

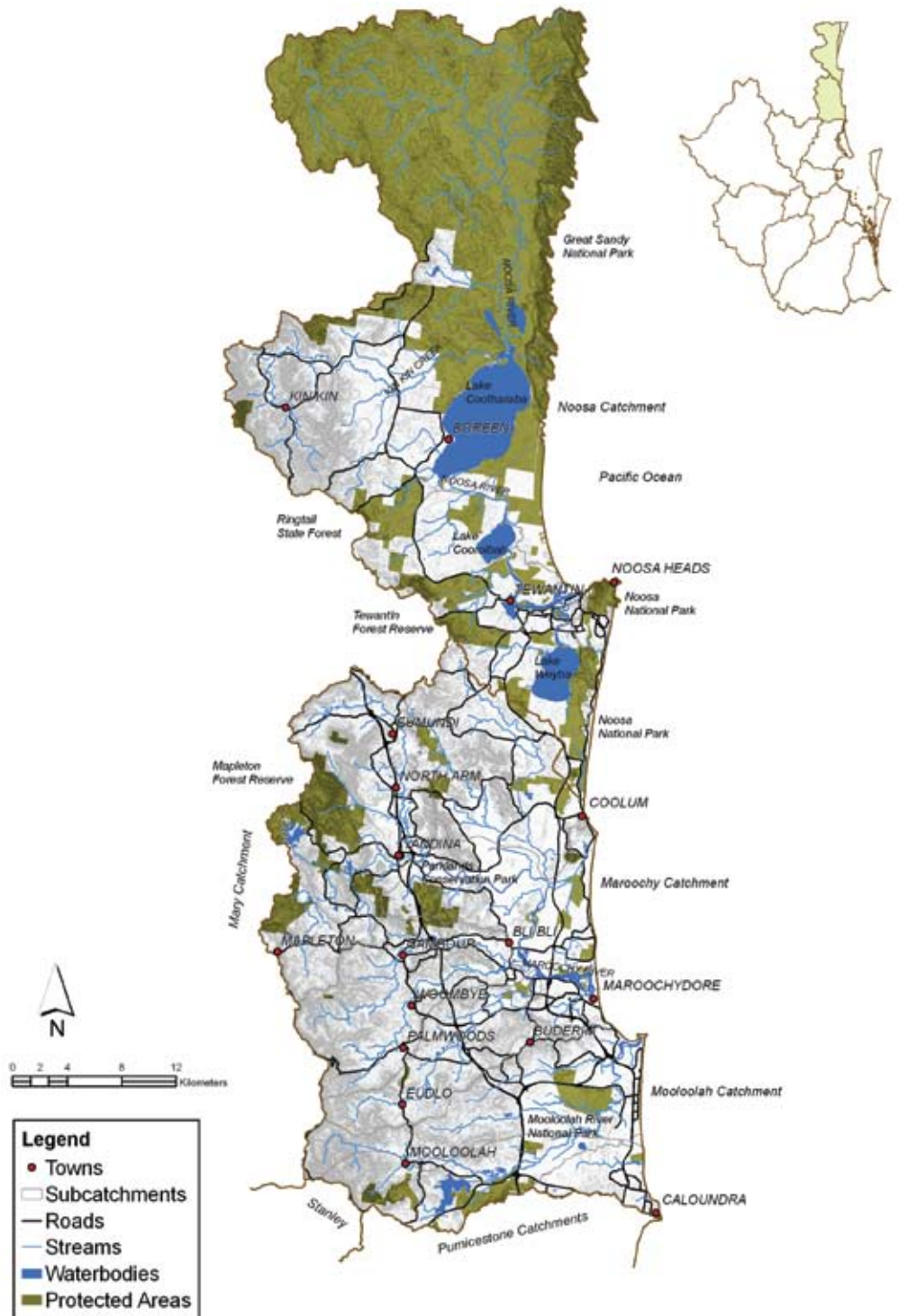


# NORTHERN REGION CATCHMENT

The Northern Region covers 1757km<sup>2</sup> stretching along beaches and headlands from Caloundra in the South, to Noosa and further into the Great Sandy National Park in the North. The three catchments of the Noosa, Maroochy and Mooloolah Rivers extend across many lakes, tributaries, and productive lands to the scenic Sunshine Coast hinterland.

