2 NOOSA ENVIRONMENT STRATEGY IMPLEMENTATION YEAR TWO ANNUAL UPDATE

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Environment and Sustainable Development Department

Index ECM/ 21.44 Environment Strategy / Biodiversity Plan

Attachments 1. Noosa Environment Strategy – Year Two Implementation Progress.

2. Summary of Outcomes from Environmental Grants 2020/21FY.

EXECUTIVE SUMMARY

The following report and attachments have been prepared to provide an update on the performance of the Noosa Environment Strategy 2019 inclusive of:

- The Noosa Environment Strategy Implementation Plan 2019, which is a three-year plan containing a number of projects or actions intended to initiate progress towards the targets in the Noosa Environment Strategy.
- Summary of Outcomes from the Environment Grants 2020/21 FY, a key part of performance of the Noosa Environment Strategy.
- A draft Environment Strategy Monitoring Report comparing performance against the twelve targets outlined in the Noosa Environment Strategy. The strategy was envisaged to have a ten-year life and contains targets which are monitored and reported on every two years. This is the first time a monitoring report has been prepared

These reports and attachments show the status of the Noosa Environment Strategy and Implementation Plan as at June 30, 2021 which is the end of the second year of the strategy life. The delay in reporting was due to disruptions caused by the departure of the former Environmental Services Manager and business disruption caused by COVID-19.

The report and attachments highlight the areas of these plans that are performing well but also shows numerous areas where there is still work needed to get some projects off the ground and/or establish baseline data for effective monitoring.

RECOMMENDATION

That Council note the report by the Acting Environmental Services Manager to the Planning & Environment Committee Meeting dated 08/02/2022, providing the year 2 annual report on the implementation of the Noosa Environment Strategy.

REPORT

At the June 2019 Ordinary Meeting, Noosa Council endorsed the Noosa Environment Strategy & Implementation Plan. The Noosa Environment Strategy is the key strategic policy document for Council related to our environment and the way we live within it. The Strategy identifies key strategies, outcomes and measurable targets that guide decision-making and support prioritisation of investment over the 10 year life of the strategy.

The Strategy provides a clear monitoring, evaluation and reporting framework for the Strategy that consists of:

- Annual reporting on the progress of specific implementation actions associated with the Environment Strategy.
- Biennial reporting against the 12 targets identified in the Environment Strategy, to measure the success of the Strategy's implementation.

A copy of the Noosa Environment Strategy 2019 can be found at the following link https://www.noosa.qld.gov.au/downloads/file/1130/noosa-environment-strategy

This report provides an update on the progress of the 42 actions outlined in the Implementation Plan for the 2020/21 FY. These actions are made up of four enabling actions that will deliver outcomes across all four themes of the Environment Strategy and 38 actions that are specific to each of the four themes; *Biodiversity*, *Waterways*, *Wetlands* & *Coasts*, *Sustainable Living* and *Climate Change Resiliance and Adaptation*.

These reports and attachments show the status of the Noosa Environment Strategy and Implementation Plan as at June 30, 2021 which is the end of the second year of the strategy life. The delay in reporting was due to disruptions caused by the departure of the former Environmental Services Manager and business disruption caused by COVID-19.

Summary of Progress

Implementation Plan

Each of the actions in the Environment Strategy Implementation Plan have been categorised against the following criteria;

- On target action is progressing well, as we would have hoped for at this stage of the plan.
- Progressing steps have been taken towards this action, but it is not quite where we hoped to be at this stage.
- Needs Attention either has not started, or not significantly progressed.
- Not planned to begin, has not begun and is intended to be initiated in future years, as identified in the Implementation Plan.

Of the 42 actions -

- 29 were to be underway prior to 2020/21 FY
- 11 were to be commenced in 2020/21 FY
- 2 were planned to commence in 2021/22 FY.

Attachment 1 of this report provides a summary of key achievements and some brief detail on the progress of each individual action item.

	On Target	Progressing	Needs attention	Not planned to begin
	/		X	Ö
Environment Strategy	19	14	7	2
(Enabling actions)	2	1	1	0
Biodiversity	8	0	1	1
Waterways, wetlands & Coasts	3	3	3	1
Sustainable Living	2	6	1	0
Climate Change Adaptation & Resilence.	4	4	1	0

Significant achievements in the Year 2

The Bushland Reserve Strategic Management Plan

The 20/21 FY saw the completion of the Bushland Reserve Strategic Plan which will be the guiding document for managing Council's Bushland Reserve network until 2026. The plan provides

methodology for prioritization of works allowing for more efficient and effective delivery of works. Reserves are assessed and ranked based on a range of attributes including Biodiversity Value, Waterway Value, Carbon Sink Value, Social Value, Cultural Value, and likelihood of success. This ranking then determines the resource allocation and service level for each of Council's Bushland Reserves.

Provision of Green Waste Bins.

Green waste bins were made available to residents in this reporting period. This has significantly reduced the amount of organic waste entering landfill with 16,000 tonnes of green waste being diverted and processed for consumer use in the 2020/21 FY.

Reducing Council's Greenhouse Gas Emissions.

New vertical wells have been installed and gas capture has increased significantly. Staff are in ongoing discussions with LMS energy for future emission reduction opportunities. 640 kW of solar have now been installed on Council buildings, energy efficiency projects such as LED lighting replacement and A/C upgrades are ongoing.

Expansion of Council's Conservation Partnerships initiatives.

A report outlining the success of community participation in voluntary conservation programs, including Community Bushland Care, Land for Wildlife and Voluntary Conservation Agreements was presented to the Planning and Environment Committee on 7 December. This report presented participation data which outlined consistent strong community interest and rapid growth across the programs, Community Bushland Care and Land for Wildlife in Particular.

