

# *Cape York* **Healthy Country** NEWSLETTER

Issue 35  
Winter 2018

## *SEEDS OF CHANGE*

*“All of the seed is  
collected by hand”*

*CAPE YORK NRM's  
CEO ANNOUNCEMENT*





# Seeds of Change

*“We can teach our young people now — to learn revegetation processes for a healthy, natural habitat, and what the results of healthy habitats mean.” Joey Dix*

Almost 80 Cape York Indigenous participants have been busy working on the Cape York Community Seed Collection Program. The program was established in early April 2018, attracting pickers from the Cape York communities of Cooktown, Hope Vale and Laura. Pickers have collected 840kg of mixed native grass seeds over three months.

Cape York Natural Resource Management initiated the program to supply local seed for gully remediation and other environmental regeneration works, including the newly established Amrun mine in Weipa. Funding from the Australian Government’s Reef Trust Investment was instrumental in establishing the project which became self-sustaining once trading with the Amrun mine began.

Michael Goddard, Cape York NRM’s Gully and Grazing Project Officer, has been working closely with seed collectors.

“All of the seed is harvested by hand, allowing for weed seeds to be rejected and ensuring that only mature seeds are selected. The hand picking method results in higher germination rates compared to mechanical harvesting which often picks immature seed,” Michael said.

The majority of the program’s seed pickers are based in the small community of Hope Vale, and it is not uncommon for families to spend weekends working together.

“The response has been tremendous. Parents are telling us the program provides the opportunity to spend quality time with their kids in the bush,

passing down traditional knowledge and generally enjoying great family interaction,” Michael said.

Cape York NRM has contracted botanist Dr James Hill to train pickers and oversee the program. James is extremely happy with all aspects of the program.

“When a whole family is picking they have the opportunity to earn a good income if they gather a lot of seed,” he said.

Seed maturing occurs during the North Queensland wet season allowing local seed collectors to receive an income when employment on the Cape is low. During the dry many Indigenous locals work on roadworks or muster on cattle stations, but as the wet season hits all of these activities end.

The program has almost concluded for 2018 with the final collection to take place in the last week of June.

Cape York NRM’s Acting CEO Will Higham said, “We are excited about this program and all of its associated benefits and we want to keep it running. To do this we are seeking other avenues for the sale of seed. Anyone interested in taking part should contact us.”

*The establishment of the Cape York Community Seed Collection Program has been supported by the Australian Government’s Reef Trust Phase IV Gully and Stream Bank Erosion Control Program through the project titled ‘Scaling up Normanby Basin gully and stream bank remediation in priority areas’.*



ABOVE AND BELOW RIGHT | collectors in the field



ABOVE AND BELOW | Hope Vale community seed collectors bring their seeds in for weighing





CONTENTS  
EDITION 35 – Winter

STORY	PAGE
Seeds of Change	2-3
Contents	4
CEO announcement	5
Horticultural practice change	6-7
Grasses of Kimba Plateau - <i>Alloteropsis semialata</i>	8-9
Trialling drones for turtle track monitoring	10-13
Fire management	14-15
Updates - Baiting products using regulated poisons	16
Have you seen the vegetable leaf minor	16
Gateway to the Cape update	17
Update from Directors	18
Board of Directors	19

# CEO announcement

*Cape York NRM's new CEO will come on board  
on Monday 13 August 2018*

The Chair of Cape York Natural Resource Management, Emma Jackson, takes pleasure in announcing that the Board of Directors has appointed a new Chief Executive Officer.

Mr John Gavin will commence working in the role of CEO with Cape York NRM on Monday 13 August 2018.

Emma Jackson said, 'John has many years' experience in natural resource management and has successfully operated his own business specializing in natural resource management services and solutions'.

She went on to say that Mr Gavin literally comes with a world of experience, both with community development experience in Australia and internationally, and environmental management across the rangelands of Australia — plus a broad skill set in corporate and community governance.

Cape York NRM's previous CEO, Bob Frazer, retired in April this year after eight years in the position since the organisation's inception in 2010.

Mr Gavin will be based at Cape York NRM's Atherton office.



