

Environment Levy Annual Report 2017/18



Acknowledgement of Traditional Owners

Sunshine Coast Council acknowledges the traditional Country of the Kabi Kabi Peoples and the Jinibara Peoples of the coastal plains and hinterlands of the Sunshine Coast and recognise that these have always been places of cultural, spiritual, social and economic significance. We wish to pay respect to their Elders – past, present and emerging – and acknowledge the important role Aboriginal and Torres Strait Islander people continue to play within the Sunshine Coast community

September 2018 edition

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Acknowledgements

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Disclaimer

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An aerial photograph of a coastal landscape. A river flows through the center, bordered by dense, dark green forest on the left and a mix of coastal vegetation, including tall grasses and shrubs, on the right. The top of the image shows a dense forest of trees with yellowish-green foliage. The bottom of the image shows a large, dense tree with bright yellow-green leaves. The overall scene is a mix of natural, undeveloped land.

Sunshine Coast Council
Environment Levy Annual Report 2017/18
September 2018 edition



Message from your Mayor and Councillor

Sunshine Coast Council is focused on achieving a healthy, smart, creative region that our 320,000 residents and our millions of visitors each year can enjoy now and well into the future.

The Sunshine Coast's natural environment is one of our most important assets and is highly valued by council and our community.

It is an integral part of our value proposition, our identity and the quality of life of our residents.

Protecting, maintaining and enhancing our environment is not only a key priority for our council – it is also an intrinsic element of the liveability of our community and the success of our economy.

One of the key levers we have in helping us to achieve our vision for the region is the annual Environment Levy.

Contributed by all ratepayers, the Environment Levy enables our council to provide lasting conservation and preservation services and opportunities that will benefit our communities for generations to come.

This annual report outlines the achievements that have been realised over the last 12 months through the use of the Environment Levy and highlights the key projects we have delivered in line with our *Environment and Liveability Strategy*.

With the continuing and valuable assistance of many community groups, property owners and volunteers, we have been able to implement a range of outcomes to protect and enhance our natural environment.

Our council is proud of the significant environmental achievements over the past financial year and looks forward to continuing the region's progress to be Australia's most sustainable region – healthy, smart, creative.

Mayor Mark Jamieson and
Councillor Jenny McKay (Environment Portfolio)



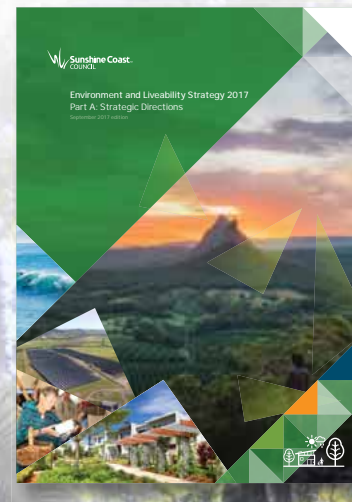
Mayor Mark Jamieson and Councillor Jenny McKay planting trees to improve waterway health in the Mooloolah River catchment.

A strategic approach

Our natural environment is a living network of landforms and catchments, wetlands, waterways, terrestrial ecosystems, coastal foreshores and marine waters. These natural assets provide the foundations of the valued Sunshine Coast way of life.

The protection and enhancement of these natural assets is clearly articulated in council's strategic and integrated approach as outlined in the *Environment and Liveability Strategy 2017*, which seeks to guide decision-making and action to maintain the liveability of the region.

Council's Environment Levy provides important funding that allows council and the community to work together to deliver a range of strategic projects, programs and initiatives that contribute to the preservation and enhancement of our biodiversity; waterways and wetlands; and coastal areas.



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.

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.

Transforming the Sunshine Coast

In response to the challenges and opportunities presented by population growth, climate change, economic growth and technological innovation, implementation of the Environment and Liveability Strategy is assisting to transform the Sunshine Coast. This year, the Environment Levy has continued to invest in land acquisitions, on-ground projects, community engagement and support and building our knowledge. Such investments have supported the delivery of outcomes associated with a number of strategic Transformational Actions.

Buying, protecting and enhancing environmentally significant land

Building our knowledge (monitoring and research)

Delivering on-ground environmental projects

Engaging and supporting the Sunshine Coast community

Other environmental activities

\$8.575M

\$234K

\$1.135M

\$1.527M

\$2.239M



Environment Levy
2017/18 snapshot

Total spend:
\$13.75M



Transformational Actions

Connecting nature and people

Connecting our valued habitat areas to support our native flora and fauna and providing the community with opportunities to participate in conservation and to experience the natural environment.

Maintaining the blue by protecting the green

Delivering healthy waterways and beaches that continue to support our lifestyle and livelihoods through integrated catchment management.

A step ahead

Providing for the reinstatement of vegetation and habitats that locally offset the unavoidable vegetation clearing required for our critical public infrastructure.

Healthy coast

Providing a strategic and coordinated approach to the protection, sustainable use and enjoyment of our dunes, beaches, rocky shores and near-shore marine waters.

Managing our invasive plants and animals

Providing a collaborative, effective and efficient response to the management of invasive plants and animals to reduce their social, economic and environmental impacts.

An involved community

A major engagement program to inspire and empower the community to value the environment and play their part in a liveable, sustainable and resilient future.

Building our Knowledge

Enabling evidence based decisions for a healthy environment and liveable Sunshine Coast.

Connecting nature and people



Connecting our valued habitat areas to support our native flora and fauna and providing the community with opportunities to participate in conservation and to experience the natural environment.

Through the implementation of this Transformational Action, the Environment Levy has supported the acquisition of environmental lands, the conservation and management of native animals and delivered a successful partnerships and grants program to engage and support the community in their conservation efforts.


Land acquisition program acquires 405 hectares

This has been council's most successful year for the Environment Levy Land Acquisition Program with \$7.3M invested into the purchase of nine properties totalling 405 hectares, across three catchments.

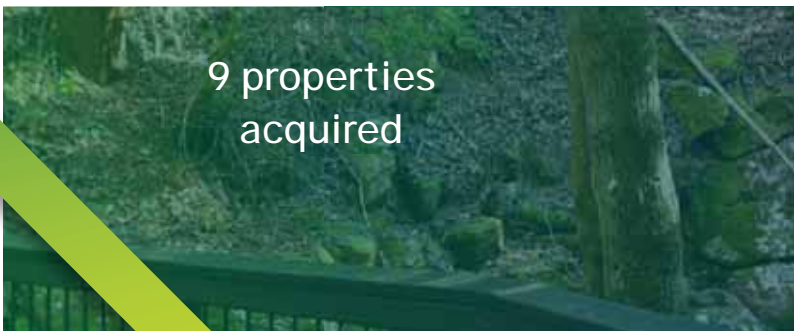
The acquisitions assist to:

- protect, preserve and enhance of our natural environment
- consolidate and expand council's conservation reserve network
- preserve native plants and animals
- protect and enhance wildlife corridors

