

## **Rain Barrels**





A rain barrel is a basin that attaches to the gutter on your home to catch rainwater that falls onto your roof. You can use the water to wash your car, top off your swimming pool and, most commonly, to water your garden or lawn. Harvesting rainwater prevents stormwater runoff from picking up pollutants as it flows into the streets and storm drains which then flow untreated to our local streams. Harvesting rain water also allows stormwater to

soak into the ground decreasing scouring flows of stormwater to streams in urban areas after rainfall.

#### How Much Rain Can a Rain Barrel Drain?

To calculate the runoff from 1 in. (0.08 ft) of rain on a 10ft x 20ft roof catchment area use the following formula:

### 0.08 ft x 10 ft x 20 ft x 7.4805 = 125 gallons

(FEET OF RAIN) X (ROOF WIDTH) X (ROOF LENGTH) X GALLONS RAIN/CUBIC FOOT) = GALLONS OF RUNOFF

Depending upon the size of the roof an overflow system or multiple barrels may be desired.

#### **Tulsa's Average Monthly Rainfall**



**Rain Barrel Tips** 

Keep the top firmly in place. Exposing rainwater to sunlight and open air will encourage algae growth. Elevate the rain barrel to have better water pressure if you will be attaching a hose.

Make sure the screen is secure to keep out water-loving bugs, like mosquitoes, and inspect your rain barrel occasionally for leaks.

Drain your rain barrel prior to colder temperatures to avoid freezing and cracking. Periodic draining will also prevent any particulate build-up from roof debris and algae.





#### The City of Tulsa and Low Impact Development

Low Impact Development (LID) is a design concept that provides for the treatment of stormwater closer to its source. The LID concept limits the amount of runoff to impervious surfaces such as roofs, parking lots, and streets where it picks up pollutants. This water then flows, untreated, through the storm sewer into our local streams. The City of Tulsa suggests rain barrels along with other LID practices such as rain gardens, green roofs and permeable pavement as a means to improve stormwater quality in our community.



This graph illustrates the relationship between impervious surfaces and stream health. As impervious surface area (roadways, rooftops, parking lots) increases, stream health decreases.

Harvesting rain water runoff from your home is a win-win situation. You save money on your utility bill while helping your community achieve the common goal of clean water in our rivers, lakes and streams.

#### Already have a LID feature?



The City of Tulsa would like to thank and recognize those who implement LID. To find out how to submit an LID feature for recognition or to view a list of Tulsans who have alread adopted LID, please visit: www.cityoftulsa.org/PACE

# For more information about rain barrels and other LID practices, please visit:



www.cityoftulsa.org/sos

http://lid.okstate.edu

http://water.epa.gov/polwaste/green