Summary of Outcomes from Environmental Grants 2020/21 FY

This report also includes a summary of environmental outcomes arising from the Environmental Grants program (see **Attachment 2**). This information has been gathered from the grant acquittal process and shows significant outcomes. This process of including a summary of grant outcomes is proposed to be imbedded in the annual reporting on the Noosa Environment Strategy as an ongoing obligation.

Improvement Areas

Areas for improved focus include ongoing work in implementing the 10-year strategy include:

- Environment and sustainability forums with community partners (disrupted due to COVID)
- Threatened species management
- Integrated water monitoring program

Noosa Environment Strategy Monitoring Program

The development of a draft inaugural environmental monitoring program for the Noosa Environment Strategy is near completion. The intention of this program is to record and report on progress on the 12 key environment performance metrics using currently available data over the 10 years of the Environment Strategy. The draft monitoring program will be circulated in the coming fortnight for iterative feedback prior to formal presentation to Council.

Previous Council Consideration

The Planning and Environment Committee Meeting on the 8th of September 2020 considered the Year 1 annual update for the Noosa Environment Strategy Implementation Plan.

Finance

The Noosa Environment Strategy 2019 and supporting Implementation Plan is a funded program. Budget bids are being considered for additional resourcing for the FY 2022/23 in the following areas to maintain and improve performance:

- Wildlife management including threatened species.
- Community Bushland Care support

Ongoing foreshore management planning

Risks & Opportunities

The implementation of the Noosa Environment Strategy 2019 and supporting Implementation Plan are endorsed Council programs and this report articulates performance. Specific risks and opportunities are highlighted in each performance benchmark area.

Consultation

External Consultation - Community & Stakeholder

There has been no external consultation for this specific report, though it is noted that many of the programs have external implementation partners, who are key community stakeholders.

Internal Consultation

Many of the programs in the Noosa Environment Strategy Implementation Plan are implemented by different Council departments and there is ongoing liaison.

Departments/Sections Consu	ulted			
Chief Executive Officer		Community Services		Corporate Services
Executive Support		Director		Director
		Community Development		Financial Services
		Community Facilities		Fleet
		Libraries & Galleries		ICT
		Local Laws		Procurement
		Waste & Environmental Health		Property
				Revenue Services
Executive Services	Х	Environment & Sustainable Development	Х	Infrastructure Services
Director	X	Director		Director
Community Engagement	X	Building & Plumbing Services		Asset Management
Customer Service		Development Assessment		Buildings and Facilities
Governance		Economic Development		Civil Operations
People and Culture	X	Environmental Services		Disaster Management
	X	Strategic Land Use Planning	Χ	Infrastructure Planning,
				Design and Delivery

Attachment 1 - Noosa Environment Strategy – Year Two Implementation Progress

Environment Strategy Enabling Actions	Status	Progress comments
A. Implement an Environment Grants program to support community projects and programs that lead to implementation of the Environment Strategy.		Noosa Council provides funding to projects working towards Noosa Environment Strategy targets through three different grant streams, these are: • Community & Environment Alliance Agreement. • Community, Environment Project Grant. • Multi-Year Environment Collaborative Grant. In the 2021/22 the grant program was also expanded to include a new category of the Climate Change Response. A summary of awarded Noosa Council grants in the 2020/21 FY working towards Noosa Environment Strategy targets has been complied and is separately attached to this report. Notable projects funded in this reporting period include: • Enter the Flyosphere delivered by Noosa Integrated Catchment Association focuses on long-term monitoring of Shorebirds at Noosa Spit and community awareness raising through the distribution of interpretive material and the installation of a telescope to engage residents and visitors. Council investment of \$14,977.00 • Engaging Local Communities in Restoring Bush (Roving Restorers Noosa Chapter) which is delivered by Noosa Landcare is a program that facilitates a group volunteers who deliver restoration and weed management works on both private and public land. Council investment of \$23,620.00 • Keep in in Kin Kin, delivered by Noosa & District Landcare is a large-scale soil conservation project in the Kin Kin creek catchment that focuses on engaging private landholders to undertake remediation works in priority riparian areas on their properties. Council investment \$240,000 over three years. • Plastic Free Noosa, by Tourism Noosa, is a program aiming to drive wide-scale change by empowering the Noosa community in eliminating single-use plastics through direct engagement, recognition and facilitating circular economies. Council investment \$185,400 over three years. • Hinterland Rural Extension Program, delivered by Mary River Catchment Coordinating Committee, also focuses on private land riparian remediation. Council investment \$105,000 over three years.

	Environment Strategy Enabling Actions	Status	Progress comments
B.	B. Implement an Environment & Sustainability Roundtable to provide a mechanism for local community groups, government stakeholders and experts to have input into the development of Council policy.		The intent of this action within the Noosa Environment Strategy was to transition the informal previous stakeholder round tables held over a period of some years, into a more formal mechanism for providing input into key Council environmental initiatives. COVID restrictions made it difficult to further progress this action item in the 20/21 FY.
			More recently the Environmental Services Manager has initiated half yearly meetings with key local Natural Resource Management groups to share program information. Reinstatement of the formal Environment Round Table will be further considered in early 2022
			In addition, the formation of the Noosa River Stakeholder Advisory Committee (to guide the decisions relating to the Noosa River) and the Climate Change Response Community Advisory Group (to provide local advice to Council on Climate change issues).= provides additional opportunity for stakeholder input into development of Council Policy.
C.	Support community environmental and sustainable development networks and		COVID restrictions made it difficult to further progress this action item in the 20/21 FY.
	forums to build partnerships to drive the implementation of the Environment Strategy.	X	Initial discussion have been undertaken with the Noosa Biosphere Reserve Foundation on the possibility of hosting an annual sustainable forum on behalf of Council and community stakeholders.
D.	Undertake monitoring programs required for evaluating and reporting on the success of the implementation of the Environment Strategy.	/	The inaugural monitoring program has been complied and separately attached to this report.