SEQ Catchments works in partnership with landholders, government, corporate businesses, Traditional Owners, education and research organisations, schools and community groups to protect, repair and rehabilitate the catchments of South East Queensland. A large proportion of the work on the ground is achieved by landholders and volunteers involved in community groups, such as the Noosa Integrated Catchment Association, Noosa and District Landcare, Coolool and District Coastcare, Maroochy Waterwatch, Maroochy Landcare, Barung Landcare, Mooloolah Waterwatch and Landcare, Night Eyes, Lake Baroon Catchment Care Group, Sunshine Coast Environmental Council, Wildlife Preservation Society of Qld Sunshine Coast Branch, Noosa Parks Association, Currimundi Catchment Care Group, numerous Bushcare groups under the auspices of Sunshine Coast Regional Council and environmental protection groups. SEQ Catchments also works closely with the Sunshine Coast Regional Council and state agencies, particularly the Department of Environment and Resource Management, Queensland Primary Industries and Fisheries and Seqwater.

## The Region



# NORTHERN REGION CATCHMENT

## 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>1</sup> The diverse habitats in the Northern Region range from mangroves to rainforests, and provide homes to 91 threatened flora species and 68 threatened fauna species.<sup>2</sup> Wildlife habitat areas have declined across the catchments as human and climatic pressures have increased. The vulnerable Richmond Birdwing Butterfly and Giant Barred-Frog, among others, need healthy habitats in order to adapt to different environments and changing climatic conditions. Environmental weeds and pest animals typically outcompete native flora and fauna, causing declines in local populations.

Some regional ecosystems in which many of these species live are also under threat and require protection from encroaching weeds and pest animals, changed land uses and mismanaged land. 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>3</sup>

In an effort to protect and restore the important biodiversity and other natural assets, SEQ Catchments works with Landcare, catchment and conservation groups across the Northern Region to enhance biodiversity and riparian corridors. This is undertaken by mapping priority management areas, removing weeds such as Lantana, Madeira Vine, Morning Glory and Camphor Laurel, planting native plants, monitoring water quality, creating habitats for native animals and plants, and supporting landholders to undertake sustainable land management practices to achieve increased productivity and profitability. Other activities include mapping Camphor Laurel infestations using satellite imagery ground-truthed by the community groups, and supporting landholders with conservation incentives for wetland, riparian and landslip protection such as eTrees to achieve vegetation offsets and other grants.

The voluntary Land for Wildlife program also enhances biodiversity values as landholders agree to manage their land in ways that protect and enhance wildlife habitat. There are more than 950 landholders in the Northern Region participating in this program, which is coordinated regionally by SEQ Catchments and delivered across the area by Land for Wildlife officers in the Sunshine Coast Regional Council.

## Natural Assets

- Biodiversity
- Productive land
- Natural areas
- Waterways
- Coastal and marine areas

Erosion control in Noosa River



## Major Threats

- Climate change
- Population growth and development
- Unsustainable land use
- Habitat fragmentation
- Weeds and pest animals

Maroochy Boardwalk





## Managing the Land

There is a diverse range of rural land uses across the Northern Region, including horticulture (ginger, cane, turf, avocados, strawberries, pineapples and small crops), grazing, farm forestry, recreation, lifestyle blocks, urban development, light and heavy industries, extractive industries and conservation. Some of the more popular protected natural areas include the National Parks of Noosa, Mt Coolum, Mooloolah River, Kondalilla and Conondale, Cooloolabin State Forest, Mapleton Forest Reserve (border) and Currimundi Lake Conservation Park.