John Gavin and Bob Frazer in April 2018 | Photo Robyn May



# Horticultural practice change

*Lakeland horticulture producers are improving water quality that exits their farms by understanding the variation in soil composition, and continuing to improve farm management practices.*

STORY MICHAEL GODDARD | MAPS TONY CROWLEY

On 17 May this year, Cape York NRM held its agriculture meeting with Lakeland producers. Land managers from six properties attended the event to listen to a presentation about the results of recent soil mapping on their properties, plus a presentation on catchment modelling.

Tony Crowley of Farmacist spoke about the EM mapping he had undertaken on all of the major agricultural properties in the Lakeland area. EM mapping allows producers to identify the variation in soil composition and to make management decisions such as timing and placement of fertilisers, and ameliorants which enhance soil condition, as well as determine locations for soil sampling. The presentation provided producers with the information they need to get the best results from soil mapping on their individual properties. The presentation also included information about both the benefits and the problems associated with precision agriculture.

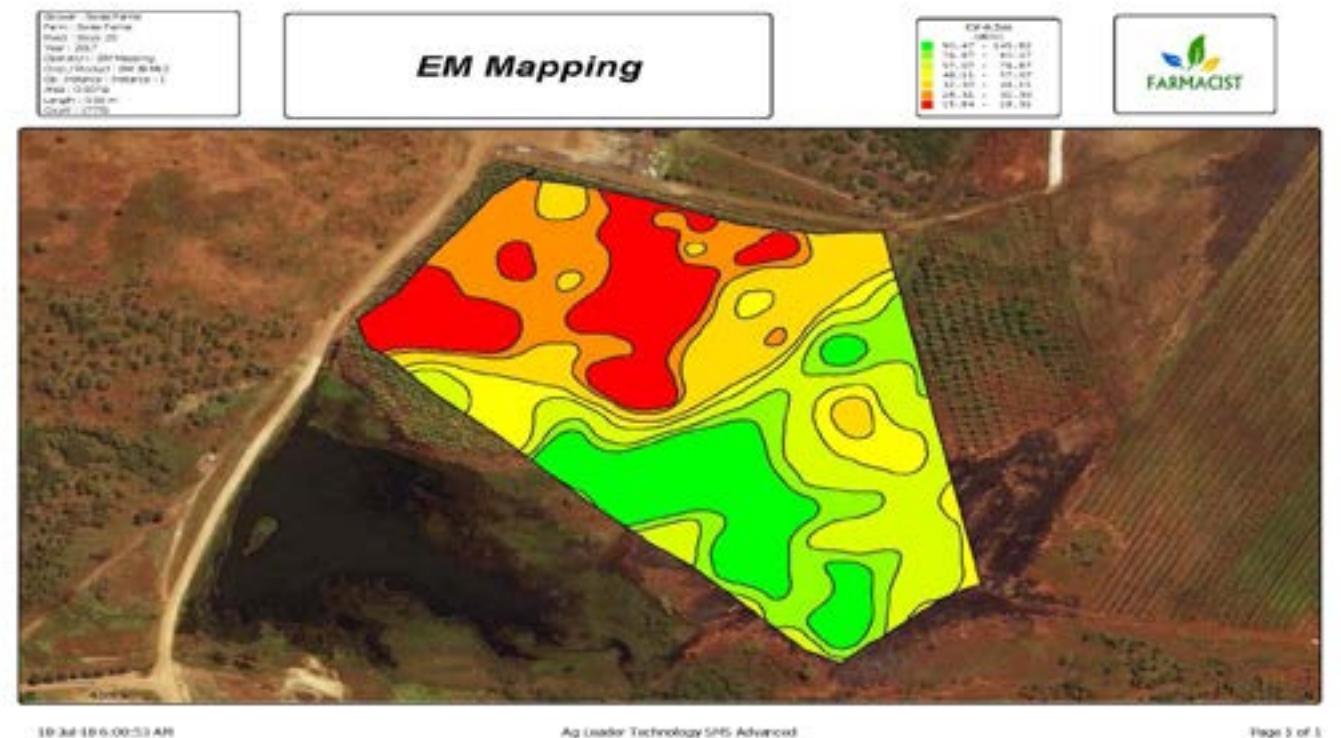
Gillian McKoskey, from the Department of Natural Resources, Mining and Energy, told the group about the difficult task of monitoring and modelling water entering the Great Barrier Reef from farms and grazing properties, and how the model has been fine-tuned over the years to become far more accurate.