THEME: BIODIVERSITY

Actions: Protect and enhance existing ecosystems, vegetation networks and habitats

 Undertake environmental restoration activities throughout Council's conservation reserves. Prepare Bushland Operational Assessments (BOAs) for Council reserves to monitor the success of work.



At the Ordinary Meeting on 17th June 2021 Council endorsed the Bushland Reserve Strategic Management Plan 2021-2026. The Noosa Bushland Reserve Strategic Management Plan is the operational mechanism for the implementation of several targets identified within the Noosa Environment Strategy. The Noosa Environment Strategy sets the 'big picture' for our environment and sustainability across all plans and subsequent implementation documents. This plan will deliver outcomes across all of the 4 themes of the Noosa Environment Strategy being Biodiversity; Waterways, Wetlands and Coasts; Climate Change Adaptation and Resilience; and Sustainable living.

Bushland Operational Assessments (BOAs) are a resilience-based method for mapping native vegetation condition within an area of bushland. The intent of the mapping is to guide on-ground restoration works to improve ecosystem resilience. These assessments create the ability to provide quantifiable baseline data to monitor efforts for the next 5 years. Through its methodology and assessment criteria, the Bushland Reserve Strategic Management Plan identifies 57 reserves requiring a BOAs. These are now all completed.

A report outlining the success of community participation in voluntary conservation programs, including Community Bushland Care was presented to the Planning and Environment Committee on 7 December. This indicated that In terms of outputs, the volunteers contributed 4771 hours labour in the 2020/2021 financial year. This figure does not include the many unrecorded hours that group leaders contribute in preparation and planning. Since 2016 Bushcare volunteers have planted 11206 trees and removed 1248 cubic meters of invasive environmental weeds. 4 larger community plantings were held in Council reserves. Community interest in this program continues to be extremely high with officers receiving 4 applications for new groups in this reporting period.

As noted in the report, there is a risk in being unable to adequately manage ongoing growth and participation in the Community Bushland Care Program and this has been identified as a priority for funding consideration in the 2022/23 FY budget.

In addition, Council received State Government funding as part of the Southeast Queensland Community Stimulus Program, which allowed for the appointment of 4 bushland restoration employees in the 19/20 financial year to current date. This has allowed the additional restoration works in more than 20 reserves.

Reduce the threat of priority biosecurity risks, such as pest plants and animals, on Council land and support private landholders to do the same.	In the 20/21 FY, 250 properties were visited as part of Council's approved Biosecurity Surveillance Program, targeting Cats Claw Creeper and other priority weeds. Biosecurity threats were detected on 7 of these properties with 5 advisory letters and 2 Biosecurity orders issued. Ongoing assistance is provided to landholders to control Fireweed in the Lake MacDonald area and Cats Claw Creeper in the Upper Six Mile Creek catchment area.
	Pest Management Officers continue to provide ongoing assistance to landholders in the control of Wild Dogs, Fox, Deer, Feral Cat and Myna Birds on private land as part of their regular business.
	Land for wildlife incentive program – 26 LFW members received weed management training and contractor assistance on their properties targeting Cats Claw, madeira Vine, Camphor, lantana. Area of land treated 9.3 hectares. Council investment \$23,000. Landowner co-contribution – labour \$9000, materials \$1460.
3. Implement rehabilitation programs of former forestry areas in the Yurol and Ringtail State Forests, in preparation for the land to be transferred to National Park.	This action is progressing well with both the Ecological Restoration Plan and Plant species list for nursery propagation close to completion. Agreements between DES, Landcare, Kabi Kabi and Greenfleet have been finalised in the more recent period and QPWS are taking on a greater operational role for management of State Forest areas. 82ha of land has been revegetated in FY 20/21 so far with 24,800 trees planted. QUT have commenced koala baseline, vegetation assessment and dog threat assessment using remote and drone technology. This is a 2-3 year project.
Actions: Expand vegetation netv	vorks and habitat
4. Support private landholders to achieve environmental outcomes on their property through an expanded Land for Wildlife and Voluntary Conservation Agreement Program.	A report outlining the success of community participation in voluntary conservation programs, including Land for Wildlife and Voluntary Conservation Agreements was presented to the Planning and Environment Committee on 7 December. This indicated that for the 2020/21 financial year, there are 68 new registered Land for Wildlife properties with 5 new Land for Wildlife working towards properties. This includes 380 ha of retained habitat and 73 hectares of habitat under restoration. In addition to this, 82 existing Land for Wildlife properties have been revisited in the same period. The report also showed that as at July 1 2021 there were 20 active VCA properties covering 336 hectares. Growth in land owner participation in the last two years has been due to extra resourcing being allocated to program promotion and landowner engagement. Five VCA properties have disengaged from the program due to change of property ownership but noting the covenant/nature refuge remains on title, securing conservation qualities in perpetuity.

