Inquiry into the impacts of invasive plants (weeds) and their control in Queensland Southern Gulf NRM



9 January 2017

Research Director Agriculture and Environment Committee Parliament House Brisbane Qld 4000

Via email: aec@parliament.qld.gov.au

Dear Sir/Madam

# Re: Inquiry into the impacts of invasive plants (weeds) and their control in Queensland

Please find attached the submission of Southern Gulf NRM into the abovementioned Parliamentary Inquiry.

I will be pleased to provide any other advice or information the Inquiry may seek.

Yours sincerely



Andrew Maclean Chief Executive Officer

### Southern Gulf NRM Ltd

# Submission into the Inquiry into the impacts of invasive plants (weeds) and their control in Queensland

Agriculture and Environment Committee, Queensland Parliament

### Background

The northern beef industry relies almost entirely on native rangelands pastures that are vulnerable to the spread of prickly acacia. The industry is an important contributor to the regional and State economy but its viability is threatened by the spread of prickly acacia which, in dense infestations, suppresses the growth of valuable pasture grasses. The bare ground typically found under these infestations is also at risk of soil erosion, further degrading pasture productivity and heavy infestations destroy the habitat of many native animals, particularly ground dwelling species that inhabit the black soil plains.

Prickly acacia has been established in north west Queensland for many years, having been originally promoted as a shade tree and drought fodder. Even if there is some local advantage in prickly acacia, its costs substantially outweigh its benefits at the regional scale. Left unmanaged, prickly acacia has the potential to spread throughout the valuable native grasslands that underpin the beef industry. There is an urgent need for the State and local governments, industry and the community to collaborate in the effective management of this major threat to productivity and the environment.

#### Prickly Acacia Ecology

The ecology of prickly acacia has been well-researched by the Queensland Department of Agriculture and Fisheries, and others. Its life cycle and the mode of spread are sufficiently well understood as a basis for control strategy.

The most fundamental aspect of the species' ecology relevant to management is that cattle are the primary vector of long distance seed spread. New infestations established at a distance from established infestations are almost always the consequence of poor biosecurity practices. Seed remains viable in the gut of cattle for up to one week or longer. The cattle industry therefore plays the major role in both the spread of prickly acacia and in limiting that spread through the choices they make in stock buying, quarantine and transport.

Water is another significant vector for seed spread, but research shows that it is most significant at the local and district scale. There is merit in giving priority to control of seed bearing trees in and close to waterways as part of wider control strategies.

On-property spread of prickly acacia is mostly the result of cattle having access to seed-bearing trees. Producers can reduce the risk of spread through managing access to these plants.

Seed remains viable in the soil for many years. Even after mature plants have been removed, producers can expect new plants to emerge, especially if the growing season has been favourable. This requires continuing vigilance over many years to avoid re-establishment.

In summary, the ecology of prickly acacia is such that the feasibility of *preventing* infestation of previously clean country is relatively high and the cost of required management practices is comparatively low. On the other hand, even at the paddock scale, the cost of *eradication* is very high.

## Southern Gulf NRM

As the regional Natural Resource Management organisation for the Southern Gulf region, Southern Gulf NRM has a strong interest in the management of weeds, including prickly acacia in particular. With support under the QNRM program, during 2015/16, Southern Gulf NRM managed prickly acacia control projects over 150,000 hectares in partnerships involving more than 20 pastoral properties. This is representative of the nature and extent of the annual Southern Gulf NRM program that has been underway since 2002.

### Management Strategy

Prickly acacia is recognised as a Weed of National Significance (WONS). The strategic approach Southern Gulf NRM takes is consistent with the WONS Prickly Acacia Strategic Plan 2012-2017 prepared for the species. That is, recognising that parts of the region have heavy, long-established infestations and other parts, while vulnerable to infestation are now free of the weed, the principles of the strategy can be summarised as:

- Prevent the spread of the weed into currently un-infested areas
- Monitor the landscape to enable early detection of any new infestations
- Give priority to eradication of newly established infestations where this is feasible
- Support land managers with information, technical advice and financial assistance in managing established infestations.

It is most unlikely that prickly acacia can now be eradicated from the Queensland landscape with currently available technologies. However, practical eradication at the paddock, property and district scale can be achieved with diligent and cooperative effort. Producers working in partnership with Southern Gulf NRM and others have demonstrated this.

### **Terms of Reference**

The following paragraphs address the terms of reference of the Inquiry with regard to prickly acacia in the Southern Gulf region.