The modelling, as well as data collected from producers by Cape York NRM staff, helps to inform the Government on how to rate the different reef catchments for the annual Reef Report Card. Due to the lack of data in the past, it has been difficult for Cape York producers to gain a good grade for water quality. Data supplied by horticulture producers over the last two years should see these grades improve.

Producers were also encouraged to undertake the second round of management practice change evaluations using the Cape York Agriculture ABCD framework. Recent visits by Cape York NRM staff have allowed farmers to sit down and go through the process face to face and rate themselves using the framework. The second round of questionnaires allows producers to rate themselves against their last assessment and see how their management practices have improved over time.

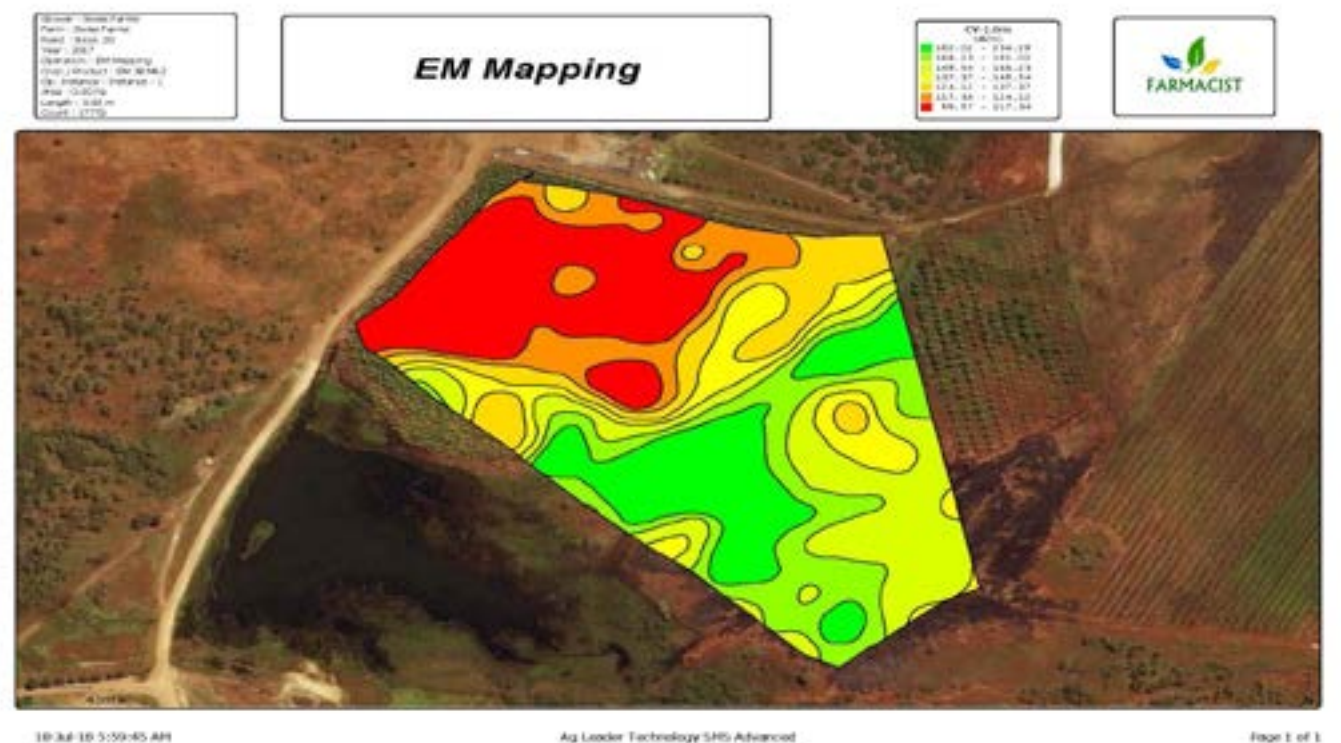
*The Agriculture Roundtable and the EM Mapping project were supported by Cape York NRM, in partnership with Farmacist, with funding through Australian Government's National Landcare Programme.*

*The presentation by Gillian McKoskey was supported by the Queensland Government Department of Natural Resources, Mining and Energy through the Queensland Regional Natural Resource Management Investment Program.*



