

A submission on the LLS Act (Native Vegetation provisions) Statutory Review

I am a retired ecologist, previously employed by the NSW Government, mostly doing work related to the conservation, management and restoration of native vegetation in rural areas. I now manage a rural property with a significant area conserved under a Federal stewardship scheme. In this submission I suggest some simple changes to the LLS Act and Code that may improve the conservation and management of native vegetation

Firstly, I should acknowledge having such legislation is vital. In the past I have reasoned that legislation to prevent clearing of native vegetation was necessary because in many cases individuals financially benefit from increased production from clearing in the short-term, while society as a whole suffers from the long-term consequences of clearing (Nadolny 1991). In particular, impacts of clearing such as loss of wildlife, emissions of greenhouse gases and salinity are not confined to the parcel of land being cleared. Today, both declines in wildlife (e.g. koalas, woodland birds) and climate change are becoming even more pronounced.

The object of the legislation, *to ensure proper management of natural resources in the social, economic and environmental interests of the State, consistent with principles of ecologically sustainable development*, is very all encompassing and admirable. However, there are two interrelated problems: (1) Our sharp decline of biodiversity in rural areas means that “proper management” does not suffice, and (2) Some provisions in the legislation are inconsistent with achieving ecologically sustainable development, e.g. the Equity provision in the Code (see below).

Implications of the Biodiversity decline: Biodiversity in rural NSW is declining sharply, with the decline of many threatened wildlife species largely or partly driven by rural land clearing. In addition, biodiversity is facing compounding threats related to climate change, with the 2019 drought and the recent floods prominent examples. It is not a normal situation where “proper management” is sufficient. It may be worthwhile to re-instate the objects of *preventing broadscale clearing* and *protecting native vegetation of high conservation value*, which have been lost with the repeal of the NV Act. It is certainly not the time to dispense with the task of “preventing broadscale clearing”, and the current legislation needs to pay more direct attention to protecting native vegetation of high conservation value. I also suggest an object of *promoting the value of native vegetation*.

Suggested object to promote the value of native vegetation

There is a lack of public understanding of the reasons why native vegetation is being protected. The high cost of inappropriate or excessive clearing has never been adequately explained to landholders. There is a lack of appreciation of the environmental harm caused by broadscale clearing and, for example, the scale of losses of native birds, mammals and reptiles arising as a result of clearing (see Cogger *et al.* 2003). The current legislation does nothing to address this issue. Language used in the legislation (e.g. the term “Invasive Native Species”) sends mixed messages and the package lacks an educational component. This is important because the cause of much clearing is the failure of agricultural developers to appreciate the value of native vegetation and their over-estimation of productivity

benefits arising from clearing (see Perry 2016). There is a role for specialist extension officers with expertise in management of native pastures and rangelands.

Broad-scale clearing, particularly of open grassy areas, woodlands and isolated paddock trees, continues. The *Discussion Paper* states that 21,364 ha have been cleared under the Code in the 2017-20 period, but there was 50,245 ha of unallocated clearing in 2020 alone, with the proportion of illegal clearing uncertain. The legislation, with an emphasis on “trust” that landholders will act responsibly, is unlikely to reduce illegal clearing. It needs to be acknowledged that a disproportionate amount of clearing is undertaken by very few individuals who are either very large landholders who are expanding their operations or are specialist developers who buy, then develop and sell blocks of land. Virgin land that has been cleared is most productive in the first few years after clearing, with declining production more pronounced on poorer quality land, so people buying poor quality cleared land with waning productivity are often short-changed. There also needs to be a more effective means of stopping clearing in real time, such as in Queensland where bulldozers can be impounded if landholders refuse a direct request to stop clearing from a compliance officer.

There is no robust mechanism to achieve no-net-loss at a bioregional or state scale. For example, while clearing under the Code has been in the order of 20,000 ha more than half a million ha have been authorised to be cleared. Investment in stewardships, while beneficial, is unlikely to compensate for regional losses in native vegetation if landholders decide to clear. There appears to be too much reliance on the requirement to offset acting as a break for clearing. While I agree that offsetting needs to be included as part of the policy mix, the use of “offsets” or “Set Aside Areas” cannot result in no net loss. Off-setting that is not like-for-like, as may occur in Set Aside Areas, may be of little conservation benefit. New habitat created through revegetation may take decades, if not hundreds of years, to attain the condition of the vegetation cleared. Habitat features such as hollow-bearing trees are essentially irreplaceable. I recommend some form of the maintain-or-improve test should be reinstated.

Inconsistency with the principle of ecologically sustainable development: As stated above, the legislation is not consistent with the principle of ecologically sustainable development as defined in the Environmental Protection Administration Act. In particular, the underlying principles – the precautionary principle, the polluter pays and inter-generational equity are ignored. Prominent examples include:

- Greenhouse gas pollution is not explicitly considered as an impact of clearing even though emissions can be very high, e.g. clearing and burning a single hectare of dense sclerophyll forest on the Tablelands can result in emissions of 300-400 tons of carbon dioxide, plus other greenhouse gas pollutants in smoke.
- Evidence is accumulating that long-term, large-scale effects of deforestation could also affect climate directly resulting in declines in regional rainfall. Such an effect has been demonstrated to have occurred in the West Australian wheat-belt, and is predicted to occur elsewhere in Australia (McAlpine *et al.* 2009). The likelihood and consequences of this happening need to be evaluated.
- The wisdom of further expansion of agriculture into marginal areas needs to be evaluated. In particular, aspects of the legislation (e.g. Equity and INS provisions in the Code) will help to expand

agriculture in the Western Division. Is this wise, either economically or ecologically, when this region is predicted to become hotter and drier as a result of climate change? The impact of the 2019 drought says it all.

