



Environment Levy Annual Report 2016-2017

Your Environment
Levy in action



Acknowledgment of Country

Sunshine Coast Regional 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.

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Acknowledgements

Council wishes to thank all contributors and stakeholders involved in the development of this document.

Disclaimer

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Front cover image: © Claxton
Yellow-footed Antechinus (*Antechinus flavipes*)





We live in an outstanding part of the world. The Sunshine Coast's beautiful natural environment is valued by not only the people who live here, but also by the people who visit the region.

Sunshine Coast Council's Environment Levy provides funding to deliver a range of environmental projects and initiatives which would not otherwise be possible.

Funded by all ratepayers, this Levy assists to maintain and enhance our region's natural assets and our liveability and environmental credentials.

It contributes to our vision to be Australia's most sustainable region - healthy, smart, creative.

This year alone the Environment Levy has:

- purchased \$3.7 million of additional environmentally significant land. These four new land acquisitions added another 75 hectares to Council's conservation estate,
- invested \$1.2 million in delivering on-ground catchment and coastal rehabilitation projects,

- funded more than \$320,000 into research, planning and monitoring to support koala conservation and understanding the health of our waterways,
- invested just over \$1.4 million to engage and support the community to achieve significant conservation outcomes, through the Land for Wildlife Program, including Voluntary Conservation Agreements and Environment Levy Partnerships and Grants.

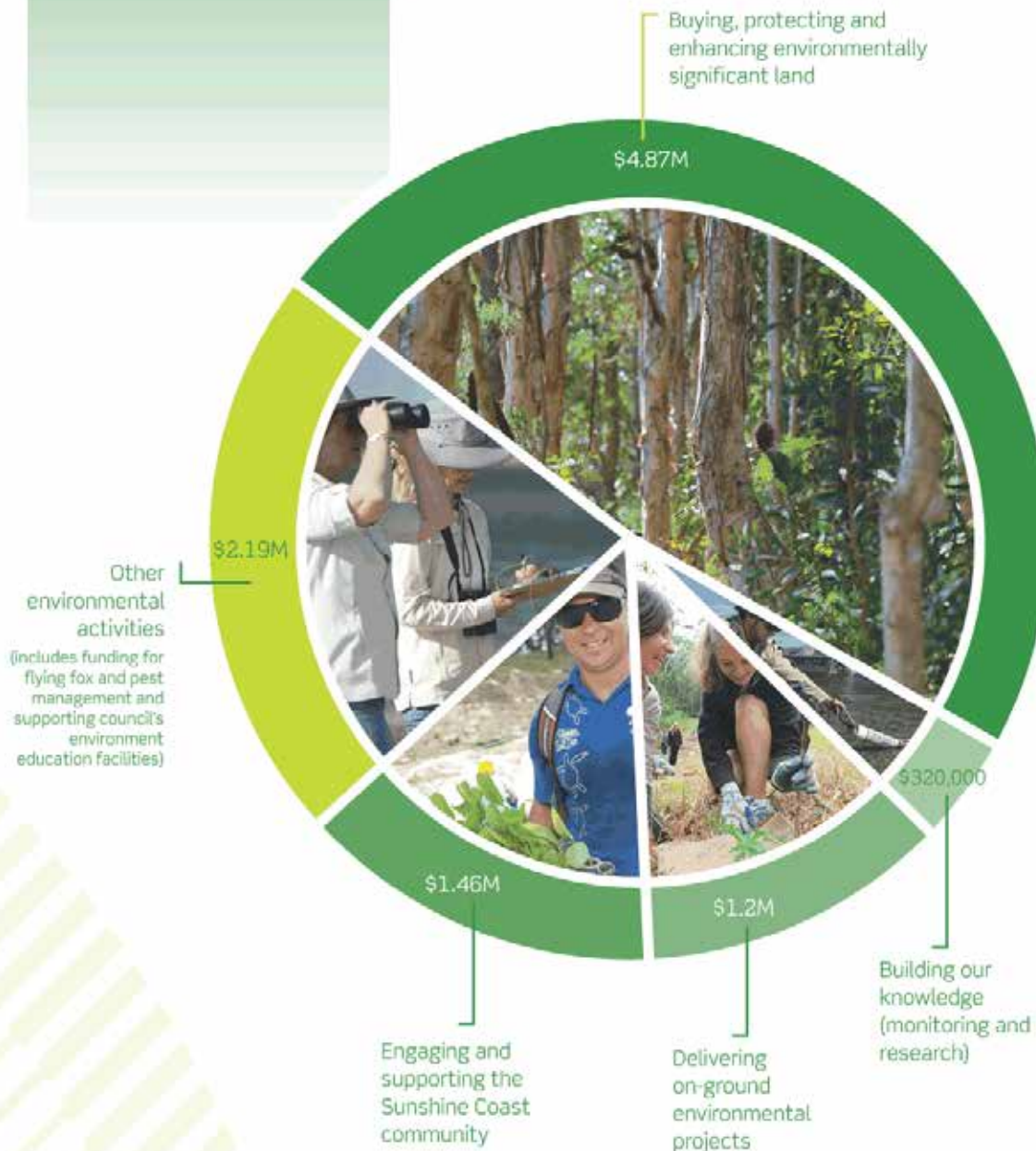
We are very proud of the Environment Levy's achievements this year and would like to thank each rate payer who contributes to this important Levy and the many volunteers who play an important role in caring for our natural assets.

