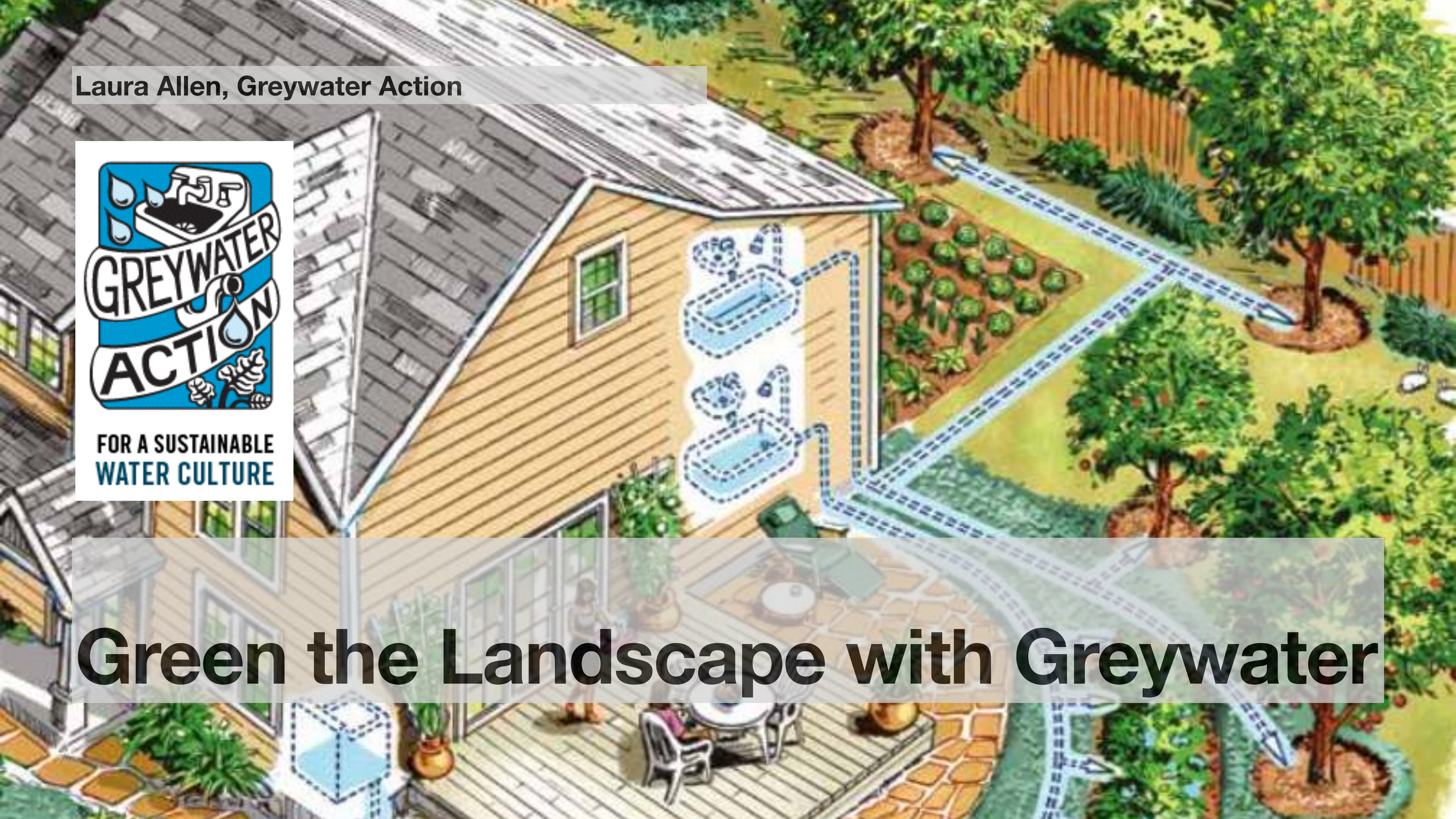


Laura Allen, Greywater Action



FOR A SUSTAINABLE
WATER CULTURE

Green the Landscape with Greywater

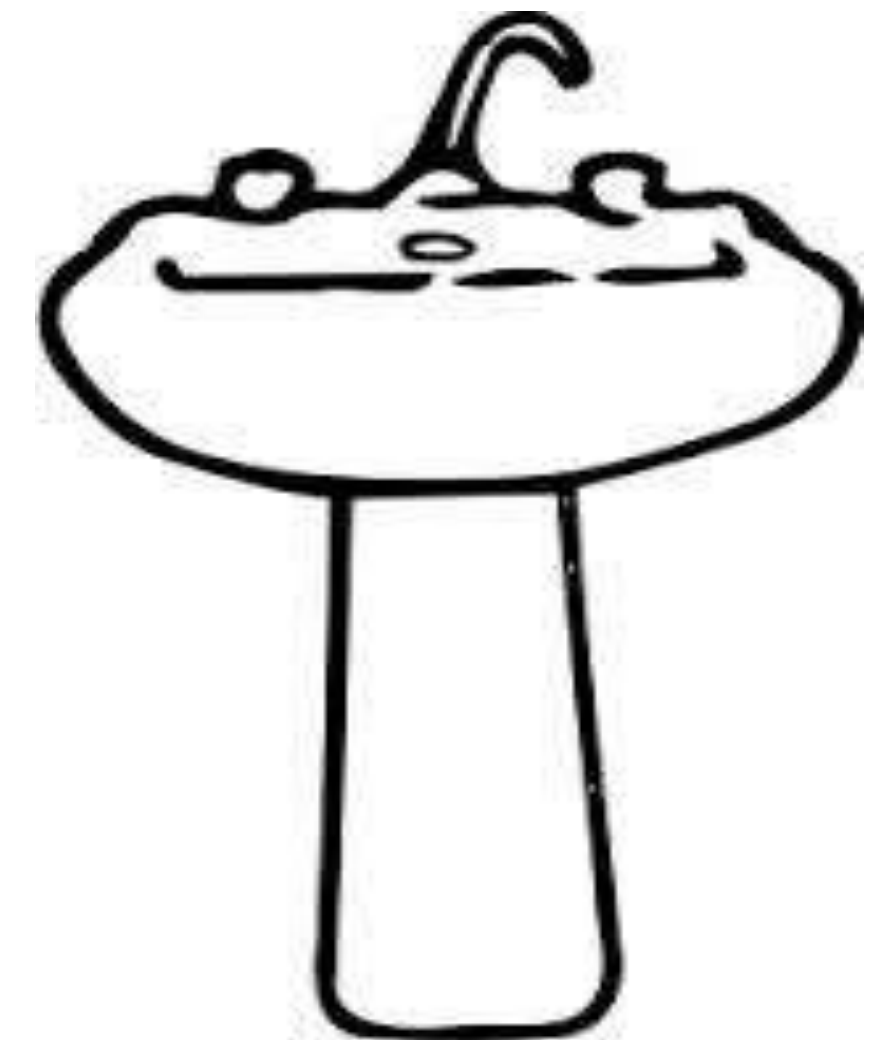


Californian's produce around
1 billion gallons of greywater
every day





Greywater is..





this.... or this...?





Image credit: Leigh Jerrard

Simple Systems Irrigate Larger Plants

- Trees
- Bushes
- Vines
- Larger annuals and perennials



...but not lawns or small plants



Irrigating these types of plants requires a more complex type of system.

Use Plant Friendly Products

- These products don't contain much SALT, BORON, or CHLORINE.