5.	Identify priority land parcels that enhance landscape connectivity and seek to have them managed for environmental outcomes, either through direct purchase by Council, or utilising other appropriate protective mechanisms.	/	The Conservation Land Policy Guideline was completed in 2018 which identifies land parcels of interest. 88ha of land purchased on Lake Flat Rd, Boreen Point in February 2021. Any suitable land parcels that come to market are assessed on an ad hoc basis.
6.	Undertake an urban environmental education program to improve environmental outcomes for urban wildlife in strategic locations.		The start of 2020/2021 FY Saw the Urban Wildlife Gardens Program (UWG) commence its first official year. This is a Council program, funded through the Environment grants, that has been developed and is delivered by Noosa Integrated Catchment Association. The program aims to assist urban property owners in enhancing habitat opportunities in their own backyards through education and professional advice. Participants receive a property visit from the program coordinator who provides information and advice tailored to their properties and supplies a number of appropriate native plants. 6 workshops of relevance are also available annually to anyone participating. An Urban Wildlife Gardens welcome pack for new residents has been developed and is proving to be quite popular with local real estate agents. The pack includes an invitation to join, a copy of Noosa Native Plants – a field guide to our local flora, information on responsible pet ownership and weeds.
A	ctions: Improve long-term s	survival for thr	eatened species and ecological communities
7.	Undertake detailed biodiversity assessments across different Broad Vegetation Groups, with a view to understanding and monitoring the health of biodiversity across the Shire.	Ö	Scheduled for Year 3 (2020/21) but unlikely to be delivered.
8.	Scope and undertake monitoring programs on populations of 6-8 key representative threatened species, to	Y	Long-term monitoring programs are undertaken for koalas through Council's Koala Conservation Plan 2016 and Glossy-black Cockatoos through the Glossy Black Conservancy.
	mitigate against local extinctions.		There has been no further work on this significant action, and considering community concerns for various species this is an areas that requires attention.
			The deficiency in progress on this action is a key risk for biodiversity in Noosa Shire, and this has been identified as a priority for funding consideration in the 2022/23 FY budget.
9.	Implement propagation programs that grow threatened plant species and result in new populations at		Council has previously provided grant funding to Noosa Landcare to initiate a program that focuses on surveillance, seed collection and propagation of threatened species of plants. Landcare continued to deliver this program through the 2020/2021 FY with the State Government

	originally focused on six key species in high-risk areas such as road reserves. The current program scope has broadened to include a further 6 species.
 Undertake targeted wild dog control in key Koala Habitat Areas as identified in Koala Threat Mapping. 	Wild dog control including trapping and baiting has been undertaken in some of the identified Koala Habitat Areas mostly on private land in the localities of Como, Kin Kin, Cootharaba, Cooran, Federal, and Ridgewood with 20 wild dogs trapped in these areas. A significant portion of the Koala Habitat Area identified is National Park and an agreement/ partnership is yet to be developed concerning wild dog control in these areas.

THEME: WATERWAYS, WETLANDS AND COASTS			
Actions: Maintain & improve the health of waterways, wetlands & catchments			
11. Develop an integrated water monitoring network for Council, community and other agencies, including event monitoring of sediments, nutrients and litter for Noosa and Mary Catchments,	Currently, there are 15 separate programs and projects delivered by multiple organizations contributing to this action item. All water quality data is uploaded to the Statewide Water Information Management database software, SWIM Local, which is a data management tool that can be accessed by all stakeholders but does not have a user friendly interface.		
and a Mary River sub-catchment baseline and report card.	It is also noted that there is inconsistency in the metrics and methodology between the different programs. In addition, lack of transparency of the data makes it invisible in terms of active decision making.		
	There is significant opportunity to refine water monitoring programs, both in terms of metrics, but importantly accessibility to assist live reporting. The following considerations are being explored:		
	Consistency in metrics and methodology, stipulated through funding and partnership arrangements		
	- Sub catchment reporting to supplement the annual Noosa River Healthy Land Water Report Card		
	 Exploration of user data base interface, using dashboard technology as that being explored by the Peregian Data Centre 		
12. Improve the water quality and biodiversity of the Noosa River by restoring aquatic habitats, such as oyster reefs, and improving riparian vegetation.	In terms of oyster reefs, the Noosa River Shellfish Restoration Project has been funded to the amount of \$1.2million and was due to have delivered two pilot reefs by July 2021. The project has struggled to deliver to expectations and is subject to separate considerations by Council. In terms of riparian vegetation, waterways and adjacent lands make up a significant component of almost all Community Bushland Care groups' projects. Volunteers have continued to deliver quality environmental outcomes in these habitat types through this reporting period.		

		In addition, Noosa Council's Natural Areas team undertake significant vegetation management works in riparian areas throughout Councils' Bushland Reserves. These works include weed management and revegetation and aim improve habitat opportunities, water quality and biodiversity.
		As outlined previously, the Land for Wildlife Program has grown significantly through this reporting period with 68 new registrations. New Participants receive extension advice on riparian vegetation management if applicable.
		Council has also provided support through grants for large scale projects such as Keep It In Kin Kin which is delivered by Noosa & District Landcare to prioritise high risk erosion sites in the Kin Kin Catchment. This project is summarised in a separate attachment to this report.
13. Investigate and implement best practice solutions to reverse the decline of benthic biodiversity and	\overline{Q}	The report released in August 2020 on the decline of benthic biodiversity in the Noosa River highlighted fine silt sediments as the primary cause of this decline.
primary production in the lower Noosa Estuary.		As articulated in previous action, there are two major projects already underway addressing this action;
		 Keep it in Kin Kin – a large scale project aimed at preventing mobilization of soil in the upper Kin Kin creek catchment reducing fine sediment loads from entering the Noosa River.
		 Noosa Oyster Reef Ecosystem Restoration – aims to re-instate oyster habitat in the Noosa River.
14. Enhance Integrated Catchment Management of the Noosa River and Mary River sub-catchments, with a focus on improving land use, wetland and riparian management practices through landholder engagement on onground rehabilitation programs.		Council provides funding through grants for three project that are contributing to this action. Keep it in Kin Kin delivered by Noosa Landcare and the Hinterland Rural Extension Program delivered by Mary River Catchment Coordinating Committee, both funded through the Multi-year Environment Collaborative grant, are three year projects that focus on improving land use through Landholder engagement. The third program, funded through the Community, Environment & Climate Change Project Grant is the Noosa chapter of Roving Restorers, a roaming group of volunteers who assist landowners with weed management and revegetation on their restoration projects.
		Councils Natural Areas Team contribute significantly to this action through their management of Council's Bushland Reserves. The Bushland Reserve Strategic Management Plan was endorsed in June 2021. This document provides clear direction for prioritization of works allowing for more effective delivery.