ABOVE | Map showing change in soil conductivity 0 - 0.5 metres

BELOW | Map showing change in soil conductivity 0.5 - 1 metre





# *Alloteropsis semialata*

Cape York NRM and the Australian Tropical Herbarium are pleased to bring you Grasses of Cape York, a series of fact sheets about grasses found on Cape York. A page is in development on the Cape York NRM website which will display detailed information and downloadable fact sheets at <http://cli.re/9675dL>

Each fact sheet will provide information, photos, maps and diagrams to assist land managers to identify grasses to help with decision-making for best practice land management. An example of a grass found in the Kimba Plateau area is *Alloteropsis semialata*, and is one of around fifteen grasses identified for this project.

*This project is supported by the Queensland Government Department of Natural Resources and Mines through the Queensland Regional Natural Resource Management Investment Program.*

## Grasses of Kimba Plateau

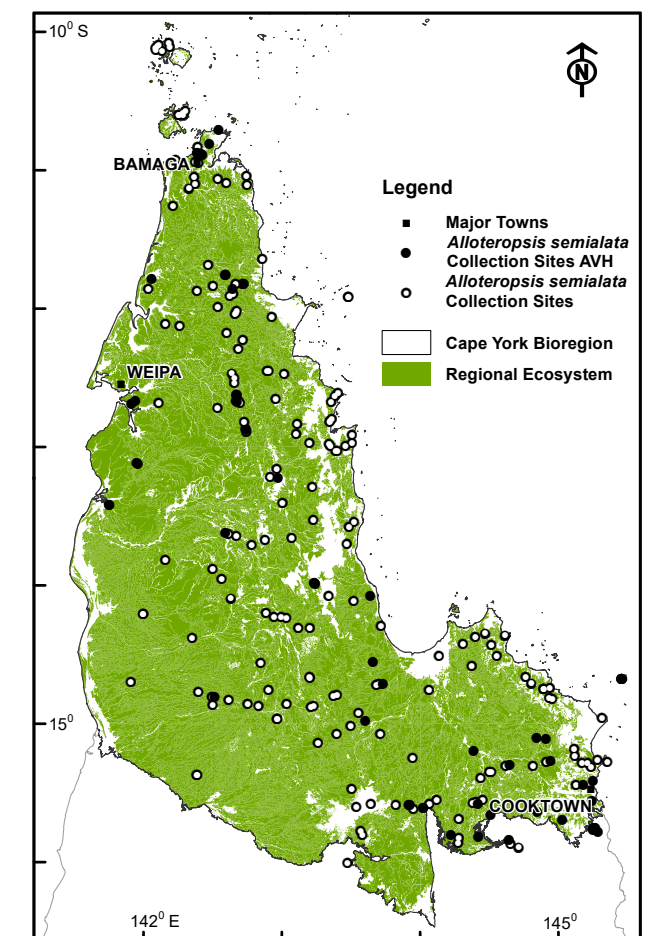
*In 2018 the Australian Tropical Herbarium produced fact sheets for 15 species of grasses found on the Kimba Plateau and adjacent areas of Cape York. These fact sheets will assist land managers to identify grasses in the Kimba Plateau area, especially grasses of concern to the management of the endangered Golden Shouldered Parrot (*Psephotellus chrysopterygius*)*

Alice River, Kimba Plateau  
PHOTO | Vicki Wundersitz



ABOVE | Image of whole plant of *Alloteropsis semialata*, in situ, showing clumping base and exerted flower heads. (CC By: RJCumming d56599a).

BELOW | Image of inflorescence of *Alloteropsis semialata* showing three branches of flowering head and arrangement of spikelets. (CC By: RJCumming d82249a)



ABOVE | Map of CYP bioregion showing actual herbarium collections (from BRI and CNS) (solid circle) and site records (open circle) of *Alloteropsis semialata*. The green shading indicates areas where this species might also be found, based on similarity of habitat to locations where the species has been recorded. (Mapping supplied by P. Bannink, DES). Data attribution: Environment and Science, Queensland Government, Biodiversity status of pre-clearing and 2015 remnant regional ecosystems series - version 10.0 licensed under Creative Commons Attribution



# TRIALLING DRONES FOR TURTLE TRACK MONITORING



NPARC/Apudthama Rangers participating in the drone trial on Woody Wallis Island  
PHOTO by Droner



*The Western Cape Turtle Threat Abatement Alliance (WCTTAA) has recently conducted trials to explore the potential use of UAV (unmanned aerial vehicles), or drones, for turtle monitoring activities. The NPARC/ Apudthama Rangers participated in the trials in June 2018 on Apudthama Country where marine turtles can nest all year round.*

Conservation and resource management organisations are increasing their use of drone technology due to its capacity to improve safety and data quality, as well as the drone's ability to cover large areas over a short time, therefore reducing costs.

