

Queensland Murray-Darling Committee Inc.'s Submission on the Nature Conservation (Protected Plants) and Other Legislation Amendment Bill 2013

4 July 2013

Submission to:

Agriculture, Resources and Environment Committee Parliament House George Street BRISBANE QLD 4000 Fax: 07 3406 7070

Email: arec@parliament.qld.gov.au

Submitting organisation:

Chief Executive Officer Queensland Murray-Darling Committee Inc. PO Box 6243

Toowoomba QLD 4350 Phone: 07 4637 6200 Fax: 07 4632 8062

Email: geoffp@qmdc.org.au

This submission is presented by the Chief Executive Officer, Geoff Penton, on behalf of the Queensland Murray-Darling Committee Inc. (QMDC). QMDC is a regional natural resource management (NRM) group that supports communities in the Queensland Murray-Darling Basin (QMDB) to sustainably manage their natural resources.

1.0 Background

QMDC has made submissions and deputations to both the Australian and Queensland Governments seeking improvement to legislation, policies, and planning in order to conserve, protect and manage vegetation based on regional as well as State and national aspirations and priorities.

It is QMDC's experience that both state and national strategies and policies lack specific regional information, expertise or a process of regional management which could better inform vegetation management including ecosystem vulnerability. Past and present threats to bioregions and their landscapes require innovative management options for conservation and sustainable use of vegetation. QMDC therefore offers the following specific comments in relation to the QMDB region and the aspirations and targets described in this region's NRM Plan to help fill the knowledge gap.





2.0 Connectivity between ecosystems and across landscapes that may contribute to better vegetation management

- 2.1 QMDC supports strategies and actions which maintain or improve priority landscape scale regional ecosystem connectivity so that ecological processes and ecosystem linkages are increased in extent and abundance at priority catchment scales.
- 2.2 Fragmentation has been identified in a number of studies as a critical factor in biodiversity decline within the Brigalow Belt. Regional Vegetation Management Plans must therefore be implemented to protect the Brigalow Belt within the QMDB as part of the identified priority areas. The long term conservation of biodiversity and the wellbeing of the region's communities depend upon vegetation management plans and strategies that recognise the importance of protecting the Brigalow Belt as a natural asset.

QMDC argues that overall proponents for development, for example, through the EIS and EA process do not demonstrate scientific understanding of the importance of remnant vegetation and preventing further fragmentation or destruction of ecosystem corridors in the QMDB.

Destroying habitat before equivalent habitat has been restored increases the risk of species extinction. Additionally, species need time to colonise a restored habitat, and too frequent a turnover of habitat may increase the risk of species extinction.

2.3 QMDC believes that the *Terrestrial (and aquatic) ecological environmental plans* (EEPs) produced by proponents of development must therefore demonstrate an understanding that modification or destruction of ecological processes are, in practice, often irreversible and an ecosystem will not necessarily rehabilitate to its prior function.

The decline in populations of 'at risk' flora and fauna species must be prevented at a catchment and regional scale. It should not be assumed (a common practice by proponents) that fauna, if found where vegetation is to be cleared, can be removed to another ecosystem, and that birds will simply fly away to somewhere else if disturbed by lighting, noise or dust.

- 2.4 QMDC submits that decision makers/regulators must ensure that all proposed developments respond adequately through EEPs or other mechanisms to the complexities in the ways in which threats affect ecological processes and regional ecosystems and vegetation. For example proponents of development need to address the following issues:
 - Impacts may occur far from the location of the initial threat or disturbance (particular hundreds of kilometres upstream of Ramsar sites).
 - Threats that affect one species may have cascading effects on other species.

