

The case for approving  
common never lube 3-way diverter valves  
for residential greywater-harvesting systems  
and greywater-harvesting stub outs

Compiled by Brad Lancaster



*Three-way diverter valve installations enable easy and convenient diversion of sink greywater to either the landscape or sewer.*  
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**The issue needing to be addressed**

The never lube 3-way diverter valves listed below are the most used, most effective, 3-way diverter valves for gravity-fed sink, shower, and bath greywater systems, readily available in the U.S. They have been used for decades by leading greywater-harvesting practitioners across the U.S. with great success, and no problems.

But at the inspection desk, these valves are sometimes approved, or sometimes flagged, and even rejected, because the valves are not manufactured and listed specifically for low-pressure, gravity-fed waste drain pipe (no effective three-way diverter valves are, as the costs for testing and listing are too high for the current volume of greywater harvesting installations). Yet, these never-lube valves are manufactured, NSF listed, and regularly used for *higher performance* systems.

When the use of these valves are rejected for greywater-harvesting systems, the associated greywater-harvesting system is often removed from the project, sometimes at the recommendation of the plan inspector, resulting in less water conservation, more waste, and less resilient water infrastructure.

We need a means of officially approving the use of these valves for use in residential greywater harvesting systems to incentivize best practices and reduce permitting friction in approval of the most-used, most-effective valves available.

A “code compliance package” may be one option.

**The most commonly used, and effective, 3-way diverter valves for greywater harvesting systems**

- [Jandy valve](#) – [NSF/ANSI listed/approved](#) equipment for swimming pools, spas, hot tubs, and other recreational water facilities
- [Pentair valve](#) – [NSF/ANSI listed/approved](#) equipment for swimming pools, spas, hot tubs, and other recreational water facilities

Other, lesser used, brands include FibroPool and Tiroar

## The advantages of approving and using the never lube 3-way diverter valves for greywater harvesting systems

- They add resilience to the overall plumbing system, as they can bypass greywater flow to either the sewer/septic or the landscape
  - In case of public sewer overload or breakage, power outage, disaster, etc, the greywater flow can be safely directed into mulched and vegetated basins in the landscape.
  - In case of saturation of soil in the landscape, greywater flow can be redirected to the sewer or septic.

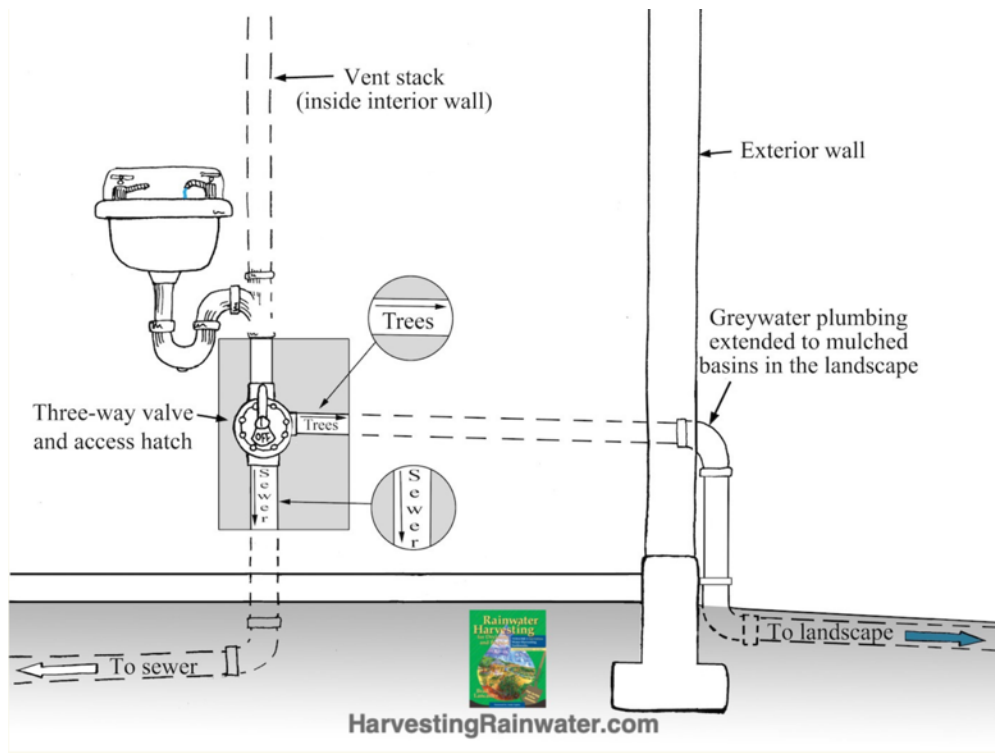


Fig. 1C. Stub-out completely connected.

