

## Growing Edible Arizona Forests, An Illustrated Guide

Excerpt from leafnetworkaz.org **Edible Tree Guide CHOOSE Planting Site and Design** 

Harvest Graywater

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Water from showers, bathtubs, bathroom sinks and washing machines is called graywater (sometimes spelled gray water or greywater) and is produced daily in occupied households and other buildings. Instead of discharging graywater to sewers, this water can be piped outside to serve as a steady, on-site water supply to help support edible trees. In Arizona, you may reuse graywater by following state and local codes and guidelines on how to collect it, transport it and apply it to soil.

Do not apply graywater on the leaves or fruits of trees. Use soaps and cleaners specifically designed for graywater reuse. Since graywater typically originates as well water or utility water, it may have higher salt and mineral levels than rainwater and may get saltier as it is reused. Passive rainwater harvesting depressions are ideal locations to use graywater, since the higher salts in the graywater will periodically be diluted by low-salt harvested rainwater.

The volume of graywater produced at a given site depends on the water use efficiency of water fixtures, and how often showers, baths, bathroom sinks and washing machines are used. Water discharged from these water fixtures can be reused by piping it to a graywater distribution system that transports it outdoors via gravity flow. As people shift to low water-use appliances and plumbing fixtures to save potable water, the volume of available graywater will decrease. Graywater generated at sites where people are present year round is likely to be constant month-to-month, but could vary if sites are occupied only seasonally.

Many resources are available to guide you on how much graywater is available and how to put it to use in accordance with state and local regulations.



A washing machine discharges graywater to a different pipe with each wash. Each pipe drains to a different edible tree. The soaps used are made for graywater systems.

## ADDITIONAL RESOURCES

## Graywater design and water quality

- Graywater Action for a Sustainable Water Culture: http://greywateraction.org/
- Oasis Design: <a href="http://oasisdesign.net/greywater/">http://oasisdesign.net/greywater/</a>
- Arizona Department of Environmental Quality brochure on graywater: http://legacy.azdeg.gov/environ/water/permits/ download/graybro.pdf
- Greywater for Fruit, Nuts and Vegetables The Greywater Guide: www.thegreywaterguide.com/fruit-nuts-andvegetables.html
- Brad Lancaster, Rainwater Harvesting for Drylands and Beyond: www.harvestingrainwater.com/greywaterharvesting/
- Graywater Sources, Qualities and Quantities: www.harvestingrainwater.com/wp-content/ uploads/2009/07/Ludwig-Greywater-Sources-Qualities-and-Quantities-Page-10.pdf