

Reef Guardian Councils Milestone Report Summaries 2014–15



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Great Barrier Reef
Marine Park Authority



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Local Government Areas in the Great Barrier Reef Catchment



About Reef Guardian Councils



Introduction

The Great Barrier Reef Marine Park Authority's Reef Guardian program recognises the good environmental work undertaken by communities and industries to protect the Great Barrier Reef. The Reef Guardian program began in 2003, working with schools to encourage the community to take action for a healthier Reef. Over the past decade it has expanded to include farmers, fishers and councils.

Sixteen councils are actively involved in the Reef Guardian program. They cover a 300,000 square kilometre area and a population of a million people stretching from northern Cape York to Bundaberg. Each council undertakes a range of activities to improve the health of the Reef and educate residents about sustainability. The councils are committed to continuous environmental improvement and a better future for the Great Barrier Reef.

Councils are partners

The Reef Guardian Council framework evolved over the past decade as a collaborative partnership between mayors, council officers and the Great Barrier Reef Marine Park Authority. Steering committee and working group meetings are convened several times a year for mayors and council officers to share ideas and foster continuous environmental improvement. The councils have a strong sense of ownership and actively drive the program's direction.

Annual action plans

Each Reef Guardian Council prepares an annual action plan to identify activities that will be undertaken to promote and protect the health of the Reef. With assistance from agency staff, the councils list a range of activities that will benefit the Reef under the general headings of land, water and waste management, community education and climate change. The actions vary depending on the capacity and context of each council, but generally cover everything from the big picture of new planning schemes to the detail of installing new pipes in causeways to improve waterway connectivity.



Working together today for a healthier Reef tomorrow



Milestone reports

The action plan is reviewed at the end of each financial year and each council produces a report to highlight the milestones it has achieved. This document is a compilation of the 2014/15 Milestone Reports provided by the councils. It demonstrates the hands-on, community-based approach of Reef Guardians can make a real difference to the health and resilience of the Great Barrier Reef.



Reef Guardian projects

Healthy waterways and coastlines are a vital for the Reef. Councils are helping by restoring and reconnecting coastal ecosystems. They also have a crucial role to play in shaping future development through their planning schemes. Councils are also improving water quality by upgrading wastewater treatment plants, improving stormwater management and providing collection facilities for chemicals and other pollutants. Many of these projects are highlighted in this report.



Reef 2050 Plan

The Reef 2050 Plan was released by the Australian and Queensland governments in 2015. The plan provides a blueprint for governments, industry and communities to work in partnership to ensure the Great Barrier Reef remains a global icon into the future. Local government is listed as a partner against 35 priority actions to be undertaken over the next five years. The Reef Guardian partnership is more important than ever as the councils begin to align their activities with the targets in the Reef 2050 Plan.

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Bundaberg Regional Council

Milestone Report

Fishway stars on YouTube

To help celebrate World Fish Migration Day, council produced a YouTube video promoting the success of the Baldwin Swamp Fishway. The nature-like fishway allows many fish species to move from the saltwater in Burnett River, along Bundaberg Creek and into freshwater lagoons in Baldwin Swamp. The species include mangrove jack, bream, barramundi and mullet. There was only one location previously in the Burnett River where fish could easily migrate. The video features Fisheries Queensland biologist Andrew Berghuis and can be viewed on council's YouTube channel.



Low-confusion lighting helps turtles

Special streetlights featuring highly energy efficient LEDs are helping nesting turtles. The lights meet Australian Standards for street lighting, but use 30 per cent less electricity. They replace the old low pressure sodium lights which are expensive to maintain in a coastal environment and have a shorter lifespan.

The new lights emit a wavelength that minimises the confusion of marine turtles nesting along Bundaberg beaches. The lights are also directional, so there is less spillage onto the coastline.



Working together today for a healthier Reef tomorrow

Goodbye greenhouse gas

Large amounts of harmful methane gas is being eliminated thanks to a new gas flaring facility at a council landfill. A cross section of pipework gathers and channels the methane gas from Cell 1 of the Cedars Road Landfill to a flaring plant where the gas is burnt off. Methane is 23 times more potent than carbon dioxide. It is produced by decomposing organic matter buried in the landfill. In 2014–15 council and its partner, Landfill Gas Industries, started installing pipework to Cell 2 of the landfill at a cost of \$150,000. Once complete, the methane from this cell will be introduced to the flaring system.



New \$92 million wastewater treatment plant

Work started on council's largest infrastructure project — a state-of-the-art wastewater treatment plant. Under a \$7.4 million contract, a 5.4 kilometre 600 millimetre-diameter pressure pipeline was built in preparation for the \$92 million Rubyanna Wastewater Treatment Plant. The new plant will replace aged infrastructure, cater to future population growth and address environmental performance requirements. It will be constructed above the 2013 flood height, allowing the flood-prone East Bundaberg Treatment Plant to be decommissioned.



Litter: See it, report it, stop it!

A council crackdown on illegal dumping and littering resulted in more than \$36,000 in fines issued. The installation of cameras at dumping hotspots and an increase in residents reporting dumping sent a clear message this behaviour is unacceptable. In 2014, council officers specifically targeted littering drivers and vehicle passengers. Litter is a big problem to the health of the Reef and marine life. Council adopted the motto 'See it, report it, stop it.'





