Converting Native Forests to Plantations.

Dailan Pugh, North East Forest Alliance Inc, September 2022.

This desktop review of hardwood plantations in north-east NSW attempts to apply the readily available data to track changes in the reclassification of native forest to plantations in north-east NSW. In general I do not attempt to assess the veracity of the areas Forestry Corporation claims as plantations, or their properties purchased for plantations, but rather to use their data to track their ongoing reclassification of native forest as hardwood plantations over time.

After 1980 the Forestry Corporation (in all its previous incarnations) abandoned the concept of plantations, intensively logging where they wanted, and throwing around seed or planting jiffy pots in an ad-hoc manner. This practice continues today, though now they use tubestock.

In 1990 the Forestry Corporation decided they needed hardwood plantations so began progressively reclassifying native forest as hardwood plantations based on often flimsy evidence that they had seeded areas or planted jiffy pots in some part of intensively logged areas (including many areas logged in the 60s and 70s not previously claimed as plantations). This reclassification continues today.

This review makes it apparent that as they expand their claimed plantations into native forests they are constantly changing their claims, adding areas, then deleting some and adding others. In recent years they have focused on consolidating "authorised" plantations by either incorporating retained vegetation to enable it to be treated like plantations, or excluding the larger areas to enable them to be logged, while continually pushing the boundaries and adding new areas.

The conversion of public native forests to plantations has to stop, and there needs to be an open independent inquiry into those they have so far claimed.



Native forest in compartment 62 and 63 Wild Cattle Creek SF, reclassified from native forest to plantation in 2020, cleared, windrowed and planted with blackbutt.

Summary

By the early 1980s the then Forestry Commission had established around 9,000 ha of hardwood plantations, then decided to stop identifying hardwood plantations and treat them as a continuum with native forests.

By 1990 the Forestry Commission were being criticised for their lack of hardwood plantations, so they retrospectively classified 25,000 ha of native forests as hardwood plantations, in an ambit claim for any forests they had intensively logged in the past where they had records that someone had sown some seed or planted some jiffy pots (in some part of the area), or claimed they had, a common silvicultural practice in the laissez faire 1960s, 70s and 80s.

After the 1998 forest decision which resulted in transfer of large areas of State forest to National Parks, in 2000 the rebranded State Forests had another go, claiming 27,100 ha for accreditation as hardwood plantations in accordance with the Timber Plantations (Harvest Guarantee) Act 1995, which required the majority of the canopy to be formed by planted trees. They included some of the 1990 areas, along with 9,000 ha of additional areas, Though not all these were accredited. By then they had also purchased, with State and Federal funds, large areas of private property for hardwood plantation establishment which were not included.

By 2014 the boundaries of their claimed plantations on State forests had been expanded and other areas added, claiming at least another 2,000 ha of native forest not previously identified as plantations, while dropping claims for 2,000 ha of those previously identified presumably because they couldn't be justified. In 2018 the rebranded Forestry Corporation was claiming 39,400 ha as hardwood plantations of various types, including 1,900 ha labelled as "failed". Many of these were on purchased properties.

Currently, some 36,500 ha has been authorised as hardwood plantations by the Department of Primary Industries (DPI), delivering a further windfall, with some 4,700 ha authorised even though it has not been identified as plantation, including over 3,000 ha identified as native vegetation. It is unfathomable as to why the DPI included non-plantations, particularly as the majority of their canopies were clearly not formed by planted trees, or at the least, why they didn't identify the native vegetation as 'retained' vegetation.

As an example of the never-ending plantation expansion, in 2020 79 ha of native vegetation, identified as high quality Koala habitat, in Wild Cattle Creek State Forest was reclassified and authorised by DPI as plantation based on a claim that some seed had been scattered around in some part of the area following intensive logging in the 1960s and 70s. This area had never been claimed as a plantation previously. In 2022 it was clearfelled, windrowed and planted with blackbutt seedlings, with the wood likely sold as plantation timber.

It is not over yet. The recent Northern Hardwood Plantations map identifies an additional 14,200 ha of claimed plantations outside existing authorised plantations, some of these are added areas on purchased lands, though they include more infilling with native forest between existing plantations as well as additional areas of native forests. Then there is an additional 5,700 ha of claimed plantations identified in 2018. There are still numerous areas of native forest identified on forest type maps and on their Defined Forest Area map as plantations, and large areas on purchased properties, which are yet to be accredited, and as demonstrated recently in Wild Cattle Creek SF they can always claim any area of regrowth and sell it as plantation timber.

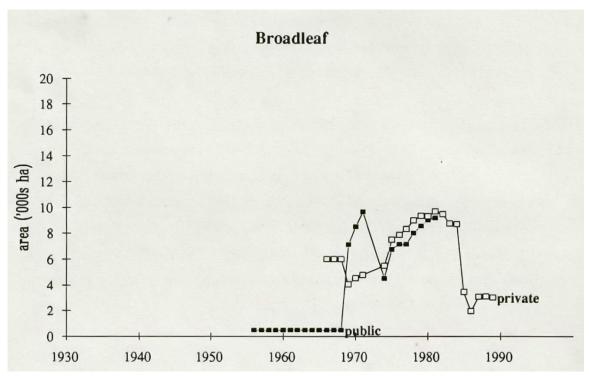
The Defined Forest Area map is relied upon for the Forest Corporation's Chain of Custody to identify whether timber comes from forests certified to the Australian Standard for Sustainable Forest Management. At the time this report was started, the then mapped Northern Hardwoods Plantations comprised 54,100 ha, with 31,700 ha (59%) authorised as plantations by DPI. Within both authorised plantations and unauthorised areas there were large areas of native forest, some of which was currently being logged, making the mapping misleading and their Chain of Custody unreliable.

