

Sunshine Coast
Biodiversity Report 2024



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Acknowledgements

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Reference document

This document should
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Cover image

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Traditional acknowledgement

Sunshine Coast Council acknowledges the
Sunshine Coast Country, home of the Kabi
Kabi peoples and the Jinibara peoples, the
Traditional Custodians, whose lands and
waters we all now share.

We recognise that these have always been
places of cultural, spiritual, social and
economic significance. The Traditional
Custodians' unique values, and ancient and
enduring cultures, deepen and enrich the life
of our community.

We commit to working in partnership with
the Traditional Custodians and the broader
First Nations (Aboriginal and Torres Strait
Islander) communities to support self-
determination through economic and
community development.

Truth telling is a significant part of our
journey. We are committed to better
understanding the collective histories of the
Sunshine Coast and the experiences of First
Nations peoples. Legacy issues resulting
from colonisation are still experienced by
Traditional Custodians and First Nations
peoples.

We recognise our shared history and will
continue to work in partnership to provide
a foundation for building a shared future
with the Kabi Kabi peoples and the Jinibara
peoples.

We wish to pay respect to their Elders – past,
present and emerging, and acknowledge
the important role First Nations peoples
continue to play within the Sunshine Coast
community.

Together, we are all stronger.



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The strategic pathway to a healthy and liveable Sunshine Coast

The Sunshine Coast Local Government Area is recognised by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as a biosphere reserve, where responsible development and people living sustainably sit alongside active conservation. Protecting, enhancing and restoring our region's biodiversity is critical to maintain the Sunshine Coast Biosphere reserve for future generations.

Council's **Environment and Liveability Strategy (ELS)** provides a framework to deliver a healthy environment and liveable Sunshine Coast by 2041. Our biodiversity is an integral part of the Sunshine Coast's natural environment. That's why it's so important to protect our native plants and animals and unique landscapes.

An ELS outcome for 2041 is our native plants, animals and habitat are healthy, resilient and valued by the community. The biodiversity target is to maintain the 2016 extent of native vegetation (no net loss) by 2041. This report provides valuable data to support the strategic direction set in the ELS and report on our existing biodiversity assets and progress towards meeting this target.



The Natural Environment

Biodiversity

Biodiversity is the variety of all life – plants, animals and microorganisms, their genes and the ecosystems they inhabit.

Outcome 2041

Our native plants, animals and habitats are healthy, resilient and valued by the community.

Target 2041

Maintain the 2016 extent of native vegetation (not net loss) by 2041.

Waterways and wetlands

Waterways and wetlands are the living arteries of our natural environment that convey or hold water in the landscape. They support a wide range of habitats that are home to specialised and diverse wildlife including fish, crustaceans and shellfish, water birds, frogs, turtles and aquatic mammals.

Outcome 2041

Waterways and wetlands are healthy, resilient to change and valued by the community.

Coastal

The coast is the tidal foreshore and adjacent areas that include the built and natural environments. The defining natural features incorporate the coastal plains, dunes, open beaches, rocky foreshore, estuaries, near-shore marine waters, reefs and coastal lagoons.

Outcome 2041

Our coastal areas are healthy, resilient to climate change impacts and support sustainable use.

What is the Biodiversity Report?

To manage terrestrial biodiversity at a landscape scale within the local government area, the focus is on our core **habitat** areas. The Sunshine Coast Council area has a range of different **vegetation** communities that contribute to these habitat areas and support threatened **plant and animal** species.

Parts of our habitat areas are managed in the **conservation estate**, where properties are either protected by National Parks, Nature Refuges, Council reserves and statutory covenants or through voluntary conservation programs such as Land for Wildlife. These four key reporting strategies make up the core categories in the Biodiversity Report and are shown in Figure 1.

The Biodiversity Report 2024 provides a snapshot of each category and can be used to track the progress over the last 8 years since the first Biodiversity Report in 2016. The results are presented at a major catchment scale to provide an overview of each major catchment and the region.

The Report's supplementary notes, methodology and datasets are presented in the Biodiversity Report - Technical Background Report 2024. This Report uses the most up to date datasets and analysis to provide continually improved, accurate results, acknowledging methods and data have improved since the initial report.

Figure 1: Key reporting categories for biodiversity





What is biodiversity?

Biodiversity or 'biological diversity' is the variety of all living things, including plants, animals (vertebrates and invertebrates), fungi, lichen and microorganisms. Biodiversity includes the variety among individuals within a species, the variety of different species and the variety of ecosystems.

Queensland is the most biologically diverse state in Australia supporting around 14,000 native plant species with more than one third of those species found nowhere else in the world. Queensland is also home to almost three quarters of Australia's

native bird species, more than 80 per cent of native mammals and more than 50 per cent of its native frogs and reptiles.

The Sunshine Coast's subtropical location, climate and varied landforms support a diverse range of plants and animals, from tropical through to temperate and marine through to lowland and upland species. The Sunshine Coast is home to a diverse array of habitats from coastal dunes, saltmarsh, and mangroves to open eucalypt forest on the floodplains and rising rocky ridges with deep rainforest gullies. In the diversity of these landscapes and vegetation types lies a deep cultural, spiritual, and social connection to the land, plants and animals that make up the unique character of our biodiverse backyard.

2024 snapshot

Our native vegetation

Native vegetation 129,938 ha	Remnant vegetation	91,724 ha
	Non-remnant vegetation	38,214 ha
	% local government area vegetated	57%
	Number of Regional Ecosystems	77
	Number of Broad Vegetation Groups	6
	Broad vegetation communities (percentage extent)	
	Mangrove and saltmarsh	2%
	Foredune	>1%
	Heath and Wallum	3%
	Melaleuca and Casuarina	10%
Eucalypt	65%	
Rainforest	20%	

Our conservation estate

Conservation estate total native vegetation extent is 60,622 ha	67,140 ha land conserving 60,622 ha of native vegetation
	47% of the local government areas native vegetation in the conservation estate
	29% of the local government area is in the conservation estate
	75 out of 77 Regional Ecosystems are represented

Our native plants and animals

133 Threatened native species	67 threatened animals		
	6 Critically endangered	24 Endangered	37 Vulnerable
	66 Threatened plants		
	20 Critically endangered	18 Endangered	28 Vulnerable

Our habitat areas

101 Core habitat areas	72,507 ha Core habitat areas
	15,220 ha Core connecting habitat areas
	42,210 ha Connecting habitat areas

Tracking our progress

This is the third Biodiversity Report for the Sunshine Coast Council area that tracks changes from 2016 to 2024 in each of the reporting categories.

Our native vegetation

Our native vegetation extent is comprised of remnant and non-remnant vegetation. This vegetation provides important habitat areas for threatened plants and animals across our region. In the past eight years our total native vegetation extent has grown by 5,655 hectares.

	2016	Hectare changes	2020	Hectare changes	2024
Remnant	92,866 ha	⬇️ - 300	92,566 ha	⬇️ - 842	91,724 ha
Non-remnant	31,417 ha	⬆️ + 889	32,306 ha	⬆️ + 5,908	38,214 ha
Native vegetation	124,283 ha	⬆️ + 542	124,825 ha	⬆️ + 5,113	129,938 ha

Our conservation estate

Our conservation estate is a combination of Queensland Government, Council and privately owned and managed environment lands that protects, conserves, and enhances our biodiversity across the region. The amount of native vegetation in our conservation estate has grown by 6,449 hectares from 2016 to 2024 with the biggest increases in Nature Refuges and private land conservation.

Conservation estate	2016	Hectares gained	2020	Hectares gained	2024
State National Parks and Conservation Parks	39,684 ha	⬆️ + 691	40,375 ha	⬆️ + 106	40,481 ha
Council environment reserves (incl. Nature Refuge)	5,051 ha	⬆️ + 1,092	6,143 ha	⬆️ + 907	7,050 ha
Nature Refuges	666 ha	⬆️ + 243	909 ha	⬆️ + 47	956 ha
Environmental Covenants	1,477 ha	⬆️ + 204	1,681 ha	⬆️ + 303	1,984 ha
Land for Wildlife	7,295 ha	⬆️ + 1,001	8,296 ha	⬆️ + 1,855	10,151 ha
Total vegetation for all conservation estate	54,173 ha	⬆️ + 3,231	57,404 ha	⬆️ + 3,218	60,622 ha

Our native plants and animals

Over the past eight years there have been many changes to our knowledge of threatening processes and the presence of threatened plants and animals in our local government area. The below changes represent changes in state and federal classification, local knowledge of species presence.

	2016	Changes	2020	Changes	2024
Plants	53	0	53	⬆️ + 13	66
Animals	51	⬆️ + 13	64	⬆️ + 6	67

Our habitat areas

Our habitat areas are changing and so is the way we measure them at a landscape scale. Our vegetated habitat areas have continued to increase over the past eight years and provide a greater extent of core and connecting habitat areas for fauna.

	2016	Hectare changes	2020	Hectare changes	2024
Core Habitat areas	67,101 ha	⬇️ - 172	66,929 ha	⬆️ + 5,578	72,507 ha
Core Connecting Habitat areas	22,313 ha	⬆️ + 173	22,486 ha	⬇️ - 7,266	15,220 ha
Connecting Habitat areas	34,869 ha	⬆️ + 588	35,457 ha	⬆️ + 6,753	42,210 ha

Image: Grey-headed flying foxes



Biodiversity report results



Our native vegetation

Our terrestrial biodiversity is supported in natural bushland areas in both urban and rural landscapes across the 228,475 hectares of the Sunshine Coast Local Government Area. The Biodiversity Report uses a combination of vegetation datasets including the Queensland Government's Regional Ecosystem mapping (referred to as remnant vegetation) and Council's fine scale vegetation (referred to as non-remnant vegetation). Combined, these two datasets are referred to as Sunshine Coast Council's native vegetation extent. These datasets combined make up the 129,938 hectares of native vegetation in our the Local Government Area.

Figure 4: Extent of native vegetation and no vegetation in the Sunshine Coast Council local government area