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- Environmental responses to a threat are not necessarily directly proportional to the level of threat (ie a linear response). Non-linear responses mean there are critical thresholds where small increments of change can result in dramatic shifts in the state of the system.
- There is often a time delay, from days to decades, between alteration to an ecological process and its full effects on biodiversity.
- Threats may have a combined impact greater than their independent effects.
- Complexities in interrelationships among species and chance environmental variation may mean that often there will be uncertainty about the effects of a particular threat on processes.
- 2.5 QMDC recognizes the value of the terrestrial ecology studies that may have already been conducted in a proposed development area. QMDC submits however that further studies are required to ascertain which processes have the greatest influence in a project development area, their role, the spatial extent over which they operate, the kinds of threats that are limiting their function. This will assist the EEPs and other planning mechanisms to direct their management strategies where they will have the greatest impact and therefore compliment Regional Vegetation Management Plans.
- 2.6 A fundamental tenet of regional ecosystems is recognition of the interaction between pattern and process. The identification and management of locations directly associated with a specific process is a practical way for the projects to protect regional ecological processes.
- 2.7 The *EPBC Act* species listing categories would suggest that a higher level of protection and or a higher offset requirement should be in place and supported by the *Nature Conservation (Protected Plants) and Other Legislation Amendment Bill* 2013 (the Bill).

Protection mechanisms in the QMDB region within the Bill could include:

- Protecting floodplains adjacent to river channels to maintain lateral hydrological connectivity and the ecological benefits of periodic flooding.
- Maintaining continuous vegetation along elevational gradients to enhance opportunities for altitudinal migration or range shifts in a changing climate.
- Protecting key wetlands along the migration paths of waterbirds as critical stops for refuelling.
- Maintaining riparian vegetation to promote interactions between terrestrial and freshwater systems.
- Protecting "keystone" species and communities within small ephemeral streams and wetlands to aid the re-establishment of ecological process in restoration.

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- 2.8 Particular areas will become more important as regional climate shifts limit the extent for species existence. Identification of these key areas is likely to include mid-latitudes where tropical meets sub-tropical and sub-tropical meets temperate. QMDC asserts that the identification of these areas should inform priority investment with the aim of increasing regional knowledge and advancing conservation strategies that will aid the protection or restoration of ecosystems that are both regionally and nationally important. Semi evergreen vine thickets (EPBC listed community) are a very vulnerable community. These thickets are historical remnants of rain forests that have been resilient, surviving the continent drying up throughout the last several thousand years. If climate change trends accelerate it could put these vines at increased risk.
- 2.9 Protected Plants Assessment Guidelines (new section 174B)

QMDC does believe the ability, under new section 174B, for the chief executive to approve or make assessment guidelines about how applications for an authority are to be considered will provide for consistency and transparency in decision-making processes.

2.10 Amendments to section 95 (Payment of conservation value)

If the intention is that payment of a conservation value will not be required in most circumstances according to the Bill's explanatory notes what is the point of this clause. Amendments to section 95 raise the potential issue of whether the Bill has sufficient regard to conservation values. QMDC argues it does not. Money cannot restore or replace an ecosystem that is beyond the point of return.

3.0 Recommendations

That the Bill must be enforced so that:

- the operations of a development will not be permitted to impact on highconservation areas
- land is allocated by a development for habitat connectivity to allow species to move as climate zones change
- the construction of infrastructure not be approved until a detailed site investigation is carried out and an official map modification is approved as per the Queensland Herbarium process giving accurate details of the regional ecosystem and its biodiversity and landscape types that could contribute to the establishment of a strategic corridor.

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- a development identifies the processes that are most important in sustaining the regional ecosystems or species in their development areas
- a development establishes a long term monitoring programme to measure environmental change and generate information on:
- i. The direction and magnitude of change (taking into account natural fluctuation)
- ii. The rate of change
- iii. The pattern of the change response
- the New England Tableland be considered an important ecosystem to be protected in accordance with the Bill.
- semi evergreen vine thickets and their habitats be considered an important ecosystem to be protected in accordance with the Bill.
- research into weed and pest spread in QMDB be considered as important research to ascertain the impacts weed and pest spread is having on vulnerable ecosystems in the region.

4.0 In summary

It is essential that the *Nature Conservation (Protected Plants)* and *Other Legislation Amendment Bill 2013* sits within a legislative framework that clearly articulates the cumulative upper and lower threshold limits for changes to natural resource asset condition and function in defined zones and timeframes to protect the integrity, health and value of the asset, and productive capacity, of those zones. Exceeding such limits should not be permitted under any circumstance, and it should be an offence to do so.