As a result of my complaints in July and early August about clear inaccuracies in the Northern Hardwoods Plantations that would mislead customers, the Forestry Corporation changed their map of the Northern Hardwoods Plantations by adding 5,800 ha and deleting 9,700 ha. Such changes display how misleading the AFS Chain of Custody was, and it is still not much better with numerous areas dubiously claimed as plantations and areas clearly identified as native forest included. Currently over 14,000 ha (28%) of the Defined Forest Area's claimed hardwood plantations are not authorised by DPI as plantations. Customers purchasing claimed plantation timber from the Forestry Corporation are taking a big risk.

I thank Greg Hall for his assistance in obtaining data for this review.

1. Background

By the early 1980s the Forestry Commission had established around 9,000 ha of hardwood plantations, they then decided to manage plantations under the same prescriptions as the surrounding native forest and therefore it was not necessary to classify these areas separately, so they stopped establishing plantations.



RAC 1991 'Trends in the area of public and private plantations: New South Wales, 1930-90'. The black squares are public lands. Note that after a flurry of plantation establishment in the late 1960s, with many apparent failures, by the early 1980s there were around 9,000 ha of hardwood (broadleaf) plantations on public lands across the whole of NSW, thereafter they ceased to exist.

The creation of the Resource Assessment Commission (RAC) in 1989, and the commencement of its Inquiry into options for the use of Australia's forest and timber resources in 1990, put a focus on the Forestry Commission's lack of hardwood plantations. The Forestry Commission then decided to retrospectively identify hardwood plantations. In 1989 ABARE identified no eucalypt plantations for NSW State forests, though in 1991 RAC identified the Forestry Commission were claiming 25,000 ha of public hardwood plantations.

In 1992 the Forestry Commission reported these new claims in "Research Paper No.15 Eucalypt Plantations in New South Wales" by Richard Stanton. It identified some 25,000 hectares of eucalypt plantations based on the definition "An area that has been established after full site clearing, with full or at least good stocking of eucalypts, by planting or direct sowing of seed", noting "The areas currently recorded are taken from planting records and do not presume to make any conclusion about the current condition of the areas planted". Further observing:

However, plantings of native species can easily become what appears to be a "natural" system, especially if planting is only supplementary to natural regeneration and when the area of plantation is completely surrounded by native forest.

From 1995 I represented conservation interests during negotiations over public forests in the NSW Interim Assessment Process, at that time refusing to accept that the areas identified by the renamed State Forests as plantations be excluded from negotiations, on the basis that they were unverified ambit claims, with some plainly wrong. To resolve the status of claimed plantations, State Forests' established the Eucalypt Plantation Technical Advisory Committee (EPTAC) in February 1997 to oversee the identification of areas meeting the definition of plantations in accordance with the Timber Plantations (Harvest Guarantee) Act 1995;

6 Definition of timber plantation

- (1) In this Act, timber plantation means an area of land on which the predominant number of trees forming, or expected to form, the canopy are trees that have been planted (whether by sowing seed or otherwise) for the purpose of timber production.
- (2) To avoid doubt, a natural forest is not a timber plantation. However, an area is not a natural forest merely because it contains some native trees that have not been planted.

I was one of 2 conservation representatives on EPTAC. Long lists of areas were put forward to EPTAC for consideration, with indications of supporting evidence. For many the supporting "evidence" was non-existent, anecdotal, consisted of vague claims of seeding or plantings (somewhere in the area), and/or landsat images of heavy logging/clearing. There were no site assessments of any of the claimed areas to show that the current canopy was formed by planted trees. In many cases the original forest was dominated by the same species claimed to have been seeded, making it impossible to discern what was natural regrowth and what was planted. At one site EPTAC assessed, the rows of stumps showed it had been planted but that the planted trees had been logged and the canopy was now formed by natural regrowth (State Forests still persisted with claiming it as plantation).

EPTAC was to have completed its deliberations by June 1997, though it was not allowed to meet until then. It met again in July 1997, then not until August 1998 was it allowed to meet again. A process of allocating the claimed plantations to various categories was adopted, and it was agreed that the supporting information for representative examples would be provided. EPTAC was virtually abandoned for almost two years until it was allowed to meet again in May 2000 for half a day. At its last meeting EPTAC identified numerous deficiencies in State Forests' plantation database. State Forests agreed to rectify some of these and follow up on issues that had been outstanding for years. Though Andrew Lugg of State Forests then decided that despite EPTACs terms of reference it was really only an advisory committee that State Forests did not really need to consult with before finalising their plantation claims, so went ahead with exhibiting their long list of claimed plantations.

