

# Stormwater Pollution Prevention What You Can Do!

Angel Hinickle

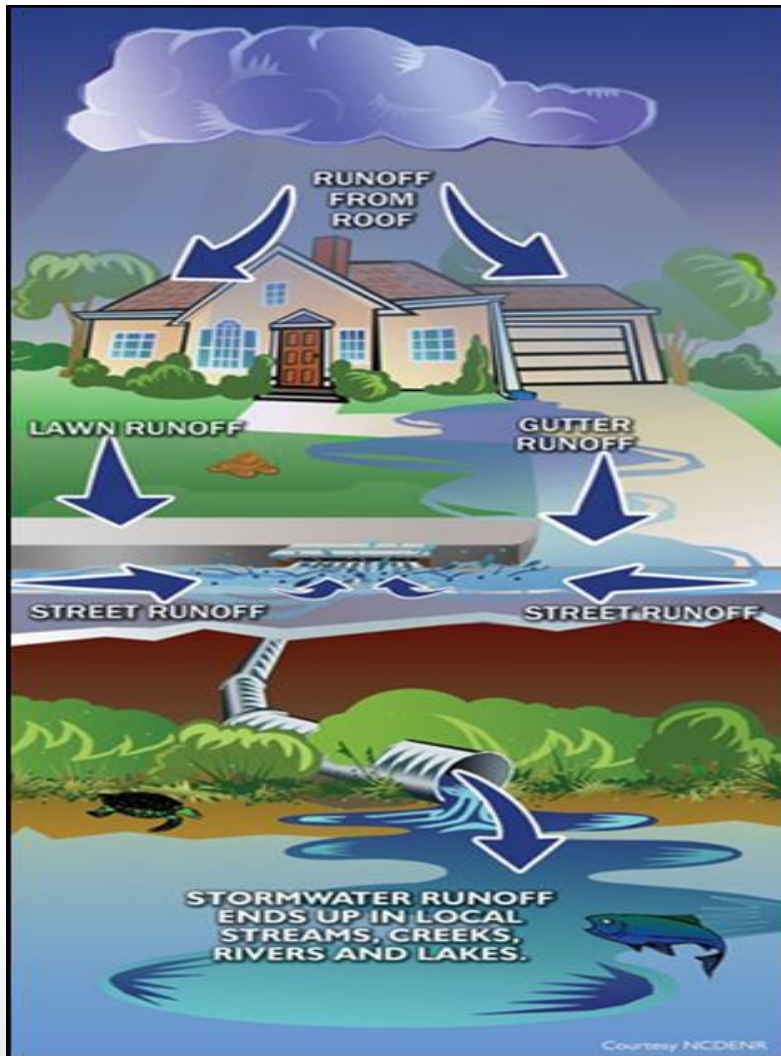
Resource Conservation Specialist

Tompkins County Soil and Water Conservation District

Stormwater Coalition of Tompkins County



# What is Stormwater?



Stormwater is rainwater or melting snow that doesn't soak into the ground but runs off the landscape into waterways.



