

Smart & Adaptive Graywater Irrigation Systems



The **IrriGRAY** graywater irrigation system is a **fully assembled self-cleaning** system that **automatically irrigates** your landscape with all types of available water.

On average, our clients save over \$1,000 per year on their water utilities, as well as helping to **protect your valuable landscape** from the ravages of **drought and water restrictions**.

IrriGRAY not only conserves hundreds of thousands of gallons of precious water, but it also **significantly reduces property water demand during the summer months**.

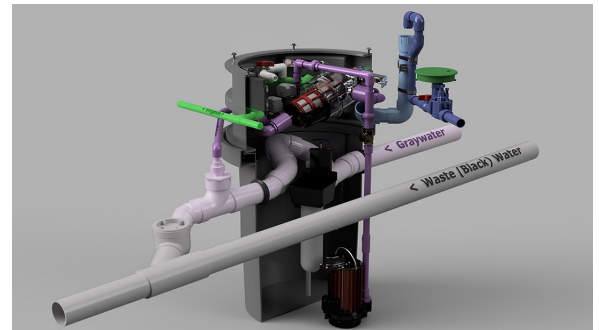
This allows for **more building construction** without straining the **existing water distribution infrastructure**.

IrriGRAY Basin

The IrriGRAY collection and filtration basin processes graywater as soon as it is available, irrigating throughout the day.

With a compact size of just 24" diameter and 42" deep,

the system takes up minimal space and is designed for easy plumbing installation in both new constructions and remodels.



IrriGRAY Controller

The IrriGRAY controller manages all types of irrigation as efficiently as possible all day.

We designed and manufacture the controller to automatically

monitor potential issues such as power / water / internet / component failures that can impact irrigation, and continue operation as best possible to meet daily irrigation needs.



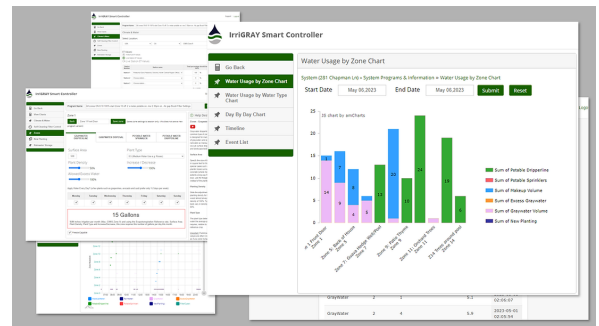
IrriGRAY Online

The IrriGRAY controller is connected to the internet for programming, weather updates, remote control and IrriGRAY support access.

Data is automatically sent to our server for automated

performance analysis, as well as providing a wide range of data charts.

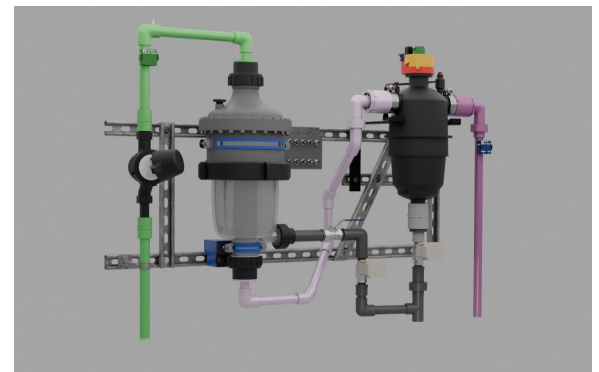
*If internet is lost, IrriGRAY continues to operate, with local data logging.



IrriGRAY High Volume

If your need is high volume processing of laundry waste water, we recommend the high volume filtration module.

The module efficiently extracts large amounts of natural cotton fibers from heavy towel washing.



* Pipe colors shown illustrate the function of each pipe. Systems are manufactured with standard Sch 40 and Sch 80 pipe components.

Why Graywater?

- Between 20—40 gallons of shower and clothes washing machine water per person, per day
- Dripperline irrigation daily, increases irrigation efficiency to 95%, compared to ~ 50% efficiency with traditional, once or twice a week irrigation
- Graywater soap and detergent help water move through the soil, allowing irrigation zones to balance moisture to suit plant needs
- Constantly moist—but not wet—topsoil results in faster plant growth
- Reliably irrigate 1,000 square feet of landscape per person in warm climate
- Controller manages all irrigation needs, whether graywater, potable water, rainwater, well, condensate and foundation water, with best practice methods according to class of water

About Water ReNu

- Paul James is the technical founder of Water ReNu
- 2000—2011, designed / manufactured / supported over 2,000 graywater systems in Australia (and USA since 2008). Graywater dripperline since 2004
- 2011 moved to USA. Started designing the IrriGRAY system—automated self cleaning filtration with a self-aware smart controller
- 2014 Version 1 fully automated system released. Multi-year onsite testing of niche markets, small / medium / large residential, multi family and commercial applications e.g. hotel laundry waste water. Versions 1.0 to 2.5
- 2020 development of version 3 controller, manufactured in-house (including PCB build)
- 2022 release of brush based self cleaning filtration. Release of new controller to existing clients across USA. Release of marine quality controller and component cables
- 2024 installation of manufacturing robotics, including PCB pick and place capabilities
- 2025 Q1 = release of short form animations videos for client support and contractor training / website update

Dripperline Irrigation

- 20+ years experience with Netafim graywater capable dripperlines (Australia and USA)
- Proven dripperline in all applications. Manufactured by Netafim to Water ReNu specifications
- Cost effective—our techniques achieve the same or lower cost of installation as traditional spray systems
- High flow (landscape beds) and Low flow (lawn) dripperlines
- We are proud to report we have not had a single dripperline blockage or failure when using approved materials / components

Code Compliance

- Compliant with USA UPC / IPC codes
- Compliant with state specific requirements without modification in most USA states
- Airgap makeup water supply, in most cases eliminates the need for potable water backflow protection (RPZ)
- Decades of experience coordinating with state departments of plumbing and public health regarding appropriate local regulations

Ease of Repair

- We have clients across USA, in densely and sparsely populated locations, often with only inexperienced (and expensive) contractor services available
- All components of the IrriGRAY system are designed for easy removal and replacement, up to 10 minutes of effort, generally 5 minutes or less
- Contractor skills are not required. Full instructions are provided via short, easy to follow animation videos. No special tools are required (in most cases only a screwdriver)
- Issues are automatically identified by the controller, with IrriGRAY support notifying the client of an issue / resolution before the client is aware an issue has occurred



Waco TX. Top photo: Landscape installation. Middle and bottom photos 14 months later.

Modular Design

- Pumping and Collection basins can be combined / mixed to suit specific site requirements (high flow / high lift / multiple graywater collection)

IrriGRAY Controller (fully automated)

- Recalculation of irrigation requirement scheduling whenever normal operation is interrupted by power / wifi / water / component failure / remote interruption
- Daily electrical component checks to confirm reliability of each component, including irrigation zone valves. Performance decrease over time used as a predictor of failure (advanced warning)
- Detection of changes in flow and pressures of irrigation zones, providing indicators of inground zone damage
- OTA updates, optional free Beta test participation
- Free for the first 12 months, monitoring is \$10 per month onwards

Together with self repair, cost of ownership / monitoring is less than traditional irrigation systems