SUBMISSION TO THE DRAFT COASTAL IFOA

BELLINGEN ENVIRONMENT CENTRE

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1. **Introduction**

The Bellingen Environment Centre has for over thirty years acted to protect the environment of the Bellingen Valley and surrounds.

The Proposed IFOA remake together with the report on the NSW Regional Forest Agreements second and third five-yearly reviews are the most convoluted, unprofessional and dishonest documents that have come before the Bellingen Environment Centre during those thirty years. The BEC has also included its submission to the RFA reviews as part of this submission to the IFOA remake as it believes the processes are closely linked and interdependent. For example major environmental undertakings in the RFA’s have not been fulfilled and that is a major consideration in reviewing and refocusing forest harvesting plans for the foreseeable future.

We have not as yet identified any one person, other than perhaps Dailan Pugh from NEFA who has been able to stick with the documents to read and understand them entirety. This submission benefits from the work of Dailan and the NSW National Parks Association who have undertaken thorough research and analysis of forest management in NSW. This submissions benefits from the research of other community and scientific review and evaluation and where relevant copies sections straight from other work.

It is evident by the number of updates and clarifications the EPA has had to post on the IFOA remake website during the consultation period that there are many areas of uncertainty within and between government agencies and it is therefore unlikely in the extreme that the general public have an understanding of the issues in relation to future management of publicly owned forests.

Public confidence is further sapped by the NSW Forestry Corporation calling an Expression of Interest for 58% of the production from North coast and Tablelands forests during the consultation process and indicating an intention to make a decision on that EOI before the public consultation process on North Coast forest management is completed.

1. **Response to questions**

In response to the questions posed in the consultation document.

1. **What parts of the draft Coastal IFOA are most important to you? Why?**

All parts which allow continued logging of our native forests are most important to the members of the Bellingen Environment Centre. Our members believe continued logging of publicly owned native forests is not sustainable and not supported by the vast majority of the community.

2. **What parts of the draft Coastal IFOA do you think have a positive outcome on the management of environmental values or the production of sustainable timber?**

None

3. **Which parts of the draft coastal IFOA do you think have a negative outcome on the management of environmental values or the production of sustainable timber? Why?**

Without exception all the proposed changes are considered to have a negative impact on environmental values and the production of sustainable timbers. Targeting timber production towards producing small logs of a single preferred species is in no sense sustainable forestry.

The BEC sees no components of the IFOA remake it can support. All the proposed changes send the direction of forest management towards a single short term use for small timber production, predominantly of a single species without recognising the environmental consequences or the competing demands for publicly owned forests.

4. **What are your views on the effectiveness of the combination of permanent environmental protections at the regional, landscape and operational scales (multi scale protections)?**

Firstly The draft IFOA remake demonstrates there are no “permanent environmental protection measures” available for NSW native forests when features the community were led to believe had “permanent environmental protection’ under national and state forest policy are proposed for removal from protection. These include oldgrowth forest and rainforest, streamside protection and threatened
species protection and . There is, through an absence of effective monitoring over the last twenty years, no evidence that current silvicultural practices are working let alone any scientific evidence the proposed silvicultural practices will work. The flimsy referencing used to support the proposed silvicultural treatment of NSW native forests is from overseas (including Tasmania) and in most cases or completely of significantly different forest ecosystem . There is no local scientific evidence to support the radical proposals to unsustainably single use our North coast forests.

5. In your opinion, would the draft Coastal IFOA be effective in managing environmental values and a sustainable timber Industry? Why?

The draft Coastal IFOA will not be effective in managing environmental values based on the lack of scientific monitoring of past practices and the lack of scientific evidence supporting the proposed silvicultural practices. A grand and uncontrolled experiment is planned with the draft Coastal IFOA for some of the most unique and diverse tall forests on earth – there is no way any credible person, organisation or government can claim the draft coastal IFOA will be effective in managing environmental values.

The proposed conversion of one of the World’s most species rich and diverse forests on the NSW North Coast, which produce a diverse range of timber products and size classes of timber, to a plantation like structure producing small single species logs and pulpwood to through the full adoption of industrial logging practices can in no way produce a sustainable timber Industry.

6. General comments – BEC detailed submission follows.

Alternatively to the draft Coastal IFOA the BEC requests the Government:

3. Recognise that regional forest agreements have failed to environmental protection nor industry security.

The NSW National Parks Association report: https://npansw.org/wp-content/uploads/2016/10/139075-epa-national-parks-assoc-nsw-52pp-a4-rfa-report_printversion.pdf comprehensively rebuffs the Regional Forest Agreements. The study analyses the RFA aims and demonstrates that, in all cases, they have failed to substantially meet their goals either wholly or in part. The process of RFA development was flawed and subsequent governance in regards to formal changes to the RFA’s and timely reporting has not been to sufficient standard.

The IFOA remake proposals follow the same flawed approach of the RFA’s undermining the reserve system, one of the fundamental components of the National Forest Policy and the RFA’s. On State Forests there are currently significant areas excluded from logging as Informal Reserves and designated as Forest Management Zones 1, 2 and 3. These are primarily comprised of HCV oldgrowth forest (over 10ha) and rainforest (over 2ha), though also include wilderness, wetlands, major rock outcrops, heathlands, rare non-commercial forest types, and steep unloggable areas.

These are designated as part of the State-Commonwealth Comprehensive Adequate and Representative Reserve System and counted as contributing towards targets for all entities, most notably national targets for forest ecosystems, oldgrowth, wilderness and national estate.

These are mostly designated as Special Management Zones and protected under the NSW Forestry Act, requiring parliamentary approval to undo them. The SMZ also include 20,000 ha of additional areas of non-HCV oldgrowth nominated by NEFA in 2003.

The FMZ zone 3B is allowed to be logged under special prescriptions intended to protect their conservation values, though in practice there is no consideration of their values and they are treated as just another part of the logging area, including being subject to illegal intensive logging.
The NSW Government is now intending on remapping the oldgrowth forest and rainforest with the intent of removing areas remapped as not being oldgrowth or rainforest from the reserve system and making them available for logging (see section on oldgrowth and rainforest). They are put forward on only considering their contributions to oldgrowth targets while ignoring their contribution to other reserve targets.

There are additional areas outside the FMZs that are mapped for protection including: stream buffers, 40m and 80m wide 'ridge and headwater habitat' (wildlife corridors), owl landscape areas (additional areas identified as required as owl habitat), Endangered Ecological Communities, additional areas of rainforest (including unmapped rainforest), unmapped rock outcrops and unmapped wetlands.

There are also requirements to undertake pre-logging surveys for a range of threatened species and either require increased tree retention around records, or most often to establish exclusion areas around them. Generally these are considered to encompass 3.4% of the loggable area, though more thorough and expert surveys do significantly increase the required retention. It is important to recognise that where exclusion areas are required they can not be counted towards habitat tree retention and other such requirements. A minority of species will still require surveys and habitat protection, and previously protected (carry-over) areas for Squirrel Glider, Brush-tailed Phascogale and Koala high-use areas (where not since logged) are required to be retained.

Existing owl landscape areas are not defined and thus not protected under the IFOA. The EPA have said they will rectify this error, though prompting is required.

As an alternative to most threatened species provisions the Forestry Corporation is required (Protocol 22) to retain 'wildlife clumps' over 1ha encompassing 5% of the loggable area within a 'local landscape area' (an area identified by the Forestry Corporation that is less than 1,500ha). These can include areas that would otherwise be required to be retained such as unmapped rocky outcrops, cliffs, heath and scrub, wetlands, as well as "carry-over" exclusion areas, and habitat trees. As noted by the EPA "it is anticipated most wildlife clumps will be made up of 'carry over exclusion zone’ – being large exclusion zones previously applied for koalas, squirrel gliders and phascogales or the specified habitat features". So they are not intended to protect anything additional to other requirements. There are a range of selection criteria, though as only one of those needs to be met, it is open to the Forestry Corporation to chose virtually any area they want. With few requirements for surveys for threatened species these in no way compensate for the current needs to identify and protect occupied habitat for a range of threatened species.

In addition to wildlife clumps, there are also requirements to retain 'Tree retention clumps' between 0.1 and two hectares in size encompassing 5% of the loggable area of a compartment in the coastal ('regrowth') forests and 8% of the loggable area of escarpment ('non-regrowth') forests. These must prioritise the retention of hollow-bearing trees and potential future hollow-bearing trees. These can similarly include areas otherwise required to be protected.

So in summary 10 to 13% of the loggable area is required to be permanently excluded from logging, which can include any other areas or trees required to be excluded from logging.. They are meant to improve landscape connections between other retained patches of vegetation or as 'habitat islands' within a large cutover area, though this is not a requirement. The trade-off is to remove most protections for locations of threatened species, remove specific requirements to protect recruitment and eucalypt feed trees, and to increase logging intensity in 87-90% of the loggable area. Note that
the current requirement for intensive logging (AGS) is to protect 10% of the area, so there are no real compensatory gains.

The Remake of the Coastal Integrated Forestry Operations Approvals Final Report Threatened Species Expert Panel Review reports the EPA representative Brian Tolhurst (one of the 10 experts who answered questions) as stating:

_The spacing of clumps across the harvestable area will conceivably be much greater than the distances between scattered individual retained trees and will have a significant impact on many arboreal species. For gliding mammal species these distance will be of critical importance – 30 m is the current reported average glide distance for Squirrel and Yellow-bellied Gliders and canopy gaps over 40 m would start to become barriers for regular and safe movement. For Koalas significantly separating the forest canopy will increase their time spent on ground and thus increase their exposure to terrestrial predation. In areas with records of these and similar arboreal species, wide scale intensive harvesting regimes would not be appropriate. For many small forest birds and microbats this would also be the case. Additional scattered trees between the clumps to provide some level of forest canopy connectivity would be necessary._

Direct employment in the native forest timber industry is tiny – approximately 600 state wide. Expanded to the manufacturing sector it rises to about 1800.

According to NSW DPI figures, 2662 is 0.03% of all primary industries employment in NSW or 0.0008% of total employment. We’re talking very small numbers here.

The plantation sector completely dominates the industry, which should be a good news story because it offers the government a way to protect some of the most valuable forests on earth with minimal disruption.

Failure to provide security to the native forest timber industry is demonstrated in the graph below by the decline in employment over the last fifteen years.
These figures are all hardwood + cypress, including red gums and some millers. Therefore the number of jobs potentially affected will be lower.

Despite the reduction in the native forest timber industry the Forestry Corporation have issued an Expression of Interest for new WSAs for 416,851 tonnes per annum of low quality sawlogs and residual logs (logs over 10cm diameter and 2.4m long) from north east NSW’s native forests and plantations (58% of the total log resources predicted to be produced), which the EOI sates they intend to issue in June 2018. These volumes assume that the new logging rules have been approved. The NRC (2018) identify that annual salvage log, pulpwood and residue sales average 300,000, so these new WSA represent a 39% increase above current cut.

4. Recognise the benefits of non-timber forest values are vital for the future of regional economies and ecosystems.

Changed economic conditions are resulting in reduced economic and commercial viability of public native forest logging activities, including declining yields of high quality sawlogs. There are increasing environmental concerns associated with logging activities.

There is an increasing need to recognise the potential health and wellbeing benefits derived from public native forests and changes in international and national public opinion and tourism trends.
5. Establish the Great Koala National Park as an immediate priority.

Large and well managed protected areas remain the single most effective tool to protect biodiversity around the World, and Australia is no different. The great Koala national Park, which is designed as a key component of a larger strategic koala reserve network for the North Coast, is the best chance for koalas to have a secure future in NSW. See:


6. Commit to a just transition out of native forest logging on public land and transfer of public forests to protected areas when the RFA’s expire.

The NSW National Parks Association has made the case for an end to native forest logging through; https://npansw.org/wp-content/uploads/2018/06/Forests-For-All-Case-For-Change.pdf

Changes to the current management of NSW public native forests is required if their full range of potential economic, environmental, social and health benefits are to be realised. Within NSW, the main drivers for the case for change to the existing approach to NSW public native forests are:

- Changed economic conditions resulting in reduced economic and commercial viability of public native forest logging activities, including declining yields of high quality sawlogs;
- Environmental concerns associated with logging activities;
- The loss of potential health and wellbeing benefits derived from public native forests; and
- Changes in international and national public opinion and tourism trends.

7. Ensure that public forests are managed for public good (i.e. tourism, environmental repair, carbon sequestration and storage, wildlife habitat and the provision of clean and abundant water,

Stop planning to log areas protected as habitat for threatened species, Koalas, oldgrowth forest, rainforest and stream buffers,

Oldgrowth and Rainforest Logging

Based on their inflated timber commitments, and without accounting for the increasing yields from hardwood plantations, the Natural Resources Commission (NRC) claims there will be a shortfall of up to 8,600m³ in annual volumes of high quality sawlogs. Based on this misrepresentation the NRC are proposing remapping oldgrowth forest and rainforest to make up the claimed shortfall.

The NRC’s claimed need to log rainforest and oldgrowth protected for the past 20 years is based on a lie. The Natural Resources Commission have dramatically changed both the criteria for identifying oldgrowth forest and rainforest and the methodology for mapping them, with their trial resulting in 88% of mapped HCV oldgrowth and 62% of mapped rainforest being identified for logging. The NRC have particularly targeted stands dominated by brushbox and turpentine for exclusion from both rainforest and identification as oldgrowth (because oldgrowth trees of these species don’t typically display senescence).
The NRC fraudulently claim to have identified "new" oldgrowth that was not previously mapped in order to encourage support for their remapping, though most of their "new" oldgrowth was in fact previously mapped as oldgrowth, just that it wasn't included as HCV oldgrowth. It is deliberately deceptive to claim these stands as "new" oldgrowth.

Additional areas of rainforest are identified because of the higher resolution imagery, which allows the rainforest under a eucalypt canopy to be more accurately seen. Though the overall area of rainforest is reduced by 35% because of the exclusion of stands with >30% canopy of Brushbox, Turpentine and eucalypts. Unmapped rainforest is currently required to be protected.

On behalf of the NRC, the Forestry Corporation have identified some 14,600 hectares of oldgrowth they consider they could log under the new rules to realise 212,000m$^3$ of high quality sawlogs, and some 4,900 ha of rainforest to log for 90,000m$^3$ of timber.

As noted by the NRC:

> While technically feasible, remapping and rezoning will be challenging. Nearly all north coast old growth forests are protected by Parliament under a 'special management zone' and are also protected under Forest Management Zones (FMZ) 2 and 3a as informal reserves or exclusion zones. Furthermore, old growth forests under the current HCVOG spatial data set for the upper north east region are listed as a state significant heritage item.

The NRC proposal is to compensate for reductions in the reserve system with additions of "steep slopes, threatened ecological communities and other non-commercial forest areas".

**Stream Buffers**

Headwater streams are of overwhelming importance for catchment health as this is where most of the interaction between the terrestrial and aquatic realms occurs. The science is that we should be establishing buffers at least 30m wide around these headwater streams. The NSW Government’s intent is to reduce already inadequate buffers around headwater streams from 10m down to 5m.

It is stated:

> To ensure this increased protection does not impact on the sustainable supply of timber, the draft Coastal IFOA proposes to reduce the width of protections on headwater streams in some areas from 10 metres to 5 metres. In areas where there is important fish habitat or where more intensive harvesting is proposed, all headwater streams will retain their original 10 metre protection.

For north east NSW (except possibly the intensive zone) the new rules are that all headwater streams in catchments less than 20ha will have buffers reduced from mostly 10m to 5m (except where it is Class 1 Aquatic Habitat). Class 1 Aquatic habitat will be mapped - it is currently defined as having a threatened fish recorded within 2km upstream or 5km downstream of the site of the proposed works. The current requirement to increase riparian protection within 100km upstream of threatened fish (Class 2 Aquatic Habitat) will be removed.

