

PRACTICES

GREEN INFRASTRUCTURE PRACTICE: CISTERNS

Cisterns store rooftop runoff in a storage tank placed either above or below ground. Cisterns are used for larger rooftops and can capture and store between 100 and 10,000 gallons of runoff. (Rain Barrels are used for smaller roofs and can only hold about 55 gallons.) The stored water can then be used in non-potable manners such as landscape irrigation, rinsing gardening tools and washing the car. Cisterns can also be rerouted for indoor uses such as toilet water.

HOW IT WORKS:

Cisterns capture runoff from rooftop downspouts and gutters. Cisterns can store water which reduces runoff to streams and storm sewers, particularly for small storms. A filter is used to remove any debris and pollutants from the runoff that goes through the gutter before entering the cistern. A gutter guard can also be used to reduce any leaves, dust and debris that may enter the cistern.

CONSIDERATIONS:

Consideration should be taken to ensure a stable and appropriate path of water in for overflows since cisterns are not typically designed for large storm events. Underground cisterns may need special permits and the location for overflows may also need approvals. Check with your local municipality.





photos courtesy of Rutgers Cooperative Extension

Cistern Irrigation from cistern