



Noosa Environment Strategy 2019

Implementation Plan





Introduction



This document forms part of the Environment Strategy. It provides a clear commitment and set of implementation actions for delivering the planning and policy outcomes of the strategy.

The Implementation Plan establishes an integrated and targeted approach to delivery through identifying:

- a planning framework to support implementation
- a monitoring, evaluation and reporting framework on the progress and success of the strategy
- significant implementation actions for the first 3 years of the Strategy.

The plan identifies how Council seeks to contribute to achieving the outcomes and targets in the strategy, as well as opportunities for others to partner with Council in achieving excellence in environmental management and sustainability.

The Implementation Plan recognises that everyone in the community has a shared responsibility as stewards of the environment and that there are benefits in utilising the collective knowledge and skills available through productive and enduring partnerships. This includes partnerships with community groups, traditional owners (Kabi Kabi), universities, research institutes, other management agencies, and environmental organisations.

The Environment Strategy is expected to be a 10 year document, with annual progress reporting throughout that time. The strategy and plan will be reviewed periodically to retain their currency and relevance.

Council has a number of roles in the implementation of the Noosa Environment Strategy:

- » Partner– developing formal and informal relationships and alliances and working with others to achieve common goals
- » Provider – offering a range of services, support, infrastructure and facilities to individuals and groups
- » Planner – proactively planning for services and infrastructure, which respond to current and future needs and requirements
- » Advocate– raising the awareness of State and Federal governments and other stakeholders of the issues and needs of residents and businesses, as well as initiating or supporting campaigns and programs for positive change
- » Regulator – providing governance and regulatory controls such as local laws and health and planning controls
- » Educator - raising community awareness and promoting behavioural change
- » Leader – leading by example through adopting best practice and taking up new technologies and techniques
- » Researcher – undertaking the collection, analysis and dissemination of quantitative and qualitative data to inform evidence-based planning, priority setting, decision-making and evaluation
- » Funder – providing grants, funding and/ or subsidies to local groups and agencies to research, undertake project and/or progress and develop services, programs and infrastructure for individuals and groups.
- » Enabler – supporting and encouraging the community to make positive change and take action