The three-way valve is turned so the greywater is now directed to the landscape.

See the greywater chapter of Rainwater Harvesting for Drylands and Beyond, Volume 2, 2nd Edition for various options where the pipe outlets within the landscape

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- Sewer systems on their own, have no back up. While a greywater system installed upstream of blackwater flow, creates a backup system to the sewer for the greywater flow.

- These valves make best practices easy and convenient. For example, when a person takes a bubble bath (the salts from which are not good for plants), they can use the valve to direct the salty greywater to the sewer; and when they are bathing without the salts of bubble baths, they can direct the greywater to the landscape for free irrigation water.



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- These valves double as additional clean outs/access points to the waste pipe plumbing, since the valve cap can be unscrewed for easy access and clean out.



*Jandy valve, exploded view.*



- These valves have had the most service history, having been in the pool industry for decades and the go-to valve for greywater systems for over 30 years of successful service.

**OVER TWO AND A HALF MILLION VALVES SOLD MAKE JANDY THE INDUSTRY STANDARD.**

**Never needs lubrication. Guaranteed never to fail.**  
You'll never need to worry about a Jandy Never Lube™ Valve. That's because Never Lube Valve diverter seals are made of a special proprietary material that is guaranteed never to leak or break for the life of the valve. And best of all, Never Lube diverters never need lubrication.

**Easiest to install, easiest to use.**  
Never Lube Valves have a unique port design that comes in both 1½"-2" and 2"-2½" sizes, so they'll fit almost any plumbing situation. And you can plumb any port as inlet. They are much easier to turn and set than other valves, too.

**Best materials, best design.**  
Never Lube Valves are made out of CPVC, so they are resistant to temperature and chemical fluctuations, and the Never Lube Valve body is designed to allow maximum water flow while maintaining structural strength.

**18 quality tests on every valve.**  
Jandy Valves pass 18 different quality control checks before leaving the factory. Jandy Valves have no defects because they are 100% quality tested.

**Easy to motorize, simple to automate.**  
Every Jandy Valve can be automated using Jandy JVA Valve Actuators. JVAs are easy to install and make valve operation automatic.

**The industry standard.**  
Pool and spa professionals have made Jandy the industry standard in valves. Jandy Industries is well on its way to selling three million valves for one reason—a reputation for quality.

**NEVER LUBE JANDY VALVE**

**Jandy Industries**

**PERFORMANCE**

**JANDY INDUSTRIES**  
2180 Wilshire Court, P.O. Box 6101, Torrance, CA 90506-6101 Phone (800) 227-1442 FAX (415) 342-6391

- Leading greywater practitioners, advocates, and instructors all use and advocate for these valves.  
Advocates include:
  - Art Ludwig, author of "Create and Oasis with Greywater", "The Builder's Greywater Guide", "[Santa Barbara County Greywater Handbook: Integrated Water and Home Resource Management](#)", and the website [OasisDesign.net](#)
  - Laura Allen, author of "Greywater Green Landscape", and co-founder of [Greywater Action](#)
  - Leigh Jerrard, Greywater Corps founder, Los Angeles, CA, [GreywaterCorps.com](#)
  - Brad Lancaster, author of "Rainwater Harvesting for Drylands and Beyond", and the website [HarvestingRainwater.com](#)