Each year, WCTTAA members conduct extensive land-based monitoring surveys of marine turtles nesting on sections of the western Cape York coastline that are declared as census beaches. Census beaches range in length from approximately 10 to 45 kilometres. Many of these beaches are difficult to access so they are not visited frequently by Ranger groups outside of the census period.

In their turtle monitoring activities, Rangers use the different turtle track characteristics (size, gait) left in the sand to determine species and numbers of marine turtle nesting. Rangers also monitor and record nest predation and hatching events. The value of this monitoring relies on accurate and complete coverage of the census beaches during set times of the year, the results of which then contribute to local planning for predator management as well as regional and global understanding of threatened marine turtle populations.

It is this combination of high cost, difficult access, and reliance on visual cues of western Cape turtle monitoring that lends itself well to the potential use of drones.

Droner, a Cairns-based company, were engaged to supply and operate the drones for WCTTAA's turtle track monitoring trials. With Droner's expertise, WCTTAA was able to trial different types of drones (fixed wing and multi-rotor), operation styles (manual and automatic flight paths), launching platforms (beach and boat), and various flight parameters (height, camera angles, etc) for monitoring turtle tracks. The data collected from the drone trials was subsequently downloaded and analysed.

Overall, the 1.4 kilogram, multi-rotor drone with a 20 MP inbuilt camera provided the best results for the turtle track monitoring activities. This drone had good stability to deal with windy conditions, high camera resolution, boat-launching capability, and could deliver both grid and linear flight paths. Under suitable weather conditions, this drone captured high-quality aerial imagery that could be analysed for turtle track species and numbers.

However, the use of drones for this work still has its challenges and limitations. The amount of data collected means that significant time and storage space is required for data processing and analysis. Poor weather conditions, such as rain and wind, can prevent or significantly reduce the drone's capacity to capture high-quality imagery. Additionally, the standard operating conditions for recreational drone use in Australia requires the drone to remain within line of sight. This limitation may prove significant with the long distances currently being monitored on the western Cape.

While drones cannot replace the outcomes achieved by having Rangers on the ground, it is clear that they can provide significant benefits in certain conditions, and can complement current land and sea monitoring activities in these remote and challenging locations.

A final report is currently being completed on the outcomes of the drone trials and will be made available on the WCTTAA website on completion ([www.capeyorknrm.com.au/wcttaa](http://www.capeyorknrm.com.au/wcttaa)).

*This project is funded by the Nest to Ocean Turtle Protection Program, which is a joint initiative of the Australian and Queensland Governments. WCTTAA is supported by Cape York NRM.*



Tom Watson (Droner) and Trevor Nona (NPARC/Apudthama Ranger) launch the drone from the boat at low tide | PHOTO Kerri Woodcock



Woody Wallis Island — photo showing turtle tracks was taken using a 1.4 kilogram, multi-rotor drone with a 20 mp inbuilt camera | PHOTO by Droner





Ideal low intensity burn undertaken during fire management training at Mary Valley

BELOW TOP LEFT – healthy country after managed burn | BOTTOM LEFT – country after hot fire |  
BELOW RIGHT – a good example of country after ‘patchy’ type burning



# Fire management

*Technical and onground training is being provided to land managers on Cape York to assist with improved water quality outcomes.*

STORY + PHOTOS BARRY LYON

**Cape York Natural Resource management is providing a range of training options for Indigenous and other land managers on Cape York under funding provided by the Queensland Government. A fire management workshop hosted by Cape York NRM and The Nature Conservancy in December 2016 highlighted the need for improved fire management capacity, including training of land managers.**

This need has aligned with the Government funding aimed at improving fire management across the Cape, particularly in the reduction of extensive late season hot wildfires. Such fires readily impact upon the health of landscape. As well as directly injuring vegetation and wildlife communities and cattle pastures, they cause increased erosion and sediment and nutrient runoff which effects rivers and wetlands, and eventually marine ecosystems, including coral reefs and sea grass beds.