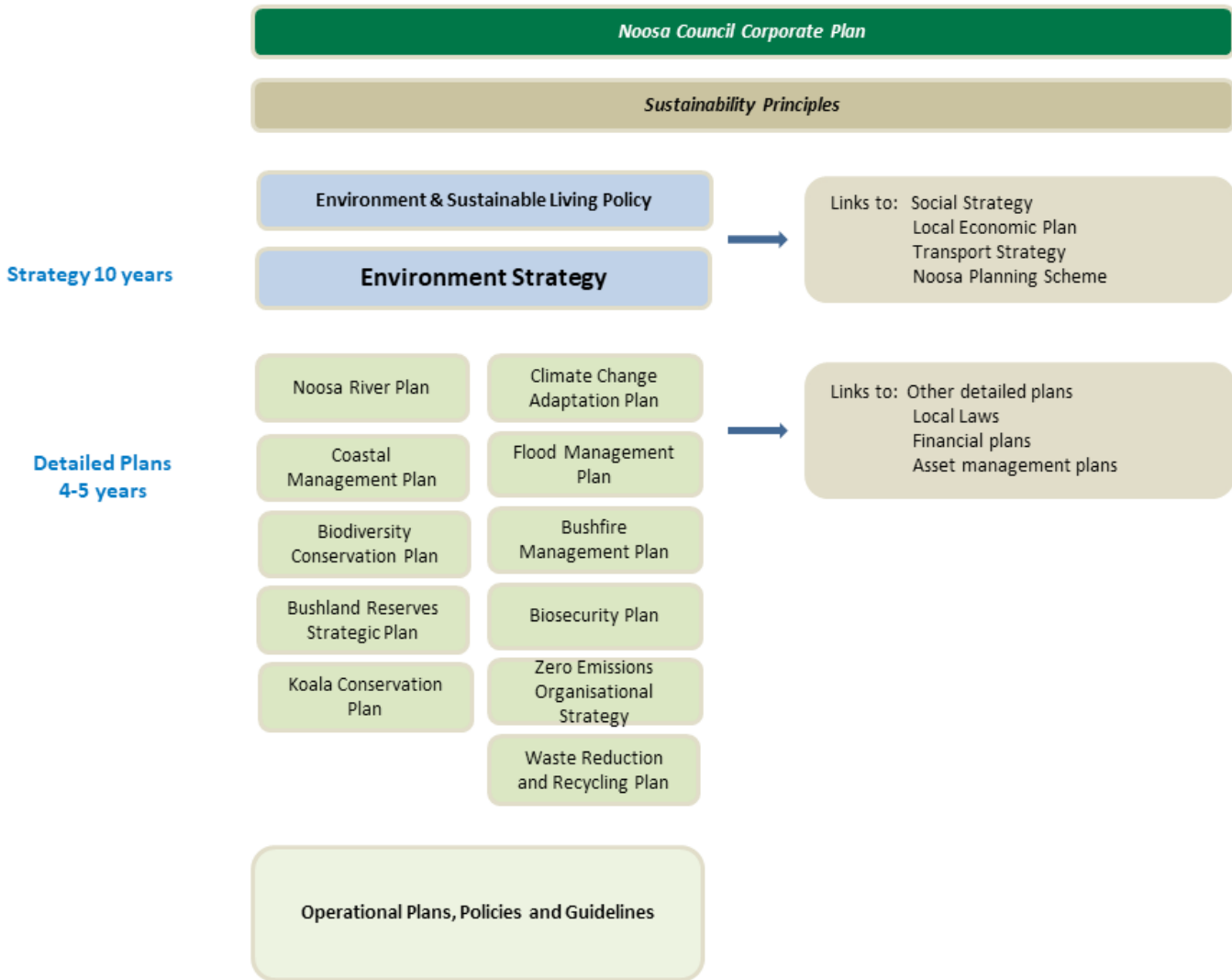
Planning framework

The Environment Strategy is set within a broader policy framework as illustrated below.

It is guided at the higher level by Council's Corporate Plan, Sustainability Principles and Environment and Sustainable Living Policy, as well applicable international, Commonwealth and State legislation and policy.

The Environment Strategy also sits alongside the Social Strategy, Local Economic Plan, Transport Strategy and Noosa Planning Scheme, which comprise Council's key strategic policy documents.

The Environment Strategy also provides the overarching policy direction for detailed environment-related plans, policies and guidelines, as well as a number of new plans that are to be developed.



Noosa Council Environmental plans



The table below describes the purpose of current and planned environment-related plans that will support the delivery of the Environment Strategy.

Plan	Purpose	Status	Timeframe
Zero Emissions Organisational Strategy	Provides a decision making framework and identifies key actions for achieving Council's zero emissions target by 2026.	Completed 2016	Review 2019/20
Waste Reduction and Recycling Plan	Identifies specific actions for garden waste and composting, waste reduction, landfill diversion, community education and other local government activities.	Completed 2016	Review 2020/21
Flood Management Plan	Provides for a coordinated approach to flood management and identifies specific actions for improving flood resources, planning and policy and disaster management.	Completed 2016	Review 2019/20
Koala Conservation Plan	Identifies specific management objectives and actions to help conserve and protect koala populations and habitat in Noosa Shire.	Completed 2016	Review 2020/21
Biosecurity Plan (Pest Management Plan)	Establishes priorities and actions to address the impacts of biosecurity threats, such as weeds and pest animals, in Noosa Shire.	Completed 2015	Review 2019/20
Bushland Reserve Strategic Plan	Establishes a prioritisation approach and identifies priority Bushland Reserves for coordinated ecological restoration management, based on key principles and values.	Underway	To be completed 2019/20, review every 5 years
Bushland Reserve Fire Management Plan	Identifies and sets priority actions for Bushland Reserves requiring fire mitigation activities to address community and ecological risks.	Underway	To be completed 2019/20, review every 5 years
Climate Change Adaptation Plan	Provides a coordinated approach to adapting to climate change challenges across different sectors including biodiversity, coastal hazards, agriculture, commerce, built environment, health and emergency management.	Underway	To be completed 2019/20, review every 4 years
Noosa River Plan	Provides a catchment-wide approach to management of land-based and on-river activities which are designed to reduce major threats to the environmental values and associated community benefits of the river system.	Underway	To be completed 2019/20, review every 5 years
Biodiversity Conservation Plan	Identifies achievements, gaps and opportunities for biodiversity conservation and sets out key conservation priorities and actions for managing biodiversity, threatened species and ecosystems.	Scoping commenced	Review every 5 years
Coastal Management Plan	Establishes a framework for managing coastal resources including for erosion management, public use of beaches and coastal reserves, dune access and encroachments, bushland reserve management, beach cleaning, and channel control.	Not commenced	Review every 5 years



Monitoring, evaluation and reporting

The success of the Environment Strategy will be measured and monitored using targets identified for each Strategy. The targets and baseline measures are outlined in the tables on the following pages. The results of this monitoring will inform annual reporting back to the community on Council's progress.