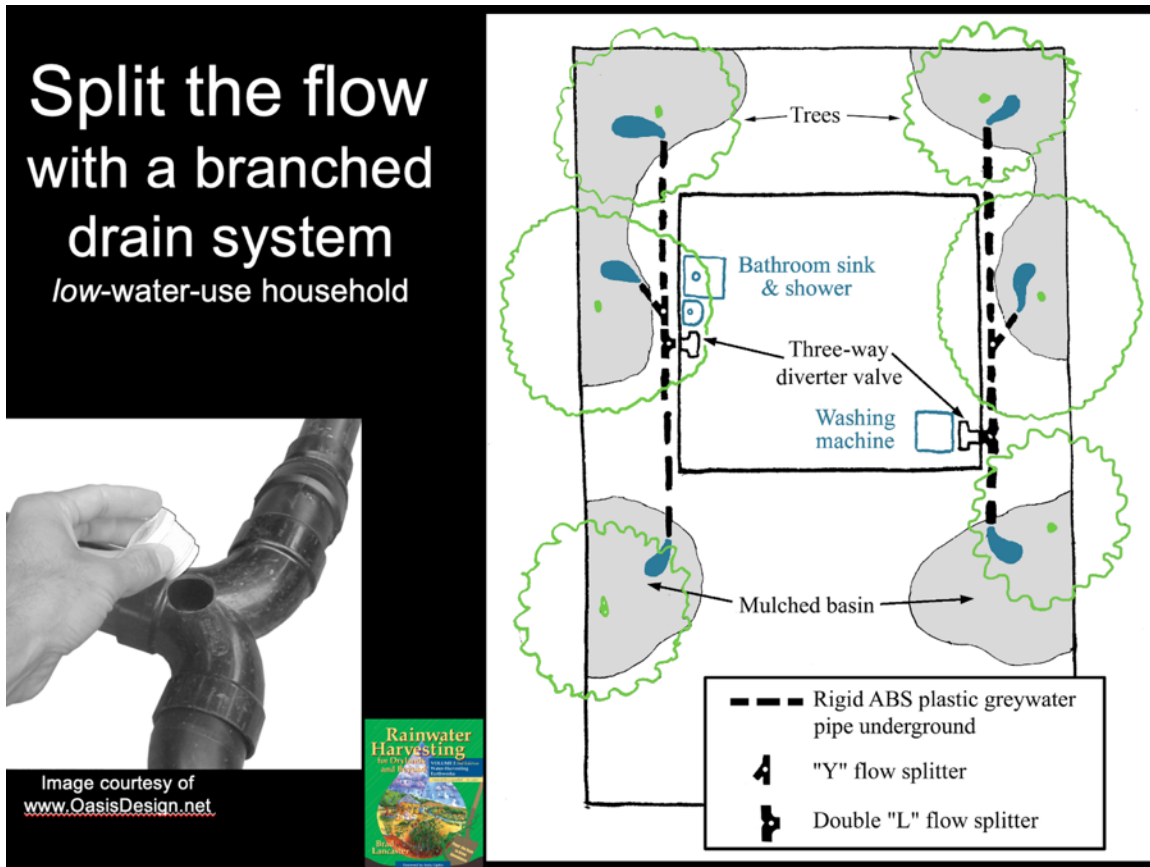
- These valves' orientation is easily reconfigurable – you can rotate the inner valve in relation to the body so any of the 3-ports can be chosen as the inlet.



*Screws have been removed, so the valve's top plate can be rotated to move the inlet (currently on right) to the desired orientation.*

- All parts of the warranted valve can be replaced.

**Typical distribution of greywater  
into mulched and vegetated basin in the landscape  
via branched drain distribution plumbing**



*Splitting the flow to multiple outlets in the landscape ensures no area becomes super saturated and anaerobic (which can cause odor). Instead, water is quickly infiltrated into the soil, soil conditions stay aerobic, and there is no odor.*

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*Branched drain distribution pipe is laid in raised pathways, and outlets into sunken (to be mulched and planted) basins. Flow splitters, splitting the flow to multiple points, are placed in valve boxes for easy access.*

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For more images of such gravity-fed greywater distribution plumbing see <https://www.harvestingrainwater.com/resource/branched-drain-greywater-distribution-plumbing/>





*Dark mulched basin receive greywater.*  
*Branched drain plumbing is beneath raised paths*  
*covered in light mulch.*  
*Flow splitters placed in valve boxes for easy maintenance access.*