The training being delivered is wide ranging. It includes recognised fire management competencies required by many agencies and organisations involved in fire management. More broadly, training in Indigenous burning methods, honed over thousands of years to maintain biodiversity and landscape health, has a major focus, as does on ground monitoring of specific fire regimes, and interpreting satellite imagery as provided by the vital North Australian Fire Information Service. Training is being offered through structured

workshops/sessions, in conjunction with Fire Management Cluster meetings, and mentoring through individual visits across the Cape. To date this has involved land managers on the Normanby–Annan and Endeavour River catchments; the Laura River basin; the Hann–Morehead River catchments; northern Princess Charlotte Bay hinterland; the mid–upper catchment of the Wenlock and Archer Rivers, and the Northern Peninsula area. A Cape York Indigenous fire workshop was also undertaken in late June.

Queensland Parks and Wildlife Service and Rural Fire Service are supporting this work, which is complementing other training being delivered.

Cape York is a large, remote region, and the way fire managers are increasingly co-operating and sharing knowledge and resources is seeing many positives in terms of improved fire management.

*This project is supported by the Queensland Government Department of Natural Resources and Mines through the Queensland Regional Natural Resource Management Investment Program*



# Updates to baiting application processes

*for baiting products containing regulated poisons*

Recent amendments have been made to Queensland Health's application process to obtain and use baiting products containing regulated poisons ie: strychnine, fluoroacetic acid (1080) and 4-aminopropiophenone (PAPP). There is no change to coordinated baiting programs provided by Local Governments.

There are eight key amendments — documents can be found on the website at <https://www.health.qld.gov.au/system-governance/licences/medicines-poisons/licensing-fees/poisonpermits>

There is currently a shortage of strychnine in Queensland. The Permit issued to Queensland (DAF) by the Australian Pesticides and Veterinary Medicines Authority will expire 31 March 2019. Landholders applying for strychnine will notice that their Endorsement for strychnine will expire on this date. Once further information is received as to the renewal status of the permit, it will be distributed accordingly. The decision-making on landholder applications under this process continues to be undertaken by the local Public Health Units.

Contact your local Public Health Unit if you require any further information. The contact details



The Gateway to the Cape planned for a Lakeland site is one step further to becoming a reality thanks to the full support of Cook Shire Council and a RADF funded sculpture workshop which was held on the weekend of 14-15 July 2018.

Cook Shire Council has submitted an Expression of Interest to Building Our Regions to develop the Gateway to the Cape. The proposed development will consist of— a BBQ area, a sculpture park, and a building containing information about Cape York Peninsula.

Cook Shire Mayor Peter Scott said, “The site of the Gateway to the Cape tourist information centre is ideally located and will be an important hub for visitors to obtain practical

information about travelling on the Cape. The proposed development will host a free-standing innovative mix of static and interactive displays and public art sculptures, plus practical information for travellers. It will be a drawcard for visitors and a credit to the Shire.”

A RADF funded workshop to construct some sculptures for the site was held in Lakeland on the weekend of 14 and 15 July. There were some satellite dish turtles, tyre crocodiles and a painted 3m satellite dish to work on — lots of new skills learned.

For more info visit FB <http://cli.re/Goo4wz> or contact project manager Waratah Nicholls: [waratahnicholls@gmail.com](mailto:waratahnicholls@gmail.com)



A 'crocodile' in the making.



# Update from the Directors

*Cape York NRM Board of Directors meets several times throughout the year. The Board's most recent meeting was held in Mapoon in June.*

**Welcome to another interesting update from the Board of Directors, and a fabulously constructed newsletter updating all on key Cape York NRM-related news, stories, projects and partnerships.**

Your Board recently met in Mapoon for its second meeting this year. Director Pauline Smith welcomed us to the beautiful Western Cape area and took us on a personal tour, sharing some of its history, sights and wisdom. The Directors engaged in a solid meeting and the core theme from the discussions was very much about the 'people'.