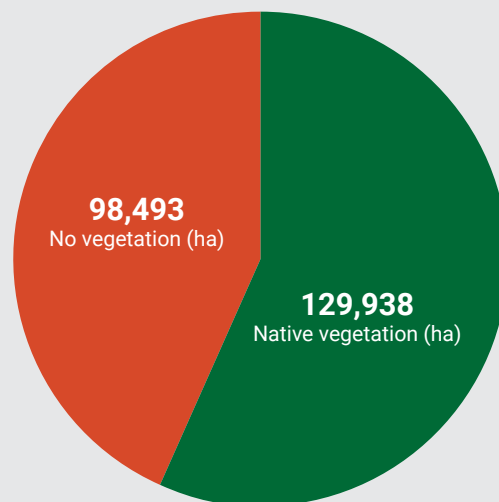
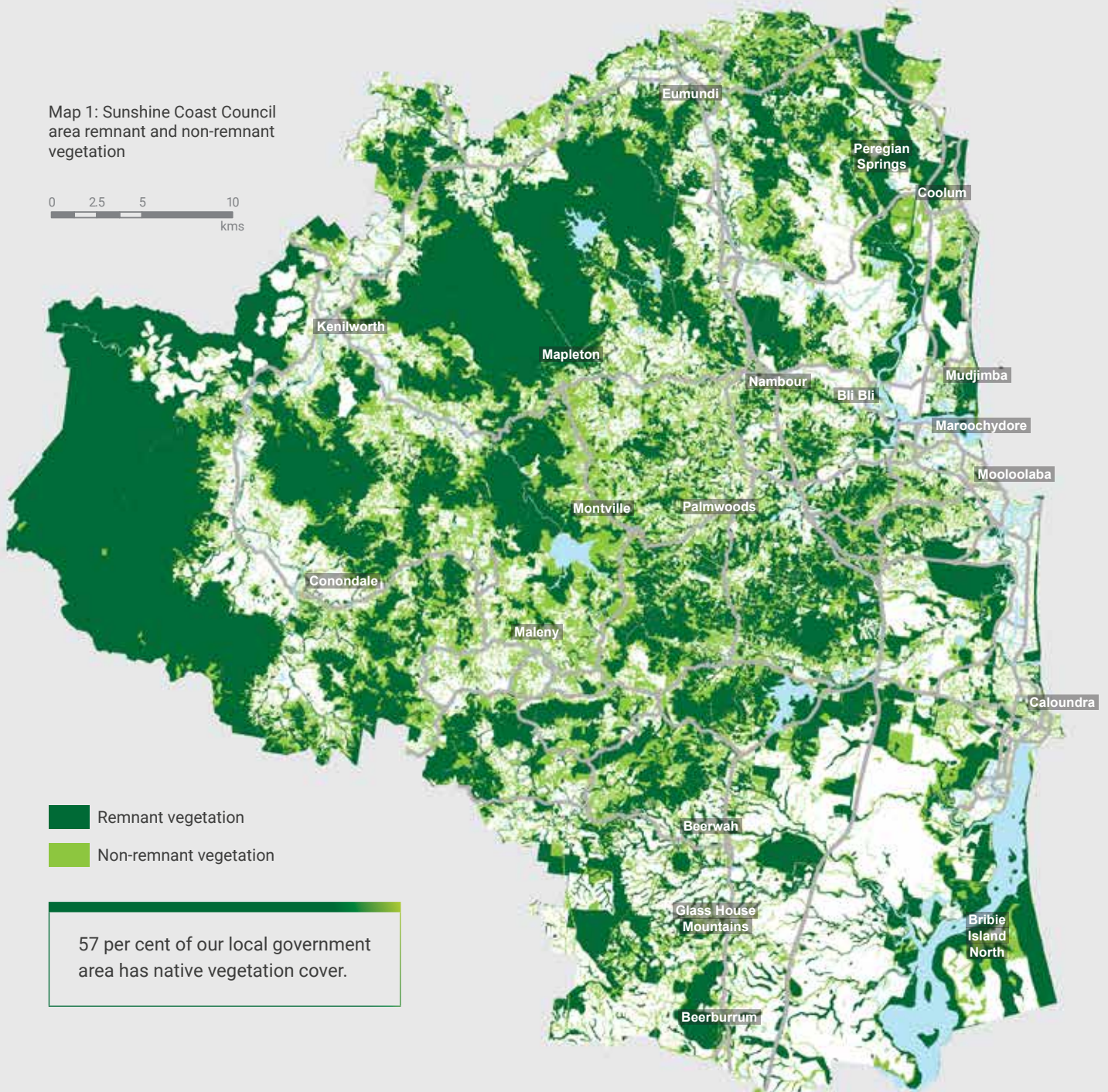
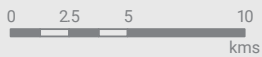


Table 1: Sunshine Coast Council area remnant and non-remnant vegetation

	Urban area (ha)*	Rural area (ha)*	Total Area (ha)*
Remnant	7,523	84,201	91,724
Non-remnant	8,470	29,744	38,214
Native vegetation	15,993	113,945	129,938
No vegetation	24,309	74,184	98,493
Sunshine Coast area	40,301	188,129	228,430

* Urban areas are areas in the Urban Footprint and Rural areas include both Regional Landscape and Rural Production Area (RLRPA) and Rural Living Area (RLA) defined in the ShapingSEQ 2023 - SEQ Regional Plan.

Map 1: Sunshine Coast Council area remnant and non-remnant vegetation



Tracking our progress - our native vegetation ▶▶▶

2016 ▶ 124,283 ha

2020 ▶ 124,825 ha

2024 ▶ 129,938 ha

Over the past eight years the Sunshine Coast Local Government Area's native vegetation has increased by 5,655 hectares which is equal to approximately 6,896 football fields.

This vegetation increase is attributed to both the re-growth of native vegetation and revegetation (plantings) over the past four years and an improvement in the accuracy of our fine scale vegetation mapping technology.

Overall, there has been a combined loss of 1,142 hectares of remnant vegetation over the past eight years.

This vegetation loss can be attributed to clearing for major infrastructure projects, and urban development, residential dwellings, agricultural land use and other activities. Remnant vegetation is important to conserve and maintain in the landscape as it provides a seed bank for native species, critical habitat for many threatened animals and plants as well as a myriad of social, economic, and cultural benefits. Once lost, it takes a long time for remnant vegetation to grow and develop the structure and species composition that defined the vegetation community prior to clearing.



Vegetation communities

Broad vegetation groups are a high-level grouping of vegetation communities that describe the diverse array of landscapes and major ecological patterns across temperate, arid and the tropic climatic zones in Queensland.

The Regional Ecosystems describe vegetation communities within a specific bioregion, distinguished by dominant canopy tree species that occur in association with a particular combination of geology, soil and landform. The Regional Ecosystems (REs) are mapped by the Queensland Government. The remnant and pre-clearing datasets were used to classify Council's native vegetation data for all vegetation communities.

The region is made up of six broad vegetation groups and 77 regional ecosystems.



Foredune

The area directly behind the beach running parallel to the coastline supports a unique mix of plants including spinifex, casuarina and pandanus. These habitats are critical for many coastal raptor species and other marine and terrestrial animals.



Mangrove and Saltmarsh

Intertidal communities of plants that grow on the foreshore of coastal lakes and estuaries. These plants are adapted to salty conditions and are ecologically important areas that link the land to the sea, providing productive habitat for a range of species including migratory shorebirds and act as nurseries for many marine species.



Heath and Wallum

These communities of specialised plant species occur on nutrient poor sandy soils inland from the foredune ecosystems. Some of these ecosystems are unique to south-east Queensland and support iconic species such as banksias, hakeas, and the ground parrot. They can be found from Glasshouse Mountains to Lake Weyba.



Melaleuca and Casuarina

Commonly known as paperbarks and she-oaks these communities thrive in the seasonally inundated wetland, coastal floodplain and riparian areas along waterways. These communities can be some of the most diverse ecosystems supporting a range of associated plant and animal species. Watching jacanas balance on the lily pads at Ewen Maddock dam we can see these dynamic vegetation communities flourishing.

Eucalypt



This group is diverse and occurs across a wide range of geologies and landscapes. The Sunshine Coast is home to more than 50 eucalypt species (including species with genera other than eucalypt but identified as 'gum trees') occurring across a diverse range of environments from coastal floodplains, foredune and riparian ecosystems to mountainous areas on volcanic and sandstone soils. Walking through the tall blackbutt forests in Mapleton National Park or visiting the scribbly gum country on the floodplains, eucalypt forests radiate a familiar smell in the warm summers and a sometimes eerie quiet in the mild winters.

Rainforest



Typically considered to be the most diverse and complex of all the vegetation communities, subject to high levels of rainfall and occurring in the moist gullies, along waterways and wetland areas. The rainforest areas in south-east Queensland and the Sunshine Coast support a myriad of significant plant and animal species, most notable among these are the diverse range of bird and frog species. Here we can listen to noisy pittas calling on the forest floor or the giant barred frogs calling in the heat of summertime. This vegetation community supports the recently listed Conondale spiny crayfish known to occur only in Conondale, Bellthorpe and Maleny areas.



Map 2: Sunshine Coast area broad vegetation communities

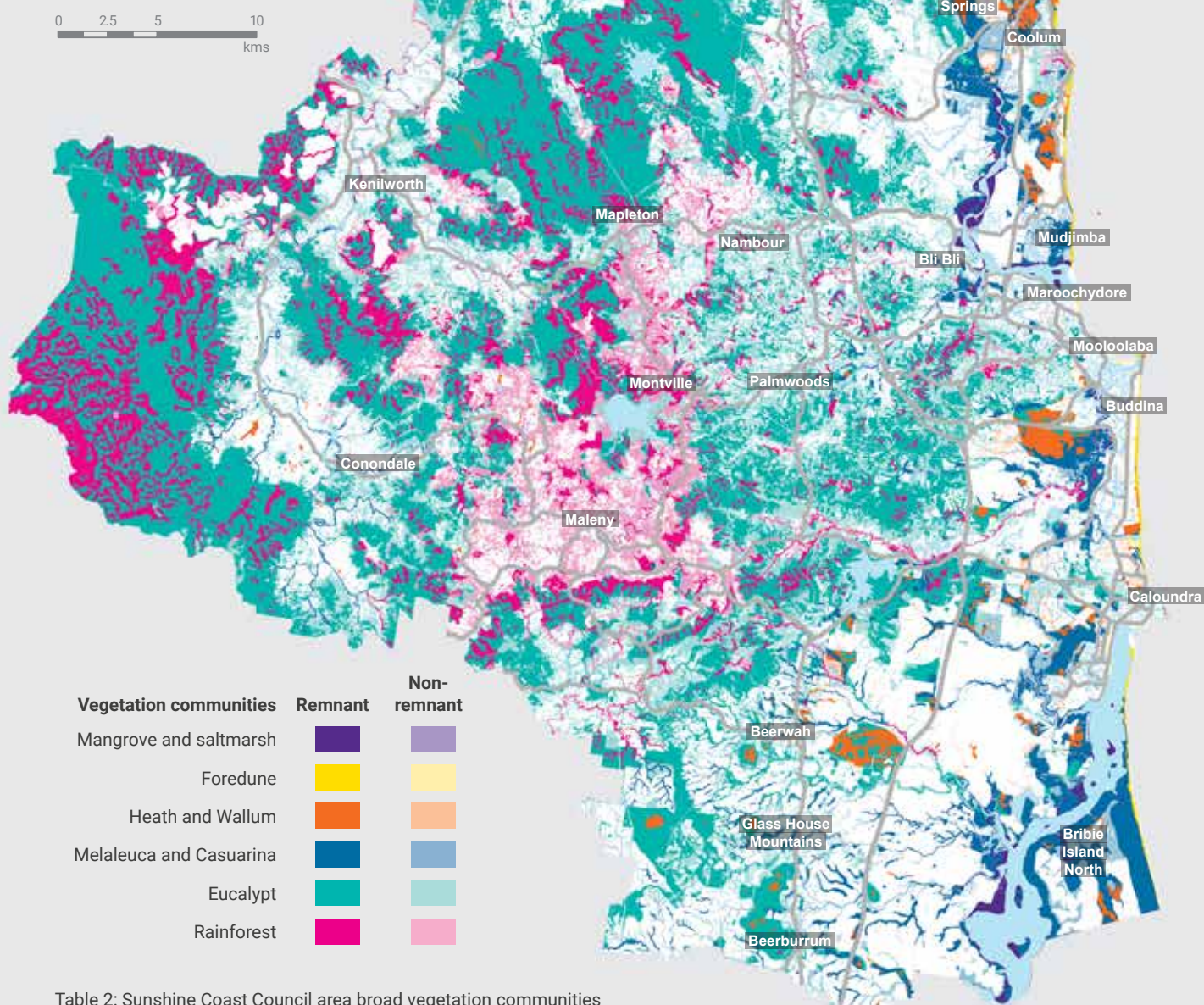


Table 2: Sunshine Coast Council area broad vegetation communities

Broad Vegetation Group	Remnant vegetation				Non-remnant (based on pre-clearing REs)	Progress tracker		
	Number of REs	Pre-clearing extent (ha)	Current extent (ha)	Percentage loss	Current extent (ha)	2020 native vegetation extent (ha)	Hectares gained	2024 native vegetation extent (ha)
Mangrove and saltmarsh	2	2,318	2,109	9	56	2,161	5	2,166
Fore dune	2	633	339	46	59	388	10	398
Heath and Wallum	15	8,334	2,907	65	693	3,417	184	3,601
Melaleuca and Casuarina	11	29,026	9,060	69	4,356	12,570	847	13,417
Eucalypt	37	145,812	60,575	58	24,385	82,151	2,809	84,960
Rainforest	10	39,521	16,733	58	8,555	24,102	1,185	25,287
Sunshine Coast Council area	77	225,644	91,724	59	38,104	124,872	4,956	129,828

* Non-remnant vegetation has been grouped under the broad vegetation communities using pre-clearing regional ecosystems.

