North Coast Environment Council Inc.

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Hon Sec. John Jeayes
www.ncec.org.au

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Submission to the Senate Inquiry into "The effectiveness of threatened species and ecological communities' protection in Australia".

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Terms of Reference:

The effectiveness of threatened species and ecological communities' protection in Australia, including:

(a) management of key threats to listed species and ecological communities;
(b) development and implementation of recovery plans;
(c) management of critical habitat across all land tenures;
(d) regulatory and funding arrangements at all levels of government;
(e) timeliness and risk management within the listings processes;
(f) the historical record of state and territory governments on these matters; and
(g) any other related matter.

ToR (a) management of key threats to listed species and ecological communities;

There are 966 Threatened Species in NSW and 103 Threatened Ecological Communities. There are 37 Key Threatening Processes- that is, activities which threaten a variety of threatened species or communities.

The Key threatening processes are by no means a comprehensive list, but nonetheless, a quick look at them shows that Governments are not taking them seriously and that much of the work to 'protect' threatened species, is lip service, because the KTPs continue unabated. The descriptions of the KTP are from the Schedule to the Act, the comments in italics and brackets are ours.

Schedule 3 Key threatening processes

Alteration of habitat following subsidence due to longwall mining *(Governments continue to give out mining licences for this activity despite proven fracturing of river beds.)*

Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands (as described in the final determination of the Scientific Committee to list the threatening process)

Anthropogenic Climate Change *(While there has been some small progress on this, on the whole, Government decisions continue to assume that climate change is some gradual process that will be addressed seriously in the future. All the recent science, and the forthcoming IPCC Report will show, that we are tracking at the top end of the model predictions and that the changes are*

happening much faster than predicted. For many species of plant and animal their habitat will become too hot, either on average or at the extremes. The opportunity to build a network of habitat corridors across the landscape to facilitate population migration is rapidly disappearing.)

Bushrock removal (as described in the final determination of the Scientific Committee to list the threatening process) *(Landscaping businesses are removing huge quantities of bush rock, with no understanding of the habitat consequences)*

Clearing of native vegetation (as defined and described in the final determination of the Scientific Committee to list the key threatening process) *(Clearing continues in a variety of guises. Changes proposed to the NSW Native Vegetation Act will see dozens of native species listed as 'invasive native scrub' and thus able to be cleared with impunity. Advances made in the previous decade will be reversed. There is little incentive for the current NSW Government to prosecute breaches of the NVAct.)*

Competition and grazing by the feral European Rabbit, *Oryctolagus cuniculus (L.)*

Competition and habitat degradation by Feral Goats, *Capra hircus*

Competition from feral honey bees, *Apis mellifera* L. *(Many native species depend on native bees for pollination. There are over 1500 species of native bee in Australia, many of which depend on tree hollows to build their hive. They are adversely effected by the decline of hollow bearing trees and by feral European bees taking over the spare hollows.)*

Death or injury to marine species following capture in shark control programs on ocean beaches (as described in the final determination of the Scientific Committee to list the key threatening process)

Entanglement in or ingestion of anthropogenic debris in marine and estuarine environments (as described in the final determination of the Scientific Committee to list the key threatening process)

Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners. *(It has been the work of conservationists that has led to this process being listed. Hundreds of thousands of hectares are now affected with many more at risk. It is now clear that intensive logging plays a significant role in spreading this problem.)*

Herbivory and environmental degradation caused by feral deer. *(Rather than a targeted eradication program, the NSW Government have opened the forests to shooters, who have no interest in eradication, but in maintaining deer population for future hunting.)*

High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition. *(Animals species of the Critical Weight Range are adversely affected by high frequency fire. Due to misinformation and media scare campaigns, politicians promise to burn the forests every year or two in the mistaken belief this will lessen the fire hazard. One of the ecological effects is to lessen the structural complexity of the forest, destroy habitat such as ground debris and for many plants, fatally interrupt their life-cycle.)*

Importation of Red Imported Fire Ants *Solenopsis invicta* Buren 1972

Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species

and populations

Infection of frogs by amphibian chytrid causing the disease chytridiomycosis

Infection of native plants by *Phytophthora cinnamomi* *(Phytophthora is becoming increasingly common. It is spread by vehicles usch as forestry and contractor vehicles, log trucks etc. Best practice requires that all vehicles leaving an area of known phytophthora infestation should be thoroughly washed down. This does not happen, thus the spores spread to hitherto unaffected forest.)*

Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae

Introduction of the Large Earth Bumblebee *Bombus terrestris* (L.)

Invasion and establishment of exotic vines and scramblers

Invasion and establishment of Scotch Broom (*Cytisus scoparius*)

Invasion and establishment of the Cane Toad (*Bufo marinus*)

Invasion, establishment and spread of Lantana (*Lantana camara* L. *sens. Lat*) . *(Lantana invasion is common after logging. The opening of the canopy and exposure of the soil create perfect lantana conditions. Lantana invasion of northern NSW forests post-logging is severe, often laying the foundation for other KTPs such as the Bell Miner Associated Dieback, where the Bell Miners are able to nest in the lantana and other shrubs and young trees that would enable other bird species to be present, are unable to penetrate the lantana thickets.)*

Invasion of native plant communities by African Olive *Olea europaea* L. subsp. *cuspidata* (Wall ex G. Don Cirferri)