After the Government's 1998 reserve decision, in 2000 State Forests exhibited 27,124 ha of proposed hardwood plantations (hwdpln_may2k) for public comment. Of the exhibited areas, 17,131 ha are identified as being included as plantations (at least in part) in the 1992 Research Note 15 and 1,049 ha as "not applicable", the balance can be considered to be new ambit claims, with 8,111 ha identified as not included in Research Note 15, and 834 ha unspecified. This is an additional conversion of native forests to plantations.

In company with experts, in 2000 I undertook an assessment 'Creative Plantations, an Assessment of Whian Whian' of 5 areas of claimed Blackbutt plantations, totalling 360.5 hectares, in the then Whian Whian State Forest. This involved reviewing the grossly inadequate supporting data, and undertaking canopy transects, finding that in 3 of the areas Blackbutt only formed 3-6% of the canopy, and while in the other 2 the majority of the canopy was indeed Blackbutt, they were naturally Blackbutt forest and the range of tree sizes and lack of planted rows did not allow their differentiation from regenerating natural stands.

It is not apparent how many of the claimed plantations were accredited at that time. In 2003 1,062 ha of the 2000 claimed plantations were incorporated into new reserves, by 2014 the Forestry Corporation had deleted 1,936 ha from their claimed plantations, and currently 20,540 ha is within authorised plantations.

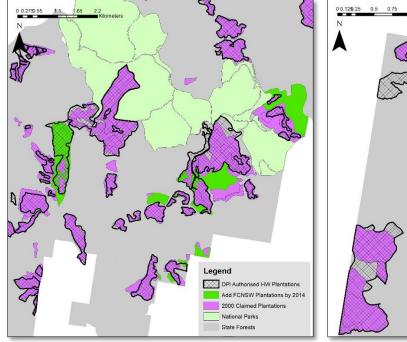
Since the 1990s the Forestry Corporation have been purchasing private properties for hardwood plantations, with this accelerated after the 2000 Regional Forest Agreement, in an effort to increase sawlog supply in the longer term. Those plantations seen are what you would expect, trees planted in rows rather than random regrowth from natural and scattered seeds.

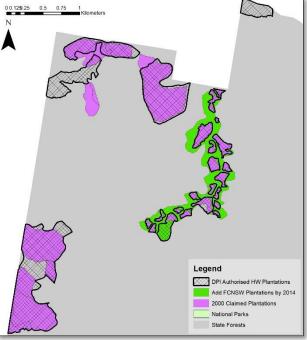
2. Tracking the expanding plantations:

To check how claimed hardwood plantations changed over time since 2000, I first extracted detailed plantation data from forest type mapping (extracted in 2014) which differentiated claimed plantations on species types. The 2014 forest type mapping was compared to the 2000 exhibited plantations (hwdpln_may2k), there was good polygon match, though with significant additions of plantations on purchased lands, some of the 2000 claimed plantations not included, but numerous bits and pieces added. To identify those areas of native vegetation likely to have been added since the 2000 exhibited plantations; the 2000 data were erased from the 2014 data, the 2014 categories retention, failed and leftovers were deleted, then the data was clipped to State Forests as at 2000, and the data manually reviewed to remove any lands (most purchased lands added since around 1990) that had not had a significant part of their area included in the 2000 data.

The outcome was that the Forestry Corporation had added 2,034 ha of what had apparently previously been considered native forest to their claimed plantations between 2000 and 2014. This included 37 patches ranging from over 10 ha to79 ha in size. Though most were boundary extensions or infilling, a bit here and a bit there. This is identified on maps as 'Add FCNSW Plantations by 2014'.

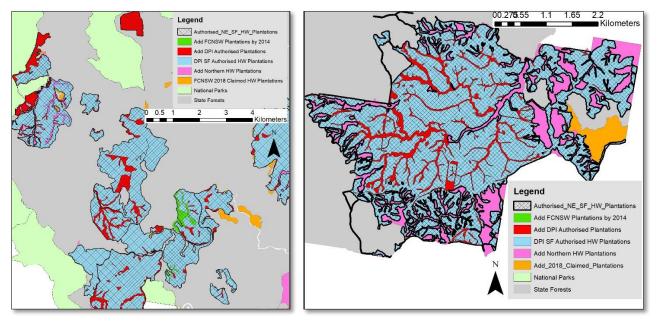
The next readily available plantation data is that included in the revised forest type mapping released in 2018 as part of the outcome of the revised Coastal Integrated Forestry Operations (CIFOA) process. This plantation data is basically the same as the 2014 data, though excludes most of the leftovers: "Area left when replacing old Hardwood Plantations with new data". The categories 218, 218h, and 218NFA data were trimmed to mapped State forests (using the most current FMZ layer) and the category "Hardwood Plantation Retained" (being mapped areas of native vegetation within claimed plantations), along with obvious anomalies, were removed. This was taken to be the definitive 2018 claim for hardwood plantations. This is termed herein as 'FCNSW 2018 Claimed Hardwood Plantations' and covers 39,391 ha. Of this 1,918 ha is categorised as "failed", which includes fragments of native vegetation in large pine plantations (ie Walcha and Urbenville areas) and some apparently failed plantations, which were included as it appears the intent is to convert the fragments in the pine plantations and replant the failed areas.



