

<p><b>BRIARCLIFF MANOR UNION FREE SCHOOL DISTRICT 45 INGHAM ROAD BRIARCLIFF MANOR, NY 10510</b></p>	<p><b>1. WHAT IS A RAIN GARDEN?</b> Rain gardens are gardens containing plants and grasses that can survive in soil soaked in water from rain storms. A rain garden is a shallow depression of about 5” to 10” that collects stormwater from a roof, driveway, parking lot or yard. The stormwater that collects in the rain garden is discharged as follows:</p> <ul style="list-style-type: none"> <li>• <b>Groundwater Infiltration:</b> The collected water may infiltrate, if the soils permit infiltration</li> <li>• <b>Discharge to the Nearest Storm Drain:</b> The collected water may be discharged to the nearest storm drain, if the soils are unsuitable for infiltration into the ground</li> </ul> <p>Rain gardens typically include plants and a mulch layer (6”) and an underdrain collection stem, if the underlying soils are unsuitable for groundwater infiltration.</p> <p><b>2. BENEFITS OF A RAIN GARDEN</b> The rain gardens collect and slow stormwater, during heavy rainfalls. The rain garden reduces runoff volume, peak flow and flow duration and increase infiltration into the ground. Some of the benefits of a rain garden include:</p> <ul style="list-style-type: none"> <li>• <b>Reducing Pollution:</b> By building a rain garden in your home, or school yard, you are helping reduce pollutants that are carried by stormwater runoff to our waterways, lakes streams and wetlands</li> <li>• <b>Flooding:</b> Rain gardens reduce basement and street flooding</li> <li>• <b>Habitat Improvement:</b> Rain gardens improve habitat for insects, butterflies and birds</li> </ul>
<p><b>MS4PY12 STORMWATER PROGRAM</b></p>	
<p><b>FACT SHEET #4 OCTOBER 2022</b></p>	
<p><b>RAIN GARDEN MAINTENANCE FOR STORMWATER MANAGEMENT</b></p>	
<p><b>FOR MORE INFORMATION, CONTACT YOUR STORMWATER COORDINATOR:</b></p> <p><b>ANTHONY BAUSO AT: 914-432-8134 OR AT abauso@briarcliffschools.org</b></p>	

### 3. MAINTAINING YOUR RAIN GARDEN

Once you have your rain garden constructed and functioning well proper annual maintenance will be important to maintain the health and functionality of your garden.

#### Step 1. Plant Care:

- **Pruning** should occur to remove any dead, dying, diseased, or hazardous branches. Trees should be pruned over the winter before bud break and flowering plants should be pruned immediately after the plants have finished blooming
- **Mowing** is unnecessary as rain gardens are designed to flourish over the growing season. Mowing may also increase the nitrogen load of the garden and reduce its ability to remove pollutants.
- **Weeding** as with regular gardens the rain garden will require more aggressive and regular weeding until the desired plants become established. Weeding should be limited to invasive and exotic plants. Chemical herbicides should be avoided.
- **Watering** regularly is critical during the first few weeks after planting the garden. Once the rain garden is established, watering will only be necessary during drought conditions. Care should be taken not to over water as that may harm the health of the garden.

- **Fertilizing** is unlikely to be necessary as rain gardens are designed to retain nutrients. Excess fertilization compromises the gardens pollutant reduction effectiveness, leads to weak plant growth, promotes disease and pest outbreaks, and inhibits soil life.

- **Plant Replacement** should occur in the same location or close to the original location of the plant being replaced. The exception to this recommendation is if plant mortality is due to initial improper placement or if diseased/infected plant material was used and there is risk of persistence of the disease or fungus in the soil. The best time to plant is in early to mid-fall or early to mid-spring.

#### Step 2. Infiltration Maintenance:

- **Trash and debris removal** should be routinely performed to ensure inlets do not become blocked. Also inspect for debris after particularly heavy rain events.
- **Mulching** should be inspected and maintained to filter nutrients and protect the plants. Avoid blocking inflow entrance points with mounded mulch or raised plantings. To avoid bark rot and subsequent infestation by pests, not exceed the recommended depth especially around trees, shrubs, and perennials. Replace mulch as necessary to maintain the depth necessary to protect the plants
- **Observe** the rain garden during heavy rain events and watch for overflowing areas. If the overflowing water is removing the mulch slow that water down at the garden inlet by adding more rocks.

If the water is overflowing at a section where you did not intend then you will need to add more soil to that area. Repeat this activity twice a year going forward to ensure that the garden overflows properly.

- **Remove** sediments that have accumulated in curb cuts to ensure proper water flow. Regularly removing grit, sand, and debris from the surface of the soil can help to keep the system healthy and allow water to infiltrate.

### Step 3. Additional Tips:

- **Leave** the plant stems up through winter to enjoy their structures and to give the wildlife some cover; it will also benefit the soil by protecting its surface from the weather.

- **Based** on aesthetic preference, rain gardens can be aggressively maintained or left to form a dynamic ecological community on its' own.

- **Prevent** gullyng by adding a berm, more plants, river rocks, and/or more mulch.

- **Testing** should be performed on soil every 3 years to evaluate its condition. If any soil amendments are necessary they should only be added when no storms are expected

## 4. KEY TAKEAWAYS

For rain garden maintenance the key takeaways are:

1. Water regularly to promote plant growth during the first two years and dry spells.
2. Inspect site following rainfall events. Add and or replace vegetation and mulch in any eroded areas.
3. Prune and weed to maintain appearance.
4. Replace mulch as needed.
5. Soil fertilization is unnecessary as rain gardens are designed to absorb excess nutrients.
6. Inspect the rain garden for dead or dying vegetation. Replace vegetation as needed.

## 5. PLANTS FOR YOUR RAIN GARDEN

Before planting consult with a local nursery for what native plants will grow best in your area. Some suggested plants used in other Westchester Rain Gardens:

Royal Fern, Blazing Star, Turtlehead, New England aster, blue flag, switchgrass, highbush blueberry, Redtwig dogwood, summersweet, and Winterberry.

Some invasive species to avoid:

Barberry, Black Swallow Wort, Burning Bush, Common Reed Grass (Phragmites), English Ivy, Garlic Mustard, Giant Hogweed, Japanese Angelica Tree, Japanese Stiltgrass, Tree of Heaven, Purple Loosestrife, and Mugwort.