Council will monitor and evaluate the Environment Strategy and its implementation in two ways:

- 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.



Theme 1 - Biodiversity



Goal: By 2030 the condition and extent of our natural ecosystems has improved.

Target	Baseline	How we will measure progress
Strategy 1.1 Protect and enhance existing ecosystems, vegetation networks and habitats		
By 2030, there is no net loss of ecosystem values across the shire, and the condition of Council's priority bushland reserves are enhanced.	<p>In 2016, the Noosa Biodiversity Assessment Report mapped the extent and abundance of the 61 regional ecosystems (RE) types occurring within Noosa Shire.</p> <p>The Department of Environment & Science has completed BioCondition Benchmarks for Regional Ecosystem Condition Assessment for south-east Queensland.</p> <p>Bushland operational assessments (BOAs) will be undertaken, where they do not already exist, across priority Council-managed restoration initiatives and as identified in the Bushland Reserve Strategic Management Plan.</p>	<p>Every 5 years updated regional ecosystem mapping will be used to identify changes in the number and extent of regional ecosystems.</p> <p>BioCondition Benchmarks for Regional Ecosystem Condition Assessment will be undertaken every 5 years for Noosa regional ecosystems.</p> <p>BOAs will be undertaken every 5 years across priority Council managed Bushland Reserves and for VCA/LfW landholders and verified against shire-wide BioCondition Assessments.</p>
Strategy 1.2: Expand vegetation networks and habitat		
By 2030, half of all land in the Noosa Shire is managed for its environmental values.	36.5% of land within Noosa Shire is currently managed for its environmental values on public and private land, through National Park, Conservation Area, Council bushland reserve, Land for Wildlife, or private property conservation covenants.	Every 2 years GIS tenure mapping and data from private property programs will identify the percentage of land managed or protected for its environmental values.
Strategy 1.3: Improve long-term survival for threatened species and ecological communities		
By 2030, populations of key threatened indicator species remain viable.	<p>A baseline is to be developed for 6-8 key threatened species based on:</p> <ul style="list-style-type: none"> • Representativeness across biological families • Representativeness across ecosystems • Iconic value to the Noosa community • Availability of existing data and records <p>Depending on the species selected, there may already be existing data, however a new baseline for some species will be required.</p>	<p>A key threatened species list is already being developed and will be workshopped and finalised in 2019</p> <p>A longitudinal study of key threatened species will be undertaken over 10 years</p>



Theme 2 - Waterlands, Wetlands and Coasts

Goal: By 2030 waterways, wetlands and coasts are healthy, resilient to change and valued by the community.

Target	Baseline	How we will measure progress
Strategy 2.1 Maintain and improve the health of waterways, wetlands and catchments		
By 2030, the Noosa River and Mary River sub-catchments within Noosa Shire achieve an A rating (or equivalent) for their environmental health.	<p>In 2018, the Noosa River catchment achieved an A- (excellent condition) assessment rating for ecosystem health under the Healthy Land and Water monitoring program.</p> <p>A baseline for the Mary River sub-catchments within Noosa Shire is to be developed, similar to the Healthy Land and Water monitoring framework.</p>	<p>Council will continue to support and participate in the annual Healthy Land & Water monitoring program.</p> <p>Mary River sub-catchment:</p> <ol style="list-style-type: none"> 1. A baseline and report card will be developed in 2020 2. The Mary River sub-catchment report card will be regularly reviewed
Strategy 2.2: Protect and enhance coastal environments and vegetated buffers to coastal foreshores		
By 2030, maintain the extent of vegetated buffers and improve diversity of coastal ecosystems	<p>Existing mapping of vegetation extent of coastal foreshores.</p> <p>Reef surveys have been undertaken on nearshore reefs in 2010 and 2011.</p> <p>In 2016, the Noosa Biodiversity Assessment Report mapped the extent and abundance of regional ecosystems.</p>	<p>Review mapping of vegetation extent of coastal foreshores every 2 years.</p> <p>Surveys of reef biodiversity every 5 years</p> <p>Every 5 years updated regional ecosystem mapping will be used to identify changes in the number and extent of coastal regional ecosystems.</p>
Strategy 2.3: Manage waterways and coasts to protect environmental values while enabling sustainable public access, recreation and commercial use		
By 2030, Noosa has a sustainable fishing industry and increased opportunity for recreational fishing.	A baseline will be developed, similar to work undertaken elsewhere in Queensland, for the numbers of hours taken for recreational fishers to catch a legal-sized fish.	A biennial survey of recreational fishers and catch times will be conducted.