Conservation significance of remnant vegetation

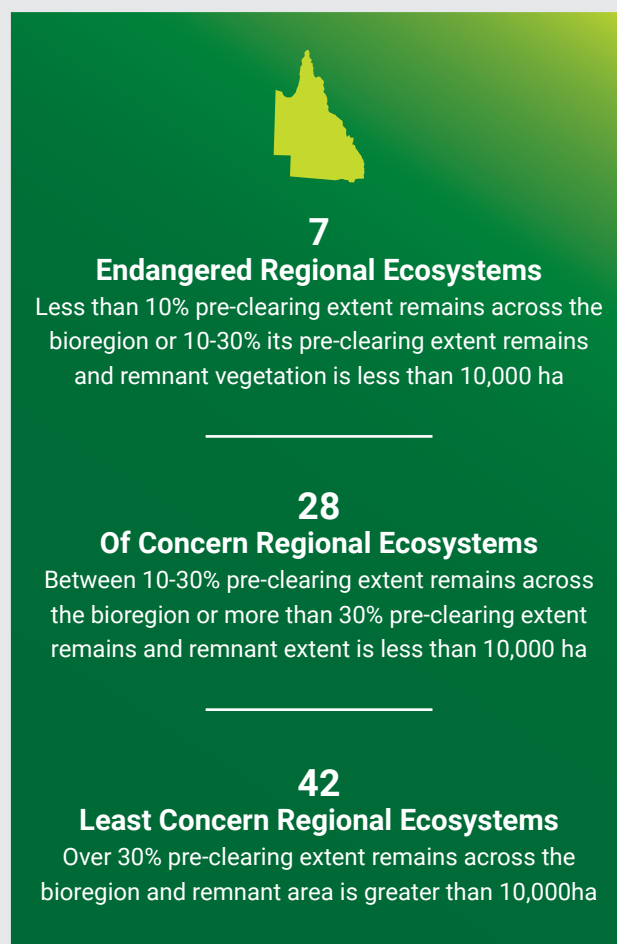
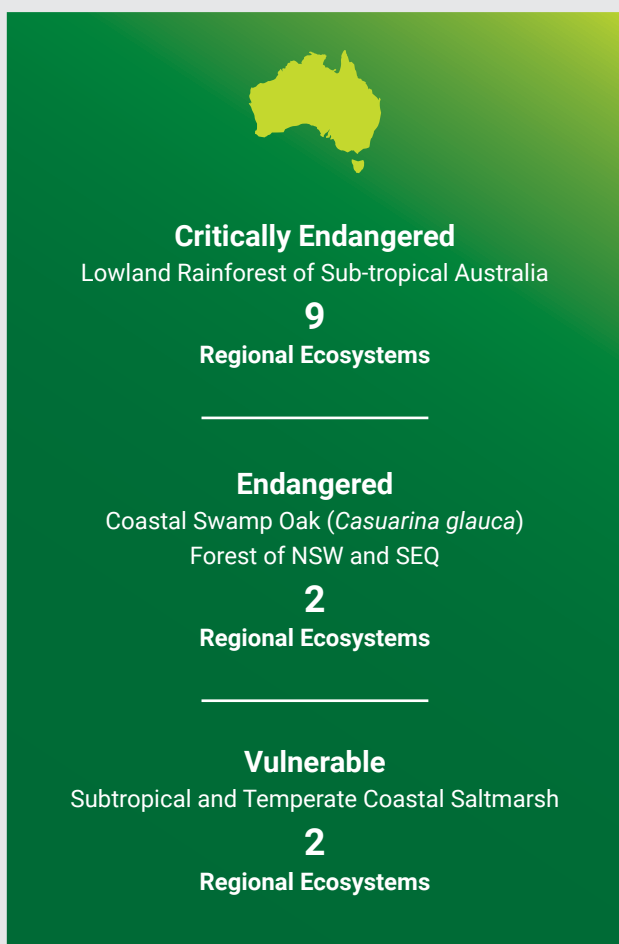
The Australian Government and Queensland Government have slightly different ways of identifying and determining a vegetation community's conservation status. This is largely due to the scale and geographic area being managed. At both levels, there is interest in understanding the health or extent of decline of vegetation communities to drive management strategies to deliver biodiversity conservation outcomes.

National Conservation Significance

The Commonwealth Government identify, describe and list Threatened Ecological Communities (TECs) under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC). EPBC listed TECs occurring in Queensland use diagnostic regional ecosystems to describe that community. The Sunshine Coast has three EPBC listed TECs which include 13 regional ecosystems.

State Conservation Significance

The Queensland Government uses the *Vegetation Management Act 1999* (VMA) regional ecosystem framework to identify and describe the conservation status of a regional ecosystem. The regional ecosystem pre-clearing (or prior to European settlement) extent data is used to calculate how much of a regional ecosystem extent remains. The Queensland Government update their pre-clearing and remnant vegetation mapping every two years. According to the Queensland Government's conservation status classification, almost 50 per cent of the Sunshine Coast Council area's regional ecosystems are threatened or in significant decline.



In the Least Concern category mapping shows Council has gained an additional two regional ecosystems and one has been reclassified from Of Concern to Least Concern.



Endangered RE12.5.3, Scribbly gum (*Eucalyptus racemosa* subsp. *racemosa*) woodland



Image: Mount Coonowrin and Mount Beerwah, Glasshouse Mountains.



Our conservation estate

The conservation estate represents areas managed for their conservation values, in private and public ownership. These areas aim to protect, enhance, and conserve environmentally and culturally significant areas across the Sunshine Coast Local Government Area.

Protected and voluntary conservation areas include:

- State National Parks and Conservation Parks
- Council Environment Reserves (including those gazetted under the *Nature Conservation Act 1992*)
- Nature Refuges (recognised class of Protected Area as defined by the *Nature Conservation Act 1992*)
- Statutory environmental covenants (voluntary or non-voluntary on private freehold land)
- Land for Wildlife properties (non-legally binding, voluntary protection mechanism).

The conservation estate currently conserves 47% of the native vegetation in the Sunshine Coast Council Local Government Area.

Table 3: Sunshine Coast conservation estate and native vegetation extents

Conservation areas	Number of Reserves or Lots	Total Area (ha)	Non-remnant vegetation extent (ha)	Remnant vegetation extent (ha)	Native vegetation extent (ha)
State	30	40,806	1,089	39,392	40,481
Council (incl. Nature Refuge)	629	8,119	1,672	5,378	7,050
Nature Refuge	37	975	172	784	956
Environmental Covenant	1,774	2,324	510	1,474	1,984
Land for Wildlife	1,027	14,917	3,989	6,162	10,151
Total	3,498	67,140	7,432	53,190	60,622

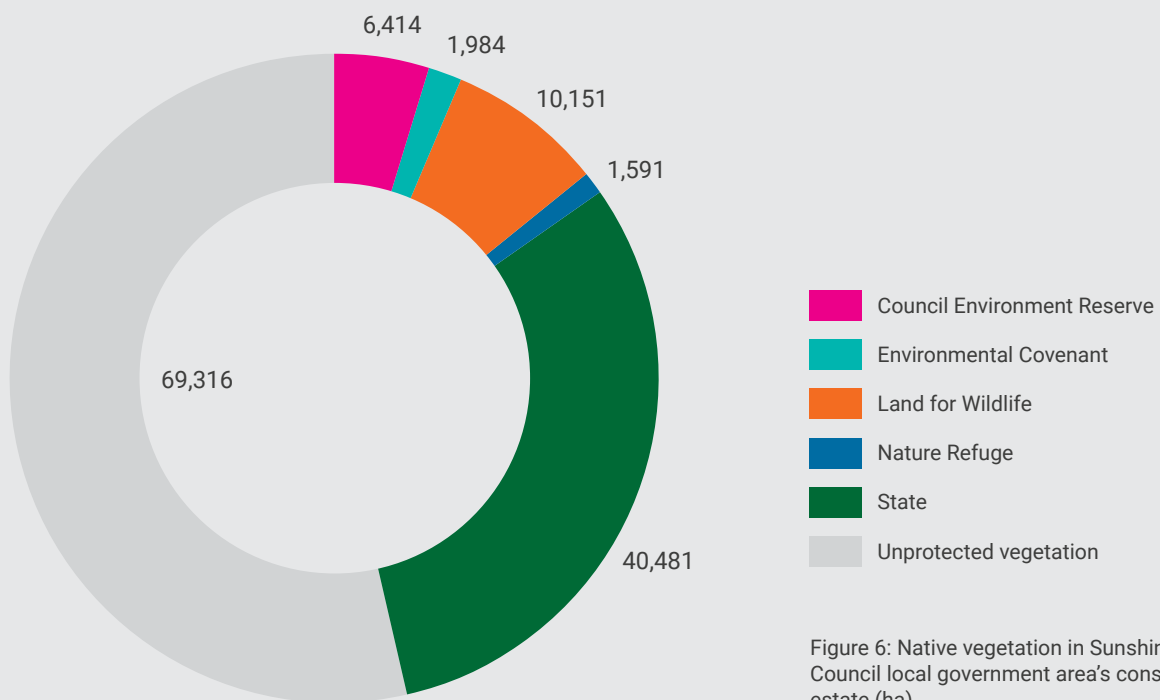


Figure 6: Native vegetation in Sunshine Coast Council local government area's conservation estate (ha)

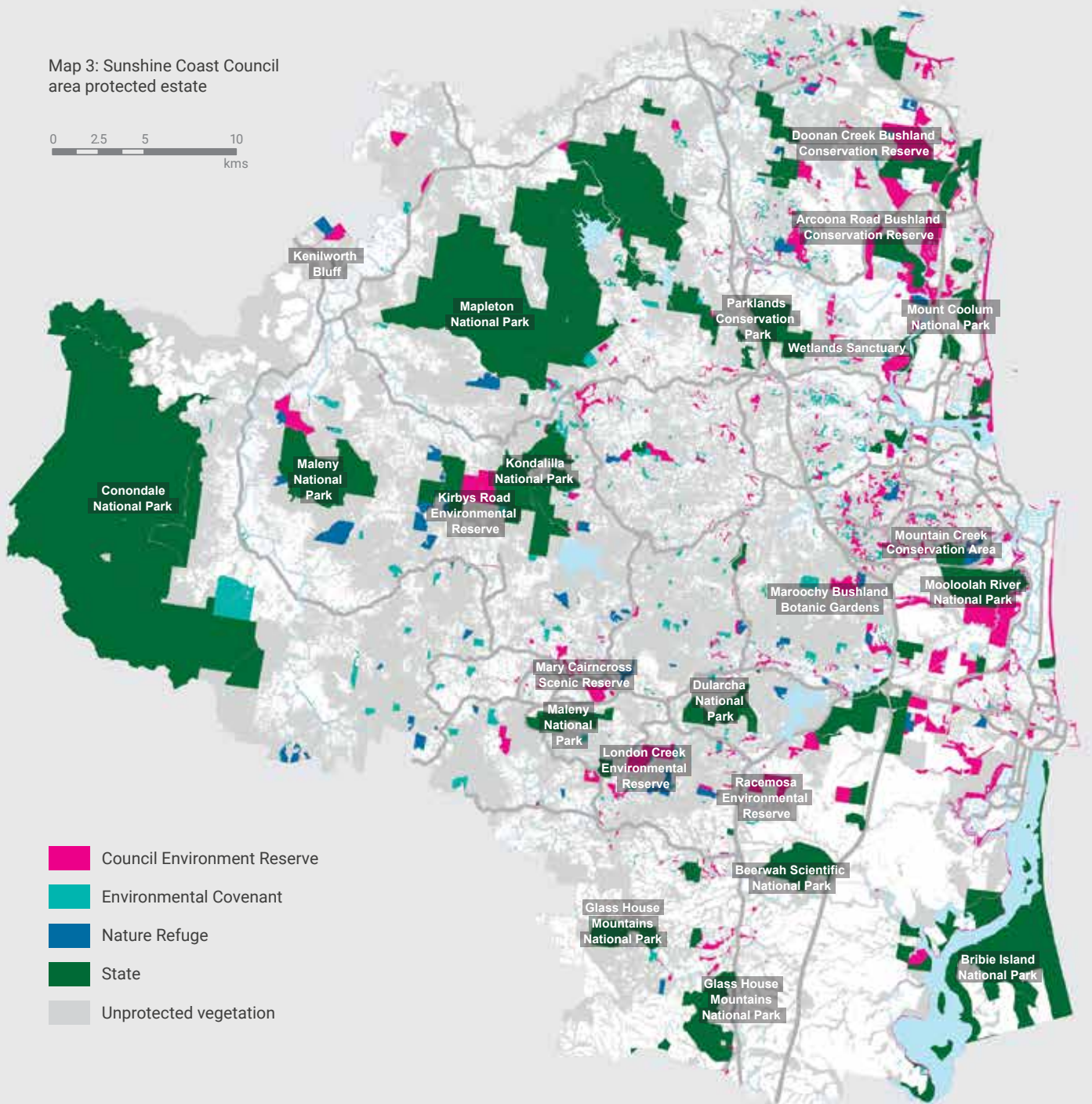
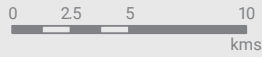
Conservation and restoration

