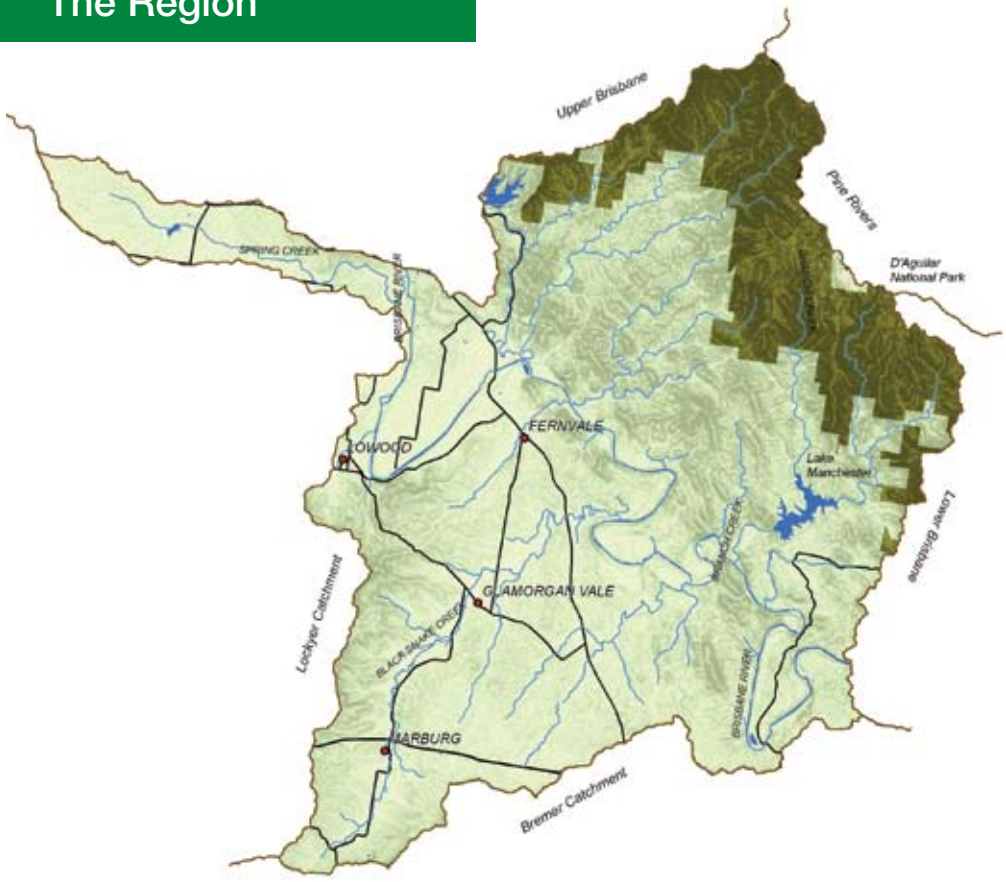
SEQ Catchments
Healthy Land – Healthy Water

MID BRISBANE CATCHMENT

The Mid Brisbane Catchment extends over 552 km and encompasses some 65 kms of the Brisbane River from the wall of Wivenhoe Dam to Mt Crosby Weir. It is bounded on the north and east by the D'Aguliar Range and Brisbane Forest Park.

SEQ Catchments works in partnership with landholders, government, business, Traditional Owners, education community and research organisations, to protect, repair and rehabilitate the catchments of South East Queensland. Much of the on-ground work in the Mid Brisbane Catchment is undertaken by landowners and community volunteers including members from West Moreton Landcare Inc, Mid Brisbane River Irrigators Inc and numerous environmental protection groups.

The Region



Grazing Lands

MID BRISBANE CATCHMENT

Water Hyacinth

Natural Assets

- Clean waterways
- Healthy soil
- Terriestrial biodiversity
- Landcape amenity
- Clean air

Brisbane River

Twin Bridges, Fernvale

Biodiversity

Biodiversity refers to the variety of all life forms - the different plants, animals and micro organisms, the genes they contain, and the ecosystems of which they form a part.[1]

The Mid Brisbane Catchment is home to many threatened native plant and animal species. Large areas of wildlife habitat have been damaged or removed as a result of development to meet the needs of the growing population. Habitats, food sources and breeding grounds for native species face a range of threats including habitat fragmentation and infestations of pests.