This will have significant impacts on riparian habitat, stream quality, and aquatic species. For example on State Forests across the Clarence and Richmond valleys, Pugh (2016) estimated that over 7,000 kilometres of vital headwater streams in catchments less than 20ha will have their buffers cut by at least 50% down to 5m wide. With the inclusion of riparian areas protected for threatened animals the reduction is likely to be over 10,000 ha. This is the loss of some 35% of existing riparian buffers (outside 'informal reserves'), a 24% reduction due to changes in stream
buffers and an additional 11% reduction due to the loss of protections around records of threatened fauna.

The Remake of the Coastal Integrated Forestry Operations Approvals Final Report Threatened Species Expert Panel Review reports all experts who commented as opposing the opening up of protected riparian areas protected for the past 20 years for logging. For example Brad Law, DPI Forestry, stated:

"In some areas where areas once mapped as riparian buffers are no longer identified then there would be a loss of habitat protected for the past 20 year period. Given the intensity of operations over the last 10 years, it would be important to try to ensure these areas remain protected”

The EPA representative Brian Tolhurst stated:

"No further loss or impact on the retained riparian areas that have been protected to date under the existing rule set should occur. The expert panel agreed that these areas were the few areas seen on the site visit that still retained habitat elements and the diversity, form and structure of a native forest.

...I am not convinced that the proposed riparian buffers are adequate for ecological protection of these features. The widths seem to have been generated to deliver no net loss of available harvestable area rather than driven by an appropriate buffer for the size/importance of the feature”.

The claim is made that 10m buffers will be retained on headwater streams within the intensive logging zone, but Table 6a only identifies 5m buffers as being required, The IFOA must be altered to meet the promise that 10m riparian buffers will be implemented on all streams in catchments less than 20ha.

Tree Retention

The older a tree gets the more browse, nectar and seeds they provide for wildlife. Once eucalypts are over 120-180 years old they begin to provide the small hollows needed by a plethora of native wildlife for denning, nesting and shelter. Though it is not until they are over 220 years old that they provide the larger hollows required by species such as owls, cockatoos and gliders. They may live for 300-500 years, sometimes longer.

To maintain continuity of supply of these resources by such long lived organisms it is essential to ensure that there are enough small hollow-bearing trees to replace the large hollow-bearing trees when they die, and enough strong and health mature trees to develop into the hollow-bearing trees of the future. It needs to be recognised that many trees die along the way, so increased retention of smaller trees is need to ensure that sufficient trees survive into the next age class. The persistence of a multitude of animals, and the health of the forest, depends on maintaining and restoring hollow-bearing trees in perpetuity.

Retention of Hollow-bearing (H) trees and recruitment (R) trees (to grow into the hollow-bearing trees of the future) are key requirements of the Threatened Species Licence to mitigate logging impacts on an array of native animals in eucalypt forests (see nefa.org.au/old_trees). For decades NEFA have been battling to get improved protection for large hollow-bearing trees and the recruitments needed to sustain them, and the vital hollows they provide, into the future. NEFA has identified poor and inadequate selection and protection of habitat trees as a problem in all our audits.
The current habitat tree retention rules per hectare are for the retention of 5 hollow-bearing trees (where they remain), and one of the next largest trees as recruitment trees for each hollow-bearing tree. Natural forests have 13–27 hollow-bearing trees per hectare so this is a major reduction in resources. The retention of just one recruitment tree for each hollow bearing tree means that not enough will survive to replace the hollow-bearing trees as they die. In forests with Greater Glider densities >1 per hectare, and records of threatened owls, 8 hollow-bearing trees per hectare need to be retained, though just 5 recruits. In the non-regrowth zone if there are less than 5 hollow-bearing trees per hectare then the next largest tree needs to be retained and counted as a hollow-bearing tree to make the numbers up to 5.

The intent of the new IFOA is to just require up to 5 hollow bearing trees per hectare (where they survive) and to remove the requirement to retain recruitment trees (except where they fall within habitat tree clumps). This is a significant reduction in hollow-bearing trees (in non-regrowth areas and Greater Glider habitat) and a near total loss of the recruitment trees essential as the hollow-bearing trees of the future. This will have huge long-term impacts on hollow-dependant fauna.

There are currently requirements to retain 3 mature eucalypts per hectare of species known to produce copious nectar as "eucalypt feed trees". This retention increases to 5 'eucalypt feed trees' per hectare in compartments with nectivorous Swift Parrot, Regent Honeyeater or Black-chinned Honeyeater records. These trees provide vital resources to a plethora of nectar-feeders, that are nowhere near as abundant in regrowth stands. The proposal is to remove any need to protect 'eucalypt feed trees'.

The current retention requirements are that recruitment trees are required to be a "live tree of a mature or late mature growth stage ... that is not suppressed prior to harvesting and appears to have good potential for hollow development and long term survival", and "belong to a cohort of trees with the largest dbhob" be scattered throughout the logging area, and have "good crown development" and "minimal butt damage". Similarly eucalypt feed trees are required to be "mature or late mature individuals" of select nectar producing species. In practice eucalypt feed trees are often taken to be a subset of recruitment trees, though they come into their own in forests with low numbers of hollow-bearing, and thus recruitment, trees.

While large old hollow-bearing trees are not of much interest to the industry, the recruitment trees and eucalypt feed trees are of the utmost interest as these constitute a high proportion of the remaining large high quality sawlogs. It is therefore not surprising that the most widespread and frequent breaches found by the EPA and NEFA are the logging of the large mature trees required to be retained as recruitment and/or nectar feed trees. Because these represent the best sawlogs the Forestry Corporation does everything they can to avoid protecting them, either by refusing to select any or by selecting trees that are too small, deformed or damaged to meet requirements.

The EPA have proven themselves totally unwilling to take any meaningful regulatory action in response to these most common breaches, meaning that as large sawlogs dwindle the logging of recruitment and/or nectar feed trees has increased. Now the EPA has absolved itself by any liability by removing any requirements to protect recruitment or nectar feed trees.

NEFA has also found that trees required to be retained and protected are also often illegally damaged during logging, though again the EPA refuse to do anything about it. For example, NEFA found that 22% of retained trees were illegally damaged by being sideswiped by machinery or carried logs, or by having trees dropped on them, in Cherry Tree SF. The EPA repeatedly said they
would take legal action after their inspection confirmed our complaint, though in the end they did nothing at all on the spurious grounds that they couldn't prove forestry had caused the damage.

Now they have codified this do-nothing approach into the new IFOA. If the Forestry Corporation damage a retained tree they firstly need to try to replace it with a comparative tree, if they can't find one then they need to pick a mature tree with a healthy crown (though it too may be damaged). If they can't find one of them then who knows, but at least the Forestry Corporation can no longer be held to account for their reckless logging.

In addition to these there are requirements to retain Glossy Black-Cockatoo feed trees (Casuarina with chewed cones beneath them), Yellow-bellied Glider and Squirrel Glider sap feed trees (trees where characteristic marks have been chewed through bark for sap collection), and dead standing trees. The feed trees are rarely identified and retained in practice (and the EPA refuses to enforce breaches), though the intent will remain under the new rules.

There are also currently requirements to retain 5 Koala feed trees per hectare in medium quality Koala habitat, which is discussed under Koalas.

**Giant trees**

There is a requirement that all "giant" blackbutt and alpine ash over a 1.6m diameter at stump height over bark (DSHOB) and for all other species all "giant" trees over 1.4m DSHOB be retained. The NRC (2016) again over-rode the EPA who were advocating a "Minimum 135 centimetres blackbutt, Minimum 120 centimetres all other species". As noted by the NRC these size thresholds were specifically chosen because "proposed size thresholds likely to have limited impact on wood supply (no net change to wood supply)".

All such trees are the largest trees and thus should have been retained under the present prescription, though in practice the Forestry Corporation continued to log them whenever they thought they could get away with it. At least this stops such blatant rorting, though all trees over a metre diameter should be retained as such large trees are becoming increasingly rare.

The Remake of the Coastal Integrated Forestry Operations Approvals Final Report Threatened Species Expert Panel Review reports the EPA representative Brian Tolhurst as stating:  

*All trees greater than or equal to 100 cm dbh should be retained and protected as a matter of urgency. Not only do these provide the best opportunity to develop the large hollows required by many species they also provide more flowers, fruit, nectar and seed along with nesting opportunities for large birds such as raptors. At this stage of the harvesting cycles across coastal NSW all remaining large trees are part of a limited resource and are critical for many threatened species and populations to survive. There is known clear deficit of hollow bearing trees in the forested coastal landscapes of NSW.*

**Threatened Species**

Currently, for north-east NSW pre-logging surveys are required to identify locations of 36 threatened animal species, and provide various protection around them - ranging from increased feed trees up to 20ha exclusions for Brush-tailed Phascogale. Pre-logging surveys are also required for 316 threatened plant species, with most species requiring either 20m or 50m exclusion areas around records.
The draft Coastal IFOA proposes to "reduce the need to locate threatened species through costly and ineffective surveys", though "proposes that 'targeted surveys' still be required to cater for some species not suited to the multi-scale landscape approach".

In north-east NSW the intent is to remove the need to survey for and apply prescriptions to protect 22 threatened animals (9 mammals, 6 birds, 6 frogs and 1 reptile), with prescriptions only retained for 14 species. Some examples of lost protections around records of threatened fauna are:

- 20ha exclusion areas: Brush-tailed Phascogale.
- 8ha exclusion areas: Squirrel Glider.
- 30m riparian buffers on 1st and 2nd order streams within 200m: Golden-tipped Bat, Fleay's Frog, Giant Barred Frog, Stuttering Frog.
- 50m around records or inhabited wetlands: Green and Golden Bell Frog, Littlejohn's Tree Frog.
- 50m around dens and retain 15 mature feed trees within 100m of observations/200m of calls: Yellow-bellied Glider.
- Retain 10 mature eucalypt feed trees per 2ha in compartment: Regent Honeyeater, Swift Parrot, Black-chinned Honeyeater.

In north-east NSW 228 species of threatened plants (72%) will lose all protection and 28 species (9%) will have reduced protection. Most species either required 20m or 50m exclusion areas around records. Of the 91 species currently requiring 50m buffers (i.e. 0.79ha) around records, 79 will have all protection removed and the rest will have buffers reduced to 20m (i.e. 0.13ha).

A total of 60 threatened plants will still require limited surveys and limited protection ranging from Roadside Management Plans up to 20m exclusions.

Prescriptions were originally determined by negotiations between the NPWS and the Forestry Corporation, with many subsequently removed or reduced (none were increased). Despite claims of adaptive management, over the past 20 years there has been no monitoring undertaken to test the effectiveness of prescriptions. The agencies don't care how well they work, or what will be the consequences of reducing or removing them.

Threatened species exclusions are considered to represent an average of 3.4% of the logging area, though NEFA surveys do find many more locations of threatened species and do significantly increase exclusion areas. Protected areas would substantially increase if independent surveys were required.

Where there are records of previously protected areas for Squirrel Glider, Brush-tailed Phascogale and Koala high-use areas, that have not been subsequently logged, under the new IFOA they are intended to be protected by inclusion in 'wildlife clumps'. Though no new areas will be protected for these species.

**Koalas**

Since 1997 the Forestry Corporation have been required to thoroughly search for Koala scats ahead of logging and establish 20m exclusion zones around Koala High Use Areas (the buffer was reduced from 50m to 20m in 1998). Where some evidence of Koalas are found the compartment is identified as 'intermediate use' and 5 Koala feed trees per hectare are required to be retained (though there is no minimum tree size).
In 2012 NEFA caught the Forestry Corporation halfway through logging a Koala High Use Area and about to log 4 others in Royal Camp State Forest. They weren’t looking before they logged. When they started logging nearby they still didn’t look and logged another high use area.

The Forestry Corporation had been refusing to do the searches with the thoroughness required to identify Koala high use areas for 15 years. After Royal Camp the EPA briefly tried to make the Forestry Corporation do thorough searches, but soon gave up and agreed with the Forestry Corporation to abandon pre-logging searches and rely on modelled habitat instead.

The NRC (2016) identify that only "Around 200 hectares of koala high use area has been protected over the past 15 years and tree retention requirements have been triggered on around 33 percent of compartments (130,000 hectares)". NEFA accepts that the relatively low identification of Koala High Use Areas partially reflects the collapse of Koala populations on the north coast, though considers it also reflects the ongoing refusal by the Forestry Corporation to thoroughly search for Koala scats ahead of logging.

In 2016 the EPA undertook a project overseen by an expert panel to review various approaches to map potential Koala habitat, with extensive groundwork to test the mapping. The project found that neither modelling nor ecosystem mapping were accurate enough to identify the "occurrence of feed trees and therefore habitat class at the level of detail required for management in state forests", with the panel unanimously agreeing that "the primary intent and focus should be to identify the location, distribution and extent of areas that are supporting extant/resident koala populations".

Despite the conclusion from their study that modelling is too inaccurate for regulation at the scale of individual logging operations, the EPA funded DPI Forestry (Law et. al. 2017) to develop a model. This was intersected with an OEH (2016) likelihood model to identify high/high, moderate/high and moderate/moderate quality Koala habitat.

Because of differences between the EPA and Forestry Corporation the Natural Resources Commission (2016) was directed to resolve a prescription based on a "modest increase in tree retention rates aim to minimise impacts on wood supply to best possible extent while recognising Government’s policy initiatives and targeted investment in Koalas as an iconic species (no net change to wood supply)".

The EPA (NRC 2016) proposed a retention rate of "25 trees per hectare in High/high quality habitat, 20 trees per hectare in High/moderate quality habitat, and 15 trees per hectare in Moderate/moderate quality habitat". The NRC over-rode the EPA to support a retention rate proposed by the Forestry Corporation specifying "10 healthy trees per hectare with cell based application in High/high quality habitat, 5 trees per hectare with compartment wide application in High/moderate or moderate/moderate cells over 25 percent or more of compartment".

Under the new prescriptions Koala browse trees are required to be greater than 20 cm diameter at breast height (DBH) (30cm DBH outside the north coast). The EPA (NRC 2016) proposed that "retain trees with minimum 25 centimetre diameter DBHOB, prioritising primary browse species, then secondary browse species.". The NRC over-rode the EPA to support the Forestry Corporation, deciding "retain trees with minimum 20 centimetre diameter DBHOB, retaining trees where available with 50 percent primary browse species".

The outcome is a map of very restricted highest quality Koala habitat and a broad map of compartments with more than 25% "moderate" quality Koala habitat. In the high quality habitat the requirement is to retain up to 10 browse trees >20cm DBH per hectare in the vicinity, and in
moderate quality habitat the proposed requirement is to retain up to 5 browse trees >20cm DBH per hectare.

It is evident that the EPA list of feed species fails to include numerous browse species. This means that where there are less than 5 or 10 browse trees per hectare, alternative unlisted browse trees are allowed to be logged rather than retained.

43% of the mapped high quality Koala habitat on State Forests is within the North Coast Intensive zone and thus intended for clearfelling. Illegal logging in these forests over the past decade has focussed on replacing Koala feed trees with Blackbutt.

The methodology for applying the models is very simplistic and appears intended to reduce the identification of high quality habitat requiring higher tree retention rates. For example, Royal Camp and Carwong State Forests which have been identified by the EPA to be source Koala habitat with Koala occupancy of 58% and 80% respectively, are ranked as being very high on the OEH Likelihood Map, but only Moderate on the DPI Forestry map. So these important Koala habitats will only qualify for Koala Prescription 2 and the retention of 5 browse trees per ha.