Voluntary private land partnerships contribute to 22 per cent of the total conservation estate in the region.

The Land for Wildlife Program has been growing since 2014 with more than 1,300 members across the region. Land for Wildlife members deliver restoration, conservation, and rehabilitation work on private land. In 2023-24 alone, landholders installed 87 nest boxes and planted 34,050 native seedlings on their properties.



Map 3: Sunshine Coast Council area protected estate



- Council Environment Reserve
- Environmental Covenant
- Nature Refuge
- State
- Unprotected vegetation

From 2020 to 2024

The overall conservation estate has grown by 3,218 ha.

Council's conservation estate has increased by 907 ha including the addition of significant areas of Core Koala habitat and habitat for a variety of threatened species.

Voluntary conservation programs such as Land for Wildlife have the highest increase in native vegetation compared to all other conservation estate.

From 2016 to 2024

The native vegetation in Council's conservation estate has increased by almost 2,000 ha which is on average 250 ha per year.

How well are we protecting our poorly conserved Regional Ecosystems?

Comparing a particular regional ecosystem's protected or conserved extent to its pre-clearing extent tells us the level of protection for this vegetation community within the Council area. The Sunshine Coast Council area has 15 regional ecosystems considered poorly conserved. A national assessment process, the Comprehensive and Adequately Represented system, was applied to understand how well represented (or poorly conserved) each regional ecosystem's is within our conservation estate. A regional ecosystem is considered poorly conserved if there is less than 10 per cent of the pre-clearing extent represented in the Sunshine Coast Council protected area estate.

Regional ecosystems with representation in the protected areas estate:

Poorly Conserved Regional Ecosystems			
Eucalypt	Heath & Wallum	Melaleuca & Casuarina	Rainforest
10 Regional Ecosystems	1 Regional Ecosystem	3 Regional Ecosystems	1 Regional Ecosystem

Protecting our biodiversity – increasing extent of poorly conserved Endangered Regional Ecosystem 12.5.3 Scribbly gum (*Eucalyptus racemosa* subsp. *racemosa*) woodland.

In 2024, in partnership with Queensland Parks & Wildlife Services (QPWS), Council acquired a 150 ha property which includes a portion of the poorly conserved RE 12.5.3 Scribbly gum (*Eucalyptus racemosa* subsp. *racemosa*) woodland. This woodland also provides habitat for an array of threatened flora and fauna including Mt Emu she-oak (*Allocasuarina emuina*), *Eucalyptus curtisii*, greater glider (*Petauroides volans*), koala (*Phascolarctos cinereus*) and glossy black cockatoo (*Calyptorhynchus lathamii*).





Our native plants and animals

Our region supports a diverse range of plants and animals, including tropical, temperate, marine, lowland and upland species.

Threatened species are any plant or animal species that are at risk of extinction. To drive preservation outcomes, the Commonwealth Government and Queensland state government have specific legislation that identifies threatened species:

- the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC)
- the Queensland *Nature Conservation Act 1992* (NCA).

Queensland has 1000 threatened species including 230 animal and 770 plant species. Of these threatened species, 40 per cent of plants and 70 per cent of animals are endemic to Queensland.

The Sunshine Coast Council area has 135 threatened species according to the latest Queensland State records (July 2024) and some supplementary data.

19% of all native plant species that occur in the state of Queensland are represented in the Sunshine Coast Council local government area.

Threatened species recovery – Koala (*Phascolarctos cinereus*)

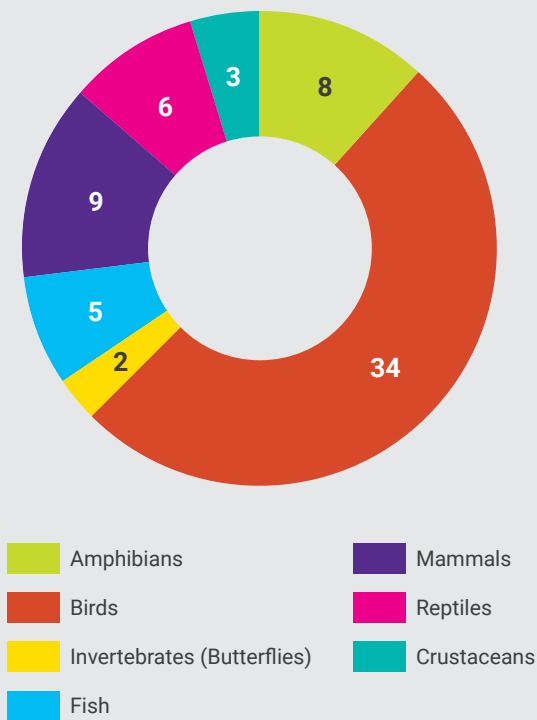
Council is committed to partnership programs that increase our understanding of population dynamics and genetics to better conserve and protect local threatened species including Koalas, listed as Endangered in SEQ. A partnership with the University of the Sunshine Coast has used a tenure-blind approach to assist in identifying koala individuals and completing health checks and collecting genetic information. This will improve an understanding of koala populations, including core habitat and movement pathways, to better protect and conserve this species in the region.



Table 4: Threatened species in the Sunshine Coast LGA

	Critically Endangered	Endangered	Presumed Extinct	Vulnerable
Animals	6	24	2	37
Plants	20	18	0	28

Figure 7: Sunshine Coast local government area threatened animals




61 animals and 54 plants listed under the *NC Act* for the Sunshine Coast local government area

56 animals and 31 plants are listed under the *EPBC Act* for the Sunshine Coast local government area

Threatened species recovery – Sunshine Coast Myrtle (*Lenwebbia* sp. Blackall Range .R. Sharpe 5387)

In 2024, Council partnered with the Department of Environment, Science and Innovation (DESI) to deliver an offset project to reintroduce healthy plants of the endangered Sunshine Coast myrtle, endemic to the Sunshine Coast Council area. Council aims to plant 500 individuals that have been propagated from “myrtle rust” tolerant plants. Myrtle rust is a threat to the survival of this species and this project aims to rehabilitate surrounding habitat areas and establish disease resistant plants to strengthen populations.






Our habitat areas

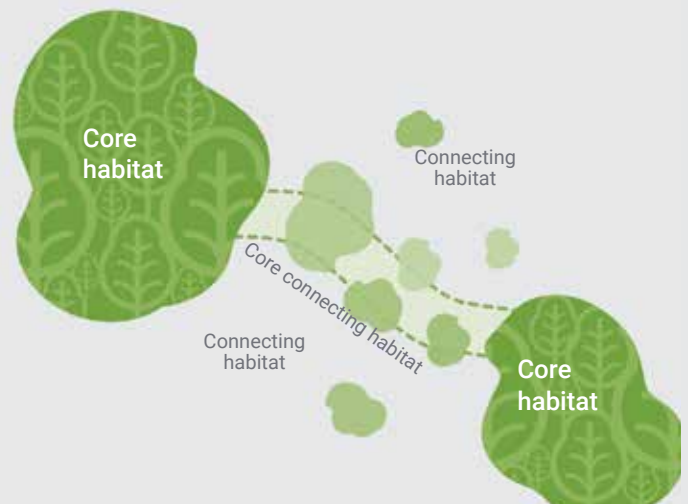
Council's strategic biodiversity conservation planning is guided by a landscape ecology approach, which seeks to maintain and improve ecological functionality and connectivity at a whole of landscape scale by:

- identifying and protecting biodiversity priorities (such as core habitat areas and poorly conserved regional ecosystems)
- consolidating and expanding key conservation areas
- restoring areas to connect habitat.

Habitat areas can be defined by the size of the vegetation patch and how connected the vegetation is, which has been influenced by the level of habitat fragmentation. Increased fragmentation is likely to result in greater interruption to habitat functionality impacting on fauna movement, dispersal, mating potential, roost sites, food resource availability and feeding regimes.

Understanding the spatial distribution and the relationship between different habitat areas and the role they play in landscape connectivity and habitat functionality is critical to biodiversity conservation network planning and the delivery of strategic biodiversity conservation outcomes.

Figure 8: Core habitat, core connecting habitat and connecting habitats in a landscape ecology approach to conservation





Our habitat areas are made up of remnant and non-remnant vegetation and are classified into three broad types:

1. **Core Habitat Areas (CHA)** – these areas include patches greater than 50 hectares in size and often include large conservation areas and well-connected areas of native vegetation.
2. **Core Connecting Habitat Areas (CCA)** – vegetation connecting Core Habitat Areas (CHAs), with areas of “bottlenecks” or fingers of vegetation that fall below the minimum threshold of CHAs but provide significant connectivity with these areas.
3. **Connecting Habitat Areas (CNA)** – patches of native vegetation less than 50ha in size. These may or may not be connected to cores.