Wildlife corridors that link remnant vegetation are important, especially for such species as the vulnerable Glossy Black cockatoo and Tusked frog. Without careful management, environmental weeds and feral animals typically out compete native flora and fauna, causing native populations to diminish.

SEQ Catchments is working with landowners, Landcare, conservation groups and Government across the Mid Brisbane Catchment to enhance biodiversity and regional riparian corridors by mapping priority management areas, removing pest weeds, planting native plants, monitoring water quality, enhancing habitats for native animals and encouraging the implementation of sustainable land management practices.

The voluntary Land for Wildlife program encourages landholders to adopt land management practices that protect and enhance wildlife habitat. There are more than 50 landholders in the Mid Brisbane Catchment involved in the Land for Wildlife program.

Regional ecosystems are natural communities of vegetation that are consistently associated with a particular combination of geology, land form and soil in a bioregion.[2]

Eastern Water Dragon

Managing the Land

The Mid Brisbane Catchment ranges from rainforest and open forest in the D'Aguilar National Park to agricultural land and features relatively intact regional riparian corridors adjacent to the Brisbane river, Remnants of the endangered Brigalow and the historic Rosewood Scrub can still be seen on some of the hill slopes overlooking the catchment. The catchment features a diverse range of land uses including grazing, intensive agriculture, managed forestry, natural areas for recreation purposes, rural lifestyle blocks, urban development and industry. Some of the more popular natural areas in the catchment include the Twin Bridges at Fernvale, Colleges Crossing at Chuwar and the D'Aguilar National Park.

Agricultural and conservation land faces increasing challenges in parts of the catchment. Climate change predictions suggest that impacts over the coming decades are expected to include more intensive storms, rising sea levels leading to coastal flooding and erosion, and temperature rises leading to habitat loss for many native species. Population growth in the region, along with its consequential supply and demand pressure on primary production and natural resources, raises further challenges for land managers in the catchment.

SEQ Catchments is working in partnership with local landholders, Seqwater, the Mid Brisbane River Irrigators and Somerset Regional Council to assist more than sixty land owners and irrigators develop sub-regional plans and property management plans.

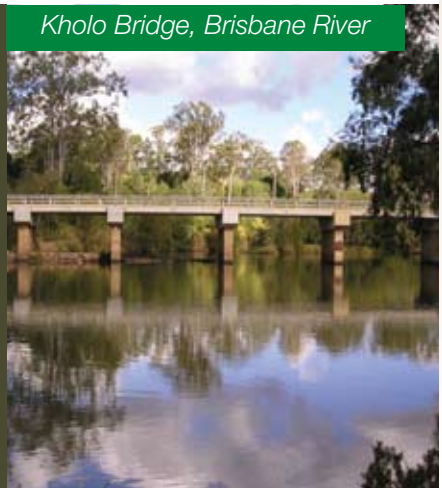
Actions taken by landholders and Seqwater to stabalise stream banks and gullies, reduce sediment run-off and improve water quality in the Brisbane River, include maintaining good grass and tree cover, reducing land and aquatic weed infestations and improving soil health.

SEQ Catchments works with various partners in the Mid Bisbane Catchment conducting workshops and field days for land managers. SEQ Catchments also offer Property Management Planning services (which includes the provision of high resolution property maps) to landholders to assist them manage the productivity and sustainability of their lands.

Major Threats

- Streambank, hillslope and gully erosion
- Aquatic weeds
- Pest plants
- Salinity

Kholo Bridge, Brisbane River



Managing Water Quality

The Brisbane River stretches the length of the catchment from the Wivenhoe Dam wall to Mt Crosby Weir, where its flow is regulated by releases from the Wivenhoe Dam. Other main water bodies include Lake Manchester and seven main creeks: Lockyer Creek, Banks Creek, Black Snake Creek, Branch Creek, Cabbage Tree Creek, England Creek and Sandy Creek.