Burdekin Shire Council

Milestone Report

Burdekin businesses embrace recycling

The 'Getting Burdekin Businesses Busy Recycling' project helped local businesses increase recycling efforts and reduce the amount of recyclables going to landfill. During the project:

- 136 businesses were visited
- 33 per cent did not recycle because they felt it was too costly
- 33 per cent said they did not have sufficient knowledge or that recycling was inconvenient.

On follow-up, 72 per cent reported an increase in the amount of recyclables diverted from waste stream. Council is now strengthening its Waste Management Policy to ensure businesses receive a recycling service.



Plantation creek weed blitz

Thousands of tonnes of water weed was removed from Plantation Creek using a water weed harvester. Council officers worked with the Burdekin Water Board to remove water hyacinth and other species. The creek is already seeing the benefits with increased oxygen levels for plants, macroinvertebrates and fish. There is now an opportunity for recreational activities such as fishing and skiing. The railway bridge and highway downstream have also been protected from possible damage if flooding occurs in the next wet season.



Working together today for a healthier Reef tomorrow

500kg of marine waste stripped from Alva Beach

Marine debris has become a worldwide problem and a major threat to the Great Barrier Reef. While some rubbish floats in from overseas, a large percentage comes directly from the Queensland coast. Council teamed up with Tangaroa Blue Landcare, Gudjuda Reference Group Aboriginal Corporation, Queensland Parks and Wildlife Service, Burdekin Landcare, Conservation Volunteers Australia and Yongala Dive to clean up marine debris from Alva Beach. Funding for the clean-up was provided by NQ Dry Tropics. Over the weekend, 570 kilograms of waste was removed from the beach, demonstrating what can be achieved by working together.



Sand ladders protect beach

Our beaches are a great community asset and looking after our foreshore also helps the Great Barrier Reef. Council maintains a number of sand ladders at Alva and Wunjunga Beaches to provide approved access to the beach, which ultimately protects the sand dunes. Council is continuing to trial options that have reduced ongoing maintenance but provide effective access to the beach. In conjunction with the sand ladders, fencing has been established in heavy trafficked areas to protect the dunes.



Plantation Park welcomes 1000 trees

National Tree Planting Day saw 1000 trees planted in Juru Walk, part of Plantation Park, thanks to volunteers from Lower Burdekin Landcare, local schools and the community. The Landcare group collected the seeds locally and nurtured them for the community to plant. The variety of trees planted included Moreton Bay ash, cabbage tree palma, weeping paperback and native damson.





Cairns Regional Council

Milestone Report

8000 locals get eco-inspiration

The inaugural Cairns ECOfiesta, delivered in partnership between Cairns Regional Council and James Cook University, showcased and celebrated the region's natural environment and the businesses and organisations contributing to long-term sustainability. The event featured three stages, an expo zone live music, eco-fashion, local food shows, electric vehicles, circus acts, team events, gardening activities and a kids' zone. The event attracted a crowd of 8000 highly engaged people keen for a day of fun, friendship and eco-inspiration.



Skate littering statement

The Woree Skate Park is a litter hotspot near Gordon Creek, which flows to Trinity Inlet. To raise awareness of litter impacts and help change youth attitudes and behaviours towards littering, council hosted a community event, Youth Storm, at the skate park. Twenty-five children attended the weekend event, which was based around a skate and street art workshop where participants received skate tips and tricks, and contributed to the production of an anti-litter mural on the park's stormwater culvert. The event helped reduce littering at the facility.



Working together today for a healthier Reef tomorrow

Bramston Beach turtle nests protected

Green turtles use Bramston Beach during the nesting and hatching season between October and March. The beach is also a popular spot for recreational vehicles, which have the potential to damage nesting sites.

In November 2014, council installed additional bollards and rock barriers to reduce beach access points for vehicles, plus new beachfront regulatory and interpretive signage. This was undertaken in consultation with the local progress association, Queensland Police, the Great Barrier Reef Marine Park Authority and the Department of Environment and Heritage Protection.

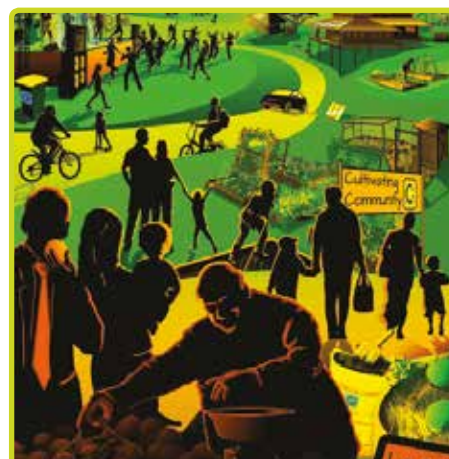
Community feedback indicates this collaborative approach reduced the incidence of vehicles on beaches and helped raise local and visitor awareness of the need for turtle conservation measures.



Region unites for ECOweek

ECOweek is the largest community-focused environmental collaboration in North Queensland, with communities from Townsville to Cooktown coming together to deliver new and existing festivals, events and green business offers under the ECOweek banner. Local government partners included Townsville City Council, Cassowary Coast Regional Council, Tablelands Regional Council, Douglas Shire Council and Cook Shire Council.

The inaugural ECOweek 2015 saw 55 events ranging from sustainability festivals and discounted reef and rainforest trips, through to community tree planting days and beach clean-ups.



