

## AQUA PIOVANA PTY LTD

I believe that the issue of the drying out of our land in the urban environment is related to the fact that we no longer have the ability for rain to soak into the soil to create deep groundwater because so much property is taken up by buildings.

I would like to propose a scheme for harvesting water from every building into rainwater tanks for the needs of the building, and then to be diverted into the surrounding soil. This would prevent the necessity for governments to build more dams to feed thirsty cities, a scheme that has robbed the countryside of its rivers. If the government subsidised rain water tanks for every building this water could be recycled for garden and domestic use. Once the tank was full, excess water could be used to rehydrate the surrounding soil through the use of a new invention called a Water Diverter. This device is attached to every down pipe and the water can be channelled through a sprinkler system or water hose out over the soil so that all the water off the roof is used to either diminish the use of water from the dams or to promote healthy ground water levels. Across the country there are millions of houses where water could be harvested in this way. We don't need new dams. We need each individual house to use water wisely.

The Water Diverter can also be used to run a sprinkler system on the roof in the event of a bushfire as it recirculates water from the sprinkler back into the tank and then back into the sprinkler again, so that water is not lost in the process. This gives far more time and volume of water than a normal system.

The fact that less of our rainwater will eventually go out to sea through the drain system also benefits coastal areas. When rainwater mixes with the saltwater it evaporates at a faster rate and the resulting rain systems are more likely to cause floods.

Signed: Charles Vella