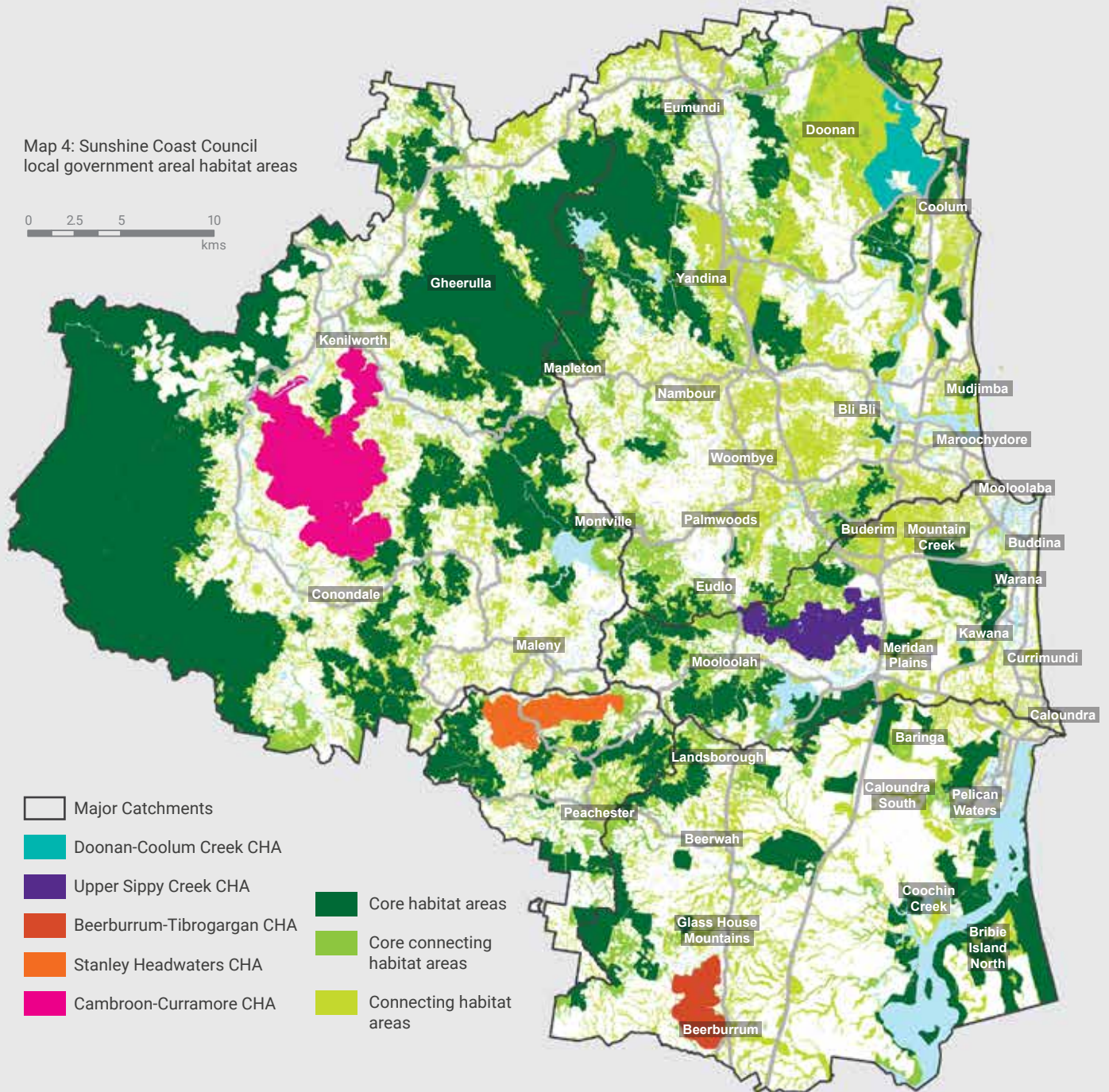
The process for defining habitat areas can be found in more detail in the Technical Background Report 2024.

Habitat protection, restoration and rehabilitation

In 2023, Council acquired 120ha of ex-cane land to restore as natural wetlands within the Blue Heart Sunshine Coast project area. This new land builds on an existing Reserve network at Coolum Creek and provides valuable habitat for a number of terrestrial and aquatic species including threatened migratory birds and the vulnerable Water Mouse (*Xeromys myoides*).



Map 4: Sunshine Coast Council local government areal habitat areas



Tracking our progress: our habitat areas

Our region has 101 core habitat areas that comprise 72,507 hectares of native vegetation and in the past four years have increased in size by 5,578 hectares. Core habitat areas protect conservation values and provide large patches of habitat supporting a myriad of species important for biodiversity conservation in our region. Overall core habitat areas have increased in size due to an increase in native vegetation surrounding cores and expansion into connecting core habitat areas.

Over the past four years, areas of core connecting habitat have decreased due to reclassification to core habitat with corridors expanding as native vegetation grows, adding to the total increase in core habitat. Some areas of core connecting habitat have also been reclassified as connecting habitat where roads and/or other clearing activity have resulted in fragmentation in connecting habitat areas. In these instances habitat remains, but connectivity is lost and there is more fragmentation in the greater landscape. This change is reinforced by the growth of connecting habitat areas over the past four years, an additional 6,753 hectares of connecting habitat, with smaller patches of native vegetation found in the urban footprint.

Core habitat areas

The Sunshine Coast has many significant habitat areas with diverse faunal assemblages and ecological functionality. These habitat areas sustain characteristics essential for plants and animals in the region to survive and thrive, such as species-specific home range, food resources and nesting and roosting resources.

Five significant core habitat areas have been identified to represent the diverse ecosystem types of the Sunshine Coast. One was selected from each major river catchment, and these have been highlighted in the following summaries. These core habitat areas have intrinsic and irreplaceable natural values and contribution to the Sunshine Coast's distinct landscape character.



Cambroon-Curramore CHA

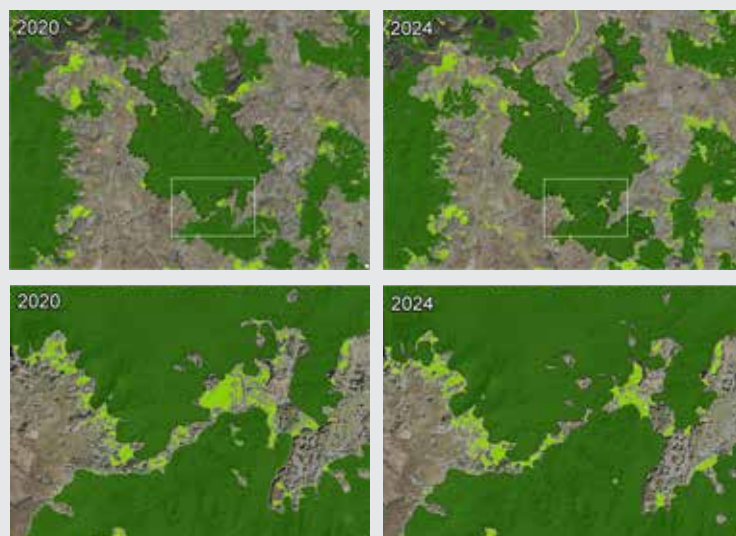
The Cambroon-Curramore CHA is approximately 3,825 hectares and has increased by 29 per cent over the past four years. This growth is attributed to an increase in native vegetation surrounding the core and is a good example of where previously core connecting habitat has grown and resulted in the joining of two previously separate core habitat areas.

The Cambroon-Curramore CHA is in the eastern headwaters of the Mary River catchment and forms part of a mosaic of core habitat areas that extend from the Blackall Range and Kondalilla National Park west to the Mary River. It is an area of outstanding natural beauty and a highly functional biodiversity corridor. It includes five of the eight rainforest regional ecosystems listed by the Australian Government as critically endangered lowland rainforest of subtropical Australia.

More than 75 per cent of the CHA is protected by national park, Council environment reserve and nature refuges providing habitat for a suite of threatened species including the giant barred frog, greater glider, brushed-tailed phascogale, koala, glossy black-cockatoo and black-breasted button-quail.

Due to the expansion of core and connecting habitat in this catchment, there are future opportunities to focus on strategic pathways to connect this core with the large Conondale core to the west.

Figure 9: In the Curramore-Cambroon CHA we see a growth in the core habitat areas between Maleny National Park in the north and Land for Wildlife properties to the south. Growing core habitat areas result in a decrease in bottlenecks and less fragmentation of native vegetation in this area.





Doonan-Coolum Creek CHA

The Doonan-Coolum Creek CHA adjoins major core areas in the northeastern area of the region and has grown significantly over the past eight years. Located in the Maroochy River catchment, this CHA forms the backbone of the Maroochy-Noosa wallum corridor and the southern portion is a major green space area, the Blue Heart.

This CHA supports a range of important mangrove, wallum, melaleuca and casuarina vegetation communities that is habitat for the endangered ground parrot and water mouse. This habitat area also includes a 155-hectare addition to the conservation estate acquired in 2024, which further consolidates and extends protected areas in this core.



Upper Sippy Creek CHA

The Upper Sippy Creek CHA is made up entirely of eucalypt and rainforest vegetation communities. Unlike all other CHAs, the eastern extent of this community lies within the urban footprint and is not a part of the conservation estate. These forests support some of the richest biodiversity in the Mooloolah River catchment providing important habitat for koalas, greater gliders, multiple species of micro-bat and other arboreal mammals, along with a myriad of threatened bird and frog species including the glossy black cockatoo and tusked frog.

This CHA also includes a large membership base of Land for Wildlife members working on restoration projects for many threatened species, including a variety of threatened plants that inhabit rainforest and open eucalypt communities.

The endangered lesser swamp orchid (*Phaius australis*) produce the largest flowers of any Australian orchid and can be found in our conservation estate in a variety of coastal heath, Melaleuca forests and swampy rainforest.





Beerburrum-Tibrogargan CHA

The Beerburrum-Tibrogargan CHA has grown by 5 per cent from 2020 to 2024, with an increase in non-remnant vegetation growth on the edges and core connecting habitat extending the edges of this core area. This core habitat areas is home to the internationally renowned, Glass House Mountains, specifically Mount Beerburrum, Mount Tibrogargan, Mount Tibrowuccum and Mount Cooee. This CHA also connects with protected areas to the south in the Moreton Bay region with connecting habitat areas and some forestry providing vegetated corridors to the south-west.

This CHA supports unique biodiversity values including montane heath, eucalypt and rainforest vegetation communities, which provide critical habitat for the vulnerable Mount Beerwah mallee, Mount Beerwah she-oak, Glass House Mountain teatree and Coochin Hills grevillea.

The critically endangered Coochin Hills grevillea (*Grevillia hodgei*) is known to occur in only two peaks in the Glasshouse Mountains.



Stanley Headwaters CHA

The Stanley Headwaters CHA supports some of the richest biodiversity in the Sunshine Coast Council local government area and forms part of a major green space. This CHA has increased in size by 2 per cent from 2020 to 2024 and continues to provide culturally significant areas with strong ecological connectivity, from Mount Mellum and London Creek sub-catchments wrapping around the escarpment west forming the headwaters of the catchment to Boorobin.

This CHA is growing closer to its neighbouring CHA to the west which includes an additional 1,160 hectares of vegetation adjoining 382 hectares of Bellthorpe National Park and environmental covenants. The CHA has high-biodiversity rainforest vegetation communities and includes habitat for the Sunshine Coast myrtle, large-leaf silkpod, giant barred frog, koala, glossy black cockatoo, black-breasted button quail, greater glider and the Richmond birdwing butterfly.



Our catchments' biodiversity results

The Sunshine Coast Council local government area is made up of five major river catchments and a summary of the results for each reporting category is outlined for each catchment:

1. Maroochy River
2. Mooloolah River
3. Mary River
4. Stanley River
5. Pumicestone Passage
(including northern portion of Bribie Island)

Approximately 1 per cent of the Noosa River catchment occurs within the Sunshine Coast local government area. Given the limited extent of this catchment, the biodiversity results have not been captured in this report. The results for the Noosa River catchment can be found in the Technical Background Report 2024.

Map 5: Sunshine Coast Council area major catchments



Maroochy River

The Maroochy River system dominates the northern half of the Sunshine Coast Council local government area. It drops quickly from its headwaters in the Blackall and Mooloolah Ranges onto a large broad floodplain dominated by farmland and sugar cane paddocks before reaching the sea at Maroochydore. Approximately 99 per cent of the Maroochy River catchment occurs within the Sunshine Coast Council area. The catchment's most northern watershed area falls within the neighbouring Noosa Council area.

Native vegetation

Native vegetation covers approximately 54 per cent of the total area of the Maroochy River catchment. Of the native vegetation cover, 62 per cent is remnant and 38 per cent is non-remnant vegetation.