Drain stencilling awash with Reef protection messages

As part of ECOweek 2015, a drain stencilling program targeting residential streets in Cairns and the northern beaches was delivered by the Cairns and Far North Environment Centre, with funding support from the Cairns Local Marine Advisory Committee and in-kind support from Cairns Regional Council. It follows past drain stencilling by Reef Guardian Schools. In addition to the on-ground results and community engagement outcomes, the project strengthened relationships between stakeholders and identified opportunities for the installation of Reef protection messages in popular recreational and high pedestrian areas.





Cassowary Coast Regional Council

Milestone Report

Staff unite for sustainable opportunities

Under its new sustainability policy, in May 2014 council established a sustainability working group that meets every three months. Since it was established, initiatives have been implemented and have achieved sustainable and financially positive outcomes for council. Three major projects identified for this coming year include energy efficient lighting for Tully Civic Centre, solar power for a council caravan park as a pilot to assess effectiveness and savings, and a new community composting program including subsidised compost bins.



Staff deliver eco messages

Council staff spent time in the community promoting sustainability, healthy communities and environmental protection. The annual sustainability and Eco Expo offered a great opportunity for a number of council departments to have stalls promoting and providing information about disposing of inappropriate waste into the wastewater system, home composting, pest animal and plant control, revegetation, tree giveaways, illegal dumping, mosquito control and water quality protection, amongst other key messages. Throughout the year, staff also visited schools, day care centres and kindergartens to present information and create awareness amongst our all-important future generations.



Working together today for a healthier Reef tomorrow

Core biodiversity values protected

Council adopted a new planning scheme for the region to regulate land use and development. A number of council's core values are delivered as land use planning objectives in the new planning scheme. This includes protecting the ecological values of the region from the potential adverse impacts of urban development by limiting this development to existing urban areas. Also, the importance of the region's coast, including its beaches, native plants and animals, littoral rainforest, coastal wetlands, coastal woodlands and the Great Barrier Reef, are acknowledged, with the new planning scheme seeking to protect the biodiversity values of coastal ecosystems.



Keep your Butts off our Beach!

Council joined forces with Reef Guardian School Mourilyan State School for a project to reduce marine debris at Etty Bay, which was identified by the students. Cigarette butts are one of the most common threats to marine life (especially for young or small animals). With funding from the Great Barrier Reef Marine Park Authority and assistance from council's parks and gardens section, the project 'Keep your Butts off our Beach!' was born. Students helped design logos for ashtrays and interpretive material. Council staff helped install the ashtrays around the Etty Bay area and the students also became involved in litter patrols to help get the message across to the public.



Results show our activities have no damaging impact and, in the case of one wastewater treatment plant, are actually improving downstream water quality.

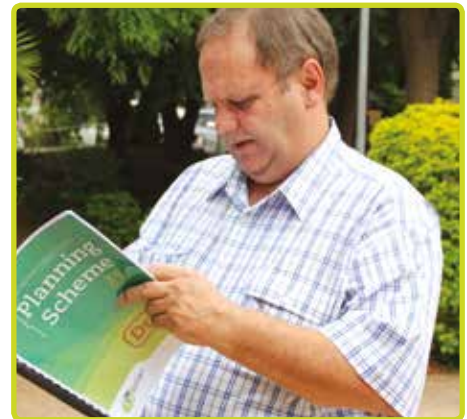


Central Highlands Regional Council

Milestone Report

Merge of planning schemes yields environmental benefits

A single and consistent approach to manage and regulate land use prevailed after council amalgamated four planning schemes from former shires. Environmental initiatives include bushfire and flood overlays, maintaining wildlife corridors for bushland connectivity and clearly defined planning codes for natural places. Natural environment themes with strategic outcomes for biodiversity, ecosystem maintenance, natural waters, and environmental health (air and noise) are incorporated into the new planning scheme.



Better resilience and recovery from flooding

Council is implementing the Central Highlands Floodplain Management Plan to reduce the adverse impacts of flooding, extend flood warning and evacuation time and enhance resilience and recovery options for the communities and areas susceptible to flooding. Actions include structural measures to provide better protection for the communities of Emerald, Bluff, Rolleston and Sapphire.



Working together today for a healthier Reef tomorrow

Pests targeted to protect Reef

The Central Highlands Pest Management Plan 2015–2020 has been adopted. The plan has input from many local stakeholders including industry groups, natural resource management groups and landholders. The aim is to improve the coordination and delivery of actions targeting the region's pest animals and plants with a particular focus on promoting use of wash-down facilities to prevent the spread of weeds through the region's 1450 kilometre road network. Pest animals and plants have the capacity to degrade large areas of the Reef catchment, and controlling pests leads to a direct improvement in reef water quality.



Stock route sustainability

Council developed and implemented the Central Highlands Stock Route Network Management Plan 2015–2020 with input from many local stakeholders, including landholders. The plan outlines management actions including stock management and natural resource management to ensure the sustainable use of this important resource.



Blackwater and Bluff Water improvement

Council is committed to improving the quality of Blackwater and Bluff water supplies. More than 70 kilometres of water mains were cleaned using innovative ice pigging technology. Council also removed tonnes of silt from the raw water dam at the Blackwater Water Treatment Plant, reducing the concentration of iron and manganese in the raw water. This will assist the water treatment process, reducing electricity costs and greenhouse gas emissions.