	Councils' Land for Wildlife program has continued to significantly contribute to this action item with all new participants receiving extension advice on improving land use, wetland and riparian management at property visits/inspections.
15. Implement a septic system inspection program in high priority areas (such as Noosa North Shore) to better understand the impact of these systems on the quality of surface water and groundwater systems.	This action needs more attention. More work is needed to develop a program that monitors the impacts of septic systems in priority locations.
Actions: Protect and enhance coasta	Il environments and vegetated buffers to coastal foreshores
16. Investigate the need and appropriateness of statutory mechanisms to protect Noosa's coastal and marine waters, including the lower reaches of the Noosa River.	Noosa Council has been working closely with Maritime Safety Queensland through the Noosa River Stakeholder Advisory Committee, on the introduction of new regulations concerning vessel management in the Noosa River, including vessel speed, anchoring, mooring and live aboards. There is also cross relationship to possible expansion of Councils Local Laws governing foreshores.
17. Implement an Eastern Beaches dune rehabilitation program to improve the condition, species diversity and stability of dune ecosystems and enhance	In 2019 six Bushcare Groups joined and formed the Eastern Beaches Bushcare Collaborative with the aim of taking a more strategic approach to restoring our Eastern Beaches dune ecosystems. Council has committed \$225,000 over three years through the MEC grants to facilitate this program.
resilience to climate change.	Six Community Bushland Care groups undertook dune rehabilitation in the 2020/2021 financial year. The Eastern Beaches continues to be the area of highest interest and participation for this program.
	Scoping for the Eastern Beaches Coastal Foreshores Management Plan has commenced in the 21/22 FY and good initial progress made at the time of the reporting.
Manage waterways and coasts to precreation and commercial use	rotect environmental values while enabling sustainable public access,
18. Work with stakeholders to review current fishing practises and achieve	The Noosa River Stakeholder Advisory Committee has not determined that review of fisheries practices is a priority for their immediate attention.
sustainable recreational and commercial fishing outcomes in the Noosa River.	It is noted that the Qld Government Sustainable Fisheries Strategy 2-17-2027 includes progressive annual reporting. See https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy-overview

19. Undertake a stormwater quality improvement program that includes an audit of stormwater quality improvement devices, analysing current infrastructure, current best practice and options to improve infrastructure as it is due for replacement.	Ö	Not planned to begin in 2019/20 FY. An audit of the effectiveness of 50 Bio-basins has been programmed for the 2021/22 FY to inform ongoing work.
20. Work in partnership with a range of stakeholders including Kabi Kabi to provide an on-river presence to deliver a range of environmental and education programs, and support compliance with regulations on the Noosa River.		 Noosa Integrated Catchment Association deliver a long standing program, funded by Council that addresses this action item. Some of the programs objectives are: Assist in the implementation of local, catchment and regional strategies Provide information to facilitate education and awareness on catchment, river, biodiversity, water quality, ecosystem health and fisheries Provide assistance to institutional, government and industry based research Identify environmental issues and potential project sites Coordinate litter collection and assist with pollution control Promote community discussion and participation It is noted that currently, there is no active Kabi Kabi participation.

THEME: SUSTAINABLE LIVING	
Actions: Reduce waste to landfill	
21. Work with other agencies on a Regional Waste Strategy to develop broader regional solutions to local waste management problems.	Regional MoU with Sunshine Coast and Moreton Bay Council's with Unitywater has been completed and a joint venture under that MoU was deemed as not feasible. Currently there is discussion with Sunshine Coast Council on joint initiatives, these are in their early stages. The Waste Manager to now join the COMSEQ waste group to discuss opportunities in South East Queensland. Previously we were not able to do this as Noosa Shire Council was not a member of COMSEQ.
22. Improve rates of commercial recycling and green waste diversion through implementation of bulk green waste bins and targeted education and	Green waste bins are now available to all residents resulting in 16,000 tonnes of green waste being diverted from the landfill. Education and behaviour change programs targeted at commercial operators have been stalled due to COVID-19. No further progress for this reporting period.