Table 5: Maroochy Catchment vegetation extent

	Urban area (ha)	Rural area (ha)	Total Area (ha)	Progress tracker	
				2020 Total area (ha)	Changes (ha)
Remnant	3,666	17,354	21,020	21,659	↓ -639
Non-Remnant	4,013	8,884	12,897	10,735	↑ +2,162
Native vegetation	7,679	26,238	33,918	32,394	↑ +1,524
No vegetation	8,990	20,263	29,253		
Total	16,669	46,502	63,171		

Vegetation communities

Table 6: Maroochy River catchment vegetation communities

	Pre-clearance extent (ha)	Pre-clearance RE	Remnant extent (ha)	Current RE	Loss (%)	Non-remnant extent (ha)	Progress tracker			
							2020 remnant extent (ha)	Changes (ha)	2020 non-remnant extent (ha)	Changes (ha)
Catchment	63,171	55	21,020	56	67	12,897	21,659	↓ -639	10,735	↑ +2,162
Eucalypt	42,256	27	14,365	28	66	8,966	14,936	↓ -571	7,573	↑ +1,393
Foredune	181	2	119	2	34	17	123	↓ -4	12	↑ +5
Heath and Wallum	2,002	11	963	11	52	217	1,002	↓ -39	50	↑ +167
Mangrove and saltmarsh	578	2	525	2	9	21	523	↑ +2	19	↑ +2
Melaleuca and Casuarina	9,185	6	2,337	6	75	1,308	2,385	↓ -48	930	↑ +378
Rainforest	8,285	7	2,712	7	67	2,327	2,690	↑ +22	2,015	↑ +312

Conservation estate

Conservation estate makes up approximately 22 per cent of the entire catchment area.

Table 7: Maroochy River catchment conservation estate

Conservation areas	Number of Reserves or Lots	Total Area (ha)	Non-remnant vegetation extent (ha)	Remnant vegetation extent (ha)	Native vegetation extent (ha)	Progress tracker	
						2020 Native vegetation extent (ha)	Changes (ha)
State	15	6,584	126	6,397	6,523	6,515	↑ +8
Council Environment Reserve	298	3,049	556	1,992	2,548	2,343	↑ +205
Council Environment Reserves (w/ Nature Refuge)	5	194	17	175	192	-	-
Nature Refuge	5	66	22	39	61	61	0
Environmental Covenant	1,123	868	248	560	809	650	↑ +159
Land for Wildlife	475	3,453	987	1,563	2,550	2,086	↑ +464
Total	1,922	14,212	1,956	10,727	12,683	11,655	+1,028

Floodplain restoration on the Maroochy River

The Blue Heart is approximately 5,000 hectares in size and includes much of the natural floodplain in the lower Maroochy River catchment. Council continues to plan for future climate-driven challenges in the Maroochy River catchment area and has acquired land within the floodplain to protect and establish wetland and floodplain ecosystems. The need to develop a long-term transition of inundation-prone agricultural areas to wetland ecosystems was identified and is now underway in the Maroochy floodplains. In 2024, tidal waters have been introduced to some parts of the floodplain on Council-owned land as part of a blue carbon trial project that aims to provide insights into how long-term climate-driven changes may affect the floodplain and includes economic, social and environmental benefits.

Wetlands are rich reservoirs of biodiversity and long-term research partnerships will continue to monitor the species abundance, diversity and changes over time as a part of this project in the Blue Heart of our region. This project will provide enhanced and protected habitat for a variety of species including the vulnerable water mouse (*Xeromys myoides*) as well as a variety of migratory birds and birds.



Mooloolah River

The Mooloolah River is a meandering river, with its headwaters in the Mooloolah Range. The river winds through rainforest and natural bushland, agricultural and grazing lands, and urban development. The lower reaches have been modified for canal estates and a marina, supporting intensive boating, fishing and tourism activities. The Mooloolah River catchment occurs entirely within the Sunshine Coast Council area.

Native vegetation

Native vegetation covers approximately 55 per cent of the total area of the Mooloolah River catchment. Of the native vegetation cover, 34 per cent is non-remnant and 66 per cent is remnant vegetation.

Table 8: Mooloolah River catchment vegetation extent

	Urban area (ha)	Rural area (ha)	Total Area (ha)	Progress tracker	
				2020 Total area (ha)	Changes (ha)
Remnant	2,067	6,071	8,138	8,310	↓ -172
Non-remnant	2,043	2,106	4,149	3,547	↑ +602
Native vegetation	4,111	8,176	12,287	11,857	↑ +430
No vegetation	6,633	3,349	9,982		
Sunshine Coast Council area	10,743	11,526	22,269		

Vegetation communities

Table 9: Mooloolah River catchment vegetation communities

	Pre-clearance extent (ha)	Pre-clearance RE	Remnant extent (ha)	Current RE	Loss (%)	Non-remnant extent (ha)	Progress tracker			
							2020 remnant extent (ha)	Changes (ha)	2020 non-remnant extent (ha)	Changes (ha)
Catchment	22,269	39	8,138	39	63	4,149	8,310	↓ -172	3,547	↑ +4,763
Eucalypt	13,026	16	5,305	16	59	2,873	5,498	↓ -193	2,481	↑ +3,017
Fore-dune	167	2	97	2	42	19	86	↑ +11	20	↑ +66
Heath and Wallum	2,663	10	640	10	76	217	626	↑ +14	171	↑ +455
Mangrove and saltmarsh	121	2	75	2	38	2	73	↑ +2	2	↑ +71
Melaleuca and Casuarina	3,748	6	1,093	6	71	478	1,126	↓ -33	397	↑ +729
Rainforest	2,375	3	928	3	61	554	901	↑ +27	474	↑ +427

Conservation estate

Conservation estate makes up approximately 26 per cent of the total catchment area.

Table 10: Mooloolah River catchment conservation estate

Conservation areas	Number of Reserves or Lots	Total Area (ha)	Non-remnant vegetation extent (ha)	Remnant vegetation extent (ha)	Native vegetation extent (ha)	Progress tracker	
						2020 Native vegetation extent (ha)	Changes (ha)
State	7	2,100	65	2,027	2,092	2,088	↑ +4
Council Environment Reserve	152	1,808	367	1,085	1,452	1,489	↑ +152
Council Environment Reserves (w/ Nature Refuge)	6	192	13	177	189	.	-
Nature Refuge	4	84	11	70	81	79	↑ +2
Environmental Covenant	430	265	55	197	252	295	↓ -43
Land for Wildlife	128	1,414	383	682	1,065	881	↑ +184
Total	727	5,863	894	4,238	5,132	4,832	↑ +300

Threatened species recovery project – greater gliders in the Mooloolah River corridor

In 2022, the Greater Glider (*Petauroides volans*) was re-listed from Vulnerable to Endangered nationally as it continues to decline across the east coast of Australia. In 2022-23, Council partnered with the Wildlife Preservation Society Queensland (WPSQ) in a pilot project to install 18 greater glider nest boxes with remote sensing cameras across three locations with known greater glider inhabitants (known from recent sightings and records). These nest boxes are monitored remotely with the aim of understanding if greater gliders use these supplementary habitat options in areas they currently inhabit.

It is important to understand the habitat requirements, behaviours and threats to our threatened species to better prioritise management and conservation outcomes. Projects like this help Council to gain a better understanding of our local fauna, as well as presenting opportunities to grow community awareness of threatened species and their habitats.



Mary River

The Mary River is one of the most environmentally and economically diverse catchments in Queensland, supporting a range of activities including agriculture and tourism. Its headwaters are in the Conondale and Blackall Ranges and it flows northwards for hundreds of kilometres to the Great Sandy Strait, influencing the coastal environment of Hervey Bay and ultimately the Great Barrier Reef. Large areas of the catchment are protected natural areas and support several iconic threatened species – notably the Mary River cod (*Maccullochella mariensis*), Mary River turtle (*Elusor macrurus*) and Queensland lungfish (*Neoceratodus forsteri*). Approximately one sixth or 85,000 hectares of the Mary River catchment occurs within the Sunshine Coast Council local government area.

Native vegetation

Native vegetation covers approximately 68 per cent of the catchment.

Of the total native vegetation cover 23 per cent is non-remnant and 77 per cent is remnant.

Table 11: Mary River catchment vegetation extent

	Urban area (ha)	Rural area (ha)	Total Area (ha)	Progress tracker	
				2020 Total area (ha)	Changes (ha)
Remnant	72	44,873	44,945	45,027	↓ -82
Non-remnant	520	12,530	13,050	11,141	↑ +1,909
Native vegetation	592	57,403	57,996	56,168	↑ +1,828
No vegetation	822	25,950	26,772		
Total	1,415	83,354	84,768		

Vegetation communities

Table 12: Mary River catchment vegetation communities

	Pre-clearance extent (ha)	Pre-clearance RE	Remnant extent (ha)	Current RE	Loss (%)	Non-remnant extent (ha)	Progress tracker			
							2020 remnant extent (ha)	Changes (ha)	2020 non-remnant extent (ha)	Changes (ha)
Catchment	84,768	41	44,945	41	47	13,050	45,027	↓ -82	11,141	↑ +1,909
Eucalypt	57,698	25	32,406	25	44	7,922	32,531	↓ -125	6,749	↑ +1,173
Heath and Wallum	100	2	98	2	2	0.2	73	↑ +25	0.2	0
Melaleuca and Casuarina	1,127	5	638	5	43	183	547	↑ +91	193	↓ -10
Rainforest	25,843	9	11,804	9	54	4,945	11,875	↓ -71	4,197	↑ +748

Conservation estate

Conservation estate makes up 43 per cent of the total catchment extent.

Table 13 Mary River catchment conservation estate

Conservation areas	Number of Reserves or Lots	Total Area (ha)	Non-remnant vegetation extent (ha)	Remnant vegetation extent (ha)	Native vegetation extent (ha)	Progress tracker	
						2020 Native vegetation extent (ha)	Changes (ha)
State	5	25,506	233	25,245	25,478	25,462	↑ +16
Council Environment Reserve	51	903	251	544	795	807	↑ +114
Council Environment Reserves (w/ Nature Refuge)	3	127	2	125	126	-	-
Nature Refuge	23	712	118	583	701	657	↑ +44
Environmental Covenant	117	957	158	542	701	526	↑ +175
Land for Wildlife	341	8,182	2,139	3,049	5,188	4,228	↑ +960
Total	540	36,386	2,901	30,089	32,989	31,679	↑ +1,310

The power of private land partnerships in catchment conservation

Land for Wildlife is a free, voluntary conservation program that supports landholders to protect native plants and animals on their property. Over the last 10 years, the Land for Wildlife Habitat Restoration Incentives have assisted landholders to plant over 267,000 native seedlings across the region. The program has supplied and installed over 1,400 wildlife nest boxes across 400 properties, and has allowed over 220 landholders to participate in over 970 hours of weed control training, arming individuals with the foundational skills required to continue to undertake conservation activities across the Sunshine Coast Council area.

Land for Wildlife member uptake in the incentives program has increased by 60 per cent from 101 participants in 2014-15 to 166 participants in 2022-23. This positive growth in engagement can also be seen as Land for Wildlife membership grows on average 100 members per annum. The Land for Wildlife Habitat Restoration Incentive program is, according to a long standing member, an *“excellent program providing great motivation for landholders such as myself to participate in achieving regional environmental objectives of the council at a local grass roots level”* (A. Webb, Diamond Valley 2016).



Stanley River

The Stanley River headwaters are located in the Great Dividing Range and the Conondale Range, where large areas of land remain in a relatively natural state. The catchment contributes substantially to Brisbane's water supply through its impoundment at Somerset Dam. Approximately 11,224 hectares which equates to 7 per cent of the total catchment size of the Stanley River catchment is in the Sunshine Coast Council local government area. The headwaters are primarily surrounded by privately owned and managed land.

Native vegetation

Native vegetation covers approximately 60 per cent of the total area of the Stanley River catchment. Of the native vegetation cover, 37 per cent is non-remnant and 63 per cent is remnant vegetation.

