



## Natural Selection

**While concrete kerb and guttering and drainage lines are typical of the traditional Australian suburban scene, they can contribute to the degradation of our waterways.**

In Lake Macquarie, it adds up to a major impact on water quality and marine life.

Concrete drainage lines have been constructed in almost all suburban areas and are considered a part of essential infrastructure in modern sub-divisions and housing estates. While it is a requirement and an expectation of land developers to provide drainage infrastructure, some progressive developers are now installing vegetated swales to mimic the natural versions. The recently gazetted Lake Macquarie LEP promotes the use of these strategies.

and guttering which you'll find around most modern Australian neighbourhoods, we've got the natural grass swales."

"I'm certainly not complaining. The grass catches sediments from the stormwater and absorbs it into the soil, so the water that flows into the drain and ends up in Lake Macquarie is much cleaner."

"The vegetation also filters out litter which you might normally see carried down drains and into our waterways."

Hamish Meek says that with minimal care and maintenance, vegetated swales can be attractive



**Mark Saunders, Project Management Officer for The Office of the Lake Macquarie & Catchment Coordinator in Moore Street Toronto, where grassed swales line the street in place of concrete kerb and guttering.**

Natural vegetated drainage lines slow down and limit the amount of stormwater that ends up in Lake Macquarie. In a natural drainage line a portion of stormwater is absorbed into the soil, while the water that reaches our waterways is filtered of sediments and nutrients which

can be harmful to the water quality. Toronto resident Hamish Meek says that nature's own "kerb and guttering" systems work just fine, and he should know.

Mr Meek's property and most of the surrounding neighbourhood features healthy vegetated swales that help filter stormwater, absorb run-off and contribute to a healthier Lake Macquarie.

"Instead of the concrete kerb

and efficient.

"We normally mow the swales once a fortnight in season and maybe once a month during winter.

We don't have to sweep rubbish

and we reuse clippings and leaves as mulch."

Mr Meek says that the swales are so effective at managing overflow after heavy rain

that he would be opposed to concrete kerb and guttering being introduced in the area.

"I would fight against it for sure."

"I think more communities should be encouraged to reinstate vegetated swales and drainage lines instead of concrete systems."

"It's one way of slowing down the flow of sediments into the Lake."

**"Instead of the concrete kerb and guttering which you'll find around most modern Australian neighbourhoods, we've got the natural grass swales."**