In abandoning any measures to ascertain whether Koalas are present in an area, the EPA have deliberately abandoned any measures to identify and protect resident Koala populations and will instead often provide their limited protection to uninhabited and unsuitable habitat while allowing logging of the best habitat left. The Forestry Corporation can now log high-use koala habitat at their whim.

Despite north-coast Koala populations crashing by 50% over the past 15-20 years, in part due to the logging of core Koala habitat and the loss of mature feed trees through logging, the Forestry Corporation and EPA are removing the need to identify and protect occupied Koala habitat. They are prioritising the protection of virtual Koalas over real Koalas, while targeting half of the high quality modelled habitat for the most aggressive logging and conversion into quasi-plantations. This is clearly not compliant with the Commonwealth Conservation and Management Strategy and NSW Recovery Plan requirements.

8. Stop increasing logging intensity and legalised clearfell logging along the North Coast of NSW.

Under the current IFOA two logging regimes are allowed: Single Tree Retention (STS) and Australian Group Selection (AGS). STS is the only logging regime currently practiced.

The current intensive logging regime (Australian Group Selection) limits the size of cleared patches to 0.25 hectare (50m by 50m), and requires logging be excluded from 10% of the net logging area.

Current requirements for Single Tree Retention are for 60% of the basal area (area of the cross section of a tree trunk) of the trees in a harvesting area, including all trees under 20cm diameter, to be left after a logging operation.

In a natural forest basal area can vary from as low as 18m² ha on a low productivity site, up to 47m² ha on a high quality site (Smith 2000), with up to 60m² on better quality sites. The NRC effectively identify the basal area range as 17-40m² per hectare, identify the current 60% retention requirement as equivalent to the retention of 10 to 24 m² per hectare. The classic study on Blackbutt Forests by Florence recommended retention of a minimum basal area of 22m² per hectare.

The proposal is to establish 3 zones where logging is only limited by basal area retention. These will be a 140,000ha North Coast Intensive Zone covering Coastal forests south from Grafton to Taree, a coastal "regrowth" zone and an escarpment "non-regrowth" zone.
The proposed North Coast Intensive Zone is for alternative coupe logging, with coupes limited to 45ha. 10% of the loggable area is required to set aside as wildlife or habitat tree clumps. For 90% of the loggable area there are no minimum basal area retention requirements. Retention of up to 5 remaining hollow-bearing trees per hectare, and koala feed trees (within modelled habitat) require retention - preferably within wildlife and habitat tree clumps. So if the tree retention requirements have been met in the clumps (which is likely) then they will effectively be no constraints on most of the 90%, meaning that large areas can be clearfelled with at best a few small retained trees. Up to 2,200ha is allowed to be intensively treated each year, with clearfelled patches of 45ha (60 ha clearfells will be allowed for the first 2 years).

The EPA (NRC 2016) argued the baseline for intensive logging should be Australian Group Selection, though never-the-less argued for maximum 30ha clearfells with 21 years between clearfells and 10 years between adjacent clearfells. The Forestry Corporation wanted 60 ha clearfells with 14 year return times and 7 years between adjacent clearfells. The NRC went with 45 ha clearfells, 21 year return times and 10 years between adjacent clearfells. Though the Forestry Corporation will just do what they want.

Since 2006 the Forestry Corporation have been practicing an illegal form of Single Tree Selection called "Regeneration Single Tree Selection" where they have been taking up to 90% of the basal area. NEFA have been complaining about this for years, leading the EPA (2016), on behalf of the Environment Minister, to admit this "is not consistent with the definition and intent of STS (Single Tree Selection) in the Integrated Forestry Operations Approval (IFOA) as well as FCNSW's own silvicultural guidelines."

Despite its illegality the NRC (2016) consider that as the Forestry Corporation have been practicing "Regeneration Single Tree Selection" since 2007 they would adopt this as Current harvesting practice to reference proposed changes against. They give the parameters as "no upper coupe size limit, coupes range in size from 5 hectares to over 100 hectares, 4 harvest cycles, 7 year average gap, 21 years until all harvested". This is a big difference from 60% basal area retention and retention of all trees <20cm., which is the current regime that the EPA recommended should be the benchmark.
Selective Logging

Differences between logging regimes when applied to a natural oldgrowth forest. Based on a 100m x 20m transect (0.2ha)

Under the new rules 10% of the loggable area in the "regrowth" zone, and 13% of the loggable area in the non-regrowth zone will be required to be set aside in as wildlife or habitat tree clumps. The only limit on selective harvesting in the remaining 87-90% is that in the regrowth zone the minimal basal area required is 10m² ha and in the non-regrowth zone 12m² ha. The EPA (NRC 2016) recommended basal area retention of 12 and 14m² ha respectively though they were over-ridden by the Natural Resources Commission.
The new rules allow for logging intensity to increase on better sites, with as little as 16-25% of the basal area retained in the better quality forests. This is well below expert recommendations.

The Remake of the Coastal Integrated Forestry Operations Approvals Final Report Threatened Species Expert Panel Review reports the EPA representative Brian Tolhurst (one of the 10 experts who answered questions) as stating:

*Sustainable forest management requires maintenance of forest stand structure complexity and heterogeneity to allow for biodiversity conservation. This key point seems to have been given up on in this review process with harvesting practices proposed that will severely degrade these forests to an artificial and simplified arrangement with severely reduced and limited biodiversity values.*

*I think this remake is an interventionist approach to remedy a situation that has evolved through poor and desperate practices adopted to meet an unsustainable wood supply agreement at significant expense to the environment and the people of NSW. Continuing down this path will have long term deleterious environmental outcomes for the public forests of NSW in order to limp across the line and meet the final years of the wood supply agreements. This will be entirely at the expense of these forests. Recovery to some level of ‘natural’ ecological function will be decades and centuries, possibly without many species that will not survive this current and ongoing impact.*

... *The intensive harvesting has clearly moved the coastal state forests from being multiple use forests with significant biodiversity values to that of purely production forests more in line with plantations. I don’t believe this is an appropriate outcome or use of these crown lands that was ever envisaged.*

... *Removal of standing trees below a basal area of around 18 - 20m2/ha will reduce the structure of these native forests to such a simple form that the ecological processes will be severely diminished or non-functioning. Even in the best case scenario it will take many decades or even centuries of recovery for any level of native forest ecological function to be restored after this intensity and scale of impact.*

*A typical healthily stocked Blackbutt forest could be expected to have a basal area of around 30 - 40 m2/ha. Currently under the IFOA a 40% removal would limit the minimum basal area retention of 18 m2/ha in the worst case scenario.*

The NSW Government repeatedly promised that the new IFOA would result in "no net change to wood supply and no erosion of environmental values",

With the NSW Government now proposing to log oldgrowth forest and rainforest, increase logging intensity, introduce clearfelling, reduce buffers on headwater streams, and remove protections for most threatened species on public land in north-east NSW, it is clear that they lied to us.

The Government justified all these environmental wind-backs on the grounds that they promised the industry that they would not impact on existing wood supply obligations, and it is clear that this took precedence.

It is hard to fathom exactly what the current wood supply from north-east NSW is. Every document relating to current supply levels of high quality sawlogs (m³ per annum) from native forests and hardwood plantations in north-east NSW are very different: in 2015 in response to a question to Nick Roberts the Forestry Corporation stated that current allocations were 192,471, in 2017 the EPA reported that as at 2015 they were 179,600, in 2018 the Forestry Corporation released an Expression
of Interest that identified current commitments as 168,812 and now the NRC claims they are 220,423.

For most of June NEFA sought replies from EPA, NRC and Forestry Corporation to specific questions about wood commitments from north-east NSW. It wasn't until July that partial responses were put on the EPA's website, we are still waiting for answers to most queries.

Based on claims of resource short-falls the EPA agreed to major wind-backs of environmental protections, including increasing logging intensity, removing protections for mature trees, reducing buffers on headwater streams, and removing protections for most threatened species.

Then, on the grounds of resource shortfalls, the Natural Resources Commission (NRC) intervened to side with the Forestry Corporation against the EPA to further increase logging intensity, increase the size of clearfells, slash retention rates for Koala feed trees, and increase the size of old trees that can be logged.

Even then the NRC claimed that "it is not possible to meet the Government’s commitments around both environmental values and wood supply" maintaining there would be a shortfall in commitments from north-east NSW of 7,600 to 8,600 cubic metres of high quality sawlogs per annum due to protections for Endangered Ecological Communities and Koalas. To make up this claimed shortfall the Government decided to log oldgrowth and rainforest protected in the reserve system.

Nowhere in their documents until recently do the NRC say what timber volumes they base these conclusions on. In response to enquiries they stated that their considerations have been based on high quality sawlog commitments from north-east NSW's native forests and hardwood plantations of 237,000m³ per annum.

9. Stop propping up the rapacious native forest logging industry at the cost of species extinction, logging dieback, reduced stream flow and water quality decline and sustainable forest based jobs

This submission uses the example of Bell Miner Associated Dieback (BMAD) to illustrate the the damaging effect of current logging practices

BMAD occurs when canopy trees are removed allowing lantana to dominate the understorey. It is logging-induced ecosystem collapse. It was first recognised in the 1940s, though in recent decades has been spreading, along with lantana, at an alarming rate, likely exasperated by increasing water stress due to climate change. In some State Forests up to 60% of the eucalypt forests are affected. It occurs throughout coastal NSW.

When the NSW Scientific Committee listed BMAD as a Key Threatening Process in 2008 they considered it was initiated on sites "where tree canopy cover has been reduced by 35 – 65 % and which contain a dense understorey, often of Lantana camara". Many researchers have reached the conclusion that it is initiated by logging.

Yet again the most recent review by Silver and Carnegie (2017) for OEH found that the literature supports that logging is primary cause of dieback - without clearly saying so. The process of BMAD has been identified for over 20 years, and the process is once again confirmed to be:

1. Reduction in density of overstorey canopy, or creation of gaps in the overstorey results in an increase in density of understorey plants, particularly the weed lantana

2. Lantana outcompetes and suppresses native species, creating a dense understorey which is ideal for nesting by Bell Miners (Bellbirds)
3. Aided by the open overstorey, Bell Miners aggressively mob other bird species (and predators and diurnal arboreal species) to exclude them from their territories.

4. The reduction in predators of the sap-sucking psyllids, coupled with the preferential feeding of Bell Miners on the psyllids sugary coatings (lerps) leaving the psyllids intact, enables populations of psyllids to proliferate.

5. Psyllids primarily feed on the leaves of eucalypt trees causing defoliation. The trees use their carbohydrate stores to produce new foliage with the young leaves even more attractive to psyllids.

6. Repeated defoliation depletes tree's carbohydrate stores, allowing for an increase in attack by secondary pests (such as wood-borers) and disease, and causing trees to sicken and die. Once a tree's carbohydrate stores are sufficiently depleted they may be unable to recover.

DPI - Forestry recently used helicopter sketch-mapping to identify 44,777ha of BMAD north from Taree. Though comparison with other mapping indicates that there is something like double this area affected.

A major thrust of the Forestry Corporation and the EPA is to create the pretence that BMAD has nothing to do with forestry. One way of doing this is to claim that because BMAD occurs on National Parks, it can't have anything to do with logging. It is a convenient and effective excuse for inaction.

In order to properly consider the tenure claim, for the Border Ranges region a simple comparison was made of National Parks (and Flora Reserves) created before 1995, National Parks created after 1995 (mostly created from State Forests from 1995-1999 as part of the forest reform process) and current State Forests (excluding plantations). It is clear that most of the BMAD on National Parks is in parks that were being logged up until their creation as part of the forest reform process (post 1995). It is also clear that the ongoing logging of State Forests has dramatically increased BMAD over the past 20 years.

The IFOA intends to allow the ongoing logging of BMAD affected forests, subject to some basic simplistic acknowledgement of its presence by FC. It will only require an operational plan to subjectively identify "the occurrence and susceptibility of the operational area to Bell Miner associated dieback", and where this is identified "details of each management action to be
implemented in the operational area to mitigate the impact or further spread of Bell Miner associated dieback”. This amounts to nothing more than a subjective cursory assessment and allows for their current protocol of targeting all trees affected by BMAD to be targeted for removal to continue.

Though what is most concerning is that rehabilitation work is only required when forest is on its last legs: "Regeneration to achieve the standards in this protocol is only required for harvested areas where the natural floristic composition exists at a basal area of less than 14 square metres per hectare (14 m2/ha)". 14m2 is bugger all (for example intact high site quality forest can have an average basal area of 47m2 per ha, and in better forests 60m2), and it can be made up of dead and dying trees.

Harvested areas are defined to be "The portion of the operational area that has been subject to harvesting operations or forest products operations as part of the current forestry operation". It is only areas subject to "active" logging that require rehabilitation. The extensive areas of degraded forests with no or little millable timber can simply be excluded from "active" logging and will never require rehabilitation.

timber from the region’s forests". Their WSA was extended until 2028. Now much of that timber is effectively being given back to the industry according to the NRC figures.

Absurdly the new IFOA is allowing the removal of 269,000 m3 p.a. large high quality sawlogs per annum from north-east NSW, which was the original 1998 gross over-estimate. Why retain it as it is totally divorced from reality?

10. End logging of public native forest and complete transition of the timber industry to 100% plantations.

Transition must include transition to genuinely sustainable timber plantations, transition to alternative products including transition to bamboo and hemp products.

The experience of the BEC and the Bellingen community with the management of native forest plantations has as is described below been an disaster and the approach and management of native forest plantations must change dramatically to ensure a successful transition.

The link between native forests and plantations of native hardwood species on the North Coast regarding the proposed coastal IFOA is that unsustainable cutting out of native forests is justified on the claim that local hardwood plantations will take up the shortfall.

The Natural Resources Commission (NRC) report in 2016 identifies public native forest plantations as providing the following inputs into of high quality sawlogs for North east NSW:

1. 40,000m3 from 2013 to 2021
2. Rising to 70,000m3 between 2021 and 2029
3. Continuing at 70,000m3 until 2049
4. Rising to 140,000 between 2049 and 2053 and continuing indefinitely at that rate.

However, no reference is given for these, which must be considered highly speculative and a high risk in view of the fact that it is apparent that that a majority of these plantations have been clearfelled during the last 20 years, to provide a relatively low level of resource of generally low-grade timber. For example:
Forestry Corporation’s current Flooded Gum and Blackbutt plantation harvesting operation at Tarkeeth State Forest. Harvesting plan 2014-0113 states: “flooded gum and blackbutt plantation was originally established by Australian Paper Manufacturers in the 1960s and 1970s. It was purchased by the Forestry Commission of NSW in the 1980s and commercially thinned in 1999-2000. The timber crop is now mature and ready to be harvested to supply the local timber industry”.

It should be noted, however, that item 3 — Expected Yield, shows a high proportion of low and moderate grade logs. It should be noted also that a considerable proportion of the high-grade Blackbutt yield in 2016-17 was obtained from adjoining public Crown Road reserves, outside the State forest plantation boundary. (Without this added resource, the high-grade yield would have been lower).

In response to community concerns over the numerous daily truckloads of small logs exiting the Tarkeeth SF 49-year-old Flooded Gum and Blackbutt plantation, Forestry Corporation’s senior manager Dean Kearney confirmed in the Bellingen Shire Courier Sun on 22 February 2018, that 24% of the production is exported as small logs, and 6% burnt for bioenergy.

It is apparent from the official Yield Estimates and eye-witness accounts of small logs on the trucks, that little of the 70% provided to local industry was high grade, suitable for construction.

With this sort of production from a 49-year-old hardwood plantation, and notwithstanding the increased plantings of Blackbutt in recent years, it is doubtful that public native forest plantations can make the massive contribution to high quality sawlogs that is predicted by the NRC. This view is also understood to be commonly held by the industry.