The responsibilities of local government in relation to the control of prohibited, restricted and invasive plants imposed under s.48 of the Biosecurity Act 2014 are reasonable and local government are meeting those obligations

Southern Gulf NRM recognises local government as very important partners in managing biosecurity in the region, including prickly acacia management. For example, gulf region local governments collaborate with Southern Gulf NRM, Biosecurity Queensland and others in the Gulf Catchments Pest Task Force that meets to coordinate and share information about pest animal and weed management. Weed management is a frequently discussed topic at North West Queensland Regional Organisation of Councils meetings that Southern Gulf NRM regularly attends to brief on emerging issues. Some local governments have been

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diligent in meeting their planning responsibilities under the *Biosecurity Act 2014* and some have demonstrated good leadership in developing regionally relevant solutions in partnership with their communities. The Flinders Shire Council stands out in this regard in its leadership of a Good Neighbour program to manage prickly acacia.

Notwithstanding their best efforts, while sharing the same responsibilities under the *Biosecurity Act 2014* as local governments throughout Queensland, local governments in the Southern Gulf region are generally large in area but very small in population and have very limited capability to discharge these responsibilities. To illustrate this point, compare three key statistics (sourced from Council websites) for Burke Shire Council to that of the Sunshine Coast Regional Council:

Council	Council Total Annual Revenue (\$M)	Regional Population	Land Area (km²)
Burke Shire	8.5	550	40,127
Sunshine Coast Region	396	287,000	3,124

Despite the enormous disparity in population and funding, under the Act, Burke Shire Council has the same legislative responsibilities for weed management as Sunshine Coast Regional Council, over a council area that is more than 10 times as large. While Burke Shire has the smallest population in the Southern Gulf Region, none of the others are much bigger. It would be unconscionable to criticise local governments with such limited resources for failing to discharge responsibilities established by the State Government.

It is well known that regional scale movement of prickly acacia is very largely associated with the transport of livestock. A failure to take reasonable steps to prevent that spread is a clear breach of the general biosecurity obligation established by the *Biosecurity Act 2014* and an appropriate focus for compliance action in the context of an overall containment and management strategy. Yet the capacity of Southern Gulf local governments, combined with the social and economic context of the small local governments of the region means that insufficient attention is given to compliance action, including prosecution when appropriate. This lets down the responsible producers and livestock carriers that do mitigate the risk of seed spread and imposes significant costs on the regional community when new infestations establish. An argument can be made that compliance activities of this type would be better led by Biosecurity Queensland than by local government.

### **Recommendations**

The State should invest in projects that better support western Queensland local governments to discharge all aspects of their weed management responsibilities under the *Biosecurity Act 2014*, including provision of expert support for weed planning, technical aspects of weed control, and in particular support for compliance activities to mitigate the spread of prickly acacia.

Local governments should continue to improve their mutual support and collaboration arrangements in relation to biosecurity matters through forums and processes such as the Gulf Catchments Pest Task Force. State agencies and other

partners, including Southern Gulf NRM should continue to support these forums and processes.

The Queensland Government, in collaboration with local government, the beef industry and other stakeholders should develop and implement an effective compliance strategy using legislative, market-based and other relevant methods to ensure the beef industry plays its proper role in eliminating the risk of transport of prickly acacia via stock transport.

Southern Gulf NRM, if adequately resourced, can play a very important role in providing co-regulatory support through using existing networks with land managers to inform them of their regulatory responsibilities under the *Biosecurity Act 2014*.

Programs for the control of weeds on Crown Land administered by the Department of Natural Resources and Mines are effective

The area of land in the Southern Gulf region directly managed by the Department of Natural Resources and Mines is small and insignificant in relation to the management of prickly acacia. However a substantial proportion of the region is State (Crown) Land held under leases administered by the Department.

Section 199(2) of the *Land Act 1994* establishes a duty of care, including a requirement that the lessee:

(d) protect riparian vegetation;
(e) maintain pastures dominated by perennial and productive species;
(f) maintain native grassland free of encroachment from woody vegetation;
(g) manage any declared pest;
(h) conserve biodiversity.

Section 200(1) of the Act states:

All leases, licences and permits are subject to the condition that the lessee, licensee or permittee must keep noxious plants on the land under control.

Each of these provisions is relevant to prickly acacia management. However, they are rarely enforced and in any event largely duplicate the General Biosecurity Obligation under the *Biosecurity Act 2014*.