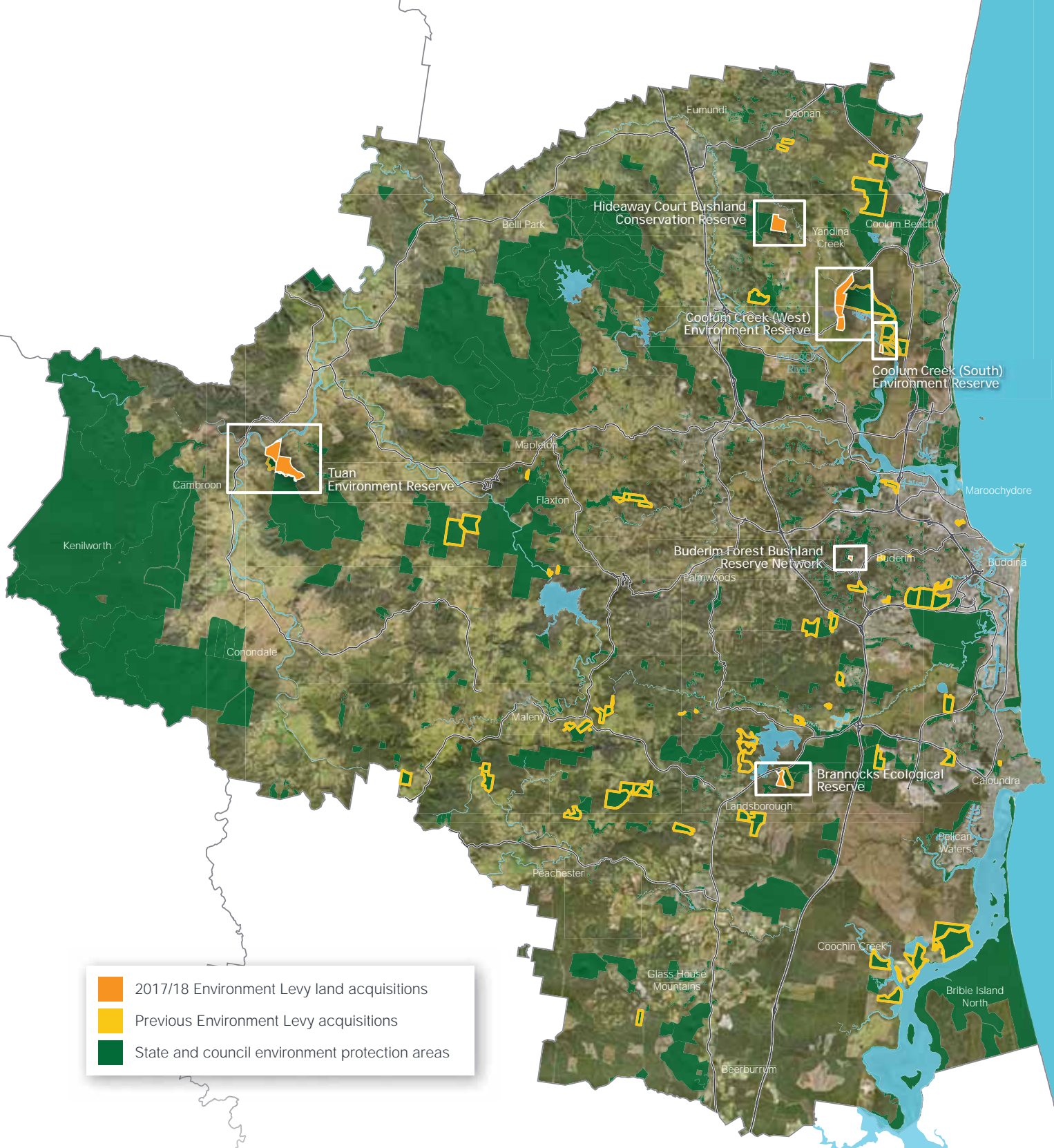
A further \$508K has been invested into the establishment of these, and previously acquired lands under this program. \$701K has also been invested into the management of council's Environment Levy conservation estate which ensures the site's values are protected for both today's community and future generations to enjoy and appreciate.



\$7.3M
invested



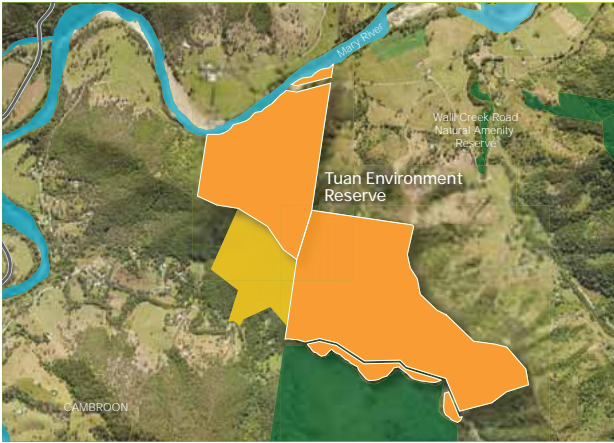
9 properties
acquired



405 ha across
3 catchments

including approx. 200 hectares
for creation of new habitat

\$1.2M invested into
the establishment and
management of acquired lands



200 hectare reserve established in Mary River Catchment

The Tuan Environment Reserve (purchased by the Environment Levy in 2011) has been expanded with the acquisition of a 109 hectare property at Cambroon and a 63 hectare Kenilworth property. These acquisitions have established a regionally significant reserve of almost 200 hectares that links the Maleny National Park directly to the Mary River. The acquisitions also assist to consolidate a strategic wildlife corridor that extends from Kondalilla National Park to Conondale National Park.

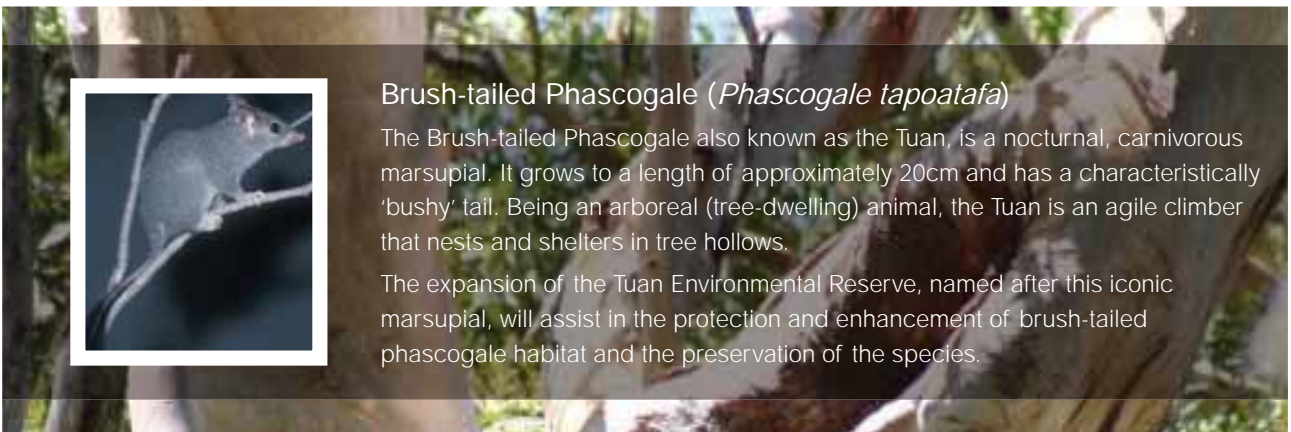
The Kenilworth property comprises over 600 metres of Mary River frontage providing opportunities to improve riparian habitats to further support habitat for the endangered Mary River turtle (*Elusor macrurus*), the Mary River cod (*Maccullochella mariensis*) and lung-fish (*Neoceratodus forsteri*). The consolidated reserve also protects habitat for the threatened species such as the brush-tailed phascogale (*Phascogale tapoatafa*) and glossy-black cockatoo (*Calyptorhynchus lathami lathami*).