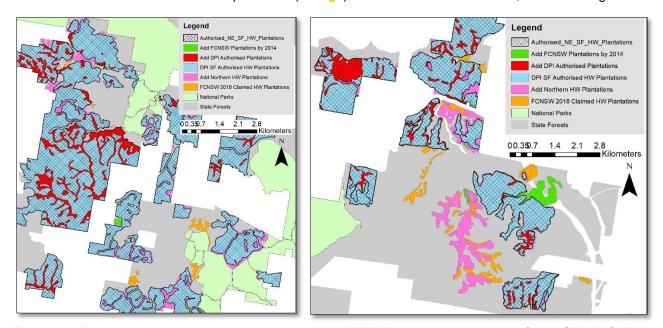


Examples of plantation creep. The purple areas are the 2000 claimed plantations, green areas represent additional areas claimed by 2014 as plantations after the 2000 exhibition of claimed plantations, with the hatched areas those that have been authorised to date, note that they include yet more additional areas while

also excluding large parts of the claimed plantations. LEFT Lorne State Forest, RIGHT Lower Bucca State Forest

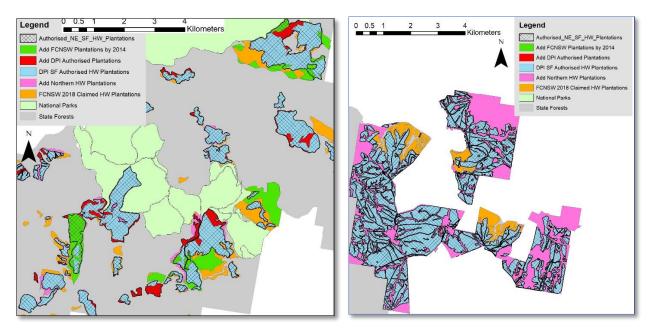


Examples of changing hardwood plantations over time, showing, DPI accredited plantations (blue base and hatched overlay), areas added by 2014 to the 2000 map of claimed plantations (green), areas not identified as plantation on the 2018 forest type map within DPI accredited plantations (red - note inclusion of native forest between plantations and the additional areas added), and the additional claimed unauthorised plantations; those shown on the current Defined Forest Area map as hardwood plantation (pink) and additional areas identified in 2018 as plantation (orange). LEFT Wild Cattle Creek SF, RIGHT Grange SF.



Examples of changing hardwood plantations over time. LEFT: Tuckers Knob and Pine Creek SFs, RIGHT: Newry and Tarkeeth State Forests.

The other applicable data is the "Indicative Plantable Area", which was recently provided by the Department of Primary Industries (DPI) and represents the current DPI authorised plantations. This data is aggregated across all land tenures and includes softwood plantations. In an effort to constrain it to hardwood plantations, it was clipped to State forests, with the most recent FMZ6 (Pine plantations) removed, and then the very small areas (35 ha) of "Indicative Retained Native Vegetation" (areas within authorised plantations required for retention) identified by DPI removed. This is termed herein as the 'DPI SF Authorised Hardwood Plantations', and has an area of 37,480 ha. As identified below, up to 1,000 ha of this map layer may be pine plantations.



Examples of changing hardwood plantations over time. Note: on the right most of these plantations are on purchased properties, in this case the pink areas represent native vegetation "retention" excluded from authorised plantations but still included on the Defined Forest Area map as plantation, in this case only the orange areas have now mostly been rezoned as pine plantations. LEFT: Bulls Ground, Kerewong, Lorne, Broken Bago SFs, RIGHT: Sugarloaf SF.

The 37,480 ha of 'DPI SF Authorised Hardwood Plantations' includes 31,726 of 'FCNSW 2018 Claimed Hardwood Plantations', meaning 5,754 ha that was not identified in 2018 as plantation has been added to the authorised hardwood plantations. These are identified on maps as 'Add DPI Authorised Plantations'. The 2018 Forest Typing covers 4,606 ha of these additions, of which 1,972 ha is mapped as native forest types (including 447 ha of rainforest, 756 ha of Tallowwood, Sydney Blue Gum. Flooded Gum, Brush Box, 419 ha Blackbutt) with an additional 9 ha of swamp, scrub and rock, 1,010 ha as Hardwood Plantation Retention (presumably predominately native forest of various types), 1,039ha as softwood plantation (not included in FMZ6) and 576 ha as other (proposed plantation, cleared and partially cleared). It is unsure whether some of the softwood plantation was later converted to hardwood plantation, The balance is unclassified.

Given that some 1,000 ha was mapped as Hardwood Plantation Retention (presumably native forest) and 2,000 ha as native forest, it is perplexing as to why such areas were authorised as plantation given the definition in the now applicable Plantations and Reafforestation Act 1999 is "plantation means an area of land on which the predominant number of trees or shrubs forming, or expected to form, the canopy are trees or shrubs that have been planted (whether by sowing seed or otherwise)". Or at least identified as "Indicative Retained Native Vegetation" by DPI. To the contrary DPI have been reclassifying previously retained and protected vegetation as plantations.