Table 14: Stanley River catchment vegetation extent

	Urban area (ha)	Rural area (ha)	Total Area (ha)	Progress tracker	
				2020 Total area (ha)	Changes (ha)
Remnant	89	4,172	4,261	4,231	↑ +30
Non-remnant	206	2,303	2,509	2,179	↑ +330
Native vegetation	295	6,475	6,770	6,410	↑ +360
No vegetation	241	4,216	4,457		
Total	536	10,691	11,227		

Vegetation communities

Table 15: Upper Stanley River catchment vegetation communities

	Pre-clearance extent (ha)	Pre-clearance RE	Remnant extent (ha)	Current RE	Loss (%)	Non-remnant extent (ha)	Progress tracker			
							2020 remnant extent (ha)	Changes (ha)	2020 non-remnant extent (ha)	Changes (ha)
Catchment	11,227	25	4,261	25	62	2,509	4,230	↑ +31	2,180	↑ +329
Eucalypt	8,323	17	3,031	17	64	1,809	3,047	↓ -16	1,506	↑ +303
Heath and Wallum	11	2	11	2	1	0	11	0	0	0
Melaleuca and Casuarina	152	1	76	1	50	38	27	↑ +49	84	↓ -46
Rainforest	2,741	5	1,143	5	58	662	1,146	↓ -3	590	↑ +72

Conservation estate

Conservation estate makes up approximately 21 per cent of the catchment extent.

Council's conservation estate makes up approximately 16 per cent of the total conservation estate for the Stanley River Catchment with Land for Wildlife making up approximately 54 per cent of the conservation estate area.

Table 16: Stanley River catchment conservation estate

Conservation areas	Number of Reserves or Lots	Total Area (ha)	Non-remnant vegetation extent (ha)	Remnant vegetation extent (ha)	Native vegetation extent (ha)	Progress tracker	
						2020 Native vegetation extent (ha)	Changes (ha)
State	3	485	15	465	479	477	↑ +2
Council Environment Reserve	13	364	114	245	359	356	↑ +3
Council Environment Reserves (w/ Nature Refuge)	0	0	0	0	0	-	-
Nature Refuge	4	85	21	64	84	84	0
Environmental Covenant	36	151	40	109	148	126	↑ +22
Land for Wildlife	68	1,251	345	532	877	637	↑ +240
Total	124	2,337	534	1,414	1,948	1,679	↑ +269

The power of private land partnerships in catchment conservation

Since 2020, Council's Waterways and Catchment Management team has undertaken a range of riparian restoration projects and water quality monitoring programs to improve waterway and catchment health. This includes monitoring 48 freshwater and estuarine sites throughout the Sunshine Coast local government area, removing 60 tonnes of waterway litter and completing detailed designs for two proposed fishways in Petrie Creek, Nambour. Some project highlights for 2024 include:

- Restoration of 5km of riverbank in the north Maroochy catchment treating the invasive weed cats claw creeper across 25 properties. As part of the project, three field days attracted 55 attendees.
- Restoration and revegetation of a 1km section of the Obi Obi Creek, funded by the Disaster Recovery Fund (DRFA). Approximately 1,000 plants were planted on the riverbanks. Extensive treatment of Madeira vine and woody weeds have been a big part of this project.
- Waterway Enhancement Projects have included five sites, 1.5km of waterway in various catchments, weed treatment and 5,000 plants revegetation.

These initiatives contribute to the protection and enhancement of all species by improving a range of habitat areas within multiple major catchments across the region.



Pumicestone Passage (including northern portion of Bribie Island)

The Ramsar-listed Pumicestone Passage is a long, tidal waterway, enclosed between the mainland and Bribie Island. The Passage receives inflows from a network of creeks (Bells, Halls, Coochin and Coonowrin) which have their headwaters in the D'Aguiar Range. The catchment passes through mixed-use landscapes including native bush, forestry, pine plantations, grazing, horticulture and urban areas. Approximately 60 per cent or more than 45,700 hectares of the Pumicestone Passage catchment (including the northern portion of Bribie Island) occurs within the Sunshine Coast Council local government area.

Native vegetation

Native vegetation covers approximately 40 per cent of the total area of the Pumicestone Passage. Of the native vegetation cover 29 per cent is non-remnant and 71 per cent is remnant vegetation.

Table 17: Pumicestone passage vegetation extent

	Urban area (ha)	Rural area (ha)	Total Area (ha)	Progress tracker	
				2020 Total area (ha)	Changes (ha)
Remnant	1,560	11,190	12,751	12,717	⬆️ +34
Non-remnant	1,636	3,684	5,321	4,460	⬆️ +861
Native vegetation	3,197	14,874	18,071	17,177	⬆️ +894
No vegetation	7,487	20,159	27,646		
Sunshine Coast Council area	10,684	35,034	45,717		

Vegetation communities

Table 18: Pumicestone passage vegetation communities

	Pre-clearance extent (ha)	Pre-clearance RE	Remnant extent (ha)	Current RE	Loss (%)	Non-remnant extent (ha)	Progress tracker			
							2020 remnant extent (ha)	Changes (ha)	2020 non-remnant extent (ha)	Changes (ha)
Catchment	45,717	39	12,751	39	72	5,321	12,717	⬆️ +34	4,460	⬆️ +861
Foredune	23,715	14	5,275	14	78	2,597	5,295	⬆️ -20	2,148	⬆️ +449
Heath and Wallum	228	2	104	2	54	24	106	⬆️ -2	21	⬆️ +3
Mangrove and saltmarsh	3,265	9	999	9	69	250	991	⬆️ +8	187	⬆️ +63
Melaleuca and Casuarina	1,619	2	1,509	2	7	34	1,510	⬆️ -1	34	0
Eucalypt	14,463	9	4,717	9	67	2,288	4,669	+48	1,957	⬆️ +331
Rainforest	258	3	146	3	44	67	147	⬆️ -1	65	⬆️ +2

Conservation estate

Council's conservation estate makes up approximately 17 per cent of the Pumicestone passage total catchment extent.

Table 19: Pumicestone passage conservation estate

Conservation areas	Number of Reserves or Lots	Total Area (ha)	Non-remnant vegetation extent (ha)	Remnant vegetation extent (ha)	Native vegetation extent (ha)	Progress tracker	
						2020 Native vegetation extent (ha)	Changes (ha)
State	5	5,777	649	4,908	5,556	5,484	⬆️ +72
Council Environment Reserve	107	1,218	272	857	1,129	1,054	⬆️ +203
Council Environment Reserves (w/ Nature Refuge)	4	130	18	111	128	-	-
Nature Refuge	4	12	0	11	11	11	0
Environmental Covenant	61	68	8	54	61	60	⬆️ +1
Land for Wildlife	49	593	133	315	448	439	⬆️ +9
Total	228	7,797	1,079	6,255	7,334	7,048	⬆️ +286

Growing our conservation estate in the Pumicestone Passage catchment

In 2024, the State government began the process of dedicating an additional 1,119 hectares of land to Beerburrum West State Forest in the Pumicestone Passage catchment area as national park. This will connect with the existing Glass House Mountains National Park, improving connectivity and management benefits for the protected area estate in the Sunshine Coast. These areas have significant conservation values including habitat for species such as the glossy black-cockatoo (*Calyptorhynchus lathami*), wallum frog (*Crinia tinnula*) and tusked frog (*Adelotus brevis*). This transition of previously forested areas to protected areas will significantly increase our core habitat areas in the south of the region. This growth in habitat areas for our threatened species is also important in a landscape that continues to provide social, economic and environmental benefits for the whole region within the inter-urban break.

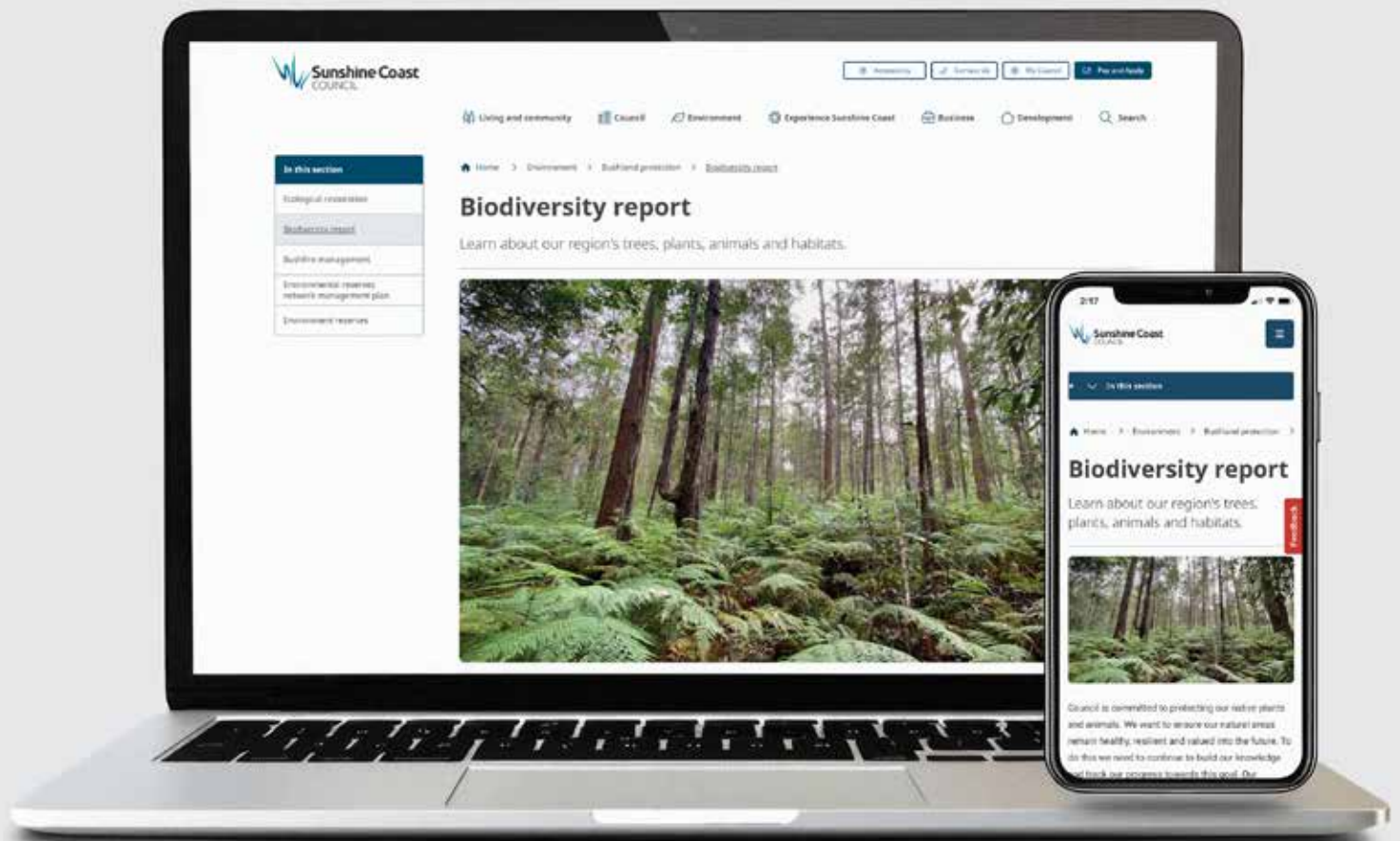


Methods and data

A Technical Background Report 2024 is available and provides the methods and data used to complete this Report.