Building conservation areas for Buderim

Adjoining the urban fringe of Buderim, a four hectare acquisition has expanded the Buderim Forest Reserve Network – a mosaic of council environment reserves, totalling an area in excess of 100 hectares. The reserve network preserves patches of remnant native vegetation in an otherwise fragmented landscape.

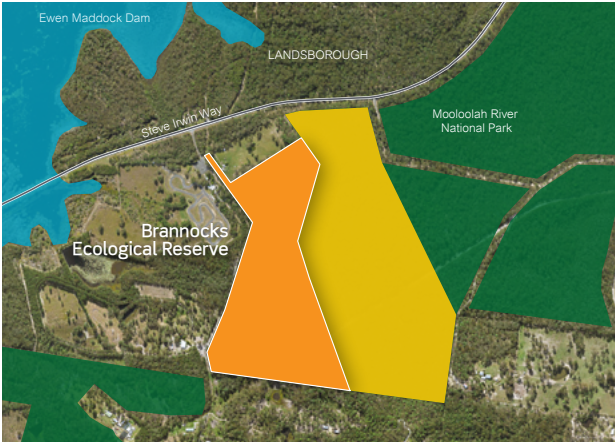
The acquisition of this property protects eucalypt forest on basalt soils, an ecosystem type not well represented in the Buderim Forest reserve network. This habitat is home to the threatened Richmond Birdwing butterfly (*Ornithoptera richmondia*), Tusked Frog (*Adelotus brevis*), the vulnerable Powerful Owl (*Ninox strenua*) and Koala (*Phascolarctos cinereus*). The acquisition of this property may assist to facilitate recreation opportunities as part of the Buderim Forest Park walking trail network.



Brush-tailed Phascogale (*Phascogale tapoatafa*)

The Brush-tailed Phascogale also known as the Tuan, is a nocturnal, carnivorous marsupial. It grows to a length of approximately 20cm and has a characteristically 'bushy' tail. Being an arboreal (tree-dwelling) animal, the Tuan is an agile climber that nests and shelters in tree hollows.

The expansion of the Tuan Environmental Reserve, named after this iconic marsupial, will assist in the protection and enhancement of brush-tailed phascogale habitat and the preservation of the species.



Landsborough landscape connections enhanced

Adjoining the Brannocks Ecological Reserve (purchased by the Environment Levy in 2002 and expanded in 2010), this acquisition expands the reserve to 80 hectares and consolidates the adjoining Mooloolah River National Park, contributing to improved ecological connectivity and habitat functionality.

The acquisition protects habitat for the threatened Wallum Froglet (*Crinia tinnula*) as well as eucalypt forests (suitable for koala habitat) that are not well represented in council's environment reserve network.

Located within the catchment of Ewen Maddock Dam, the protection of the site's native vegetation will also contribute to improving catchment water quality.

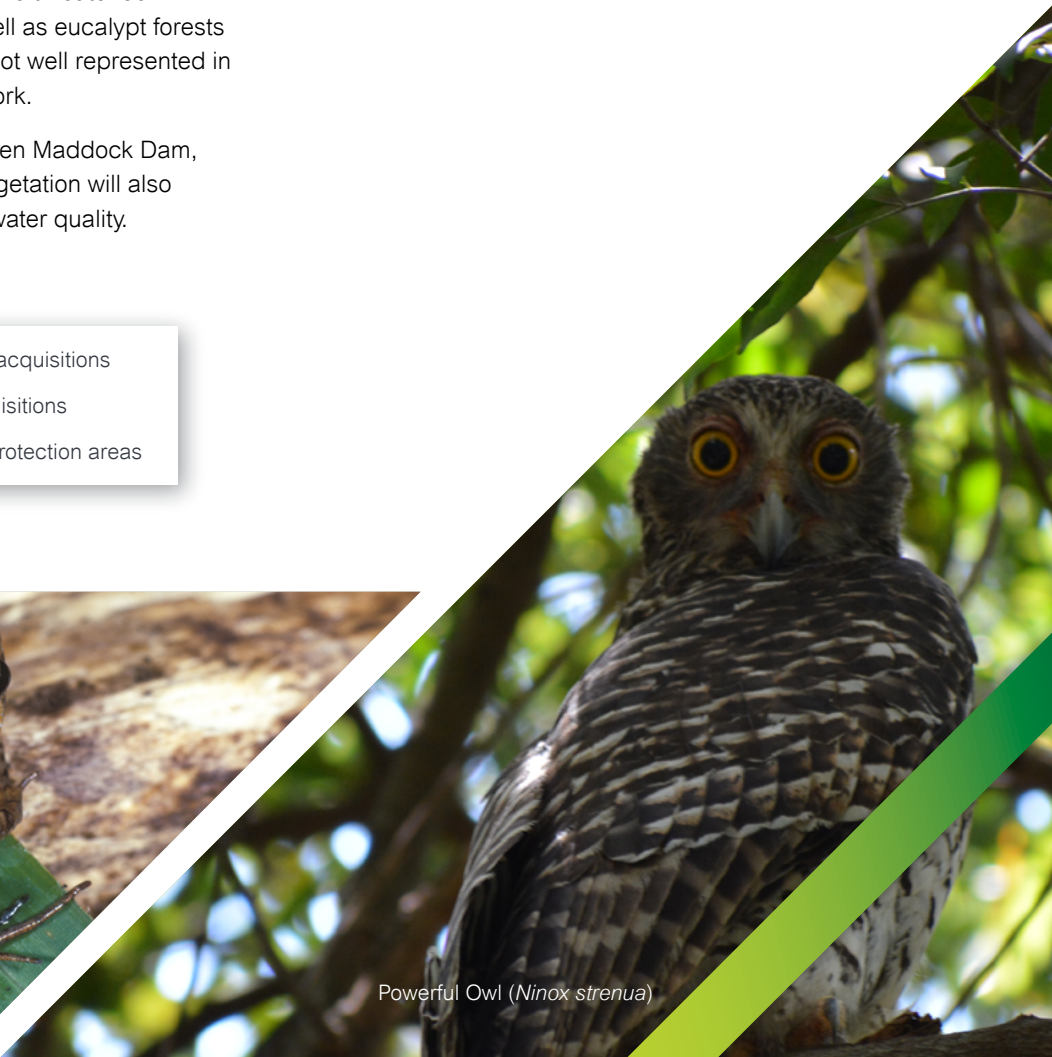
Maroochy River property secured

The acquisition of a six hectare property located on the south bank of the Maroochy River has expanded the Coolum Creek (South) Environment Reserve and protected melaleuca and casuarina vegetation communities. The cleared portion of property provides opportunity for restoration of riparian habitats. The acquisition may also assist to connect people and nature by supporting nature based recreational activities.

