

# Creek Restoration.....

## Creek Restoration the natural way, with a little help from Bushcare South Lawson Park Bushcare Group and Lawson StreamWatch

Article by Peter Ardrill

In 2010 Lawson Creek was overwhelmed by massive amounts of silt that had been transported by heavy rains from a collapsed track and building site along the Great Western Highway.

A 200 metre section of healthy bushland creek was reduced to a shallow trickle of water (*Image 1*) and these conditions made it impossible for water insects (bugs), crayfish and tadpoles to exist.

Bushcare members alerted Council and sediment controls across sections of the creek, to try and disperse the sand were installed. Fortunately, lots of professional bush regeneration and volunteer bushcare work had been done in the area, and the surrounding natural bushland was very healthy, with a good mix of trees, shrubs and groundcovers.

This bushland served as an important restoration function. Natural debris from the trees and shrubs, such as large branches, bark, sticks and leaf litter, was constantly being deposited in the creek. It further dispersed the sand and created riffles and pools, steadily replacing the aquatic fauna habitat that had been smothered in the sand.

Amy St Lawrence, Council's Aquatic Systems Officer, explained: "Bug recolonisation relies on having intact bug populations/communities nearby...different types of water-bugs will recolonise in different ways, providing their water quality and habitat requirements recover."

In 2015 the StreamWatch Group recommenced water quality testing on the site, with good results. But one question remained - would the bugs come back?

Over the years more of the deposited sand was transported downstream, and by 2018 the creek was starting to resemble its former healthy condition, displaying a few deep pools, some good natural habitat of logs and other fallen timber, and a layer of decayed leaf litter along the banks and channel (*Image 2*).

In May, 2019, the StreamWatch volunteers tested for bug life in the water. And we got them! Mayfly nymphs, which are very sensitive to pollution, so that was pleasing, and also damselfly nymphs, dragonfly nymphs, boatmen and water treaders, and crayfish and tadpoles.

Amy explained the re-colonisation process: "Insects probably hatched at the site from eggs laid by adults that decided your pools were suitable; adults that possibly came from further downstream on Lawson Creek. Your large crayfish may have been there all along despite the sedimentation, or may have moved overland from a pool downstream or a nearby creek."

What if there had been a wall of weeds, such as privet or blackberry, and not natural bushland, along the creek? It is quite likely that the damage may not even have been noticed, and that the weeds would have colonised most or even all of the silted creek. Bushcare makes a difference, in lots of different ways.

Further information and illustrations: <https://southlawsonpark.bushcarebluemountains.org.au/lawson-creek/>



Image 1: Silted Lawson Creek 2010  
Photo: Peter Ardrill



Image 2: Natural debris in Lawson Creek, October 2018  
Photo: Peter Ardrill

