

# CLIMATE CHANGE AND NRM

## 20<sup>TH</sup> NOVEMBER, 2014

### VIBE HOTEL – WATERFRONT, DARWIN, 9AM – 10.30AM

#### WORKSHOP AS PART OF THE TNRM CONFERENCE

#### WORKSHOP AIMS & QUESTIONS

- What are the predictions for the NT's climate in the future?
- What are the likely impacts of this change in climate for the NT?
- What should we be doing in terms of natural resource management now to adapt to climate change?
- What effect will climate change have on aspirations for northern development?

#### INTRODUCTION

The Australian Government has funded CSIRO and the Bureau of Meteorology to provide updated climate projections for Australia's Natural Resource Management regions. This information will be utilised in a number of research projects through a number of institutions on the effects of climate change on NRM issues relevant to NRM bodies around Australia. This research and the climate change projections will be utilised by Territory Natural Resource Management for the updated 2016-2020 Integrated Natural Resource Management Plan for the Northern Territory.

This workshop provided updates on the progress of some of the key projects in the Monsoonal North and Rangelands cluster groups relevant to TNRM.

#### SECTOR PRESENTATION KEY POINTS

##### **1. Brendan Edgar – Monsoonal North Cluster Program Leader (CDU)**

An update on the progress of the climate projections project was presented. It was noted that the latest research builds upon previously published work; Climate Change in Australia (2007), IPCC 5th Assessment Report (2013) and the State of the Climate Report (2014).

Final reports and interactive tools from the climate change projections across Australia are expected to be launched in January 2015.

##### **2. Mary-Anne Healy – Rangelands Cluster – Program Leader (Ninti One)**

The NRM planning for Climate Change project facilitated a stronger partnership between researchers and NRM bodies in the Rangelands area (spans across QLD, NSW, SA, NT and WA). A number of projects were identified as useful for NRM planning including how climate change impacts upon important NRM issues in the Rangelands region including, fire, drought, pastoral production, aquatic refugia, heatwaves and dust.

Most of the reports are now completed and published online at [www.nintione.com.au/resource-centre](http://www.nintione.com.au/resource-centre)

##### **3. Garry Cook – Climate Change, Fire and Carbon in the Monsoonal North (CSIRO)**

This project studies the interaction between changes to climate and carbon stock across Northern Australia. Some key points this project raises are:

- Fire is just one driver of tree stand and landscape carbon
- Seasonal distribution of rainfall is critical
- Longer dry seasons are likely across the area

- Loss of winter rainfall in South East of Monsoonal North cluster area (QLD) likely to have impact on carbon stocks and fire regime.
- Final modelling of carbon dynamics is waiting on climate projections information

#### **4. Gabriel Crowley – Pressures and Drivers affecting NRM and climate change resilience**

This project takes a holistic approach to help NRM planners understand the range of pressures and drivers affecting NRM. We cannot plan for climate change without a good understanding of the factors that currently influence natural resource condition and activities.

#### **5. Nadine Marshall – A handbook for social resilience in the Monsoonal North – CSIRO (presented by Brendan Edgar).**

This project is preparing a handbook for NRM planners and graziers to enhance capacity of graziers to cope and adapt to climate change. It is based on interviews with pastoralists over a number of years right across northern Australia. The handbook will be distributed through NRM networks in early 2015.

#### **6. Jeremy VanDerWal – Climas Next Generation – James Cook University (presented by Brendan Edgar).**

Climas Next Generation is an online tool that will produce projections of future species distributions based on future climate scenarios. There is a web interface to browse distribution and biodiversity summary maps. This will be a useful tool for NRM planners and practitioners now and in the future.

### **CONCLUSION**

This workshop presented a snapshot of some selected projects from the Monsoonal North and Rangelands clusters intended to inform the 2016-2020 INRM Plan.

For more information on research projects or the release of new climate projections data for the Northern Territory please contact, Program Manager – NRM Planning, Paul Donohoe on [paul.donohoe@territorynrm.org.au](mailto:paul.donohoe@territorynrm.org.au)