- 2017/18 Environment Levy land acquisitions
- Previous Environment Levy acquisitions
- State and council environment protection areas



Wallum Froglet (*Crinia tinnula*)



Powerful Owl (*Ninox strenua*)

The Sunshine Coast Environment Levy has continued to invest into the conservation and management of koalas. This year a project also commenced to better understand and ultimately improve fauna movement on the Sunshine Coast.

Caring for our koalas

Levy funding has continued to support the implementation of the Sunshine Coast Koala Conservation Plan. Commencing in 2015, the Plan provides a framework for council and the community to work in partnership to protect koalas through the delivery of 34 actions. These actions contribute to a landscape conservation approach in supporting broader environmental protection. Additionally these actions deliver specific koala conservation outcomes to increase habitat availability, connectivity, build understanding and mitigate threats.

Actions underway include:

Planting of koala food trees on private properties.

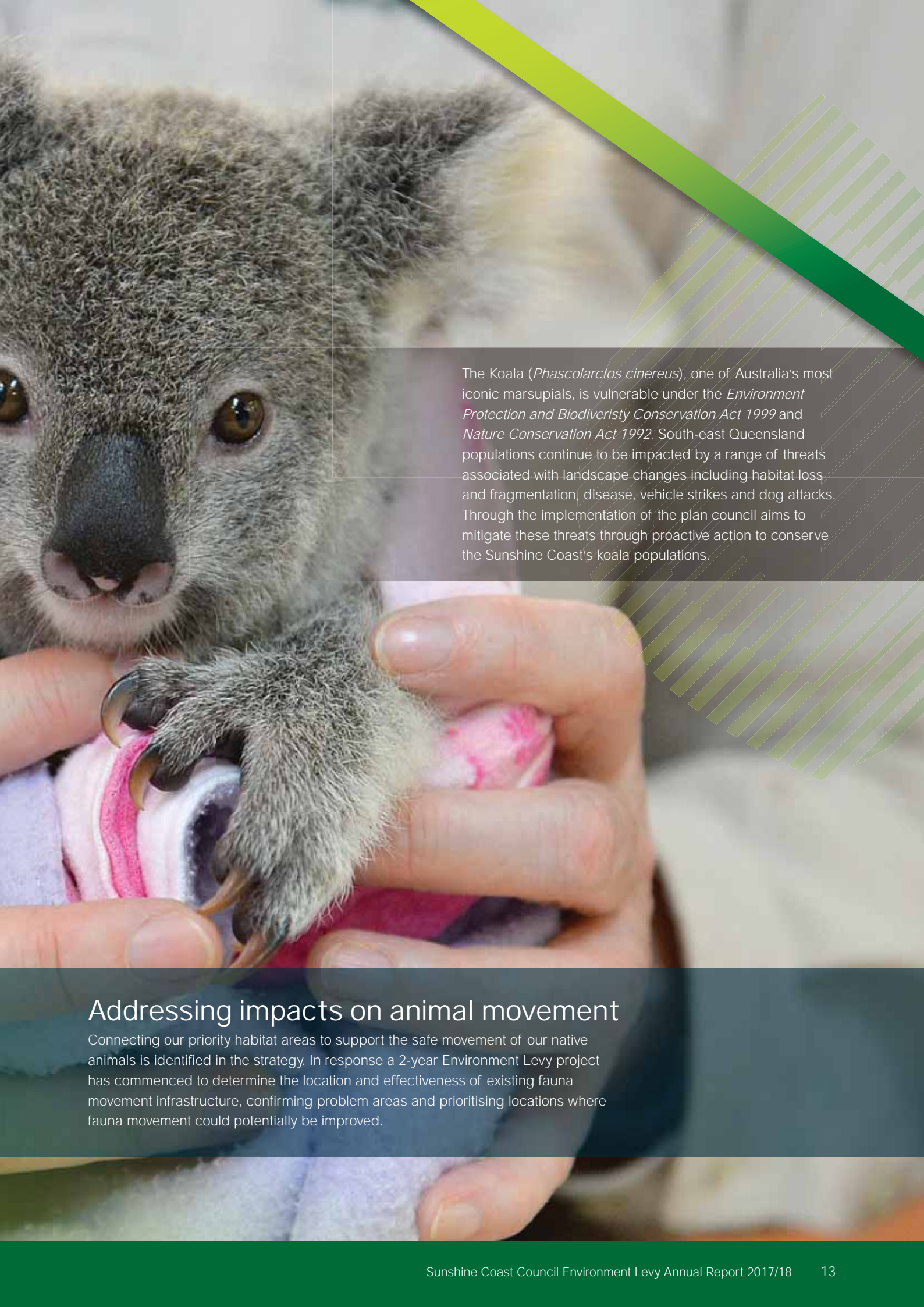
Provision of funding to wildlife care groups and hospitals for the support of sick or injured koalas.

Ongoing work with partner organisations in investigating koala ecology and disease.

19 of 34 actions
commenced or
completed

Continued
monitoring of
koalas in Witta/
Reesville

Lizzie the Koala
cured of Chlamydia
and re-released



The Koala (*Phascolarctos cinereus*), one of Australia's most iconic marsupials, is vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* and *Nature Conservation Act 1992*. South-east Queensland populations continue to be impacted by a range of threats associated with landscape changes including habitat loss and fragmentation, disease, vehicle strikes and dog attacks. Through the implementation of the plan council aims to mitigate these threats through proactive action to conserve the Sunshine Coast's koala populations.

Addressing impacts on animal movement

Connecting our priority habitat areas to support the safe movement of our native animals is identified in the strategy. In response a 2-year Environment Levy project has commenced to determine the location and effectiveness of existing fauna movement infrastructure, confirming problem areas and prioritising locations where fauna movement could potentially be improved.

Engaging and supporting the Sunshine Coast community is integral to achieving council's desired natural environment outcomes. Funding provided to not-for-profit community groups assists them to operate and engage with the broader community on environmental issues, while grants with private landholders delivers on-ground outcomes which would not otherwise be achieved by council.

