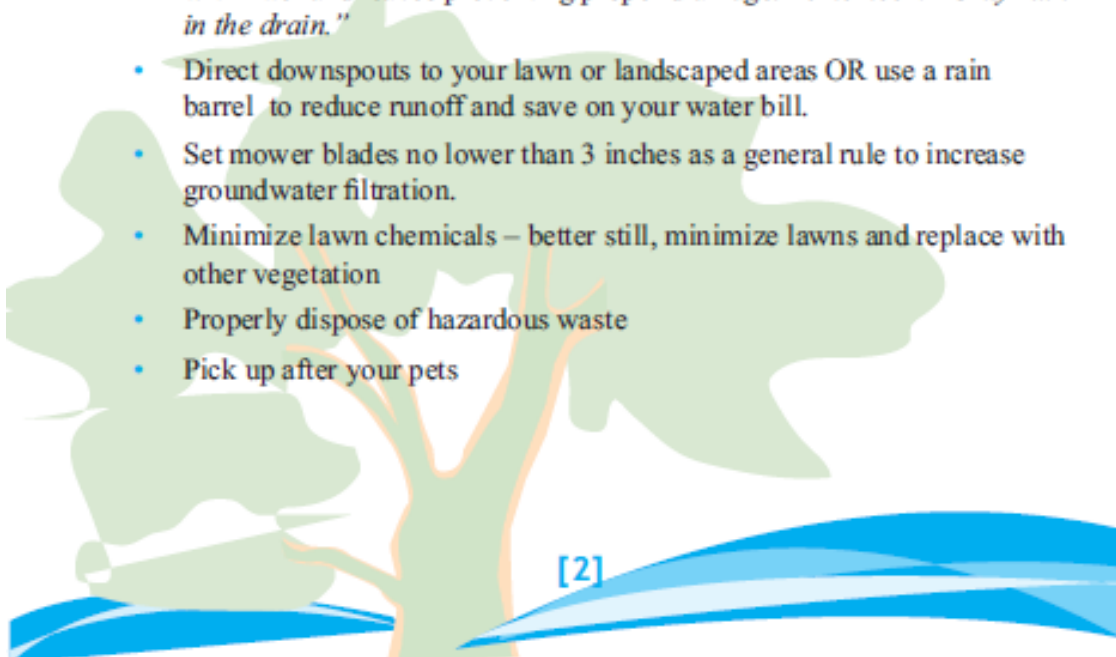
Stormwater can flood houses and roads and make its way to storm drains, discharging into streams. In Media, the path of stormwater runoff is from the highest point in the Borough, 8th and Monroe/Jackson Streets, to Edgemont to Gayley Run behind the Gayley Park Apartments and off Jackson Street to Glen Providence Park. From both places water then flows into Ridley Creek, the Delaware River, and the Atlantic Ocean.

## 3. Why is stormwater runoff bad?

If stormwater does not infiltrate into the ground but “runs off”, both water quality and quantity are negatively affected and the ground does not get replenished with water. As storm water travels over the ground, it picks up pollutants such as fertilizers, pesticides, animal waste and chemicals from residential areas, and oil from roadways.

## 4. What you can be do about stormwater?

- Plant and maintain trees and shrubs.
- Use pervious paving surfaces such as brick sidewalks on a bed of gravel and sand.
- Adopt a storm drain and keep it open near your home – drains often clog with litter and leaves preventing proper drainage. *Remember: “Only rain in the drain.”*
- Direct downspouts to your lawn or landscaped areas OR use a rain barrel to reduce runoff and save on your water bill.
- Set mower blades no lower than 3 inches as a general rule to increase groundwater filtration.
- Minimize lawn chemicals – better still, minimize lawns and replace with other vegetation
- Properly dispose of hazardous waste
- Pick up after your pets





## DRINKING WATER

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### Where does Media's drinking water come from?

Our water comes from Ridley and Chester Creeks. Ridley Creek is designated as "High Quality Waters" from its source in eastern Chester County to the water intake near Media.

The primary influence on our high water quality is the forested area of Ridley Creek State Park and Tyler Arboretum.

Forest buffers along their banks enable streams to clean themselves naturally. (*Water treatment plants basically imitate forested stream processes.*) Trees in **urban areas help reduce stormwater runoff and prevent pollutants from getting into the water.**

For more information visit <http://www.stroudcenter.org/press/20050512.htm> or download *Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands*.