Cook Shire Council *Milestone Report*

Community and council efforts recognised with big awards

Cooktown was named Queensland's Tidiest Town at the 2014 Keep Australia Beautiful state awards. The town also scooped two major accolades — Young Legends and highly commended for Energy Innovation — at the 2015 national awards. The awards recognised council and the community's commitment to energy efficiency, preserving culture and heritage, water conservation and a range of other sustainability initiatives. The ongoing work of key regional groups such as South Cape York Catchment Group, local schools, the Yuku Baja Muliku Rangers and Lakeland Progress Association were key to securing the award wins.



Kids collect 1.6 tonnes of recyclables

More than 360 children from seven local education and childcare facilities collectively stopped 1.6 tonnes of recyclables ending up as possible marine debris or in landfills during the 2014 annual Cook Shire Council Recycling Competition. They collected more than 31,000 aluminium cans — which were donated to the Endeavour Lion's Club for recycling — and 10,432 plastic containers, which were baled and sent to recycling agents to make new products.



Working together today for a healthier Reef tomorrow

New biosecurity team

In January a new council division was created to manage weeds and feral animals across the shire. Its work includes:

- providing support and educating the community and local groups about weed management and eradicating invasive species to protect our biodiversity
- feral pig control, as pigs destroy important wetlands and cause sediment run-off to the Reef
- working with farmers to produce property pest management plans incorporating sustainable pest management practices, which reduces chemical runoff to the Reef.



Sealed Rossville–Bloomfield Road cuts dust and erosion

The sealing of the Rossville–Bloomfield Road, which traverses the World Heritage rainforest between Shipton's Flat and the tiny townships of Rossville, Bloomfield–Ayton and Wujal Wujal, is now complete. The sealing of this road will reduce dust, sediment and erosion along the road, therefore helping improve the water quality of the Great Barrier Reef. The project took five years to complete, with the final 10.5 kilometre dirt section sealed in late 2014. The works were funded by council and the Queensland Government's Department of Transport and Main Roads.



Energy consumption in spotlight

Cook Shire took advantage of Regional Development Australia's Killa-Watt campaign, running energy audits on several council-owned facilities in Cooktown. The audits were conducted on the Historical Society, Re-enactment Association, kindergarten, district community centre, James Cook University student home and PCYC events centre buildings. The audit results provided an insight into current tariffs and recommendations to switch tariffs if necessary, plus a full breakdown of energy consumption of certain appliances, lighting and heating elements. Improving energy consumption and the flow on climate change effects is a long-term sustainability goal for council and the community.





Douglas Shire Council

Milestone Report

Protecting the Reef with better pipes and pumps

A range of initiatives are improving council's wastewater treatment system and minimising water quality impacts on Douglas waterways and the Great Barrier Reef. Sewer networks were inspected and re-lined and overflow chambers at three sewer pump stations were upgraded to ensure proper screening. Sewer manhole and pump station rehabilitation continues. An outfall flow meter was installed at the Port Douglas plant and the meter at Mossman was relocated to give more accurate readings. Automatic changeover generator systems were installed at main wastewater pump stations for use during severe weather conditions.



Love where you live — tackling illegal dumping

Council is promoting a culture of zero tolerance to illegal dumping through its 'Love Where You Live. Keep Douglas Clean and Green' education campaign. This was initiated via a display of illegal dumping at the Port Douglas Markets and Mossman Show. Council provided free disposal of 1700 tonnes of green waste and mulched it for re-sale. Council also provided collection points for a range of waste materials that were sent south to be recycled including more than 1000 tonnes of packaging material, 320 tonnes of scrap metal, 26 tonnes of batteries, 14 tonnes of tyres and 10 tonnes of waste engine oil.



Working together today for a healthier Reef tomorrow

Refrigerant gas recycling sees 144kg recovered

The fluorocarbon refrigerant contained in air-conditioners and refrigerators can be extremely harmful to the environment. One kilogram of refrigerant emissions has the same greenhouse impact as two tonnes of carbon dioxide, which is the equivalent of running a car for six months. Douglas Shire Council Waste Services started a recycling program for refrigerant and LPG gas in February 2015. The program resulted in the recovery of 144 kilograms of refrigerant gas from 342 gas bottles and 765 fridges and air-conditioning units.



Fish ladders open-up new marine territory

Marine life are as delighted with the new Banabilla causeways project as residents of Degarra. The two new causeways are a joint flood mitigation initiative of council and the Queensland Government with the added environmental benefit of allowing marine life to access parts of the river system previously off-limits. The old causeways' crushed pipes didn't allow the free movement of marine life up and down stream. In the project's first week sharks, stingrays and even a two-metre groper were observed relishing their new access. Council has installed fish ladders during construction of Woobidda Bridge, and the Spring and Connelly Causeways.



Staff take on hiptage, pigs and plant 600 trees

Hiptage is a locally-declared pest vine capable of smothering large rainforest trees. Council spent more than 2000 staff hours surveying and treating hiptage, using aerial surveys to find the vines, then ground work in very rough mountainous terrain to confirm and treat. Rehabilitation is also being furthered by council's pig trapping program, which resulted in 268 feral pigs being trapped and destroyed and a new pest animal controller enlisted to continue the work. Council has completed revegetation works in sensitive areas including the planting of 628 trees in three locations in Cassowary.





