Northern Territory
NATURAL RESOURCE MANAGEMENT PLAN
2016-2020

PLAN REVIEW 2018

Territory
Natural Resource
Management

VISION

"Territorians working together to manage our environment's natural, cultural and economic values for the benefit of all."

FOR MORE INFORMATION

This publication is available on request through contacting info@territorynrm.org.au

This publication is also available at: www.territorynrm.org.au

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READING THE REPORT

The report presents an assessment of the progress with the Strategies and Actions contained in each of the four regional NRM plans that make up the Territory NRM Plan. We have focused on the Strategies and Actions, at this stage, because these are the most straightforward areas to report against after only a year of plan implementation.

It is intended that the next review will focus more on Outcomes (Pressure Reduction), and subsequent reviews on Impacts (health of Assets).

For each Strategy and Action an assessment has been made about it's progress by TNRM Staff in consultation with regional stakeholders, and the Strategy or Action given a rating using the table below. For each region, we show the rating for Strategies and Actions against the nine Programs, and compare that to the overall rating across the Territory. A detailed assessment for each Region is provided in the appendices.

We start by presenting some background on development of the Plan, and some summary material for the Territory as a whole.
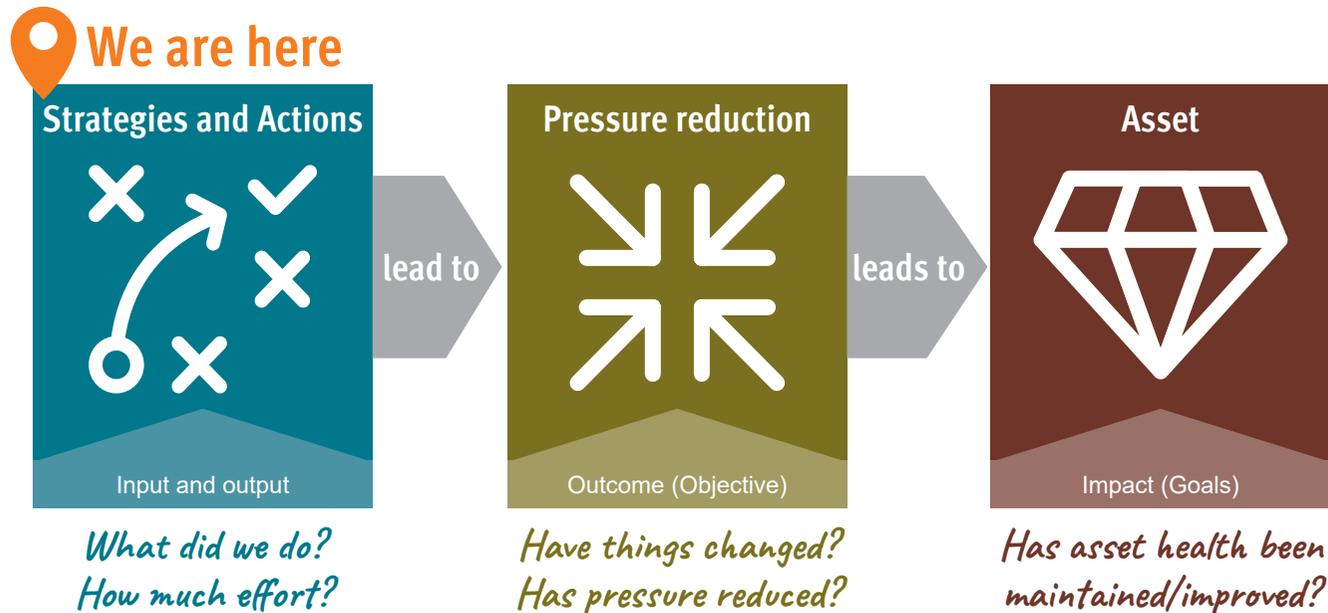
Project / Strategy / Action

For now, as well as recording the effort we made (time / $$) we are also rating our progress with the Projects, Strategies and Actions using the scale below

Rating	Example
Not specified	We really don't know and have no information
Scheduled for future implementation	We have not got around to this yet, but we will
On-track - ongoing, generally on track	We are doing it, and it is all going as we expected (more or less)
Minor issues - ongoing, has minor issues that need attention	We are doing it, but there have been some delays due to weather/technical problems
Major issues - ongoing, major issues that need attention	We are doing it, but there have been some significant delays that we are not sure when we can resolve
Completed - successfully completed	We did it
Abandoned - no longer relevant or useful	We don't think we need to do this anymore

We are here

Strategies and Actions		Pressure reduction		Asset
	lead to		leads to	
Input and output		Outcome (Objective)		Impact (Goals)

What did we do? How much effort?

Have things changed? Has pressure reduced?

Has asset health been maintained/improved?

Developing the 2016-2020 Plan

The NRM plan was developed using a participatory processes and set up to facilitate ongoing review. The new plan used past plans and re-evaluated priorities and NRM targets, as well as integrating climate change projections and adaptation into NRM actions (partnership with researchers). The plan was focused more at the regional level to support implementation action planning.

1 Review of 2010-2015 NRM Plan **2** Regional Workshops **3** Meetings with Local/Regional Experts **4** Expert and Sector Input **5** NT-wide Prioritisation Workshop **6** Public Comment **7** Publication

Where are we now?

The plan has now been in place for over a year, and projects are being implemented based on what the plan says. Many of the things we want to achieve in the plan will take a number of years, and so we are starting the review process looking first at the work we have done (Year 1 below). In later years we will work on measuring and reporting achievement of Milestones, Objectives and Goals, as well as maintaining our reporting on the work being done.

Implementation → Year 1: Strategies and Actions → Year 2: + Milestones → Year 3: + Objectives → Year 4: Goals → Year 5: Evaluation → Next version

WHAT IS IN THE PLANS?

The Plans themselves all have the following main elements:

Assets

The important things that we want to see as healthy as possible to sustain the environment and communities of the Northern Territory

- People on Country
- Community Knowledge
- Coastal and Marine
- Freshwater Systems
- Healthy Soils
- Grasslands/Rangelands
- Cultural Landscapes and Sites
- Biodiversity and Conservation Sites
- Ranges

Pressures

The things that are potentially influencing the Assets in a negative way

- Loss of Knowledge and Access
- Feral Animals
- Mining and Energy Production
- Inappropriate Fire Regimes
- Recreation and Other Activities
- Invasive Plants
- Primary Industries
- Pollution
- Climate Change and Severe Weather

Programs

The areas of work that will be used to manage Pressures and Assets

1 Managing Fire

2 Preventing and Managing Weeds

3 Reducing the Impacts of Feral Animals

4 Industry Adoption of Sustainable Practices

5 Water Resources and Soil Management

6 NRM Based Economic Opportunities

7 Minimising Ecological Footprints of Development

8 Managing and Protecting Key Natural and Cultural Assets

9 Knowledge, Capacity and Engagement

As well as containing these elements (Assets, Pressures, Programs) the regional plans are set up to help us more easily measure and report on our progress with implementation.

The example below shows the typical structure of a Program in a Regional Plan which contains all the elements listed to the right.

The Background sets out the issue in the region, Strategies are listed and prioritised, and Activities that will be undertaken to do the Strategy then listed. The Milestones we should come to as we implement the Activities are listed, and the Objectives they will help us reach (these are usually linked to a Pressure).

Finally the Plan shows which Assets are impacted by the Strategies, how we will Measure our impact, and who will be involved in implementation.