To access the Technical Background Report 2024 and the online mapping portal visit the Sunshine Coast Council website.

sunshinecoast.qld.gov.au



Glossary

Biodiversity	Biodiversity—the variety of plants, animals, micro-organisms and ecosystems that constitute our living environment— is not static; it is constantly changing. It can be increased by genetic change and evolutionary processes, and it can be reduced by threats which lead to population decline and extinction.
Catchment	A catchment is defined as the area of land that contains a river system and its associated coastal waters. Catchment boundaries are often formed by high ground separating them, at a line known as a watershed.
Connecting habitat areas	Areas of remnant and non-remnant vegetation less than 50 hectares in extent, and which may comprise: <ul style="list-style-type: none">• fragmented and isolated patches of vegetation as small as 10m²• a group of loosely aggregated, but proximal, small habitat fragments in natural or near natural condition• groups of habitat fragments within discrete physical regions such as catchments and landform elements not identified as core habitat areas.
Conservation	The preservation, protection, or restoration of the natural environment, natural ecosystems, vegetation, and wildlife.
Conservation estate	Includes land parcels with legally binding protection mechanisms as well as land parcels with voluntary intent to preserve the environmental values contained within (i.e. Land for Wildlife).
Core Habitat Areas (CHAs)	Contiguous remnant and non-remnant vegetation greater than 50 hectares in extent, which may comprise: <ul style="list-style-type: none">• multiple vegetation community types (or regional ecosystems)• wetlands, rivers and wide coastal waterways that traverse the core habitat area• known rare and threatened flora and fauna populations• lands with a variety of tenures• infrastructure easements that retain a grassy ground cover or shrubby understorey that reflects the characteristics of nearby habitat types• narrow infrastructure corridors such as local roads or rail easements.
Ecosystem	An ecosystem is a natural unit consisting of all plants, animals and microorganisms in an area, functioning together with all the non-living physical factors, including soil, rocks, minerals, water sources and the local atmosphere.
Ecosystem function	The capacity of natural processes and components to provide goods and services that satisfy human needs, either directly or indirectly. Ecosystem functions are conceived as a subset of ecological processes and ecosystem structures.

Endangered Under the Queensland *Nature Conservation Act 1992*, a regulation may prescribe native wildlife as endangered wildlife if:

- there have not been thorough searches conducted for the wildlife and the wildlife has not been seen in the wild over a period that is appropriate for the life cycle or form of the wildlife
- the habitat or distribution of the wildlife has been reduced to an extent that the wildlife may be in danger of extinction
- the population size of the wildlife has declined, or is likely to decline, to an extent that the wildlife may be in danger of extinction
- the survival of the wildlife in the wild is unlikely if a threatening process continues

Endemic The situation in which a species is restricted to a particular geographic region, owing to factors such as isolation or response to soil or climatic conditions. Such a taxon is said to be endemic to that region.

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) is the Australian Government’s central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places – defined in the EPBC Act as matters of national environmental significance.

Fine-scale vegetation (FSV) Fine-scale vegetation (woody vegetation) was identified from a dataset produced by the Sunshine Coast Council (2022) generated using a combination of Aerial Laser Survey (LiDAR), Vegetation Index (NDVI), infra-red and aerial photography. It captures much of the vegetation outside the mapped blocks of vegetation through the regional ecosystem mapping. In this LiDAR capture we included only woody vegetation greater than 2m in height.

The data underwent significant post-processing through a rigorous Q&A process that included identifying significant vegetation communities that were below the 2m threshold and not mapped as remnant. For more information on these vegetation communities see the Technical Background report.

Habitat Habitat is defined as:

- place where an organism or a biological population normally lives or occurs
- the location or environment where an organism is most likely to be found
- the home to a particular organism where the species will attempt to be as adaptive as possible to that particular environment
- the place being occupied by an organism, population, or community.

Habitat fragmentation The situation when a continuous habitat has become divided into separate and often isolated patches of small habitat areas.

Land for Wildlife program Land for Wildlife is a free, voluntary conservation program that supports participants in protecting, enhancing and rehabilitating native flora and fauna on their property. Land for Wildlife registration does not alter the legal status of a property, convey the right of public access, nor represent an official wildlife sanctuary.

Landscape ecology The science of studying and improving relationships between ecological processes in the environment and particular ecosystems. This is done within a variety of landscape scales, development spatial patterns, and organisational levels of research and policy.

Least concern	Under the Queensland <i>Nature Conservation Act 1992</i> , a regulation may prescribe native wildlife as least concern wildlife if the wildlife is common or abundant and is likely to survive in the wild.
LiDAR	Light Detection and Ranging Data (LiDAR) is aerial laser survey technology which remotely senses the height of objects on the earth's surface using laser scanners mounted to an aircraft.
National Parks	A class of protected area declared under the <i>Nature Conservation Act 1992</i> .
Native Vegetation	In this Report refers to the combined remnant vegetation and non-remnant vegetation defined within this report and previous Biodiversity Reports.
Nature Conservation Act 1992 (NC Act)	<i>Nature Conservation Act 1992</i> is the Queensland government's central piece of environmental legislation. It provides a legal framework to protect and manage state, nationally and internationally important flora, fauna and ecological communities.
Nature Refuge	A Nature Refuge is a legally binding voluntary agreement between a landholder and the Queensland Government. A Nature Refuge agreement acknowledges a commitment to protect land with significant conservation value, while allowing compatible and sustainable land uses to continue.
Non-remnant vegetation	For the purpose of this report, means vegetation that doesn't qualify as remnant vegetation and may include native, indigenous, endemic, non-native, and invasive pest flora species. This can also be used inter-changeably with fine scale vegetation (see definition above).
Pre-clearing regional ecosystem	Pre-clearing vegetation is defined by the <i>Vegetation Management Act 1999</i> and depicted by the Queensland Herbarium's regional ecosystem mapping as the vegetation present before clearing.
Regional ecosystem	A vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil (Sattler and Williams, 1999).
Remnant vegetation	As defined in the <i>Vegetation Management Act 1999</i> , a vegetation community in a bioregion. Remnant vegetation is defined as vegetation that has not been cleared or vegetation that has been cleared but where the dominant canopy has more than 70% of the height and more than 50% of the cover relative to the undisturbed height and cover of that stratum and is dominated by species characteristic of the vegetation's undisturbed canopy. For this report the regional ecosystem mapping (V13) was used.
Rural	For the purposes of the Biodiversity Report, Rural is defined under the ShapingSEQ - South East Queensland Regional Plan 2023 and the Sunshine Coast <i>Planning Scheme 2014</i> including areas in the rural residential zoned area.
Statutory covenant	A statutory covenant is a legally binding written agreement entered into by the landowner to protect, preserve and often enhance environmental features on private property. They can also be used to better control built form or development on private properties.

Threatened ecological community

Ecological communities listed under the *Environment Protection and Biodiversity Conservation Act 1999*. An ecological community may be categorised as critically endangered, endangered or vulnerable.

The three categories are defined as:

1. Critically Endangered - if, at that time, an ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).
2. Endangered - if, at that time, an ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).
3. Vulnerable - if, at that time, an ecological community is not critically endangered or endangered, but is facing a high risk of extinction in the wild in the medium-term future (indicative timeframe being the next 50 years).

Vegetation community

An assembly of different species of plants growing together in a particular habitat; the floral component of an ecosystem.

Vegetation Management Act 1999

The purpose of the *Vegetation Management Act 1999* is to regulate the clearing of vegetation in a way that conserves regional ecosystems, conserves vegetation in declared areas, ensures clearing does not cause land degradation, prevents the loss of biodiversity, manages the environmental effects of clearing in relation to the abovementioned elements and reduces greenhouse emissions.

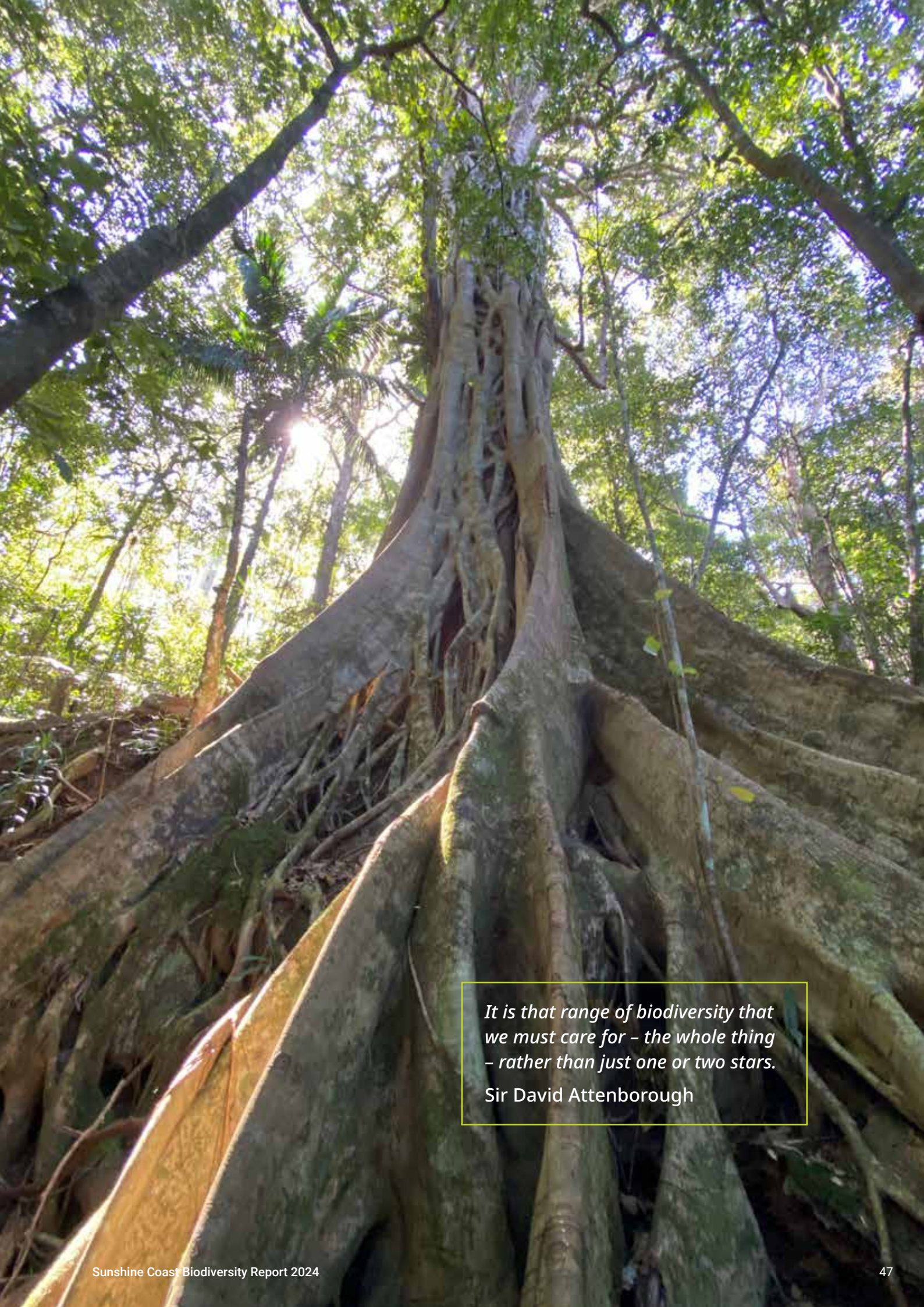
Vulnerable

Under the Queensland Nature Conservation Act 1992, a regulation may prescribe native wildlife as vulnerable wildlife if:

- a. the population size or distribution of the wildlife has declined, or is likely to decline, to an extent that the wildlife may become endangered because of a threatening process
- b. the population size of the wildlife has been seriously depleted and the protection of the wildlife is not secured
- c. the population of the wildlife is
 - i. low or localised;
 - ii. dependent on habitat that has been, or is likely to be, adversely affected, in terms of quantity or quality, by a threatening process.

Urban

For the purposes of the Biodiversity Report, Urban includes Urban Footprint and Rural Living Areas as defined by the ShapingSEQ - South East Queensland Regional Plan 2023 and the Sunshine Coast Planning Scheme 2014 and are those areas where residential, commercial and industrial development and subdivision is permissible.



It is that range of biodiversity that we must care for – the whole thing – rather than just one or two stars.
Sir David Attenborough



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