# WE ALL LIVE DOWNSTREAM

# THE VALUES OF TREES

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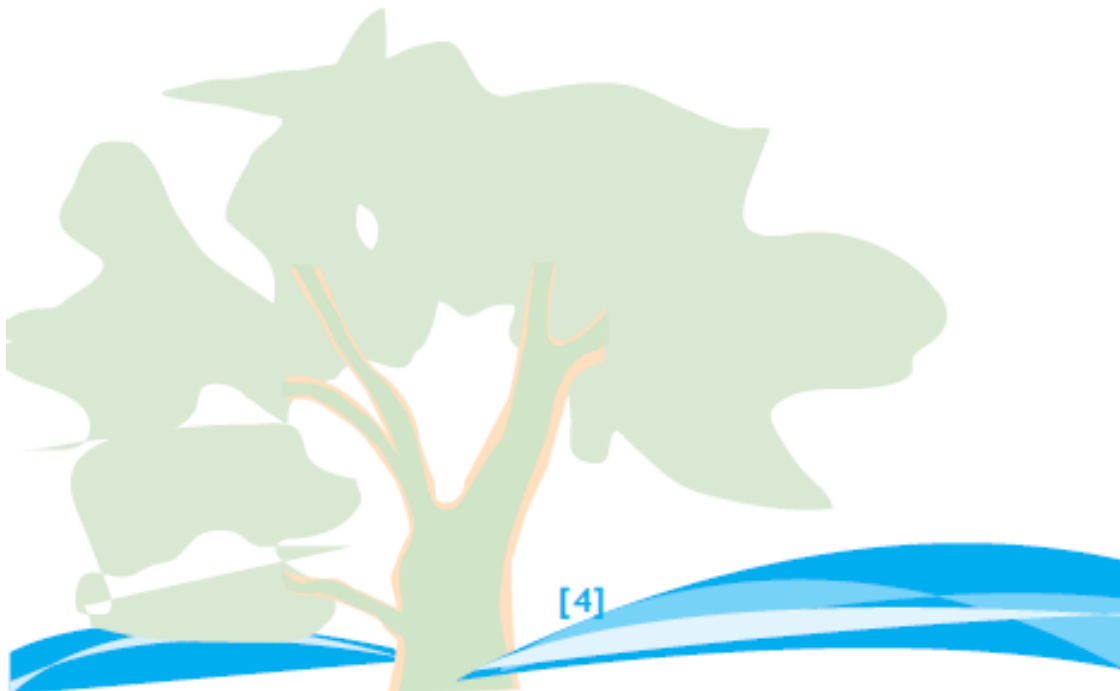
## Environmental Benefits



- Trees' leaves catch and hold rainfall. Their roots reduce runoff and flooding by creating a soil "sponge" that lets the ground absorb more water, filter sediments, nutrients and some pollutants, and slow the release of water as it enters the stream.
- They absorb sulfur dioxide and nitrogen oxide, two major components of acid rain and ozone pollution.
- Trees provide a natural habitat for wildlife.

## Health Benefits

- Trees release oxygen into the air, absorb carbon dioxide, remove ozone and other air pollutants as well as trap dust and dirt, thereby improving the quality of the air we breathe.
- Trees reduce noise pollution.
- Trees shield us from exposure to ultraviolet light from the sun, lowering the risk of skin cancer.
- • Street trees provide a buffer between moving vehicles and pedestrians and provide both visual interest, safer speeds and quieter neighborhoods.





# THE VALUES OF TREES cont'd

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## Economic Benefits

- Houses with numerous trees increase property values 3-7%
- Neighborhoods with well-shaded streets can be up to 10°F cooler than neighborhoods without trees. Three well-placed trees around a home can lower air conditioning bills by up to 30% and trees providing windbreak can save up to 25% on winter heating costs.
- Trees reduce water treatment costs.
- Trees reduce the frequency of street resurfacing.
- Consumers shop more often and longer in downtown business districts with street trees and other landscaping than in districts without; and they are willing to pay more for parking and up to 11% more for goods and services.

**References:** The TreeTenders Handbook, The Pennsylvania Horticultural Society, 2005  
<http://www.pennsylvaniahorticulturalsociety.org/phlgreen/treetenders.html>



# HOW THE BOROUGH HELPS CONTROL STORMWATER

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Media has an aggressive program of street tree planting and a reimbursement program for sidewalk repairs caused by root damage. Please contact the Borough office for information.

## Homeowners are responsible for:

- watering the new trees
- repairing the curb as well as sidewalks.
- letting the borough office know if a tree needs to be examined by the town's Tree Warden.

## Best trees for controlling stormwater:

### 1. What are the considerations for best street trees?

- Plant trees that withstand poor alkaline soil and tolerate drought and salt.
- Consider the size of the tree in maturity and plant accordingly. Where there are overhead wires, plant small trees; otherwise, plant large trees that in the future will provide more shade, cleaner air and better stormwater management.