Background

Strategies

Priority Activities

Milestones

Objectives

Assets Improved

Key Measures Of Achievement

Key Collaborators

PROGRAM 3
REDUCING THE IMPACTS OF FERAL ANIMALS

GULF SAVANNA NRM PLAN

Background	Strategies	Priority Activities	Milestones	Objectives	Assets Improved
To reduce the impacts of feral animals, it is important to have a shared goal, common approach and a coordinated and long-term effort in feral animal programs. Therefore, a key objective of this program is to develop an NT-wide feral animal management strategy. There are a number of feral animals impacting on Gulf Savanna ecosystems and livelihoods. Large feral herbivores, horses, donkeys and buffaloes reduce ground cover and expose the soil to erosion. They also spread weed seeds in their coats and droppings, foul waterholes and impact on pastoral productivity. Feral pigs are identified as a threat particularly around freshwater systems, cultural sites and in coastal areas where they eat sea turtle eggs. Cane Toads are a key threatening process and their arrival through the Gulf Savanna region has had drastic impacts on native animals. Insects pose a significant risk to the Gulf Savanna's terrestrial environments and primary production. Feral cats are a key threatening process under the EPBC Act and have been identified as a significant threat to small mammals in the Gulf Savanna. Biosecurity measures to stop the invasion of potentially new feral animal species that could impact on biodiversity and productivity such as Asian Honey Bee and tropical invasive ant species are also important in the region. The objective of this program is to reduce the impact of feral animals at the landscape scale, with high value assets prioritised and with long-term multi-stakeholder commitments. This program aims to raise the awareness of feral animal damage and support training in control and management techniques, as well as promote the sharing of knowledge and data, whilst supporting economic opportunities for the community on feral animal control.	**VERY HIGH PRIORITY** Strengthen regional feral animal management programs through coordinated and collaborative action **3.1**	• Develop a feral animal control strategic plan for the NT involving multiple stakeholders and regionally specific agreed priorities • Establish a 'backbone' group to support implementation of landscape feral animal management approaches • Plan and undertake regional meetings with key stakeholders leading effective collaboration between Fire, Weed and Feral Animal programs • Continue the cat eradication program on Sir Edward Pellew Islands and commence management on other islands • Conduct horse and donkey control prioritised around conservation and production values • Continue measures to keep priority islands in the Gulf Savanna Cane Toad free • Conduct strategic pig control around sites of high conservation significance and vulnerable areas (i.e. turtle nesting beaches)	• By 2017, a feral animal strategy for the NT has been developed and is guiding strategic action • By 2018, regional feral animal advisory committees are functioning across the NT • Offshore islands remain refuges for small mammals and are predominantly cat free by 2018 • Long-term collaborative catchment based approaches to feral herbivore control are continued in VRD and developed in other areas in the Roper and Gulf regions by 2018 • Key priority islands remain Cane Toad free in the Gulf Savanna by 2018 • Pigs are excluded from key high value freshwater and coastal areas by 2018	By 2020, feral animal control programs are prioritised and targeted through an NT-wide feral animal strategy that establishes an agreed understanding of the problem, shared measurement and review of actions By 2020, cat densities are reduced particularly in sites of biodiversity and conservation value and offshore islands with healthy small mammal populations By 2020, the impacts of horse and donkey damage is reduced from 2015 levels in the VRD area and in the Roper River/Gulf area. By 2020, offshore islands in the Gulf Savanna remain Cane Toad free By 2020, reduce the impact of pigs on coastal ecosystems and priority freshwater ecosystems	
	HIGH PRIORITY Use common measures and analysis to monitor, evaluate and report on and adapt the feral animal management program **3.2**	• Develop field indicators that can be readily used by land managers to quantify the damage and impact of feral herbivores • Establish a data management framework and share results through regular reporting to all stakeholders • Conduct aerial surveys in consultation with all stakeholders and at demonstration sites to develop management programs and to help garner long-term and diversified funding support for priority areas in the Gulf Savanna region	• By 2018, consistent and ongoing monitoring programs are being introduced and coordinated across the Gulf Savanna and feeding into NT-wide feral animal strategies	By 2020, monitoring data is being consistently collected and is informing strategic action in feral animal management programs	
	HIGH PRIORITY Support research and innovation in techniques, training and motivation to control feral animals **3.3**	• Use innovative and cost effective techniques to survey and manage feral horses and donkeys (e.g. Judas Collars) • Communicate to a range of stakeholders the importance of horse and donkey control on Indigenous pastoral land • Trial feral cat control techniques and assess for effectiveness and for practical application in savanna ecosystems • Support Traditional Owners and Aboriginal rangers in early detection measures (including new technology) to keep offshore islands Cane Toad free	• Interest and motivation to control feral animals is increased across the region by 2018 • Skills and capacity of land managers to control feral herbivores are increased each year • Effective and viable control techniques for cats are increasingly known and applied by 2018 • Innovative technologies are utilised by more land managers in the early detection of Cane Toads by 2018	By 2020, innovative feral animal control techniques are being applied to cats, Cane Toads, horses and donkeys in Gulf Savanna	

Key Measures of Achievement

• Number of groups/individuals involved in feral animal management programs

• Trends in feral animal distribution as a result of management programs

• Number of landscape scale feral animal management programs

• Availability and utilisation of feral animal distribution data to NRM stakeholders

• Systems to involve NRM community in pest and disease detection and eradication in place

• Effectiveness of innovative feral animal control approaches

Key Collaborators

NTG (DLRM), VRDCA, Roper River Landcare, Aboriginal ranger groups, Northern Land Council, Traditional Owners, researchers, pastoralists, Defence, NTG (Parks and Wildlife), Australian Quarantine Inspection Service (AQIS), NTG (DPIF), private landholders, feral animal contractors.

Feral pig in the savanna.

Approach

Step 1: Initial rating of progress

TNRM staff, in consultation with regional and Territory stakeholders, reviewed progress with implementation of each Activity and Strategy in the NRM Plan.

Step 2: Community Survey

At the same time, a community survey was distributed using SurveyMonkey to regional and Territory stakeholders, asking the questions on the right. Over 100 responses were made to the survey. Responses to key questions (4, 6, 7, 10 and 13) are shown on the next page.

Step 3: Stakeholder review

The results of Step 1 and Step 2 were then taken and shared in 4 regional workshops (Katherine, Alice Springs, Tennant Creek and Darwin) where they were reviewed and revised.

Step 4: Revision

The results will be 'fed back' into the next work program based on the plan and the plan updated to reflect this process before the next review.

1. How do you describe your own NRM stakeholder status/affiliation?

2. To which geographic sub-region does your NRM interest pertain?

3. How were you engaged through the original Northern Territory NRM plan consultation in 2015-2016?

4. How frequently have you looked at the Northern Territory NRM plan (2016-2020)?

5. Which of the two following comments best reflects your view of the Northern Territory NRM plan (2026-2020)?

6. How do you use the NT NRM plan 2016-2020?

7. To what extent do you think the 9 programs identified in the plan capture the overall NRM priorities for the Northern Territory?

8. To what extent do you think the objectives identified for your sub-region align with your own sub-regional priorities?

9. To what extent do you think the Strategies and Activities identified for your sub-region constitute logical pathways to improving assets?

10. Which of the 9 programs in the NRM plan have you or your organisation undertaken substantial work towards?

11. If you have contributed to one or more NRM programs, tell us briefly what you have done.

12. Do you think the Northern Territory NRM plan format is effective for engaging the participation and partnership of stakeholders into coordinated NRM?

13. What aspects of the Northern Territory NRM plan (2016-2017) plan do you think could we could improve upon?

How frequently have you looked at the Northern Territory NRM plan (2016-2020)?

Regularly consult it — ~18%
A few times — ~65%
Only once — ~18%

(axis: 0% 10% 20% 30% 40% 50% 60% 70%)

How do you use the NT NRM plan 2016-2020?

As a reference when applying to TNRM project funding — ~27%
As a source of general information about NRM issues in the Northern Territory — ~35%
Don't use it. — ~22%
To help identify regional NRM priorities — ~40%
To set your own agenda for planning NRM activities — ~17%

(axis: 0% 5% 10% 15% 20% 25% 30% 35% 40%)

To what extent do you think the 9 programs identified in the plan capture the overall NRM priorities for the Northern Territory?

Capture — ~63%
Partially Capture — ~36%
Don't Capture — ~1%

(axis: 0% 10% 20% 30% 40% 50% 60% 70%)

Which of the 9 programs in the NRM plan have you or your organisation undertaken substantial work towards?

I have not undertaken any NRM activities... — ~0.5%
Managing Fire — ~13%
Managing Weeds — ~17%
Controlling ferals — ~10%
Adoption of sustainable practices — ~9%
Water and soil resources management — ~8%
NRM based economic opportunities — ~6%
Minimising ecological footprint of development — ~4%
Protecting natural and cultural assets — ~17%
Knowledge capacity and engagement — ~16%

(axis: 0% 2% 4% 6% 8% 10% 12% 14% 16% 18% 20%)

If you can send me the data/ graphcs for these, I can udpate to match the style
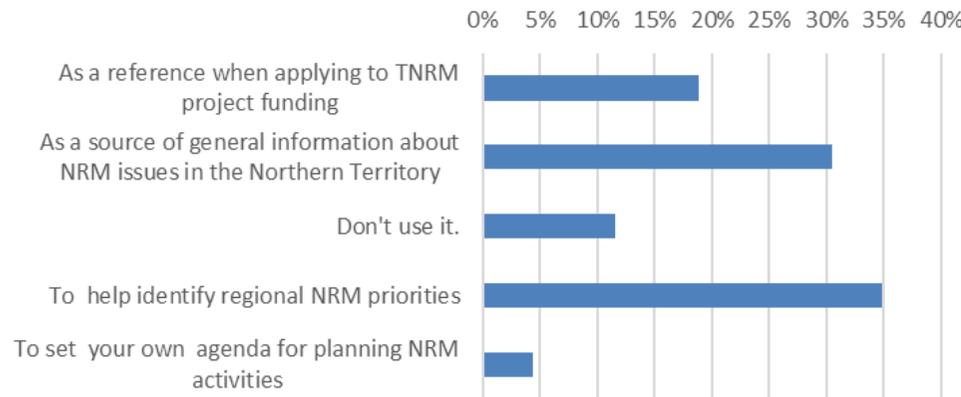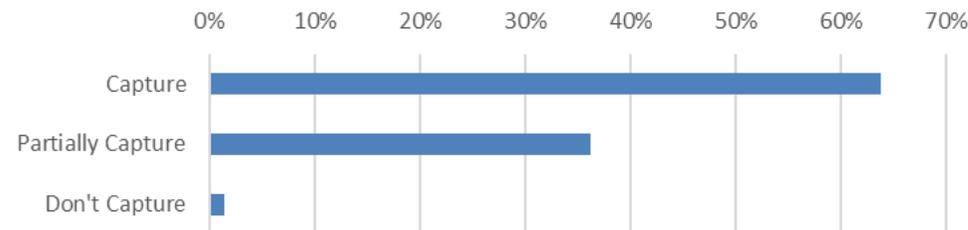
What aspects of the Northern Territory NRM plan (2016-2020) do you think we could improve upon?

