



Bremer River

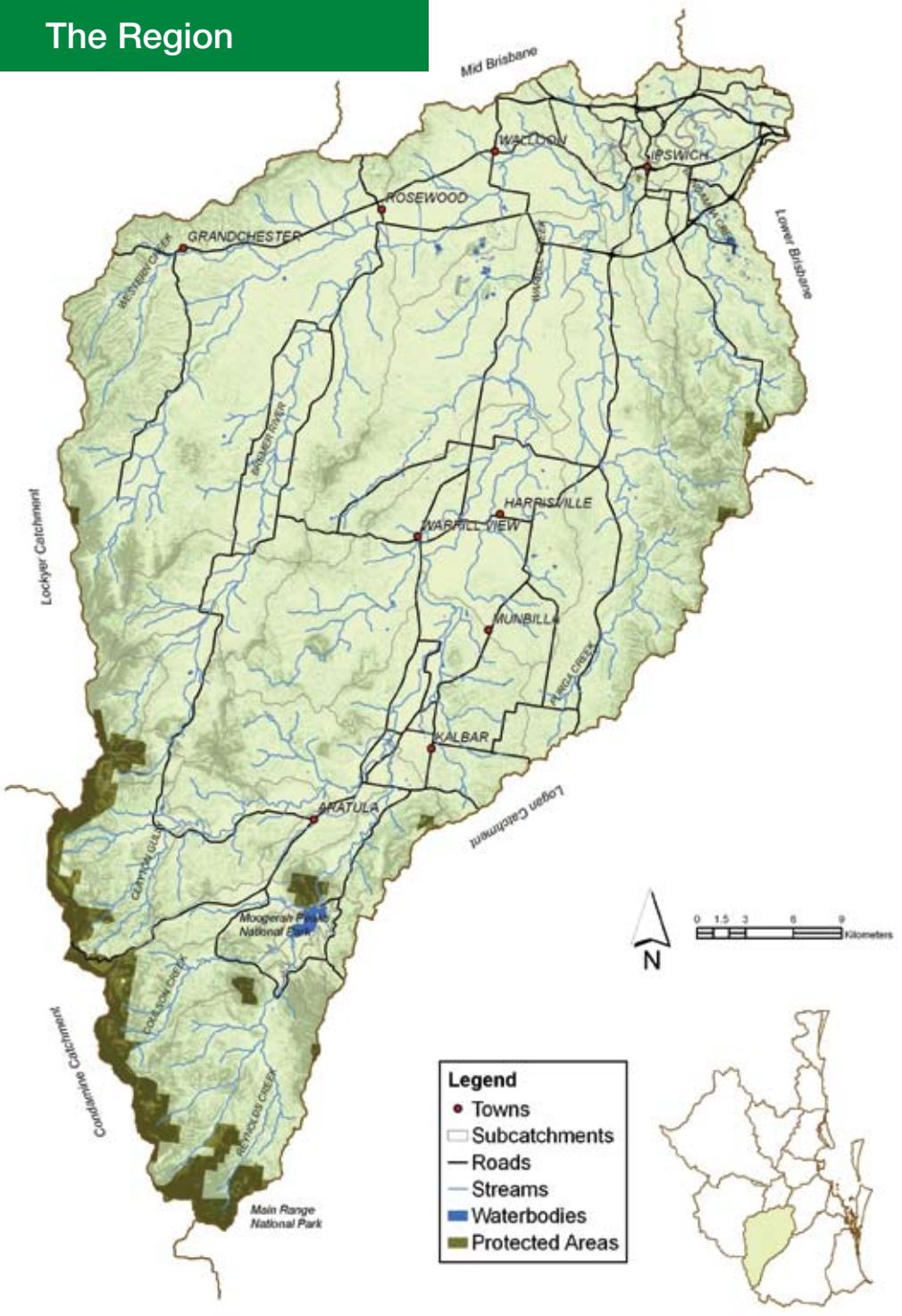


# BREMER RIVER CATCHMENT

The Bremer River Catchment covers approximately 2030 km<sup>2</sup> and is bounded by the Main Range National Park to the south, Flinders Peak to the east and Mt Mort to the west. The tidal reaches of the Bremer River extend some 17km upstream from its confluence with Brisbane River to the Ipswich CBD.<sup>1</sup>

SEQ Catchments works in partnership with landholders, government, landcare and catchment groups, corporate businesses, Traditional Owners, education, community and research organisations, to protect, repair and rehabilitate the catchments of South East Queensland.

## The Region



Brush Tailed Wallaby



View from Spicers Gap

# BREMER RIVER CATCHMENT



Bremer River



Spotted-tailed Quoll

## 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.*<sup>2</sup>

The Bremer River 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 species such as the vulnerable Spotted-tailed Quoll which need remnant vegetation and corridors to link remnant areas and create paths for movement in order to adapt to different environments and changing climatic conditions. The introduction of environmental weeds and pest animals typically outcompete native flora and fauna, causing declines in local populations.

SEQ Catchments is working with landholders, Landcare, catchment and conservation groups and Government to enhance biodiversity and riparian corridors by mapping priority management areas, removing weeds such as Lantana and Celtis, planting native plants, monitoring water quality, creating 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 100 landholders in the catchment participating in this program, which is coordinated by SEQ Catchments and delivered by Ipswich City Council and Scenic Rim Regional Council.

