



Research Director
Agriculture and Environment Committee
Parliament House
BRISBANE QLD 4000

April 24th, 2016

*Re: Vegetation Management (Reinstatement) and Other Legislation Amendment Bill
Comments due on Monday April 25th, 2016*

Dear Committee:

We are pleased to have this opportunity to provide comment on the above mentioned bill and thank the Queensland government for tabling it. As Founding and continuing President of this NGO, I am authorised to pen this submission.

As an organisation dedicated to the conservation of amphibians, we are of course very concerned about the continued loss of habitat tree clearing manifests. However, issues even greater than the survival of one particular taxon emerge when the true impacts of vegetation removal are considered. It is those that I would like to expand upon.

Why is tree clearing so contentious?

My impression of some farmers is that they view their plot of earth as entirely under their control and consider anything that takes away from the total productivity of their plot - or what they define as 'productivity' - as unwanted. For example, clearing a large tract of trees provides more room for cattle to graze or a crop to be planted - so this is desired and wantonly pursued under the previous government's legislation. However, each parcel of land that is used for agriculture needs to be viewed in a far more holistic manner - at the regional landscape level - where what it contributes includes not only a food product but a contribution to our atmosphere, biodiversity support, and climate systems. Completely clearing vegetation on a given parcel of land has massive consequences but those have been completely ignored by the LNP's reckless 'Vegetation [Mis]management Act'. This VMR bill could go further (particularly if it closed more loopholes), but it **MUST** be supported and passed for the future liveability of Queensland.

I invite the committee to view some of the case studies (videos and webinars) from farmers who have transitioned to a farming practice which increases tree cover on their land, supports local biodiversity, restores the soil, and increases their profit margin. The two links below will take you to a soil health webinar and a page of videos from farmers. It is precisely this information which should be presented to ALL farmers in Queensland, especially those in Barrier Reef catchments. (In fact, all reef catchments should be farmed organically and the government should be openly supporting the transition to organic instead of trying to entice more GMO's down the public's throat!)

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farmer case studies:

<http://www.soilsforlife.org.au/Default.aspx?PageID=7948655&A=SearchResult&SearchID=69933828&ObjectID=7948655&ObjectType=1>

webinar on soil health with farmer case studies:

http://www.soilsforlife.org.au/_blog/SoilsforLife-Blog/post/spreading-the-word-on-soil-health/

A swinging pendulum: drought or soil erosion

This past year, 75% of Queensland was in declared drought.... and I'm sure the other 25% was actually in drought but not declared for financial reasons or at least very close to the official definition of drought. The vegetation clearing that has taken place since the LNP legislation went into effect has exacerbated drought and there was a financial downside to this as well - the government had to support the farmers when they had no income. How much of tax-payer money would the government like to budget for drought support in the future?

Vegetation removal and modification by burning also contributes to drought. Please view the most interesting TED talk below by Allan Savory. He explains the process by which vegetation removal (including burning) creates desertification and how to reverse this:

https://www.ted.com/talks/allan_savory_how_to_green_the_world_s_deserts_and_reverse_climate_change?language=en

another reference on desertification:

<http://desertificationb.tripod.com/id3.html>

Let's look at the flip side of the coin when the climate occasionally drifts back to La Nina conditions. Without sufficient vegetation to hold soils in place, the amount of siltation running off into the reef lagoon will be unchecked when the next flooding rains occur. Additionally, not only does this heavy runoff contain fertilisers (which the government acknowledges), it is loaded with a massive array of nasty chemicals (which is too often downplayed by the government). So many farmer's insist they can't live without these chemicals but the organic farmers do just fine, so is their perception of chemicals essential or delusional? (The next time there is a fish die-off during La Nina, the government needs to look at the chemicals in that run-off and not just dismiss the whole event as "too much fresh water".)

Salinity

More evidence of the folly of vegetation removal falls under the destruction of soils known as salinity. This quote is from the Queensland government's own publication: Science Notes - Land Series L57 - under the heading Managing to Avoid Salinity on page 3:

"Two management practices that increase the risk of the development of salinity are land clearing and irrigation."

<https://publications.qld.gov.au/storage/f/2015-01-16T06%3A16%3A50.768Z/sn-l57-salinity-hazard-mapping-in-queensland.pdf>

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Does the government still employ extension officers who are able to visit farmers (especially those who apply for clearing permits) to educate them on the folly of vegetation removal? What support does the government propose to not only discourage clearing of vegetation but to reverse the trend and demonstrate how increasing vegetation on agricultural land is important for future livability?