The Northern Territory NRM plan cannot be improved upon — ~7%
The strategies we have identified to achieve objectives — ~14%
The metrics and measures we use to assess progress — ~27%
The priorities that have been given to individual strategies — ~18%
The way that roles and responsibilities delivering the NRM plan are defined. — ~35%

(axis: 0% 5% 10% 15% 20% 25% 30% 35% 40%)
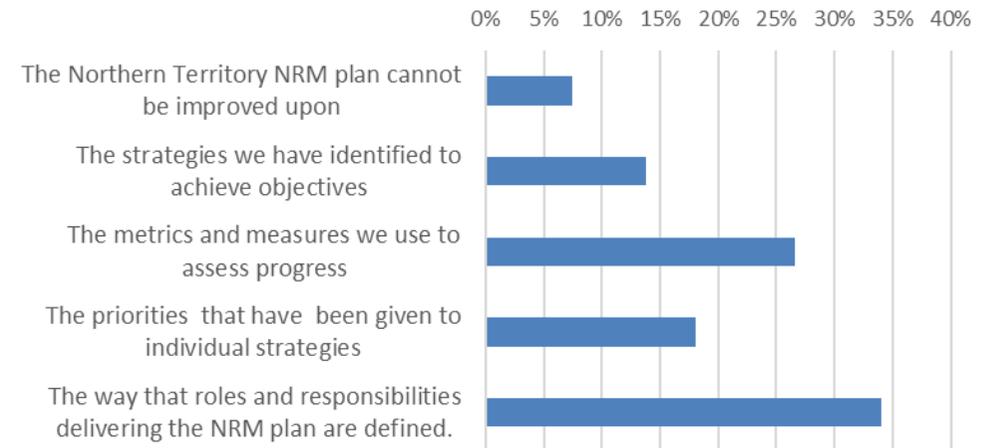
ALL STRATEGY AND ACTIVITY PROGRESS

Looking across all Programs, Strategies and Activities in all plans shows that most (73%) of Strategies are being pursued, with the remainder yet to be addressed. This is likely to be due to timing, and is reasonable to expect at this stage of plan implementation (1 year in).

Although the degree of implementation for the actions is less (33%) this is to be expected given that, while Strategies have been started, there are many Activities within them and so it would be expected the level of implementation would be less. Nevertheless, it is still positive that after a year a third of the actions are being implemented.

The small degree of Minor Issues probably reflects again the early stage of implementation.

| Completed | On-track | Minor issues | Major issues | Scheduled | Not specified |

Strategy Progress: All regions

Completed 3% On-track 67% Minor issues 1% Scheduled 2% Not specified 2%

Activity Progress: All regions

Completed 3% On-track 67% Minor issues 1% Scheduled 2% Not specified 2%

| Completed | On-track | Minor issues | Major issues | Scheduled | Not specified |

Program Strategy Progress

Good progress is being made in implementing most Programs in the NRM plan, particularly in the areas of Fire, Weeds and Knowledge. Given the early stage of plan implementation there are not yet any clear areas that should be of concern.

Program Activity Progress

Looking a the implementation of Activities, there has been some progress in all Programs. As for Strategies, given the early stage of implementation of the Plan there are not yet any clear areas of concern.

If you can send me the data/ graphcs for these, I can udpate to match the style

REGIONS PROGRESS

Each of the Regional Plans is being utilised, and most Strategies have at least been started in al of the Programs (see later slides for greater detail on this).
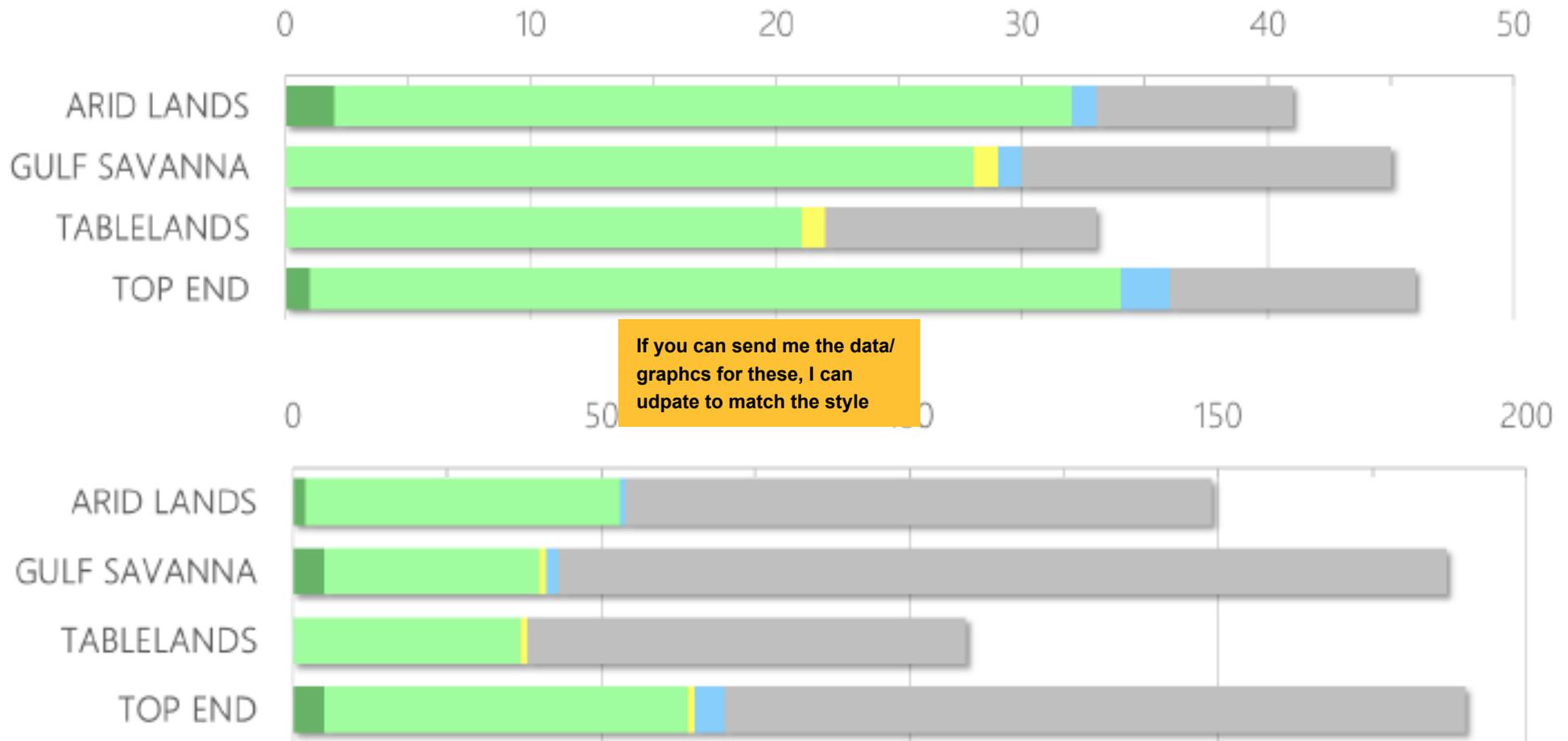
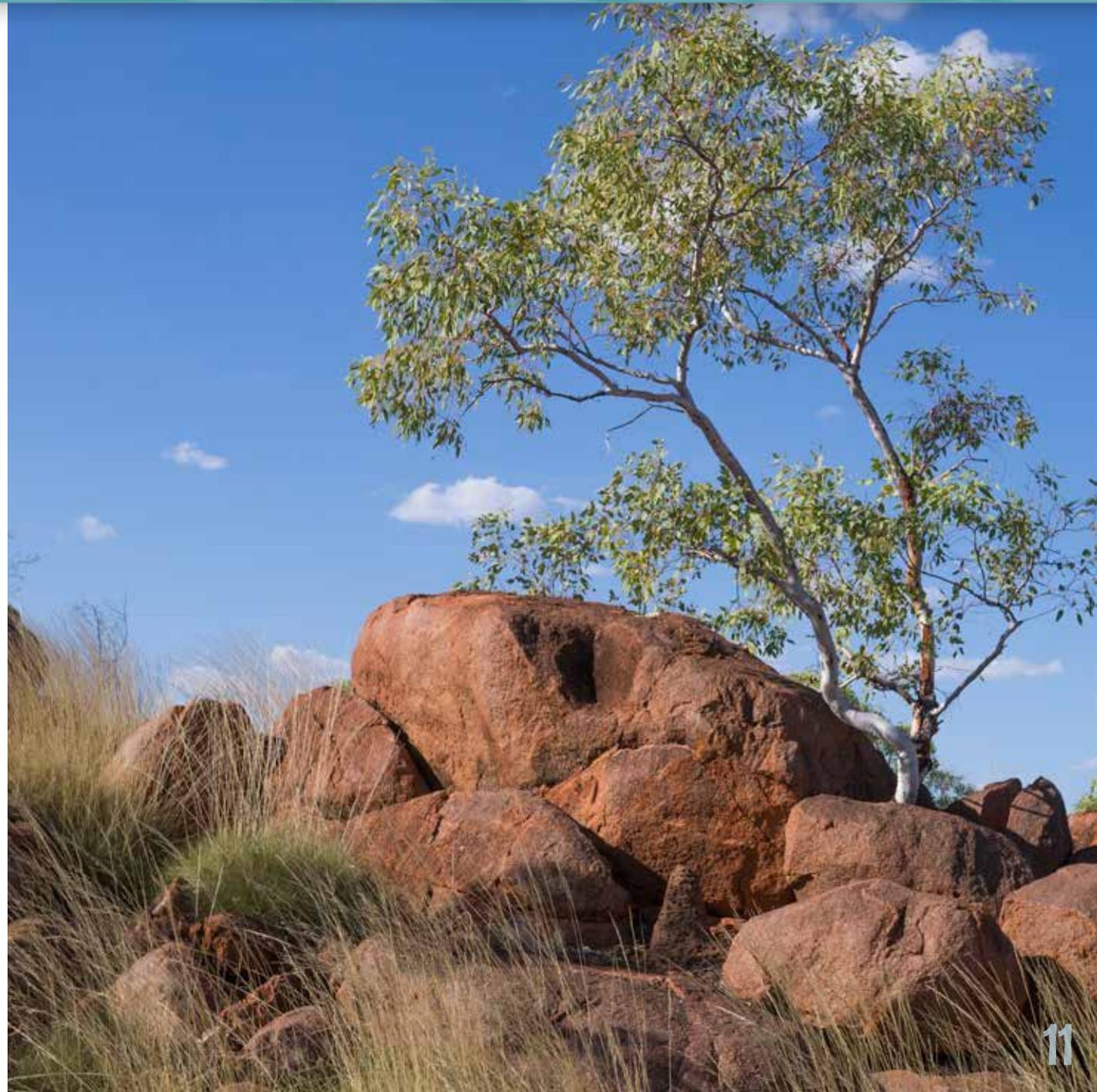## Findings

