

**BRARCLIFF MANOR
UNION FREE SCHOOL DISTRICT
45 INGHAM ROAD
BRIARCLIFF MANOR, NY 10510**

MS4PY7 STORMWATER PROGRAM

**FACT SHEET #2
JANUARY 2017**

**WATER CONSERVATION AND
STORMWATER MANAGEMENT**

**FOR MORE INFORMATION, CONTACT
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1. LIMITED FRESH WATER SUPPLY

Ninety-seven percent of all water on earth is saltwater which is not suitable for drinking. Only three (3) percent of all water is fresh water, and only one (1) percent is available for drinking water. We depend on a reliable, clean supply of drinking water to sustain our health. We also need water for agriculture, energy production, navigation, recreation, and manufacturing. Many of these uses put pressure on water resources, stresses that are likely to be exacerbated by climate change.

2. REGIONAL WATER SHORTAGES

Many areas of the United States, especially the West, currently face water shortages. The amount of water available in these areas is already limited, and demand will continue to rise as population grows. Many areas in the West have experienced less rain over the past 50 years, as well as increases in the severity and length of droughts; this has been especially of concern in the Southwest. In the western part of the United States, less total annual rainfall, less snowpack in the mountains, and earlier snowmelt mean that less water will likely be available during the summer months when demand is highest.

**3. WHAT YOU CAN DO INDOORS TO
SAVE WATER**

- **Faucets:** Install aerators on faucets and turn off the faucet while shaving, brushing teeth and washing dishes.
- **Dripping and Leaking Faucets and Toilets:** Replace dripping and leaking faucets and toilet fixtures. A slow drip can

waste 15 to 20 gallons a day. Fix it and you will almost save 6,000 gallons a year.

- **Shower and Baths:** Install a low-flow shower head. They are inexpensive and can pay for themselves in water, sewer and energy savings in less than a year. For a five (5) minute shower, you can reduce water usage from about 40 gallons to about 12 to 15 gallons.
- **Replace Old Dishwashers and Clothes Washers:** Replace old appliances with more efficient water saving and energy star rated appliances. Do only full loads. Avoid extra cycles whenever possible.

4. WHAT YOU CAN DO OUTDOORS TO SAVE WATER

Outdoor water use accounts for almost half the water used and thus provides the single greatest opportunity for conserving water.

- **Watering Lawns and Gardens:** If your community allows watering, water lawns and gardens on alternate mornings instead of every day. Water early in the morning, as early morning watering minimizes evaporation. Watering late in the day promotes fungus and other lawn diseases. Depending on the weather, it is generally better to water once a week with about 1 inch to 1 1/2 inches of water. Less frequent watering will develop grass with deeper roots. You can measure how much the lawn has received by placing a flat-bottomed tuna can about 6-feet away from the sprinkler. When water in the tuna can is filled to the top, you can turn off the sprinkler. When automatic lawn watering

Systems are used, override the system in wet weather. Irrigate only when needed. It saves water and can improve your lawn health.

- **Cutting Lawns:** Do not mow lawns too short. Keep the grass height to 2 inches. Taller grass requires less water. Mowing fewer times will also save time and money.
- **Mulching around Shrubs and Garden Plants:** Use mulch around shrubs and garden plants to limit evaporation. Apply mulch to a minimum depth of four (4) inches. Many communities will provide mulch for free. Mulch will help keep plant roots cool, prevent soil crusting, minimize soil erosion, and reduce weed growth. In addition to reducing watering during dry seasons, the mulch in around shrubs will also promote the growth of microorganisms which are needed for healthy plant root growth.
- **Car Washing:** Wash cars less frequently. If you wash your car at home, utilize phosphorus free detergents. Wash the car away from a storm drain or on a grass path where water can infiltrate into the grass. Rinse the car once, wash from a bucket and rinse quickly again. Be sure to use a shut-off nozzle on your hose, and shut the nozzle off, when soaping the car. If your car needs to be washed especially in the winter, take the car to a car wash, which treats and recycles the water.

5. STORMWATER POLLUTANTS IMPACTING THE SUSTAINABILITY OF OUR WATER RESOURCES

Water, our most precious commodity, is brought to us in the form of rainfall, snow

and ice melt. To maintain the sustainability of this precious commodity, we must take positive steps to reduce stormwater pollution from non-point sources of pollution

- **Reduction of Excessive Application of Salt and De-Icing Chemicals:** You should reduce or eliminate the use of salt and de-icing chemicals in and around our drinking water reservoirs. You should consider utilizing newly introduced biodegradable chemicals, even though costlier than salt, may be environmentally more suitable. After the snow has melted, and before the first rainfall, parking lot and street sweeping should be considered. Utilize a covered storage facility to store sand, salt and de-icing chemicals
- **Reduction of Pesticides and Lawn Fertilizers:** Use pesticides and lawn fertilizers sparingly as they promote algae growth and contaminate our drinking water supplies
- **Maintenance of Septic Systems:** Have your septic systems inspected and cleaned at least every three years to reduce pathological contamination of our drinking water supplies
- **Management of Construction Sites:** Any construction performed on your site must be properly inspected and managed to reduce the release of sediment and chemicals from construction site into the adjacent waterway

- **Maintenance of Automobiles:** Have your automobile serviced and maintained to prevent leakage of oils, greases and other chemicals into the stormwater runoff

6. UTILIZING GREEN STORMWATER PRACTICES

If we work together, we can stretch our limited water supplies and ensure that the water is there when we need it. Instead of letting it drain off your property, we can conserve this precious commodity by utilizing green stormwater practices. Green stormwater practices include a range of soil-water systems that intercept stormwater, infiltrates a portion into the ground and evaporates a portion into the atmosphere. These innovative alternatives are not only attractive water-friendly alternatives to conventional or traditional stormwater management practices, but can also be a cost-effective means to protect our water resources. These green stormwater practices include:

- **Bio-Retention Structures**
- **Rain Gardens**
- **Green Roofs**
- **Infiltration Basins and Trenches**
- **Vegetated Bioswales**
- **Porous pavements**
- **Rain Barrels and Cisterns**
- **Natural Vegetative Landscaping**
- **Tree Planting**
- **Container Gardening**

Remember any water conservation practice you adopt will help protect and manage our water resources for future generations.