## **Desert Channels Queensland**

submission to the

Queensland Parliament's Agriculture and Environment Committee inquiry into the

impacts of invasive plants (weeds) and their control in Queensland

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

Given their closeness to their constituents, and the fact that many elected representatives in local government in rural areas have, historically, either come from the landholder community, or have close ties to that community, and wish to be re-elected in subsequent years, there has long been a reluctance and inability to enforce the control of invasive plants.

It is the view of DCQ that, while the responsibilities are reasonable, enforcement by local government will not occur, regardless of additional resourcing, and would be best performed by a State agency, more removed from local politics and connections and has both the resources and the appetite to deal with regulatory matters.

Not every State agency has the capacity to deal with regulatory matters, so careful consideration should be given to which Agency has the best `demonstrated' capacity in this regard.

Furthermore, without stock movement and truck hygiene protocols in place, continued spread of Prickly Acacia will occur, potentially far from the original seed source (Gutteridge and Shelton 2005). Ingested seeds can take a week to be passed by cattle, with 41% remaining viable (Barker 1996). Over the past 20 years, we have seen the results of the status quo in Prickly Acacia control strategies: the area impacted has gone from 6 million hectares (Mackey 1996) to 22 million hectares (DSITI 2015, DCQ 2015, Pest Central 2015). Without a change to the Prickly Acacia control strategy and implementation, 95% of the highly productive Mitchell Grass Downs will be impacted by 2030 (Gutteridge and Shelton 2005).

More than 30 years ago, the National Prickle Bush Management Strategy recognised that the two main vectors of Prickly Acacia seed spread were stock and water, while Gutteridge and Shelton (2005) state: 'Cattle are the most effective agents for seed dispersal'. Despite this, there has been no strategy developed to specifically address this issue - new infestations of Prickly Acacia were found recently at Augathella and Thargomindah; given neither location has watercourse connectivity to Prickly Acacia infestations, water could not have been the vector.

Moreover, in the past 20 years of the National Prickle Bush Management Strategy we've seen an additional 16 million hectares affected by this weed of national significance across the highly productive Mitchell Grass Downs and adjacent areas. Reluctance to address the major seed spread vector (cattle) through stock movement protocols can no longer be considered a viable, reasonable or acceptable strategy by any of the stakeholders, be they Government, local government, NRM groups or producers.

Compliance with the Act, and a workable stock movement protocol, is essential for success, regardless of the control methods and strategies used.

It is the view of DCQ that shires are unable to meet these obligations with or without additional resourcing, with or without the support of BQ officers with the independence and authority to enforce action by landholders. The State Agencies should have never abdicated their responsibilities to Local Government in the first place. This was inappropriate and, over time, has proven to be inefficient and highly ineffective. We also believe that BQ doesn't have the appetite for enforcement and is not the agency to adequately address the burgeoning crisis. This issue now requires strong, long-term, carefully considered on-ground action, running concurrently with research and in partnership with all natural stakeholders.

We are currently on the cusp of social change for the benefit of the landscape. Now, more than ever before, we are seeing more landholders take their social responsibilities more seriously. Prickly Acacia infested properties are being discounted and are more difficult to sell, and this is translating into a decrease in land values; stock off these areas is also being discounted (DCQ 2016). In DCQ's experience, important factors in landholder participation (not necessarily in this order) are financial impacts, peer group pressure, demonstrated successful strategies and techniques, desire to be good stewards of the land.

There remain some individuals within Council and in communities that actually believe that Prickly Acacia trees provide great fodder (seed pods) in times of drought. This is not based on science or economics. Not only do the trees shut down in drought time and not produce seeds, the pasture lost to Prickly Acacia infestations far out weight any gain from Prickly Acacia. Gutteridge and Shelton (2005) state that a 25% canopy cover of Prickly Acacia reduces pasture by 50%. This translates into annual production losses in the order of \$24 million (DCQ 2016).

While local government is very good at aligning with other local governments, weed and pest management matters are the responsibility of all stakeholders (community, landholders, NRM groups, industry, Government, local government) and there needs to be a greater emphasis on alignment of strategies and planning activities. Responsibilities for local government in this space have been determined by the State Government, so it's only fair that leadership in this space should be demonstrated by the State Government as well. While NRM groups are still the new

kids on the block, in our short lifetime we have demonstrated significant achievements and solutions in tackling some long term problems that both local government and State Agencies have not achieved.

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

Prickly Acacia control on Crown land can be problematic, depending on where Crown land is seen in the general order of things. In some of the western shires the work is carried out by local shires, and there is no personal connection or conflict of interest with the landholder. And sometimes there is conflict and in these situations neither council nor the landholder adequately address the problem. However, this work has to compete for funds with other, usually higher, priorities of councils. Small shire, particularly, can be challenged by these costs.

There is an entire section of the Act that 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'.

This is an impossible task for Local Governments.

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

The technical highlights from DAF over the last few years indicates BQ is making good progress with different bio controls and trials in a number of species, but without a breakthrough for Prickly Acacia. However, assessing whether this is adequately funded is difficult without a peer-reviewed wish list, or similar, from researchers in the field... there may be a lot of potential trials that could occur but for the lack of funding.

That said, biological control should not be the only form of research funded. There are a number of industry and community groups also undertaking trials in this space and are achieving positive and timely results because they are not hampered by bureaucratic constraints. DCQ is a prime example of this, obtaining a misting permit in one year when Biosecurity Queensland couldn't manage to get one in 5 years. Through its own research and development, DCQ has delivered, over the last three years, a level of innovation and success (DCQ 2016) never before seen in the control of Prickly Acacia (more details in Conclusion below). This has given heart to landholders despairing at their inability to stem the tide of Prickly Acacia spread (DCQ 2016).