Gladstone Regional Council

Milestone Report

Recycling wastewater frees up city's water supply

Water from the Calliope River Sewage Treatment Plant is recycled and up to three megalitres of wastewater per day is pumped to Queensland Alumina for reuse within the refinery. Recycling of the city's wastewater began in 2002 and reduces the impact of waste on the natural environment and diminishes the demand on the fresh water supply. It provides a reliable supply of water to industry in times of drought.



Don't dump in my backyard litter campaign

The 'Don't Dump in My Backyard' campaign is part of the council's illegal dumping and litter prevention strategy and aims to raise awareness of waste issues in the region. The campaign combined a waste-wise message with a song and animation, colouring competition and recycling activity at Ecofest 2015. Council offered free car litter bags to residents to enable drivers to collect rubbish usually left in cars. By tackling litter on land the Gladstone community is reducing marine debris on the Great Barrier Reef.



Working together today for a healthier Reef tomorrow

Methane gas reduced at landfill

The Benaraby Landfill Carbon Abatement Program uses a gas extraction and flaring system to reduce the methane gas emissions from decomposition of buried waste. The Benaraby Landfill was recognised as council's largest source of greenhouse gas emissions so steps are being taken towards addressing this. The system is due to start producing power and will further offset council's carbon liability. Climate change is one of the key threats to the Great Barrier Reef and, through this initiative, the Gladstone community is helping the Reef.



Police Creek rehab has Reef benefits

Police Creek is an important historical site for the Gladstone community and has been used as a recreational area since the 1870s. Council is continuing to work with natural resource management groups to rehabilitate and restore the Police Creek catchment to improve the health, biodiversity and resilience of this important waterway. The restoration work will improve water quality and reduce the amount of sediment and debris that flows into the Great Barrier Reef.



'Grown in Gladstone' flourishes at Ecofest

Ecofest is one of Central Queensland's biggest free environmental awareness events and coincides with World Environment Day. The 2015 theme was 'Grown in Gladstone' and promoted what's good about living in the region and what must be done to protect our lifestyle and health of the environment. To reduce the event's environmental footprint, a free bus service was provided. Free Harbourwatch community barge tours promoted ongoing water quality monitoring in the Gladstone Harbour.





Hinchinbrook Shire Council

Milestone Report

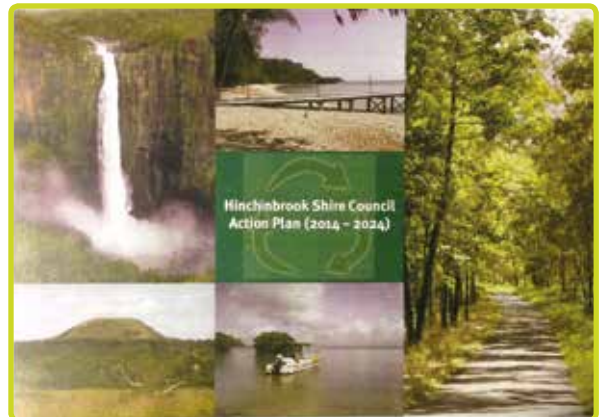
Virtual waste vouchers offer flexibility

Council has continued to offer residents four 'virtual' waste vouchers in 2015–16. Use of the voucher involves showing evidence of a residential address within the shire. The vouchers can be used for domestic or green waste. This system was introduced to replace free dump weekends previously provided by council. It offers people the convenience to use the waste facilities when it most suits them. Residents are now becoming familiar with the virtual state of the vouchers and uptake is increasing.



Working with neighbours to responsibly reduce waste

Hinchinbrook Shire Council was pleased to participate in the North Queensland Regional Waste Reduction and Recycling Plan together with Townsville City Council, Burdekin Shire Council and Charters Towers Regional Council. This plan will help produce economies of scale in the deliverance of modern waste management systems throughout North Queensland by utilising services on a regional basis. In the local context, the plan encourages responsible waste management within the council and throughout the community.



Working together today for a healthier Reef tomorrow

Taskforce continues to stamp out weeds

Council regularly participates in regional weed management taskforces with members of the Far North Queensland Regional Organisations of Councils. Regional taskforces are a great opportunity for officers to share information and knowledge about weed identification, mapping and control techniques. They are also a practical approach to dealing with priority species in a particular area. A recent taskforce focused on one of the last remaining stands of pond apple in the Lower Herbert region of Hinchinbrook. The trees were identified using three survey techniques including aerial, boat and ground surveys.



Water quality monitored in Herbert River

Council, together with Terrain Natural Resource Management, canegrowers and government departments, are promoting improved land management practices in an effort to reduce nutrient, pesticide and sediment losses, which can adversely impact the Reef. Regular water quality monitoring in the Herbert River system is aimed at ensuring the water quality meets the targets identified in The Reef 2050 Plan. Weed control and revegetation works throughout the Herbert River Catchment help to achieve the plan's targets.



A recent taskforce focused on one of the last remaining stands of pond apple in the Lower Herbert region of Hinchinbrook. The trees were identified using three survey techniques including aerial, boat and ground surveys.



Isaac Regional Council

Milestone Report

Reef out the rubbish supports waterway health

In an effort to increase public awareness and knowledge of waterway and beach health, council partnered with natural resource management bodies to host 'Reef Out the Rubbish' events across the region. Each event focussed on increasing public knowledge about waste management and waterway health. On the day a waterway clean up involving the volunteers was conducted. This was followed by educational talks from council officers and the local natural resource management group. These presentations focused on waste management at home and school, plus native and introduced wildlife.