Cr Mark Jamieson
Mayor

Cr Jenny McKay
Environment Portfolio

Where did your Environment Levy go in 2016-2017?

Total spend: **\$10.04M**



Environment Levy 2016-2017 Program snapshot

Buying, protecting and enhancing environmentally significant land

The environmentally significant land acquired assists to protect habitat for native plants and animals, build landscape connections improving habitat functionality and consolidate environment reserves delivering management efficiencies.

Image: T Fauser

Delivering on-ground environmental projects

The large scale rehabilitation projects assist with maintaining, enhancing and reconnecting our natural environment through rehabilitation of coastal dunes, removing weeds in road reserves, and restoring waterway vegetation across our major catchments.

\$3.7M
 acquisition program
 Four new reserves
 75ha hectares

\$690K
 managing the Environment Levy conservation estate

\$300K
 Mary River Rehabilitation Project
 45,000 plants
 2km riparian habitat being rehabilitated

\$770K
 Coastal Rehabilitation including:
\$652K
 Weed management
 pandanus monitoring
\$120K Buddina, Alex and Mooloolaba foreshore planting
 12,000 native plants

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Building our knowledge

The Environment Levy invests in projects which are continually improving our knowledge of the Sunshine Coast's natural environment.

This includes planning, monitoring and research projects which are used to adapt and improve management approaches where required.

Engaging and supporting the Sunshine Coast community

Funding provided to not-for-profit community groups and supporting the Sunshine Coast community is important to maintain and enhance our region's environment.

Partnering and supporting the community assists council to achieve larger conservation outcomes which would not otherwise be possible.

\$547K
 Environment Levy Partnerships

22 not-for-profit community group partners

\$307K
 74 Voluntary Conservation Agreement Partners protecting 1,153 hectares of habitat for flora and fauna

\$82K Land for Wildlife incentives

27,650 native plants on **135** LW properties

27 landholders received herbicides training and equipment

942 Registered Land for Wildlife members

339 working towards full registration

Managing **8,291** hectares of retained habitat and restoring a further **795** hectares

\$17K
 7 Environment Levy Grants

Total project value **\$16,375**

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Buying, protecting and enhancing environmentally significant land

Establishing our reserves

monthly bush regeneration completed on



11 Environment Levy reserves currently being established

\$358K establishing our new reserves
705 hectares



1000 trees planted at Kirbys Road Environmental Reserve as part of a new offset planting site for flying fox habitat



The environmentally significant land acquired assists to protect habitat for native plants and animals, build landscape connections improving habitat functionality and consolidate environment reserves delivering management efficiencies.