If we are to make a difference for the next generation, we need to do it now, in our lifetime not theirs.

It's also bears noting that research alone, while important, doesn't achieve on ground results. Research and on-ground activities need to go hand in hand. While we sit back and wait for research to deliver that silver bullet, we could have another 10 or 20 years of Prickly Acacia spread, on top of that of the past 20 years.

DCQ's research has been developed into on-ground action, delivering landscape scale change on an industrial scale. Through innovation, DCQ has taken a cottage industry approach to treating Prickly Acacia, and turned it into industrial scale eradication.

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

No comment.

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

As alluded to in statement 5 above, successful weed control is contingent on the engagement of all stakeholders and coordination across all bodies. Therefore, the implication that NRM groups are not a significant player in this sphere is indeed perplexing and frustrating. In the Queensland section of the Lake Eyre Basin, DCQ has achieved more on-ground outcomes than all levels of government combined, and more importantly, developed model for eradication that has proved viable, cost-effective, and embraced by landholders.

Despite years of effort by DCQ, it was only in late 2016 that there emerged the beginnings of coordination between Biosecurity Queensland, Desert Channels Queensland and South Gulf NRM. Coordination between Transport and Main Roads has been strong and very effective for a number of years, as has DCQ's relationships with individual local governments although in most cases stronger at the operational rather than management level.

While there are conflict of interest and personal connection issues with local governments meeting weed control responsibilities, Federal and State government initiatives are hampered by short-term funding cycles and can have different priorities. They are also subject to 'pet project' implications, gaining or losing funding based on politics.

Successful weed control is based on a long-term strategy that requires long-term, sustainable funding. Short-term funding cycles run the very real risk of placing previous investments in serious jeopardy.

Within governments there is potential for conflicting views with one department promoting an exotic plant as fodder, with another department warning of its potential as a future weed.

Another example of this is that Biosecurity Queensland promotes mechanical control as an effective treatment for Prickly Acacia while from the Department of Natural Resources and Mines perspective, the soil should not be disturbed.

## Conclusion

As this is an enquiry into weed control in Queensland, using Prickly Acacia as an indicative case study, the terms of reference are perplexing to say the least, and an interesting insight into Government thinking.

More than 90% of the Prickly Acacia in Queensland are in the DCQ and Southern Gulf regions, and these two regional NRM groups (Desert Channels Queensland and Southern Gulf NRM) undertake the vast majority of control activity and have, arguably been more successful than any other entity to date in developing the techniques and strategies to prevail against this pest plant. Therefore, DCQ finds it staggering that there is no mention of the vital role that regional bodies play in weed control. This is an oversight that must be addressed if the investments made to date by all levels of government are to be built on, rather than written off, or worse, followed by more good money to continue to do the same thing and hope for a different result (e.g. the 20 year tripling of Prickly Acacia infestations under the current strategy).

Given the twists, turns, obstacles and, dare one suggest, roadblocks of DCQ's journey, one could be forgiven for thinking there are some in Government not ready for the solution for whatever reason. Personalities, pride and pet projects should not enter into the discussion... we are all working hard, within the confines or freedoms of our individual circumstances, to achieve production and environmental outcomes through the eradication of Prickly Acacia. Successes, from whatever source, should be celebrated, embraced and supported at all levels of government and by all stakeholders.

Despite the significant, verifiable results achieved by DCQ's Prickly Acacia eradication program (groundcover up from 10% to 40%; grass biomass up from 100 kg/ha to 1,500 kg/ha; grass species up from 1 to 6; 92% reduction in costs; 99.96% kill rate), support from Government has been disappointingly slow to translate into funding or recognition of achievements.

The fact that governments (State and local) have not shown that much interest in the DCQ program, appears to indicate that they don't have a clear understanding of: a) the magnitude of the Prickly Acacia problem; b) the uniqueness and effectiveness of the DCQ Prickly Acacia Weed Eradication Program.

Enforcement isn't the answer to controlling declared plants, which is fortunate considering neither local government nor Biosecurity Queensland appear willing to impose compliance. DCQ believes an incentive based approach or an industry certified market incentive would be far more effective than enforcement. This has been the experience of DCQ for a number of years now, and as such we are in the process of developing a web portal where properties can track and input information to update their pathway to eradication through the following five stages:

Stage 1 - no information / no weed control activity

Stage 2 - localised weed control activities (this would encompass previous DCQ, SGNRM and War on Western Weeds (WoWW) weed control activities;

Stage 3 - integrated landscape scale, property based weed control (ideally the minimum stage for landholders);

Stage 4 - implemented property based best management practice for WONS weeds, particularly Prickly Acacia; and

Stage 5 - certified weed free status.

A collaborative approach from all natural partners to develop and agree on best practice management approaches that landholders, community, local governments, industry, NRM groups etc all adopted would also be a very useful step forward.

Adoption of new frameworks and innovative thinking by all parties, regardless of who developed the concept, would also be advantageous and go a long way towards building relationships and having a better understanding of each partner's respective responsibilities, challenges and successes.

There are some in Government who need to accept that innovative thinking and good concepts can come from sources apart from Government. There can sometimes appear to be a reluctance to accept new data, or different concepts because it hasn't been undertaken by Government. An example of this is the fact that DCQ has spent the past six years stating, based on its own data, that the infestation of Prickly Acacia is twice the size of the six million hectares Government kept referring to. DCQ is ground truthing the area all the time, but it wasn't until government did the mapping that some of the state agencies realised the size of the infestation had tripled!

Recognition of others' data and learnings could save Government a lot of money and time.

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