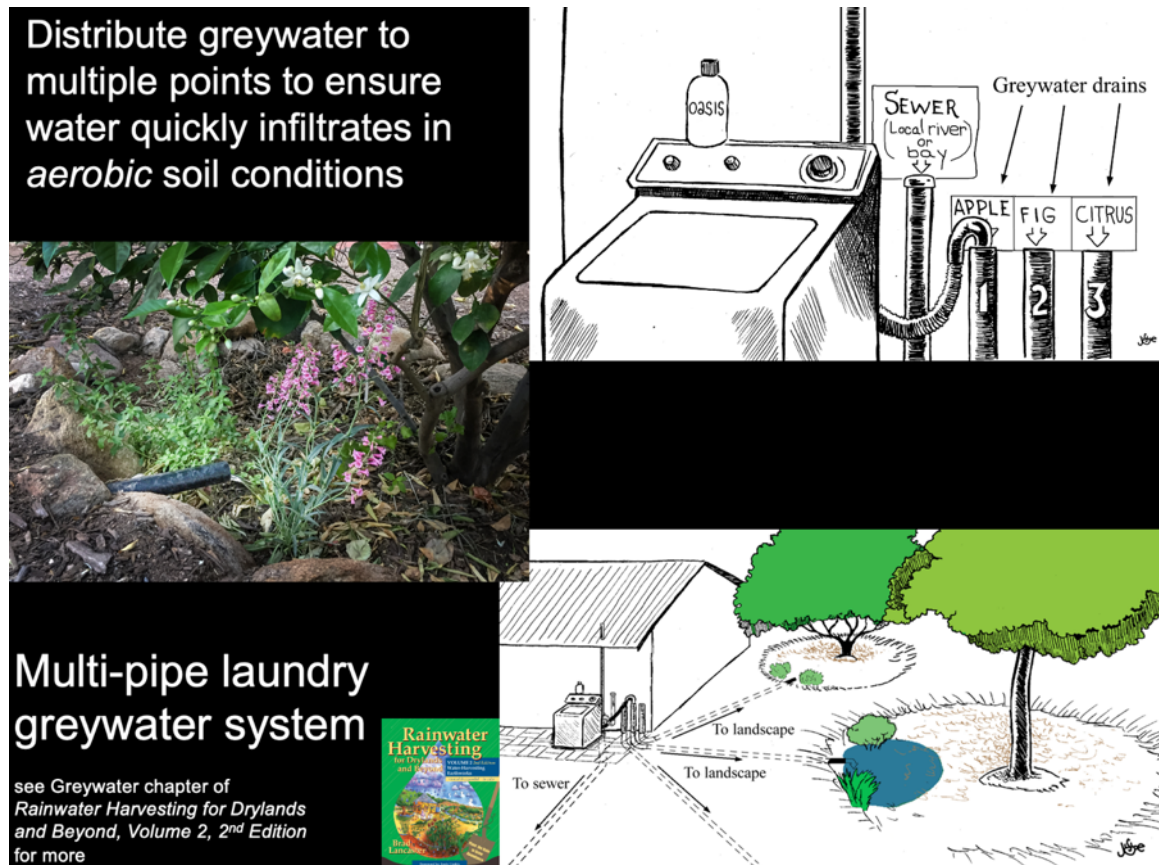


Greywater pipe outletting into mulched basin 3 inches ABOVE the  
 mulch so NO roots can grow into and clog the pipe.  
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 Beyond, Volume 2, 2<sup>nd</sup> Edition](#)" by Brad Lancaster.

## Potential next steps

- Brad Lancaster could be contracted to help create a code compliance package for the approved use of never lube three-way diverter valves for residential gravity-fed greywater harvesting systems associated with sinks, showers, and bathtubs;

and the [multi-pipe drain system](#) for gravity-fed greywater harvesting from clothes washing machines.



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Note that Art Ludwig has already created a code compliance package for the City of Santa Barbara, CA for the L2L systems for washing machines that utilized water pressurized by the washing machine pump.

*The L2L system is NOT for gravity-fed systems and does NOT use a never lube diverter valve. I bring this into the conversation only to see an example of a code compliance package – see attached file.*