The plantations in Bellingen were originally owned by Australian Paper Manufacturers (APM), who established the Flooded Gum trees to supply pulp logs to a proposed paper processing industry, at nearby Bonville. After that project was abandoned and the plantations left to grow wild, the land was acquired by the Crown and dedicated as State forest in 1984, and has been managed by Forestry Corporation (FCNSW) since January 2013. The plantations, originally established as a pulp log resource, were acquired primarily to supplement the dwindling hardwood sawlog supply, despite Forests NSW having numerous research reports warning that plantation Flooded Gum was unsuitable for sawlogs.

Today in 2018, Bellingen’s hardwood plantations are still not economically viable. The older plantings (1968-72) are predominantly lower grade Flooded Gum, suitable for pallets, biofuel and pulp export, whilst the newer plantings of predominantly higher-grade Blackbutt will not ready to harvest for construction timber for decades.

Contrary to the NRC claim that public native forest plantations will provide high quality saw logs into future is the recommendation of NSW Treasury’s Financial Audit 2011 to divest of the plantation business:

“Divestment of non-core assets — Forestry sector
Forests NSW is an entity that sits within the Department of Primary Industries and comprises two separate operating units: native forests and plantation forests. The plantation business is fully commercial and operates in a competitive market, supplying the building materials industry and the pulp and paper industry. While there was a case for public ownership when the plantation business was first established, this justification is no longer present.”
It is recommended that the plantation business be separated from Forests NSW and corporatised and as part of the process of corporatisation, the native title, policy and research functions are separated out and retained while the plantation business is established on an efficient basis. Once corporatised it is proposed it is prepared for privatisation by means of a long-term lease in line with the approach followed in Victoria and Queensland and which South Australia is proceeding with.

The Financial Audit recommends: Sale or lease or restructure of businesses: Separate the Forests NSW plantation business from the Department of Primary Industries, then corporatise and execute a long-term lease of the business.”

It is highly unlikely any new ‘owner’ of Bellingen’s plantations would wait decades to harvest construction timber, but would instead intensify operations to achieve a sustained profit through short crop rotations and log supply to Asian pulp markets.

Bellingen Environment Centre is vehemently opposed to all forms of asset recycling, long-term leasing or privatisation of Bellingen’s plantation forests, as this would adversely and permanently alter the character and culture of Bellingen, due to the extreme closeness of the plantations to the town centre, surrounding family homes, small farms and our rivers.
There are numerous problems being identified with plantations both internationally and locally. **Problems associated with Bellingen’s hardwood plantations include:**

1. **Soil Erosion**

   The Forestry Corporation was fined $15,000 over erosion caused by a plantation clearfelling operation near Coffs Harbour in 2014. The Environment Protection Authority (EPA) said the harvesting of a native forest plantation in Tuckers Nob State Forest saw a huge amount of sediment wash into the Never Never Creek. The EPA said not enough attention was paid to likely rainfall and soil loss during the logging, which ran from September 2014 until February this year. The activity involved whole scale removal of the vegetation and exposed 95 hectares of land which was subject to a significant rainfall event, that resulted in a significant volume of sediment being discharged into the Never Never Creek. The EPA concluded that the erosion controls that were implemented were inadequate and that there was inappropriate or insufficient attention paid to the level of risk posed by the works at that time of year.

   Tuckers Nob SF and much of the rest of public plantation estate in the Bellingen valley are associated with the highly erodible Nambucca soil beds (Eddie 2018).

2. **Threatened Species**

   Tarkeeth State Forest is a 1450-hectare former APM paper plantation, stretching from Bellingen town in the west, through the forested hills of southern suburbs to Raleigh in the east. 59% is registered as a 'plantation', and currently undergoing a 10-year clearfell-burning operation.

   The forest rises on the steep fragile slopes of Fernmount Range between the Bellinger and Kalang rivers, and descends onto floodplain, where the two rivers connect tidally and meet the Pacific Ocean at Urunga. It is a biodiversity hot-spot.

   Over the forty-eight years since planting took place, the Flooded Gum crop has failed to flourish due to the rigorous grow back of the native species, and now has a rich and diverse lower story of native trees that supports threatened wildlife. It is an important habitat for rare and endangered native wildlife including: Koala, Quoll, Giant Barred Frog, Powerful Owl, Sooty Owl, Black Necked Stork (Jabiru), Glossy Black Cockatoo, Red-tailed Cockatoo, Wompoo Fruit Dove, Rose Crowned Fruit Dove and Superb Fruit Dove.

3. **Indigenous cultural significance**

   To the Gumbaynggirr people, the traditional owners, Tarkeeth Forest is of great value holding bush medicines, bush tucker, and artefact making trees, stone tools/ weapons, scarred trees and most importantly Sacred Sites. The Tarkeeth Forest also serves as a significant Dreaming Track — an Ancient Traditional 'major roadway', linking Gumbaynggirr Clan groups from the Great Dividing Range and other western tribes to the coastline for its abundance of natural resources. The Gumbaynggirr stand to lose this precious history through destruction of this forest.

4. **Unsustainable Plantation Management**

   **Clearfelling** is form of deforestation that destroys natural habitats and contributes to climate change. It damages, soil, water, wildlife, human wellbeing, and the atmosphere.
When trees are felled they release the carbon they are storing into the atmosphere, where it mingles with greenhouse gases from other sources and contributes to global warming. Additionally, post-clearfelling fires release massive quantities of carbon dioxide into the atmosphere. Reform of these practices must be central to any serious climate change mitigation techniques and mechanisms.

Clearfelling has a massive impact on the water cycle. Trees hold water and topsoil. Clearfelling removes the trees which would otherwise have been transpiring large volumes of water, and also demolishes the understorey. This reduces the local capacity to retain water, which can exacerbate flooding.

In mid-2016, Forestry Corporation has commenced a 10-year operation in Tarkeeth Forest. Their method involves industrial-scale clearfelling of up to 150 hectares at a time, using massive machine harvesters, followed by intense post-harvest windrow and ground fires, and repeat cycles of wide-acre spraying using a cocktail of herbicides.

Forestry Corporation’s methodology and practises are unsustainable and unsafe for our community and environment. For example, the Tarkeeth plantations are situated on fragile steep slopes, too close to our main waterways and farms. Our region has a very high rainfall and is subject to severe flooding. Clearfelling is a complete desecration of our forest, everything is destroyed in the process — unlike selective logging.

The fallout of this methodology is three-fold; there is enormous destruction of native flora and lower under-story native trees and shrubs, loss of vital habitat for rare and threatened native wildlife and birds, and exposure of thousands of tonnes of top soil which could potentially wash into our river system when heavy rains come. In one location, clearfelling is occurring only 100-metres from the Kalang River.

Forestry Corporation claims to use sustainable methods (however this term only refers to the fact he clearfelled area is replanted with seedlings for the next harvest). It does not refer to methodology. Forestry Corporation’s standard practice is to use repeated wide-acre applications of a chemical cocktail that includes: Weedmaster ARGO which contains two Glyphosate salts, Associate which contains Metsulfuron Methyl, Starane Advanced which contains Fluroxypyr, and Pulse Penetrant an organosilicone-based surfactant.

Several of these chemicals have been banned in Europe, and no one has done any research anywhere in the world to determine the impact of using these chemicals in their applied combination. Forestry Corporation’s methods include the use of synthetic fertilisers. Our fragile soils, steep slopes and high rainfall make this a recipe for disaster, as these chemicals will move off site and wash into our main two waterways. Contamination of our waterways and impact on our threatened native wildlife is a serious concern for our community.

Industrial-scale clearfelling, burning, and poisoning are dangerous practices that emit pollution. The risks are exacerbated in Bellingen’s drought-prone, flood-prone and high fire-risk region. The severe adverse impacts of the clearfelling methodology cannot be contained within the plantation area, causing damage the surrounding social and natural environments. Forestry Corporation’s clearfelling methodology must be reformed and replaced with environmentally sustainable forestry methods.

5. Fire risk associated with timber plantations
Clearfelling causes rapid deforestation, replacing moist forest with arid land, and then replanting in a significantly drier, more fire-prone environment. The higher fuel loads and uniform crown height of a young regenerating forest can massively elevate the intensity and rate of spread of fire.

We have learnt from the fatal Canberra and Black Saturday bushfires, and many others in Australia and abroad, that it is dangerous to situate flammable timber plantations close to human settlements. Because we know that they have the potential to considerably alter fire behaviour and exacerbate the risk of a catastrophic fire event.

However, Bellingen is closely surrounded by thousands of hectares of flammable timber plantations!

In 2013, after clearfelling moist mature forest, Forestry Corporation established a new eucalyptus plantation on very steep land, opposite the public hospital, close to Bellingen town centre.

During 2016-18, following clearfell-burning, Forestry Corporation is establishing new eucalyptus plantations on the steep slopes that surround the settlement of Fernmount, 6 kilometres east of Bellingen town centre. According to the Rural Fire Service asset register, Fernmount is rated as having an ‘Extreme bushfire risk’ with a potential ‘Catastrophic consequence’.

Today’s thinking is that flammable timber plantations should be located well away from human settlements, and best practice flammable landscape planning for a town in a bushfire-prone area, demands that parkland buffer zones separate homes from fire-prone forest, and that the surrounding forest be of mixed tree species that vary in size, and that there is a protective moist rainforest understory.

6. Betrayal of Community Consultation

Forestry Corporation has betrayed our community consultation process and has rejected the concerns and requests put forward. In relation to forests in the Bellingen and Kalang valleys the community asked for no clearfelling, to use selective logging methods to preserve the delicate ecosystem. It requested bigger buffer zones for our waterways, and additional wildlife corridors to protect habitat for threatened native wildlife. It asked for buffer zones to separate homes from fire-prone forest, and that the surrounding forest be of mixed tree species that vary in size, and that there is a protective moist rainforest understory.

For example, In March 2018, 50 Bellingen families, mainly residents of Fernmount, wrote to Forestry Corporation seeking minor modifications to clearfell-burning and b-double haulage operations, to minimise adverse impacts on the community, and reduce risks to the health, safety and property. The noise, dust and smoke pollution affect some residents very badly. (In 2016, Forestry Corporation’s senior manager Dean Kearney informed residents that operations would continue for up to a decade).

Residents asked Forestry Corporation:

— To immediately and permanently discontinue post-harvest fires in Tarkeeth State Forest and employ safe methods to reduce and utilise wood residue, for example: mulching, chipping, pulping, salvage, collection of firewood, cease the felling of immature trees.
— That Sweedmans Lane (a 1-kilometre laneway designated for B-double haulage) be resurfaced with bitumen to bring an end to the severe dust pollution, frequent roadworks, and sudden road closures that are having a severe adverse impact on families living in Sweedmans Lane and residents who depend on the road for access.

— That Forestry Corporation adopts standard working hours for ALL future harvesting and haulage operations in Tarkeeth State Forest.

— For Forestry Corporation to constructively engage with our Tarkeeth Forest Neighbour Stakeholder Forum, and genuinely address our concerns.

After a few months Forestry Corporation wrote to all the families, saying NO to every request, and refusing to engage with the forest neighbour forum.

7. **Bellingen’s timber plantations are in in the wrong place**

Situated at the easterly extension of the Great Dividing Range the Bellinger Valley is surrounded by thousands of hectares of beautiful rich and diverse land and three main rivers: the Kalang, Never Never and Bellingen. These rivers connect tidally and meet the Pacific Ocean at Urunga. Their estuary is the only place in Australia where two rivers meet the ocean together.

Local residents rely on the quality of river water for their lifestyles and livelihoods, including: domestic water supply, irrigation for local farms (cropping, dairy, livestock, oyster farms), and for recreational activities and tourism.

However, State Forest plantations with their cycles of industrial noise, dust and smoke pollution, encircle Bellingen, and occupy vast areas of land on the outskirt of town and prime tourist destinations. The plantations within Tuckers Nob, Never Never and Pine Creek SF abut the residential streets of North Bellingen and stretch through 3850 hectares of Gleniffer, the Promised Land and Hydes Creek. 850 hectares of plantations in Tarkeeth SF, abut the town to the south, starting at the hospital in the west and stretching east close to family homes in Brierfield, Tarkeeth, Marx Hill, Fernmount, East Fernmount and Raleigh. Vast riverside plantations stretch across 1115 hectares of Gladstone and Newry SF follow the water’s edge of the Kalang River from Brierfield in the west to homes in South Urunga and Hungry Head.

Most of the Bellingen’s plantations, covering approximately 5700 hectares, are within 10 kilometres of Bellingen Post Office in the main street of town.

As the severe adverse social impacts of industrialisation are becoming increasingly apparent since the clearfell-burning operations commenced in Tarkeeth SF in mid-2016, Bellingen residents want some answers:

— What failures of governance have occurred to allow the establishment, ongoing development and industrial intensification of these massive flammable timber plantations on Bellingen’s doorstep, that abut our homes and rivers, occupy much of our flood-free land, and constrain the footprint of our town?

— Why have these failed paper plantation developments been allowed to undergo numerous changes of ownership, management, legislation, regulation, registration, methodology, intensification and branding, without any public consultation?
— Why has there never been any assessment of the severe adverse environmental, social, health, climate and cumulative impacts?
— Why are there no social impact controls in the Plantations and Reafforestation Act, when plantations are permitted so close to human settlements?
— Why has there never been any urban or flammable landscape planning?
— Why has there never been any serious assessment or mitigation of the fire risk?
— Why does the climate impact of clearfell-burning continue to be ignored?
— Why have our leaders allowed Bellingen's State forests to become 'green deserts' that are of low value to our Koalas and other precious native fauna?
— Why is the Bellinger-Kalang river catchment being clearfelled to provide pulp logs to China?
— Why hasn't the government established vast, genuinely sustainable and profitable timber plantations in safe locations away from our homes, rivers and fragile forests?
— Why is this happening to beautiful Bellingen? What is our future?

The Alternatives to current hardwood plantations in the Bellingen valley

1. Ethical plantations

The BEC understands and supports the need for responsibly managed timber plantations as a means of protecting our native forests, and being able to provide for our own timber needs here in Australia. We support sustainable selective harvesting to provide a permanent supply of quality timber to local mills and small businesses, to support and create local jobs.

However, we do not believe that Forestry Corporation is engaging in best practise, and that Bellingen's plantation do not confirm to best practice plantation design standards. Plantation operations and conducted under the Plantations and Reafforestation Act 1999 and Regulation Code 2001. The Act assumes that an accredited plantation is in a safe location, well away from homes and rivers, and therefore applies state-wide minimum environmental standards. No threatened species field studies are required, and there are no social impact controls. However, the people are falling ill because of air pollution, and some say they would never have come the Bellingen, had they known about the clearfelling and burning.

This is not good enough for the Bellingen community or environment. Forestry Corporation should be required to provide an environmental impact and a threatened species assessment for their plantations like everyone else has to.

Whilst Forestry Corporation refuses to listen to our community and adopt more ethical standards for its plantations, we are asking our government to put a stop to all State Forests plantations with 10-kilometres of Bellingen town centre (Gladstone, Never Never, Newry, Tarkeeth, Tuckers Nob and Pine Creek) and to relocate this business to a safer, more suitable location well away from our homes and rivers.

2. Alternative uses of plantations in the Bellingen valley
The Bellingen community wants its forests preserved and to be used for our thriving tourism industry — a mainstay of our local economy. We believe there will be far more consistent jobs and income via soft eco-tourism from walking trails, hiking, camping and adventure sports. We believe the community stands to benefit far more from the sustainable management and preservation of these forests than from timber plantations.

The BEC are asking our government for a complete stop to clearfelling in Bellingen. The aggressive nature of this methodology, along with the use of fire and chemicals, is too destructive for our threatened native wildlife, waterways and community’s health.

We believe the Bellingen community wants a full enquiry and assessment in consultation with our key stakeholders, to develop more sustainable and ethical methodologies to be adopted if business is to continue in this region.