- Biodiversity in landscapes that are over-cleared or over-developed for agriculture are subject to greater risk of further losses, for example, as a result of eucalypt dieback or local extinction of isolated populations of fauna. This concept of landscape thresholds (see McIntyre et al. 1999), which had been previously prominent in regional vegetation planning in NSW appears to have been abandoned. From a landscape perspective the land use change from grazing based on native pasture to broad-acre cropping is a major development and should be treated as a development proposal.

All of these risks need proper consideration. While I agree with the merits of including “Social” considerations in the principle of ecologically sustainable development, a methodology for considering them has not been expounded. Net social impacts from inappropriate clearing are likely to be negative in the long term. Social impacts should include impacts of clearing on neighbours (e.g. causing decline in wildlife) and we need to think about impacts on future generations.

Specific concerns with the Allowances and Code of Practice

As previously mentioned, the implications of the allowances and some provisions of the Code, are inconsistent with the principle of ecologically sustainable development. They include high risk activities, such as broadscale clearing or destruction of threatened entities. The allowable clearing for rural infrastructure to 30m for Central Division and 40m for Western Division is excessive and unjustified. In some landscapes a large proportion of trees would become unprotected (e.g. based on my observations possibly half of the Brigalow in NSW grows within 30 m of fence lines). Modelling is required to assess the impact of this allowance.

In general, too much latitude, which could result in environmental harm, is permitted under the Code. For example, in some circumstances thinning could be regarded as a positive management activity, to facilitate faster growth of trees, but the felling of trees up to 80 cm DBHOB cannot be justified. The size threshold for protection of trees (80 cm DBHOB), which appears in several provisions of the Code, was intended as a protection for hollow-bearing trees, but is set too high and not scientifically justified, except perhaps for the coastal zone where trees grow relatively quickly. In the Central zone trees of 40-50 cm DBH often have hollows (Raynor et al. 2013) and in the Western Division it is rare for any trees to grow to that size. Allowing clearing of endangered ecological communities and species will lead to further endangerment, and the legislation would further threaten EECs in areas under intense clearing pressure, such as Brigalow. Also, Koala food trees are not protected (except in areas declared under SEPP 44). The provisions related to Invasive Native Species (INS) are based on a viewpoint that ecosystem function is deleteriously affected by encroachment of shrubs, but this viewpoint is not entirely supported by scientific evidence. A recent study suggests that most ecosystem functions, including pastoral value, are enhanced by at least some shrub cover, while efforts to improve productivity by removal of shrubs have been largely unsuccessful (Eldridge and Soliveres 2014). The list of INS species also includes trees, such as Poplar Box, which can be cleared if trees are less than 30 cm

DBHOB. A Poplar Box of that size in the Western Division could be over a hundred years old. Up to 90% of invasive species can be cleared over thousands of hectares simply by notification. With certification the INS provision enables backdoor approval for cropping in Western Division. Furthermore, the INS provision could enable rent-seeking for Carbon Credits: seeking approval to clear INS and then seeking compensation to forgo that approval. Some provisions allow clearing detrimental to both productivity and biodiversity, e.g. the removal of scattered paddock trees is permitted in grazing country, whereas research shows that pasture growth is greater under scattered paddock trees than in the open (Barnes et al. 2011), a piece of information that has not been properly extended to graziers.

The Equity provision allows major broad-scale clearing, allowing expansion of cropping in marginal areas, as well as clearing for grazing. For example, cropping or clearing for grazing on a very large property with a lot of native vegetation would be permitted to expand by 625 ha, with further expansion permitted after 3 years, if set aside areas were available, even if the development involved clearing of EECs. Set asides may not be proportionate e.g. they may be on marginal land containing vegetation that is not of conservation concern while threatened ecological communities are cleared. The notion of the “proportion of the property with native vegetation” that is embedded in the equity provision is not related to threshold theory because the proportion vegetated should be considered at a landscape rather than a property scale. While equity for the landholders, who have been caught with land that they were intending to clear 25 years ago when clearing regulations came in, is a valid issue, allowing broad-scale clearing is not the solution. The beneficiaries of the provision will be wealthy people who can afford to buy and clear vegetated land or speculators who have recently bought such land in the expectation that the laws would change and allow clearing. I recommend that this provision of the Code be discarded.

The Farm Plan provision is based on a false notion that remnant vegetation, which may take over a hundred years to replace, can simply be “redistributed” without loss of biodiversity values. This provision should be discarded.

Set Aside Areas: A lot of work has gone into the development of a fair and equitable means of calculating the offsetting requirements as specified under the Biodiversity Conservation Act. Considerations include adoption of a like-for-like principle, consideration of determining how to assess gains in biodiversity values and determination of weightings for different communities. In contrast, the requirements for Set Aside Areas under the LLS Act appear to be poorly thought through. In general, the size of Set Aside Areas is much too small to either compensate for the loss of biodiversity or act as a financial disincentive, especially given that improvements in the condition of vegetation are likely to be incremental and take decades. I suggest that, for larger clearing applications, the Set Aside be brought into line with offsets as specified under the Biodiversity Conservation Act, so that, at least broad scale clearing for agriculture is treated the same as clearing for other purposes.

In this submission I have concentrated on pointing out aspects of the legislation that I thought could be improved. Thank you for the opportunity to make this submission.

Dr Chris Nadolny, 18 December 2022

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