



## Vegetated Roof Experiment

When it rains, a roof is one of the first places rainwater lands. Storm water runoff from roof downspouts can pick up pollutants that are on the ground and carry those pollutants to nearby streams. A vegetated roof, also known as a “green roof”, acts like a giant sponge. The plants on a vegetated roof help absorb rainfall, reducing the rate of runoff, while also reducing energy usage by providing insulation for buildings.



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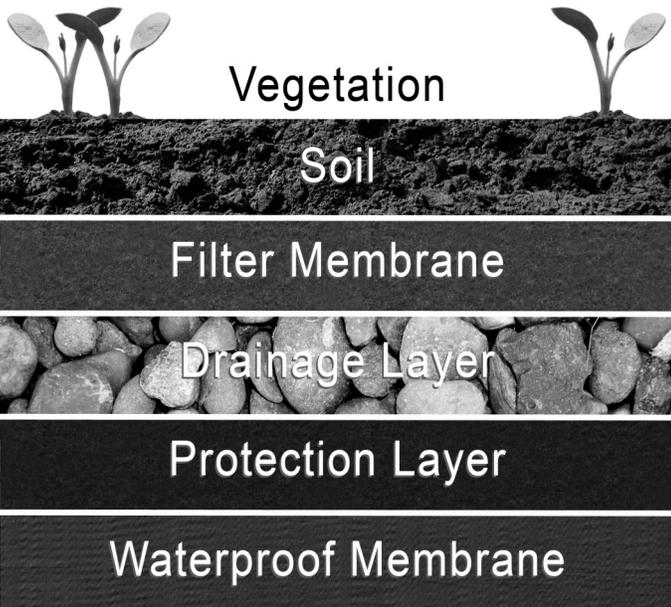


### You will need:

- 2 small bowls
- 2 large plates
- 1 small sponge
- 1 measuring cup

### Instructions:

1. Place each small bowl upside down on top of each plate (plate diameter should be at least 2x the diameter of the bowl).
2. Place a sponge on top of one of the flipped over bowls. The bowl with a sponge on top represents a vegetated roof and the bowl without a sponge represents a conventional roof.
3. Slowly pour 1 cup of water over the bowl with a sponge (*vegetated roof demo*), then slowly pour 1 cup of water over the bowl without a sponge (*conventional roof demo*).
4. Pour runoff collected on each plate back into the measuring cup, one at a time, and record runoff results from both individually.



*Layers of a Vegetated Roof*

**Which roof system reduces storm water runoff? Which roof system is better for the environment?**