Forum focuses on local pests

In partnership with NQ Dry Tropics, Biosecurity Queensland, and industry experts, council ran a pest advisory forum in the town of Kilcummin, located in the Logan Creek catchment. The day was organised to provide graziers and landholders with greater resources to combat declared pests that have a harmful impact on the Great Barrier Reef catchment, including prickly acacia, feral pigs, and feral deer. Multiple presenters provided information about innovative techniques to manage pest flora and fauna, with 50 landholders attending the event.



Working together today for a healthier Reef tomorrow

Prickly acacia help for property owners

Landholders within the region are getting assistance with the management of prickly acacia on their properties thanks to a partnership between council and NQ Dry Tropics. The project, which will last for three years, aims to manage prickly acacia infestations on private properties within the Kilcummin area. The goal of the program is to manage the spread of prickly acacia within the region and minimise catchment infestations to better preserve biodiversity and land viability.



Spreading the word at Moranbah Rotary Home Show

Environmental officers attended the 2014 Moranbah Rotary Homeshow, showcasing information and materials to the community regarding environmental health, flying foxes, native fauna management, vector control and declared species. The weekend-long event aimed to increase the outreach of local businesses and improve public awareness of products and services available to the community.



Flora mapping identifies weed targets

This year council continued to improve the mapping of declared flora within the Isaac Region by targeting state and local government controlled roads. By mapping declared weed infestations along these roads, council identified a number of target species for management activities. Target species identified during the mapping period were parthenium (*Parthenium hysterophorus*), prickly pear (*Opuntia stricta*), parkinsonia (*Parkinsonia aculeata*), harrisia cactus (*Eriocereus* spp.) and prickly acacia (*Vachellia nilotica*).





Livingstone Shire Council

Milestone Report

Kinka Wetlands flourishes after rehabilitation

The Kinka Wetlands Protection and Enhancement Project involves a suite of activities designed to protect and enhance this significant environmental asset and build upon previous planning and on-ground works. Specific activities carried out in 2014–15 included:

- rehabilitation of the former quarry to prevent sediment run-off (bunds)
- pest plant and animal eradication (lantana, pigs), community engagement and events
- inclusion of sites under environmental management and conservation zones in the new Livingstone Planning Scheme.



New planning scheme to protect biodiversity

Development of the new planning scheme for Livingstone Shire will ensure better environmental outcomes for the Great Barrier Reef Marine Park through:

- biodiversity corridors and mapped locally significant vegetation
- identification and protection of waterways, wetlands and riparian vegetation
- protection of significant terrestrial areas, including habitat connectivity
- consideration of hazards (bushfire, flood, acid sulphate soils, climate change) on the environment.

During 2014-15 the drafting process of the planning scheme continued with associated workshops and community information releases occurring. It is expected the final version will be released mid-2016.



Working together today for a healthier Reef tomorrow

Australian Marine Debris initiative targets the source

This project involves a network of volunteers and partners who are monitoring the impacts of marine debris along our coastlines. A number of clean-up events were undertaken that involved removing rubbish, data collection and tracking debris to the source. Further opportunities exist to collaboratively develop specific source reduction plans to prevent marine debris from entering the environment in the first place, as well as litter reduction plans and further media.



Sacred Heart College students become stewards

The Environmental Education and Stewardship project is about working with the students and teachers at Sacred Heart College to promote further understanding of the local environment and to facilitate stewardship of the school and the environmental values of adjacent areas. Specific activities included:

- sessions on catchment management, coastal wetland importance
- tours of the melaleuca swamp located on the school grounds
- plantings on Lammermoor Beach with a grade four class, which will serve as a stewardship site
- a session on environmentally sustainable development.



Business plan gauges interest in bio-recyclable bags

The initiative to ban single use plastic bags throughout the Livingstone Shire has been led by the Livingstone Plastic Bag Free community group. A business plan was developed and local businesses surveyed to gauge interest in trialling bio-recyclable bags, which were successfully trialled in 2015.





Mackay Regional Council

Milestone Report

Mackay Natural Environment Centre launches

The Mackay Natural Environment Centre was officially opened on 12 March 2015. Upgrades to the centre included increasing nursery space by 100 per cent, install a solar power system, energy reducing technologies, rainwater harvesting and irrigation recycling systems. Production capacity is expected to exceed 90,000 plants per year, helping council to supply stock for revegetation projects and plant giveaways to local residents and community groups.



Mackay Show-goers engaged

Parks, environment and sustainability were a key part of council's exhibit at the 2015 Mackay Show. Information was provided on a wide range of subjects including weeds, garden plants that attract wildlife, local landcare groups, volunteer opportunities including the Coastcare program and the range of projects funded by the Natural Environment Levy. More than 1600 local native plants were given away to home gardeners and rural property owners, and free dog leads were provided to encourage people to keep their dogs on leashes and to avoid disturbing local wildlife such as migratory shorebirds.



Working together today for a healthier Reef tomorrow

Flatback turtles tracked for valuable insights

Through natural environment grants, council provided Mackay and District Turtlewatch Association with funding to work with James Cook University to attach radio transmitters to four flatback turtles. This project will provide information about where female turtles go between laying events, and where they travel to after they have finished laying for the season. Lots of interesting information has already been collected which will contribute to the knowledge of flatback turtles in the area. Local school students named the turtles Clancy, Matilda, Mei-Kai and Livia and the community has been able to follow their progress via the seaturtle.org website. Additional funding has been sourced to continue the project for another season.