Areas of international, national, regional and local significance are found in the Northern Region, including the Maroochy-Noosa Wallum Corridor (National Estate listed), Maroochy Wetlands (part of the Moreton Bay international Ramsar site) and the Noosa Biosphere Reserve (United Nations Environment, Scientific and Cultural Organisation (UNESCO) for Man and the Environment listed).

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. SEQ Catchments supports research and implementation of community-based climate change adaptation across the catchments.

The Northern Region has a rich agricultural history of cane, sub-tropical fruits, ginger and grazing. Such land uses have changed over the years as infrastructure development has increased. The tourism industry in the region has also risen dramatically, placing additional pressure on local catchments.

Landslips, another threatening process, are a form of erosion that are generally caused by the removal of deep rooted vegetation on unstable landforms combined with the lubrication of the shallow groundwater by ponded water on the slopes. Landslips can shift massive amounts of sediments to waterways, making them turbid and fill waterholes. SEQ Catchments works collaboratively with the community and council to prevent and repair landslips, mainly on the eastern slopes of the Blackall Range where several major landslips are having significant impacts on waterways and infrastructure in the area.

SEQ Catchments is also working with land managers and other partners to enhance the Northern Region catchments by encouraging property management planning and improved pasture and nutrient management including on-farm composting and other organic soil improvements. SEQ Catchments is also supportive of indigenous involvement in natural resource management, funding work crews and training.

## Managing Water Quality

The three major catchments in the Northern Region feature many waterways, lakes and dams. The Noosa River catchment includes the Noosa River, Kin Kin and Teewah Creeks, Lakes Cootharaba, Cooribah and Weyba. The Maroochy River catchment includes the North and South Maroochy River, Paynter, Petrie, Eudlo, Coolum, Doonan and Yandina Creeks, Cooloolabin, Poona and Wappa Dams. The Mooloolah River Catchment includes the Mooloolah River and Sippy, Adlington and Mountain Creeks. The coastal catchments of Currimundi and Stumer Creek flow directly to the ocean.

Healthy water quality is important for maintaining the health of the catchment and all that lives in it. Sustainable land management practices can reduce degradation and increase productivity by maximising groundcover to reduce soil erosion from wind and water, improve soil health, retain groundwater and stem the flow of nutrient and sediment flow to the waterways. Riparian species are also important as they play a significant role in stabilising creek and river banks and maintaining waterway health. Freshwater and tidal wetlands are also important as they reduce flood impacts, absorb pollutants, improve water quality and provide habitat for animals and plants.<sup>3</sup>

SEQ Catchments works with community groups and land managers to improve water quality in the catchments by undertaking water quality monitoring, protecting and restoring riparian and wetland vegetation, stabilising streambanks, promoting waterways education and supporting community groundwater monitoring. Efforts to build resilience in the coastal zone and monitor marine species and areas affected by the Pacific Adventurer oil spill in March 2009 have also been undertaken by volunteers and agencies coordinated by the Sunshine Coast Regional Council with support from SEQ Catchments.

Mangroves





## CASE STUDY

## Koalas – Under threat of extinction



The Koala (*Phascolarctos cinereus* – southeast Queensland bioregion) is under threat of extinction in the North Region and most of the eastern section of South East Queensland according to the Australian Koala Foundation.

Koala habitats have been largely lost due to changed land uses and bushfires. SEQ Catchments, land holders, government agencies and conservation groups are working collaboratively to save Koalas by protecting and rehabilitating biodiversity corridors, including bushland and urbanised koala habitat areas.

### References

- <sup>1</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>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, *Vegetation Communities*, [Internet]. Available at: [www.derm.qld.gov.au/vegetation/bioregions.html](http://www.derm.qld.gov.au/vegetation/bioregions.html)
- <sup>4</sup> Commonwealth of Australia 2009, *About Wetlands*, [Internet]. Available at: [www.environment.gov.au/water/topics/wetlands/about/index.html](http://www.environment.gov.au/water/topics/wetlands/about/index.html)



### For more information

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