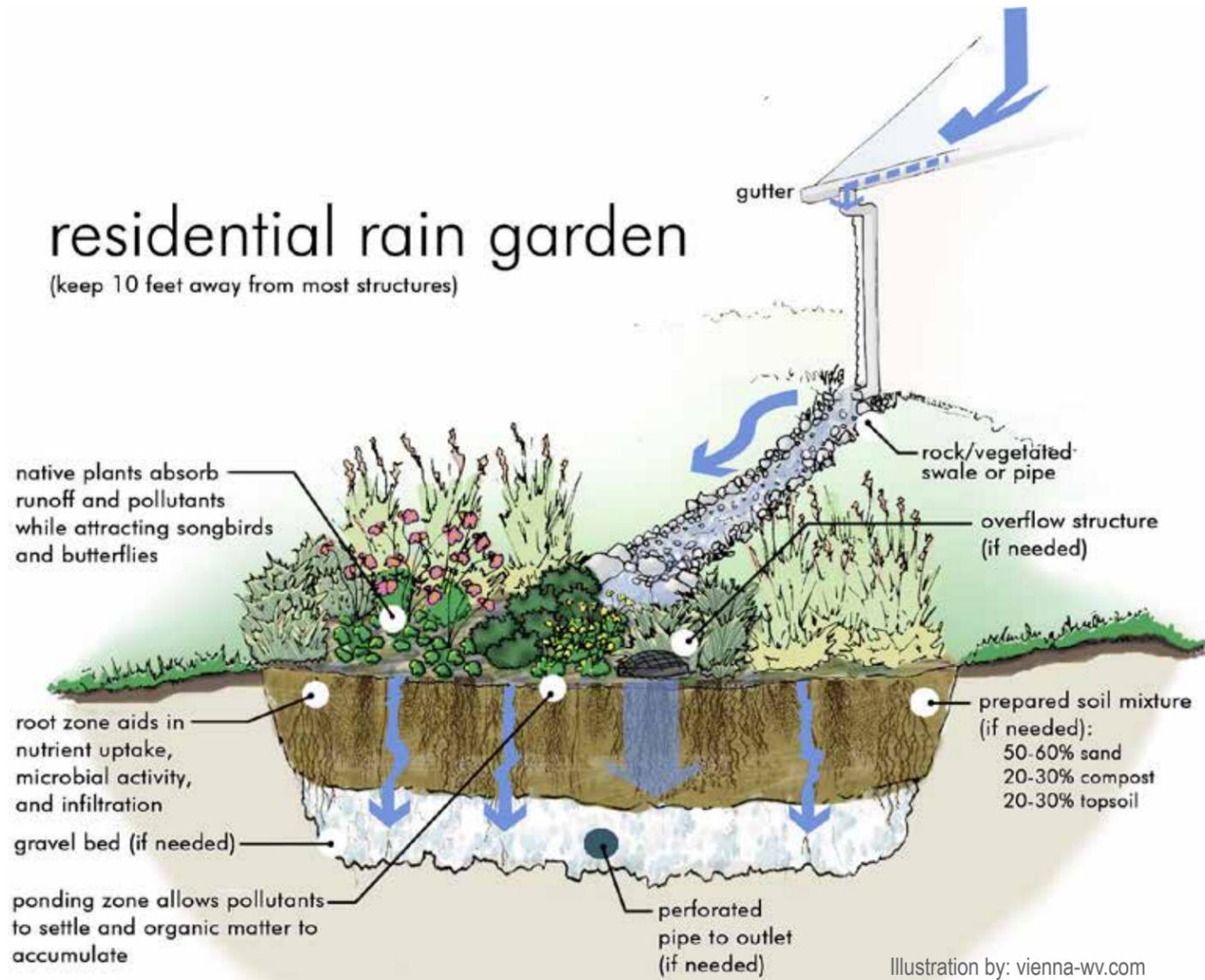


residential rain garden

(keep 10 feet away from most structures)



How to Build Your Own Rain Garden



Rain Gardens

- Soak up rain where it falls
- Reduce rainwater runoff into streets and drainage systems
- Reduce flooding and remove pollution
- Create attractive landscaping

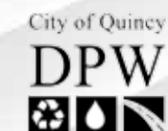
Did you know...

1. The average residential property can contribute over 5,000 gallons of stormwater runoff in a single 1" rainfall event.
2. Impervious surfaces like sidewalks, rooftops and driveways contribute significantly to stormwater runoff.
3. Providing a place for rainwater to infiltrate can reduce localized flooding.
4. Rain gardens help to slow down stormwater and protect water quality by filtering pollution.
5. Native plants actually increase infiltration over time because of their strong root system.