Trashracks stop rubbish from entering waterways

Following the installation of four gross pollutant traps in the Paget and Ooralea area, council contracted Ecobarge Clean Seas to carry out the maintenance and content analysis for two years. Results indicated that whilst 96 per cent of all material collected was organic matter, the trashracks sampled had prevented 17,565 individual pieces of rubbish from entering natural waterways. Food and beverage-related items were most common in all of the trashracks analysed, making up 42 per cent of all litter found.



Revegetation adds 3000 native plants

The northern end of Quota Park has been revegetated with nearly 3000 local native plants including casuarinas, Morton Bay ash and coastal hibiscus. A 120 metre fence has been installed to delineate the revegetation area. Weed control is underway across 6.7 hectares to remove pests such as guinea grass, lantana and leucaena. Stage two of this project will happen in 2015–16. When completed, the three hectare revegetation project will save council \$40,000 per annum in mowing costs, as well as providing habitat for wildlife, shoreline stabilisation and buffering to the existing coastal vegetation.



Mareeba Shire Council

Milestone Report

Preventing the weed seed spread

Mareeba Shire Council developed the Weed Seed Spread Prevention Protocol to help staff comply with the *Land Protection Act 2002*. Council staff attended a workshop at the Australian Agricultural College in Mareeba where they received hands-on training in weed seed identification and vehicle and equipment wash-down procedures. This training is crucial to prevent weeds spreading between properties and regional areas and minimises the risk of weeds choking waterways. Healthy waterways and catchments are critical for a healthy Great Barrier Reef.



Water quality of Bi-Centennial Lakes boosted

The Bi-Centennial Lakes are a focal point for the Mareeba Community and have the potential to attract visitors and community to the area. Council undertook desilting works to improve the water quality and aesthetics of this community asset. To do this, council employed erosion and sediment control measures to ensure that the sediment-laden waters did not impact the downstream lakes and receiving waters of Granite Creek. Council is now moving towards the development of a water management plan to introduce capital and routine maintenance measures to sustainably improve the amenity of this area.



Sewage works protect creeks

Council identified that increased loads received at the Barang Street Sewage Pump Station were threatening the adjacent Jumrum Creek Conservation Park. Works have been completed to relieve hydraulic pressure and a standby generator is now permanently located at the pump station to ensure no overflows occur during power outages. Granite Creek pump station also received pump upgrades. These works will help protect the Jumrum and Granite Creek environment and ultimately improve the water quality in the Barron River and the Great Barrier Reef.



Energy audit finds \$138,000 saving

Council recently completed an in-house energy audit where a number of savings were made and the carbon footprint reduced. Council officers changed tariffs and disconnected a number of redundant connections which were still consuming energy. This resulted in a huge \$138,000 saving. The monitoring of energy usage by council has now been standardised to identify further efficiencies and wastage. The installation of solar panels has been approved in the next financial year to further reduce council's carbon footprint and address the threat of climate change to the Great Barrier Reef.



Council fleet reduces emissions and fuel consumption

Five job trucks were replaced with trucks that meet and exceed strict Euro V and Australian exhaust emission design standards. Four new job trucks have enhanced environmentally-friendly vehicle technology, which reduces particulate matter by 33 per cent and carbon monoxide by 25 per cent further to the strict standards. One new job truck has selective catalytic reduction technology. All engines are returning 10 per cent reduction in fuel consumption which reduces council's carbon footprint, returns savings to the community and addresses the threat of climate change to the Great Barrier Reef.



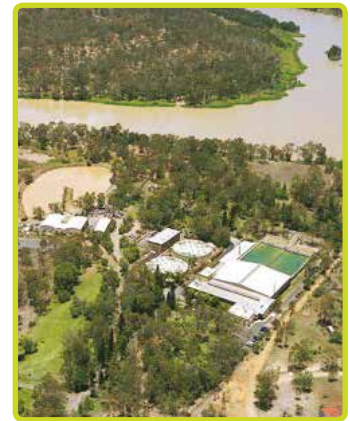


Rockhampton Regional Council

Milestone Report

Glenmore upgrade creates energy consumption win

Glenmore High Lift Water Pump Station, one of the Rockhampton region's largest, is undergoing a \$9.3 million upgrade. The project began in mid-2013 and will soon be completed and is already creating positive ripple effects. The pump's had a complete electrical and mechanical upgrade, including four new high efficiency pumps, plus new transformers and electrical switchboards. This has seen significant financial and environmental benefits through reduced energy consumption. The new pumps have an increased capacity, which will enable the pump station to supply at least 140 megalitres. The upgrade also enables the station to be powered by a diesel generator in the event of a power outage.



Channelling funds for creek clean-up

Council and the Queensland Government joined forces to clean-up dozens of creeks and waterways around the local area. The three-phase project totals \$2 million. Damages caused by cyclone Marcia in early 2015 require clean-up and restoration including removing debris from each creek, protecting various banks and some reshaping to reinstate channels. The clean-up helps improve overall water flow and reduce the risk to nearby properties in the case of a future flood event.