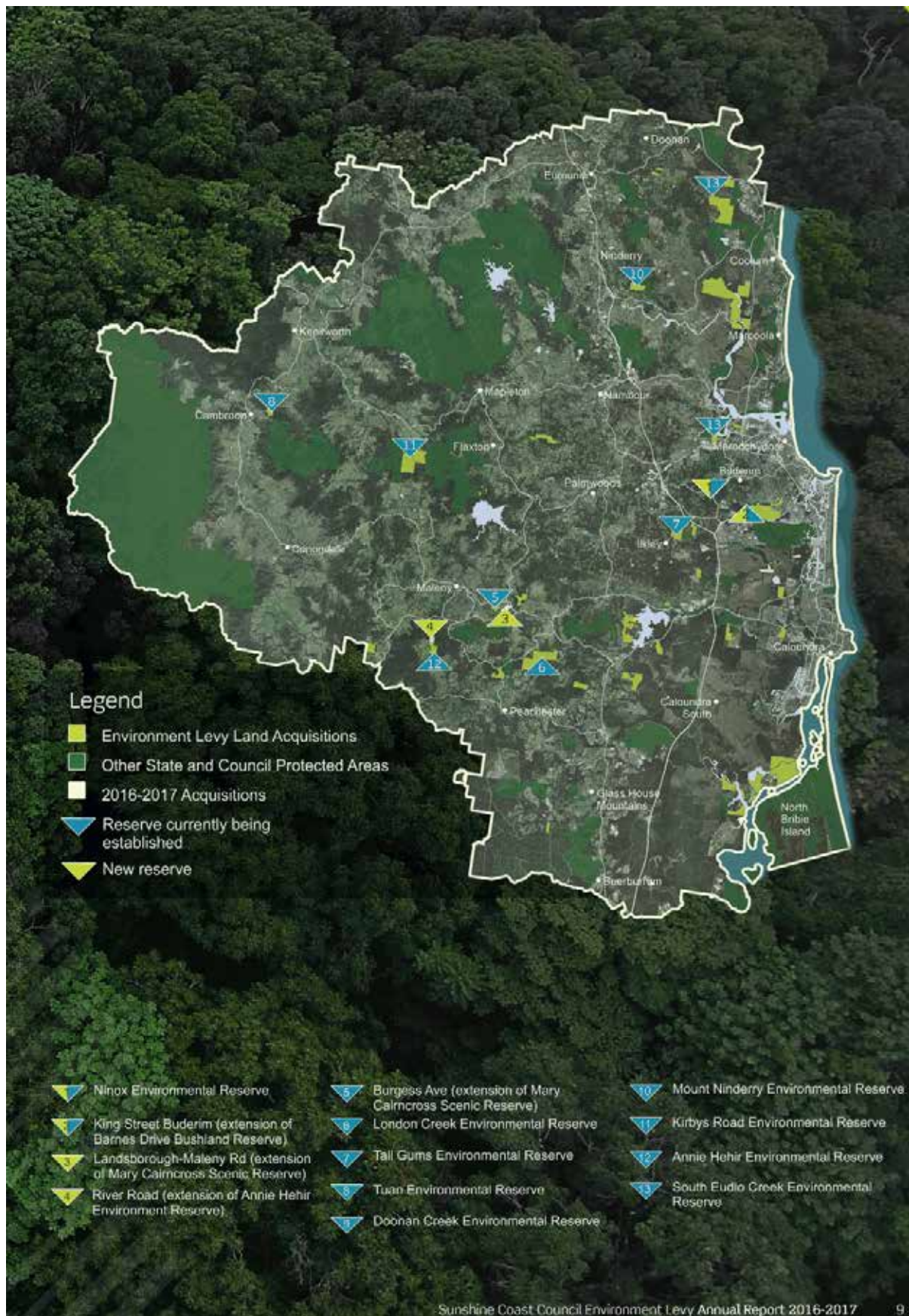
Environment Levy Land Acquisitions are guided by the *Sunshine Coast Biodiversity Strategy 2010-2020* which aims to:

- protect and enhance our natural environment
- expand on Council's conservation reserve network
- preserve native plants and animals
- protect and enhance wildlife corridors.