References to this section

NSW RFS Asset register

DPI Public register of plantations:

NSW Treasury Financial Audit Report 2011

12. Transfer all existing subsidies from native forest logging into native forest restoration

13. Submission by the Bellingen Environment Centre (BEC)

On the NSW Regional Forest Agreements, second and third five-yearly reviews

Introduction

The coastal IFOA remake must take account of the preceding period of almost 20 years of the regional forest Agreements. Performance of the RFA’s is critical in planning for the future management of forests.

The report on the NSW Regional Forest Agreements second and third five-yearly reviews is the most convoluted, unprofessional and dishonest document that has come before the Bellingen Environment Centre during those thirty years.

We have not as yet identified any one person who has been able to stick with the document to read it in its entirety.

The tone for the document is set in its failure to accept the need to account for the first, second and third five-yearly reviews not to be done in a timely manner. No explanation is given as to why the reviews are up to eight years late — this is interpreted as a strong opening display of disregard for and disparagement of public accountability.
This submission therefore concentrates only on two sections of the review; World Heritage and Forest Ecosystems. In reviewing these sections we demonstrate and exemplify the errors, omissions, failures in scientific integrity and outright lies we believe are included in the document as a whole.

The BEC believes the NSW Regional Forest Agreements second and third five-yearly reviews report should be withdrawn and rewritten by a team of experts independent of government. It will be difficult, to say the least, for an independent scientist to grapple with the sheer volume of errors and omissions, inaccuracies and outright lies included in this document. Further general recommendations are included at the end of this submission.

World Heritage.

The listing of qualifying areas of the forests of north-east NSW on the World Heritage list was always an iconic conservation goal for north coast environmentalists and heavily influenced participation in the RFA process. The influence was such the anticipation of extensive World Heritage listing softened resistance to compromises to the timber industry, including accepting the widespread failure to achieve agreed conservation criteria in the reserve system.

The Bellingen Environment Centre has a strong interest in World Heritage having within our area of interest a number of Gondwanan World Heritage areas, areas on the indicative list, areas which may qualify under the RFA expert panels findings and areas which may also qualify on more contemporary interpretation of World Heritage criteria as applied in the Tasmanian Wilderness Forests listing in 2013.

The BEC also believes the proposed Great Koala National Park would potentially qualify for World Heritage listing on the basis of threatened species as the nine nature reserves set aside in China for Panda conservation do. The area to the west of Bellingen is also a stronghold for the endangered Rufous Scrub-bird and velvet worms and includes areas that would most likely protect the best of the best examples of habitat for those species. The BEC submission draws strongly on the resources and documentation of the north East Forest Alliance in preparing this section of the submission.

The Gondwana Rainforests of Eastern Australia is a serial property comprising many of the major remaining areas of rainforest in southeast Queensland and northeast New South Wales which was added to the World Heritage list in 1986, well before the adoption of the National Forest Policy and commencement of the RFA process.

Clauses 27-32 NSW Regional Forest Agreement for North East NSW deals with the RFA commitments to World Heritage. It is recognised that these commitments are not tied to time lines, though the wording identifies some urgency "to actively investigate, and jointly participate in the further World Heritage assessment of the relevant Australia-wide themes specified in Section 3.4.2 (Table 17) of the World Heritage Expert Panel report, including any potential contribution from the Upper North East and Lower North East regions".

The report on the NSW Regional Forest Agreements, second and third five-yearly reviews claim is repeatedly made that:

“This ongoing commitment was achieved during Period 1, Period 2 and Period 3”.

This claim is patently untrue.

They also claim somewhat misleadingly:

“There have been no World Heritage nominations within the three NSW RFA regions over the three five-year periods."

The only example given in the reviews of active investigation is a "joint undertaking" and reference to a 1999 Expert Workshop which predated the NSW Regional Forest Agreement for North East NSW.

Nineteen years after the Expert Workshop confirmed the "eucalypt theme" as a qualifying value for north east NSW the best the Governments can say is that;
"Any further development of World Heritage assessments of the eucalypt sub-theme will be subject to bilateral discussions between the relevant states and the Commonwealth and will take place independently of the RFA process".

There has been no investigation let alone an active investigation. Similarly there has been no attempt to investigate the identified associative values of Rufous Scrub-bird and velvet worms. It is apparent that there was no timely active investigation and the Commonwealth's obligations to World Heritage remain unresolved.

In 1996 the Commonwealth of Australia and the State of New South Wales signed a Scoping Agreement for New South Wales Regional Forest Agreements which committed:

- (f) World Heritage values
  This assessment will allow the Commonwealth to meet its obligations arising both from it being a State Party to the World Heritage Convention and from its own statutory requirements as set out in the World Heritage Properties Conservation Act 1983. The output from this assessment will be an assessment of World Heritage values of the forested areas of New South Wales.

The NSW CRA process made no attempt to specifically identify World Heritage values. As an alternative in 1998 the Commonwealth established a ‘World Heritage Expert Panel’ to identify outstanding universal values in forested areas as part of its Regional Forest Agreement process.

As well as rainforest, for north-east NSW the panel identified that *Eucalyptus* dominated vegetation is of World Heritage value as an outstanding example on a continental scale of forest and woodland vegetation dominated by a single genus, noting:

- There are two major peaks of eucalypt species richness in the eucalypt forests of the Australian continent – one in the Blue Mountains and the other in north-east NSW extending into south-east Queensland.
- All major ecological types of eucalypt forest, except monsoon forest, are well represented in these two areas.
- Two of the eucalypt subgenera, Monocalyptus and Symphyomyrtus, and the genus *Angophora* are most diverse within these two areas.
- The emphasis should be on inclusion of large natural areas of eucalypt forests.
- CERRA was designed for rainforest representation and does not cover the variety of eucalypt species and forest types in the region.
- To adequately encompass the eucalypt theme, CERRA needs to be expanded to include adjoining areas of National Parks, State Forests and private property.
- Supporting values include representation of passive marginal swells and Aboriginal ceremonial sites.

The panel identified that "Australian rainforests are an outstanding example of ecosystems from which modern biota are derived. These rainforests are exceptionally rich in primitive and relict species, many of which are similar to fossils from Gondwana", though wrongly concluded that there are no rainforest areas of sufficient extent and integrity outside existing World Heritage Areas in New South Wales to justify their further investigation as possible best global expressions of the rainforest sub-them"

The panel identified that "*Eucalyptus*-dominated vegetation in Australia is an outstanding example on a continental scale of forest and woodland vegetation dominated by a single genus. This vegetation has evolved under stress, including conditions of high climatic variability, nutrient deficiency, and high fire frequency". Noting:

Fragmentation due to clearing in north-east New South Wales has resulted in a situation where representation of the outstanding catena of eucalypt forest diversity in the region can only be achieved in one extensive and largely-continuous area of natural forest. This area extends almost continuously from sub-alpine forest to the coast and contains populations of more than 80 eucalypt species and a wide range of ecological forest types. The Guy Fawkes Wilderness Area forms the most extensive component of this large natural area, which has been called "Moonee-Bindery".
The Panel recommended that the Moonee-Bindery area be further investigated in relation to the sub-theme. It also noted that, in order to capture the outstanding catena of eucalypt forest diversity in the region, consideration would have to be given to including other smaller reserves, areas of State Forest, and some private land extending for the Warra State Forest in the west to the coastal Moonee Beach Nature Reserve in the east.

Other significance values identified in an associative context under the "Sub-theme: Refugia, Relicts" were:

The relict Rufous Scrub-bird, *Atrichornis rufescens*, is significant as one of the most primitive living song birds

Onychophorans (Velvet Worms) are a primitive phylum dating back 30 million year, with one of two known areas of exceptional diversity of Onychophorans identified the north-east region of New South Wales and contiguous border regions in Queensland.

The UNE Forest Agreement (2.7) signed by the NSW Ministers on 5 March 1999 states:

The rainforest values contained in existing reserves, which have been recognised internationally by being listed as World Heritage Areas, must be protected. These areas are collectively known as Central Eastern Rainforest Reserves, Australia (CERRA).

As a result of the UNE agreement, substantial new rainforest areas have been added to existing reserves. The Ministers agree to undertake studies in the new dedicated reserve* areas, and if they meet World Heritage criteria, to nominate additional areas for World Heritage Listing as extensions to CERRA, by 1 April 2001.

The Ministers also recognise that the forests of the UNE Region may potentially contain other outstanding universal World Heritage values apart from rainforests. These other potential values may include Eucalypt dominated vegetation and religious beliefs embodied in the landscape (Aboriginal dreaming sites and bora grounds). The Ministers* agree to further studies being undertaken in the forests of the dedicated reserve* areas of the UNE Region by 1 April 2002, to investigate and document other potential World Heritage values. If areas are demonstrated to be of outstanding universal significance on the basis of these values, the Ministers* agree to put them to the Government for consideration of their protection and nomination for World Heritage Listing.

In March 2000 the NSW and Commonwealth governments signed Regional Forest Agreements for north-east NSW which committed them to (clause 27):

Parties agree to actively investigate, and jointly participate in the further World Heritage assessment of the relevant Australia-wide themes specified in Section 3.4.2 (Table 17) of the World Heritage Expert Panel report, including any potential contribution from the Upper North East and Lower North East regions.

It is important to recognise that under Clause 36.

"New South Wales confirms that its Upper North East Region Forest Agreement and Lower North East Forest Agreement (NSW, 5 March 1999) and any Integrated Forestry Operations Approvals for all or part of the Upper North East and Lower North East regions are parts of the New South Wales Forest Management System and are means by which New South Wales will implement obligations and undertakings arising from this Agreement".

So effectively the Forest Agreement commitment "to nominate additional areas for World Heritage Listing as extensions to CERRA, by 1 April 2001" is carried through to the RFA.

Rather than completing the renomination by 2001, DECCW (2010) note that they didn’t start until 2003–04 and limited consideration to “its current rainforest theme”. For a long-time NSW tried to limit its additions to under 10% so as to avoid having to prepare a renomination. In 2007 the name of the World Heritage property was changed to Gondwana Rainforests of Australia.
Belatedly an assessment was undertaken by scientists from both the Office of Environment and Heritage and the Gondwana Rainforests Technical and Scientific Committee (TSAC), with review by the Gondwana Rainforests Community Advisory Committee, that assessed existing reserves for addition to the World Heritage property “against objective criteria to establish those sites which would both best add to the outstanding universal values of the property and those which would facilitate further protection of these values” (DECCW 2009). DECCW (2009) note:

The values that may justify inscription are those Gondwana Rainforests values that met the UNESCO criteria for World Heritage listing in 1986 and 1994 as detailed below. These values are represented largely by its biota, in particular, biota that are relictual (dating from earlier stages of Earth’s evolutionary history), are endemic to small areas (indicating ongoing evolutionary processes) and are rare or threatened. The areas proposed for addition included those with a high proportion of rainforest, those containing key biota linked to World Heritage values and those which contained rainforest types and values currently not well represented in Gondwana Rainforests.

In 2010 NSW, Queensland and the Commonwealth submitted a Tentative List of national parks to the World Heritage Centre which were proposed for future nomination as additions to the Gondwana Rainforests of Australia World Heritage area. Most of the NSW qualifying area of 459,739 ha is comprised of areas added as part of the Forest Reform process.

**Areas of NSW Reserves Submitted to IUCN as Tentative Additions to the Gondwana Rainforests of Australia.**

<table>
<thead>
<tr>
<th>QUALIFYING CATEGORY</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas previously recommended by the IUCN to be a part of Gondwana Rainforests</td>
<td>250,491 ha</td>
</tr>
<tr>
<td>Areas that formed a contiguous addition to an existing part of Gondwana Rainforests</td>
<td>105,247 ha</td>
</tr>
<tr>
<td>Areas that had a high total score against the criteria</td>
<td>104,001 ha</td>
</tr>
<tr>
<td><strong>TOTAL area of identified NSW additions</strong></td>
<td>459,739 ha</td>
</tr>
</tbody>
</table>

Unfortunately the Tentative List submitted to IUCN failed to consider additional areas that could qualify for listing as World Heritage based on the eucalypt theme, or the supporting values of passive marginal swells and Aboriginal ceremonial sites.
Proposed NSW & QLD Additions To The Gondwana Rainforests of Australia World Heritage Areas

Proposed additions to the Gondwana Rainforests World Heritage Area
The National Parks Association (Cerese 2012) undertook a preliminary assessment of the World Heritage values of the eucalypt forests in north east NSW, finding:

The significant eucalypt attributes detailed in the report suggest that the northeast NSW region is likely to make a significant contribution to the recognition of the outstanding universal value of the eucalypts in Australia. The ecological diversity apparent in the large numbers of eucalypt dominated communities in the study area; the high level of species diversity and endemicity; the wide range in structural forms of eucalypt vegetation present in the region; and the domination of the terrestrial environment across a broad latitudinal range from the coast and across the higher altitudes of the escarpment ranges to the western slopes of the Great Dividing Range, all add considerably to the representation of the World Heritage Eucalypt theme. The unique biogeographic placement of the region within a zone of subtropical/temperate overlap, and the altitudinal range and geologic/edaphic variation across the Study Area, means that this region supports a diversity of eucalypt vegetation mosaics that is possibly unique continent wide. The exceptional wet sclerophyll forests of the region form an integral component of this unique ecological diversity. In addition, the biological diversity attributes detailed in the report, and the dependence of the flora and fauna of the region on the essential habitat requirements provided by the eucalypt biota, suggests that these forests contain the most important and significant natural habitats for in-situ conservation of biological diversity in the region.

Cerese (2012) evaluated the diversity and significance of eucalypt flora and biodiversity in north east NSW (north from Hunter River) finding:

1) Eucalypt species:
   i) Overall species richness - 143
   ii) Number of endemic species - 43
   iii) Number of threatened species - 21
   iv) Number of ROTAP-listed species - 43

2) Forest ecosystems and communities:
   i) Total number of eucalypt ecosystems - 159
   ii) Number of endangered ecological communities (with a eucalypt component) - 11

3) Vertebrate fauna species:
   i) Total number of species - 695
   ii) Number of threatened species - 148

4) Vascular flora species:
   i) Total number of species - 3412
   ii) Number of threatened species - 231
   iii) Number of ROTAP species - 390

Cerese (2012) recommends undertaking an assessment to identify the 'best of the best' of eucalypt vegetation across all tenures in north east NSW, stating:

Given the significant areas of eucalypt forest located within existing Gondwana Rainforests World Heritage Area (and the proposed additions to this area) as well as the recent fossil evidence confirming the Gondwanan origins of the eucalypts, this report concludes that the most effective and appropriate way to recognise and protect the eucalypt values of the forests of northeast NSW is to include them within a new and revised ‘Gondwana/Gondwana Forests World Heritage Area’. It is therefore recommended that all those areas of outstanding eucalypt forest in the subtropical biogeographic region that are identified by a further assessment process are then incorporated into a renomination or additional nomination for this property.

Completing the identification and protection of all forests satisfying World Heritage criteria in north-east NSW is long overdue. The NSW and Commonwealth Governments have not complied with the original intent to identify and protect World Heritage as an outcome of the RFA. Then they failed to complete the identification by 2001 as promised by the Forest Agreement, and carried through to the RFA. They did eventually put forward Tentative Additions of 459,739 ha to the Gondwana Rainforests of Australia based solely on the rainforest theme, though even these have not been progressed and no nomination prepared. While the private conservation group the NPA undertook an assessment of the eucalypt values of north east NSW, neither the State or Commonwealth Governments have made
any attempt to investigate the eucalypt themselves or the identified associative values of passive marginal swells, Aboriginal ceremonial sites, Rufous Scrub-bird and velvet worms identified by the Expert Panel back in 1999.