Except at the margins, achieving the goals of the *Land Act 1994* in relation to maintenance of leasehold land is unlikely to be achieved through compliance approaches. The termination of a lease for a failure to undertake weed control would be a drastic step. Instead, consideration could be given to an incentive based approach whereby rentals could be discounted for lessees who demonstrate progress towards targets established in approved property management plans<sup>1</sup>. The cost to the State could be largely neutralised if lease

<sup>&</sup>lt;sup>1</sup> Leasehold rentals are tied to property valuation. To the extent that a dense infestation of prickly acacia may devalue a property, leaseholders could currently financially benefit through lower rentals from their failure to implement proper control.

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payments were correspondingly increased for lessees that fail to take action. The ultimate sanction of lease termination remains. It is acknowledged that this proposal is likely to raise complex issues, so our recommendation is that it be further studied in the first instance.

#### **Recommendation**

The State should, in consultation with the pastoral industry, NRM sector and other stakeholders, undertake a feasibility study for the introduction of a rental discount incentive for lessees that demonstrate progress in prickly acacia control (and other aspects of sustainable land management relevant to their lease conditions).

Biosecurity Queensland's weeds programs, including biological controls and new technologies, are adequately funded and effective at controlling weeds

Southern Gulf NRM warmly supports the efforts of Biosecurity Queensland in relation to prickly acacia management. We note in particular the innovative leadership of Biosecurity Queensland in the War on Western Weeds (WoWW) project in which Southern Gulf NRM is a partner. WoWW has done a good job in trialling and systematically evaluating a range of technologies, planning and engagement approaches, and control options to generate recommendations for land managers undertaking prickly acacia control. In a partnership with Flinders Shire Council, the WoWW team merit credit for their leadership in the development and trialling of the Good Neighbour approach to prickly acacia management. WoWW is a good example of best practice R&D which fully engages research users – primarily regional producers – in the generation and application of new knowledge.

Southern Gulf NRM also supports the related work Biosecurity Queensland leads in relation to research into biological control options. We note that identification of biological control agents effective on prickly acacia that do not create risks for native acacia species is a particular challenge; and that the agents thus far established have not been especially effective in northwest Queensland. Nevertheless, the search for effective biological control agents should continue.

The Inquiry terms of reference address funding and effectiveness for Biosecurity Queensland. These issues are clearly linked. In Southern Gulf NRM's view:

- The programs delivered by Biosecurity Queensland in the region are effective and well-supported by land managers and other stakeholders
- Resources for the regional field trials aspects of the project appear to be sufficient, although supplemented this year with Australian Government investment
- Research and development into biological control methods is limited by funding constraints
- Grant funding recently announced under the Queensland Feral Pest Initiative (\$1.9 million over 3 years) is clearly insufficient having regard to the scale of the pest and weed problem in Queensland.

Environmental programs administered by Department of Environment and Heritage Protection impact favourably on weed control programs administered by the Department of Agriculture and Fisheries and local governments

Grants under the 'Everyone's Environment' program administered by the Department of Environment and Heritage Protection (DEHP) provided some welcome support for prickly acacia control projects in the Region during 2013/14. Other than this, Southern Gulf NRM has seen no evidence that any DEHP-administered program is having either favourable or unfavourable impacts on prickly acacia control in the Southern Gulf region. DEHP seems to have limited interests in the Southern Gulf region.

Federal, state and local government weeds programs are coordinated to maximise their achievements and to have a whole of government approach.

As for most other pest management programs, prickly acacia management requires a whole of government approach along with engaged land managers and communities.

The Australian Government has made clear to NRM organisations that it wishes to focus its investment on Matters of National Environmental Significance (MNES) as defined in the *Environment Protection and Biodiversity Conservation Act 1999.* A consequence of this is that unless weed infestations are having a direct negative impact on specific MNES, the Commonwealth is not prepared to invest. Examples of MNES in the Southern Gulf relevant to prickly acacia are the Southern Gulf of Carpentaria wetlands (listed as nationally significant) or the habitat of the Julia Creek Dunnart (listed nationally as endangered and prickly acacia is identified as a threatening process).

Along with its peers elsewhere in Australia, Southern Gulf NRM plays an important role in regional coordination of Australian and Queensland Government investments in NRM to the extent that program guidelines permit. Program guidelines sometimes makes this difficult to achieve, leading to projects being developed and delivered within program-based silos, when a coordinated multiple-outcome approach mediated by the NRM organisation could achieve better outcomes.

Coordination between the States, including Queensland, and the Commonwealth in relation to natural resource management investment is weak and apparently *ad hoc*. Previously effective mechanisms, such as an intergovernmental agreement that recognised and supported the role of NRM organisations and in turn their work on matters such as weed control, have been allowed to lapse but have not been replaced with anything better.