- For example: ECOS, Biopac, Trader Joes, Oasis, Vaska, Aubrey Organics, hydrogen peroxide bleach.
- Don't use sodium based water softened water.



Residential greywater users can manage inputs and control water quality

Safety Considerations

Greywater is NOT Potable



Use Plant Friendly Products

“Mulch”



Wood chips filter and absorb greywater before it soaks into the soil.

“Mulch Basin”



A shallow basin filled with mulch (wood chips).

The basin spreads greywater out, provides surge capacity, and prevents pooling or runoff.

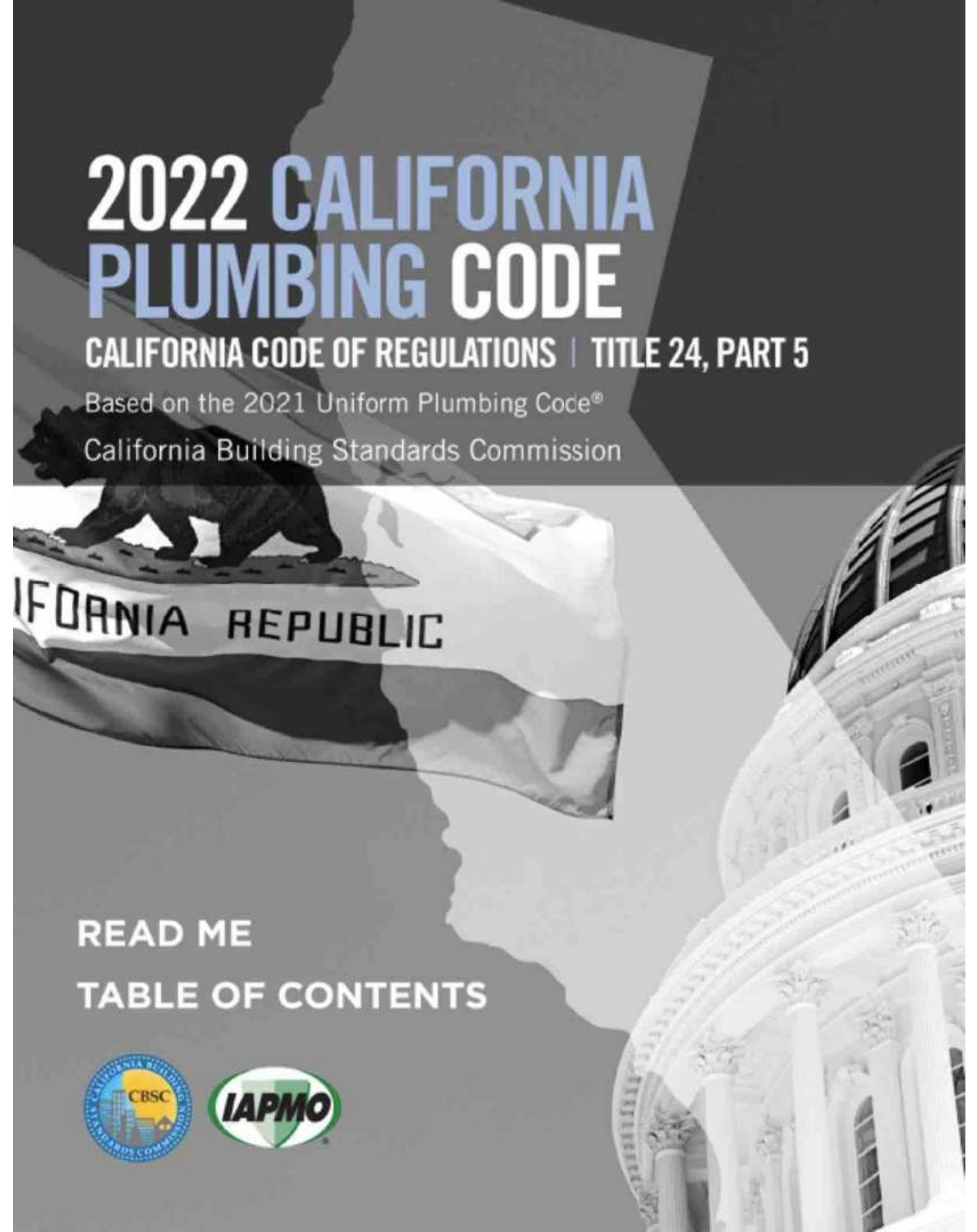
“Diverter Valve”