*Regional ecosystems are natural communities of vegetation that are consistently associated with a particular combination of geology, land form and soil in a bioregion.*<sup>2</sup>

Photographer: Darryl Larsen



## Natural Assets

- Biodiversity
- Productive land
- Natural areas
- Waterways



## Managing the Land

There are a diverse range of land uses across the Bremer River Catchment. Over half the area is grazed with other areas used for horticulture, mining, lifestyle blocks, urban development, industry and natural areas. Crops, including potatoes and carrots, are grown in the catchment's rich alluvial soil areas.<sup>1</sup> Natural areas include the National Parks of Scenic Rim, Main Range (listed World Heritage Area) and Mt French, and numerous nature reserves and conservation areas, such as Ivory's Rock, Mt Goolman, Spring Mountain, Spicers Gap, Flinders Peak and the Teviot Range.

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

Sustainable land management practices can reduce degradation and increase productivity, in part by maximising groundcover to reduce exposed soil and erosion, retain groundwater and halt sediment flow into the waterways. SEQ Catchments is working with land managers to rehabilitate part of the Bremer River and reduce streambank erosion on properties. SEQ Catchments also provide opportunities for land managers to increase their knowledge of sustainable land management practices at field days and workshops; and offer Property Management Planning services including property maps to assist landholders to improve productivity and sustainability.

SEQ Catchments has worked in partnership with Queensland Parks and Wildlife Service, the Rosevale and Tarome Rural Fire Brigades and Queensland Fire and Rescue Service to develop and guide sustainable fire regimes to improve the land condition of some 9000 hectares of National Park and grazing country.

## Managing Water Quality

Six major waterways flow through the Bremer River Catchment: the Bremer River, Bundamba Creek, Purga Creek, Reynolds Creek, Warrill Creek and Western Creek. Moogerah Dam supplies irrigation and drinking water for a large proportion of the catchment.<sup>1</sup> Wetlands in the catchment, include Purga Nature Reserve and Bundamba Lagoon (otherwise referred to as Daly's Lagoon) near Ripley. These wetlands are important for the health of the surrounding land and waterways and provide habitat to a diverse range of bird species, including migratory wader birds.

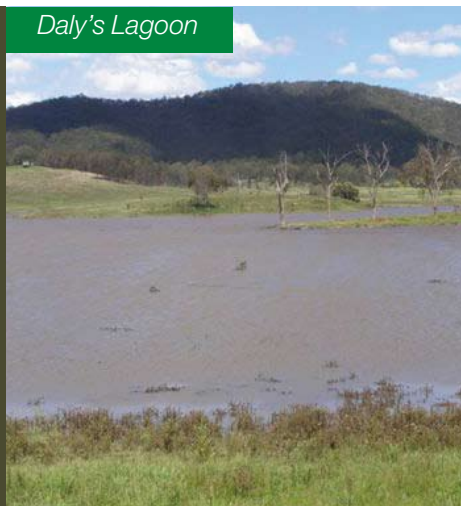
A healthy catchment is reliant on the quality of its waters. Soil health and water quality improvements along with increased productivity levels can be achieved through the adoption of sustainable land management practices. Maximising groundcover to reduce soil erosion from wind and water, retaining 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 stabilisation of creek and river banks and waterway health.

Efforts to improve water quality in the catchment have been undertaken through the "Healthy Country" demonstration project, using the best available science to identify ways to reduce rural sediment runoff and pollutant loads entering Moreton Bay. The program involves collaborative research, waterway restoration and sustainable land management, including field trials. This project is a partnership between SEQ Catchments, the Queensland Government's Department of Environment and Resource Management and Department of Employment, Economic Development, South East Queensland Traditional Owners Alliance, SEQ Healthy Waterways Partnership and the community.

## Major Threats

- Climate change
- Population growth and development
- Unsustainable land use
- Drought
- Inappropriate use of fire
- Fragmented habitat
- Weeds and pest animals

Daly's Lagoon



Peak Crossing

## Rare Community: Swamp Tea-tree Forest

The Bremer Catchment is home to the endangered Swamp Tea-tree (*Melaleuca irbyana*) Forest, a vegetation community found only in restricted areas of South East Queensland. Swamp Tea-tree Forest also provides habitat for numerous bird, frog and mammal species, including koalas. In good condition this forest contains a diversity of native grasses and herbs in the ground layer.

Swamp Tea-tree Forest has been extensively cleared in the past. Current remnants are small, scattered and threatened due to further clearing, incompatible land use, pest and inappropriate fire.

SEQ Catchments and partners are working to conserve the Swamp Tea Tree Forest with support from the Australian Government's Caring for our Country initiative, Powerlink GreenWorks and Logan City, Lockyer Valley Regional and Scenic Rim Regional Councils.

## CASE STUDY



Swamp Tea-tree



### References

- <sup>1</sup> Ipswich City Council 2010, Bremer Catchment, Natural Resources, [Internet]. Available at: [http://www.ipswich.qld.gov.au/residents/healthy\\_lifestyle/waterways/natural\\_resources/](http://www.ipswich.qld.gov.au/residents/healthy_lifestyle/waterways/natural_resources/)
- <sup>2</sup> 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.
- <sup>3</sup> The State of Queensland (Department of Environment and Resource Management) 2010, *Threatened Species*, [Internet]. Available at: [www.derm.qld.gov.au/wildlife-ecosystems/wildlife/threatened\\_plants\\_and\\_animals/index.html](http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/threatened_plants_and_animals/index.html)

### For more information

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