



### Welcome to WaterSmart: Drop by Drop!

This interactive education series is brought to you by the City of Prescott. An informed community can make better short-term and long-term decisions concerning our water supply. Let's discuss water one drop at a time!

#### WaterSmart Factsheet Summary:

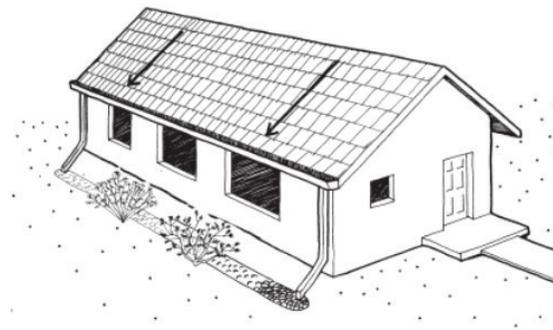
- There are two types of rainwater harvesting, passive and active
- Reduces reliance on potable supplies for outdoor irrigation
- Even with desert weather patterns, a lot of rainwater can be captured

Rainwater harvesting can be traced back over 12,000 years ago to the Neolithic age. Throughout history it has been utilized as a resource for drinking water, agriculture, aquifer recharge, and to support outdoor landscaping.

Now, rainwater harvesting is employed, in this area, to help reduce the use of potable supplies for outdoor irrigation use. Two types of rainwater harvesting techniques will be described, passive and active.

#### Passive Rainwater Harvesting

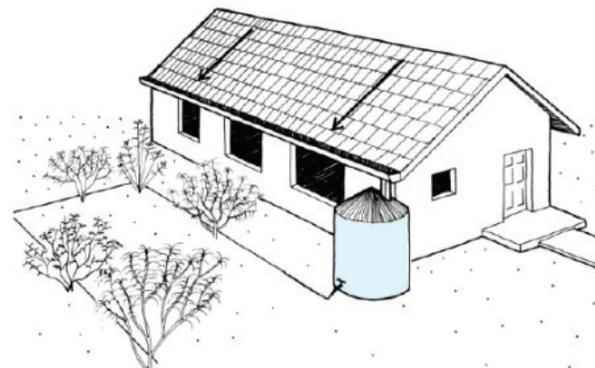
A simple rainwater harvesting method is to divert precipitation from gutters directly into landscaping. This method is low maintenance, can be beneficial for people on a budget, or where site restrictions exist. Design your site by observing the drainage patterns, grade the low planting areas, and install flexible drainpipe or rock-lined trenches. Digging large detention basins or swales and planting a rain garden will allow the water to slowly infiltrate into the ground rather than run off the site into the street or storm drain.



Source: : Arizona Cooperative Extension, AZ1344, by P. Waterfall

#### Active Rainwater Harvesting

This technique includes several components, a catchment system (roof), conveyance system from roof to storage tank (gutters and downspouts), a storage container (rain barrel, cistern or other container), and in some cases a distribution system (irrigation lines) from the tank to the place of use (garden, etc). Don't forget leaf screens and first-flush devices are important. This supply can be ideal for watering vegetable gardens, raised planter beds, and containers of indoor plants.



Source: : Arizona Cooperative Extension, AZ1344, by P. Waterfall



Join us at  
noon on the  
3rd Wednesday  
every month  
at the Prescott  
Public Library.

Follow us at:



City Government of Prescott, Arizona



**Did you know?**

The City of Prescott offers a rebate for rainwater harvesting, check out the rules and requirements at [www.prescottwater.gov](http://www.prescottwater.gov)

**See examples of rainwater harvesting:**

Highlands Center for Natural History  
[www.highlandscenter.org](http://www.highlandscenter.org)  
 Prescott Public Library  
[www.prescottlibrary.info](http://www.prescottlibrary.info)

**To install or not to install?**

Many people are excited to begin rainwater harvesting, but don't assess how they will use the collected water, or maintain an active barrel. Four basic steps to determine if you would like to incorporate rainwater harvesting at your home or business.



1. **SEE IT** – The Highland Center for Natural History has many systems (passive and active) to view.
2. **STUDY IT** – There are many great resources for rainwater harvesting, consider these three.
  - a. Rainwater Harvesting for Drylands and Beyond, by Brad Lancaster
  - b. Harvesting Rainwater for Landscape Use, by P. Waterfall
  - c. University of Arizona Cooperative Extension publication nos. AZI564 and I565
3. **DESIGN IT** – At your property, review how you can use the rainwater from your downspouts, such as adding contouring to direct water to existing trees and plants. If you are interested in an active system, determine how you would use the water captured in a rain barrel. Plant native species to incorporate low-water use plants to limit outdoor water need.
4. **INSTALL IT** – Do-it-yourself or hire a licensed contractor. There are many local landscaping businesses and nurseries to assist with landscape design and rainwater harvesting.



**Check it out at the Library!**

Behind the library, a 1,000 gallon cistern has been installed. It is gravity fed to newly installed garden beds in the courtyard. Library staff now uses the water and garden system to teach 8 to 12 year old children the importance of water, and gardening skills. Ask a librarian today for more information!

**Advantages of Harvesting Rainwater:**

- Protects the watershed by slowing runoff down and reducing impurities into local streams and reservoirs
- Reduces reliance on potable supplies for outdoor irrigation.
- Rainwater is naturally soft which helps maintain healthy plants and soils.

**Be WaterSmart!**

**Is harvesting rainwater legal?**

In Arizona, it is legal to capture water that falls on your property. Be aware that Arizona Revised Statutes § 45-141 states water of all sources flowing in streams, canyons, ravines, or other natural channels cannot be captured unless you have legal appropriation rights.

