FNQ/CAPE YORK Gamba grass management project 2011-15

Northern Fire Managers
Group

Townsville June 2012





Overview

Weed management perspective – linking fire management and invasive species outcomes

Queensland's Far North & Cape York Peninsula

Management plan (stage one)

Management project (stage one implementation)



The problem

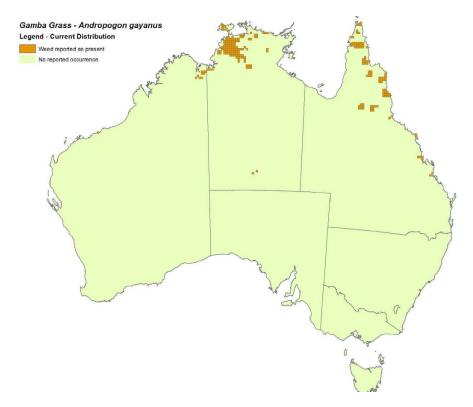


"The gamba grass issue is characteristic of the broader issue of introduced high biomass grasses in Australia"

Perennial tropical grass to 4 metres
Up to 10 times the biomass of native grasses
Competition & increased fuel loads

Significant impacts
Environmental
Social
Cultural
Economic

Current & potential distribution

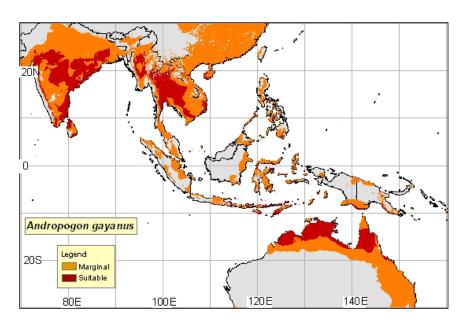


Gamba grass is already established in many separate locations

The diversity of its established range can be attributed (in part) to its promotion as a pasture grass

National core infested areas in NT and Northern Queensland

Current & potential distribution



Most of Australia's northern savannah is at risk

If unmanaged it will continue to spread and consolidate (exponentially)

Policy and legislative setting



Weed of National Significance (national)

Class 2 Pest in QLD (state)

Priority weed of management in Local Government Pest Management Plans (local)

"Gamba grass is declared weed in all susceptible jurisdictions making it illegal to deliberately spread or introduce"

Pathways of spread

Long distance spread

Road networks
Intentional introduction
Machinery and equipment





Localised spread

Wind Water Wildlife



Goal - a plan in two stages

Reduce the impact of gamba grass on environmental, Cultural, Social and economic values of Far North Queensland and Cape York Peninsula

Stage one

Target the reduction the spread along the key road and river corridors as the first stage of a long term management plan.

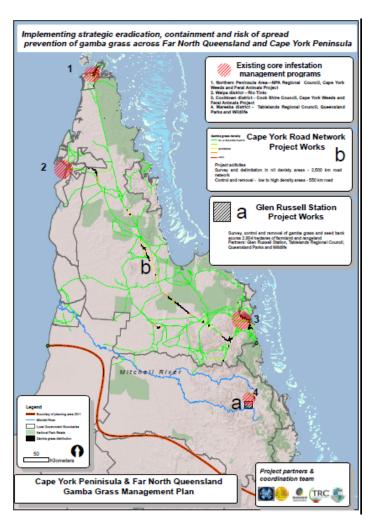
Stage two

The next stage of the plan will move onto catchment scale planning and containing major infestations off road corridors.

Implementation

Just secured \$750,000 over the next 4 years to implement stage one (Commonwealth Biodiversity Fund)

Scope and key project areas



Cape York and FNQ regions Cross-regional plan

Four core infestations (Bamaga, Weipa, Cooktown, Mareeba)

2,000 km of the 8,100 km of road network impacted or exposed to risk of spread.

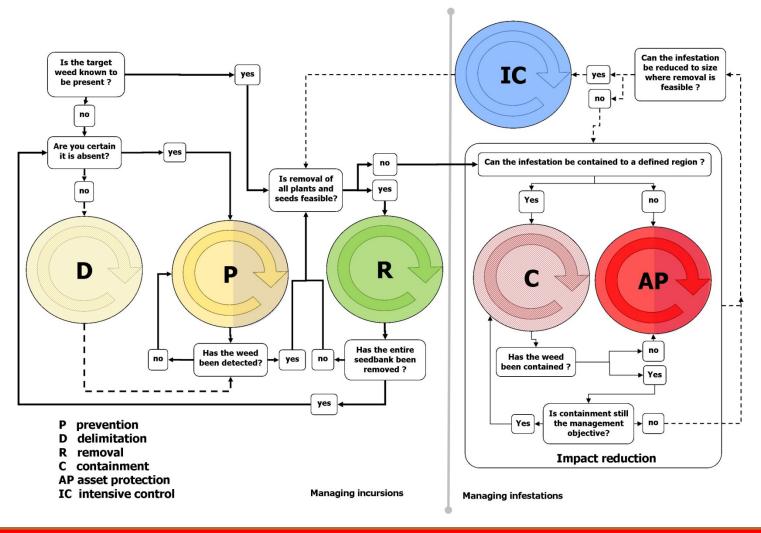
These infestations range in density from very high to very low

