

## **Landscaping to weather the storm**

**By Haidi Bernhardt<sup>1</sup>**

An integral part of living in Australia is dealing with unpredictable weather. If you love a sunburnt country, then acceptance of its droughts and flooding rains is essential and must be taken into serious consideration when landscaping.

Drought has increasingly narrowed our focus upon water-saving techniques to the point where most have forgotten the need to safeguard against the equally ruinous effects of flood.

While the potential for flood damage will depend on a range of factors including the lie of the land with respect to surrounding development and stormwater drainage, it's not just homes near creeks and canals that can be in danger.

Wherever torrential rain becomes too much for gutters, drains, driveways and yards to divert or absorb, overland flows can develop into raging torrents that result in hundreds of thousands of dollars in damage. There are a number of ways harmful run-off can be reduced for the benefit of all.

Most of the following strategies can be implemented by a novice and maintained with minimal effort but it is always helpful to consult a landscaping professional.

### **Vegetation**

By retaining as much vegetation as possible, stormwater run-off is minimised in two ways. Firstly, plants help water soak into the soil and thereby help prevent flooding. In particular, deep rooted trees lower the water table, bind the soil and decrease run-off velocities while also filtering nutrients and capturing sediment. Plants and leafy ground cover also absorb the energy of heavy raindrops, reducing the loss of precious topsoil down the nearest stormwater drain.

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<sup>1</sup> In mid-2000, Haidi Bernhardt was engaged as a journalist under the Natural Disaster Mitigation Program to prepare a series of new articles. The aim of the news articles is to provide some awareness and education about flooding issues.

## **Soil**

The thing to remember here is porosity. The more porous the soil, the more water will be absorbed reducing run-off and increasing water retention to the benefit of your garden.

Sandy soils tend to drain well and are excellent for infiltration whereas heavily compacted soil is effectively sealed from successful absorption and clay based soils tend to become waterlogged. If you find your soil not soaking up the water, try improving the quality by introducing more porous varieties such as gypsum and adding a decent amount of organic matter to the mix.

## **Reduce Paved Areas**

Hard surfaces, especially driveways, become torrents in heavy rain, directing more run-off and faster flows to wherever they end, resulting in more damage.

Consider porous paving such as dry-laid bricks, gravel and pebbles or breaking up large tracts by planting Mondo grass and other small border plants in between pavers. If the prospect of digging up the driveway is too much to bear, think about installing a dry well at the bottom of the slope to capture excess run-off. The well can also be connected to underground stormwater systems to maximise dispersal.