- The NRM plan has been generally well received during its first year in implementation.

- But there is some room for improvement and some lessons to be learned-which we'll focus on in the next review.

- People are utilising the plan in different ways around the Territory.

- There still needs to be work done with all stakeholders to identify responsibility for delivery of Strategies and Activities, and monitoring.

- This will become a more significant issue as the review cycle moves into outcomes.

- Stakeholders broadly agreed with assessment of progress, noting that some areas that TNRM had recorded as having little progress were progressing

- There has not been as much focus on Water Resource Management and Minimising the Impacts of Development as there has been on some of the more applied areas of activity (eg managing fire)

- Did not appear to be any areas of concern (Minor or Major issues) that require particular focus at this stage.

Recommendations

- A number of recommendations from stakeholders for revision of Objectives will be incorporated into the next version of the plan

- Next review will need to focus on Outcomes, not outputs, and focus on specific indicators

Legend: Completed | On-track | Minor issues | Major issues | Scheduled | Not specified

Strategy implementation: All regions

If you can send me the data/ graphcs for these, I can udpate to match the style

12

| Completed | On-track | Minor issues | Major issues | Scheduled | Not specified |

Activity implementation: All regions

If you can send me the data/graphcs for these, I can udpate to match the style

Completed	On-track	Minor issues	Major issues	Scheduled	Not specified

Strategy implementation: All regions

If you can send me the data/ graphcs for these, I can udpate to match the style

| Completed | On-track | Minor issues | Major issues | Scheduled | Not specified |

Chart (0 to 20 scale):
- MANAGING FIRE
- PREVENTING AND MANAGING WEEDS
- REDUCING THE IMPACTS OF FERAL ANIMALS
- INDUSTRY ADOPTION OF SUSTAINABLE PRACTICES
- WATER RESOURCES AND SOIL MANAGEMENT
- NRM BASED ECONOMIC OPPORTUNITIES
- MINIMISING ECOLOGICAL FOOTPRINTS OF DEVELOPMENT
- MANAGING AND PROTECTING KEY NATURAL AND CULTURAL ASSETS
- KNOWLEDGE, CAPACITY AND ENGAGEMENT

Activity implementation: All regions

Chart (0 to 120 scale):
- MANAGING FIRE
- PREVENTING AND MANAGING WEEDS
- REDUCING THE IMPACTS OF FERAL ANIMALS
- INDUSTRY ADOPTION OF SUSTAINABLE PRACTICES
- WATER RESOURCES AND SOIL MANAGEMENT
- NRM BASED ECONOMIC OPPORTUNITIES
- MINIMISING ECOLOGICAL FOOTPRINTS OF DEVELOPMENT
- MANAGING AND PROTECTING KEY NATURAL AND CULTURAL ASSETS
- KNOWLEDGE, CAPACITY AND ENGAGEMENT

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GULF SAVANNA - STRATEGY IMPLEMENTATION

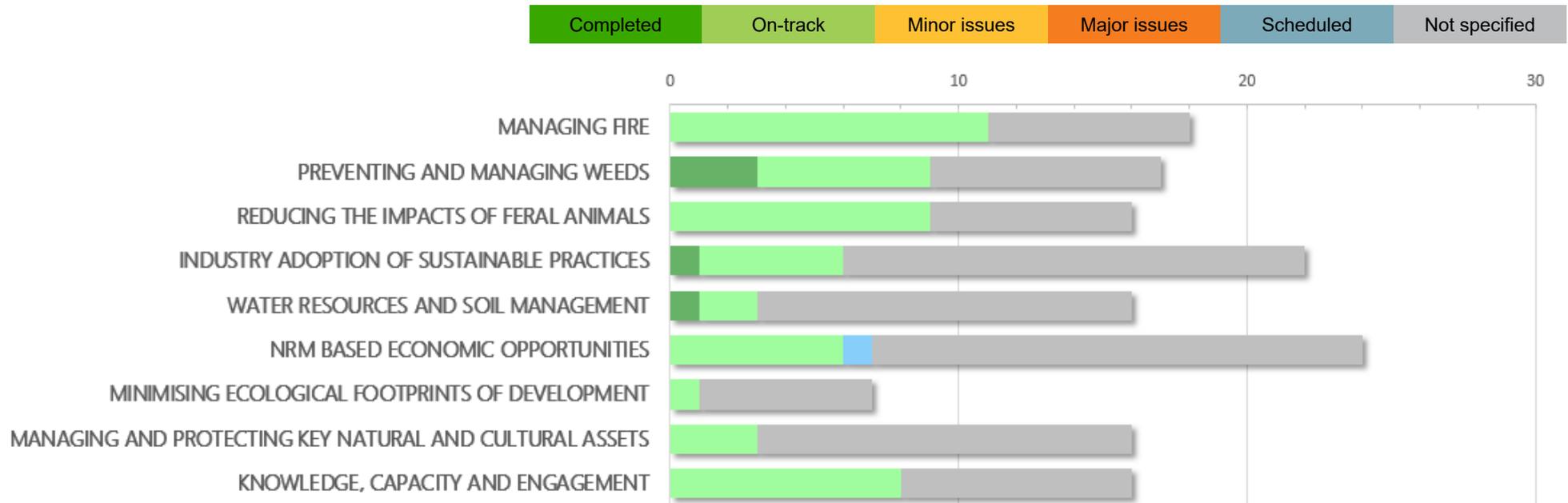
Legend: Completed | On-track | Minor issues | Major issues | Scheduled | Not specified