The Gondwana Rainforests of Australia is a serial property comprising some of the areas of rainforest in southeast Queensland and north-east New South Wales and was added to the World heritage list in 1986. The Gondwana Rainforests were listed against three World Heritage natural criteria (criterion viii, ix and x).

The understanding of our forests, in particular our eucalypt forests, has expanded rapidly since 1986 and indeed since the RFA Expert Panel deliberations in 1998. In particular the discovery of a eucalypt identical 56 million year old fossils in South America which has established our eucalypts as also Gondwanan.

The Tasmanian Wilderness was inscribed on the World Heritage List in 2013 under four natural (vii, viii, ix and x) and three cultural (iii, v, vi) criteria.

It is likely that a contemporary assessment of the forests of NE NSW would produce similar results as achieved for Tasmania.

For the agencies to now claim that "This ongoing commitment was achieved during Period 1, Period 2 and Period 3" is frankly outrageous and offensive give repeated attempts by community groups to have governments recognise and implement their obligations over decades. It is 20 years since it was meant to be completed and they have still made no attempt to assess the key themes of eucalypts, passive marginal swells, Aboriginal ceremonial sites, Rufous Scrub-birds or velvet worms. They belatedly made a tentative nomination in 2009 based just on the rainforest value, though have apparently made no attempt

**Forest Ecosystems.**

Page 48 of the second and third five-yearly review documents attempts to provide an explanation for reporting against NSW (Mitchell’s) Landscapes as against using Forest Ecosystems. It provides a completely inadequate justification for this approach.

The National Forest Policy statement NFPS states clearly that planning (and reviewing!) conservation measures at the forest ecosystem scales is an unambiguous tenet of that document. For example, the Introduction says “Australia’s forest estate comprises a range of forest types”; the Goals section includes “to conserve the full suite of values that forests can provide for current and future generations. These values include biological diversity, and heritage, Aboriginal and other cultural values”; the Specific Objectives and Policies section says; “The protection of the full range of forest ecosystems and other environmental values is fundamental to ecologically sustainable forest management” and the Glossary definition of ‘Native Forest’ recognises NFs are made up of forest types.

For the North East Region Regional forest Assessment (RFA), and I understand for other regions technical working groups (TWGS) were established containing the best available scientists and stakeholder representatives to address the implementation of NFPS requirements including for Forest ecosystems; definition, delineation and interpretation of conservation requirements from NFPS and JANIS. Meeting reports recorded the deliberations of the TWG’s and technical reports recorded the implementation of the TWG outcomes. The RFA’s recorded the outcomes for the conservation status achieved for each forest ecosystem and for old-growth for each forest ecosystem. The RFA’s also recorded priority forest ecosystems for further conservation initiatives on private forested lands.
Former OEH staffers have advised the BEC they are perplexed as to the reasoning for what OEH is reported as suggesting on P48 of the . One former senior staffer has commented “… clearly, using MLs for this purpose is breathtakingly bad form isn’t it.”

The Mitchells landscape layer was developed 20 years ago only as a coarse-level interim environmental layer to report whole-of-state conservation progress for only some conservation programs in the absence of a finer grained whole of state layer (just as bioregions and their subregions can be used carefully at a national level).

Former OEH staffers further advised; " It was never envisaged it would be used for RFAs or their regions, because they had far better levels of data and mapping. To now use the ML layer, on its own, to review RFAs is a complete misunderstanding by OEH of the issues of scale,…”

The former staffer added: "Surely it’s obvious that if you have a better environmental layer/s then why would OEH use MLs for this purpose unless they are either really stupid, they’ve lost/misplaced/can’t interpret all that wonderful fine scale data which they already have, or alternatively, they want to paint a rosy picture of forest conservation and hide its true inadequacies at finer and more appropriate scales (just as the Fed government does in its spruiking of how it’s now met its reservation targets because it has protected over 17% nation-wide).

The RFA processes went on to assemble and analyse some of the best forest botanical databases and forest ecosystem classifications ever put together in Australia (and possibly the World) – in NE they included over 5,000 veg survey plots and similar data levels for Southern NSW

Alternatively, Mitchells landscapes which were determined over pre-dominantly non-forested landscapes, using only abiotic data, not one forest veg survey plot or piece of biological information was used in their construction.

There was no process of informing or consultation with key stakeholders before the EPA decided to convert reporting from forest Ecosystems to Mitchells landscapes for the second and third five-yearly review documents.

The former OEH staffer added: “To ignore this original tenets and to review progress in forest conservation using much coarser scales is completely irresponsible. It’s a silly as using the number of books in a classroom to measure student literacy”

To all participants the use of forest ecosystems, through their titles adopted, generally allowed understanding of the form, composition of the dominant overstory species and often understory species in each ecosystem – They were described in a way that could be easily translated to the a patch of forest in the field. For example, I have copied below details ten Forest Ecosystems from the Upper North East region which contain Blackbutt as a dominant as reported in the NE RFA in 2000.
Table 1. Percentage reservation status of Forest and Non-Forest Ecosystems in the CAR Reserve System in the Upper North East region based on vegetation modelling to establish the pre-1750 extent of Forest Ecosystems in the regiona

<table>
<thead>
<tr>
<th>Forest Ecosystems²</th>
<th>Area Pre 1750 (ha)</th>
<th>Area Current (ha)</th>
<th>Percent Remaining</th>
<th>Status c</th>
<th>Percent of Forest Ecosystem (pre-1750) extent in the CAR Reserve System</th>
<th>Dedication Reserves</th>
<th>Informal Reserve d</th>
<th>Prescriptio n e</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Coastal Sands Blackbutt</td>
<td>4518</td>
<td>3101</td>
<td>68.6</td>
<td>-</td>
<td>63.0</td>
<td>0.0</td>
<td>0.1</td>
<td>63.1</td>
<td></td>
</tr>
<tr>
<td>32 Dry Foothills Blackbutt-Turpentine</td>
<td>9370</td>
<td>7364</td>
<td>78.6</td>
<td>-</td>
<td>8.1</td>
<td>1.8</td>
<td>3.1</td>
<td>12.9</td>
<td></td>
</tr>
<tr>
<td>34 Dry Grassy Blackbutt-Tallowwood</td>
<td>9880</td>
<td>6052</td>
<td>61.3</td>
<td>-</td>
<td>9.8</td>
<td>0.4</td>
<td>3.4</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>37 Dry Heathly Blackbut-Bloodwood</td>
<td>75580</td>
<td>46630</td>
<td>61.7</td>
<td>-</td>
<td>8.4</td>
<td>6.6</td>
<td>2.6</td>
<td>17.6</td>
<td></td>
</tr>
<tr>
<td>40 Dry Heathly Sandstone Blackbutt</td>
<td>20939</td>
<td>19036</td>
<td>90.9</td>
<td>-</td>
<td>25.2</td>
<td>5.9</td>
<td>3.0</td>
<td>34.1</td>
<td></td>
</tr>
<tr>
<td>72 Low Relief Coastal Blackbutt²</td>
<td>1574</td>
<td>859</td>
<td>54.6</td>
<td>R</td>
<td>9.1</td>
<td>0.6</td>
<td>0.6</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>83 Mid Elevation Wet Blackbutt</td>
<td>1333</td>
<td>1180</td>
<td>88.5</td>
<td>-</td>
<td>45.2</td>
<td>8.5</td>
<td>5.9</td>
<td>59.5</td>
<td></td>
</tr>
<tr>
<td>95 Northern Moist Blackbutt</td>
<td>10897</td>
<td>9101</td>
<td>83.5</td>
<td>-</td>
<td>37.3</td>
<td>0.9</td>
<td>0.9</td>
<td>39.1</td>
<td></td>
</tr>
<tr>
<td>101 Northern Open Grassy Blackbutt</td>
<td>30488</td>
<td>21590</td>
<td>70.8</td>
<td>-</td>
<td>14.0</td>
<td>2.6</td>
<td>1.3</td>
<td>17.9</td>
<td></td>
</tr>
<tr>
<td>155 Wet Foothills Blackbutt-Turpentine</td>
<td>8219</td>
<td>7437</td>
<td>90.5</td>
<td>-</td>
<td>16.0</td>
<td>4.6</td>
<td>4.9</td>
<td>25.6</td>
<td></td>
</tr>
</tbody>
</table>

No equivalent communities or ecosystems can be readily determined from the Mitchells Landscapes used in the second and third five-yearly review documents.

The issue of the use of Mitchell's Landscapes alone justifies withdrawal and republishing the second and third five-yearly review documents.

**Threatened species**

Clause 62 of the RFA states that "The Parties agree that the management prescriptions or actions identified in jointly prepared and agreed Recovery Plans or Threat Abatement Plans will be implemented as a matter of priority, including through the Integrated Forestry Operations Approval on State forest".

Yet neither the IFOA or the Threatened Species Licence have any reference to recovery plans, no mechanism to take them into account and do not abide by them.

The prescriptions under the Threatened Species Licence do not reflect the relevant recovery plans. In NSW the preparation of recovery plans and the identification of critical habitat for threatened species have been actively resisted by OEH and Government. The few recovery plans prepared often fail to identify needed management actions and thus often fail to address the principal threats to the species. Relevant actions in recovery plans are often ignored, even by NSW Government agencies.
The recovery planning and critical habitat processes have largely failed due to a lack of commitment to the protection of threatened species.

The Department website says, "The NSW and Australian governments are required to review the RFAs every 5 years to assess progress regarding ecologically sustainable forest management."

Failure to do reviews in a timely way has invalidated the legality of the logging and shown blatant disregard for the regulatory framework. The 5 yearly review was not done until year 9. Now the 10 and 15 year reviews have been done together at year 17. This has denied us the opportunity to assess the information that should have been provided 8 years ago.

Like the rest of the review document, there is lots of fiction dressed up as fact. Given that the Governments were required to carry out reviews to assess progress regarding ecologically sustainable forest management, and they haven't, how can we have confidence in the material presented in the review document? Most of the consultation period was over the xmas holidays which is notorious for government consultations when you hope people aren't paying attention.

Overall, the whole process has failed to collect the most basic information on which to inform decision making and has been a tick the box exercise. However even the box ticking has been lied about. The RFA review document makes hundreds of assertions that various commitments have been met, without providing any evidence or references to that effect. It is a very poor review that takes such assertions on face value, and yet we recognise insufficient time has been provided for the reviewer to check all the undocumented assertions.

Procedural fairness has been denied. The Governments of NSW and Commonwealth have already decided that RFAs will be extended for a further 20 years and that they have been a success and done what they were designed to do.

In any genuine process, the reviews would be conducted, submissions sought and the reviewer would be given the opportunity to consider the information without any conclusion being provided by those being reviewed! However in this case both Governments have made public statements to the effect that regardless of the outcome of the review, the RFAs will continue... indefinitely. As they propose to not just renew them for a further 20 years but that each 5 years, they will be extended for a further 5 years. They have called this process 'ever-greening'. It is to occur regardless of the science and in an information vacuum.

There has been no assessment of the current state of forest-dependent threatened species. How have they been impacted by logging over the last 20 years? We have a snapshot of their presence and population modelling from the 1990s. Has that changed? Are species that were present in any given area prior to logging still there 5 or 10 years later?

The first assessor’s report said...

**RECOMMENDATION 8**

In future reviews the Parties should provide more information about development of various threatened species recovery plans to allow an assessment of the adequacy of progress in the management of threatened species as it relates to Milestone 23.
Far from providing more information, the review provides less. It has a Tables 66 and 67 in Appendix I. With a short statement about whether there is a recovery plan or conservation advice in place. There is no information as to the adequacy of those plans. Two examples of many, underscore the inadequacy of those plans.

Since the advent of the RFA the koala is now listed as Vulnerable federally. In NSW scientists are of the view that the koala population is in decline. In northern NSW it is estimated to have halved over the last 20 years. This is not surprising, as a recent assessment by the North East Forest Alliance showed that the much of the most intensive logging, (maps had to be obtained via a Freedom of Information application) is occurring in forests that the DPI Koala Habitat Modelling project has identified as High Quality Habitat.

General

Whilst this submission has not covered the full extent of the NSW Regional Forest Agreements second and third five-yearly reviews, from knowledge of the north-east NSW forests and of the reviews the following general comments and recommendations can be made:

**The RFAs are bad for forests**

Almost 20 years after the RFAs were signed, there is extensive evidence that the RFAs have failed to facilitate Ecologically Sustainable Forest Management; failed to result in an economically sound timber industry; and the CAR reserve network of forest ecosystems has not been delivered. RFAs are therefore a failed model for forest management and should not be renewed.

EPBC accreditation of logging operations has resulted in lower protection for forest species, and has not been complied with, as demonstrated by the multitude of license breaches. Commonwealth oversight of forest management must be restored.

**Lack of objective data**

The review’s progress report frequently addresses indicators without providing any data. For example, no spatial data is provided to assess the change in forest growth stage over the life of the RFAs, no data is provided to assess the proportion of each forest ecosystem protected or impacts on species and no data is provided on the value of forest-based services.

**Fate of threatened species**

The number of threatened forest species has continued to rise during the RFAs, with iconic species like koalas and gliders now either absent or experiencing population crashes in many parts of NSW. Logging is identified as a key threat to many forest species, often because of the impact logging has on key habitat features like hollow-bearing trees.

**Logging kills forest animals and is therefore an important animal welfare issue.**

Climate change was not considered as part of the RFAs, but is now the largest social, economic and environmental challenge we face. It is reckless to continue logging when we know it reduces carbon stores of forests.

**Removal of third party rights**

The RFAs removed public oversight of logging by excluding ‘third parties’ from taking legal action on logging breaches. This has resulted in a lack of accountability and transparency in their implementation and has favoured industry over the public interest.

**Jobs and the economy**
The NSW taxpayer has paid millions of dollars to a multi-national corporation to buy-back non-existent timber because of over-estimated timber volumes by Forestry Corporation. This is one of a series of subsidies that the logging industry receives.

The logging industry is one of the most mechanised and most dangerous. The number of direct jobs in the industry has steadily declined and is now across NSW.

**Alternative options for public native forests**

We have other options besides logging. NPA’s *Forests For All* plan is proposing that we protect public native forests and use them to increase public access for health and economic benefits. NPA’s Great Koala National Park proposal is designed to protect the world’s favourite animal.

There are many forested areas in the north-east of NSW that should be protected in the reserve network. For example, the forests of northern NSW are one of just 36 global *Biodiversity Hotspots*, there are forested areas across NSW that should be World Heritage, and there are outstanding wilderness areas.

**Value of forest carbon**

We know that the value of carbon, water and tourism from forests is much greater than timber, and that protected areas are important for the economy. The Government must assess these trade-offs as part of a genuine review.

**Public opinion of forest management**

Polling conducted in the north coast electorates of Ballina and Lismore in December 2017 showed that 90% of people support protecting forests for nature, water, carbon and recreation. Under 10% supported logging for timber, woodchips and biomass burning.

**The consultation process**

The NSW Government has already committed to extending the RFAs. This commitment was made prior to NSW Regional Forest Agreements, second and third five-yearly reviews that are now being conducted, so this consultation cannot be regarded as genuine. The review should be collating evidence to assess the performance of the RFAs with a view to making an evidence-based decision assessing whether they are an appropriate model for forest management.

The consultation process is entirely inadequate as the outcome appears to be predetermined. The RFAs affect two million hectares of public property in NSW, and very few people under the age of 30 are likely to have heard of RFAs. A concerted effort must be made to have genuine community consultation on the future of public native forests.

**Timing**

The reviews are so late as to make them meaningless. The entire rationale of the reviews – that the community can have confidence in the RFAs because of a transparent and timely review – has been seriously undermined.