The consequences of authorising these areas as plantation is that they are then removed from the Coastal Integrated Forestry Operations Approval (CIFOA) and its numerous requirements (including for threatened plants and animals, 8 hollow-bearing trees per hectare, giant trees, 5-10 Koala feed trees per ha etc.) and instead makes it regulated by the Plantations and Reafforestation Code 2001, under the supervision of DPI, which basically requires:

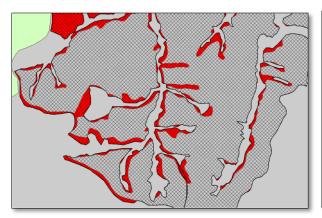
Retention of:

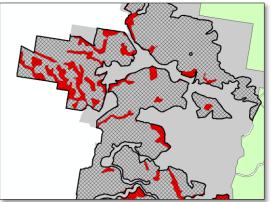
- 20m buffers on wetlands and rivers
- 10m buffers on drainage lines
- Rainforest and wetlands
- Native vegetation "listed for conservation in the regional vegetation schedule"
- Patches of woody native vegetation of more than 1 hectare (outside above retained areas)
- One habitat tree per hectare (except where offset with seedlings)

Though, despite retention requirements, allows for authorisation of:

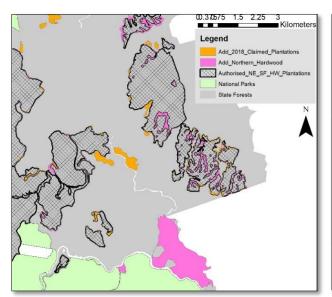
- Clearing of "regrowth vegetation that the regional vegetation schedule allows to be cleared"
- clearing of irregular projections of not more than 10% of a patch of native vegetation to improve the functional design of the plantation

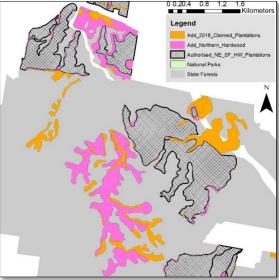
These are significantly less than the requirements of the CIFOA and allow for the progressive ongoing conversion of native forest patch by patch. There are a multitude of small patches that extend outside riparian exclusions, and without further assessment it leaves it open for the Forestry Corporation to claim any patch of native vegetation within an authorised plantation is actually plantation, as they have been doing for the past 30 years.





Example of fragments of native vegetation, with the red areas representing patches not originally claimed as plantation (presumably native vegetation) but subsequently authorised (hatched area), illustrating the threat of the loss of small patches of native vegetation (particularly outside riparian exclusions). LEFT Wild Cattle Creek State Forest, RIGHT Tuckers Knob





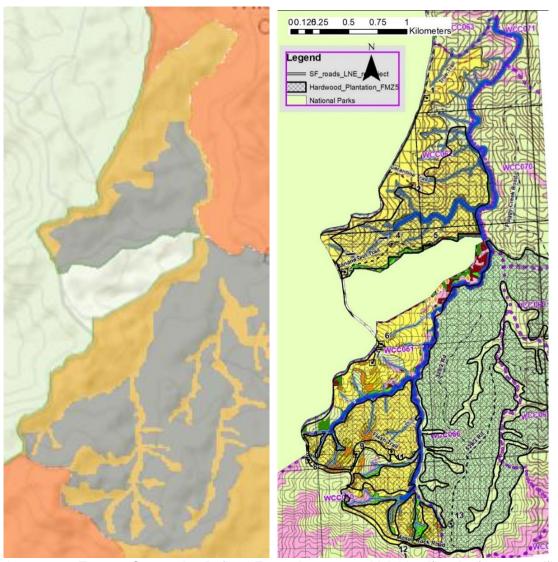
Areas identified as hardwood plantations by the Forestry Corporation outside existing authorised plantations, showing the additional areas currently identified as Northern Hardwood Plantations (pink), and in addition the areas identified as hardwood plantations in 2018 (orange). LEFT Wild Cattle Creek SF, RIGHT Newry SF.

It is not over yet. The recent Northern Hardwood Plantations identifies an additional 14,214 ha of claimed plantations outside existing authorised plantations, some of these are additional areas on purchased lands, some are more infilling between existing plantations, though there are many expansions to existing plantations and additional areas. As well as these areas, there are still an additional 5,659 ha of **FCNSW 2018 Claimed Hardwood Plantations** identified, it is assumed that some of these were refused authorisation, and that others are native forest awaiting being created as authorised plantations. And as they did recently with Wild Cattle Creek State Forest (see the case study below), they can still simply claim new areas.

3. Wild Cattle Creek Case Study

An example of recent conversion of native forest to plantation is the reclassification and authorisation of 79 ha of high quality Koala habitat in Wild Cattle Creek State Forest in 2020 as a hardwood plantation, based on the claim that some seeds were sown after logging in some part of the area in the 1960s and 70s.

After an inspection, on 26 July 2022 I submitted a 'Complaint about Conversion of 68ha of Native Forest to Plantation' relating to the logging of native forest in compartments 61, 62 and 63 of Wild Cattle Creek State Forest as plantations (later acquisition of the authorised plantation layer identified it as 79ha). At the time all the evidence was that it is native forest, such as the Forestry Corporation's 2018 forest type map showing it as native forest and all the various mappings identifying it as native forest, including the then current Forest Management Zoning identifying it as FMZ 4 (General Management Zone, rather than FMZ 5 Hardwood Plantation Zone) and the current legal online *Defined Forest Area map* (relied upon for Chain of Custody (COC) Certification to the AFS) identifying it as native forest: "Northern Coastal Hardwoods". Even the current CIFOA regulatory layers identified it as native forests, with, for example, Koala prescriptions 1 and 2 (retention of 5-10 koala feed trees per ha.) as applying.