Strategy implementation: All regions

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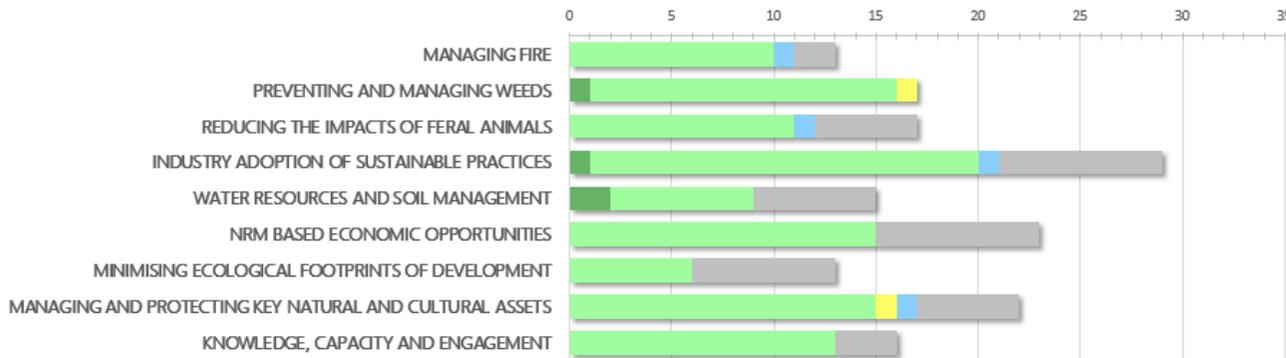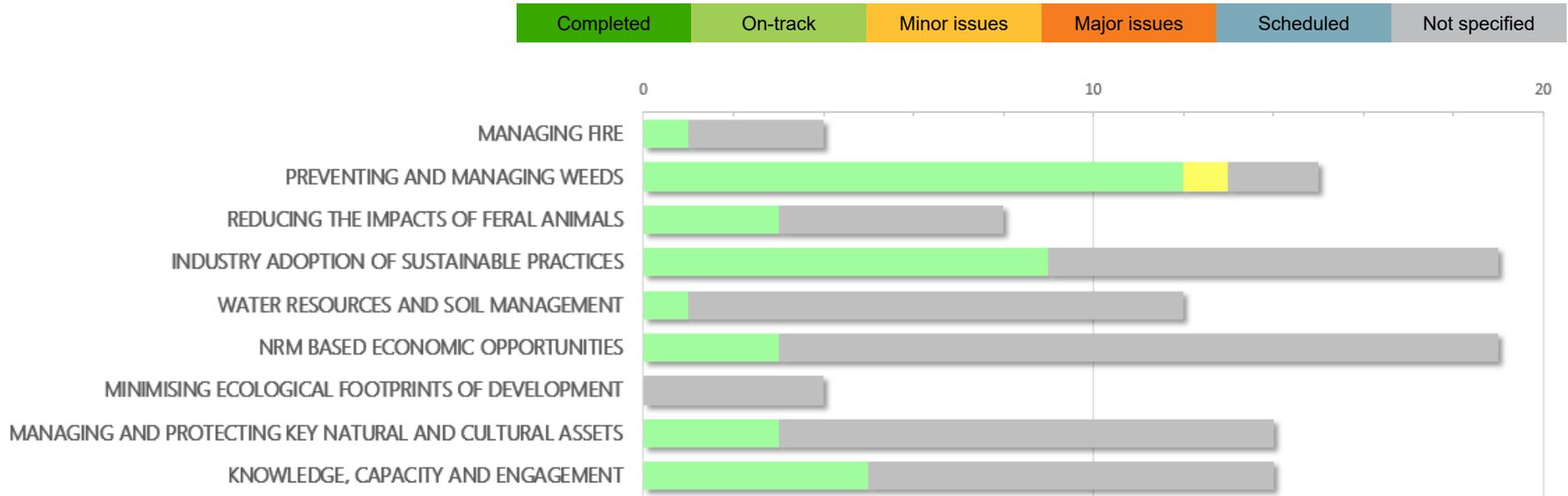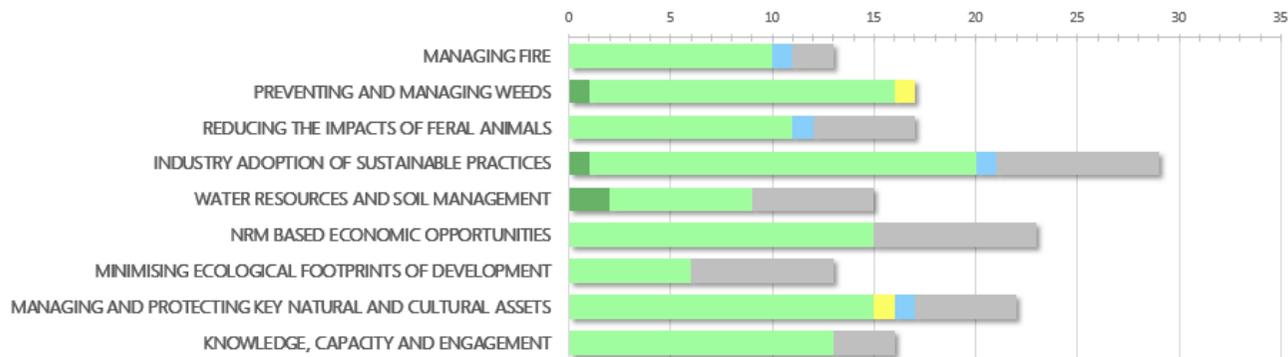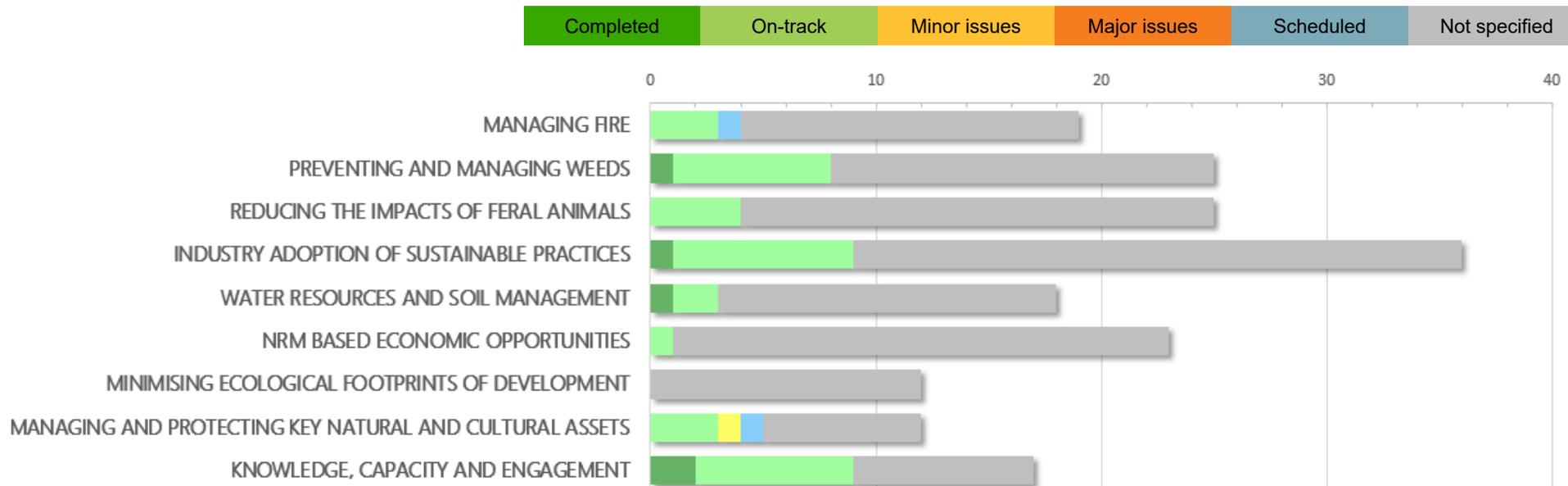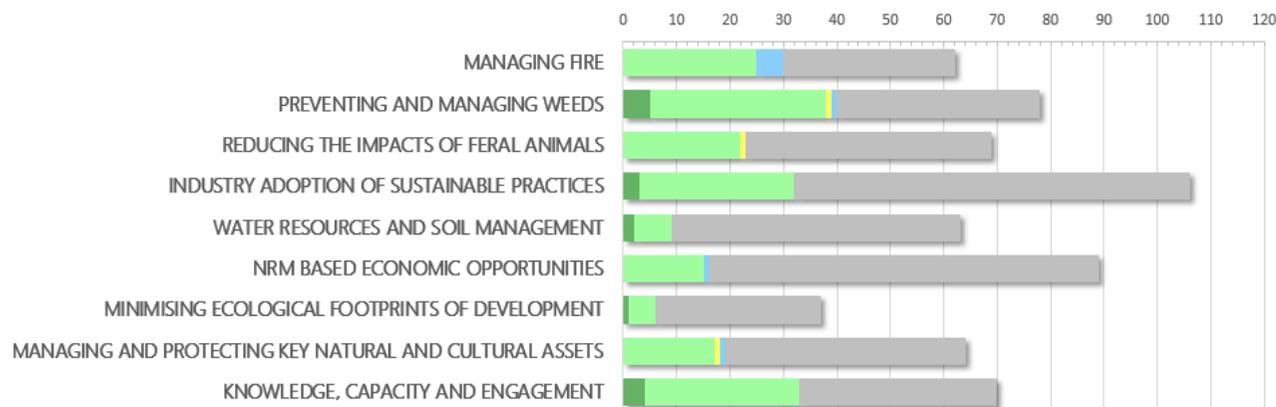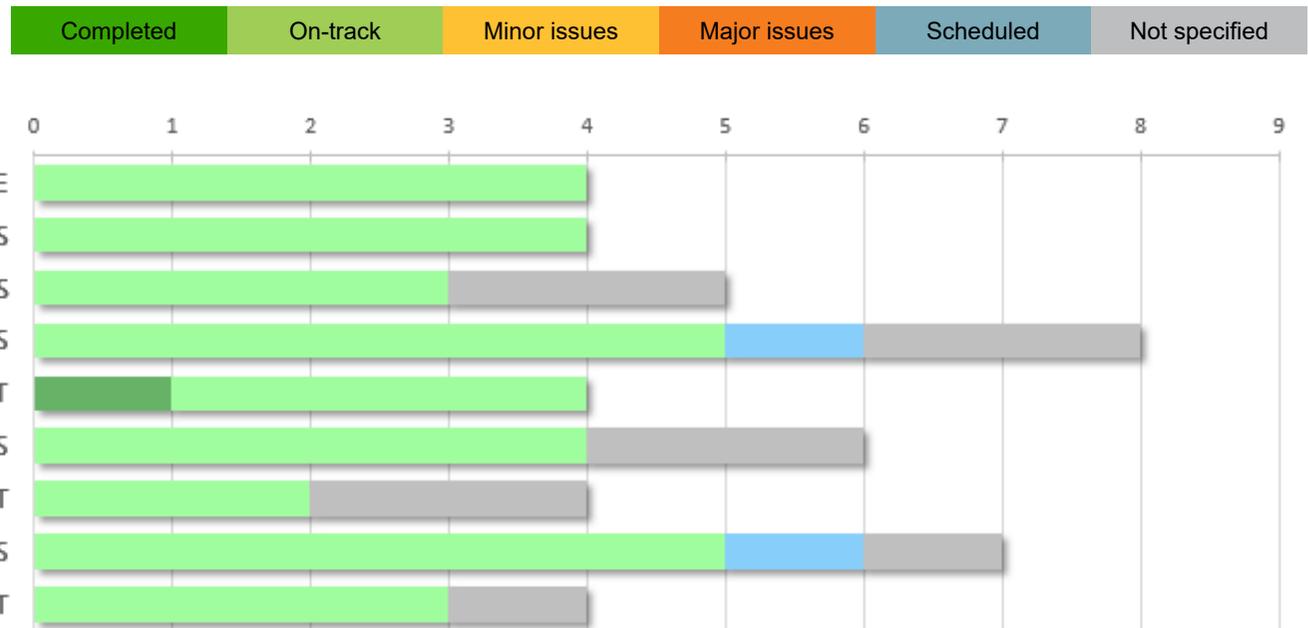# TOP END - STRATEGY IMPLEMENTATION

