

# Water Watch

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Atascadero Mutual Water Company

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## Freezing Temperatures can Freeze your Pipes!

When the temperature is freezing outside, there is a chance your pipes could freeze unless you have taken some precautions to prevent it. Following are some suggestions that could help prevent your pipes from freezing and possibly bursting:

- Wrap all exterior pipes with insulation
- Turn off any exterior water that you will not be using this winter
- Drain any exterior lines you will not need to use, such as irrigation lines

Never leave home if your pipes are frozen, as a leak could have developed in your pipes and may not be detectable until after the pipes thaw.

If you are planning to leave town when temperatures could dip into the freezing range, you may want to shut the water service at your house off. This could prevent flooding in your home, not to mention a large water bill, if a pipe freezes and breaks while you're away. **If your house is equipped with fire sprinklers, consult with a fire protection consultant before turning the water off!**

Feel free to call AMWC at 466-2428 if you have questions regarding freezing pipes.



## FREE WORKSHOP

### Living With A Gray Water System In Your Home



WEDNESDAY, DECEMBER 3RD, 6-9PM  
ATASCADERO LAKE PAVILION

Art Ludwig of Oasis Design will cover designing, permitting, installing, maintaining and living with a gray water system in your home.

*Art Ludwig is an ecological systems designer with 27 years full-time experience in water, wastewater systems, energy, shelter and human powered transport. His specialty is complex, integrated "systems of systems." Art has studied and worked in 22 different countries, consulted for the states of New York and New Mexico on water reuse policy, and given dozens of lectures and workshops.*

For More Information Contact [JESSICAS@SEMESCO.COM](mailto:JESSICAS@SEMESCO.COM) OR 805-466-6737 X203

*Brought to you by: The Appropriate Technology Coalition of San Luis Obispo County (combined local efforts of SLO Green Build, Surfrider, and Sierra Club), Atascadero Mutual water Company, and the City of Atascadero*



### What is gray water?

Any water that has been used in the home, except water from toilets, is called gray water. Dish, shower, sink, and laundry water comprise 50-80% of residential "waste" water. This may be reused for other purposes, especially landscape irrigation.



### Why use gray water?

It's a waste to irrigate with great quantities of drinking water when plants thrive on used water containing small bits of compost. The benefits of gray water recycling include:

- Lower fresh water use
- Less strain on failing septic tank or treatment plant
- Gray water treatment in topsoil is highly effective
- Ability to build in areas unsuitable for conventional treatment
- Less energy and chemical use
- Groundwater recharge
- Plant growth
- Reclamation of otherwise wasted nutrients

# The Black and White of Gray Water



## WHAT IS GRAY WATER?

### GRAY WATER IS HOUSEHOLD WATER, WHICH INCLUDES:

- ▶ Rinse water remaining after washing dishes by hand in a sink.
- ▶ Water from a bathroom sink or swimming pool
- ▶ Water from a washing machine that does not receive diapers
- ▶ Water from a bathtub or shower

## WHAT ISN'T GRAY WATER?

- ▶ Gray water should not include water from washing of diapers, or water from a toilet bowl or bedpan. Such water must be regarded as sewage and must be disposed of to a sewer or locally approved individual sewage disposal system (For example, a septic tank and leach field system).
- ▶ Gray water is not wastewater from kitchen sinks or dishwashers. Gray water should be free from oils, food scraps, high concentrations of soap, and bleach.

## PRECAUTIONS IN USING GRAY WATER:

- ▶ Do not put gray water into a spa or swimming pool
- ▶ Gray water should not be used to wash off driveways, sidewalks, or other hard surfaces if runoff cannot be contained on the property.
- ▶ Keep children from playing in irrigation gray water.
- ▶ Avoid any use that would allow contact between gray water and food or drinking water.
- ▶ Do not over apply gray water to soil; when soil is saturated with water, gray water could pool on the surface and create a health hazard.
- ▶ Be thoughtful and careful in all uses of gray water. Illness will negate any benefits derived from the use of gray water.

## WHERE TO USE GRAY WATER:

### OUTDOORS: GRAY WATER IS SUITABLE FOR IRRIGATING LAWNS, TREES, ORNAMENTALS, AND FOOD CROPS.

### SEVERAL GUIDELINES APPLY TO THE USE OF GRAY WATER.

- ▶ Apply gray water directly to the soil, not through a sprinkler or any method that would allow contact with the above ground part of the plants.
- ▶ Do not irrigate a garden in a manner that allows gray water to contact or reach anything you will eat without peeling or cooking.
- ▶ Root crops, such as carrots, radishes, and onions, which are eaten uncooked, should not be irrigated with gray water.
- ▶ Do not apply gray water near low-growing food crops, such as lettuces and strawberries.
- ▶ Disperse gray water over a large area, and rotate with fresh water to avoid buildup of sodium salts.
- ▶ Apply gray water only to flat areas where runoff is not likely. Do not allow gray water to pond on the surface of the ground. A cloth bag attached to the end of the hose will help distribute water and also act as an additional filter.
- ▶ Gray water containing certain detergents and soaps may damage some plants and damage the ability of the soil to absorb water. Plants that thrive only in acidic soil should not be watered with gray water, which is alkaline.
- ▶ Don't pour water directly at the base of tree trunks or shrubs. This may cause crown rot; the feeder roots that take up water are located farther out from the trunk.
- ▶ Be sure to apply enough water so that the plants get a good drink. Deeper-rooted plants get little benefit if only enough water is applied to just wet the ground surface.

## LOCAL REQUIREMENTS AND RESTRICTIONS ON THE USE OF GRAY WATER:

Improper alteration of wastewater drainage connections and other features of home plumbing might create a cross-connection or interference with water pressure, allowing contaminated water into the clean drinking water supply. Alternating the home plumbing system must never be done without the approval of the local building or plumbing authority.

Consult the county health department and local building and/or plumbing authority to determine what restrictions and requirements apply in reusing gray water.

Holding tanks, gray water treatment devices, sewage systems using pumps and other features of gray water systems may require approval of local agencies. Use of toilet wastes for irrigation or utilization is prohibited by state law, which is enforced by local agencies. Disposal of human wastes by any method other than into an appropriate sewage system is unlawful and extremely hazardous to public health.

FOR MORE INFORMATION ON GRAY WATER VISIT [WWW.AMWC.US](http://WWW.AMWC.US) AND CLICK ON GRAY WATER.