Both Queensland and the Commonwealth Governments create coordination challenges when they administer competitive grant funding rounds, often allocating small amounts of funding from a small overall allocation. For as long as funding for NRM programs, including weed management, is scarce it makes more sense to coordinate and focus investment rather than scatter it in small parcels among multiple recipients who are not themselves necessarily collaborating.

Coordination between Queensland Departments with responsibility for environmental and resource management is sometimes achieved at the project level, but is not clearly evident

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at the program or policy level. This obviously extends to the Ministerial level, with Departments (quite correctly) giving effect to Ministerial priorities that are themselves not necessarily coordinated. The Queensland Government has eschewed the so-called mega-department concept represented by the former Department of Environment and Resource Management, but has not established visibly effective inter-agency coordination mechanisms in its place.

The largest infestations of prickly acacia in Queensland lie within the Southern Gulf and neighbouring Desert Channels NRM regions. Recognising the importance of coordination and collaboration across NRM regional boundaries, Southern Gulf NRM met with our counterpart Desert Channels Queensland and senior managers from Biosecurity Queensland during late 2016 to ensure control and management efforts are aligned and complementary and have regard to the context of each region and the role and capacity of each organisation. This is intended to be the foundation for a renewed North West Queensland focus involving the three organisations and other partners and represents the valuable regional leadership NRM bodies provides.

Queensland NRM bodies are advocating for the establishment of a Queensland Natural Resource Management Council that would have the task of preparing a State NRM strategy. Departments would be expected to set priorities in accordance with the Strategy, which would also give legislative recognition to regional NRM bodies and the coordination and engagement roles they play. This approach would make a powerful contribution to better coordinating program design and delivery and associated investment. It is an approach used in other States<sup>2</sup> and Queensland is clearly lagging behind most if not all other Australian States.

The issue of coordination with local government is addressed in the comments above about local government role and capacity. Coordination is only part of the problem; resourcing is the other part. A memorandum of understanding between Biosecurity Queensland, the Queensland local government Association and the Queensland Regional NRM Groups Collective was established in 2009 to define the roles of the participants, but appears to have fallen into disuse. There may be merit in refreshing this document in the light of the passage of the *Biosecurity Act 2014*.

### **Recommendations**

The Queensland and Australian Governments should re-establish formal coordination mechanisms in support of natural resource management, including weed control, with the objective of maximising the effect of investments, reducing gaps and overlaps, and mutually supporting regional coordination services provided by NRM organisations.

The Queensland Government should establish a State Natural Resources Management Council that would have the role of coordinating between Departments and agencies and with community and industry in the design and

<sup>&</sup>lt;sup>2</sup> see Victoria for example: <u>http://www.delwp.vic.gov.au/water/governing-water-resources/our-catchments -our-communities</u>

delivery of NRM programs for Queensland. A primary function of that Council would be the development and implementation of a Queensland NRM strategy or equivalent.

The Queensland (and Australian) Governments should formally recognise, respect and support the network of community-based NRM organisations for their important regional coordination roles in NRM generally, and weed management in particular.

### Funding for Prickly Acacia Control

The adequacy and administration of Queensland Government funding for Prickly Acacia control seems to lie outside of the terms of reference of the Inquiry, other than in relation to Biosecurity Queensland. However, other sources of Queensland Government funding play a vital role in Prickly Acacia management so are addressed here to provide important context for the Committee.

Southern Gulf NRM's contribution to prickly acacia management is almost entirely funded under the Queensland NRM (QNRM) program, administered by the Department of Natural Resources and Mines. The 2016/17 QNRM funding allocation of around \$8M statewide, amounted to a 25% reduction in investment in previous years and the program comes to an end at the end of the current financial year. As of January 2017, the intentions of the Queensland Government in relation to the amount of funding that will be available under any successor program; how – and whether – it will be made available to NRM regional bodies; and what priorities it may address have not been communicated.

Notwithstanding global pressures on the Queensland budget expenditure through this program has been comparatively small. It could (and should) be at least doubled with minimal impact on bottom line budget outcomes.

### **Recommendations**

The Queensland Government should establish a successor program for the current QNRM program to support the work of regional NRM organisations. This program should:

- Provide support for the full spectrum of natural resource management activities delivered by NRM bodies
- Be allocated to projects that are determined by regional NRM bodies, consistent with regional NRM plans subject to review and approval by the State
- Support long term (4 year) work programs to allow for certainty in regional communities
- Be allocated equitably (rather than competitively) between NRM regions
- Amount to at least \$80M over four years