LEFT: A then current Forestry Corporation <u>Defined Forest Area map</u>, which identifies the forests certified to the Australian Standard for Sustainable Forest Management as well as which Forest Management Unit they belong to (grey is plantation, yellow and orange are native forest), which confirms that the native forest being converted to plantations is not plantation. RIGHT: FMZ 5 plantations overlaid on harvesting plan (yellow is the area being logged as plantation).







Native forest being clearfelled for conversion to plantations to the south-west of log dump 7 in Compartment 61 of Wild Cattle Creek State Forest.

The EPA (3 August) responded that "the areas subject to your complaint are authorised for plantation forestry under the Plantations and Reafforestation Act 1999. These approvals are not adequately reflected in mapping layers and the DPI has committed to updating its spatial mapping databases". My complaint was handed onto DPI.

Being authorised as plantation means the Coastal Integrated Forestry Approval (CIFOA), the logging rules for native forests, no longer apply. Now it was allowed to be clearfelled, with the only limitation applied outside riparian areas being that trees over 90cm diameter were required to be retained. At that time the clearfelling of the southern area was mostly complete, while the northern area had already been windrowed and planted with blackbutt.

While this area has never been previously claimed as a plantation in all the iterations since 1992, DPI informed me that in May 2020 it was retrospectively accredited as a plantation, based on a claim some seeds were sown after logging in the 1960s and 70s. I was told I am not allowed to see the supporting information they are relying upon, probably not even under a GI(PA) request. Given that the requirement for a plantation is that more than 50% of the canopy is formed by planted trees I don't see how either the Forestry Corporation nor DPI could determine to what extent it was seeded, or that regrowth was from the sown seed rather than natural seed remaining after logging as, like the regrowth, the natural forest was predominately Blackbutt. In response to my complaint, DPI (19 August 2022) responded:

The existing plantation was authorised on 18th May 2020. The area was authorised after assessment of evidence and information that showed the area was a plantation as defined by the Plantations and Reafforestation Act and was established prior to commencement of the legislation.

Compartment 529 records dated back to the 1960s and following clearing in the 1960s was sown with flooded gum and blackbutt. Some fire and harvest activities took place in the 1990s. Compartment 528 also had historical records showing clearing and sowing of timber species in the early 1970s. That area was partially thinned in the early 2000s.

Other evidence that supported assessment of the area as an existing plantation included historical imagery and historical documents including harvest plans.

The Forestry Corporation (26/08/2022) responded:

Interpretation of recent and historical aerial imagery is supported by on ground inspection including surveys of boundaries, aerial drone surveys, using GPS technology in the field and benchmarking against known features to verify boundaries.

No indication of the extent seeded, no transect to determine stand structure, just mapping of regrowth boundaries.

I do not accept that it is a valid plantation, particularly as its now being claimed as plantation some 50 years after it was claimed to have been established, and because it was not established as a plantation and is not identified as plantation in any of the claims made over the past 30 years. Even though these forests were not then included on the Defined Forest Area map, all the timber obtained from them is likely to have been sold as plantation timber, which makes a mockery of the Forestry Corporation's Chain of Custody.

The area of reclassified native forest totals 79 ha, with the 2018 CIFOA mapping identifying it as comprised of 42.8ha Dry Blackbutt, 5.8ha Moist Blackbutt, 23.5ha Tallowwood-Sydney Blue Gum, and 7.2ha Brush Box.

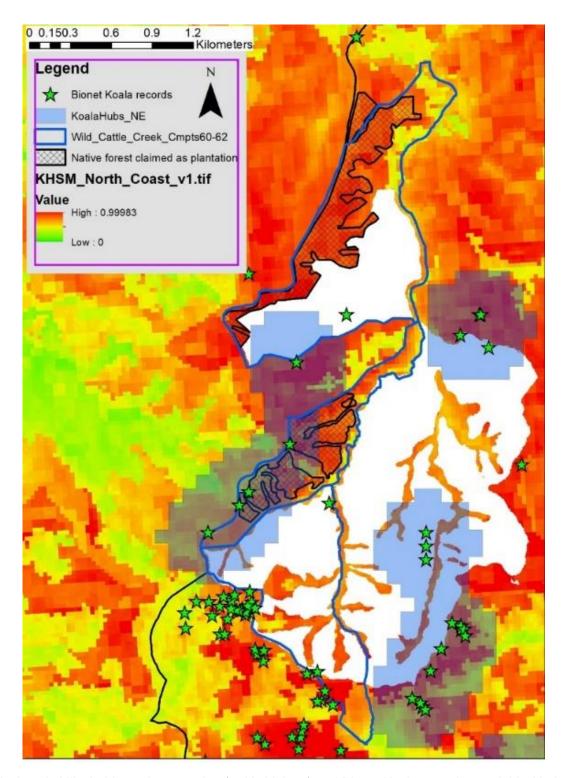
The authorised plantation was identified as high quality koala habitat, had numerous koala records and included some 16ha of a Koala Hub OEH had identified for protection, as well as having records of Vulnerable Orara Boronia, Spotted-tailed Quoll, Sphagnum Frog, Pouched Frog, Large Bent-winged Bat, Golden-tipped Bat and Powerful Owl within the area or in close proximity.

