

## Non-Point Source (NPS) Pollution

**NPS Pollution** comes from many sources and is caused by rainfall or snowmelt moving over and through the ground (carrying human-made and natural pollutants with it).

The pollutants that are carried with stormwater eventually dump into streams, rivers, lakes, reservoirs, wetlands, and even into our underground drinking water supply—having implications for us and the natural resources around us.

### EXAMPLES OF NPS POLLUTION

- Excess fertilizer, herbicide, insecticide, pesticide, and stormwater runoff from residential and agricultural areas
- Excess nutrients and harmful bacteria from faulty septic systems, pet waste, and livestock
- Accelerated sediment runoff from construction sites, dirt and gravel roads, timber operations, and some farming practices
- Oil, salt, paint, heavy metals, and other toxic chemicals from urban developments



## Why should I care?

NPS pollution affects EVERYONE! The pollution may ruin your drinking water, kill fish and aquatic life at your favorite fishing spot, and pollute your child's favorite swimming hole!

A rain barrel helps reduce NPS pollution reaching our local streams, and therefore protecting the water quality of the Delaware River. A rain barrel is a strategy used by many to manage stormwater and NPS pollution.

## PROJECT PARTNERS



**BARRY ISETT & ASSOCIATES**  
Multidiscipline Engineers & Consultants  
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**KALMBACH  
MEMORIAL PARK I**  
*A Distinct Community Center*

**Coca-Cola** Refreshments

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# RAIN BARRELS

*A Stormwater Solution to  
Non-Point Source Pollution*



*A rain barrel is a rainwater collection system that stores rooftop runoff that can be used for irrigating flowers, gardens, and lawns, while conserving water, and saving YOU money!*

## WHAT EXACTLY IS A RAIN BARREL?

A **rain barrel** is a system that collects and stores rain water from your roof that would otherwise be lost to runoff and diverted to storm drains, streams, and eventually the Delaware River watershed.

A **rain barrel** is constructed using a reused 55 gallon food grade barrel, a bottom drain, a spigot, an overflow, a screen to keep debris and insects out, and a downspout diverter to carry the water into the **rain barrel**.

A **rain barrel** is a relatively simple and inexpensive way to capture and store rain water for use at later times. It conveniently sits under residential gutter downspouts from your home, garage, and/or shed.



## **BENEFITS OF USING A RAIN BARREL**

Lawn and garden watering can take up a large percentage of total household water use during the summer months. A rain barrel collects water and stores it for when you need it most, during periods of drought! A rain barrel provides an ample supply of FREE water for flowers, gardens, lawns, and even car washing!

A rain barrel can conserve water and save YOU money during the peak summer months. Conserving water helps protect the environment, saves energy (decreased demand for treated tap water and well water) and decreases the impact of runoff to streams and the Delaware River. Therefore, by installing a rain barrel, YOU can help protect the water quality, aquatic species, drinking water quality, and recreation in the Delaware River watershed!

## **CONNECTING YOUR RAIN BARREL TO YOUR DOWNSPOUT**



Cut or remove a portion of your downspout to divert water from your roof into the rain barrel.

Install the provided downspout adapter from your downspout to the top of the rain barrel.



## **TIPS**



- **Do not use collected water for drinking, cooking, or bathing**
- **Keep the lid/screen secure so children and/or animals cannot fall into the barrel**
- **Disconnect the rain barrel during winter months to avoid freezing and breaking of the rain barrel and it's parts (you can turn the rain barrel upside down)**
- **Divert the overflow towards a grassy area (this will allow water to infiltrate into the ground, replenishing groundwater supply)**
- **Make sure screen is secure to prevent mosquitoes from breeding in you rain barrel**  
**Note: You may see mosquitoes in your rain barrel because eggs were possibly carried in from your spouting. This will not create a breeding concern!**

## *Stormwater*

Typically, rain water runoff is collected in storm sewer systems and released directly into streams. This direct runoff can contribute to flooding in developed areas that contain a lot of impervious surfaces including roofs, sidewalks, and parking lots.

This runoff carries with it pollutants that contribute to poor water quality that can affect the health of local waterways and even your drinking water.

These issues are of particular importance in highly developed areas as more impervious surfaces cause more runoff during a rain or snow event.



When you collect rain water that would otherwise enter the storm sewer system, you are helping to minimize the amount of storm water that will directly run off into streams!

A rain barrel is a good start to get homeowners thinking about water conservation. Rain barrels conserve water and control runoff, and can give you a good idea about the large amounts of stormwater that is shed from impervious surfaces.

A formula to remember: 1 inch of rain on a 1,000 square foot roof yields 623 gallons of water. Calculate the yield of your roof by multiplying the square footage of your roof by 623 and divide by 1,000.

Because plants thrive on natural rain water (no chlorine, ammonia, fluoride, or other chemicals), the rainwater collected and stored in rain barrels is ideal for watering lawns and gardens.