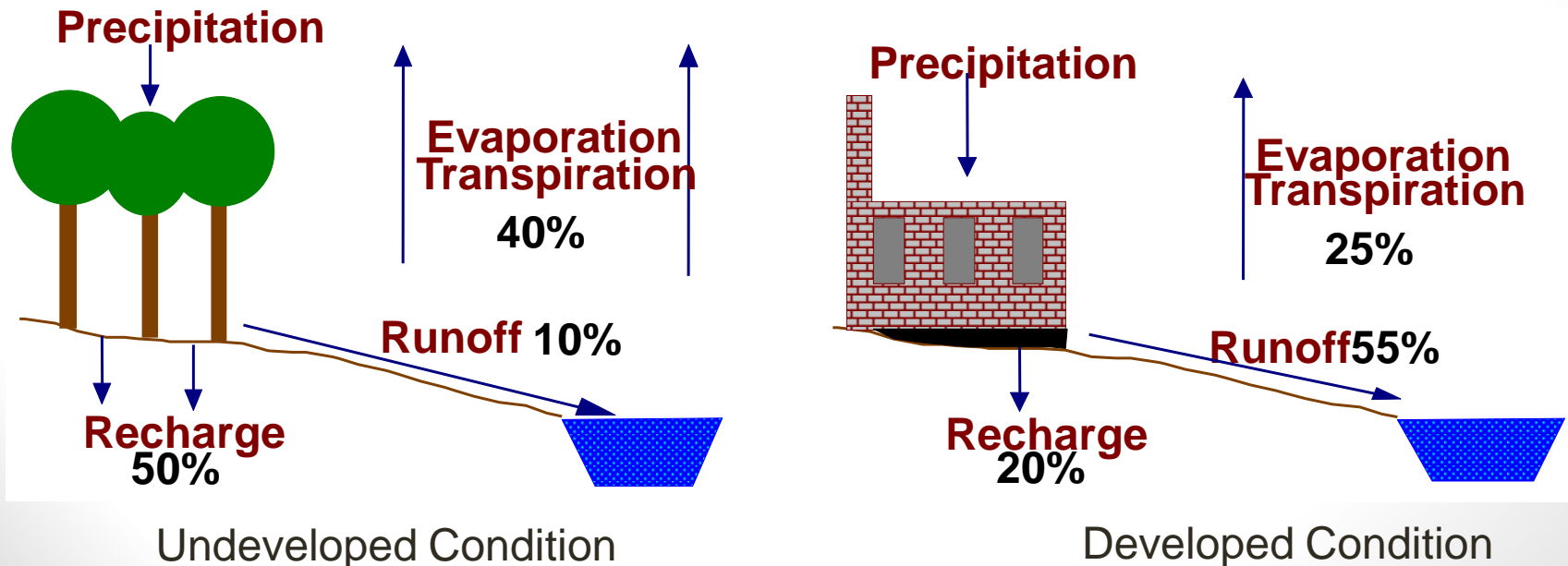
# Stormwater Runoff

- Stormwater flows from bare soil, paved areas, rooftops, and lawns
- Bringing with it:
  - Sediment
  - Pesticides
  - Fertilizer (nitrogen and phosphorus)
  - Oil/Grease
  - Human/Wildlife Waste



# What is Stormwater Runoff?

- Stormwater runoff is a natural part of the hydrologic cycle...but as land use changes, runoff can increase by 45%, resulting in erosion, pollutant transport, sedimentation, loss of aquatic habitat, and other damages.





# Why is Stormwater a Concern?



Polluted runoff is one of the nation's greatest threats to clean water.

- Major source of sediment to local waters
- Polluted water reaching local waterbodies resulting in:
  - Beach Closures
  - Degraded water quality
  - Degraded streams
  - Shellfish Closures
  - Fish Kills
  - Habitat Loss

# What Can I Do?

- Use pesticides and fertilizers sparingly or not at all.
- Infiltrate rain water or store for later use!
  - Disconnect Down Spout
  - Rain Barrel
  - Rain Garden
  - Pervious Paving
  - Green Roof

# Fertilizer and Pesticides

- Consider not using fertilizer's or pesticides
- Always follow manufacturer's directions.
- Never apply before forecasted rain!
- Slow release fertilizer (at least 30% slow release)
- Use native vegetation that requires less/no fertilizer or pesticides.



# Fertilizers and Pesticides

- Use compost.
- Spread grass clipping on the lawn.
- Maintain a buffer strip of unmowed natural vegetation bordering all waterbodies.





# Downspouts



# Rain Barrel



- Aboveground water storage
- Also called cisterns
- Vary in size (20-150 gallons)
- Capture rain runoff from roof using the gutter and downspout system
- Water can be used to water garden, plants, wash the car, discharged to rain garden





Photo courtesy of Dr. Allison Roy, USEPA





Photo courtesy of Dr. Allison Roy, USEPA



# Rain Gardens

- A shallow depression in the yard that's planted with native wetland or wet prairie wildflowers and grasses.
- Benefits
  - Promotes infiltration of rain water
  - Reduces flooding
  - Reduces amount of stormwater pollution entering waterways
  - Adds beauty to lawn
  - Provides habitat and food