Legend: Completed | On-track | Minor issues | Major issues | Scheduled | Not specified

Chart categories (top chart):
- MANAGING FIRE
- PREVENTING AND MANAGING WEEDS
- REDUCING THE IMPACTS OF FERAL ANIMALS
- INDUSTRY ADOPTION OF SUSTAINABLE PRACTICES
- WATER RESOURCES AND SOIL MANAGEMENT
- NRM BASED ECONOMIC OPPORTUNITIES
- MINIMISING ECOLOGICAL FOOTPRINTS OF DEVELOPMENT
- G AND PROTECTING KEY NATURAL AND CULTURAL ASSETS
- KNOWLEDGE, CAPACITY AND ENGAGEMENT

Strategy implementation: All regions

Chart categories (bottom chart):
- MANAGING FIRE
- PREVENTING AND MANAGING WEEDS
- REDUCING THE IMPACTS OF FERAL ANIMALS
- INDUSTRY ADOPTION OF SUSTAINABLE PRACTICES
- WATER RESOURCES AND SOIL MANAGEMENT
- NRM BASED ECONOMIC OPPORTUNITIES
- MINIMISING ECOLOGICAL FOOTPRINTS OF DEVELOPMENT
- MANAGING AND PROTECTING KEY NATURAL AND CULTURAL ASSETS
- KNOWLEDGE, CAPACITY AND ENGAGEMENT

If you can send me the data/ graphcs for these, I can udpate to match the style

18

| | Completed | On-track | Minor issues | Major issues | Scheduled | Not specified |

Activity implementation: All regions

If you can send me the data/ graphcs for these, I can udpate to match the style

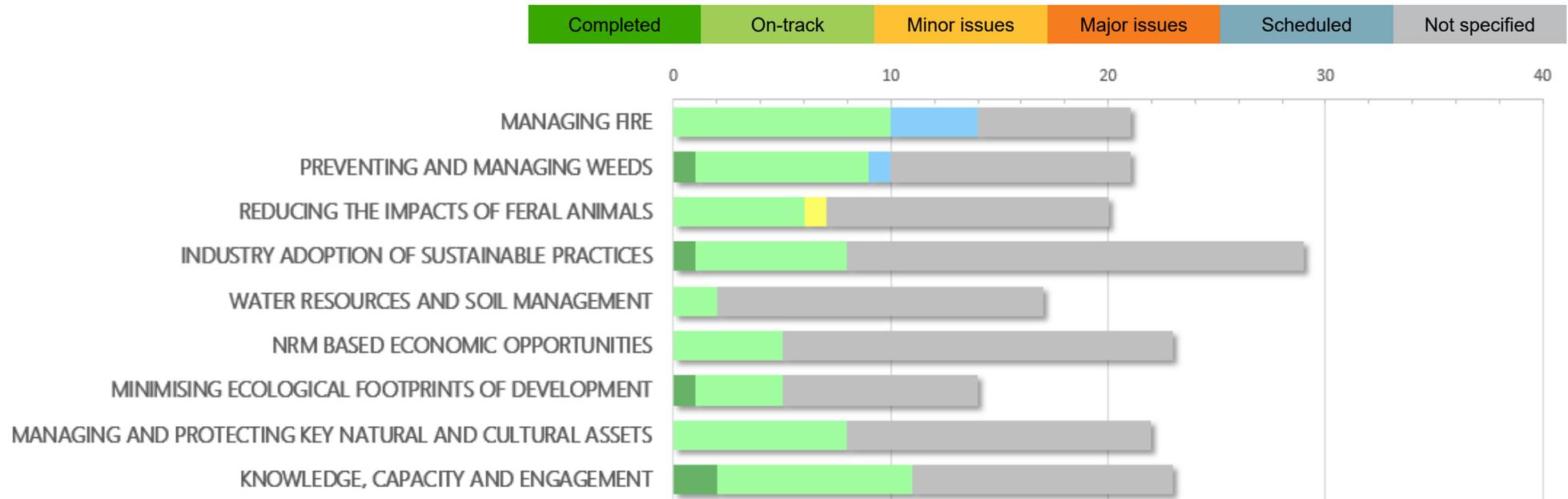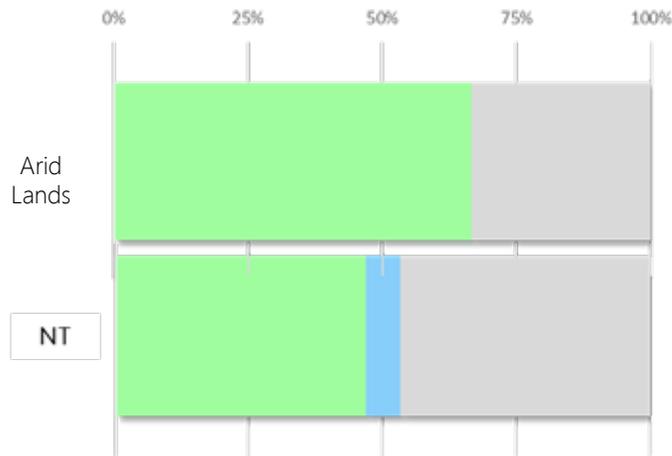ACTIVITES ----------------> STRATEGIES ----------------> OBJECTIVES

Arid Lands

NT

KEY COLLABORATORS
Central Land Council, Pastoralists (CLMA), Researchers, NTG (Bushfires NT), Aust. Govt. (Environment), TNRM, Regional Shires

1.1 Collaborative approaches to strategic fire management are extended across the Arid Lands region **H**

1.2 Increase use of spatial fire management tools, knowledge systems, safe burning practices and equipment throughout the Arid Lands **H**

1.3 Increase application of fire management techniques that promote biodiversity and ecosystem function and minimise risk to infrastructure and human health across the Arid Lands **H**

1.4 Promote policies and market forces that support collaborative fire management approaches that provide social/cultural benefit in Arid Lands **M**

By 2020, fire regimes are more diverse and wildfire extent is lower than the 2000-2010 average

By 2020, fire activity is being planned and monitored utilising GIS and remote sensing across the entire Arid Lands region by all stakeholders

By 2020, fire management is demonstrably based on knowledge of cultural, biodiversity and production values, threats and the best management options

By 2020, policies support long-term fire management in the Arid Lands through economic incentives

Completed | On-Track | Minor Issues | Major Issues | Scheduled | Not Specified

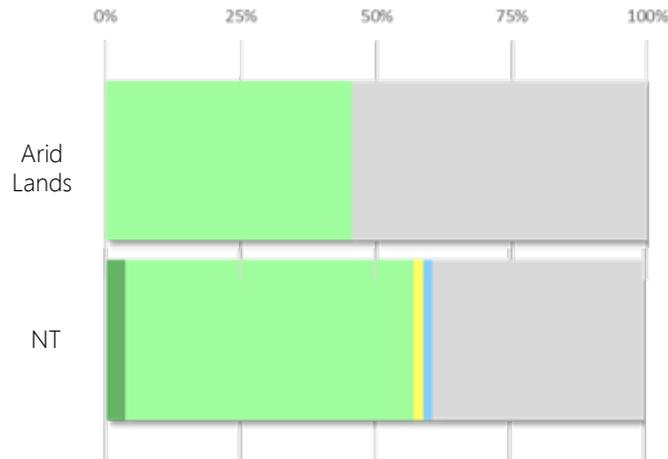ACTIVITES ----------→ STRATEGIES ----------→ OBJECTIVES

0%   25%   50%   75%   100%

Arid Lands

NT
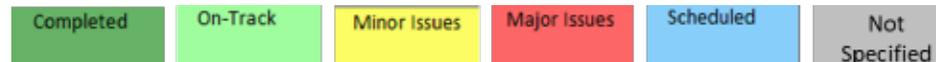
KEY COLLABORATORS
NTG (Weeds), TNRM, Pastoralists (CLMA), Central Land Council, Aust. Govt. (Environment & Agriculture), Landholders, Landcare groups, Local Government, Contractors and other Government Depts

2.1 Adopt collaborative approaches to weed management in the Arid Lands
H

2.2 Prevent the introduction of new weeds and the spread of the region's priority weeds
V
H

2.3 Improve adaptive weed management through monitoring, research and utilising data, training and capacity building
H

2.4 Increase the region's awareness of its priorities and capacity to manage the impacts of weeds
M

By 2020, the spread of Athel Pine is contained to 2015 levels

By 2020, Cacti, Parkinsonia and Rubber Bush have active weed management implementation programs

By 2020, no new weed species are introduced and existing weeds are not spread to new areas

By 2020, sites of Conservation significance or culturally significant sites that are currently buffel-free remain so

By 2020, strategic catchment based weed management is adopted throughout the region