In order to be effective, the independent reviewer must consult independent scientists (not just government agencies) and must undertake on-ground inspections of logging impacts with community groups.
Recommendations

1. The NSW Regional Forest Agreements second and third five-yearly reviews report should be withdrawn and re written by a team of experts independent of government.

2. The RFAs must not be renewed. The RFAs have failed to protect the environment, failed to result in a thriving timber industry and are driving climate change. The RFAs are therefore a failed model for forest management.

3. Forests must be managed for the public good. Logging is robbing future generations. The progress report for the RFA review fails to provide any data to support the assertions that logging is conforming to ESFM. In contrast, there is lots of evidence that forest wildlife is in decline, we know logging reduces carbon stores and water supplies and we know the majority of people support protecting forests.

4. We can implement alternative models for forest management. We can do better than industrially logging diverse, living ecosystems. National Parks Association of NSW’s (NPA) Forests For All plan seeks to protect forests to facilitate increased human access for health and wellbeing, recreation and education. The Great Koala National Park proposal would help protect koalas and become a huge tourist attraction (local groups should also reference their own national park proposals).

5. Other values of forests must be considered. Research in the Victorian Central Highlands shows that the value of water, carbon and tourism dwarf that of timber. Our Governments must consider all economic and social benefits from forests.

6. The Government should use the end of the RFAs as the point at which it implements a just transition out of native forest logging on public land.

7. That the government commit to undertaking a tenure blind assessment of World Heritage values of Australian forests (and in particular those of north-east NSW) undertaken by independent scientists

Submission by the Bellingen Environment Centre (BEC)

On the NSW Regional Forest Agreements, second and third five-yearly reviews

Introduction

The Bellingen Environment Centre has for over thirty years acted to protect the environment of the Bellingen Valley and surrounds.
The report on the NSW Regional Forest Agreements second and third five-yearly reviews is the most convoluted, unprofessional and dishonest document that has come before the Bellingen Environment Centre during those thirty years.

We have not as yet identified any one person who has been able to stick with the document to read it in its entirety.

The tone for the document is set in its failure to accept the need to account for the first, second and third five-yearly reviews not to be done in a timely manner. No explanation is given as to why the reviews are up to eight years late – this is interpreted as a strong opening display of disregard for and disparagement of public accountability.

This submission therefore concentrates only on two section of the review; World Heritage and Forest Ecosystems. In reviewing these section we demonstrate and example the errors, omissions, failures in scientific integrity and outright lies we believe are included in the document as a whole.

The BEC believes the NSW Regional Forest Agreements second and third five-yearly reviews report should be withdrawn and re written by a team of experts independent of government. It will be difficult, to say the least, for an independent scientist to grapple with the sheer volume of errors and omissions, inaccuracies and outright lies included in this document. Further general recommendations are included at the end of this submission.

**World Heritage.**

The listing of qualifying areas of the forests of north-east NSW on the World heritage list was always an iconic conservation goal for north coast environmentalists and heavily influenced participation in the RFA process. The influence was such the anticipation of extensive World Heritage listing softened resistance to compromises to the timber industry, including accepting the widespread failure to achieve agreed conservation criteria in the reserve system.

The Bellingen Environment Centre has a strong interest in World Heritage having within our area of interest a number of Gondwanan World Heritage areas, areas on the indicative list, areas which may qualify under the RFA expert panels findings and areas which may also qualify on more contemporary interpretation of World Heritage criteria as applied in the Tasmanian Wilderness Forests listing in 2013.

The BEC also believes the proposed Great Koala National Park would potentially qualify for World Heritage listing on the basis of threatened species as the nine nature reserves set aside in China for Panda conservation do. The area to the west of Bellingen is also a stronghold for the endangered Rufous Scrub-bird and velvet worms and includes areas that would most likely protect the best of the best examples of habitat for those species. The BEC submission draws strongly on the resources and documentation of the north East Forest Alliance in preparing this section of the submission.

The Gondwana Rainforests of Eastern Australia is a serial property comprising many of the major remaining areas of rainforest in southeast Queensland and northeast New South Wales which was added to the World Heritage list in 1986, well before the adoption of the National Forest Policy and commencement of the RFA process.

Clauses 27-32 NSW Regional Forest Agreement for North East NSW deals with the RFA commitments to World Heritage. It is recognised that these commitments are not tied to time lines, though the wording identifies some urgency "to actively investigate, and jointly participate in the further World Heritage assessment of the relevant Australia-wide themes specified in Section 3.4.2 (Table 17) of the World Heritage Expert Panel report, including any potential contribution from the Upper North East and Lower North East regions".

The report on the NSW Regional Forest Agreements, second and third five-yearly reviews claim is repeatedly made that:

“This ongoing commitment was achieved during Period 1, Period 2 and Period 3”.
This claim is patently untrue.

They also claim somewhat misleadingly:

“There have been no World Heritage nominations within the three NSW RFA regions over the three five-year periods.”

The only example given in the reviews of active investigation is a “joint undertaking” and reference to a 1999 Expert Workshop which predated the NSW Regional Forest Agreement for North East NSW.

Nineteen years after the Expert Workshop confirmed the “eucalypt theme” as a qualifying value for north east NSW the best the Governments can say is that;

“Any further development of World Heritage assessments of the eucalypt sub-theme will be subject to bilateral discussions between the relevant states and the Commonwealth and will take place independently of the RFA process.”

There has been no investigation let alone an active investigation. Similarly there has been no attempt to investigate the identified associative values of Rufous Scrub-bird and velvet worms. It is apparent that there was no timely active investigation and the Commonwealth’s obligations to World Heritage remain unresolved.

In 1996 the Commonwealth of Australia and the State of New South Wales signed a Scoping Agreement for New South Wales Regional Forest Agreements which committed:

“(f) World Heritage values
This assessment will allow the Commonwealth to meet its obligations arising both from it being a State Party to the World Heritage Convention and from its own statutory requirements as set out in the World Heritage Properties Conservation Act 1983. The output from this assessment will be an assessment of World Heritage values of the forested areas of New South Wales.”

The NSW CRA process made no attempt to specifically identify World Heritage values. As an alternative in 1998 the Commonwealth established a ‘World Heritage Expert Panel’ to identify outstanding universal values in forested areas as part of its Regional Forest Agreement process.

As well as rainforest, for north-east NSW the panel identified that Eucalyptus dominated vegetation is of World Heritage value as an outstanding example on a continental scale of forest and woodland vegetation dominated by a single genus, noting:

- There are two major peaks of eucalypt species richness in the eucalypt forests of the Australian continent – one in the Blue Mountains and the other in north-east NSW extending into south-east Queensland.
- All major ecological types of eucalypt forest, except monsoon forest, are well represented in these two areas.
- Two of the eucalypt subgenera, Monocalyptus and Symphyomyrtus, and the genus Angophora are most diverse within these two areas.
- The emphasis should be on inclusion of large natural areas of eucalypt forests.
- CERRA was designed for rainforest representation and does not cover the variety of eucalypt species and forest types in the region.
- To adequately encompass the eucalypt theme, CERRA needs to be expanded to include adjoining areas of National Parks, State Forests and private property.
- Supporting values include representation of passive marginal swells and Aboriginal ceremonial sites.

The panel identified that “Australian rainforests are an outstanding example of ecosystems from which modern biota are derived. These rainforests are exceptionally rich in primitive and relict species, many of which are similar to fossils from Gondwana”, though wrongly concluded that there are no rainforest areas of sufficient extent and integrity outside existing World Heritage Areas in New South Wales to justify their further investigation as possible best global expressions of the rainforest sub-theme.”
The panel identified that "Eucalyptus-dominated vegetation in Australia is an outstanding example on a continental scale of forest and woodland vegetation dominated by a single genus. This vegetation has evolved under stress, including conditions of high climatic variability, nutrient deficiency, and high fire frequency". Noting:

Fragmentation due to clearing in north-east New South Wales has resulted in a situation where representation of the outstanding catena of eucalypt forest diversity in the region can only be achieved in one extensive and largely-continuous area of natural forest. This area extends almost continuously from sub-alpine forest to the coast and contains populations of more than 80 eucalypt species and a wide range of ecological forest types. The Guy Fawkes Wilderness Area forms the most extensive component of this large natural area, which has been called "Moonee-Bindery".

The Panel recommended that the Moonee-Bindery area be further investigated in relation to the sub-theme. It also noted that, in order to capture the outstanding catena of eucalypt forest diversity in the region, consideration would have to be given to including other smaller reserves, areas of State Forest, and some private land extending for the Warra State Forest in the west to the coastal Moonee Beach Nature Reserve in the east.

Other significance values identified in an associative context under the "Sub-theme: Refugia, Relicts" were:

The relict Rufous Scrub-bird, *Atrichornis rufescens*, is significant as one of the most primitive living song birds

Onychophorans (Velvet Worms) are a primitive phylum dating back 30 million year, with one of two known areas of exceptional diversity of Onychophorans identified the north-east region of New South Wales and contiguous border regions in Queensland.

The UNE Forest Agreement (2.7) signed by the NSW Ministers on 5 March 1999 states:

*The rainforest values contained in existing reserves, which have been recognised internationally by being listed as World Heritage Areas, must be protected. These areas are collectively known as Central Eastern Rainforest Reserves, Australia (CERRA).*

As a result of the UNE agreement, substantial new rainforest areas have been added to existing reserves. The Ministers agree to undertake studies in the new dedicated reserve* areas, and if they meet World Heritage criteria, to nominate additional areas for World Heritage Listing as extensions to CERRA, by 1 April 2001.

The Ministers also recognise that the forests of the UNE Region may potentially contain other outstanding universal World Heritage values apart from rainforests. These other potential values may include Eucalypt dominated vegetation and religious beliefs embodied in the landscape (Aboriginal dreaming sites and bora grounds). The Ministers* agree to further studies being undertaken in the forests of the dedicated reserve* areas of the UNE Region by 1 April 2002, to investigate and document other potential World Heritage values. If areas are demonstrated to be of outstanding universal significance on the basis of these values, the Ministers* agree to put them to the Government for consideration of their protection and nomination for World Heritage Listing.

In March 2000 the NSW and Commonwealth governments signed Regional Forest Agreements for north-east NSW which committed them to (clause 27):

*Parties agree to actively investigate, and jointly participate in the further World Heritage assessment of the relevant Australia-wide themes specified in Section 3.4.2 (Table 17) of the World Heritage Expert Panel report, including any potential contribution from the Upper North East and Lower North East regions.*

It is important to recognise that under Clause 36.
"New South Wales confirms that its Upper North East Region Forest Agreement and Lower North East Forest Agreement (NSW, 5 March 1999) and any Integrated Forestry Operations Approvals for all or part of the Upper North East and Lower North East regions are parts of the New South Wales Forest Management System and are means by which New South Wales will implement obligations and undertakings arising from this Agreement".

So effectively the Forest Agreement commitment "to nominate additional areas for World Heritage Listing as extensions to CERRA, by 1 April 2001" is carried through to the RFA.

Rather than completing the renomination by 2001, DECCW (2010) note that they didn’t start until 2003–04 and limited consideration to “its current rainforest theme”. For a long-time NSW tried to limit its additions to under 10% so as to avoid having to prepare a renomination. In 2007 the name of the World Heritage property was changed to Gondwana Rainforests of Australia.

Belatedly an assessment was undertaken by scientists from both the Office of Environment and Heritage and the Gondwana Rainforests Technical and Scientific Committee (TSAC), with review by the Gondwana Rainforests Community Advisory Committee, that assessed existing reserves for addition to the World Heritage property “against objective criteria to establish those sites which would both best add to the outstanding universal values of the property and those which would facilitate further protection of these values” (DECCW 2009). DECCW (2009) note:

> The values that may justify inscription are those Gondwana Rainforests values that met the UNESCO criteria for World Heritage listing in 1986 and 1994 as detailed below. These values are represented largely by its biota, in particular, biota that are relictual (dating from earlier stages of Earth’s evolutionary history), are endemic to small areas (indicating ongoing evolutionary processes) and are rare or threatened. The areas proposed for addition included those with a high proportion of rainforest, those containing key biota linked to World Heritage values and those which contained rainforest types and values currently not well represented in Gondwana Rainforests

In 2010 NSW, Queensland and the Commonwealth submitted a Tentative List of national parks to the World Heritage Centre which were proposed for future nomination as additions to the Gondwana Rainforests of Australia World Heritage area. Most of the NSW qualifying area of 459,739 ha is comprised of areas added as part of the Forest Reform process.

**Areas of NSW Reserves Submitted to IUCN as Tentative Additions to the Gondwana Rainforests of Australia.**

<table>
<thead>
<tr>
<th>QUALIFYING CATEGORY</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas previously recommended by the IUCN to be a part of Gondwana Rainforests</td>
<td>250,491 ha</td>
</tr>
<tr>
<td>Areas that formed a contiguous addition to an existing part of Gondwana Rainforests</td>
<td>105,247 ha</td>
</tr>
<tr>
<td>Areas that had a high total score against the criteria</td>
<td>104,001 ha</td>
</tr>
<tr>
<td><strong>TOTAL area of identified NSW additions</strong></td>
<td><strong>459,739 ha</strong></td>
</tr>
</tbody>
</table>

Unfortunately the Tentative List submitted to IUCN failed to consider additional areas that could qualify for listing as World Heritage based on the eucalypt theme, or the supporting values of passive marginal swells and Aboriginal ceremonial sites.
Proposed additions to the Gondwana Rainforests World Heritage Area
The National Parks Association (Cerese 2012) undertook a preliminary assessment of the World Heritage values of the eucalypt forests in north east NSW, finding:

The significant eucalypt attributes detailed in the report suggest that the northeast NSW region is likely to make a significant contribution to the recognition of the outstanding universal value of the eucalypts in Australia. The ecological diversity apparent in the large numbers of eucalypt-dominated communities in the study area; the high level of species diversity and endemcity; the wide range in structural forms of eucalypt vegetation present in the region; and the domination of the terrestrial environment across a broad latitudinal range from the coast and across the higher altitudes of the escarpment ranges to the western slopes of the Great Dividing Range, all add considerably to the representation of the World Heritage Eucalypt theme. The unique biogeographic placement of the region within a zone of subtropical/temperate overlap, and the altitudinal range and geologic/edaphic variation across the Study Area, means that this region supports a diversity of eucalypt vegetation mosaics that is possibly unique continent wide. The exceptional wet sclerophyll forests of the region form an integral component of this unique ecological diversity. In addition, the biological diversity attributes detailed in the report, and the dependence of the flora and fauna of the region on the essential habitat requirements provided by the eucalypt biota, suggests that these forests contain the most important and significant natural habitats for in-situ conservation of biological diversity in the region.

Cerese (2012) evaluated the diversity and significance of eucalypt flora and biodiversity in north east NSW (north from Hunter River) finding:

5) **Eucalypt species:**
   i) Overall species richness - 143
   ii) Number of endemic species - 43
   iii) Number of threatened species - 21
   iv) Number of ROTAP-listed species - 43

6) **Forest ecosystems and communities:**
   i) Total number of eucalypt ecosystems - 159
   ii) Number of endangered ecological communities (with a eucalypt component) - 11

7) **Vertebrate fauna species:**
   i) Total number of species - 695
   ii) Number of threatened species - 148

8) **Vascular flora species:**
   i) Total number of species - 3412
   ii) Number of threatened species - 231
   iii) Number of ROTAP species - 390

Cerese (2012) recommends undertaking an assessment to identify the 'best of the best' of eucalypt vegetation across all tenures in north east NSW, stating:

Given the significant areas of eucalypt forest located within existing Gondwana Rainforests World Heritage Area (and the proposed additions to this area) as well as the recent fossil evidence confirming the Gondwanan origins of the eucalypts, this report concludes that the most effective and appropriate way to recognise and protect the eucalypt values of the forests of northeast NSW is to include them within a new and revised ‘Gondwana/Gondwana Forests World Heritage Area’. It is therefore recommended that all those areas of outstanding eucalypt forest in the subtropical biogeographic region that are identified by a further assessment process are then incorporated into a renomination or additional nomination for this property.

