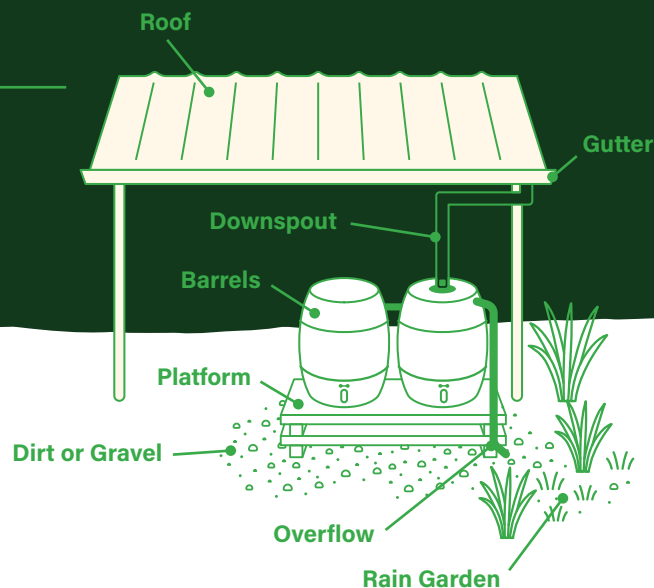


CASE STUDY

Building a Rainwater Overflow System

Rainwater is an important component of any community garden. Rainwater harvesting is a great technique to capture water that falls from the sky. But when rain barrels fill up, where does all the extra water go?

At Riverside Valley Community Garden in Harlem, NYC a rainwater harvesting system was installed to give the garden efficient and free access to rainwater, while also providing a shaded seating area for garden members underneath a roofed structure.



A 10x10' shade structure serves as a collection surface for rainwater in the garden. This roof will fill up both barrels during a typical rain storm.



A gutter, downspout, and diverter move water from the roof into the two rain barrels.



Collected rainwater can be used to fill up watering cans for garden plants, or for washing hands, tools, etc.

- Rainwater systems typically capture:
0.5 gallons of water
x **foot² of collection surface**
x **1" of rain**
- An inch of rain will fill up the two 50-gallon barrels of this rainwater system (above).
- Any excess water will be absorbed by the overflow rain garden (right).



To help prevent any possible flooding from the downspout on this system, a small rain garden was installed next to the overflow from the rain barrels. This small 4x5' area—excavated and filled with gravel, landscape fabric, plants, and stepping stones—will provide an overflow area for any excess water entering the system.