



RAIN GARDENS 101: A QUICK GUIDE

What is a Rain Garden?

A rain garden is a shallow, landscaped depression planted with native vegetation. It captures and filters rainwater runoff from roofs, driveways, and patios before it reaches storm drains.

- **Dry Most of the Time:** It typically drains within 12–48 hours, preventing mosquito breeding.
- **High Performance:** Removes up to 90% of nutrients/chemicals and 80% of sediments.
- **Superior Infiltration:** Absorbs 30% more water than a standard lawn.

Why Runoff Matters

Rainwater picks up oil, fertilizer, bacteria, and debris as it flows over hard surfaces. The US EPA estimates that this runoff accounts for 70% of all water pollution. Rain gardens solve this by filtering water through soil and plant roots, recharging local groundwater.

Planning and Design

A successful rain garden uses modified soil (tillage, compost, and sand) to speed up water absorption.

Site Selection Criteria

- **Distance:** Minimum 10 feet from building foundations/basements.
- **Safety:** Avoid utilities (call your local digger's hotline) and septic systems.
- **Sizing:** The garden area should be roughly 20% of the drainage area (e.g., a 2,000 sq. ft. roof needs a 400 sq. ft. garden).
- **Placement:** Positioned perpendicular to the slope to catch maximum runoff.

Plant Selection

Try to use native species, but it is not essential for it to function properly.

- **Best Options:** Native perennials, shrubs, and wildflowers.
- **Avoid:** Trees (they absorb too much water for the garden balance) and invasive species like purple loosestrife.

Benefits to Your Community

- **Pollution Control:** Filters toxins before they hit streams and ponds.



- Flood Prevention: Reduces the volume of water entering storm systems.
- Wildlife Habitat: Attracts beneficial birds, butterflies, and pollinators.

Installation and Cost

Costs vary based on soil type and whether you hire a professional or do it yourself.

- DIY Cost: \$3 – \$5 per sq. ft. (Plants and soil amendments).
- Professional Cost: \$10 – \$15 per sq. ft.

The Infiltration Test (Pre-Digging)

1. Dig a hole 6–12" deep and fill with water to pre-wet the soil.
2. Refill the hole and mark the water level.
3. The Goal: If the water drops 0.5" or more per hour, the site is ideal. If it drops less than 0.25", you must amend the soil with sand and compost or find a new location.



Maintenance

- Years 1-2: Regular weeding and occasional watering while roots establish.
- Long Term: Native plants will eventually out-compete weeds. No pesticides or fertilizers are required.

Get Started!

MOST HOMEOWNERS CAN INSTALL A RAIN GARDEN IN A SINGLE AFTERNOON. IT IS A COST-EFFECTIVE WAY TO IMPROVE YOUR PROPERTY'S AESTHETICS WHILE PROTECTING YOUR LOCAL WATERSHED.