Connecting through Conservation

Environment Levy Partnerships and Grants

Through the partnerships and grants programs the Environment Levy supports not-for-profit community-based environmental organisations who undertake a broad range of projects such as habitat restoration, monitoring activities, biosecurity action, litter collection and fauna rehabilitation.

\$595K provided across 22 partnership groups (incorporating more than 3000 volunteers)

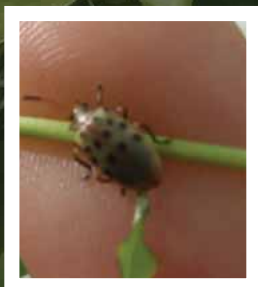
Almost \$20K provided in grants to seven community-based organisations

Battling weeds through bio-control

As an Environment Levy partner, Mooloolah River Waterwatch and Landcare have constructed a bio-control facility to combat Madeira Vine (*Anredera cordifolia*), which is a restricted invasive plant under the *Biosecurity Act 2014* and a priority in the *Sunshine Coast Council Local Government Area Biosecurity Plan 2017*.



Mooloolah River Waterwatch and Landcare



Madiera Vine (*Anredera cordifolia*)

A vigorous climbing vine that smothers native trees, shrubs and understory species degrading native forests. The Leaf Feeding Beetle (*Plectonycha correntina*) is used in the biological control of the vine. The larval and adult stages of the beetle feed on the leaves causing leaf damage and defoliation to the vine. The use of this beetle as a bio-control agent forms part of an integrated weed control program that helps protect vegetation impacted by the vine across the region including endangered Sub-tropical Lowland Rainforest communities.



Empowering Landholders

Landholder Environment Grants, Voluntary Conservation Agreements and Land for Wildlife

Environment Levy funding is invested in landholder grants, the establishment of Voluntary Conservation Agreements (VCAs), and in the Land for Wildlife Program (LFW) to support landholders to protect native plants and animals on their property.

\$309K provided to 99 private landholders

Almost \$350K invested in VCAs

Total VCAs increased to 75 – protecting 1158 hectares of land

50 additional LFW members; \$93K invested; 27,000 plants provided to members



Food for koalas in care

Supported by the Environment Levy Partnerships Program the Glass House Mountains Advancement Network (GMAN) has established a koala food tree plantation comprising 500 trees of 12 different eucalypt species. The 5600m² plantation located at Pinelands Park, Landsborough will supply food for injured or orphaned koalas that are in care.

Maintaining the green to protect the blue

Delivering healthy waterways and beaches that continue to support our lifestyle and livelihoods through integrated catchment management.

Waterways and wetlands are the living arteries of our natural environment that support a range of habitats and diverse and specialised wildlife. The Sunshine Coast comprises of five catchments that drain from the Blackall and D'Agular ranges in the west – eastward to the coast via a network of streams, creeks and rivers.

Maintaining the good health of these waterways and their habitats is reliant upon the condition of the adjoining riparian areas (the land that fringes a waterway) and its vegetation. In addition to supporting habitats, riparian areas contribute to water quality by stabilising banks to limit erosion and filtering pollutants from water.

Through an integrated catchment approach Environment Levy funds have been invested into a number of rehabilitation projects across the Pumicestone, Maroochy River, Mary River and Mooloolah River catchments to improve water quality. This year saw the 100,000th tree planted through this program.



Riparian Restoration

Pumicestone Rehabilitation – Bells Creek 4 year project – Final year

As part of the *Pumicestone Passage and Catchment Action Plan 2017-2020*, Environment Levy funds have continued to support riparian restoration works within the Bells Creek sub-catchment to address water quality decline as a result of rural and urban encroachment and the clearance of native vegetation.

7km of riverfront habitat restored

7000 native plants established and maintained

6 private landholders engaged

Water Mouse (*Xeromys myoides*) habitat enhanced

Almost \$30K invested (approx. \$350K invested to date)



Maroochy River Rehabilitation – North 4 year project – Final year

In the final phase of the Maroochy River rehabilitation project on-ground actions have focused on maintaining the previously rehabilitated areas.

4.5km of riverfront habitat restored

11,000 established trees maintained

2 private landholders engaged

\$32K invested (\$240K invested to date)



Mary River Rehabilitation

4 year project – Second year

Council has continued restorative works on degraded riparian habitats across 11 Mary River catchment sites to address declining water quality. These works complement the implementation of the *Mary River Threatened Species Community Recovery Plan* which aims to preserve threatened species endemic to the Mary River such as the Mary River Turtle (*Elusor macrurus*).

2km of riverfront habitat under restoration

1200 infill plants (46,200 since commencement)

6 private landholders engaged

Contributing to habitat and water quality improvements for endangered and vulnerable species

\$107K invested (\$300 invested to date)

Mooloolah River Rehabilitation

4 year project – First year

Building upon the success of previous Mooloolah River riparian rehabilitation works which were finalised in 2013/14 – an expanded area comprising both council and private lands has been targeted for additional riparian restoration activities.

6.5ha of riverfront habitat under restoration

13ha under bush revegetation

37,500 native trees planted in 1 year

18 private landholder sites and 3 council sites targeted

Almost \$130K invested to date



Currimundi Creek Rehabilitation

4 year project – First year

On-ground actions have been undertaken along the southern arm of Currimundi Creek to address water quality decline, improve bank stability and increase fauna habitat. Impacted by stormwater discharge and high rainfall events, works on the degraded site have included natural regeneration and removal of environmental weeds. Reduced sediment input into Currimundi Creek will support the overall health of the broader Lake Currimundi system – a waterway highly valued by the community.

230m of riverfront habitat under restoration

0.5ha under bush revegetation

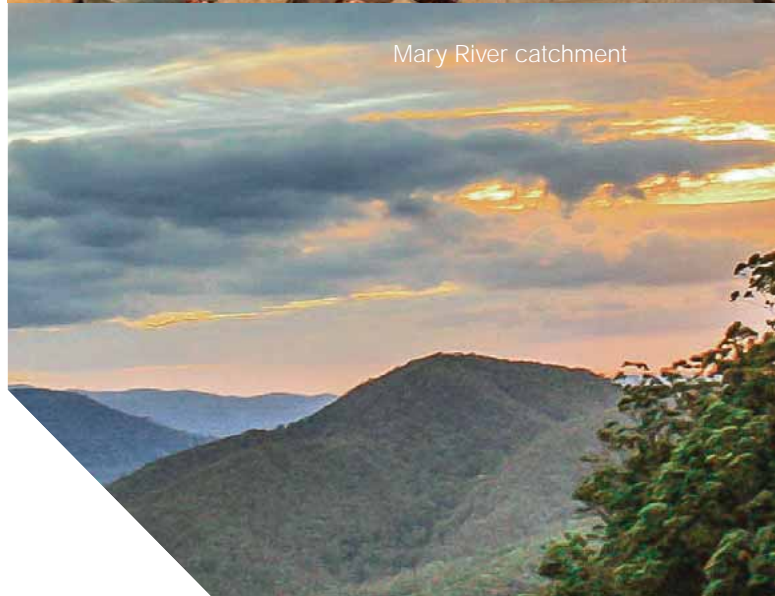
1650 native plants in 1 year

Flora survey undertaken to inform habitat restoration

More than \$20K invested to date



Mary River Turtle (*Elusa Macrurus*)