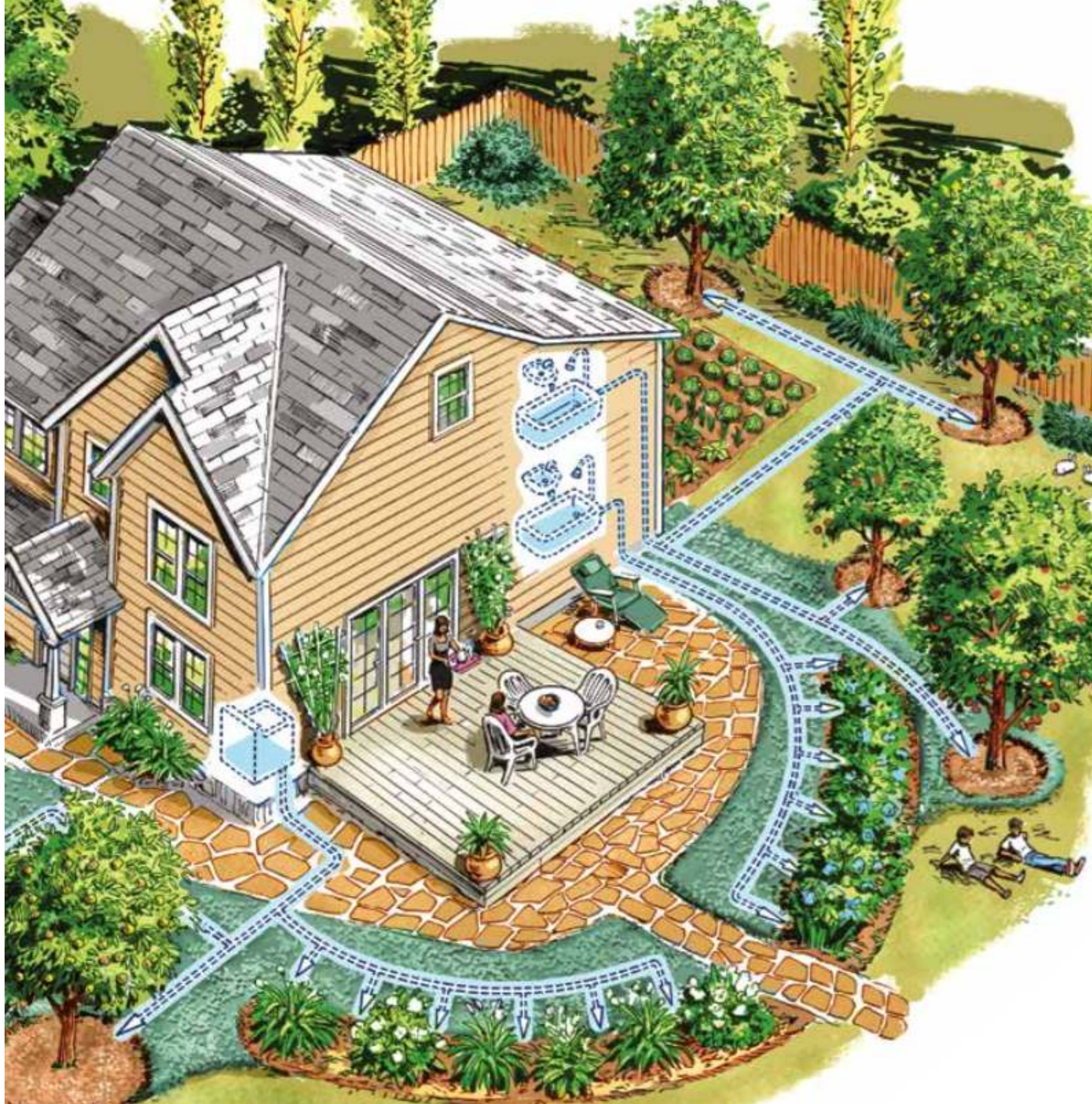
The valves allows us to control the flow of greywater (either to the landscape, or to the sewer/septic)



Is greywater legal? Yes!