In 2016-2017 Council spent **\$3.7M** on the land acquisition program and acquired four new reserves totalling **75 ha**



Image: Powerful Owl (*Ninox Strenua*)



New Acquisitions in 2016 - 2017

Ninox Environment Reserve, Buderim

27.5 hectares, \$1.225M
 Purchased October 2016

Mooloolah River Catchment

This property:

- expands the Buderim forest network to include some of the largest grey gum (*Eucalyptus propinqua*) and pink bloodwood (*Corymbia intermedia*) trees on the Sunshine Coast
- provides habitat to rare and threatened plant and animal species, like the powerful owl (*Ninox strenua*).



King Street, Buderim

4.8 hectares, \$500K
 Purchased December 2016

Mooloolah River Catchment

This property:

- assists to consolidate the Barnes Drive Bushland Reserve
- protects priority rainforest vegetation (hoop pine vine forest)
- contains the vulnerable plant species 'toothed kamala' (*Mallotus megadontus*).



Landsborough-Maleny Road, Maleny

26.8 hectares, \$1.225M
 Purchased April 2017

Mary River Catchment

This property:

- assists to protect and expand the existing habitat of the Mary Cairncross Scenic Reserve, including subtropical rainforest
- protects a number of habitat trees and patches of remnant vegetation and through future rehabilitation and offsetting activities can provide greater landscape connectivity.



River Road, Peachester

16 hectares, \$700K
 Purchased June 2017

Stanley River Catchment

This property:

- expands the Annie Hehir Environmental Reserve to 61 hectares
- assists to protect the Stanley River habitat which supports endangered and significant species, including the giant barred frog (*Mixophyes iterates*), and the cascade tree frog (*Litoria pearsoniana*).



\$1.2M
total on-ground environmental projects

Delivering on-ground environmental projects

The large scale rehabilitation projects assist with maintaining, enhancing and reconnecting our natural environment through rehabilitation of coastal dunes, removing weeds in road reserves, and restoring waterway vegetation across our major catchments.

Mary River Rehabilitation Project

Commenced 2015
4 year project – 2nd year

45,000 plants
\$300K spent this financial year

- 2 km riparian habitat being rehabilitated
- helping the endangered Mary River turtle (*Elusor macrurus*), the vulnerable Australian lung fish (*Neoceratodus forsteri*) and the endangered Mary River cod (*Maccullochella mariensis*)
- Complements the Mary River Threatened Species Community Recovery Plan

Pumicestone Passage Rehabilitation Project

Commenced 2013
4 year project – 4th year

\$450K total funding available

6 km riparian habitat rehabilitated

6,500 trees planted and established

Maroochy River Rehabilitation project

Commenced 2014
4 year project – 3rd year

\$40K spent this year maintaining **11,000** trees planted

Delivering on-ground environmental projects

In total **\$770K** was invested to protect and enhance our coastal foreshores.

12,000 native plants established within foreshore areas.

120 hectares targeted for weed control, including rocky headland areas which requires specialist bushland regenerators undertaking rope access weed control works.

37 km of monitoring pandanus trees across the dunal system for the invasive jamella insect which causes dieback.

The coastal focussed projects improve resilience of native vegetation through weed management and revegetation in dunal reserves and aims to deliver on ground ecological restoration works across the region's dunal and rocky headland systems extending from Golden Beach to Stumers Creek.



Woody weed and road reserve rehabilitation project

\$31K removing woody weeds in road reserves adjoining environmentally significant areas

Species removed included pine trees, camphor laurels and African tulip trees.



Camphor laurel (*Cinnamomum camphora*)





Pest Management Projects

Coastal Fox Control Program

33 foxes removed from control area with surveys indicating a lower activity index for foxes across this area

30 sites over **14.5km** of coastline

DNA monitoring introduced to monitor fox populations

Feral Animal Control Program

Wild dog monitoring project continues to yield results and allows for data driven decision making

270 Indian myna birds removed

Deer monitoring indicates **decrease in numbers** at deer control sites

Research into home range and habitat use has continued with **GPS tracked deer**



Wild dog (*Canis lupus rufivaris*)



Red deer (*Cervus elaphus*)

Image: Poirer, A. / Wildlife, C. Cairns - spots, Pest access control

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Building our knowledge

The Environment Levy invests in projects which are continually improving our knowledge of the Sunshine Coast's natural environment. This includes planning, monitoring and research projects which is used to adapt and improve management approaches where required.

