

# DairyCare Info Sheet 01

## Dairy water minimisation

There are five key components of an effective effluent system:

1. Dairy water minimisation
2. Solids separation
3. Storage
4. Nutrient re-use
5. Monitoring and maintenance

If any of these five components are sub-optimal, then the whole system is compromised. In this first DairyCare Information Sheet we discuss dairy water 'minimisation'.

The amount of water used in the dairy and that enters the effluent stream has a direct impact on the size of the system required, be it a trafficable solids traps where 2-3 days storage is required, through to storage ponds, which need to hold all liquid effluent over the recommended winter storage period. There are three very common questions we get in relation to this:

### Q1. Why is water-use important when sizing an effluent pond?

A1: Liquid effluent needs to be stored over the recommended storage period so effluent is not applied to paddocks when the soil moisture profile is full. Reducing the water use in the dairy means less storage is required - which saves construction costs and leaves a smaller footprint on farm.

### Q2. Shall I up the pressure for the hose wash as part of this strategy?

A2: No, actually high volume is more water-efficient than high pressure for wash down.

### Q3: Can I recycle green water through a hydrant fixed yard wash system?

A3: For occupational health and safety reasons, recycled green water is recommended for flood wash yard wash systems.

#### Some common strategies to reduce water use are:

- Dry scrape the yard
- Pre-wet the yard
- Recycle plate cooler water so it doesn't directly enter the effluent system
- Use recycled green water to flood wash yards
- Use low pressure high volume hose fittings for yard and platform wash (volume is more efficient than pressure)
- Benchmark water use per cow
- Repair and replace broken nozzles or leaking hoses.
- Equip hoses with trigger (spring-loaded) nozzles that have to be held open.
- Review cup and platform sprays on rotary dairy's as they can consume large amounts of water

<https://www.dairyaustralia.com.au/farm/land-water-carbon/water-and-irrigation/water-usage-tips>

### About DairyCare

DairyCare is a \$2.4 million Regional Estuaries Initiative and Revitalising Geographe Waterways funded project supporting dairy farmers to design, install and maintain fully enclosed effluent systems in order to reduce nutrient loss off dairy farms and improve water quality of regional estuaries.

Led by Western Dairy, the DairyCare project will undertake 60 dairy effluent system reviews of dairy farms across the south west. Farms in qualifying catchments may be eligible for financial assistance for an effluent system upgrade.

To register your interest to be involved in this state government program, contact Western Dairy's DairyCare project manager – [dan.parnell@westerndairy.com.au](mailto:dan.parnell@westerndairy.com.au) or telephone 0467 556 542.

More information on DairyCare: [www.westerndairy.com.au](http://www.westerndairy.com.au)

For more information on Regional Estuaries Initiative: <https://rei.dwer.wa.gov.au> or  
Revitalising Geographe Waterways: <https://rgw.dwer.wa.gov.au>

