



# Residential Graywater An Irrigation Alternative

## What is graywater?

Graywater is untreated household wastewater which has not come into contact with toilet waste. It is used water from showers and baths, bathroom sinks and washing machines. It can be directly reused for irrigation without undergoing a treatment process. *It does not include water from toilets, kitchen sinks, dishwashers or laundry water from soiled diapers due to potential health issues.* Graywater can be used to irrigate plants at your home, except for vegetable gardens.

## What are the benefits of utilizing graywater?

Graywater is a form of recycling and therefore reduces potable water consumption. Your indoor water can be reused as graywater, providing a constant source of recycled water for irrigation.

## How is graywater used?

A system must be installed at the home to collect and redirect the graywater to landscaping areas. A graywater system usually consists of a plumbing system and an irrigation system. The most common types of usage systems are drip irrigation and mini leach field.

## Are there any permits required for operating a graywater system at my house?

Per California Plumbing Code - A written construction permit shall be obtained from the Enforcing Agency prior to the erection, construction, reconstruction, installation, relocation or alteration of any graywater system that requires a permit.

**Exception:** A construction permit is **not** required for a clothes washer system which does not require cutting of the existing plumbing piping provided it is in compliance with Section 1603A.1.1. - [http://hcd.ca.gov/codes/shl/graywater\\_emergency.html](http://hcd.ca.gov/codes/shl/graywater_emergency.html)

New state rules provide permit exemptions for some residential gray-water systems, but people still have to follow several requirements. They include:

- The system must allow users to direct water to an irrigation field or the sewer.
- Ponding and graywater runoff are prohibited.
- Graywater can be released above ground, but the discharge point must be covered by at least 2 inches of mulch, rock or other material that minimizes human and domestic pet contact.
- Water used to wash diapers or other soiled garments must be sent to the sewer.
- Gray water shouldn't be used for vegetable gardens.
- Graywater shall not contain hazardous chemicals (please see California Code for more details (Title 24, Part 5, Chapter 16A, Part I emergency regulations of the 2007 California Plumbing Code).

## What are the steps in implementing a graywater system in my home?

- Investigate for any local permit process – City of San Diego customers, please see: City of San Diego Development Services Department Information Bulletin #208: <http://www.sandiego.gov/development-services/pdf/ã~•d^ñfobulletin/ib208.pdf> or call (619) 446-5000.
- Prepare a plan
- Select a graywater system
- If necessary submit the plan for review and approval
- Install the system
- Arrange for system inspection and approval if necessary
- Use, monitor and maintain the system

**Additional information about graywater systems:**

Emergency Rulemaking: California Plumbing Code – Graywater Systems (Title 24, Part 5, Chapter 16A, Part I): [http://hcd.ca.gov/codes/shl/graywater\\_emergency.html](http://hcd.ca.gov/codes/shl/graywater_emergency.html)

City of San Diego Development Services Department Contact: (619) 446-5000.  
Graywater Information Bulletin #208 - <http://www.sandiego.gov/development-services/industry/pdf/infobulletin/ib208.p>

County of San Diego Department of Environmental Health website at:  
[http://www.sdcountry.ca.gov/deh/water/lu\\_graywater\\_systems.html](http://www.sdcountry.ca.gov/deh/water/lu_graywater_systems.html) or call (760) 940-2861.

**Other Helpful Graywater Links:**

Frequently Asked Questions:  
[http://www.sdcountry.ca.gov/deh/water/docs/lu\\_graywater\\_faqs\\_revised.pdf](http://www.sdcountry.ca.gov/deh/water/docs/lu_graywater_faqs_revised.pdf)

Emergency Rulemaking: California Plumbing Code – Graywater Systems (Title 24, Part 5, Chapter 16A, Part I): [http://hcd.ca.gov/codes/shl/graywater\\_emergency.html](http://hcd.ca.gov/codes/shl/graywater_emergency.html)

California Urban Water Conservation Council (CUWCC) H2Ouse web site:  
[http://www.h2ouse.org/tour/details/element\\_actions.cfm?elementID=1B58D8BA-8AED-46AC-B9B5D9681A846D1F&roomID=8183044A-3219-48E2-A965ACB77A568AC4](http://www.h2ouse.org/tour/details/element_actions.cfm?elementID=1B58D8BA-8AED-46AC-B9B5D9681A846D1F&roomID=8183044A-3219-48E2-A965ACB77A568AC4)

White Paper on Graywater:  
<http://www.awwa.org/files/Resources/Waterwiser/references/PDFs/GraywaterFinal%20Report2010.pdf>

Using Graywater in your Home Landscape – Graywater Guide (1995):  
[http://www.water.ca.gov/wateruseefficiency/docs/graywater\\_guide\\_book.pdf](http://www.water.ca.gov/wateruseefficiency/docs/graywater_guide_book.pdf)

Graywater Policy and Science Center: <http://graywater.org/>

**Other Water Conservation Resources:**

City of San Diego Water Conservation Program:  
<http://www.sandiego.gov/water/conservation/>

General Water Conservation Tips:  
<http://www.sandiego.gov/water/conservation/tips.shtml>

Water Conservation Garden: <http://www.thegarden.org/>

California Urban Water Conservation Council <http://www.h2ouse.org/>