Mary River catchment



Currimundi Creek Rehabilitation

A step ahead



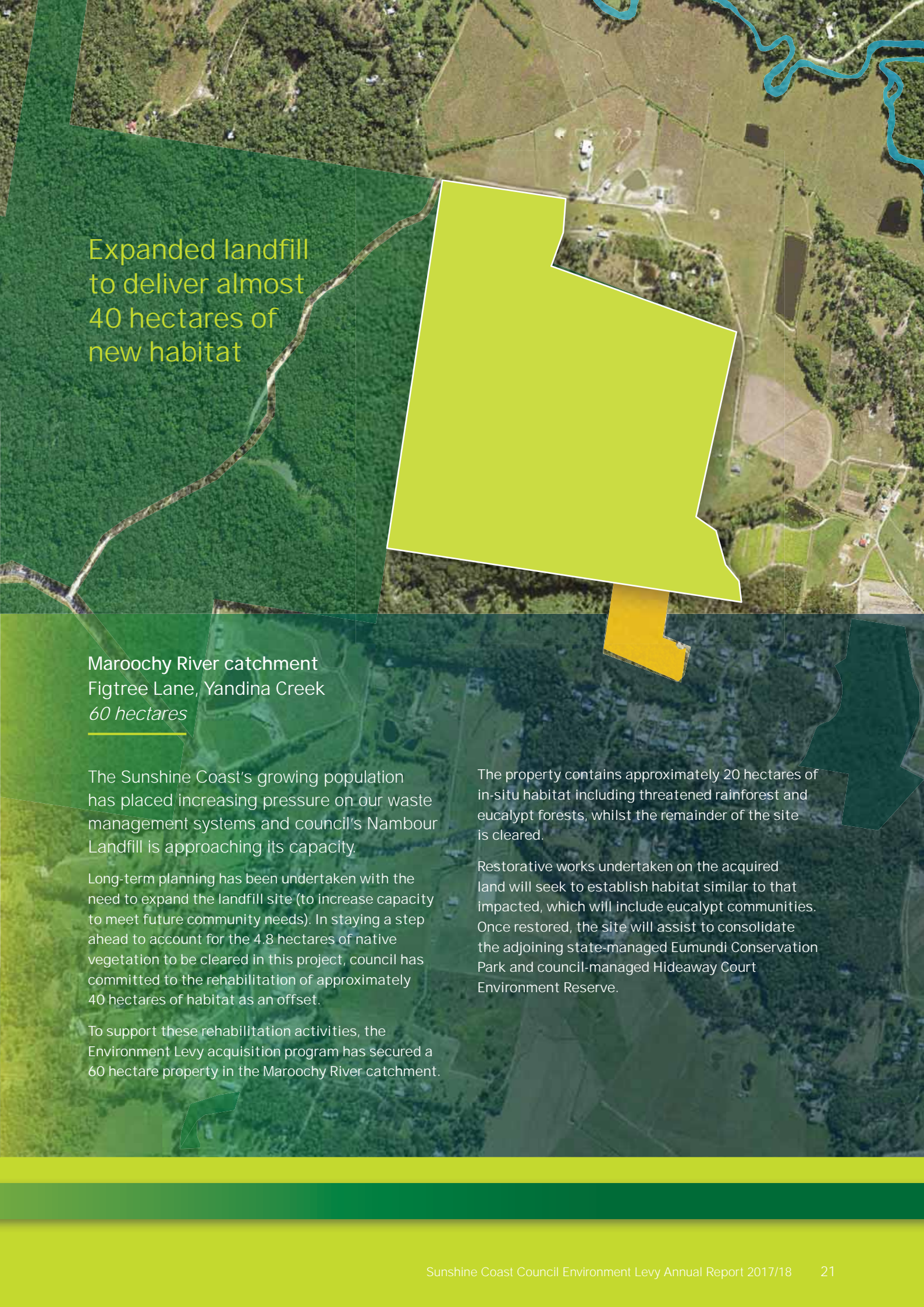
Providing for the reinstatement of vegetation and habitats that locally offset the unavoidable vegetation clearing required for our critical public infrastructure.

In addition to protecting existing natural environmental values across the local government area, council's land acquisition program has proactively secured approximately 200 hectares of cleared, but strategically located land to create and protect new habitat areas through rehabilitation and natural regeneration activities.

While improving landscape connectivity, the reinstatement of native vegetation also assists council to deliver on its target of maintaining the 2016 extent (124,331ha) of native vegetation by 2041 by offsetting unavoidable vegetation loss.



Acquired Yandina-Coolum Road properties



Expanded landfill
to deliver almost
40 hectares of
new habitat

Maroochy River catchment
Figtree Lane, Yandina Creek
60 hectares

The Sunshine Coast's growing population has placed increasing pressure on our waste management systems and council's Nambour Landfill is approaching its capacity.

Long-term planning has been undertaken with the need to expand the landfill site (to increase capacity to meet future community needs). In staying a step ahead to account for the 4.8 hectares of native vegetation to be cleared in this project, council has committed to the rehabilitation of approximately 40 hectares of habitat as an offset.

To support these rehabilitation activities, the Environment Levy acquisition program has secured a 60 hectare property in the Maroochy River catchment.

The property contains approximately 20 hectares of in-situ habitat including threatened rainforest and eucalypt forests, whilst the remainder of the site is cleared.

Restorative works undertaken on the acquired land will seek to establish habitat similar to that impacted, which will include eucalypt communities. Once restored, the site will assist to consolidate the adjoining state-managed Eumundi Conservation Park and council-managed Hideaway Court Environment Reserve.