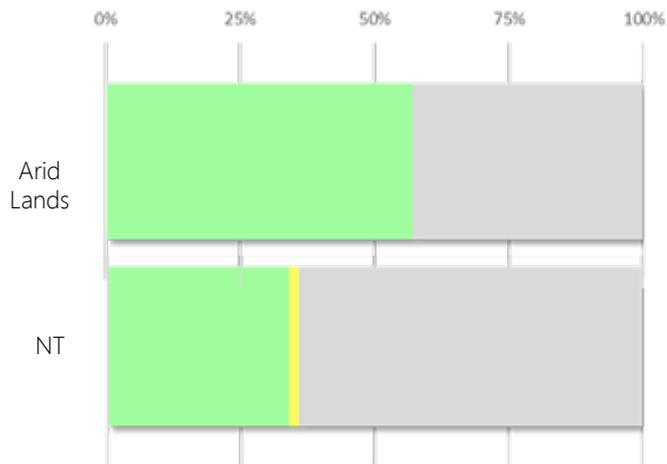By 2020, landholders are increasingly responsible and taking more action for weed management

Completed | On-Track | Minor Issues | Major Issues | Scheduled | Not Specified

REDUCING FERAL ANIMAL IMPACTS

ACTIVITES - - - - - - - - - - - - - - - ▶ STRATEGIES - - - - - - - - - - - - - - - ▶ OBJECTIVES

0%   25%   50%   75%   100%

Arid Lands

NT

KEY COLLABORATORS
NT Govt. (DLRM), Central Land Council, TNRM, Pastoralists (CLMA), Researchers, Aust Govt. (Environment), Commercial Operators

Completed	On-Track	Minor Issues	Major Issues	Scheduled	Not Specified
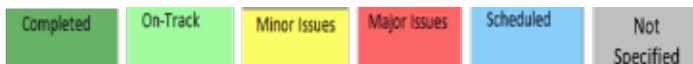
3.1 Strengthen regional feral management programs through coordinated and collaborative action

H

3.2 Use common measures and analysis to monitor, evaluate and report on and adapt the feral management program

V H

3.3 Support research and innovation in techniques, training and motivation to control feral animals

H

M

3.4 Promote policies, legislation and commercial utilisation that supports objectives in collaborative feral animal control programs

By 2020, feral animal control programs are prioritised and targeted through an NT wide feral animal strategy that establishes an agreed understanding of the problem, shared measurement and review of actions

By 2020, impacts of camels on arid ecosystems is no greater than 2015 level

By 2020, monitoring data is being collected from a range of sources consistently and informing strategic action in feral management programs
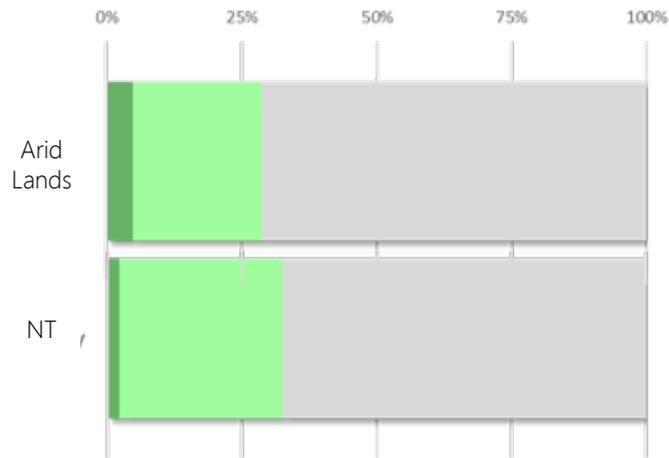
By 2020, the impacts of cats and foxes is reduced at sites of high conservation value

By 2020, the impacts of horses is reduced from some key aquatic sites

By 2020, feral animal control programs are supported through a range of legislation, policies and commercial harvest

ACTIVITES ----------------> STRATEGIES ----------------> OBJECTIVES

Arid Lands

NT

KEY COLLABORATORS
NT Govt. (DPIF), Pastoral Industry, Researchers, Aust Govt. (Environment), Centrefarm, Indigenous Land Corporation, TNRM.

4.1 Engage with industry to encourage sustainable approaches to developing the north policies and programs
M

4.2 Ensure resources are increased for biosecurity support services in line with increased agricultural development
M

4.3 Support best practice grazing management through delivery of regional monitoring programs and promoting practices that promote both productivity and ecological outcomes
H

By 2020, policies and programs for development in the Arid Lands are informed by best available science and knowledge to ensure the protection of cultural and natural assets

By 2020, our biosecurity system is integrated and risk-based with strong community involvement that minimises the establishment of exotic pests and diseases
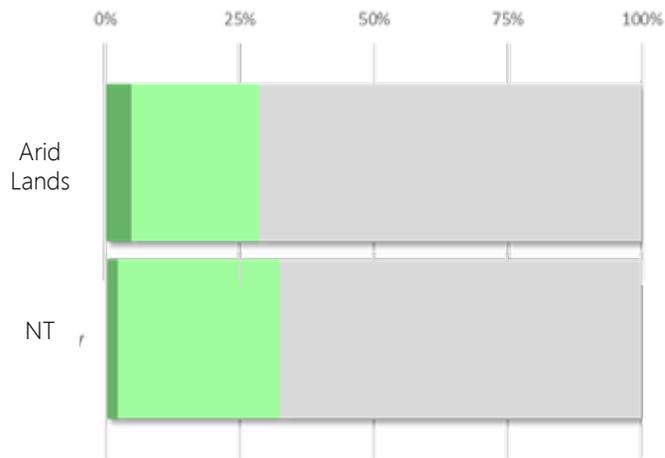
By 2020, best practice sustainable grazing practices are increasingly taken up by the pastoral industry

| Completed | On-Track | Minor Issues | Major Issues | Scheduled | Not Specified |

SUPPORTING INDUSTRY ADOPTION OF SUSTAINABLE PRACTICES

ACTIVITES ----→ STRATEGIES ----→ OBJECTIVES

4.4 Support best practice horticulture and broad scale agriculture through knowledge sharing, adoption of new technology and training and innovation

M

4.5 Reconcile conflicting management objectives for wild dogs and dingoes

H

4.6 Support and promote partnerships between the NRM community and the mining industry regarding mine rehabilitation and offset programs

H

By 2020, industry driven horticultural extension programs developing understanding of ecosystems and sustainable management are delivered in the Arid Lands

By 2020, dingoes/wild dogs are strategically managed based on understanding of their impact on both pastoral and biodiversity productivity

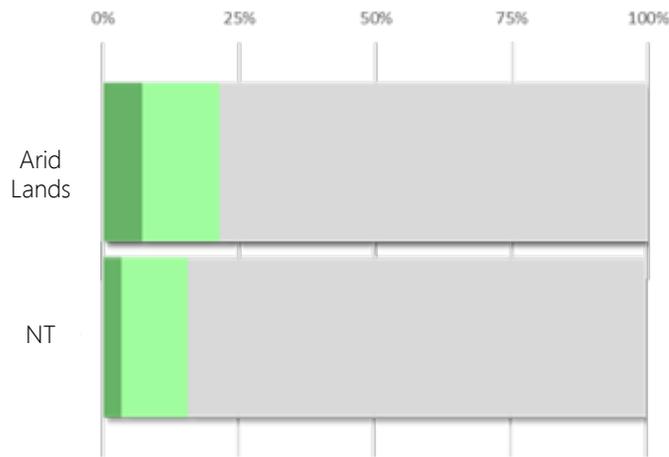By 2020, increase the involvement of the mining industry in natural resource management

KEY COLLABORATORS
NT Govt. (DPIF), Pastoral Industry, Researchers, Aust Govt. (Environment), Centrefarm, Indigenous Land Corporation, TNRM.

Completed | On-Track | Minor Issues | Major Issues | Scheduled | Not Specified

ACTIVITES ----→ STRATEGIES ----→ OBJECTIVES

Arid Lands

NT

(bar chart showing 0% 25% 50% 75% 100%)

KEY COLLABORATORS
NTG (DLRM - Water Resources & Soil), Pastoralists, CLMA, Researchers, NTG (DPIF), Australian Govt. (Environment & Agriculture), Centrefarm, Contractors, horticulturalists, NTG (DME - Mines), Mining Industry, Central Land Council.

5.1 Water resource planning and management is undertaken in consultation with multiple stakeholders, and underpinned by the best available scientific information **H**

5.2 Increase our knowledge and resources available to understand and manage the impacts on ecosystems and groundwater from mining, pastoral, agricultural and domestic use **H**

5.3 Support training and extension services on sustainable soil management **M**

5.4 Identify areas with potential for agricultural development through assessments of soil and water resources **M**

By 2020, water resources that have a moderate to high level of development relative to the water available for development (in consideration of non-consumptive uses) are managed through a Water Allocation Framework which includes monitoring and ensures that cultural, environmental and production values are maintained.