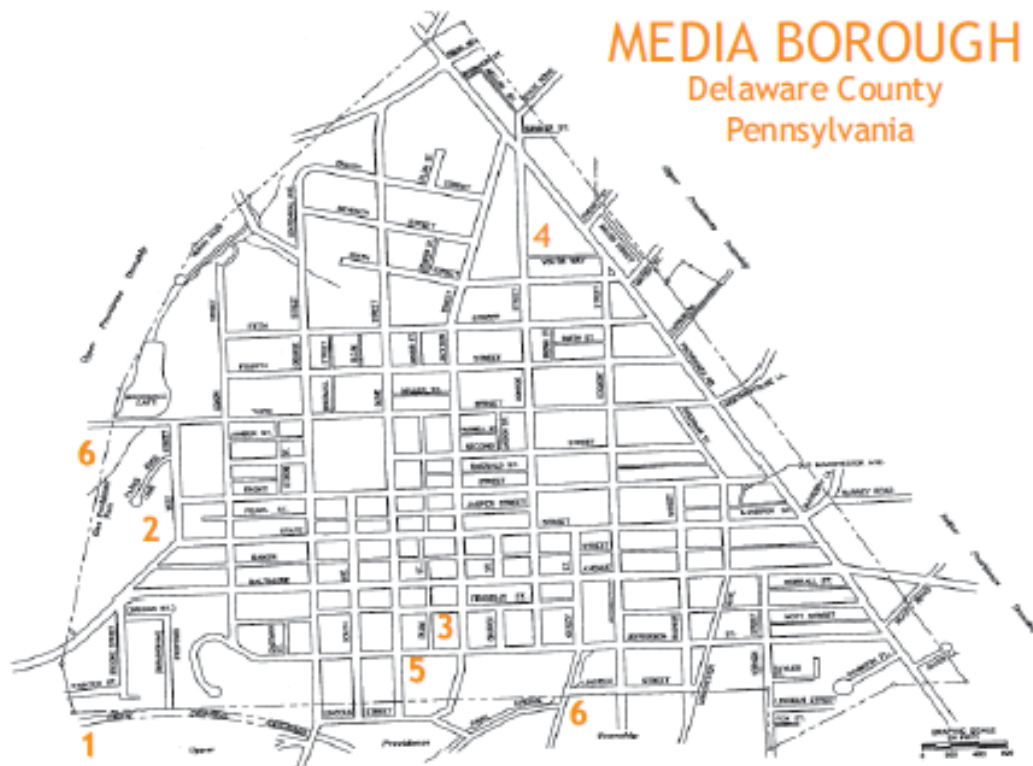
### 2. Media Borough recommends

- Ginkgo (male)
- Okame Flowering Cherry
- Kwanzan Cherry
- Scarlet Oak
- Japanese Tree Lilac
- Zelkova
- Little Leaf Linden

### 3. What are the best practices for planting trees?

- Water a newly planted tree often, slowly and deeply.
- Mulch but never pile mulch "volcano-like" against a tree. Spread no more than 2 inches of mulch around the tree, not touching the trunk.
- Don't prune heavily except to remove dead, diseased or damaged branches.
- Plant shallow-rooted annuals or ground covers around the tree, not grass.

For specific information about each tree including height, foliage color, species and best planting conditions please consult the Borough's website [www.mediaborough.com](http://www.mediaborough.com).



## Map of Media & Fun Facts

1. Water treatment plants  
~ *drinking water and wastewater*
2. Largest tree
3. Oldest tree
4. Highest point
5. Lowest point
6. Gayley Run, Broomall Run

# CONTACTS

Borough of Media  
[www.mediaborough.com](http://www.mediaborough.com)

## Borough Contacts:

All can be reached at the Borough Hall

**610.566.5210**

Tree Warden, Don Jackson

Shade Tree Commission, Jane Valdes-Dapena, *Chair*

Council Liaison, Peter Alyanakian

Borough Manager, Jeffrey A. Smith

## PA Department of Environmental Protection

[www.depweb.state.pa.us](http://www.depweb.state.pa.us)

## Stroud Water Research Center

[www.stroudcenter.org](http://www.stroudcenter.org)

## Center for Watershed Protection

[www.cwp.org](http://www.cwp.org) • [www.stormwatercenter.net](http://www.stormwatercenter.net)

You can make a difference by Joining Your Local Watershed Group

## Chester Ridley Crum Watersheds Association

[www.crcwatersheds.org](http://www.crcwatersheds.org)

Developed by the Borough of Media and Stroud Water Research Center, Inc.

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Chester-Ridley-Crum Watershed Association, and the

## Water Resources Education Network

<http://wren.palwv.org>

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