Theme 3 - Sustainable living



Goal: *By 2030 the Noosa community is living more sustainably and is carbon neutral*

Target	Baseline	How we will measure progress
Strategy 3.1: Reduce waste to landfill		
By 2030, all green waste and food waste is diverted from landfill.	<p>A total of 14,317 tonnes of green waste and food waste was collected and diverted from landfill.</p> <p>An audit of waste collected in domestic red topped bins in 2018 showed that on average these bins contained 17% green waste and 29% food waste.</p>	<p>Waste to landfill audits will continue to be conducted every year for the different waste streams.</p> <p>Intermittent audits of red-top bins will be conducted to monitor green and food waste.</p>
Strategy 3.2: Encourage incorporation of more sustainable building elements		
By 2030, sustainable building outcomes are delivered through regulation, education and showcasing best practice design.	<p>A survey to be developed for residential, commercial and industrial properties. The baseline is to be developed, and may include:</p> <ul style="list-style-type: none"> • Number of houses registered to participate in the annual Sustainable House Day in Noosa Shire • Number of houses with 3 star water efficiency fittings (from Unity Water) • Number of residential, commercial and industrial buildings and businesses with rooftop solar panels • Number of homes with water tanks, composting, and water reuse and recycling systems (via resident survey). 	Biennial survey to be developed for residential properties.
Strategy 3.3: Adopt sustainable agricultural practices		
By 2030, 80% of all grazing land achieves best practice management for agriculture.	<p>A baseline is to be developed using the ABCD framework and classification for grazing lands.</p> <p>2008 and 2015 LIDAR imagery (Light Detection & Ranging) identified levels of rural lands and sediment lost to erosion over this period.</p>	<p>Every 5 years grazing land condition will be assessed.</p> <p>LIDAR imagery will be undertaken over the same areas as the 2008 and 2015 images during the term of this strategy.</p>

Theme 4 - Climate change adaptation and resilience



Goal: By 2030 the resilience of the Noosa community and environment has increased.

Target	Baseline	How we will measure progress
Strategy 4.1 Reduce emissions and resource consumption		
Noosa Council operations and service activities, and the Noosa community as a whole, will reach zero net emissions by 2026	<p>In 2018, Council's operational carbon footprint was approximately 50,000 CO² tonnes per annum.</p> <p>The Noosa Shire annual community emissions have been calculated in 2018 as 500,000 CO² tonnes per annum.</p>	<p>Council will continue to calculate its operational carbon footprint annually which includes calculating emissions from fuel, refrigerants, electricity, fugitive emissions from the landfill, and emissions embedded in the goods and services purchased and used by Council.</p> <p>Community emissions will be calculated every three years.</p>
Strategy 4.2: Increase community resilience and capacity to adapt to climate change		
By 2030, community awareness, planning and preparedness for natural hazards and climate change is increased.	A baseline is to be developed of current understanding of the future climate change impacts and community preparedness and actions related to these.	Biennial survey to be developed for residential, commercial and industrial properties.
Strategy 4.3: Manage the natural environment in a way that improves resilience to climate change		
Ecosystem health of wetlands and riparian areas is improved.	<p>In 2018, mapped riparian buffers, as identified in the Noosa Planning Scheme, had vegetation coverage of 41.8%.</p> <p>A baseline will be developed to measure ecosystem health of coastal wetlands.</p>	Mapping of vegetation buffers will be reviewed every three years.

Implementation Action Plan



Council undertakes many actions every day that will contribute to achieving the outcomes of the Environment Strategy. Care for our environment is integrated into our work in many ways, just as it is in the community more broadly.

This implementation plan describes some key actions Council has a role in along with partners, community and other stakeholders over the next three years to make progress towards the outcomes and targets outlined in the Environment Strategy. It does not encompass all environment-related actions, and the various documents identified in the Planning Framework will also have many relevant actions.

