

Principled about permaculture

Waggrakine resident, and Permaculture Nursery owner, Julie Firth, is a Green Champion from whom local residents could learn a lot.

Julie has been involved in promoting environmental solutions using permaculture principles for over 20 years and has put a lot of her knowledge into creating a residence that demonstrates "permaculture in action" in dryland climates.

Permaculture is the conscious design and maintenance of agriculturally productive ecosystems to create diverse, sustainable, and resilient natural ecosystems.

While it might seem complicated, Julie says that permaculture essentially demonstrates practical, sustainable ways to live.

Julie's nursery and home implements innumerable practices to reduce the household's impact on the environment.

Natural fertilisers are made from composted manure and other organic waste, so no chemicals are needed to enhance the gardens.

"We are particularly aware of only using composted manure, as opposed to raw manure, as the nutrient levels are sustained and don't leach away with the rains, reducing the frequency you need to fertilise food gardens," Julie said.

Julie also has strategies in place to minimise water consumption.

"We use predominantly rainwater captured from run off from the buildings and this is stored in tanks with 40,000 gallons catchment capacity.

"We don't use any sprinkler irrigation systems to water our gardens. Instead, we minimise evaporation by using drip irrigation and our nursery plants are hand



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watered. **irrigates**

"We have a grey water system that ~~trickles over~~ an amphitheatre covered in a lipia groundcover on the north side of the house and this is solely supported by the grey water.

"Pathways designed to run off to certain areas have allowed us to create microclimates that support higher water use plants — mainly sub-tropicals like

bananas and passionfruit, and they are flourishing.

"We have a policy of not letting a drop of water off the property, so every time it rains every single bit of water is captured in some way and held, even if it's in a depression in the land, because in that basin we might grow a productive tree that usually needs a little bit more water; therefore we don't have to supplement its

water requirements."

Bee hives on the property increase the rate of pollination for Julie's vegetables and orchard, with the added benefit of providing natural honey and bees wax.

"Our house is designed to capture the sun in winter, block it out in summer, and allow for through breezes, reducing our air conditioning and energy requirements."