27th April 2016

Mundubbera Qld. 4626

SUBMISSION TO THE VEGETATION MANAGEMENT INQUIRY

- The figures that have recently been quoted from the Queensland State Land and Tree Survey in the media, state that the rate of vegetation clearing in Queensland is unsustainable. Yet the SLATS figures show that tree cover in the state has increased considerably, in spite of clearing. About onethird of this clearing was for drought feeding of livestock.
- As far as carbon accounting goes, it appears that only one side of the ledger is being looked at. Under the Kyoto Protocol, to which Australia is a signatory, as soon as a tree is felled it is counted as an emission, even if the tree is to be made into long-life timber products.
- There appears to be no accounting for carbon absorbed by new growth which is significantly more than the emissions from clearing.
- Given that climate scientists have been telling us for a long time that we can look forward to hotter and drier conditions in the future, why do we want more high water use plants (trees) in the landscape?
- Properly managed perennial grasses can sequester more than ten times the amount of carbon per hectare that trees can. On this basis, growing more trees for carbon will not be nearly as effective and at the same time, will limit production of pastures suitable for grazing animals.
- Contrary to popular opinion, much of the tree cover in Australia is very different now to what it was
 pre white settlement. In his book "The Biggest Estate on Earth", Professor Bill Gammage (ANU
 Humanities Centre) conclusively shows that prior to white settlement, tree cover was much less
 dense than it is now and the understorey (lower trees & bushes) was largely non-existent, except
 along ridge lines. This is how the landscape was shaped by burning in a closely controlled and
 predetermined way by the Aboriginal population.
- Records from the first decades of white settlement show that significant tree-thickening occurred once the burning regime changed and exotic grazing animals like sheep and cattle, were introduced. Wattles, being hardy plants, dominated the new understorey. Most of these are shallow-rooted, which leads to overdrying of the soil surface limiting grass growth. Being legumes, wattles fix nitrogen from the atmosphere in the soil. Because of shading and drying of the topsoil, not enough grass grows to use up the nitrogen. This leaves free nitrogen which bonds easily with calcium, to form calcium nitrate, which is readily leached by rainfall from the soil, leading to depletion of calcium. Calcium is a critical element for the uptake of other nutrients by plants and when in low supply in the soil, the plant roots continue to exude hydrogen ions, without being able to exchange these for other minerals. This leads to a build-up of hydrogen ions in the soil making for a decrease in pH (potential of hydrogen), resulting in the soil becoming increasingly acidic. Most grass and herbage will not grow happily in acid soils, so there is considerably less groundcover, and erosion of the soil is the inevitable result.
- Trying to preserve the current tree cover, which is not what was here before white settlement, and
 prevent responsible management of vegetation will only lead to further degradation of the
 landscape.
- As a past President of the Central Burnett Land Management Advisory Group and of the Burnett Catchment Care Association, I have seen the results of both poor and improved landscape management.
- Studies conducted by both organisations have given clear evidence that when grass cover is increased, far less soil is lost to erosion. Turbidity levels in watercourses decrease markedly also, preserving riparian health and water quality.

- The proposed legislation changes only apply to agriculture, not urban or industrial development nor mining. With greater than 70% of Queensland's wealth being generated in rural and regional areas, this is clearly biased and works against the best interests of the state.
- The principle of presumption of innocence until proven guilty beyond reasonable doubt, is extended to even the worst criminals. Under the proposed legislation, farmers have to prove their innocence when a case is brought against them by the State of Queensland. Individual farmers do not have the financial means to fight the State for justice.
- This extra regulation together with "trigger mapping" contained in the Nature Conservation Act which even applies to Category X, adds more bureaucracy and with constantly moving goal posts increases the financial risk of farm planning and development. Nobody wants to be left with a white elephant.

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