Completing the identification and protection of all forests satisfying World Heritage criteria in north-east NSW is long overdue. The NSW and Commonwealth Governments have not complied with the original intent to identify and protect World Heritage as an outcome of the RFA. Then they failed to complete the identification by 2001 as promised by the Forest Agreement, and carried through to the RFA. They did eventually put forward Tentative Additions of 459,739 ha to the Gondwana Rainforests of Australia based solely on the rainforest theme, though even these have not been progressed and no nomination prepared. While the private conservation group the NPA undertook an assessment of the eucalypt values of north east NSW, neither the State or Commonwealth Governments have made
any attempt to investigate the eucalypt themselves or the identified associative values of passive marginal swells, Aboriginal ceremonial sites, Rufous Scrub-bird and velvet worms identified by the Expert Panel back in 1999.

The Gondwana Rainforests of Australia is a serial property comprising some of the areas of rainforest in southeast Queensland and north-east New South Wales and was added to the World heritage list in 1986. The The Gondwana Rainforests were listed against three World Heritage natural criteria (criteria viii, ix and x).

The understanding of our forests, in particular our eucalypt forests, has expanded rapidly since 1986 and indeed since the RFA Expert Panel deliberations in 1998, in particular the discovery of a eucalypt identical 56 million year old fossils in South America which has established our eucalypts as also Gondwanan.

The Tasmanian Wilderness was inscribed on the World Heritage List in 2013 under four natural (vii, viii, ix and x) and three cultural (iii, v, vi) criteria.

It is likely that a contemporary assessment of the forests of NE NSW would produce similar results as achieved for Tasmania.

For the agencies to now claim that "This ongoing commitment was achieved during Period 1, Period 2 and Period 3" is frankly outrageous and offensive give repeated attempts by community groups to have governments recognise and implement their obligations over decades. It is 20 years since it was meant to be completed and they have still made no attempt to assess the key themes of eucalypts, passive marginal swells, Aboriginal ceremonial sites, Rufous Scrib-birds or velvet worms. They belatedly made a tentative nomination in 2009 based just on the rainforest value, though have apparently made no attempt

Forest Ecosystems.

Page 48 of the second and third five-yearly review documents attempts to provide an explanation for reporting against NSW (Mitchell’s) Landscapes as against using Forest Ecosystems. It provides a completely inadequate justification for this approach.

The National Forest Policy statement NFPS states clearly that planning (and reviewing!) conservation measures at the forest ecosystem scales is an unambiguous tenet of that document. For example, the Introduction says "Australia’s forest estate comprises a range of forest types"; the Goals section includes "to conserve the full suite of values that forests can provide for current and future generations. These values include biological diversity, and heritage, Aboriginal and other cultural values"; the Specific Objectives and Policies section says; "The protection of the full range of forest ecosystems and other environmental values is fundamental to ecologically sustainable forest management" and the Glossary definition of ‘Native Forest’ recognises NFs are made up of ‘forest types’

For the North East Region Regional forest Assessment (RFA), and I understand for other regions technical working groups (TWGS) were established containing the best available scientists and stakeholder representatives to address the implementation of NFPS requirements including for Forest ecosystems; definition, delineation and interpretation of conservation requirements from NFPS and JANIS. Meeting reports recorded the deliberations of the TWG’s and technical reports recorded the implementation of the TWG outcomes. The RFA’s recorded the outcomes for the conservation status achieved for each forest ecosystem and for old-growth for each forest ecosystem. The RFA’s also recorded priority forest ecosystems for further conservation initiatives on private forested lands
Former OEH staffers have advised the BEC they are perplexed as to the reasoning for what OEH is reported as suggesting on P48 of the .One former senior staffer has commented “… clearly, using MLs for this purpose is breathtakingly bad form isn’t it.”

The Mitchells landscape layer was developed 20 years ago only as a coarse-level interim environmental layer to report whole-of-state conservation progress for only some conservation programs in the absence of a finer grained whole of state layer (just as bioregions and their subregions can be used carefully at a national level).

Former OEH staffers further advised advised; " It was never envisaged it would be used for RFAs or their regions, because they had far better levels of data and mapping. To now use the ML layer, on its own, to review RFAs is a complete misunderstanding by OEH of the issues of scale,… “

The former staffer added: "Surely it’s obvious that if you have a better environmental layer/s then why would OEH use MLs for this purpose unless they are either really stupid, they’ve lost/misplaced/can’t interpret all that wonderful fine scale data which they already have, or alternatively, they want to paint a rosy picture of forest conservation and hide its true inadequacies at finer and more appropriate scales (just as the Fed government does in its spruiking of how it’s now met its reservation targets because it has protected over 17% nation-wide).

The RFA processes went on to assemble and analyse some of the best forest botanical databases and forest ecosystem classifications ever put together in Australia (and possibly the World) – in NE they included over 5,000 veg survey plots and similar data levels for Southern NSW

Alternatively, Mitchells landscapes which were determined over pre-dominantly non-forested landscapes, using only abiotic data, not one forest veg survey plot or piece of biological information was used in their construction.

There was no process of informing or consultation with key stakeholders before the EPA decided to convert reporting from forest Ecosystems to Mitchells landscapes for the second and third five-yearly review documents.

The former OEH staffer added : “To ignore this original tenets and to review progress in forest conservation using much coarser scales is completely irresponsible. It’s a silly as using the number of books in a classroom to measure student literacy”

To all participants the use of forest ecosystems, through their titles adopted, generally allowed understanding of the form, composition of the dominant overstory species and often understory species each ecosystem – They were described in a way that could be easily translated to the a patch of forest in the field. For example, I have copied below details ten Forest Ecosystems from the Upper North east region which contain Blackbutt as a dominant as reported in the NE RFA in 2000
Table 1. Percentage reservation status of Forest and Non-Forest Ecosystems in the CAR Reserve System in the Upper North East region based on vegetation modelling to establish the pre-1750 extent of Forest Ecosystems in the region a

<table>
<thead>
<tr>
<th>Forest Ecosystems b</th>
<th>Area Pre 1750 (ha)</th>
<th>Current (ha)</th>
<th>Percent Remaining</th>
<th>Status c</th>
<th>Percent of Forest Ecosystem (pre-1750) extent in the CAR Reserve System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dedicated Reserves</td>
<td>Informal Reserve d</td>
</tr>
<tr>
<td>27 Coastal Sands Blackbutt</td>
<td>4518</td>
<td>3101</td>
<td>68.6</td>
<td>-</td>
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<td>72 Low Relief Coastal Blackbutt</td>
<td>1574</td>
<td>859</td>
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<tr>
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<td>1333</td>
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<td>8219</td>
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<td>90.5</td>
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</table>

No equivalent communities or ecosystems can be readily determined from the Mitchells Landscapes used in the second and third five-yearly review documents.

The issue of the use of Mitchell’s Landscapes alone justifies withdrawal and republishing the second and third five-yearly review documents.

**Threatened species**

Clause 62 of the RFA states that "The Parties agree that the management prescriptions or actions identified in jointly prepared and agreed Recovery Plans or Threat Abatement Plans will be implemented as a matter of priority, including through the Integrated Forestry Operations Approval on State forest".

Yet neither the IFOA or the Threatened Species Licence have any reference to recovery plans, no mechanism to take them into account and do not abide by them.

The prescriptions under the Threatened Species Licence do not reflect the relevant recovery plans. In NSW the preparation of recovery plans and the identification of critical habitat for threatened species have been actively resisted by OEH and Government. The few recovery plans prepared often fail to identify needed management actions and thus often fail to address the principal threats to the species. Relevant actions in recovery plans are often ignored, even by NSW Government agencies.
The recovery planning and critical habitat processes have largely failed due to a lack of commitment to the protection of threatened species

The Department website says “The NSW and Australian governments are required to review the RFAs every 5 years to assess progress regarding ecologically sustainable forest management.”

Failure to do reviews in a timely way has invalidated the legality of the logging and shown blatant disregard for the regulatory framework. The 5 yearly review was not done until year 9. Now the 10 and 15 year reviews have been done together at year 17. This has denied us the opportunity to assess the information that should have been provided 8 years ago.

Like the rest of the review document, there is lots of fiction dressed up as fact. Given that the Governments were required to carry out reviews to assess progress regarding ecologically sustainable forest management, and they haven’t, how can we have confidence in the material presented in the review document? Most of the consultation period was over the xmas holidays which is notorious for government consultations when you hope people aren’t paying attention.

Overall, the whole process has failed to collect the most basic information on which to inform decision making and has been a tick the box exercise. However even the box ticking has been lied about. The RFA review document makes hundreds of assertions that various commitments have been met, without providing any evidence or references to that effect. It is a very poor review that takes such assertions on face value, and yet we recognise insufficient time has been provided for the reviewer to check all the undocumented assertions.

Procedural fairness has been denied. The Governments of NSW and Commonwealth have already decided that RFAs will be extended for a further 20 years and that they have been a success and done what they were designed to do.

In any genuine process, the reviews would be conducted, submissions sought and the reviewer would be given the opportunity to consider the information without any conclusion being provided by those being reviewed! However in this case both Governments have made public statements to the effect that regardless of the outcome of the review, the RFAs will continue... indefinitely. As they propose to not just renew them for a further 20 years but that each 5 years, they will be extended for a further 5 years. They have called this process ‘ever-greening’. It is to occur regardless of the science and in an information vacuum.

There has been no assessment of the current state of forest-dependent threatened species. How have they been impacted by logging over the last 20 years? We have a snapshot of their presence and population modelling from the 1990s. Has that changed? Are species that were present in any given area prior to logging still there 5 or 10 years later?

The first assessor’s report said...

**RECOMMENDATION 8**

In future reviews the Parties should provide more information about development of various threatened species recovery plans to allow an assessment of the adequacy of progress in the management of threatened species as it relates to Milestone 23.
Far from providing more information, the review provides less. It has Tables 66 and 67 in Appendix I. With a short statement about whether there is a recovery plan or conservation advice in place. There is no information as to the adequacy of those plans. Two examples of many, underscore the inadequacy of those plans.

Since the advent of the RFA the koala is now listed as Vulnerable federally. In NSW scientists are of the view that the koala population is in decline. In northern NSW it is estimated to have halved over the last 20 years. This is not surprising, as a recent assessment by the North East Forest Alliance showed that the much of the most intensive logging, (maps had to be obtained via a Freedom of Information application) is occurring in forests that the DPI Koala Habitat Modelling project has identified as High Quality Habitat.

General

Whilst this submission has not covered the full extent of the NSW Regional Forest Agreements second and third five-yearly reviews, from knowledge of the north-east NSW forests and of the reviews the following general comments and recommendations can be made:

The RFAs are bad for forests

Almost 20 years after the RFAs were signed, there is extensive evidence that the RFAs have failed to facilitate Ecologically Sustainable Forest Management; failed to result in an economically sound timber industry; and the CAR reserve network of forest ecosystems has not been delivered. RFAs are therefore a failed model for forest management and should not be renewed.

EPBC accreditation of logging operations has resulted in lower protection for forest species, and has not been complied with, as demonstrated by the multitude of license breaches. Commonwealth oversight of forest management must be restored.

Lack of objective data

The review’s progress report frequently addresses indicators without providing any data. For example, no spatial data is provided to assess the change in forest growth stage over the life of the RFAs, no data is provided to assess the proportion of each forest ecosystem protected or impacts on species and no data is provided on the value of forest-based services.

Fate of threatened species

The number of threatened forest species has continued to rise during the RFAs, with iconic species like koalas and gliders now either absent or experiencing population crashes in many parts of NSW. Logging is identified as a key threat to many forest species, often because of the impact logging has on key habitat features like hollow-bearing trees.

Logging kills forest animals and is therefore an important animal welfare issue.

Climate change was not considered as part of the RFAs, but is now the largest social, economic and environmental challenge we face. It is reckless to continue logging when we know it reduces carbon stores of forests.

Removal of third party rights

The RFAs removed public oversight of logging by excluding ‘third parties’ from taking legal action on logging breaches. This has resulted in a lack of accountability and transparency in their implementation and has favoured industry over the public interest.

Jobs and the economy
The NSW taxpayer has paid millions of dollars to a multi-national corporation to buy-back non-existent timber because of over-estimated timber volumes by Forestry Corporation. This is one of a series of subsidies that the logging industry receives.

The logging industry is one of the most mechanised and most dangerous. The number of direct jobs in the industry has steadily declined and is now across NSW.

**Alternative options for public native forests**

We have other options besides logging. NPA’s *Forests For All* plan is proposing that we protect public native forests and use them to increase public access for health and economic benefits. NPA’s Great Koala National Park proposal is designed to protect the world’s favourite animal.

There are many forested areas in the north-east of NSW that should be protected in the reserve network. For example, the forests of northern NSW are one of just 36 global *Biodiversity Hotspots*, there are forested areas across NSW that should be World Heritage, and there are outstanding wilderness areas.

**Value of forest carbon**

We know that the value of carbon, water and tourism from forests is much greater than timber, and that protected areas are important for the economy. The Government must assess these trade-offs as part of a genuine review.

**Public opinion of forest management**

Polling conducted in the north coast electorates of Ballina and Lismore in December 2017 showed that 90% of people support protecting forests for nature, water, carbon and recreation. Under 10% supported logging for timber, woodchips and biomass burning.

**The consultation process**

The NSW Government has already committed to extending the RFAs. This commitment was made prior to NSW Regional Forest Agreements, second and third five-yearly reviews that are now being conducted, so this consultation cannot be regarded as genuine. The review should be collating evidence to assess the performance of the RFAs with a view to making an evidence-based decision assessing whether they are an appropriate model for forest management.

The consultation process is entirely inadequate as the outcome appears to be predetermined. The RFAs affect two million hectares of public property in NSW, and very few people under the age of 30 are likely to have heard of RFAs. A concerted effort must be made to have genuine community consultation on the future of public native forests.

**Timing**

The reviews are so late as to make them meaningless. The entire rationale of the reviews – that the community can have confidence in the RFAs because of a transparent and timely review – has been seriously undermined.

In order to be effective, the independent reviewer must consult independent scientists (not just government agencies) and must undertake on-ground inspections of logging impacts with community groups.
Recommendations

1. The NSW Regional Forest Agreements second and third five-yearly reviews report should be withdrawn and re written by a team of experts independent of government.

2. The RFAs must not be renewed. The RFAs have failed to protect the environment, failed to result in a thriving timber industry and are driving climate change. The RFAs are therefore a failed model for forest management.

3. Forests must be managed for the public good. Logging is robbing future generations. The progress report for the RFA review fails to provide any data to support the assertions that logging is conforming to ESFM. In contrast, there is lots of evidence that forest wildlife is in decline, we know logging reduces carbon stores and water supplies and we know the majority of people support protecting forests.

4. We can implement alternative models for forest management. We can do better than industrially logging diverse, living ecosystems. National Parks Association of NSW’s (NPA) Forests For All plan seeks to protect forests to facilitate increased human access for health and wellbeing, recreation and education. The Great Koala National Park proposal would help protect koalas and become a huge tourist attraction (local groups should also reference their own national park proposals).

5. Other values of forests must be considered. Research in the Victorian Central Highlands shows that the value of water, carbon and tourism dwarf that of timber. Our Governments must consider all economic and social benefits from forests.

6. The Government should use the end of the RFAs as the point at which it implements a just transition out of native forest logging on public land.

7. That the government commit to undertaking a tenure blind assessment of World Heritage values of Australian forests (and in particular those of north-east NSW) undertaken by independent scientists