Greywater is regulated by **Chapter 15** of the California Plumbing Code.





Greywater Reuse

16-40% reduction in water use

Irrigate trees

Grow hyperlocal food (food security)

Create habitat

Fire prevention (hydrated landscapes)

Foster awareness of healthy products (no “away”)

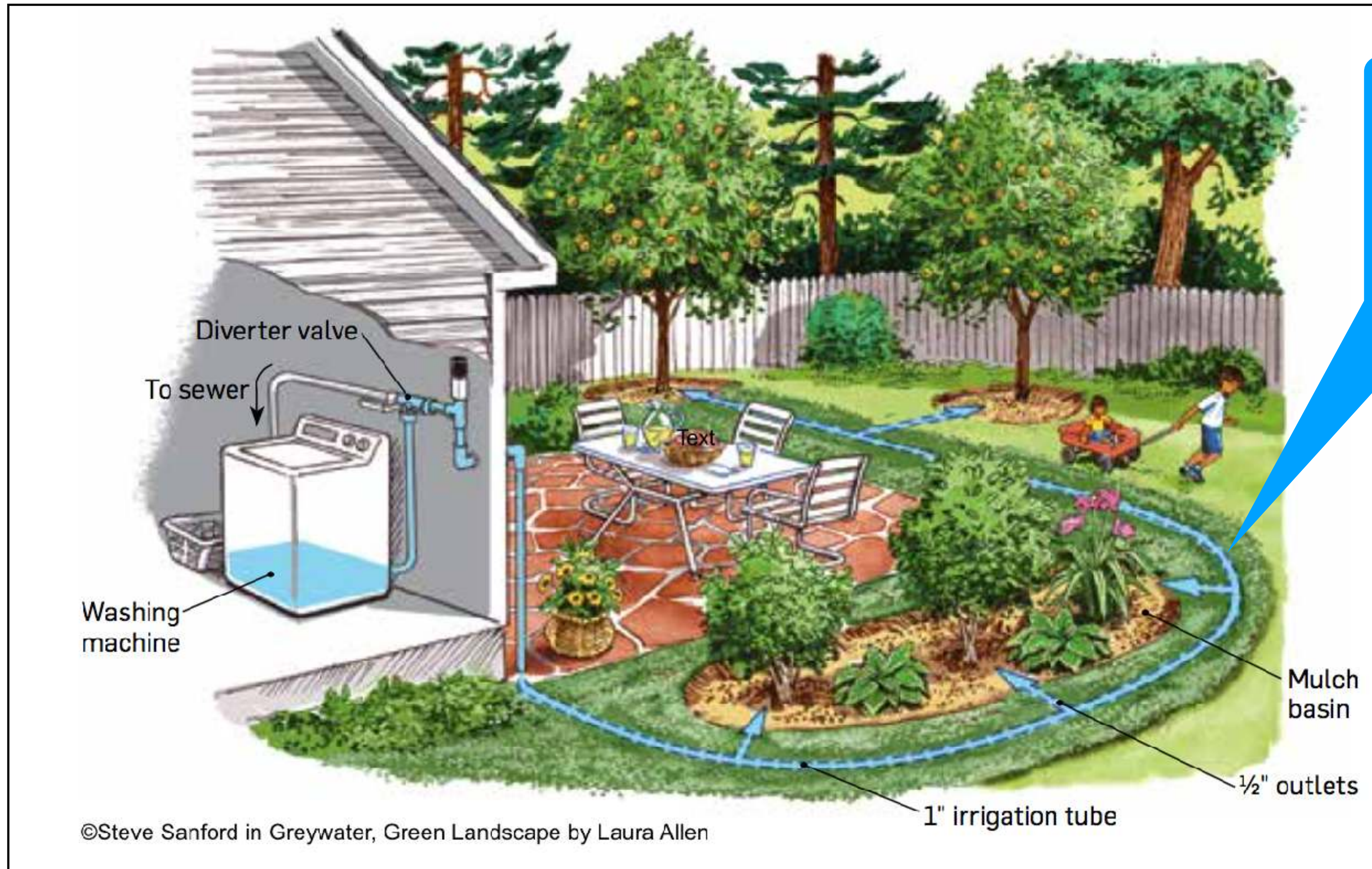
Create green jobs





Image credit Leigh Jerrard


Laundry-to-Landscape System



Rebates available in some places. No permit needed in CA

Costs: \$150-\$250 parts, \$700-\$2,500 professional installation

FREE GREYWATER WORKSHOP
Conserving water starts with you...
BE WATER WISE!




Sponsored by
Solano County Water Agency

Part I. Greywater 101
 Monday, October 21, 2014
 6:00 p.m. - 7:30 p.m.
 Theresa Douglas Senior Center, 2335 Broadway St., Vallejo

- Overview of water supply system
- Ways to reuse greywater
- Common types of systems
- General costs and water saving potential
- Greywater resources

Part II. How to Design & Build a Laundry-to-Landscape (L2L) System



Pasadena Water & Power Invites You to Attend Greywater Symposium



Interested in learning about greywater and finding a system that may work for your home?