behaviour change programs for commercial users.	
23. Develop a waste education centre at the Noosa Landfill Resource Recovery Centre, to support waste and sustainability education programs for school-aged children and the broader community.	Completed. A recycling talk and landfill tour was delivered to over 1300 students in this reporting period.
24. Continue to increase the different types of recycling services available to Noosa residents.	No increase to waste streams for this reporting period. Additional waste streams are assessed and added when markets becomes available.
25. Provide waste and sustainability education programs to improve the understanding of waste management and sustainability in the Noosa community.	This work is ongoing. The waste team have delivered multiple education programs and events including; recycling talks to schools, kindies, and community groups, weekly Facebook posts for "Waste Free Friday", a public landfill tour as part of Climate Week and a showing of the movie 2040 also for Climate Week. As previously mentioned, more than 1300 students attended talks at the new waste education centre at the landfill.
Actions: Encourage incorporation of mo	ore sustainable building elements
26. Advocate for mandating minimum energy efficiency and renewable energy generation to all new development in the shire, including domestic residences.	This action has seen no further progress since the Noosa Plan 2020 came into effect which sets the minimum requirements for sustainable building design for multiple dwellings and commercial development through the Sustainable Building Design Works Code and supporting Planning Scheme Policy for Sustainable Design.
27. Advance the idea of a Noosa Sustainability Institute to establish a coordinated approach to research and activity occurring in our community towards sustainability.	Delayed. No further progress
Actions: Adopt sustainable agricultural	practices
28. Support the community to connect a circular economy for organic waste through enhanced connectivity between providers and end users.	This action has progressed well. The introduction of green waste bins saw 16,000 tonnes of organic waste, that previously would have gone to landfill, diverted and recycled for consumer use in the 2020/21 FY. The waste team are currently developing a Waste Strategy and further enhancement of this action will be a key component.

29.	Support	on-g	round	ac	tions	with
	landholder	S	tha	t	in	nprove
	environme	ntal,	econo	mic	and	social
	outcomes	or	n rui	al	pro	perties
	throughout					
	long-term				of	rural
	landscapes	s in th	ne Shire	€.		



The action is progressing and at this stage is serviced through the following two different program streams.

Council's Community Conservation Partnership programs, Land for Wildlife and Voluntary Conservation Agreements where participants receive extension advice on sustainable land management as well as contractor support and materials such as tube stock for riparian revegetation.

The other being through Council's grants program which funds multiple projects contributing to this action. These are; The Keeping it in Kin Kin project and Regenerative Land Management Workshop series both delivered by Noosa Landcare, the Hinterland Rural Extension Program delivered by MRCCC and the Roving Restorers by Hinterland Bush Links. Combined total Council investment \$379,950.

THEME: CLIMATE CHANGE ADAPTATION & RESILIENCE				
Actions: Reduce emissions and reso	urce consumption			
30. Identify potential areas for carbon sequestration in the Noosa Shire and support landholders to take advantage of available opportunities.	Strategically Council has not yet identified potential areas for carbon sequestration.			
31. Investigate emission reduction opportunities at Noosa landfill for reducing the creation of methanebased emissions.	New vertical wells have been installed and gas capture has increased significantly. Staff are in ongoing discussions with LMS energy for future emission reduction opportunities. In addition to the role out of the Green waste bins, the Waste team are currently working towards producing a strategy to reduce organic waste to landfill.			
32. Implement energy efficiencies throughout Council-owned facilities and operations, such as the installation of solar PV systems and use of loweremission transport options.	640 kW of solar have now been installed on Council buildings, energy efficiency projects such as LED lighting replacement and A/C upgrades are ongoing.			
33. Investigate Noosa Council's future emission offset possibilities, identifying the options with the most environmental, social and economic co-benefits.	This action is progressing well. Councils carbon footprint is currently being reviewed by 3rd party to confirm quantum of offsets required.			

34. Investigate, and implement if appropriate, a solar bulk-buy scheme for Noosa residents, to provide quality solar at affordable rates.	\	This action is progressing well. A Bulk buy program was investigated and changed to solar advice line and education seminars provided by Australian Energy Foundation
35. Work with community partners to scope, develop and implement a community education program aimed at increasing the adoption of sustainable building elements and preparedness of residents to adapt to climate change impacts.		The new Climate Change Response Plan has as an action to develop Climate Resilient Guidelines to guide sustainable building design which is to be progressed in the 21/22 Financial year.
36. Encourage and facilitate the use of electric vehicles by establishing a network of electric vehicle charging points throughout the Noosa Shire.		A project to instal an EV charging station at the Peregian Community Centre is underway and due for completion in early 2022. Noosa Council in collaboration with the Federally funded ARENA EV charger rollout are in review of the proposed Go Evie projects and commercial terms. Investigations are underway for an EV charger at the Peregian Digital Hub.
37. Undertake a socio-economic impact assessment from flooding and inundation of foreshore areas, including projected impacts on public infrastructure, private assets and commercial activities in the lower Noosa River.		This is being progressed through the Coastal Hazards Adaptation Plan and an initial scoping and costing has been completed.
Actions: Manage the natural e	environment in	a way that improves resilience to climate change
38. Improve understanding and monitor changes in groundwater and wetlands and the potential impacts of climate change on their health, through the development of a groundwater and coastal vulnerability assessment and monitoring tool.		Council is providing \$10,000 funding support to the University of Queensland (PHD candidate) to assist with groundwater research in Noosa Shire including the establishment of permanent groundwater monitoring stations.

Attachment 2

Summary of Council Grant Funded Projects Working Towards Noosa Environment Strategy 2019 Outcomes.

Community	Community, Environment & Climate Change Project Grant Round 12			
Project	Amount	Outcomes		
	funded			
Protecting and Restoring Noosa's Pandanus populations Delivered by Joel Fostin	\$19,998.00	Local Pandanus population have been in decline due to dieback caused by the arrival of a biosecurity threat from North Queensland. Using these grant funds, the applicant performed immediate mitigation works on effected trees in various locations on the coastal strip and then continued with the projects main focus of long term preservation outcomes, namely; to assist natural regeneration and to perform revegetation works at severely affected dieback sites. Awareness raising was also a key focus of this project with 9 workshops being held for both community and council staff.		
2020 Noosa electric vehicle expo Delivered by Zero Emissions Noosa	\$3700	Despite wet weather and COVID restrictions, the event went ahead and attracted larger numbers of exhibitors than previous events, and extremely strong participation and interest from the community. The Minister for Transport and Main Roads, along with Noosa Mayor, MP Sandy Bolton and NJA President opened the event, and were able to experience personally the strong community interest and the range of electric transport options now available in the market.		