Acquired lands to undergo ecological restoration

Maroochy River catchment
Yandina-Coolum Road
3 properties totalling 136 hectares

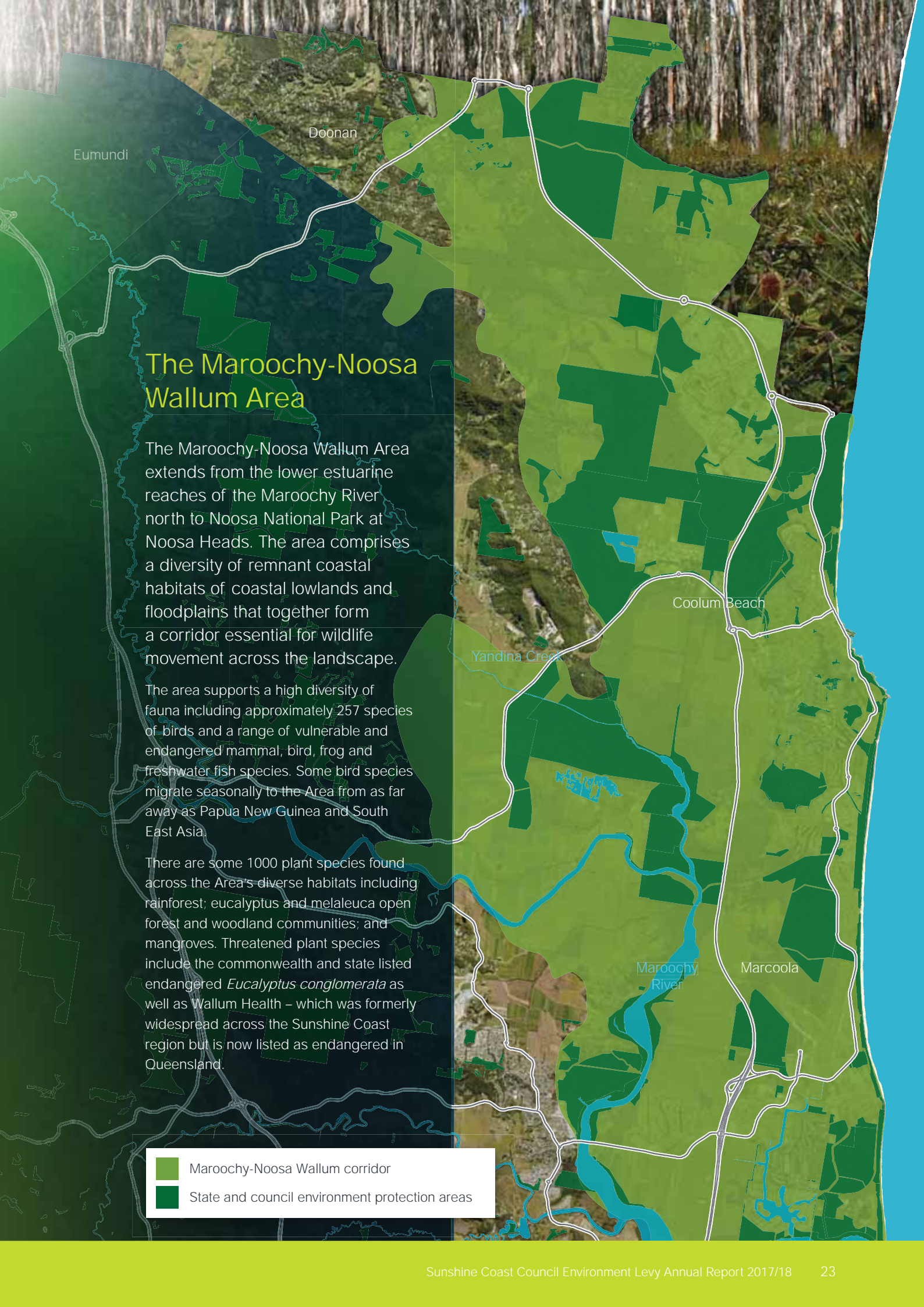
The Environment Levy purchased three caneland properties in the Maroochy River catchment. Containing rich, fertile soils, more than half of the catchment was historically cleared for agriculture – predominantly cane farming.

The acquisition of these properties consolidates and buffers the neighbouring state-managed Coolum Creek Conservation Park and the Unitywater Yandina Wetlands and provides opportunity for the delivery of integrated conservation, recreation and education outcomes through joint-management arrangements.

The acquisitions also provide an opportunity for council to undertake rehabilitation works to restore a significant component of the Maroochy-Noosa Wallum Corridor – an area containing high biodiversity values that extends as far north as Noosa National Park (See opposite).

Restoration works will reinstate Commonwealth listed endangered sheoak and melaleuca forests as well as vulnerable saltmarsh and mangrove communities to strengthen habitat connectivity across the landscape.

The acquired land also provides opportunities to investigate and deliver water quality improvement and nutrient reductions to improve the health of the Maroochy River.



The Maroochy-Noosa Wallum Area

The Maroochy-Noosa Wallum Area extends from the lower estuarine reaches of the Maroochy River north to Noosa National Park at Noosa Heads. The area comprises a diversity of remnant coastal habitats of coastal lowlands and floodplains that together form a corridor essential for wildlife movement across the landscape.

The area supports a high diversity of fauna including approximately 257 species of birds and a range of vulnerable and endangered mammal, bird, frog and freshwater fish species. Some bird species migrate seasonally to the Area from as far away as Papua New Guinea and South East Asia.

There are some 1000 plant species found across the Area's diverse habitats including rainforest; eucalyptus and melaleuca open forest and woodland communities; and mangroves. Threatened plant species include the commonwealth and state listed endangered *Eucalyptus conglomerata* as well as Wallum Heath – which was formerly widespread across the Sunshine Coast region but is now listed as endangered in Queensland.

- Maroochy-Noosa Wallum corridor
- State and council environment protection areas

Healthy coast

Providing a strategic and coordinated approach to the protection, sustainable use and enjoyment of our dunes, beaches, rocky shores and near-shore marine waters.

The Sunshine Coast has over 60 kilometres of open coast, including many world-class beaches and iconic rocky headlands that are highly valued for their ecological, cultural and recreational functions. The Environment Levy funds a range of coastal projects in the protection, sustainable use and enjoyment of these natural assets. Major investments are made into the delivery of on-ground ecological restoration works across the region's dunal and rocky headland systems, which also supports the implementation of council's *Shoreline Erosion Management Plan*.

More than
\$820K
invested

4000 plants
established
across foreshore
network

Coastal Rehabilitation

Rocky headland rehabilitation

The rocky headlands of the Sunshine Coast – Point Perry, Point Arkwright, Point Cartwright, Moffat Headland and Caloundra Headland – are all impacted by various invasive plants. The formation of shallow pockets of soils amongst the rocky cliff faces enables weedy vegetation to establish and displace native vegetation. An invasive plant which can become a dominant ground cover is the asparagus fern (*Asparagus scandens*) – which is a restricted invasive plant under the *Biosecurity Act 2014*.

To maintain the scenic amenity of these iconic headlands and protect against further erosion, on ground actions have continued to target and manage these steep areas through rope access and dispersal of native seed balls using sling shots.

Keeping coastal weeds under control

The coastal dunal areas of the Sunshine Coast are also impacted by a range of invasive plants including the broad-leaved pepper tree (*Schinus terebinthifolius*) – a restricted invasive plant under the *Biosecurity Act 2014* and a priority invasive plant under the *Biosecurity Plan 2017*. Works have continued across all of the region's coastal reserves to remove weeds, improve biodiversity and maintain scenic amenity to ensure they continued to be enjoyed.


Bokarina Foreshore Reserve

The Bokarina Foreshore Reserve has been targeted for coastal dunal rehabilitation activities to restore both scenic amenity and biodiversity values. Rehabilitation works have focused on 6 beach accesses and areas within 10 metres of the coastal pathway.