By 2020, our knowledge of the impacts of water use from key industrial and domestic uses of water resources has increased and a regulatory framework exists to minimise pollution of groundwater
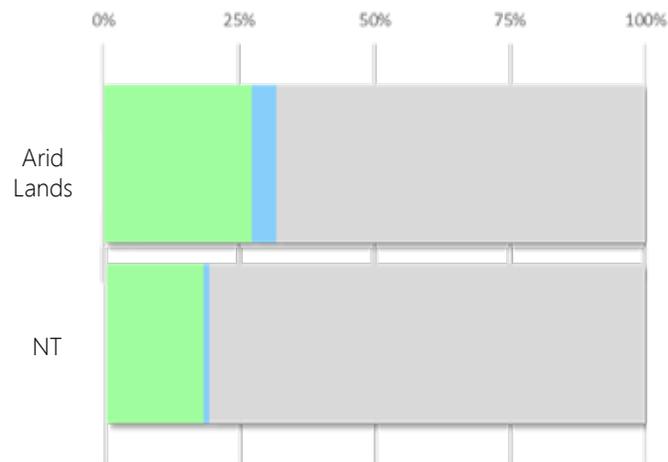
By 2020, soil loss and land degradation are being prevented and, where necessary, addressed

By 2020, areas for agricultural development have been identified with thorough understanding on limitations of soil and water resources

Completed	On-Track	Minor Issues	Major Issues	Scheduled	Not Specified

ACTIVITES ----------------> STRATEGIES ----------------> OBJECTIVES

Arid Lands

NT

KEY COLLABORATORS
Centrefarm, Central Land Council, Aboriginal organisations, Private Industry, NT Govt. (Legacy Mines Unit), NT Govt. (DLRM), Pastoralists, Researchers, Aust Govt. (Environment), TNRM

6.1 Develop NRM based economic enterprises based on the harvest of native species — M

6.2 Develop capacity for Fee For Service opportunities of Landcare groups, Aboriginal Rangers and other NRM groups — H

6.3 Support projects and research to develop and participate in national, NT and regional initiatives to develop carbon market programs — M

6.4 Investigate, progress and communicate emerging primary industry and diversification economic opportunities on Aboriginal and Pastoral lands including horticulture, aquaculture and tourism — H

6.5 Investigate and support development opportunities from new environmental technologies and renewables — M

6.6 Investigate and support development opportunities from new environmental technologies and renewables — M

By 2020, new employment and business opportunities are created based on sustainable harvest of native species

By 2020, ranger groups and other local NRM enterprises are strong and economically viable supported by a diversity of funding sources and locally based commercial opportunities

By 2020, carbon abatement opportunities are beginning to be taken in the Arid Lands region

By 2020, new employment opportunities are created through diverse primary industries and on different tenures in the Arid Lands

By 2020, the renewables and 'environmental' sector is contributing more to the Arid Lands economy than 2015

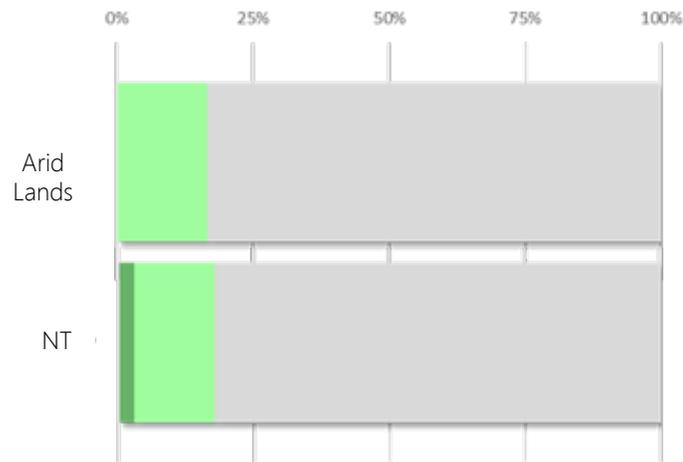By 2020, new opportunities and new partnerships between private sector and NRM stakeholders have been developed

| Completed | On-Track | Minor Issues | Major Issues | Scheduled | Not Specified |

26

ACTIVITES ‑‑‑‑‑‑‑‑‑‑‑‑‑‑▶ STRATEGIES ‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑▶ OBJECTIVES

KEY COLLABORATORS
NTG (DLRM), TNRM, Central Land Council, Researchers, Aust Govt. (Environment), Local Government, Arid Lands Environment Centre, landholders

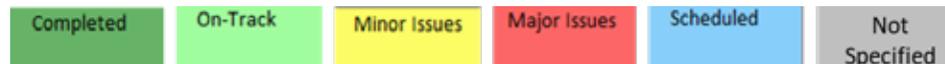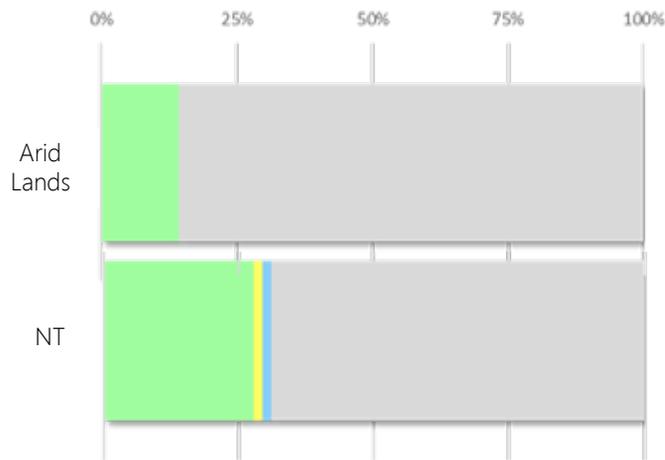| STRATEGIES	OBJECTIVES
7.1 Minimise the environmental footprint of the major population centres in the Arid Lands **M**	By 2020, towns and communities have improved environmental planning and management in the Arid Lands
7.2 Strengthen and consolidate environmental offset arrangements to direct offsets where they are likely to be most effective for NRM in the Arid Lands **H**	By 2020, offsets are well directed and transparent and linked to achieving the prioritised NRM strategies of the Arid Lands
7.3 Minimise the impact of tourism on the environment through the adoption and promotion of sustainable initiatives **M**	By 2020, there is increased environmental awareness by recreational users in the Arid Lands

Completed | On-Track | Minor Issues | Major Issues | Scheduled | Not Specified

MANAGING AND PROTECTING KEY NATURAL AND CULTURAL ASSETS

ACTIVITES ----------------→ STRATEGIES ----------------→ OBJECTIVES

0%   25%   50%   75%   100%

Arid Lands

NT

KEY COLLABORATORS
NTG (DLRM), Parks and Wildlife, Parks Australia, Central Land Council, Pastoralists (CLMA), TNRM, Researchers, Aust Govt. (Environment), AAPA, Rangelands Alliance

8.1 Develop and implement management programs in Sites of Conservation Significance in the Arid Lands
M

8.2 Implement the Action Plan for threatened species in the NT (NTG) linking on-ground action to the latest knowledge
H

8.3 Develop adaptation plans to address the impacts of climate change for vulnerable ecosystems in the region
M

8.4 Support ongoing mapping and monitoring of rangeland condition in the Arid Lands using remote sensing and field based surveys
H

8.5 Support best practice management of culturally significant Aboriginal sites and cultural landscapes
H

By 2020, increase the area under active management (stewardship) for conservation (i.e. weeds, stock and ferals are managed) and increase the involvement landholders in stewardship arrangements

By 2020, the approach to threatened species management is more integrated with strong links between research, monitoring and on-ground action showing progress against key indicators in the Threatened Species Action Plan

By 2020, our understanding of the impacts of climate change on ecosystem function are informing our management decisions
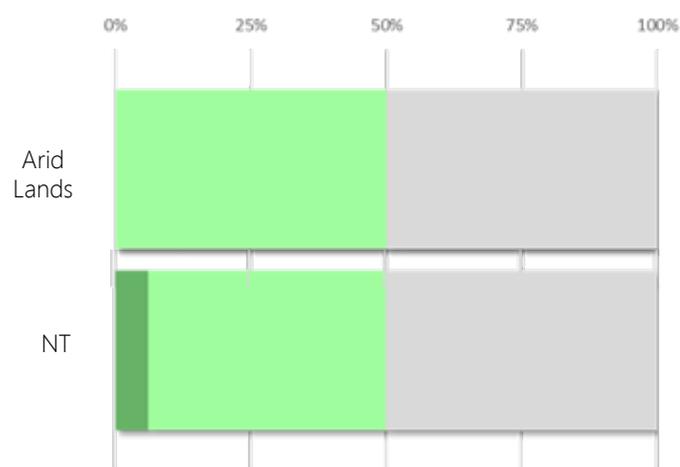
By 2020, rangeland condition is regularly being monitored and informing land management decisions

By 2020, an increasing number of Traditional Owners and Aboriginal Ranger Groups are managing culturally significant sites and landscapes

| Completed | On-Track | Minor Issues | Major Issues | Scheduled | Not Specified |

ACTIVITES ----------------→ STRATEGIES ----------------→ OBJECTIVES

0%   25%   50%   75%   100%

Arid Lands

NT

KEY COLLABORATORS
TNRM, NT Govt. (DLRM), TNRM, Landcare groups, Central Land Council, Pastoralists, CLMA, Researchers, Aust Govt. (Environment), ALL.

9.1 Support land managers to record and utilise TEK,scientific research andpastoral knowledge in NRM planning and activities. **M**

9.2 Strengthen networks and partnerships between NRM stakeholders in the Arid Lands including supporting the development of new partnerships with industry and philanthropic organisations. **H**

9.3 Support accredited and informal training in land management and sustainable industry practices in the Arid Lands **M**

9.4 Ongoing review of NRM outcomes facilitating adaptive management **H**

By 2020, increased resources and longterm approaches to NRM issues for people managing land in the Arid Lands

By 2020, Territory Natural Resource Managers are incorporating the best available knowledge, information and data into their management including TEK and community knowledge

By 2020, there is increased support provided for targeted training in relevant natural resource management skills

By 2020, multi-stakeholder review processes are strengthened in the Arid lands leading to adaptive management and improved practices and stakeholder cooperation

Completed	On-Track	Minor Issues	Major Issues	Scheduled	Not Specified