Community, Environment & Climate Change Project Grant Round 13				
Project	Amount funded	Outcomes		
Urban Wildlife Gardens Delivered by	\$5323	This is a long-term community engagement program that aims to provide a resource to Noosa's urban community members who have a desire to improve the habitat value of their backyards in turn creating vegetated linkages and wildlife corridors. The program now		
NICA		has more than 100 members. The program objectives have been achieved by:		
		Engaging with the wider urban community to raise awareness of the natural environment and providing an opportunity for them to contribute and be involved in a welcoming and low-key way on their own properties.		
		• Encouraging the use of endemic native plant species in gardens and turning their gardens into wildlife sanctuaries by putting up nest boxes, providing water and having 'messy' sections providing wildlife habitat.		
		Providing information and assistance to program participants.		
		Creating/enhancing urban wildlife corridors to assist wildlife movement in response to climate change.		
		Maximising linkages between dedicated conservation areas.		
		Reducing the impact of invasive plant species by improving vegetation structure and		
		providing for wildlife with nest hollows and food plants which can be in short supply due to		
		competition between native and introduced animals,		

		Reducing human/wildlife conflict by increasing understanding and awareness of wildlife.
Noosa Native Plants Website re-	\$6818.00	The purpose of www.noosasnativeplants.com.au to demystify and raise awareness of local native plants. The website is an excellent reference and freely available on the internet.
development. Delivered by NICA		This grant funding was used for the migration of the data and functionality of the old Noosa's Native Plants website onto a modern platform with improved access via smart phones, tablets and personal computers. It also created the ability to regularly update the database with basic botanical information about each species, plus cultural uses of the plants by aboriginal people and early European settlers and now includes landscaping advice.

Community	Community, Environment & Climate Change Project Grant Round 15				
Project	Amount funded	Outcomes			
A Line in The Sand Delivered By NICA and OzFish	11,670.00	The ALITS program represents a unique collaboration between NICA and OzFish (Noosa), in partnership with Noosa Council, to deliver a cost-effective volunteer-led and innovative community awareness and infrastructure renewal initiative designed to influence recreational fishing behaviours and enhance environmental outcomes in the Noosa Shire. The ALITS program is intended to a) replace, and where appropriate re-site, the approximately 30 remaining fishing line recovery bins (FLRBs) installed at permanent sites along the length of the Noosa River in 2004-2010 (see FLRB Audit attached) with new purpose built, and aesthetically appealing FLRBs, styled to align to Noosa's unique branding; and b) design and project community awareness materials (both on and offline including embedded on FLRBs and in selected fishing retailers), to improve recreational fishing waste disposal behaviours; c) advocate for greater recycling of collected fishing waste (where possible) as emerging processes develop; and d) monitor behaviours and where necessary re-design awareness and project efforts. This project combines NICA's and OzFish's prior and broad experience with FLRB installations and awareness initiatives, extensive on-ground volunteer force and influence within the broader recreational fishing community (retailers, operators, residents and visitors).			
		This grant is ongoing and will be reviewed at acquittal time in June 2022 and March 2023.			
Enter The Flyosphere Delivered by NICA	\$14,977.00	The Enter the Flyosphere (ETF) Project represents Stage 3 of NICA's Migratory Shorebird Conservation Roadmap (Project Plan available upon request) intended to improve the long-term survival of threatened migratory (and resident) shorebirds species in the Noosa River. The Roadmap represents a best-in-class citizen-led and research-guided collaboration between stakeholders including NICA, Noosa Council, HLW, QPWS and Tourism Noosa. The ETF project comprises several actions intended to better understand/enhance community interactions with shorebirds (surveys x10), to cost-effectively renew dilapidated infrastructure (telescope Noosa Spit) and to host innovative community awareness products (interpretive signage and film). This grant is ongoing and will be reviewed at acquittal time in June 2022 and March 2023.			
Engaging Local	\$23,620.00	This project aims to engage the local community in restoration and connection of habitat in the Noosa Council Region and is based on			

Communities in Restoring		an extremely successful model called Roving Restorers which was initiated on the Blackall Range in 2012 by Hinterland Bush Links.
Bush (Roving Restorers)		In partnership with Noosa Landcare, a Project Officer was appointed to lead the Roving Restorers Noosa Hub. The project was promoted through Noosa Landcare, MRCCC, Kin Kin Bushcare, NICA and
Delivered by Hinterland Bushlinks		Hinterland Bush Links seeking landholders who wished to have assistance with restoration projects and volunteers to undertake the Roving Restorer activities.
and Noosa Landcare	This project has engaged with 19 landholders who have benefitted from having our volunteers assist with weed management on their properties.	
	20 Roving Restorers activities were held and have assisted landholders in the Noosa Council area and Peregian and Kin Kin Bushcare groups in the 2020/21 FY.	
Noosa Indian Myna Bird	\$1,400	Indian Myna birds pose a significant threat to our local biodiversity. These birds compete aggressively with native fauna for nesting sites.
		These funds are used to deliver a trapping program.
Delivered by WILDLIFE NOOSA LTD		This grant is ongoing and will be reviewed at acquittal time in June 2022 and March 2023.
Myna Bird Reduction Project Delivered by WILDLIFE	\$1,400	20 Roving Restorers activities were held and have assisted landholders in the Noosa Council area and Peregian and Kin Kin Bushcare groups in the 2020/21 FY. Indian Myna birds pose a significant threat to our local biodiversity These birds compete aggressively with native fauna for nesting sit These funds are used to deliver a trapping program. This grant is ongoing and will be reviewed at acquittal time in June