Management zoning

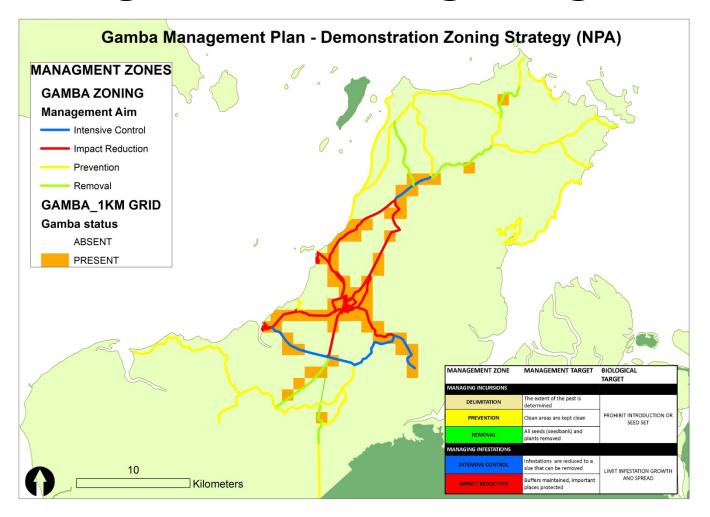


MANAGEMENT ZONE	MANAGEMENT TARGET	BIOLOGICAL TARGET
MANAGING INCURSIONS		
DELIMITATION	The extent of the pest is determined	PROHIBIT INTRODUCTION OR SEED SET
PREVENTION	Clean areas are kept clean	
REMOVAL	All seeds (seedbank) and plants removed	
MANAGING INFESTATIONS		
INTENSIVE CONTROL	Infestations are reduced to a size that can be removed	LIMIT INFESTATION GROWTH AND SPREAD
IMPACT REDUCTION	Buffers maintained, important places protected	

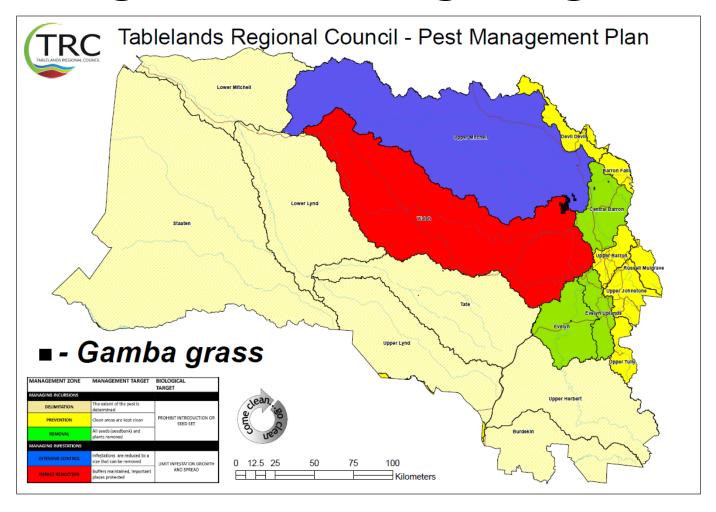
Management zoning



Management zoning- stage one



Management zoning- stage two



Bringing it all together

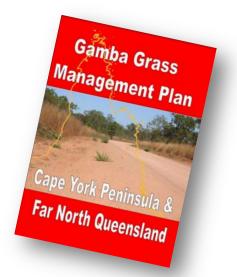
Setting and communicating annual targets - road segments & nodes as management units and response triggers

Making our management intention clear - long term management goals (tenures/political cycles)

Measuring effort and progress/regress at a standardised resolution, revising though existing advisory group

Locally distinct/ regionally consistent planning, reporting, communication

Key operational links with fire management



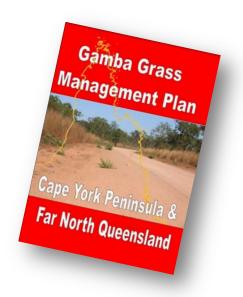
Integration of fire into management regimes i.e.-FRB with herbicide follow-up

Knowledge of and contribution to distribution, surveillance, detection and reporting

Advocacy and promotion, extension and communication

Participation in relevant weed spread prevention activities

Coming soon and future steps



Revised fine scale distribution mapping (1km grid)

Fine scale habitat suitability (threat & risk) and spread network modeling (maxent and others)

Impacts on biodiverse carbon management (IPA etc.)

Whole of landscape management zoning including containment protocols and approaches



More information: www.fnqroc.qld.gov.au