The actions listed in the following plan have been chosen because:

- They are not typically business as usual and represent a new or recent commitment

- They will lead to outcomes across multiple strategic areas of the Environment Strategy
- The community have identified them as priorities during the various consultation phases of the Environment Strategy.

Further actions and initiatives will continue to be developed with various partners throughout the life of this Implementation Action Plan, and the Environment Strategy.

Implementation actions will be reviewed and updated annually to remain current and a new Implementation Action Plan developed every 3 years for the life of the Environment Strategy. Funding for initiatives is subject to Council's annual budgetary considerations.

Activity/project	Council's role	Strategies	New initiative/ ongoing work	Year
Implement an Environment Grants program to support community projects and programs that lead to implementation of the Environment Strategy.	Funder, enabler	1.2, 1.3, 2.1, 2.2, 3.3, 4.3	New initiative	1,2,3
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.	Partner, planner, leader	All	New initiative	1,2,3
Support community environmental and sustainable development networks and forums to build partnerships to drive the implementation of the Environment Strategy.	Partner, enabler	All	Existing program	1,2,3
Undertake monitoring programs required for evaluating and reporting on the success of the implementation of the Environment Strategy.	Provider, researcher	All	New initiative	1,2,3

Biodiversity



Activity/project	Council's role	Strategies	New initiative/ ongoing work	Year
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.	Provider	1.1, 1.3, 2.1, 2.2, 4.3	Existing program	1,2,3
Reduce the threat of priority biosecurity risks, such as pest plants and animals, on Council land and support private landholders to do the same.	Partner, educator, provider, regulator	1.1, 1.3, 2.2, 4.3	Existing program	1,2,3
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.	Partner, funder	1.1, 1.2, 1.3	New initiative	1,2,3
Expand vegetation networks and habitat				
Support private landholders to achieve environmental outcomes on their property through an expanded Land for Wildlife and Voluntary Conservation Agreement Program.	Partner, enabler, educator, funder	1.2	Existing program expanded	1,2,3
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.	Planner, provider	1.1, 1.2, 2.2, 4.1	Existing program	As needed
Undertake an urban environmental education program to improve environmental outcomes for urban wildlife in strategic locations.	Partner, funder	1.2, 1.3	New initiative	2,3
Improve long-term survival for threatened species and ecological communities				
Undertake detailed biodiversity assessments across different Broad Vegetation Groups, with a view to understanding and monitoring the health of biodiversity across the Shire.	Partner, researcher, funder	1.1, 1.3	New initiative	3
Scope and undertake monitoring programs on populations of 6-8 key representative threatened species, to mitigate against local extinctions.	Partner, researcher, funder	1.1, 1.3	New initiative	2,3
Implement propagation programs that grow threatened plant species and result in new populations at appropriate, low-risk locations.	Partner, researcher, provider, funder	1.1, 1.2, 1.3	New initiative	1,2
Undertake targeted wild dog control in key Koala Habitat Areas as identified in Koala Threat Mapping.	Partner, provider	1.1, 1.3	Existing program with potential expansion	1,2 existing program, potential expansion Year 3

Waterways, wetlands and coasts



Activity/project	Council's role	Strategies	New initiative/ ongoing work	Year
Maintain & improve the health of waterways, wetlands & catchments				
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, and a Mary River sub-catchment baseline and report card.	Partner, enabler, funder	2.1, 2.2, 4.3	New initiative, Existing program expanded	2,3
Improve the water quality and biodiversity of the Noosa River by restoring aquatic habitats, such as oyster reefs, and improving riparian vegetation.	Partner, provider, leader, researcher, funder	1.3, 2.1, 2.3, 4.3	New initiative	1,2,3
Investigate and implement best practice solutions to reverse the decline of benthic biodiversity and primary production in the lower Noosa Estuary.	Partner, planner, advocate, researcher, funder	1.1, 2.1, 2.3	New initiative	1,2,3
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 on-ground rehabilitation programs.	Partner, enabler, funder	1.1, 1.2, 1.3, 2.1, 2.2, 3.3, 4.3	New initiative, Existing program expanded	1,2,3
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.	Researcher, regulator	2.1, 4.3	New initiative	2,3
Protect and enhance coastal environments and vegetated buffers to coastal foreshores				
Investigate the need and appropriateness of statutory mechanisms to protect Noosa's coastal and marine waters, including the lower reaches of the Noosa River.	Partner, researcher, advocate	2.2, 2.3, 4.3	New initiative	2,3
Implement an Eastern Beaches dune rehabilitation program to improve the condition, species diversity and stability of dune ecosystems and enhance resilience to climate change.	Partner, funder	1.1, 1.3, 2.2, 4.3	New initiative, enhancing an existing program	1,2,3
Manage waterways and coasts to protect environmental values while enabling sustainable public access, recreation and commercial use				
Work with stakeholders to review current fishing practises and achieve sustainable recreational and commercial fishing outcomes in the Noosa River.	Provider, advocate, funder	1.1, 2.3, 4.3	New initiative	1,2
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.	Provider, researcher	2.1, 2.2, 4.3	New initiative	3
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.	Partner, educator, regulator, enabler, funder	2.1, 2.2	New initiative	1,2,3

