



## Tanks for the petrol station

With support from the Little Stringybark Creek Project, Mount Evelyn Fast Fuel will soon install a stormwater harvesting system that will supply water to its car wash.

Stormwater will be collected from all sealed surfaces on the property and directed to rainwater tanks totaling 140,000L. The harvested water will then be treated to a high standard by a combination of filtration and UV exposure.

It is expected that the treated stormwater will supply 75% of the water used in the car wash, around 1,300,000L a year.

This not only helps save water, but greatly benefits Little Stringybark Creek, as this 1.3 ML of water will no longer barrel its way into the creek, causing erosion and destroying biodiversity.

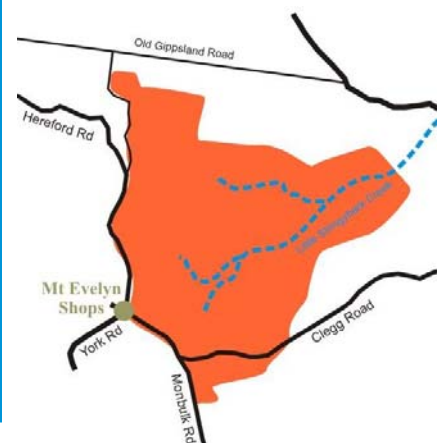
Some of the collected water will also be left to slowly trickle to the creek. This flow, which will be filtered, is designed to provide a natural baseflow to the Little Stringybark Creek, helping provide habitat for frogs and fish during dry periods.



*The Fast Fuel Petrol Station in Mount Evelyn (with Hereford Road Rain-gardens in foreground) will rainwater tanks installed that will supply their car wash.*

A research project working to restore the health of Little Stringybark Creek (Mount Evelyn) through the capture, use and treatment of stormwater.

- > **164** participating properties
- > **6 ha** of roof & road treated
- > **19.7 million litres** of stormwater harvested each year
- > **213** tanks installed (with total volume of over 1.5 million litres)
- > **3** 'neighbourhood' rain-gardens built



## Stormwater harvesting at Morrison Reserve

Work is nearing completion on the stormwater harvesting, re-use and treatment system at Morrison Reserve.

These works, jointly funded by the Little Stringybark Creek Project, Melbourne Water and Yarra Ranges Council, will capture stormwater from the Yarra Hills Secondary College in four large tanks (900,000 litres in total).

The harvested water will be used to irrigate the sports ovals, with any excess water (overflowing out of the tank) flowing into a series of vegetated rain-gardens, from where water will filter to the creek.



Above: construction of rainwater tanks and rain-gardens nears completion at Morrison Reserve.

## Monitoring efforts

Our monitoring team are regular visitors to Mount Evelyn, collecting research data from over 20 different locations. The type of information we collect varies considerably, but includes:

- > water use from domestic rainwater tanks
- > the diversity of macro-invertebrates in the creek
- > rates of stormwater inflow + outflow from raingardens
- > the quality of water in the creek; and
- > the amount and intensity of rainfall.

This information is important to all our research and will help us to understand what benefits the harvesting and treatment of stormwater has provided to Little Stringybark Creek.



Above: The monitoring vehicle is a regular visitor to the area, used to collect information at over 20 sites (shown here on Forge Road).

## Related research projects

Our project is doing more than treating stormwater in order to restore the Little Stringybark Creek. There are a range of complementary research questions that we are trying to answer at the same time, including:

- > How best to restore the natural flow patterns of urban creeks?
- > Can rainwater tanks assist in minimizing localised flooding?
- > How to encourage council and community participation in stormwater management initiatives?
- > What influence do rain-gardens have on the moisture in surrounding soils?
- > How does excess stormwater influence the in-stream habitat of macro-invertebrates?
- > At what scale (house, street or precinct) are stormwater treatment works most economical?