Saturday

FREE! Graywater Workshop



Saturday, Sept. 24, 2010, 9am-11am | 25 Stone Point Road, Santa Rosa

This FREE Graywater Workshop is presented by Santa Rosa Water's expert staff. Attendees will learn how to install a simple graywater system that uses the wash-water from your washing machine to irrigate your landscape.

The workshop is open to anyone interested in learning how to install a simple laundry-to-landscape system.

City of Santa Rosa and City of Eureka water customers are eligible to receive FREE plumbing parts. Santa Rosa customers are also eligible for a \$75 rebate in lieu of the parts.

Space is limited. Reserve your seat: wuegsr.org
 For additional information 707-543-3065.

Join West Basin, the City of Carson, the Water Replenishment District and the Metropolitan Water District



GREY
 Monday
 5:30 p.m.
 Workshop is...
 They are exp...



Widespread support of laundry-to-landscape systems

Part 2. How to Design and Build a Laundry-to-Landscape (L2L) System.

- How the L2L system works
- How to estimate greywater flows
- How to install the plumbing and irrigation for the L2L system
- How to estimate how many plants to irrigate
- Maintenance & system costs

General costs and water saving potential

- Design considerations
- Greywater resources

Space is limited. Register today. No cost to attend. Refreshments provided.

**** Free book provided to first 20 residents who register and attend the workshop. (valued at \$30) Provided by CRSP and the Metropolitan Water District (MWD)**

Location: **Juanita Millender-McDonald Community Center**
 801 E. Carson Street, Carson, CA 90745

Please RSVP to South Bay Environmental Services Center at
www.sbec.com/calendar/workshops/greywater or call 310-371-4633

For more information on the project partners visit their web sites at: <http://ci.carson.ca.us/>
www.westbasin.org/ / www.bewaterwise.com/ / www.wrd.org/ / www.greywateraction.org/ / www.laecovillage.org/crsp

© 2014 West Basin Municipal Water District | 06302014

Monrovia, CA 91016

A laundry-to-landscape (L2L) greywater system class taught by Greywater Action



Workshop topics include:

Part 1. Greywater 101

- Overview of our water supply system
- Ways to reuse greywater (lower plumbing codes)
- Plant-friendly soaps and products
- Common types of systems & design considerations
- General costs and water saving potential
- Greywater resources

Part 2. How to Design & Build a L2L System

- How the L2L system works
- How to estimate greywater flows
- How to install the plumbing component for the L2L system
- How to design & install the irrigation component for the L2L system
- How to estimate how many plants to irrigate
- Maintenance & system costs

Space is limited. Register today!
 RSVP to Elena Layugan at
 (626) 443-2297 or elena@usgvmwd.org

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

www.upperdistrict.org



Monday, November 30, 6 - 7 p.m.

A laundry-to-landscape (L2L) greywater system is a good match for your home and landscape. Learn about:

- Greywater systems
- Soaps and products
- How they may save
- System costs
- Codes and regulations

Dozens of free workshops and a handful of incentives for L2L systems funded by water agencies.

