

Private Native Forestry

Review of the PNF Codes 2019

Response to Draft Codes

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About you

- Individual
- Business
- Government Organisation
- Non-Government Organisation
- Landholder
- Private Native Forestry Industry

Name of your business or organisation

Tree Dimensions Resource Management (Sole Trade

Background:

I hold a Bachelor of Science (Forestry) degree and I am a Registered Professional Forester with more than 40 years of forestry experience. I was previously employed by the NSW Dept of Natural Resources when the PNF Codes were being developed, and I provided technical advice to the project committee and the stakeholder engagement meetings that resulted in the adoption of the current PNF Codes. My comments following are in response to the draft Codes as published on the LLS PNF website.

1. Forest Stewardship Plans

- The new proposal to require Forest Stewardship Plans which are essentially longer term “forest management plans” is sensible, but the draft requirements require some streamlining.
- These plans will come at some cost to the landowner in time and money and will likely provide a delay in obtaining a PNF approval for first time operators. It is submitted that this requirement should only be mandatory for larger PNF operators who have net

harvestable areas of 100 hectares or more. For smaller forest holdings the production of a FSP should be optional unless there is a requirement to vary a Code standard.

- Logically the higher level FSP requirement should precede the FOP requirement in the Code as it is a more strategic document rather than an operational one. Hence Clause 2.1 should relate to FSPs and Clause 2.2 should relate to FOPs.
- There is a lot of common information in both documents. As the existing draft Codes require PNF landholders to have both plans in place prior to commencing a harvesting operation and both plans must be on-site during the operation, it is submitted that the FOP content should be restricted to operational matters while the FSP holds the strategic information. For example there is no need to have the ownership details in both documents. The broader forest management objectives belong in the FSP while the FOP should only include the objectives for the particular harvesting operation. Tree marking details etc are clearly operational matters that should be in the FOP and not the FSP. I estimate that there is an 80% overlap between these two mandatory documents.
- So if there is going to be a requirement for mandatory FSPs then these documents need to be rationalized so that they fulfill their intended purpose without duplication of information.
- Note that in the Red Gum Code there is an error in Clause 2.2 (7) where it refers to Clause 2.2 (5) (b) which does not exist. The correct reference should be to Clause 2.2 (6) (b).
- The proposed process for approval of a minor variation where there is no agreement between the CEOs of LLS and the EPA is unworkable and will take an inordinate amount of time to reach a decision. It is submitted that this is a technical decision which should be technically resolved by referring to the NSW Chief Scientist or to the head of the NSW Natural Resources Commission.

2. Silvicultural Standards

- It is pleasing to see the reduction in stand basal area limits across all of the draft Codes and the proposed limits will greatly enhance the ability of PNF landowners to sustainably manage their resource.
- In the Northern, Southern and Red Gum draft Codes, Clause 3.2 (3) introduces the concept of “average” for BA assessments. This is expanded further in Appendix B. It is submitted that the current handling of this is clumsy and confusing. In my opinion the

second sentence of 3.2 (3) should be removed and transferred to Appendix B as it relates to the methodology for measuring the minimum stand BA.

- Appendix B requires some rewording to remove ambiguity and confusion. The initial sentence of App B (1) should read: ***“For the purpose of calculating minimum stand basal area for compliance, an average BA across the net harvest area shall be calculated as follows:”***
- In App B (1) after subclause (c) insert a new subclause (d) to read : ***“The average can only be calculated within contiguous forest areas and must not include isolated patches of forest.”***
- In App B (2), subparagraph (a) is confusing as there is no such thing as “the average minimum limit for BA”. It is a hard limit as specified in Clause 3.2 of the draft Code. It is suggested that this subclause is amended to read: ***“The calculated average basal area must be equal to or greater than the minimum specified in Clause 3.2”***.
- App B (2) (c) should be amended to read: ***“no more than 25% of sampling points within the net harvested area can have a basal area below 7m²/ha”***.
- These same amendments also need to be incorporated into the Cypress and Western draft Code using the appropriate clause numbers and BA standards.
- The simplification of the regeneration requirements and the proposed threshold standards are agreed with. This should make the draft Codes easier for PNF landholders to comply with and the adopted standard will ensure the regeneration of the harvested stands and the sustainability of the forest ecosystem.