Fauna Monitoring Project

2016-2017 fauna surveys have added four bat species and two native reptile species not previously recorded in Council's environment reserves.

Bats:

- common bentwing (*Miniopterus schreibersii*)
- Beccari's free-tailed bat (*Mormopterus beccarii*)
- Eastern forest bat (*Vespadelus pumulus*)
- greater broad-nosed bat (*Scoteanax rueppellii*)

Data collected has indicated that approximately 22 of the total number of bat species in Australia (>90) are found within Council's environment reserves.

Bats are good indicators of forest diversity and habitat complexity.

Reptiles:

- Scute-snouted calyptotis (*Calyptotis scutirostrum*)
- robust rainbow-skink (*Carlia schmeltzii*)
(full page image)



Scute-snouted calyptotis (*Calyptotis scutirostrum*)

Flying Fox Management Project

Outcomes from the Sunshine Coast Regional Flying Fox Management Plan 2016-2017:

- regular monitoring has continued at 5 urban flying fox roosts across the Sunshine Coast (this helps to guide future management)
- flying fox exclusion buffers have been created and/or expanded and maintained at 3 urban flying fox roosts via a range of techniques, including: vegetation removal, installation of canopy mounted sprinklers, community planting days (planting non-attractant flying fox plants) and by clearing understory weed vegetation.





Exciting find!

Coolum Community Native Nursery have discovered *Wurmbea biglandulosa* in the Environment Levy purchased, Doonan Creek Environmental Reserve. This species has not been recorded in South East Queensland since 1912. Closest known areas where this species is found is Stanthorpe and Northern New South Wales.

Image of *Wurmbea biglandulosa* courtesy of Fuschia Gallard

Below are some of our loved native animals that have been caught on cameras placed in and nearby our Environment Levy reserves. One image captured the long-nosed potoroo (*Potorous tridactylus tridactylus*). This small marsupial is listed as vulnerable in Queensland and is rarely seen in the wild.

Long-nosed potoroo (*Potorous tridactylus tridactylus*)

Mountain brushtail possum (*Trichosurus venustus*)

Image: Robust rainbow-skink (*Carex schweizeri*)

Knowledge guiding catchment management

The Environment Levy funded \$120K towards the Healthy Land and Water partnership

Through this partnership, a comprehensive and widely-recognised waterways monitoring and reporting program, along with communication, education and motivation programs to deliver healthy waterways, is coordinated across the Sunshine Coast.

Each year, monitoring results are reported through a promotional 'Report Card'. It features:

- an ecological health grade for each catchment (measuring plant and animal growth, diversity of fish and water bugs, streamside vegetation and water quality); and
- a one-to-five star rating for social and economic benefits obtained from waterways. Results from 2016 showed that our local catchments were in good condition and were highly valued and used (see table).

Council and partners use the report card monitoring program to guide our catchment management efforts.

Catchment	Ecological Health			Benefits rating - 2016	
	2015 Grade	2016 Grade	Description	Star Rating	Description
Maroochy River	C+	B	Good	★★★★☆	Very High
Mooloolah River	C+	B	Good	★★★★☆	Very High
Pumicestone Passage	B-	B+	Good	★★★★☆	Very High
Stanley River	B	B	Good	★★★★☆	High

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Koala Conservation and Management Project

This project contributes to the conservation and management of Sunshine Coast koala populations. Key aims have been to deliver on actions from the Koala Conservation Plan, invest into koala research to inform management, and deliver on-ground action as a result of research findings.

Tracking Lizzie

One koala, fondly named Lizzie (full page image) has been collared as part of the research into koala movement through the Maroochy Bushland Botanic Gardens and adjoining Environment Levy reserve network. The heat map below shows Lizzie's movement through the gardens.