Sustainable living



Activity/project	Council's role	Strategies	New initiative/ ongoing work	Year
Reduce waste to landfill				
Work with other agencies on a Regional Waste Strategy to develop broader regional solutions to local waste management problems.	Partner, planner	3.1, 4.1	New initiative	1,2,3
Improve rates of commercial recycling and green waste diversion through implementation of bulk green waste bins and targeted education and behaviour change programs for commercial users.	Partner, provider, educator, regulator	3.1, 4.1	New initiative	2,3
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.	Partner, provider, educator	3.1, 3.2	New initiative	1,2
Continue to increase the different types of recycling services available to Noosa residents.	Provider, advocate, leader, enabler	3.1	Enhancing existing program	1,2,3
Provide waste and sustainability education programs to improve the understanding of waste management and sustainability in the Noosa community.	Educator, provider, enabler	3.1, 3.2	Enhancing existing program	1,2,3
Encourage incorporation of more sustainable building elements				
Advocate for mandating minimum energy efficiency and renewable energy generation to all new development in the shire, including domestic residences.	Advocate, planner	3.2, 4.1, 4.2	New initiative	1,2
Advance the idea of a Noosa Sustainability Institute to establish a coordinated approach to research and activity occurring in our community towards sustainability.	Partner, leader, enabler	3.1, 3.2, 3.3, 4.1, 4.2	New initiative	1,2,3
Adopt sustainable agricultural practices				
Support the community to connect a circular economy for organic waste through enhanced connectivity between providers and end users.	Partner, enabler, advocate, funder	3.1, 3.3, 4.1, 4.2	Enhancing existing program	2,3
Support on-ground actions with landholders that improve environmental, economic and social outcomes on rural properties throughout Noosa while contributing to long-term sustainability of rural landscapes in the Shire.	Partner, educator, enabler, funder	1.2, 3.3, 4.2, 4.3	New initiative	1,2,3

Climate change adaptation & resilience



Activity / project	Council's role	Strategies	New initiative/ ongoing work	Year
Reduce emissions and resource consumption				
Identify potential areas for carbon sequestration in the Noosa Shire and support landholders to take advantage of available opportunities.	Partner, educator, enabler	1.2, 3.3, 4.1, 4.3	New initiative	2,3
Investigate emission reduction opportunities at Noosa landfill for reducing the creation of methane-based emissions.	Provider, planner, leader	3.1, 4.1	New initiative	1,2
Implement energy efficiencies throughout Council-owned facilities and operations, such as the installation of solar PV systems and use of lower-emission transport options.	Provider, leader, funder	3.2, 4.1, 4.2	Existing program expanded	1,2,3
Investigate Noosa Council's future emission offset possibilities, identifying the options with the most environmental, social and economic co-benefits.	Researcher, funder	4.1, 4.3	New initiative	2
Increase community resilience and capacity to adapt to climate change				
Investigate, and implement if appropriate, a solar bulk-buy scheme for Noosa residents, to provide quality solar at affordable rates.	Provider, partner, funder	3.2, 4.1, 4.2	New initiative	1,2
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.	Partner, educator, leader	3.2, 4.1, 4.2	New initiative	2,3
Encourage and facilitate the use of electric vehicles by establishing a network of electric vehicle charging points throughout the Noosa Shire	Enabler, provider, leader, funder	4.1, 4.2	Existing program expanded	1,2,3
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.	Provider, researcher, planner	4.2, 4.3	New initiative	2
Manage the natural environment in a way that improves resilience to climate change				
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.	Provider, researcher	2.1, 4.2, 4.3	New initiative	1