I am particularly concerned as the area was mapped as high quality Koala habitat, and in 2017 the Office of Environment and Heritage identified most of Compartment 61 as being within a Koala Hub. Koala Hubs were identified in response to the Chief Scientist's 2016 recommendation that NSW "government agencies identify priority areas of land across tenures to target for koala conservation management and threat mitigation".

In 2017 the Office of Environment and Heritage (OEH) analysed Koala records ""to delineate highly significant local scale areas of koala occupancy currently known for protection". Across the whole of NSW, OEH identified 100,000 hectares of Koala Hubs, with 20,000 ha of these on State forests. Since then the Forestry Corporation have been allowed to log 1,000 ha of these identified priority Koala habitats, and now they are clearfelling them.

We observed numerous stumps of Tallowwood (a preferred koala feed tree) amongst the clearfelled area, large branches from mature trees in the slash piles, and that it is being replanted with rows of Blackbutt (not a feed tree).

Three years after the Koala Hubs were identified, two years after they were caught logging protected Koala habitat in an adjacent operation, and a few months after the 2019 wildfires devastated Koala populations in the area, the Forestry Corporation had around 16 ha of this Koala Hub reclassified as a plantation based on a spurious claim that in the 1960s someone scattered some seed around.



DPIE Koala suitability habitat value mapping (red is highest) and Bionet Koala records, overlaid with the native forest being converted to plantations (black hatching) and OEH Koala Hubs (blue shadow).

As a result of this complaint, and my Ellis State Forest complaint, both Forestry Corporation's Forest Management Zones and Defined Forest Area maps were updated, with this area now identified on both as a hardwood plantation.

4. Australian Forestry Standard.

The Forest Corporation relies upon the online <u>Defined Forest Area map</u> for their Chain of Custody under the Australian Forestry Standard. The Forestry Corporation website has a current map showing the distribution of hardwood plantations (Northern Hardwood Plantations) in north-east NSW, which they rely upon for certification:

https://www.forestrycorporation.com.au/sustainability/certification_noting:

More than 98 per cent of timber supplied by Forestry Corporation of NSW is certified to the Australian Standard for Sustainable Forest Management. Customers or auditors can check the certification of timber purchased from Forestry Corporation by reviewing the forest number provided in sales and folio reports, which identifies the forest from which the logs originated.

The forest name can be cross-referenced with the <u>Defined Forest Area map</u>, which identifies the forests certified to the Australian Standard for Sustainable Forest Management as well as which Forest Management Unit they belong to. Visit <u>our estate</u> to find out more about the Defined Forest Area managed by each operational division, by FMZ, by forest and more.

The Defined Forest Area is updated each year and provides the information needed for timber buyers with Chain of Custody (COC) Certification to the AFS or Programme for the <u>Endorsement of Forest Certification (PEFC)</u>. For more information, contact info@fcnsw.com.au.

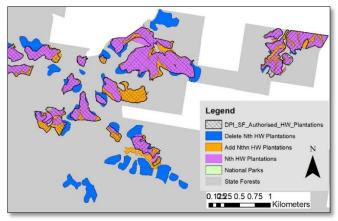
In early August 2022 the current map of Northern Hardwoods Plantations was extracted from the Defined Forest Area map. At that time it comprised 54,088 ha, with 31,669 ha (59%) (54%) of this authorised as plantations by DPI (**DPI SF Authorised Hardwood Plantations**). The problems with authorised plantations are detailed above.

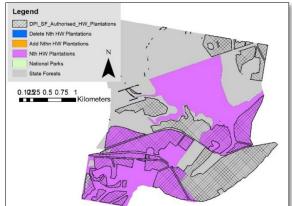
In August I reviewed Compartments 3, 4 and part 6 of Ellis State Forest which were currently being logged, on which the then Forestry Corporation mapping identified 356ha as FMZ 5 Hardwood Plantation, which was also mapped on the online <u>Defined Forest Area map</u> as plantation. Forestry Corporation's 2018 forest type map identified 293.5 ha as the single category Hardwood Plantation (Retention). I complained to DPI (16 August 2022) that the mapped native forest within the plantation was being illegally logged, as the Plantations and Reafforestation Act 1999 does not allow broadscale logging of native forests within plantations.

The DPI informed me that the plantations in Ellis were originally approved under the Timber Plantations (Harvest Guarantee) Act 1995, though were apparently redefined in August 2020 to remove the large blocks of Hardwood Plantation (Retention), so they can now be logged. At that time the online <u>Defined Forest Area map</u> had not been updated to reflect this, though has now just been changed. Once again their Chain of Custody failed its test.

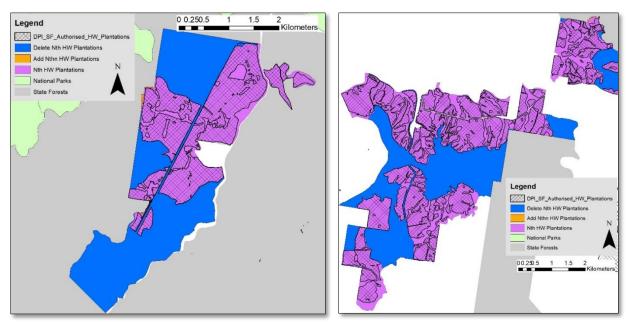
It is clear that both within DPI authorised plantations and in the balance of the Northern Hardwood plantations identified on the Defined Forest Area map that (definitional issues aside) significant areas comprise mapped native forest. At that time I complained that any Forestry Corporation customers tracking the timber's source using the Defined Forest Area map are likely to be mislead into thinking it comes from plantation if it is identified as coming from Northern Hardwoods Plantations, though that was not necessarily so.