Inside Plumbing



Sewer connection

Diverter

Greywater goes to landscape





Image: Ty Teissere







Image: Leigh Jerrard



Image: Greg Bullock

Gravity-Flow System

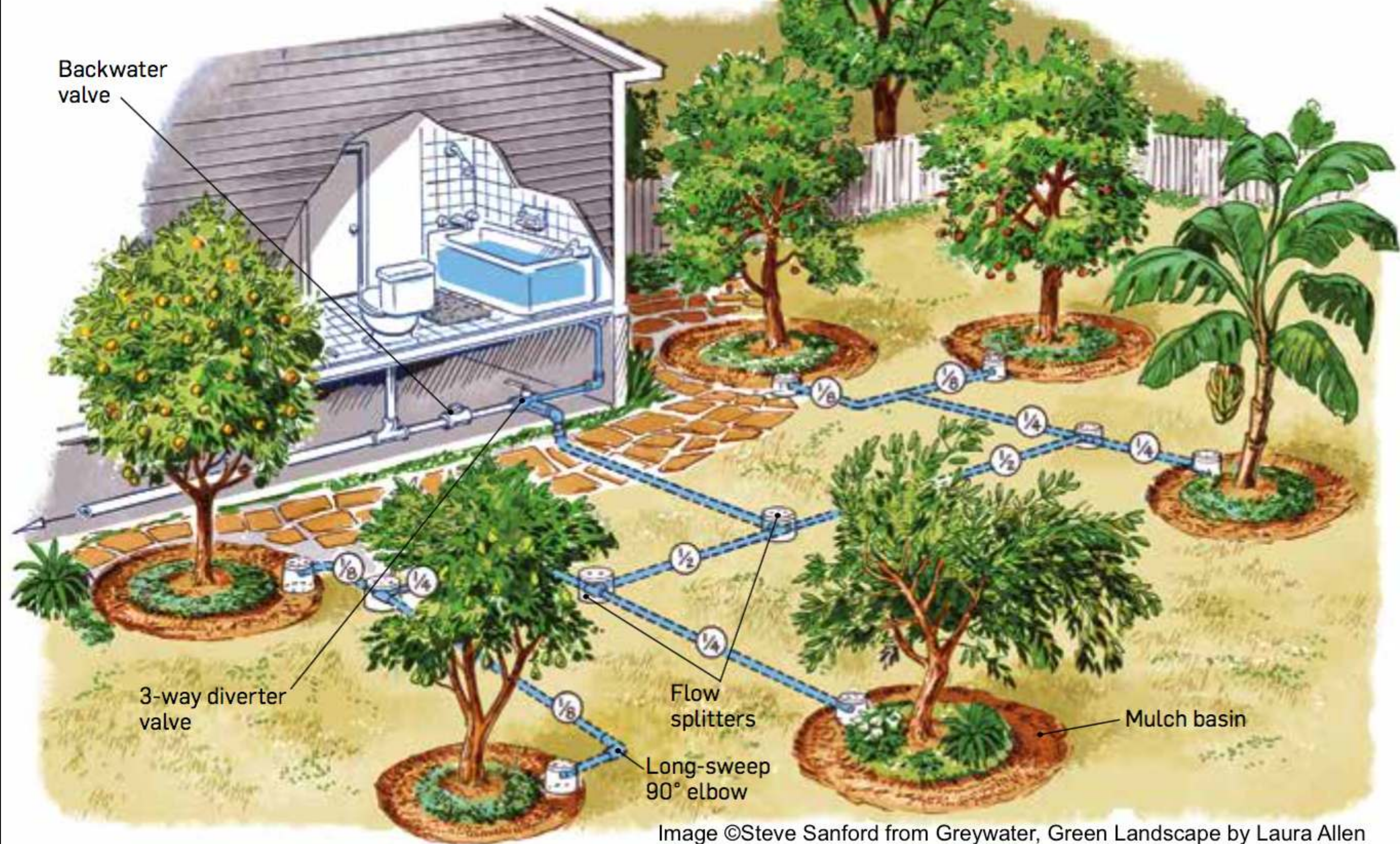
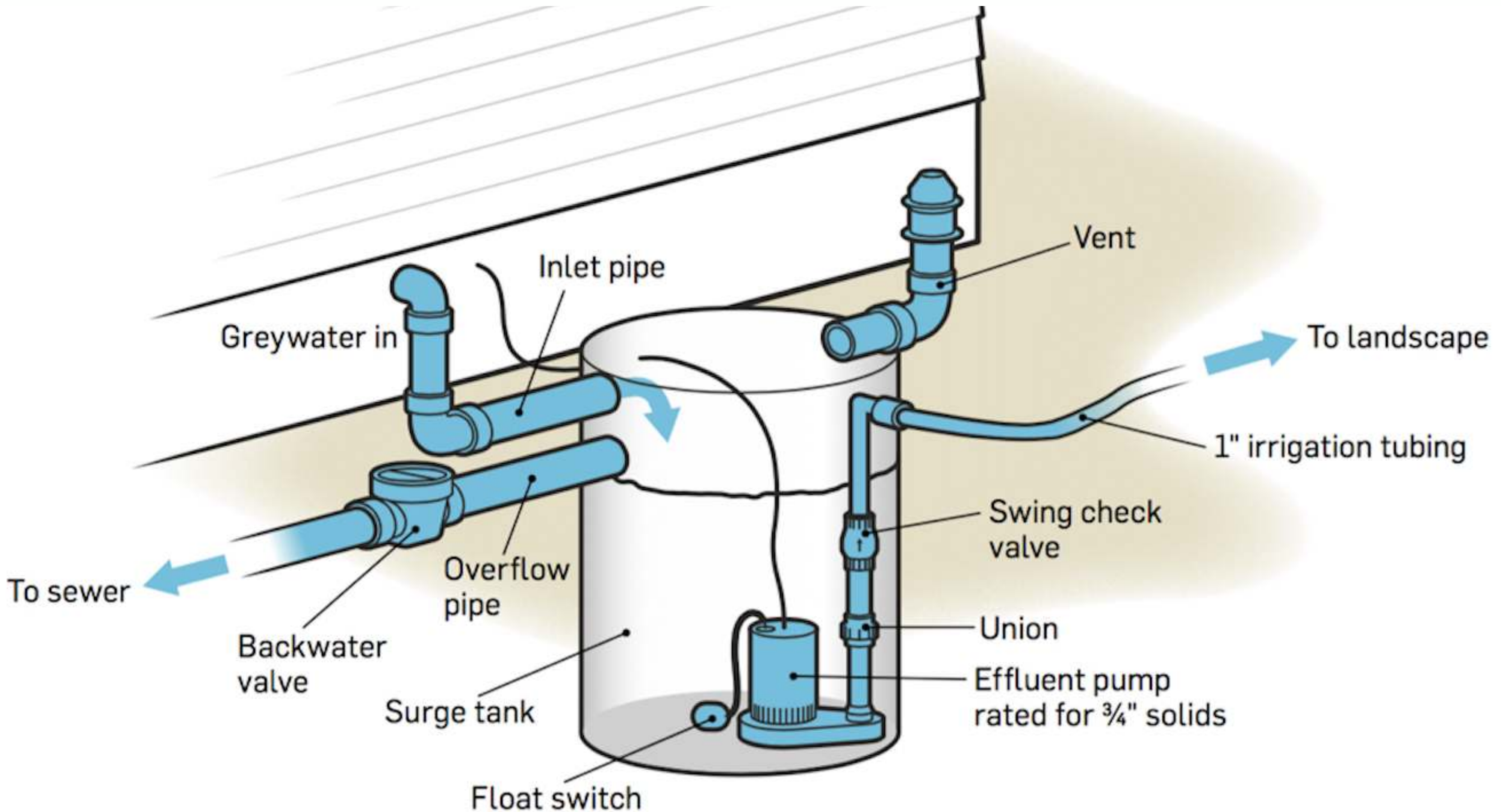


