



Rainwater Collection Terms and Definitions

Rainwater Harvesting: The gathering, or accumulating and storing, of rainwater. Traditionally, rainwater harvesting has been practiced in arid and semi-arid areas, and has provided drinking water, domestic water, water for livestock, water for small irrigation and a way to replenish groundwater levels.

Surface Water	Lakes and creeks.
Ground Water	Well water pumped from the ground.
Municipal Water	Ground water treated for consumption.
Effluent Water	Treated sewer water.
Gray Water	(Sewage) Reused directly from tubs, showers and everything but the kitchen sink.
Black Water	(Sewage) Water from toilets, and the kitchen sink.
Rainwater	Known variously as “precipitation,” “deluge,” or just plain rain.

Reasons for Collecting Rainwater

- Environmental ethics
- Self sufficiency
- Better water quality
- Cheaper than drilling and maintaining a well
- Preferred irrigation for gardening
- No other water available

Domestic Rainwater Uses

Non-Potable

- Washing machines
- Toilets
- Tubs and showers
- Landscape irrigation and water features

Potable

- Plumb to all fixtures.



How to Create a Landscape Water Budget

Example budget for a small to medium landscape.

1. Figure emitter per Plant

1 gal. plant = 1, 1 gallon per hour emitter

5 gal. plant = 2, 1 gallon per hour emitters

15 gal. plant = 3, 1 gallon per hour emitters

2. Number of Plants x Annual Irrigation Rate

50, 1 gal. Plants = 1, 1 gallon per hour emitter = 50 gal./hr.

30, 5 gal. Plants = 2, 1 gallon per hour emitters = 150 gal./hr.

12,15 gal. Plant = 3, 1 gallon per hour emitters = 180 gal./hr.

Total gal. per hr. for this landscape = 380 gal.

New Planting – Two-Year Establishment Period

Summer (April through Oct.)

1 time per week @ 2 hrs.

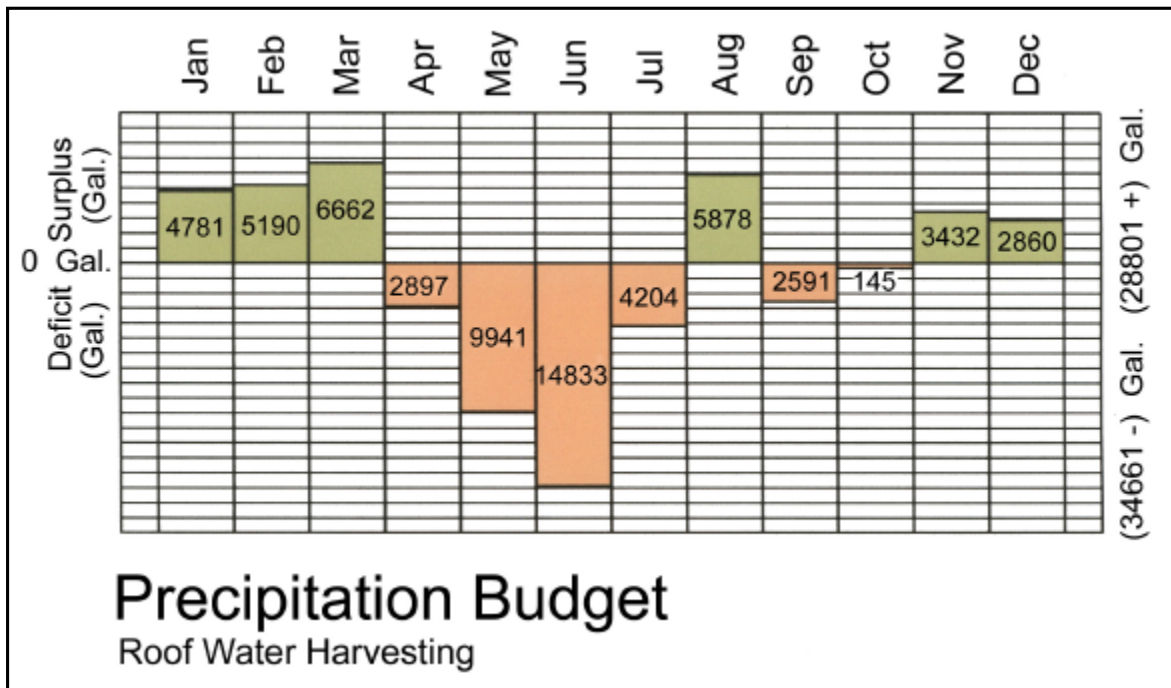
760 gallons x 24 weeks = 18,240 gallons

Winter (Nov. through March)

1 time per month @ 2 hrs.

760 x 6 months = 4,560 gallons

Annual Usage = 22,800 gallons





RESOURCES

Organizations

American Rainwater Catchment Systems Association (ARCSA)

919 Congress Ave., Ste. 460, Austin, TX 78701 (512) 477-5445 info@arcsa.org www.arcsa.org

International Rainwater Catchment Systems Association (IRCSA)

Dept. of Natural Resources, Chinese Cultural University, Taipei, Taiwan. www.ircsa.org

United Kingdom Rainwater Harvesting Association.

www.rainharvesting.co.uk

University of Arizona Cooperative Extension, Yavapai County

840 Rodeo Drive, Bldg C, Prescott, AZ 86305 (928) 445-6590 jschalau@ag.arizona.edu
<http://ag.arizona.edu/yavapai/fcs/>

Arizona Water Institute

P.O. Box 210158B, Tucson AZ 85721-0158 520-626-5627 thaymore@azwaterinstitute.org
www.azwaterinstitute.org

Water Resources Research Center

University of Arizona
350 N. Campbell Ave., Tucson, AZ 85721 520-792-9591 ext. 55 jcripps@cals.arizona.edu
<http://ag.arizona.edu/AZWATER/>

Northern Arizona University Center for Sustainable Environments

PO Box 5765, Flagstaff, AZ 86011-5765 928-523-0637 Heather.Farley@nau.edu
http://home.nau.edu/environment/sustainable_building.asp

Texas Water Resources Institute

Texas A&M University Extension <http://twri.tamu.edu/>

Publications

“Forgotten Rain: Rediscovering Rainwater Harvesting,” by Heather Kinkade-Levario. Granite Canyon Publications, 2004. www.forgottenrain.com

“Rainwater Harvesting for Drylands,” by Brad Lancaster. 2006, Rainsource Press. ISBN 097724640X

“Rainwater Harvesting for Landscape Use,” by Patricia H. Waterfall, University of Arizona Cooperative Extension. Second edition, 2006.

“Living Water: Viktor Schauberger and the Secrets of Natural Energy,” by Olof Alexandersson.

“Water Harvesting from Low-Standard Rural Roads,” by Bill Zeedyk. The Quivira Coalition, www.quiviracoalition.org, 505-820-2544.

“Water Storage: Tanks, Cisterns, Aquifers and Ponds,” by Art Ludwig.

“Water for Every Farm: Yeomans Keyline Plan,” by P.A. Yeomans.

“The Texas Manual on Rainwater Harvesting,” by the Texas Water Development Board. Third edition.