Working together today for a healthier Reef tomorrow

New waste disposal option chosen

Council has been working towards a new waste disposal option for the region for several years, with the Lakes Creek Road Landfill Site expected to reach full capacity in 2016. A new and exciting disposal option has been approved for the site, which will see the local landfill remain open for at least another 20 years. Known as the Piggy Back Extension, the disposal option will build on top of existing capped landfill rather than see a completely new landfill site established. The option was recently approved by the Department of Environment and Heritage Protection and will start this year.



Water and sewage infrastructure upgrades

Efficient water and sewage infrastructure not only saves council and ratepayers money, it helps to save the Great Barrier Reef by improving water quality. Significant investments to upgrade water and sewage mains, and treatment plants across the region have been made. Further upgrades are planned to ensure the long-term safe and reliable provision of water and sewage services.



Waste transfer station community day

In anticipation of the opening of Rockhampton's waste transfer station, council hosted a community open day to give residents a sneak peak of the facility and how it will operate. The day provided on-site demonstrations and tours. The activities also focused on the benefits of reusing and recycling items, and included an op shop dress up, a recycling sorting challenge, furniture up-cycling demonstrations, and even live entertainment by a local band playing on handmade instruments.





Townsville City Council

Milestone Report

Sensor-Q offers water quality data

Council, James Cook University, Taggle Systems Pty Ltd and CoastalCOMS are working together to improve stormwater runoff from urban Townsville by improving knowledge and reactivity to changes in water quality. The Sensor-Q project received a substantial Queensland Government grant to develop low-cost water quality sensors which can be deployed in urban waterways and stormwater treatment devices to improve the management of these assets. A visualisation platform will also be produced to make collected data easily accessible to quickly assess trends and enable proactive management actions.



Algae trial to improve effluent and add value

Townsville Water and Waste Services teamed up with James Cook University's MACRO division to assess the viability of 'polishing' wastewater treatment plant effluent by growing macro algae. A trial has been set up at a Townsville wastewater treatment plant and is currently operating under close supervision of JCU experts. Early indications show the algae quickly growing, reducing pollutant loads within the effluent before it is released into receiving waters. It allows for easy harvesting of the algae to add value to the end product, such as animal feed, fertiliser or biofuels.



Working together today for a healthier Reef tomorrow

No more waste for Magnetic Island

Townsville Waste Services constructed an \$8 million waste transfer station on Magnetic Island. As most of the Island is a national park at the heart of the Great Barrier Reef lagoon, council committed to rethinking its waste strategy. This includes removing all waste from the island and processing it at the Stuart landfill site. This project, together with community engagement activities, ensures continuing protection of the Great Barrier Reef.



Review to improve erosion and sediment control

Council is currently reviewing all erosion and sediment control processes, procedures and enforcement levels. In collaboration with Healthy Waterways, which developed the review tools, the council is aiming to identify any potential shortfalls or improvements that could be made across the organisation. This project aims to improve the way the council deals with erosion and sediment control to keep protecting the Great Barrier Reef lagoon from harmful sediments.



Litter trap trial to protect marine environment

In partnership with the Sea Turtle Foundation, the Townsville Local Marine Advisory Committee and EcoSol, council installed two NetTech solution devices, designed to capture gross pollutants before they make it into the marine environment. The devices were fitted with sensors that will let maintenance crews know automatically when a net is full and needs to be cleaned out. This automation and improvement in operational efficiency also had a positive influence on the council's carbon footprint.





Whitsunday Regional Council

Milestone Report

Gross pollutant traps reduce Reef run-off

Council — through the Australian Governments' Reef Program and in partnership with Reef Catchments Limited — installed three gross pollutant traps within the Cannonvale Botanic Gardens precinct. The traps are designed to reduce gross pollutants by 93 per cent, sediment by 40 per cent and nutrients by up to 30 per cent. The newly installed traps have been specifically located in catchments with urban and commercial uses and will minimise pollutants contained in run-off from entering the Great Barrier Reef.



Developers educated about erosion and sediment control

Council and Reef Catchments ran an erosion and sediment control workshop for developers in the Whitsunday region. The Water by Design workshop is a nationally recognised urban water capacity building program. It enables better design and assessment of erosion and sediment control strategies and outlines how to effectively incorporate water-sensitive urban design approaches into developments to meet the State planning requirements. Best practice urban stormwater management will help preserve the condition of Whitsunday waterways and reduce the impact of development on the Great Barrier Reef.



Working together today for a healthier Reef tomorrow

Cannonvale wastewater treatment plant opens

In partnership with Tenix, council opened the new Cannonvale wastewater treatment facility. The \$32 million new plant offers significant environmental benefits to the local community by reducing wastewater overflows, noise, odour and the nutrient load discharged to the environment. The new plant exceeds the most stringent effluent discharge requirements to help protect the Great Barrier Reef.



Feral pig program reduces environmental impact

Council's feral pig program is continuing to significantly reduce the issue of widespread damage caused by feral pigs in the Whitsunday Council area. The large-scale program utilises a range of control options including ground and aerial baiting, trapping and aerial shooting. Council has grown the program with the help of its partners to cover over two million hectares. The control program is proving to be very successful at reducing the impact of feral pigs to the natural environment, including turtle nesting areas and wetlands, and reducing their impact on agriculture.



The \$32 million new plant offers significant environmental benefits to the local community by reducing wastewater overflows, noise, odour and the nutrient load discharged to the environment.



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