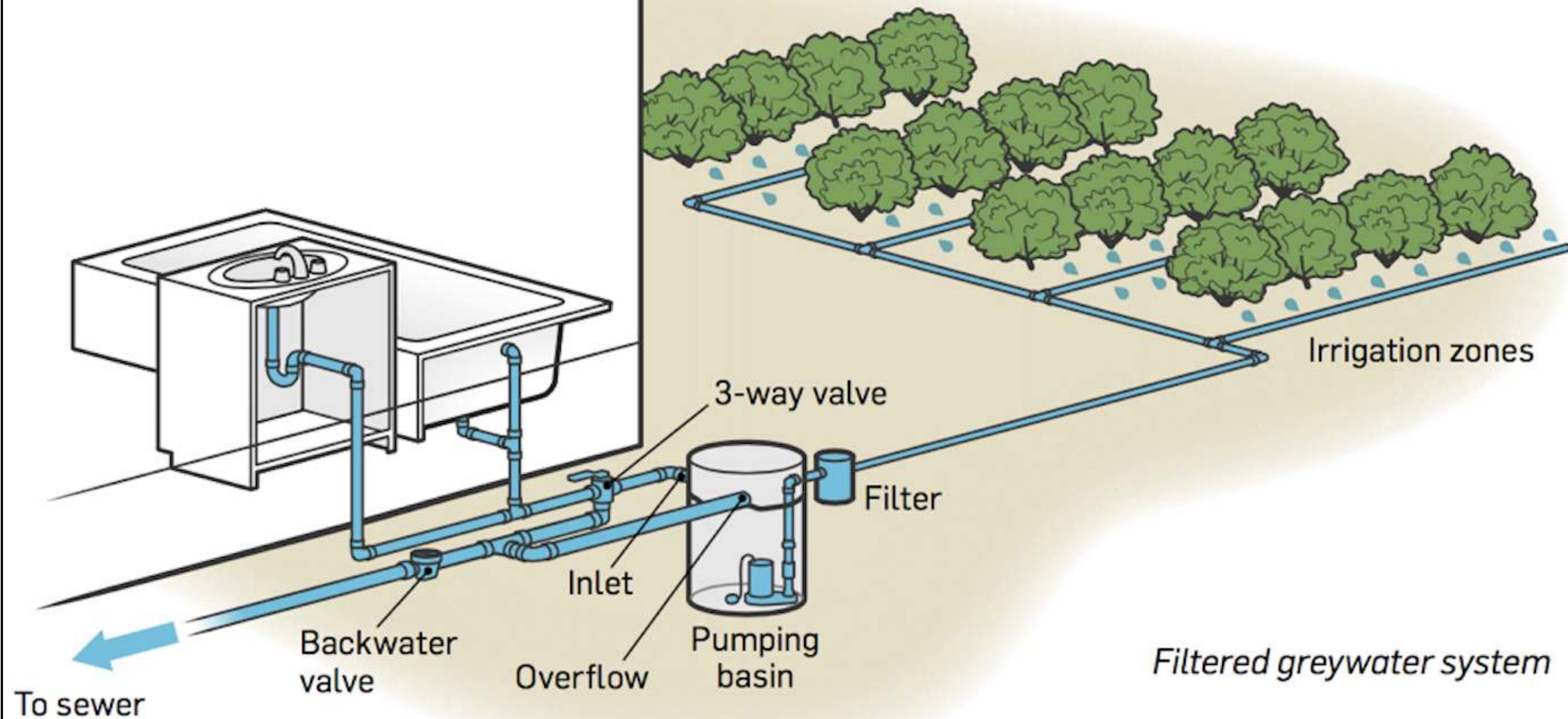
Image ©Steve Sanford from Greywater, Green Landscape by Laura Allen

Simple Pumped System (no filters)



Credit: ©Steve Sanford in Greywater, Green Landscape

Pumped and Filtered Systems



Filtered greywater system

Credit: ©Steve Sanford in Greywater, Green Landscape

Whole House Systems with potable backflush



Evergreen Lodge (Yosemite)