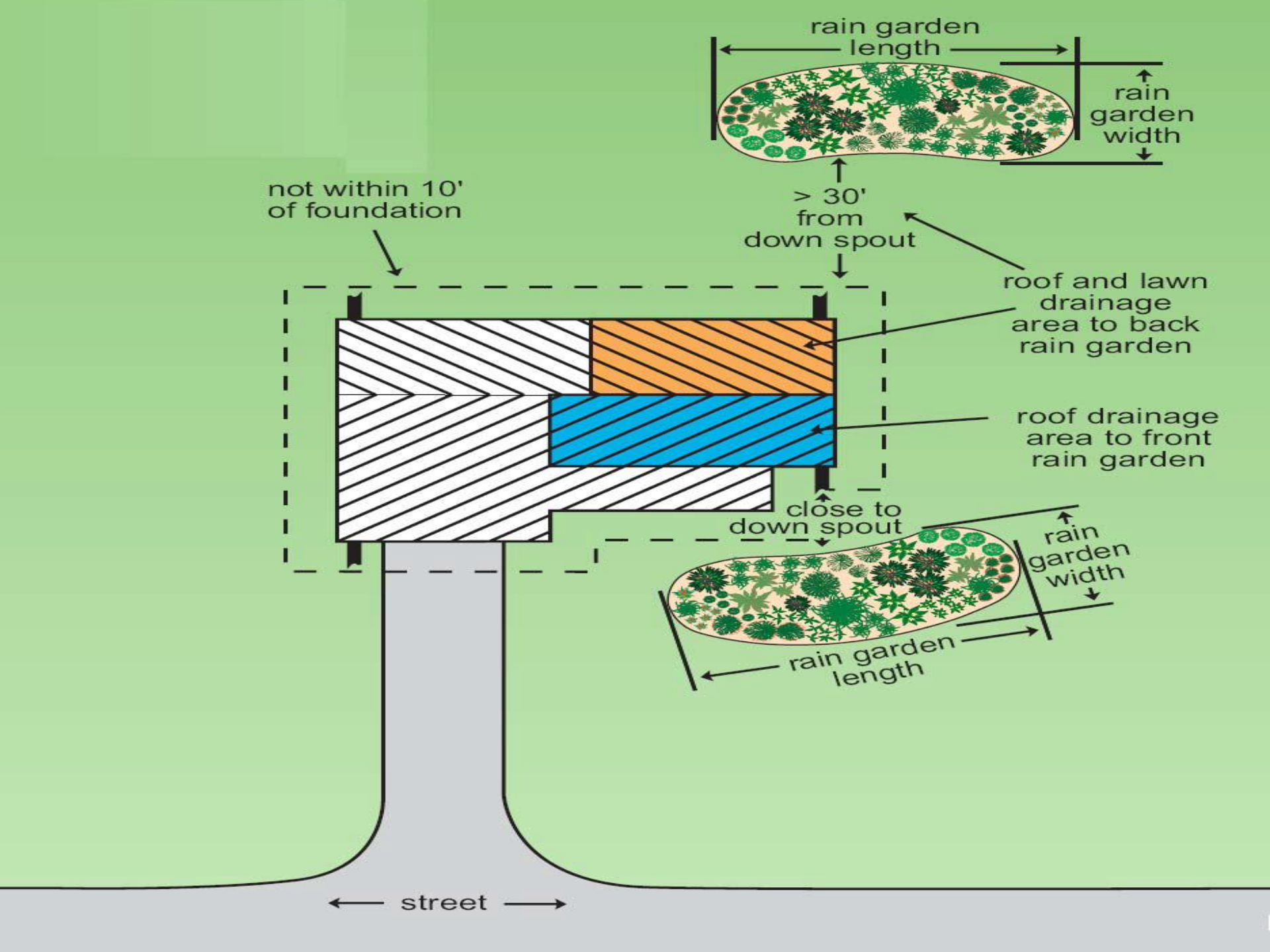
*Photo courtesy of USDA NRCS*





*Photo courtesy of USDA NRCS*







# Pervious Paving



- Pavement that is designed to allow percolation or infiltration of stormwater through the surface into the soil below where the water is filtered and pollutants removed.
- Benefits
  - Promotes infiltration of water
  - Reduces stormwater runoff
  - Reduces stormwater pollution

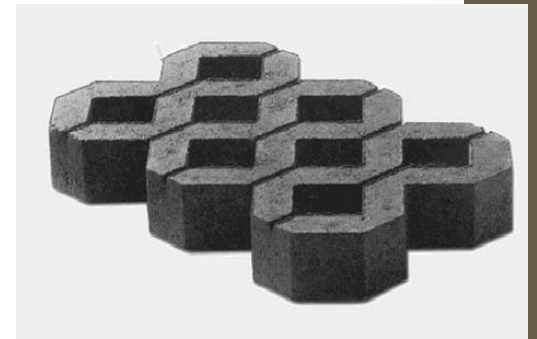
# Types



**Porous pavement**



**Porous pavers**



**Turf Stones**

# Questions?

Please contact me at:

[angeldybas@tcswcd.org](mailto:angeldybas@tcswcd.org)

or

(607) 257-2340