Trees = oxygen
insufficient trees = death

An issue which hardly ever makes the news or polite conversation over dinner is the dropping levels of oxygen in earth's atmosphere. More and more humans burning more and more fossil fuels and less and less trees producing oxygen is actually leading to a crisis we will not be able to pull ourselves out of because we recognise it too late. In the past, atmospheric oxygen levels were up around 30% (particularly at the time of the dinosaurs). According to NASA, here is the breakdown of major gases in the atmosphere:

78% nitrogen (N₂)
21% oxygen (O₂)
0.035% carbon dioxide (CO₂)
1 to 4% water vapor (H₂O)
300 Dobson Units ozone (O₃)
0.002% methane (CH₄)
0.9% argon (Ar)
trace amounts of: helium (He), krypton (Kr) and hydrogen (H₂)

from the link:

<http://quest.nasa.gov/projects/astrobiology/astroventure/challenge/Articles/planetatmoscomp.pdf>

As the world rages on in its quest to remove forests and replace them with anything else (agriculture, roads, housing, industry), we have reached a point where we are using up oxygen MUCH faster than it is being produced by the world's vegetation. Everybody is being distracted by the discussion about carbon dioxide in the atmosphere - and a few people are smart enough to be noticing the increasing levels of methane off-gassing under the oceans and leaking out of fracking wells - but how often is it pointed out to you that if oxygen levels fall much further, we will all die out???? It is very likely that current oxygen levels are already contributing to the worsening health of populations and costing governments massively. See the quote below:

*"In humans, failure of oxygen energy metabolism is the single most important risk factor for chronic diseases including cancer and death. *Oxygen deficiency* is currently set at 19.5 percent in enclosed spaces for health and safety [6], below that, fainting and death may result."*

The same paper goes on to mention some of the reasons why vegetation is not keeping up with the increasing human factor:

"This includes wide-spread deforestation and replacement of woody vegetation with pastures and crops in the tropics, an increase in fire activity and tree mortality and increasing the abundance of deciduous tree species and herbaceous plants in the boreal (northern) regions."

Please do your children and grandchildren a favour and read the two papers below.

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http://www.i-sis.org.uk/O2_Diving_Towards_Danger_Point.php
<http://www.i-sis.org.uk/O2DroppingFasterThanCO2Rising.php>

It is critical that vegetation (trees) - no matter where it is located - must be preserved. If farmers want to clear it, then they must be educated as to why that is a genocidal act! We need to be serious about increasing vegetation everywhere that we can including rooftop gardens, all highways and road verges planted up (where it doesn't block visibility), along all watercourses. Along median strips on highways is particularly useful since it eliminates glare from headlights as well as absorbing the carbon coming straight out of all those cars.

Further, it would be useful to actually create a standard guideline that either 5% (or even better 10%) of all agricultural holdings must be forested no matter what the product is that is produced on that holding. This is important for many reasons including the reduction of drought, the reduction of erosion and runoff, the provision of habitat for biodiversity but most importantly, and the reduction of salinity -- but because most importantly, **NO ONE can survive without more oxygen!**

Specific comments on the legislation

- 1) We support the retrospectivity of the bill to eliminate rush clearing.
- 2) We support the return of investigations and prosecutions for unpermitted and unwarranted clearing.
- 3) Riparian zones must be protected and steps to eliminate (not just reduce) runoff in reef catchments should be taken.
- 4) We support protection of what is termed High Value Regrowth but also stress that all trees contribute to atmospheric oxygen levels and all trees need to be retained and increased for that reason.
- 5) The definition of High Value Agriculture needs to be rethought. Most of what is being produced is often more sugar cane, other intensive crops requiring chemicals and/or GMO's. Such outputs are NOT high value. Sugar is one of the scourges in the modern diet and it initiates and promotes cancer growth. We do not need to be producing any more sugar (keep that in mind as you think about the development of northern Australia!). Additionally, crops grown with chemicals are also cancer promoters and lead to a myriad of other health concerns and eventually to the loss of productive citizens who are plagued for life with chronic conditions. The loss of productive individuals from the workforce because of toxic agricultural products costs the government (read tax payers) three times: loss of taxes, increased health services and increased support payments. As far as we're concerned, NO agriculture should be considered "high value" unless it is organic/biodynamic ... and even then, such farming style would easily be successful with the inclusion of trees/vegetation.

If you require any further information, please feel free to contact us. Thank you for your heartfelt consideration.

Sincerely,
[signature in separate file]

Deborah Pergolotti
Centenary Medalist
Cassowary Award winner