

COLLECTING GRAY WATER (Continued)

Ideally, the storage tank should be located above the planting areas so that water can be distributed by gravity. If it isn't, you'll need to install a sump pump. To screen out hair and large particles in the gray water, make a shallow basket from 1/4" hardware cloth and hang it inside the tank, just below the rim. Provide handles so that you can lift it out for frequent cleaning.

DISTRIBUTING GRAY WATER

The safest way to apply gray water is below the soil surface or under several inches of mulch. Below-surface applications eliminate human contact and the soil filters out any harmful organisms.



Products like these aqua cones can be used as a substitute to drip irrigation to provide gray water directly to the roots of your plants. They are plastic spikes with an empty soda bottle as a reservoir.

PREVENTING WATER CONTAMINATION

Any piping that is used to convey gray water to plants for irrigation must not be cross connected with any piping used to supply potable water to your residence.

Any pressure piping used in a gray water system that may be susceptible to cross connection with a potable water system must be clearly and permanently marked to indicate that the piping contains non-potable, reclaimed water.

Prevent Bacterial Growth and Contamination — Don't Store Gray Water For More Than 24 Hours.

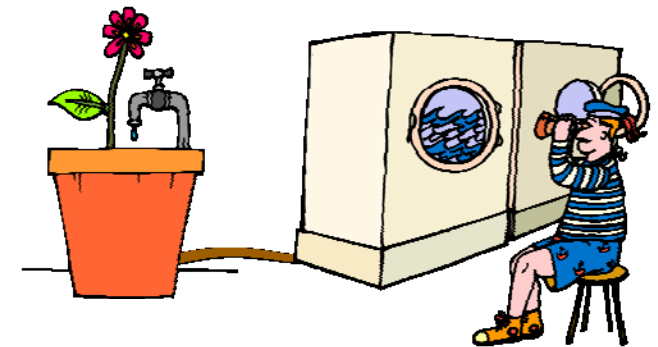
**CAUTION
Reclaimed Water
Do Not Drink!**

**For Additional Information,
Please Contact:**

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Using Gray Water Safely



WHAT IS GRAY WATER?

Water reclaimed from shower, bathtub, bathroom sink and washing machine drains is gray water suitable for watering plants. However, the gray water from dishwashers and kitchen sinks that may be contaminated with grease and food particles must not be used. Toilet waste water, called black water, must never be used!

LEGAL USE OF GRAY WATER

On January 16th, 2001, the Arizona Department of Environmental Quality finalized new regulations for reclaimed water, which includes gray water.

Anyone interested in using gray water for irrigation at a residence may now legally recycle their water without a permit, if certain conditions are met.

To meet the requirements of the new regulation, you must generate less than 400 gallons of gray water per day and meet a simple set of performance standards.

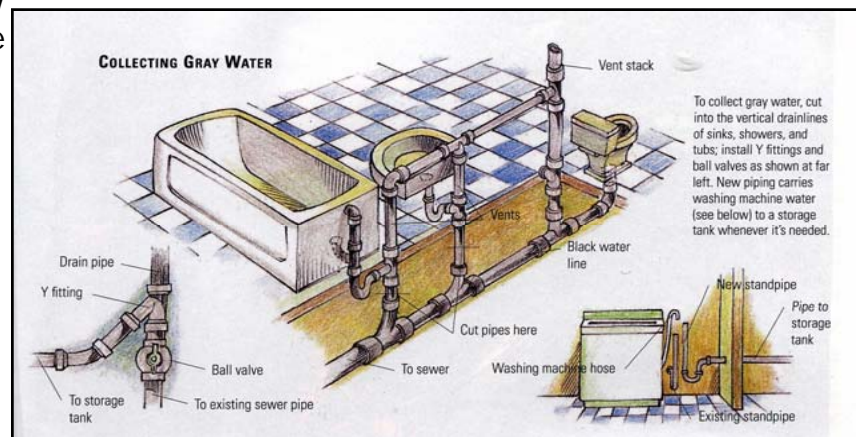
HOW TO USE GRAY WATER SAFELY

The health risks from gray water are minimal if you gather and apply it properly.

Never drink gray water or allow it to come in contact with food.

- Gray water must not be sprayed, allowed to puddle or run off property.
- Do not use gray water that has come into contact with soiled diapers, meat or poultry, or anyone with an infectious disease.
- Don't use gray water after washing strong or hazardous chemicals down the drain. (For example: drain cleaners, photo lab waste, or solutions containing boron, chlorine or sodium.)
- The gray water system must be located outside of a floodway.
- Do not use gray water to irrigate food plants, except for citrus and nut trees.
- Apply gray water with drip irrigation only—spray irrigation is not permitted due to the potential for inhalation or drifting off-site.

NOTE: Apply gray water only if the water table is at least five feet below the point of application.



WHAT TYPE OF SOAP IS BEST TO USE?

Of the standard laundry detergents, liquids contain less sodium than powders, and those labeled biodegradable are usually the least harmful. Most plants will not be affected by mild soaps or shampoos. Don't use softened water.

COLLECTING GRAY WATER

The simplest system consists of a submersible pump placed in a full bathtub and hooked to a hose that goes out the bathroom window to a collection barrel, or even directly to a planting area. You can also direct the gray water from your washing machine's drain hose to a collection barrel.

More sophisticated systems typically involve cutting into the drainpipes of some plumbing fixtures and diverting the gray water through new pipes to a storage tank, where it's filtered and stored for up to a day. To collect water from main plumbing lines, the pipes must be accessible from a crawlspace or basement (Refer to the illustration at the left).

Cover the gray water storage tank to prevent breeding of mosquitoes and other pests.