3. Protection of habitat and biodiversity

- The habitat tree and particularly the hollow bearing tree retention requirements in the existing Codes have been the most difficult standards for PNF landholders and the timber industry to comply with. The original Code standards were designed to provide flexibility for forest management while providing for necessary habitat and biodiversity requirements. The current draft Codes seem to have further tightened these requirements and hence made them even more difficult for PNF landholders and the industry to implement and comply with.

- Hollow bearing trees (HBTs) are high value habitat and there are a range of species which are dependant on them to maintain viable populations. However the current and proposed prescriptions do not accord with the ecology of HBTs in NSW natural forest. The conventional wisdom reflects Mackowski's outdated paper that concluded that tree hollows are associated with tree age, and that hollows only form in trees which are more than 80 or 100 years old. This is a wrong-headed conclusion based on the classic error of Australian silviculture that equates tree size with age. I personally know of large hollows in a Blackbutt that was not more than 50 years old. This tree was cut down and removed by the local Council, however a relative used to skip over it on her way to school.

The main factors that affect hollow formation in eucalypts are mechanical damage and wood durability which are significantly different between species. Firstly, no hollows will form unless there is some type of mechanical damage to the tree, such as broken limbs from storm damage or senescence or the bark has been killed by fire etc. The mechanical damage allows wood decay fungi and insects (termites) to penetrate the woody parts of the tree and with time and weather (moisture), a hollow is formed which is open to the atmosphere. The formation of large and very large hollows usually only occurs when termites are present in the tree to rapidly weaken and remove the bulk of the woody tissue.

The tree species which have strong wood characteristics and / or which have wood that is recognised as "durable" with respect to termite and fungal decay, form hollows much less frequently and at a much slower rate than in the weaker and less durable species. Hence in a general sense, hollows in Ironbarks are rare while hollows in Bluegum are common, all other factors being equal, (which they never are in nature)!

Young actively growing eucalypts shed their lower branches as they increase in height and prior to forming their mature crown. Sometimes the branch stubs can decay and will form a small hollow, however in most cases the tree rapidly occludes the branch stub and seals off the wound. The same process occurs with mechanical damage. Hence the rate at which a species or an individual tree occludes a stub or a wound will also affect hollow formation. Smooth bark trees such as Spotted Gum seem to occlude broken limbs much faster than say Bloodwood and Ironbark which are of course slower growing in any case.

All of these factors must be considered in terms of prescribing practical and workable HBT retention prescriptions. However there is also another factor that is peculiar to the North Coast forests. A very significant percentage of the current PNF resource is on land that was previously cleared and farmed. Following the collapse of the dairy market into Europe in the late 1960's a large amount of land that was managed for agriculture was vicariously returned to a forest ecosystem between about 1960 and 1980. I would estimate that at least 40% to 50% of the North Coast PNF resource by area is regrowth forest about 40 to 60 years old on previously cleared farmland. On these sites the only HBTs that will be present are those shade and shelter trees that have survived from the previous agricultural regime.

- With respect to the proposed draft standard, the inclusion of “inferred hollows” into the HBT definition is strongly objected to. Obvious deformities are not surrogates for hollows, and in practice, broken limbs are ubiquitous throughout the forest. This means that this aspect of the definition is too general to provide a clear and unambiguous standard and it should be removed.
- The inclusion of up to 2 dead standing trees in the habitat trees to be retained is a positive and practical step that recognizes the high habitat value afforded by these stags.
- In terms of the retention requirements in Table C, for the reasons outlined above, the requirement to keep recruitment H trees that represent a full range of species in the forest may be counterproductive. For example, if there is a large component of Ironbark in the stand, keeping these as recruitment H trees is not likely to be effective in terms of providing a future hollow resource. In terms of the habitat value of tree hollows, I am not aware of any connection between fauna species and the tree species in which the hollow is found. Tree hollows are a purely **structural** component of a faunal niche. (If this were not so, then the practice of putting artificial nest boxes into forest areas subject to development would not be effective.) The tree species is immaterial. Hence it would be more sensible to retain tree species which are likely to form hollows more quickly rather than to retain a species composition reflective of the stand.

Thank you for the opportunity to comment on the draft Codes.
Regards,

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