55 gravity-flow
system from guest
cabins

Pumped and filtered system
for commercial laundry and employee
housing



Greywater-Ready Construction

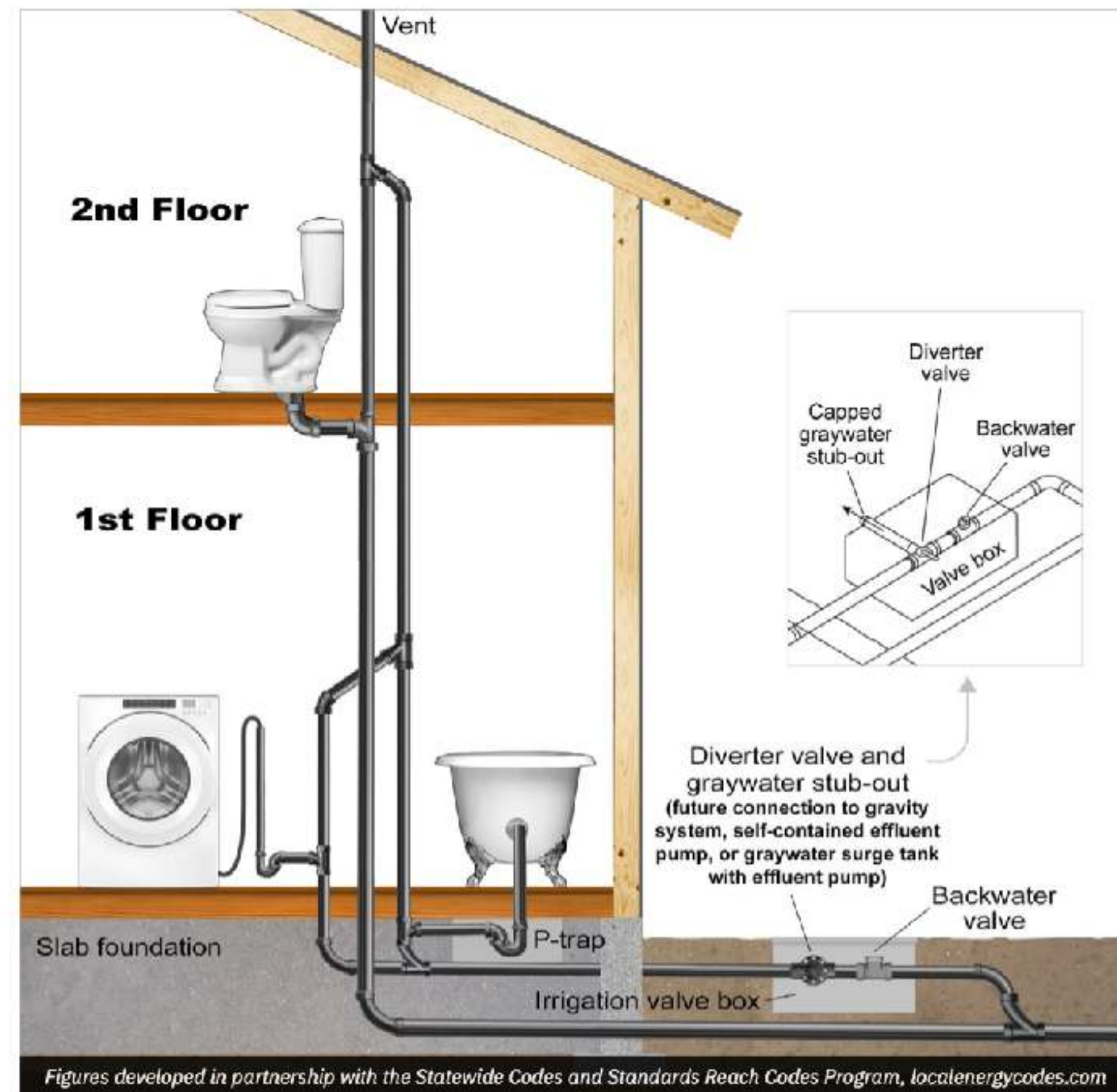


Figure 3a. Dual Drainage Plumbing: Multiple fixtures on concrete slab foundation

How to Learn More Classes, Books, Online

- On-line education with Greywater Action
- Book: Greywater, Green Landscape
- Tons of free resources (past webinars, articles, links to studies)

The collage features three main items:

- Top Left:** Book cover for "GREY WATER GREEN LANDSCAPE" by Laura Allen. The subtitle is "How to Install Simple Water-Saving Irrigation Systems in Your Yard". The cover shows a lush garden with a house in the background.
- Top Right:** Screenshot of the Greywater Action website. The header includes "GREY WATER ACTION FOR A SUSTAINABLE WATER CULTURE" and navigation links: HOME, ABOUT US, GREY WATER REUSE, RAINWATER HARVESTING, COMPOSTING TOILETS, EN ESPAÑOL, 中文, FORUM, LOGIN. A sidebar menu lists: ABOUT, GREY WATER FAQ, SYSTEM EXAMPLES, RESOURCES, CODES AND POLICY, HIRE AN INSTALLER. The main content area describes the organization as a collaborative of educators who teach residents and tradespeople about affordable and simple household greywater systems to reduce water use and foster sustainable cultures of water.
- Bottom Left:** Cover of the "SAN FRANCISCO graywaterdesignmanual for OUTDOOR IRRIGATION". The cover features several small images of outdoor irrigation systems and a person working on a pipe.

Below the website screenshot are four colored buttons:

- Past Webinars** (blue button)
- Forum** (teal button)
- Chinese Mandarin** (yellow button)
- Spanish** (red button)

Thank you!



**FOR A SUSTAINABLE
WATER CULTURE**

**Laura Allen, Greywater Action
laura@greywateraction.org**