City of Quincy

quincyma.gov
Mayor Thomas P. Koch



1. DESIGN

Think of a rain garden as another garden for your yard. As with any landscaping, you will want to pick plants that you like and fit into the space.

Rain garden plantings are likely to be more successful in sun to part sun conditions. They can also work in shady areas, but more careful plant selection is required.

A rain garden should dry out between storm events. It is not a wetland intended to permanently hold water. Plants that like average-to-moist conditions typically do well. If you choose plants that prefer wet-to-saturated conditions, you may need to water them during the summer.

Use rock walls or other borders to help define the boundaries of the garden. Start small, see what works, and expand your garden the next year.

2. LOCATION

Build rain gardens in a location that can collect water in your yard. An area where runoff naturally accumulates, near a roof downspout, driveway or other low points are perfect. Avoid placing the rain garden on a steep slope as it will require more work to create a berm.

Consider where the water will enter the garden, and where it will drain out when it overflows. Try to make sure it does not drain in an unwanted direction such as towards the neighbor's property. Try to put the rain garden 10' or more from your house to keep water away from your foundation.

Do not install the garden over utility lines. Call Dig Safe 811 to identify buried utility lines before digging.

3. SOIL & SIZING

For home gardens, the size of the garden is not terribly important and is more of a function of area available. If you have plenty of room, try to size the garden to hold an inch of rain from the area that drains to it. A typical house will require 150 to 300 square feet to accommodate one inch of rain. If you don't have that much space design the garden to fit your landscape.

Most rain gardens are about 4" to 8" deep. Try to pick a depth that will let the water soak into the soil within 24 hours. To do this, dig a hole in the garden area (8" wide and 8" deep), fill it with water, and measure how fast the water soaks into the soil. This may take a number of hours.

For example, if the water level goes down 1" in 4 hours, the soil will percolate about 6" in 24 hours, so you would make your garden 6" deep. If the garden only holds water for a day, mosquitoes can't breed in it.

Rain Gardens Are "Green Infrastructure"

Rain Gardens are shallow, depressed gardens strategically placed to catch rainwater from downspouts, sidewalks, or driveways. Many plants can be utilized in rain gardens which will enhance the look of your yard.



4. PREPARATION

Pick a location where you can dig a shallow depression of the depth and shape you want. You may need to build a small dam on the downhill side of the garden to hold the water. Grade the garden so that water will spread out over a large, flat area. Outline the shape of the garden, remove the existing sod, and dig to create a garden the size and depth you want. If you have clay or compacted soils, over-dig the garden about 12", break up large clods using a pitchfork and mix generous amounts of sand and compost into the soil to create spaces for root penetration.

The sides should be gently sloping towards the center to prevent sudden drop-offs. After the garden is prepared, fill it with water to make sure it will infiltrate within 24 hours, and that it drains in the direction you want when it overflows. If most of the plants you choose do not like very wet or saturated conditions, cut a "notch" in the downhill side of the berm so that water does not fill up the garden for the first year. This helps the plants get established. Mature plants can tolerate more water than seedlings. After the first growing season, you can fill in the notch and let the garden hold more water.

5. PLANTS

Consider planting native wildflowers, grasses, and shrubs. Many have very deep roots that do a good job of breaking up clay soils and increasing infiltration each year. If available, "plugs" are an economical plant selection. Plugs are young plants in containers. They establish faster than seeds, and are less expensive than large potted plants.

Pick a few plant species to try first. Group the same plants together in clumps of at least 3 to create mounds of color. Plant grasses between the clumps of wildflowers. This helps to prop up the flowers when they get tall.

Choose plant locations in the garden based on how much water they will tolerate. Place plants that like wetter conditions in the lowest part of the garden. Put plants that like drier conditions around the edges.

When picking plants, also consider how tall and wide the plants will get when they mature. Space them accordingly. Do not place tall plants in areas around your driveway that will reduce visibility for vehicle entry or exit.

6. CARE

Water your plants regularly until they are established.

Mulch the garden with shredded hardwood mulch.

Where water enters the garden, you may need to arrange rocks in a decorative fashion to act as a "splash block," help break up the water flow, and prevent big storms from washing out the garden inlet. These rocks should be embedded into the soil to reduce blocking flow from upstream.

Each spring, prune dead vegetation, prune plants that get too large, weed the garden, and touch up the mulch. Then weed and care for the garden as you would any other garden.

If sediments or sand from a driveway or road begins to cover the plants where the water enters the garden, clean sediment from the garden using a garden rake or broom.

Watch the plants, and don't be afraid to transplant them within the garden if they need more or less water.

