Fact Sheet
Rain Gardens

February 2017

When stormwater runs across hard surfaces, it picks up whatever is in its way, such as oil, salt, fertilizer, pesticides, pet waste, sediment, litter, and eventually carries it into a storm drain. Unlike sewer pipes, which carry household wastewater to a treatment center, stormwater pipes empty directly into streams, rivers, and lakes. Too much stormwater from developed areas can erode stream banks, pollute drinking water sources, and harm aquatic life. Studies have shown that up to 70 percent of the pollution in our streams, rivers and lakes is carried there by stormwater.

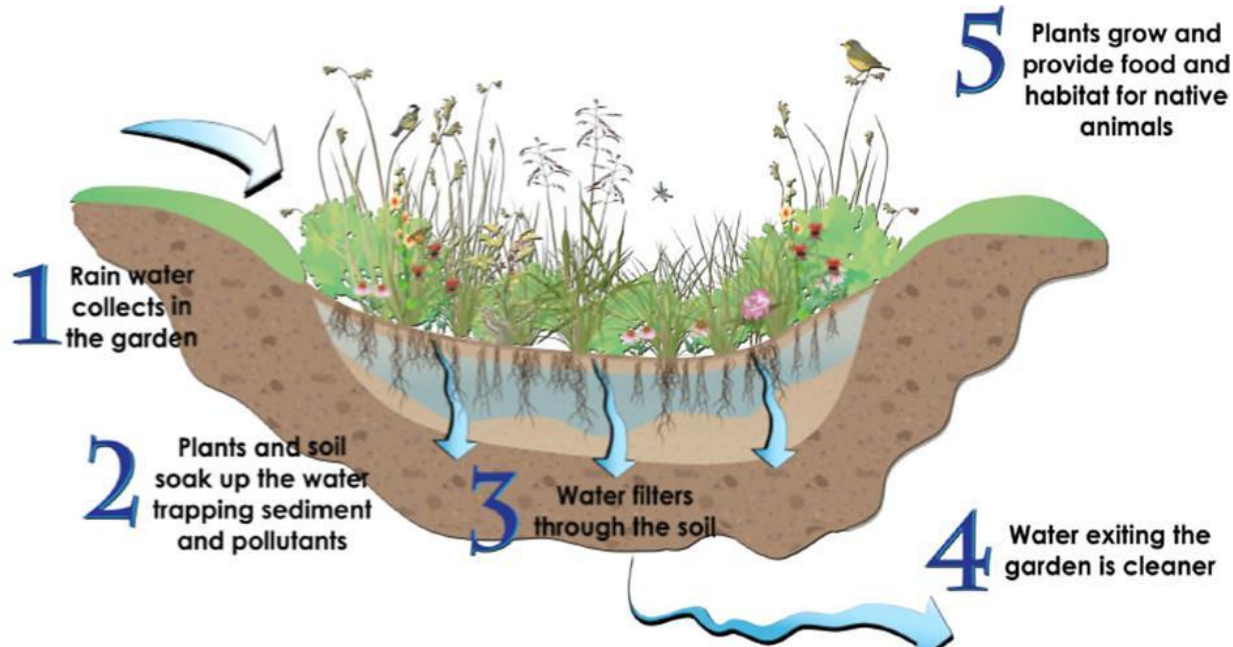
A Rain Garden is a garden with shallow depression designed to capture runoff from impervious surfaces such as rooftops, sidewalks, or parking lots. They use natural processes to improve water quality by soaking up stormwater and filtering pollutants.

These gardens contain native plants that are adapted to the local climate and generally do not require fertilizer or special care. Native plants have deep root systems that allow stormwater to infiltrate into the soil and recharge the groundwater supply. Native plants also attract native animals and provide critical habitat for critical pollinators, like bees and butterflies.

In urban areas, the recharge of the ground water by rain gardens and the addition of vegetation helps to reduce the Urban Heat Island Effect.

Rain gardens also help prevent flooding and drainage problems on the property and surrounding area by reducing stormwater flow velocity and giving water a chance to soak in rather than go into a creek.

An effective rain garden depends on water infiltrating into the soil of the garden. Water should stand in a rain garden no longer than 24 hours after the rain stops. Mosquitos cannot complete their breeding cycle in this length of time, so the rain garden should not increase mosquito populations at all.



How water flows through a Rain Garden. Diagram designed using symbols courtesy of the Integration and Application Network, University of Maryland Center for Environmental Science (ian.umces.edu/symbols/).