



# Graywater Frequently Asked Questions

## What is graywater?

Graywater is water from showers, bath tubs, washing machines, and bathroom sinks. It is water that contains some soap but is clean enough to water plants. Water from toilets or wash water from diapers is never considered graywater. Water from the kitchen sink water is not considered graywater in California.

## Why use graywater?

The use of graywater helps preserve our drinking water supplies by limiting the amount needed for landscape irrigation. Another benefit of using graywater is that it connects us to our water supply, helping us understand where our water comes from and where it goes. Becoming conscious of our water supply encourages healthier product choices and engagement with our landscapes. In concert with water-wise landscaping, rainwater harvesting, and conservation, using graywater as a resource helps reduce dependency on imported water and protects the urban watershed.

## Is it legal?

Yes! In August 2009, California's graywater regulations changed, allowing for lower-cost graywater systems to be installed legally, including some without the need for a permit. In San Francisco, a permit is not required for a one- or two-unit residential building that installs a simple laundry-to-landscape graywater system, which does not alter the plumbing and follows 12 guidelines. Any other graywater system will require a permit from the San Francisco Department of Building Inspection (DBI).

## Do I need a permit?

A permit is required for a graywater system for outdoor irrigation that includes any of the following conditions:

- Graywater system collects water from showers, sinks, or baths.
- Graywater system alters the plumbing (cutting into the drainage plumbing to access the graywater).
- Graywater system is installed in a building that is not a one- or two-unit residential building.
- Graywater system includes a pump or tank (besides the washing machine's internal pump in the case of a laundry-to-landscape system).

For graywater projects that require a permit from the Department of Building Inspection (required for all other graywater systems except laundry-to-landscape), the SFPUC offers a rebate of up to \$225 toward the cost of your permit. Visit [www.sfwater.org/graywater](http://www.sfwater.org/graywater) for information about our Graywater Permit Rebate.

### Is it safe to use graywater?

Yes. If you follow simple guidelines while constructing your graywater system, such as minimizing contact with graywater and allowing graywater to percolate through topsoil, graywater is very safe to use.

To help your plants thrive, you should consider using a “plant friendly” laundry detergent products that does not contain sodium (i.e., salt) or boron.

### How much water can I save using graywater?

Water savings vary depending on your plant’s needs, the number of loads you do, the efficiency of your clothes washer.

### How can I harvest graywater?

A graywater system captures and redirects water from specific plumbing waste lines to a separate irrigation system in your landscape. The graywater system and potable water system are completely separate. Popular graywater systems include laundry-to-landscape system, gravity-based branched drain system, and a pumped system.

### What is a laundry-to-landscape (L2L) system and how does it work?

A laundry-to-landscape system captures graywater from the drain hose of a washing machine and connects to a three-way diverter valve which allows graywater to be directed to either the landscape or the sewer system. The water is distributed subsurface through 1-inch irrigation tubing with ½” outlets to water specific plants. This system does not require a permit in California as long as basic guidelines are followed. The L2L system is typically the lowest in cost and easiest to install. Materials cost around \$200 and professional installations typically cost between \$700 and \$2,000.



To see what a laundry-to-landscape system looks like from start to finish, [watch this episode from PBS' Ask This Old House](#) featuring one of our local program participants!

### How do I get started?

Review the [San Francisco Graywater Design Manual](#) to learn about the design, installation and maintenance of residential graywater systems.

### Are there classes to learn more about graywater?

Yes! The SFPUC sponsors free workshops in partnership with Garden for the Environment, a half-acre organic community garden located at the corner of [Lawton Street and 7<sup>th</sup> Avenue](#). For a list of upcoming workshops, please visit [www.gardenfortheenvironment.com](http://www.gardenfortheenvironment.com).