

TIPS FOR NURSERIES



WATER EFFICIENT NURSERIES CAN REDUCE THEIR IMPACT ON THE ENVIRONMENT BY REDUCING PESTICIDE, NUTRIENT AND PATHOGEN FLOW INTO THE SURROUNDING STREAMS

WHY NURSERIES SHOULD SAVE WATER

Whether you run a production, wholesale or retail site, an adequate supply of water is always important. However, you may not be aware of the large amount of water wastage.

The Nursery and Garden Industry Australia's (NGIA) Best Practice Guidelines states: 'Water use efficiencies as low as 10% are common in Australian nurseries'.

Significant profits can be made from efficient water use:

- Water bills are significantly reduced.
- Water recycling and runoff management allows further use of water for free.
- Water efficiency also encourages good business practices.
- The uniformity of crops increases, as does their quality.
- Dispatch costs are also reduced.

Other benefits of saving water in nurseries include:

- A water efficient nursery will reduce your water bills. Savings could increase in the future, as the price of water may rise as water becomes a scarcer resource.

- Recycling water can reduce fertiliser needs by up to 30%, as excess water doesn't leach it out of the pots.
- Efficient and even water application improves the health of the plant stock and ensures fewer diseased plants are discarded.
- Water efficient nurseries can reduce their impact on the environment by reducing pesticide, nutrient and pathogen flow into the surrounding streams.
- A water efficient nursery contributes less to stormwater flow, reducing the need for costly public stormwater projects.
- A water efficient nursery can look tidy and organised. Low runoff cuts down on the channelling of water, which can contribute to erosion.
- Water efficient management can improve the image of the business, by showing that you care for the environment.
- Water efficient nurseries are well prepared for the occurrence of drought or mains water supply failure.
- Water efficient businesses help reduce the demand for expensive water infrastructure projects, including dams, which often have to be situated in environmentally sensitive areas.

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WHERE YOU CAN SAVE WATER IN NURSERIES

Three main areas to focus on water efficiency in nurseries are:

IRRIGATION Many nurseries irrigate all plants to the needs of the driest, most water thirsty plant. This may mean that up to 80% of plants are receiving too much water! Irrigation must be designed and managed properly.

WATER RECYCLING Recycling water reduces consumption of mains water, and limits the amount of runoff from the site.

RUNOFF MANAGEMENT Managing runoff has many benefits, one of which is to help recover used water safely, for treatment and recycling.

TIPS FOR WATER SAVING

- Understand your water use – efficient water use can be achieved through setting targets once you understand your current use.
- Select and maintain efficient irrigation equipment. The irrigation system you select will depend on your plant offerings, desired flexibility and the water quality available.
- Use a good site design - the most appropriate site design will depend on how you wish to categorise the plants, the capacity and pressure available from your pumping unit or water supply, the variety of plants, rainfall patterns, soil properties and how many hours are available to irrigate the area.
- Zone irrigation areas to ensure that plants do not receive more water than they need. Group plants according to water requirements.
- Use pressure gauges to monitor water mains and sprinkler delivery pressure. Supply pressure should be matched to your irrigation systems. Too much pressure leads to evaporation loss through misting and uneven application. Too little pressure causes poor distribution.
- Minimise the use of hand watering.
- Water early morning or late evening; savings of up to 25% are possible.
- Link monitoring to automatic control systems or install timers on irrigation systems.
- Use wetting agents.
- Change watering schedules as required for seasonal variations.
- Investigate the use of recycled water from Hunter Water treatment plants.
- Consider installing rainwater tanks or using stormwater for irrigation.

WATER RECYCLING AND RUNOFF MANAGEMENT ALLOWS FURTHER USE OF WATER FOR FREE.

RECYCLING WATER CAN REDUCE FERTILISER NEEDS BY UP TO 30% AS EXCESS WATER DOESN'T LEACH IT OUT OF THE POTS.

WATER EFFICIENT NURSERIES ARE WELL PREPARED FOR THE OCCURRENCE OF DROUGHT OR MAINS WATER SUPPLY FAILURE.