Broad-leaved Pepper Tree *Schinus terebinthifolius*

(Pictured below)

A large, spreading tree that invades streambanks, wetlands, coastal dunes and headlands. Native to South America – this tree is now common across many Sunshine Coast habitats and out-competes native vegetation.



6 beach accesses targeted
across Bokarina foreshore



Managing our invasive plants and animals

Providing a collaborative, effective and efficient response to the management of invasive plants and animals to reduce their social, economic and environmental impacts.

Invasive plants and animals have the potential to cause significant impacts on the Sunshine Coast's highly regarded natural assets – our bushland and aquatic environments; fertile and productive agriculture areas; and growing community and residential areas. Environment Levy funding is invested into the delivery of invasive plant and animal management activities which is guided by the *Sunshine Coast Local Government Area Biosecurity Plan 2017*.



5 invasive plant
and animal officer
positions funded

\$415K invested into
invasive species
management

More than
1000 invasive
species
removed

Invasive species management

The management of invasive plants and animals is supported by the Environment Levy that funds five invasive plant and animal officers.

Pest action and engagement

To provide a collaborative, effective and efficient response to the management of invasive plants and animals Environment Levy funds have been invested into the purchase of an education trailer and interactive displays to assist in community engagement. This is complemented by additional funding to support the on-ground actions of community members through the provision of weed and feral animal control equipment.



Feral deer

Feral Red Deer (*Cervus elaphus*), Feral Rusa Deer (*Rusa timorensis* syn. *Cervus timorensis*) and a small number of Feral Fallow Deer (*Dama dama*) are found within the Sunshine Coast local government area.

All three species are restricted invasive animals under the *Biosecurity Act 2014* and priority invasive pests within the Sunshine Coast region.

Feral deer can cause a range of environmental, economic and health such as:

- damage to trees and native seedlings
- dispersal of weed seeds
- damage to pastures, crops, irrigation systems and fences
- the spread of diseases such as leptospirosis
- hazards to traffic.

Council's Feral Animal Education and Control team employ the latest technologies in controlling feral deer to minimise the impacts of the species on the environment and the community. In continuing to develop best practice methods and understandings, the team will be engaging in future research projects with partner agencies to inform future management practices.

87 feral deer removed

235 since commencement of program

7 events attended,

thousands of community members engaged

\$96K invested

in community engagement and supporting on-ground pest actions

An involved community

A major engagement program to inspire and empower the community to value the environment and play their part in a liveable, sustainable and resilient future.

The Environment Levy supports a range of community engagement and education projects to foster an involved community – one that values the environment and has the capacity to contribute towards the liveability, sustainability and resilience of the Sunshine Coast.



Kids in Action

Council has continued to invest in the youth of the Sunshine Coast through the Kids in Action Program, an annual engagement and educational event, which aims to promote awareness and knowledge of local environmental issues. The two-day event engages students in on-ground environmental education and citizen science activities as well as opportunities to share their knowledge and learn from each other.

420 students from 26 schools attended

Program supported by Sealife Trust, Unitywater, Kids Teaching Kids and multiple local businesses/groups

Flying Fox Education

Environment Levy funding has supported continued flying fox education to establish better understandings of the important role flying foxes play in the ecosystem. Through community education it hoped that misconceptions about flying foxes are clarified and a better appreciation of the species is fostered.

164 community members attended 'Australasian Bat Night' event

170 community members engaged in 'Back Yard Buddies'

Sunshine Coast Environmental Conservation Forum

Funding has continued to be invested in building the capacity of our Community Nature Conservation Program, Turtlecare, Environment Education and Land for Wildlife volunteers through the annual Sunshine Coast Environmental Conservation Forum. The forum provides an opportunity for volunteers to learn from experts that share their knowledge and expertise of current environmental issues and sustainable practices.

175 council volunteers attended



\$72K invested in delivery of Kids in Action



\$35K invested in flying fox education



\$23K invested in volunteer education and support

Building our knowledge

Enabling evidence based decisions for a healthy environment and liveable Sunshine Coast.

To inform evidence based decision making, the Environment Levy supports a range of targeted monitoring, modelling, research and other data collection. These projects, which complement other conservation and management plans, inform current and future management actions to ensure best practice in maintaining the health and liveability of our region.

Koala research

Council has continued to undertake koala monitoring and research in partnerships with the University of Queensland and the University of the Sunshine Coast. Research has focussed on the ecology, health, movement and threats to koalas across the local government area. An abundant and healthy koala population has been identified in the Witta/Reesville area, with research results to inform future conservation management decisions and actions.

2 research partnerships continued

Healthy land and water partnership

The Environment Levy has continued to invest in a partnership with Healthy Land and Water to monitor and report on the health of four Sunshine Coast catchments – Pumicestone, Stanley, Mooloolah and Maroochy River. The partnership supports regional collaboration in the sharing of knowledge about waterway conditions and the development of innovative catchment management tools.

4 catchments monitored

'Good' to 'Excellent' grades achieved



\$44K invested in koala monitoring and research



\$125K invested in monitoring and reporting on our waterways

Flying fox research

The Environment Levy has continued to support the implementation of the Regional Flying Fox Management Plan.

Council is leading the way in trying to understand why flying foxes choose to inhabit urban areas and to build our knowledge around minimising flying fox roost impacts on the community, whilst also conserving the species.

Research projects with the University of Melbourne and Queensland University of Technology (QUT) have continued, with QUT developing a model to identify suitable ecological areas for flying fox roosts and highest potential conflict areas.

5 urban roosts monitored fortnightly

Buffers maintained at all urban roosts

Installation and maintenance of canopy sprinklers for deterrence

No dispersal actions required

Monitoring potential climate-induced species migration

The Environment Levy has supported investigations into the climate-induced migration of marine species with potential to impact the Sunshine Coast such as jellyfish. The study hopes to establish an evidenced-based reference point to assist in our understanding of the current coastal micro-marine species diversity as well as provide insight into any change over time that may be associated with climate change.

Working in partnership with CSIRO and Queensland Museum, these ongoing baseline investigations will inform and support future management actions and responses.

24 summer surveys undertaken across 6 sites

400 specimens sampled, 21 harmless micro-species recorded

Monitoring our reserves

A detailed understanding of the plants and animals within our Environment Levy Conservation Estate is collated through flora and fauna surveys. Survey results for two previous acquisitions have revealed a range of threatened species which are now protected and managed as part of the conservation network.

Some of the rare and threatened animals identified in our newly established reserves include:


- Powerful Owl (*Ninox strenua*)
- Richmond Birdwing Butterfly (*Ornithoptera richmondia*)
- Koala (*Phascolarctos cinereus*)
- Sooty Owl (*Tyto tenebricosa*)
- Wallum Froglet (*Crinia tinnula*)
- Tusked Frog (*Adelotus brevis*)
- Cascade Tree Frog (*Litoria pearsoniana*)
- Giant Barred Frog (*Mixophyes iteratus*).



\$140K invested
in flying fox
research
programs



\$13K invested
in marine
species
investigations



Rare and threatened
species protected
and managed



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