PRIVATE FORESTRY SERVICE QUEENSLAND SUBMISSION ON:

VEGETATION AND OTHER LEGISLATION AMENDMENT BILL, 2018.

From: Private Forestry Service Queensland Inc.

Address: 8 Fraser Rd, Gympie QLD 4570.

Phone: 0754 836 535

Private Forestry Service Queensland (PFSQ) wishes to make a submission to argue parts of the Vegetation and Other Legislation Amendment Bill (the Bill), 2018.

PFSQ has more than 220 permanent growth plots up to 14 years old in regrowth and remnant forests across southern Queensland. The plots have been established in overstock stands with tree stocking rates between 400 and 40000 stems/ha. The plots spread across southern Queensland represent a replication of two thinning regimes over 100 and 150 stems/ha against a control of unthinned forest. Within these plots we measure tree diameter growth, crown health, bole length, and percentage of ground cover.

Our data clearly demonstrates 300 stems/ha will be a major contributor to soil degradation due to the impacts of excessive tree growth on ground cover. In dry sclerophyll forests basal area in excess of 20 m² will reduce ground cover to less than 20%, 25 m², the ground cover is reduced to 10%. Basal area is the measure of tree density and is the sum of the cross section area of every tree per hectare. 300 stems averaging 30cm dbh equates to 21 m², 35cm 28.9cm. 500 stems/ha at 25 cm – 24 m², 30cm – 35m². At the prescribed stocking rates little or no ground cover will be present laving the soil at extreme risk of broad scale sheet, rill and gully erosion.
Photos 1, 2 & 3. Typical examples of RE 12.12.5 with broad scale erosion due to inadequate ground cover.
Other examples of the unworkable nature of the code

*Mechanical methods*—using a chainsaw, tractor, blade and/or thinning bar, cutter bar, chopper roller or other implement

Mechanical methods are not permitted in any of the following areas:

- slopes greater than 5 per cent
- five metres or less from the trunk of a *mature tree*, *habitat tree* or *tall immature tree*

*Chemical methods*—including basal bark, cut stump or stem injection techniques
• Chemical application is not permitted within five metres of the trunk of a mature tree, habitat tree or tall immature tree. At a stocking of 300 stems/ha the average spacing is only 5.7 m, at 500 stems/ha is 4.5 m making it impossible to thin stands that must exceed 1250 stems/ha before thinning is permitted.

PFSQ argues the Codes pertaining to Managing Category C Regrowth vegetation and Managing thickened vegetation are not based upon sound forestry science. For example:

The Regrowth code states a coastal retention rate of 300 stems per hectare and in the mid dense regional ecosystems 500 stems/ha. This retention rate will have adverse impacts on:

1. Ground cover contributing to broad scale soil erosion, particularly in the highly erodible sodic soils

2. The development of future habitat trees requires the development of a large crown and in turn large hollow limbs this will simply not occur due to very poor crown development in an overstocked stand.

3. Stand health, there is indisputable evidence that show that all stands have a threshold basal area that when exceeded, the stand locks up and stop growing, ex 12.12.5 (spotted gum) the threshold basal area is around 25m²

4. Impacts on fauna –

  o Our larger gliders such as yellow bellied and greater glider and even the sugar glider have evolved in a wide spaced large tree environment where they can glide up to 100m. Our evidence shows gliders prime habitat is wide spaced trees, we virtually never find glider feed trees in overstocked stands, they simple can’t glide when the tees are 4 m apart and move on.

  o Little or no ground cover destroys the habitat of the vulnerable listed species such as the rufus betong and potoroo both of these species require long grass to nest in and all macropods require grass to eat

Sean Ryan
CEO PFSQ