

Small Creek

Community Concerns

Flooding

Throughout the design phase extensive modelling has been and will continue to be done on the creek and surrounding area to ensure that Small Creek poses no additional flood risks and addresses existing flooding issues where possible.

Snakes

A local snake catcher advised that the cracking black soils of the local area have always been a snake habitat, and that all the new housing estates provide good habitat for snakes as they attract mice and other sources of food, and most people are oblivious to the snakes in the area. Revegetation of the creek is unlikely to result in any significant change to the number of snakes in the area. Kookaburras and other birds prey on snakes and small reptiles, also helping keep the ecosystem in balance.

Mosquitos

Mosquitos thrive in small isolated pools of water such as those along the existing concrete drain that fill after storm events. In these pools, mosquitos can breed quickly where there are few natural predators.

In a healthy balanced ecosystem, mosquito larvae are kept in check by fish, tadpoles and dragonfly and caddisfly nymphs, and adult mosquitos are hunted on the wing by dragonflies and microbats. Studies of stage one and two have already discovered fish species that eat mosquito larvae.

The concept design includes deeper permanent pools that will provide habitat for fish, rock riffles that are preferred habitat for nymphs, and a tree canopy to provide habitat for bats and predatory insects. Floodplain areas are designed to be free draining back towards the main low flow channel, and there should be fewer small isolated pockets of water as a result of the works.

Cane toads

Cane toads like waterbodies surrounded by well mown grassy areas. The concept design ensures all water is fringed by dense vegetation to help encourage native frogs and deter cane toads. However, cane toads are difficult to eradicate and will require ongoing management.

Typha

Typha, also known as bull rushes or cumbungi, is prevalent in the open drains upstream of the site. In constructed drains, typha is considered an invasive weed as it can interfere with the flow of water, and the biggest problems occur when drains are engineered assuming they will have turf or short grass without regard for the impact that typha infestations will have on conveyance.

The concept design seeks to minimise the overall area of standing water and saturated soil by having a defined low flow channel. Typha needs ample sunlight to thrive, so the concept design also maximises shade around permanently wet areas.

Sightlines

Currently the wide open expanses of concrete and lawn means it's easy to see a long way along the corridor from many points. The concept design will see many more plants growing in Small Creek, and so principles of CPTED (Crime Prevention Through Environmental Design) have been used to help manage perceptions of security and comfort.

Community creek care

Waterways in urban environments require ongoing care such as removing invasive weeds and litter. To be successful, management of the creek will need to be a shared effort between Council and the community.