Lizzie's locations:
 High occurrence (Red)
 Low occurrence (Blue)

0 20 40 80 Metres

Lizzie's stats

Total distance covered <small>Feb - July 2017</small>	Average distance per day	Shortest distance covered in a day	Longest distance per day
13.4km	88m per day	11m	363m

February to July 2017, Maroochy Botanic Gardens

Snap shot of achievements:

- \$87k** invested
- 16** koalas collared to date in the Witta/Reesville and Tanawha areas. Findings show a healthy koala population in the Witta/Reesville area
- Koala fodder plantation** established at Pinelands Park in Beerwah in partnership with Glass House Mountains Advancement Network group
- 119** council and private properties surveyed by the koala scat detection dogs through our partnership with the University of the Sunshine Coast

Engaging and supporting our community

Funding provided to not-for-profit community groups and supporting the Sunshine Coast community is important to maintain and enhance our region's environment. Partnering and supporting the community assists council to achieve larger conservation outcomes which would not otherwise be possible.

Doonan planting day

Assisting to create food forests for our wildlife with 1200 endangered lowland rainforest trees planted by the community, including specific fruiting rainforest trees that are needed to support migratory birds such as the channel billed cuckoo.

Australasian Bat Night

3rd Australasian Bat Night
130 community members

Presentations, activities and wildlife demonstrations

Conservation Field Day 2016

105 volunteers
13 workshops

Assisting to protect, enhance and improve our region's sustainability

- 105 volunteers from council's Community Nature Conservation Program, Centres for Conservation Learning and Partnerships, and Land for Wildlife landholders came together to learn new tactics to protect, enhance and improve our region's sustainability at the Conservation Field Day event
- 13 workshop presenters on the day provided a variety of topics and information enabling attendees to take away and apply to their own property or in council's reserves
- The event was held at the Environment Levy purchased London Creek Environment Reserve

Flying Fox Education Snap shots

Council presented at the National Flying Fox Forum on our Flying Fox Management Program

Research partnership with the University of Melbourne into effective flying fox management

Flyout event held at Emerald Woods with Nambour Pathfinders

Investing in the community

The Environment Levy Partnerships Program supports the ongoing operation of community based environmental organisations. These groups deliver numerous projects and services including rehabilitation of degraded areas, monitoring of various animal species and waterways, removing weeds, litter collection, education and caring for our native wildlife.

The Environment Levy supports:

- 97** landholders
- \$304K** of Landholder Environment Grants
- Total projects value **\$964,094**
- \$547K** Environment Levy Partnerships
- 22** not-for-profit community group partners
- \$307K** 74 Voluntary Conservation Agreement Partners protecting **1,153** hectares of habitat for flora and fauna

- 942** Registered land for Wildlife members and **339** working towards full registration managing **8,291** hectares of retained habitat and restoring a further **795** hectares habitat for flora and fauna
- \$82K** Land for Wildlife incentives
- 27,650** native plants on 135 LFW properties
- 225** nest boxes on **48** Land for Wildlife properties
- 27** landholders received herbicides training and equipment

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Engaging future generations

2 sites with **245** kids participating from **24** schools in **8** activities

The Environment Levy supported Sunshine Coast Kids in Action Environmental Projects Day engages kids in on-ground education and restoration work.

This program encourages kids to see themselves as informed confident and capable citizens, able to take up the challenges of actively participating in environmental protection and preservation. The day also introduced students to a range of community environmental heroes and mentors, who can assist schools on their learning journey.

Pest Action and Engagement Program

22 new rural landholders joined the weed control hire equipment program to control invasive pest plants.

8 public education displays held at Agricultural shows and other rural events.

Weed control videos developed to assist landholders with key land management issues.

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From an impressive number of entries, 26 finalists were selected for the 2016 Sunshine Coast Environment Photography Awards. Winners were announced in September at the Maroochy Bushland Botanic Gardens.

Congratulations to the winners:

Nature Based Category

Helen Debrnam, Bugs every which way - Pelican Waters

Human Interaction with the Environment Category

Nathan McNeil, the Big Whipper - Glasshouse Mountains

Junior Category

Jack Ford, Mangrove forest - Maroochydore

People's Choice Award

Nature Based Category: Shanna Bignell, Hidden jewel - Parklands Nambour

Some of the other finalist images feature throughout this report.