Aquatic weeds, such as Water Hyacinth and Water Lettuce are major problems in the mid reaches of the Brisbane River, especially during dry periods. Aquatic weeds require timely and effective management to limit the impacts of riverine degradation. They can lower oxygen in the water and change native species habitat. They clog pumps damage infrastructure and affect the quality of water in Brisbane and Moreton Bay when there are sizable flows in the river.

Water quality is important for maintaining the health of the catchment and all that lives in it, including the vulnerable Queensland Lungfish. Soil health and water quality improvements along with increased productivity levels can be achieved through the adoption of sustainable land management practices. Maximising groundcover to reduce soil erosion from wind and water, retaining groundwater, improving rainfall penetrability and stemming the flow of nutrient and sediment flow to the waterways are all actions that will contribute to a healthy and productive catchment. The protection of wildlife habitats and riparian vegetation, contribute significantly to the stabilization of creek and river banks and waterway health. Low intensity grazing and water efficient irrigation practices also benefit the catchment by increasing the retention of nutrients on properties.

Rainbow Lorikeet

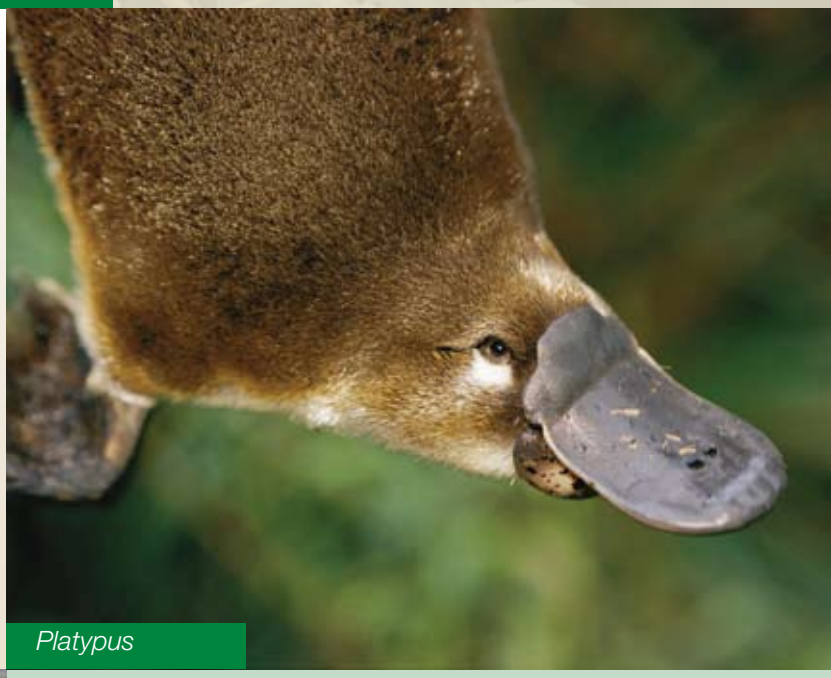
Platypus - An indicator of waterway health

CASE STUDY

The platypus (*Ornithorhynchus anatinus*) is found in the Mid Brisbane catchment, which is a positive indicator of waterway health. The platypus only lives in Australia and is a protected species by law. However, it has been increasingly threatened by habitat loss and degradation due to densely populated areas where human activity impacts on the waterways.

Platypus can be found in creeks, rivers and lakes, where they eat up to one third of their body weight each day. Depletion of food sources and poor water quality can threaten the platypus and its habitat.

SEQ Catchments, landholders, Seqwater and others have undertaken numerous projects to improve the health of the waterways where platypus live, including enhancing riparian vegetation, controlling erosion and sediment run-off and reducing pollutants entering the waterways.[3]



Platypus

Brisbane River

References

[1] National Biodiversity Strategy Review Task Group 2009, *Australia's Biodiversity Conservation Strategy 2010–2020, Consultation Draft*, Australian Government, Department of the Environment, Water, Heritage and the Arts, Canberra, ACT.

[2] Department of Environment and Resource Management 2009, *Vegetation Communities*, [Internet].
Available at: www.derm.qld.gov.au/vegetation/bioregions.html

[3] Department of Anatomy & Physiology 1997, *The Platypus*, University of Tasmania [Internet].
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For more information

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