

Treated stormwater safe for growing food

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Vegetable gardens can be watered with treated stormwater

Treated stormwater is safe to use on your humble household vegetable patch according to a new report by the Center for Water Sensitive Cities at Monash University.

The study found that vegetables watered with treated stormwater, normally associated with having strong levels of [heavy metals](#) such as lead, and increased pollutants, were just as safe to eat as vegetables irrigated from mains water supplies.

Dr. David McCarthy from the Centre for Water Sensitive Cities said two major findings emerged from the study.

“We found that using treated stormwater did not noticeably increase the level of contamination in the vegetables when compared with those

irrigated with mains water. Secondly, it seemed that the most likely route of pollutants entering the [vegetables](#) was through the soil or possibly through the atmosphere,” Dr. McCarthy said.

The study took place in Brunswick East, Victoria and involved monitoring the performance of two treatment systems that ran stormwater through a sand-based filtration system before being stored for use as irrigation water. One system was vegetated and the other non-vegetated.

The water, soil and vegetable samples were monitored from two different gardens. Samples were taken before and after the treatment system to compare each system’s performance.

The first irrigated system used normal drinking water and recycled stormwater was used on the second. The samples from both gardens were then compared to determine their quality and whether stormwater was likely to increase their [pollution](#) level.

Melbourne’s water consumption is estimated at 1040 million litres per day and 20 per cent of water consumed by the average household is used in the garden.

Dr. McCarthy hoped the research would help to change people’s behaviours in relation to water use in the garden and dramatically reduce pressure on mains water supply.

“We use treated stormwater for irrigation of our normal household gardens and toilet flushing, but this research proves that we can also use stormwater for growing food. All of these actions can help reduce pressure on our precious [water](#) supplies,” Dr. McCarthy said.

“I hope that stormwater will now become a viable option for the

irrigation of vegetable gardens at both the household and community garden scale.”

Provided by Monash University

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