

Rain Gardens and Water Quality



Silver Creek Watershed Improvement Project funded by a Nonpoint Source Section 319 Grant from IDEM Clark County Soil and Water Conservation District

Why Install a Rain Garden?

Benefits of a Rain Garden

- Increases the amount of water filtering into the ground.
- Reduces the amount of stormwater and pollutants going to area streams, improving water quality.
- Rooted plants stabilize soil to prevent erosion during large storm events.
- Requires little mowing, weeding or chemical application once established
- Provides valuable wildlife habitat.
- Helps sustain adequate flows in streams during dry spells.
- Improve or eliminate wet spots in the yard.

Wisdom for Rain Gardens

Rain gardens will not remove permanent stands of water (pool or pond) in a yard. However, water gardens can be designed to incorporate such a feature.

Do not locate rain gardens over septic systems or near wells.

Rain gardens do not have to be elaborate or overly large.

Combining a rain barrel with a soaker hose to the rain garden can help spread rainfall over longer periods of time, further slowing the flow of stormwater and increasing its infiltration.

Rain gardens are gardens containing flowering plants and grasses (preferably native species of both) that can survive soil soaked with water from rain storms. However they are not gardens that have standing water. Rain Gardens collect and slow stormwater run off and increase its infiltration into the soil. These attractive gardens help reduce the rapid flow of stormwater from homes and businesses to storm drains and thus protect streams and lakes from pollutants that are washed from house roofs and paved areas. Compared to a patch of conventional lawn, a rain garden allows about 30 percent more water to soak into the ground.

The rain garden does not require much space and can fit into existing landscapes or made into any shape. Rain

gardens should be placed in a location to collect the runoff as a rain event occurs. To make your rain garden effective, strategic placement next to hard surfaces such as alleys, sidewalks, driveways and under gutters are good choices. The location should be at least 10 feet away from your home to avoid a flooded basement or leaky foundation. You may think that a location where water already ponds in your yard would be appropriate, but it is NOT. The soil in this location does not have adequate infiltration properties. The depth should not be greater than six inches because of the possibility of retaining water longer than 96 hours, which would make the area prone to mosquito breeding. A good rule of thumb is that the garden should be at least twice as long as it is

wide. After planting, the maintenance cost of a rain garden is minimal. Weeding of grasses and non-natives is the only real maintenance needed. Cover the garden with shredded mulch to help reduce weeds and retain moisture. The other advantage of rain gardens is that they are rarely in need of watering. Each rain garden may seem small, but collectively they produce substantial environmental benefits.



Native Plants Key to Rain Gardens

It is always recommended to use native plants. Native plants are best because they are adapted for the local climate and once, established, do not need extra water or fertilizer. Many are deep rooted, allowing them to survive droughts. They also provide habitat and food for native wildlife and they at-

tract diverse native pollinators. The focus of a rain garden is flowers, although some grasses and shrubs may be used. The garden will have various zones so different kinds of plants are required. The center and deepest part of the garden will support the very wet to wet-loving plants. Drier types of vegeta-

tion can be used the as you move out to the rim of the garden. Don't forget to consider the sunlight, moisture and soil requirements during plant selection. Think about a color scheme and visual interest for each season of the year. Remember to look up if you're planting trees to avoid power lines.