Project	Amount funded	Outcomes
Coastal Connect Delivered by the Eastern Beaches Bushcare	\$225,000.00 Over 3 years	The project aims to restore ecological linkages and connectivity by rehabilitating coastal peat creek mouths, dunes and ephemeral wetlands along Noosa's eastern beaches to ensure species resilience in the face of climate change. Since initiation, the various groups involved in this project have successfully removed environmental weeds and restored sensitive
Collaborative with NICA	e	coastal creek lines through on-ground weeding, rehabilitation, revegetation, rubbish removal, monitoring, flora/fauna monitoring/recording and water testing. Multiple talks and community plantings have also been undertaken.
Keeping it in Kin Kin Delivered by	\$240,000.00 Over 3 years	This is a large scale soil conservation project that aims to prevent the mobilization of soil from rural hinterland to the Noosa River using various land management techniques.
Noosa Landcare	years	So far, this project has restored 2850 sq m of riparian vegetation, 3.1 ha of revegetation with 8971 plants made up of 184 species. The project has also seen 1.63ha of environmental weeds treated and 1.8 Km of stock exclusion fencing installed.
Protecting Noosa's Biodiversity through community programs (Frog Monitoring, find a frog) \$21,600 Over 3 years	This is a citizen science initiative that aims connect people with nature through workshops and data collection which is uploaded to the Queensland Government Wildnet database. Some highlights from the 2020and 2021 include;	
		 Involvement of Bushcare groups and local schools in their first long-term monitoring surveys of nearby wetlands. High interest through participation at workshops. Extended northern known limit for Litoria verreauxii (the whistling frog)

Delivered by		Collection of frog records from 15 species across 32 sites in
MRCCC		the Noosa Shire.
Hinterland Rural Extension Program Delivered by MRCCC	\$105,000.00 Over 3 years	This rural landholder program will target high priority subcatchments of the Mary River catchment for extension and onground incentives to improve downstream water quality. This project links with the MRCCC Reef Trust program, Noosa & District Landcare and Country Noosa. This grant is ongoing and will be reviewed at acquittal time in June 2022 and March 2023.
Plastic Free Noosa Delivered by Tourism Noosa	\$185,400 Over 3 years	Plastic Free Noosa protects the environment by empowering the Noosa community in eliminating single-use plastics through direct engagement, recognition and facilitating circular economies to create lasting change. Below are the measurable outcomes from this project thus far; 171 Plastic Free Noosa members. 2 Plastic Free Noosa Youth Ambassadors and inspired school children to become Waste Warriors. Eliminated 5 million+ single-use plastic items. Eliminated over 55,000 plastic bottles. Eliminated 13,348 single-use coffee cups from landfill annually through gifting Keep Cups. Removed over 90kg of rubbish at clean-ups. 4100kg of CO2 sequestered through Trees for Tourism.
Community	& Environm	ent Alliance Agreement
Project	Amount funded	Outcomes
Provide 24/7 flying fox rescue service Flying Fox Rescue & Release Inc.	\$33,165.00	Funding for operational support that has allowed The applicant to carry on doing the rescue and rehabilitation of the Flying-foxes and micro bats, plus the ongoing capability to educate people in the role Flying -foxes and micro bats play in the environment
Manage and maintain volunteer programs. Noosa Landcare	\$20,150.00	Delivered land management information and knowledge through workshop series, responding to individual enquiries and undertaking visits to individual properties, providing information for members via newsletters and regular emails, providing updated information on Facebook and Instagram maintaining a 'shop front' in Pomona called the Hinterhub to address concerns; provision of employees for representation at community and industry-related meetings throughout the shire and further afield. In conjunction with Council Project Officers and Directors, NDLG has leveraged co-funding through a partnership approach to investment of key public sites throughout the shire such as 'Trees for Tourism' projects on the Noosa Trail, Black Star Coffee Plantings at Cooran, BMRG funding for key Cats Claw Creeper Infestations at various Council sites (reserves).
Three year Environment Alliance Agreement	\$54,540.00 Over three years.	Organizational support. For Zero Emissions Noosa. This funding has meant the organization has been able to continue their activities focused on outreach and engagement to achieve increased community awareness of emission reduction opportunities.

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Zero Emissions Noosa		
Three year Environment Alliance Agreement NICA	\$48,240.00 Over 3 years.	Organizational support. Despite the disruption posed by Covid-19, NICA has continued to conceive, design, fund and execute projects and programs intended to progress the conservation and sustainable use of the Noosa River Catchment. NICA has grown its member and volunteer base, upgraded its capacity, skill base and equipment, enhanced its community profile and broadened its funding relationships.
		NICA has progressed its existing community conservation programs aligned to NSC's Environment Strategy and draft River Plan including Riverwatch, Waterwatch, Bushcare (Girraween and River) and Urban Wildlife Gardens initiatives.
Three year Environment Alliance Agreement	\$2,015.00	Funding used for the purchase of medicines for injured wildlife.
Wildcare Australia		
Support	\$16,000.00	Funding to Support schools and students in the delivery of
Noosa region and Council's environment management initiatives	Over 3 Years.	curriculum-based extension opportunities linked to the work of local environment groups, Kabi Kabi traditional custodians of the Noosa region and Council's environment management initiatives.
Environmental Education Hub		