We had an informal chat about the organisation and how would we like it to be recognised, with all Directors hoping others see this organisation as 'the mob who works with others'. The Board sees all the work that our energetic staff gets up to, and the outcomes from projects, and is starting to give thought to 'how do we become recognised for that?'.

We have teams who are out there with local communities and various landholders, and this is where our strengths lie. We learn from everyone we work with, and we share science and ideas together. We share what does work and we learn more about what does not work.

We recently held a Grazing Forum in Laura - My Produce, Your Plate, Our Future - in partnership with AgForce, where we saw many graziers and landholders come together.

We had special guests and presenters, plus local support from relevant agencies and groups. Following that we hosted the Gully Mitigation Forum. This forum focused on the work on southern Cape York properties such as Crocodile and Normanby Stations. Both these events brought together like-minded and interested people sharing science and theories.

Enjoy this newsletter and many more stories from across the region. The newsletter theme focuses on soils and, interestingly enough, the more we learn about soils the more we realise that without healthy soils and resilient landscapes that nurture and compliment the soils, the harder the impact is on us all—living on and from the land.

# Board of Directors



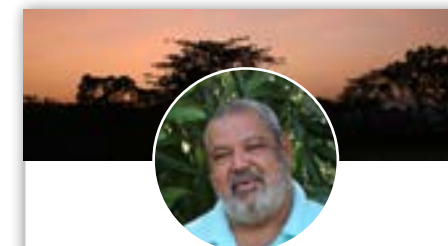
**Emma Jackson**  
Chairperson  
Primary Industries Sector



**Trevor Meldrum**  
Vice Chairperson  
Community Sector



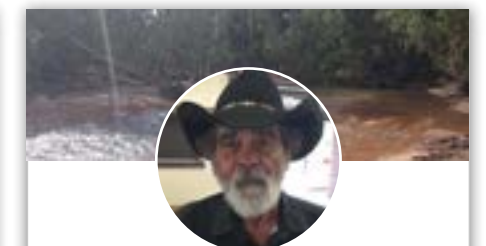
**Margaret Gebadi**  
Indigenous Sector  
Zone 1



**Joseph Elu**  
Indigenous Sector  
Zone 1



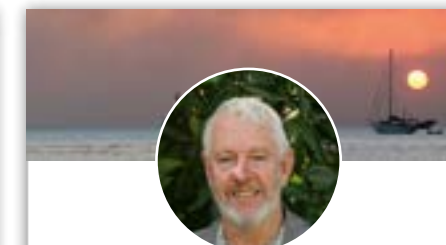
**Pauline Smith**  
Indigenous Sector  
Zone 2



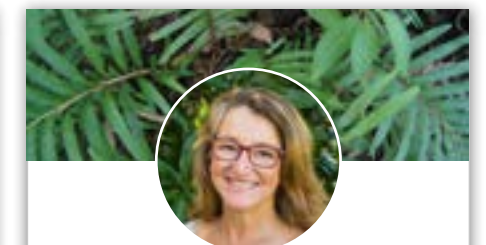
**Eric Rosendale**  
Indigenous Sector  
Zone 4



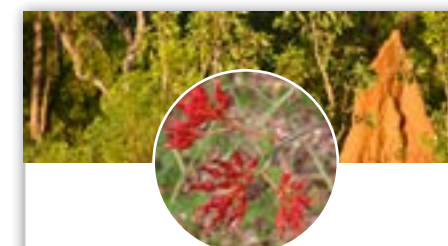
**Desmond Tayley**  
Local Government Sector



**John Charlton**  
Tourism, Small Business, Mining  
and Other Industries Sector



**Sally Gray**  
Conservation Sector



**Currently Vacant**  
Indigenous Sector  
Zone 3







Printed on sustainably sourced paper

## CONTACT US

Cape York Natural Resource  
Management

47 - 49 Maunds Road | PO Box 907

Atherton QLD 4883

1300 132 262

**To contribute or subscribe**

[media@capeyorknrm.com.au](mailto:media@capeyorknrm.com.au)

0499 405 558



**Cape York**  
Natural Resource Management



[www.capeyorknrm.com.au](http://www.capeyorknrm.com.au)



Australian Government

**National  
Landcare  
Programme**



Queensland