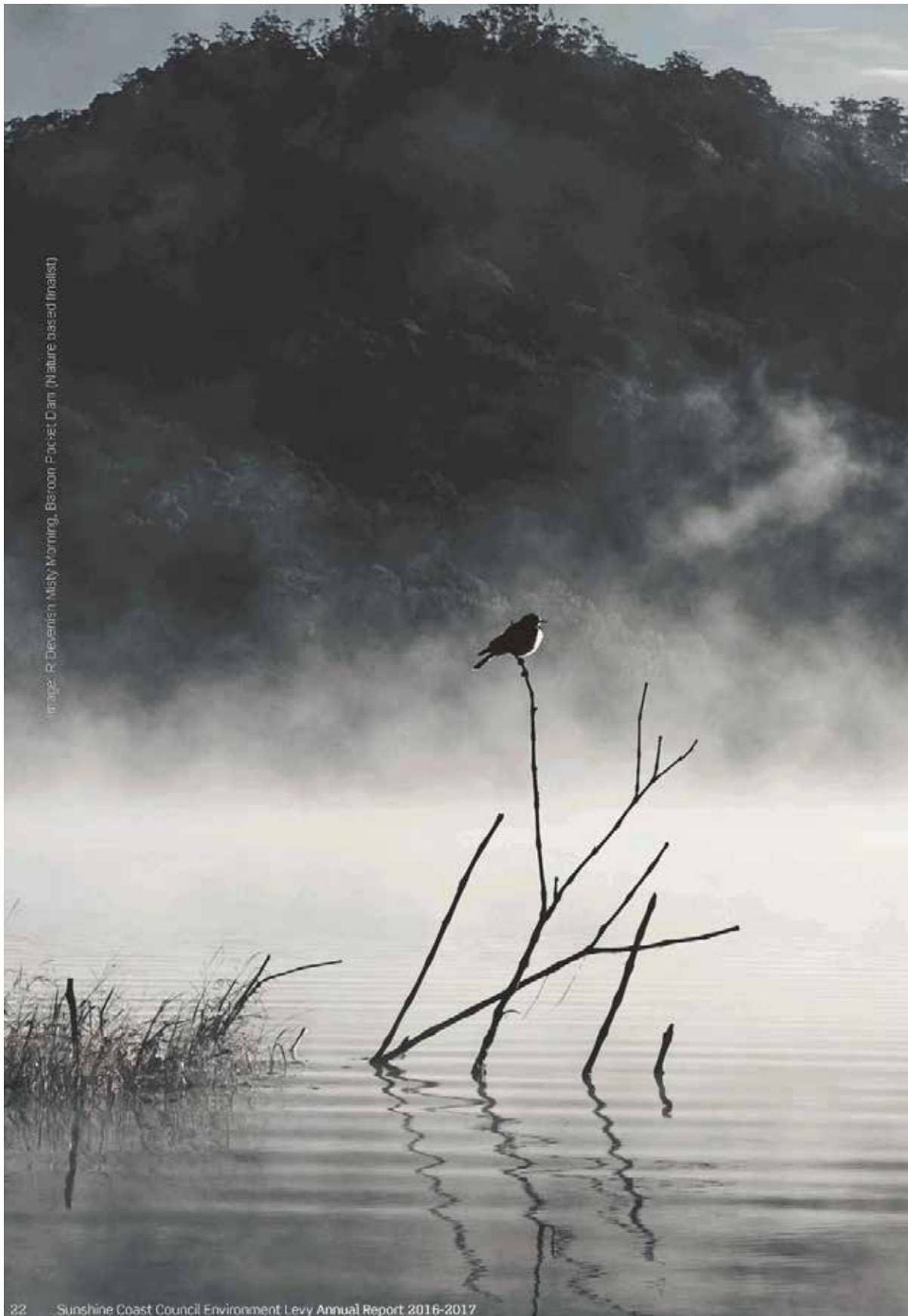


Image: R. Deyenish Misty Morning, Beroon Pocket Dam (Nature based finalist)