It is evident that much of the timber identified as being sourced from the AFS accredited Northern Hardwoods Plantations will be coming from native vegetation previously identified for 'retention' in plantations, from conversion of patches of native forests within plantations (much of it previously excluded from identified plantations) and from areas of native forests reclassified as plantations. This makes a mockery of the Australian Forestry Standard.



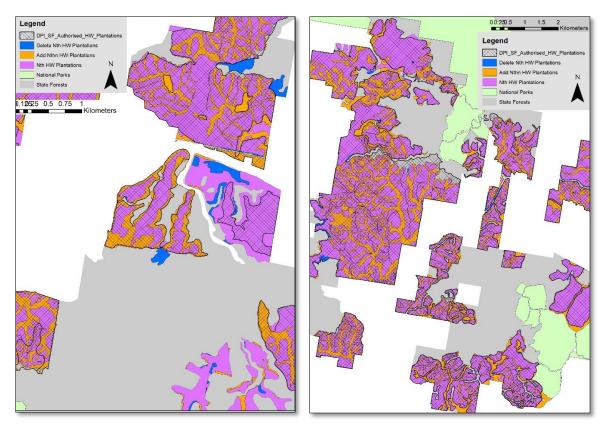


LEFT Orara West SF, showing examples of the significant changes between the early and late August 2022 mapping of Northern Hardwood Plantations, the hatched areas are DPI authorised plantations, the blue areas are those deleted that the Forestry Corporation have been claiming to customers are plantations, but overnight they changed their minds, the orange areas are those added that they previously had not claimed as plantations, despite many of them being authorised, though they have once again added unauthorised areas. RIGHT: TYR001, showing an example of the mismatch between authorised plantations (shaded) and claimed plantations (purple).

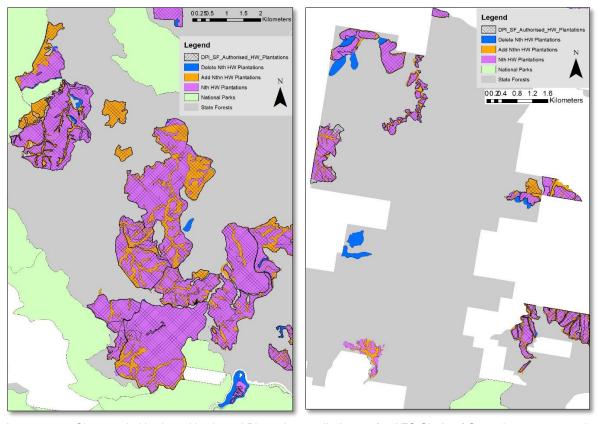


August 2022 Changes in Northern Hardwood Plantations, relied upon for AFS Chain of Custody, in these cases the deleted areas (blue) were once primarily 'retained' native vegetation within authorised plantations, that have since had their authorisation changed to remove them so they can be logged. Note that the revised Northern Hardwood Plantations still include unauthorised patches (unhatched areas). LEFT: Ellis SF, most of southern area was deleted in 2020 and had been logged before the online map was revised. RIGHT: Keybarbin SF.

As a result of my complaints on Ellis and Wild Cattle Creek (see above) both Forestry Corporation's FMZ and Defined Forest Area maps were updated, and a new version of the Defined Forest Area was uploaded in late August 2022. The changes to the Northern Hardwood Plantations in the online *Defined Forest Area map* were assessed, showing significant changes with an overall area reduction to 50,157 ha, with 5,814 ha added and 9,744 ha deleted. showing that in the revision the Northern Hardwood Plantations were significantly changed. Many of the additions were riparian corridors between plantations, though also included additional areas not previously claimed. Most (65%) of the deletions were 2018 areas of retained native vegetation within previously accredited plantations, though they also included numerous areas previously claimed as plantations. Of the new Northern Hardwood Plantations, 35,943 ha (72%) is now DPI authorised plantations. Strangely quite a few areas of authorised hardwood plantations are excluded, mostly apparently because boundaries have been redefined to exclude them.



August 2022 Changes in Northern Hardwood Plantations, relied upon for AFS Chain of Custody, showing the significant addition (orange areas) of riparian corridors and boundary extensions (most of which has been authorised despite likely being native vegetation), the ongoing ambit claims for additional unauthorised areas (unhatched), and that there are a variety of authorised plantations that are no longer being claimed as plantations (grey hatched). LEFT: Newry and Tarkeeth SFs, RIGHT: Tuckers Knob.



August 2022 Changes in Northern Hardwood Plantations, relied upon for AFS Chain of Custody, more examples of the shifting nature of claimed plantations, in this case overnight. LEFT: Wild Cattle Creek SF, with the larger north-west areas adjoining the National Park authorised as plantations in 2020 – see the case study above, RIGHT: Lower Bucca SF.