Invasion of native plant communities by *Chrysanthemoides monilifera*

Invasion of native plant communities by exotic perennial grasses

Invasion of the Yellow Crazy Ant, *Anoplolepis gracilipes* (Fr. Smith) into NSW

Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants

Loss of hollow-bearing trees *(This KTP will have huge significance for dozens of threatened fauna species, and others, now common, will become threatened. Hollow-bearing trees are the critical resource required for successful breeding for owls, gliders, parrots, possums, kookaburras, many species of bat, some reptiles, quolls and dozens of smaller bird species. Each species has a particular type of hollow that suits its needs. For example, the hollow must be just big enough for that species and no bigger, in order to exclude predators. In some cases, it must face a particular direction. Some species such a yellow-bellied gliders use several hollows over their home range, depending on the season and food resources. Recent changes to the Native Vegetation Act make it*

easier to remove individual hollow-bearing trees. These can often be the only habitat for square kilometres. Their removal effectively turns an area into a 'dead-zone' for hollow-dependant species. In forestry there is lip-service to maintaining hollow-bearing trees, however they can be removed for OH &S reasons- which is thus used at the excuse for clearing them from the landscape. Furthermore there are insufficient trees being retained to allow for hollows into the future- this is addressed in more detail in the body of the submission. We can expect many species to become locally extinct due to a lack of HBTs- this has already happened in many of the coastal forests of NSW. Even the Environment Department website says "In forests managed for timber and firewood production, silvicultural practices have greatly reduced the density of hollow-bearing trees, especially where repeated harvesting events have occurred. In some forest types there has been a gradual shift in the relative composition of tree species toward those desired for timber. Among trees grown for silvicultural purposes, current rotation intervals between harvesting events – typically 30 to 90 years – are insufficient to allow for hollow development. There have previously been limited requirements for retention of hollow-bearing trees on private property managed for silviculture, although prescriptions are currently being developed.

Even when trees are retained during harvest they are susceptible to damage from logging operations and post-harvest burning, or can suffer poor health owing to changes in abiotic conditions. Consequently, retained trees are prone to early mortality, especially with repeated exposure to harvesting events over their lifespan. In addition, the average age of hollow-bearing trees in harvested areas will continue to decrease as the few remaining very old trees die. Trees are also retained in areas excluded from harvesting, such as along drainage lines, with the aim of creating a matrix of harvested and non-harvested areas."

Loss or degradation (or both) of sites used for hill-topping by butterflies

Predation and hybridisation by Feral Dogs, *Canis lupus familiaris (Forestry activities, particularly the opening up of roads, make penetration of the forest by feral cats, dogs and foxes easier. Research shows that they animals use the road network and follow trails of the native animals that cross them.)*

Predation by *Gambusia holbrooki* Girard, 1859 (Plague Minnow or Mosquito Fish) (as described in the final determination of the Scientific Committee to list the threatening process)

Predation by the European Red Fox *Vulpes vulpes* (Linnaeus, 1758) *(Forestry activities, particularly the opening up of roads, make penetration of the forest by feral cats, dogs and foxes easier. Research shows that they animals use the road network and follow trails of the native animals that cross them.)*

Predation by the Feral Cat *Felis catus* (Linnaeus, 1758) *(Forestry activities, particularly the opening up of roads, make penetration of the forest by feral cats, dogs and foxes easier. Research shows that they animals use the road network and follow trails of the native animals that cross them.)*

Predation by the Ship Rat *Rattus rattus* on Lord Howe Island

Predation, habitat degradation, competition and disease transmission by Feral Pigs, *Sus scrofa* Linnaeus 1758

Removal of dead wood and dead trees *(Many species depend on dead wood and trees for habitat and nesting, but they also produce a rich food resource of fungi and insects. Frequent burning as occurs both in hazard reduction and post-logging leads to the diminution of this resource.)*

ToR (b) development and implementation of recovery plans;

In NSW the Threatened Species Conservation Act was amended in 2004, so the requirement to develop Recovery Plans for each threatened species was dropped and the concept of a Priority Action Statement introduced. This has lead to a very vague list of 'priority actions' for some species and some threats. An example is a couple of those for the loss of Hollow-bearing trees:
Adopt appropriate policies for recruitment tree ratios with a stipulated minimum retention density in areas of forestry operations. *(This is commented on further in the submission, but this minimum is not supported by experts as sufficient, undermined by OH&S, fire practices, unable to be verified by audit, and in most of the coastal forests of NSW DOES NOT APPLY AT ALL! due to an arbitrary 'Regrowth Zone')*

Review effectiveness of PVP biodiversity tools and Private native forestry code of practice in the protection of hollow bearing trees. *(There has been no study done on public or private land to determine the effectiveness of management prescription or the Code of Practice for Private Native Forest for protecting hollow-bearing trees, or whether the numbers protected are sufficient to maintain populations of threatened species in the forest post-logging.)*

Most of the Priority Actions identified on the Department website are out of date. Where plans are to be developed by 2005, or 2009... etc we are still waiting.

In the case of those species where Recovery Plans have been developed such as the Koala, most of the actions identified have not been carried out. Threatened species management is akin to watching a continuous episode of Yes Minister... the same processes get recycled under different names but the action on the ground doesn't eventuate …. quite the contrary, the Government supports, often financially, a range of key threatening processes to be perpetrated on the landscape.

ToR (c) management of critical habitat across all land tenures;

The NSW Environment Department has this to say about critical habitat "Aside from planning the recovery of threatened species, the Office of Environment and Heritage (OEH) is also required to identify critical habitat. Critical habitats are areas of land that are crucial to the survival of particular threatened species, populations and ecological communities.
Critical habitat is only declared after extensive consultation with the Scientific Committee, public authorities, landholders and the wider community.
Once critical habitat has been declared, it affects the development assessment process. If a proposed development is likely to affect critical habitat, a species impact statement will often have to be prepared."

Register of critical habitat in NSW

Critical habitat recommendation - pending finalisation

Bomaderry zieria within the Bomaderry bushland - critical habitat recommendation
Eastern Suburbs Banksia Scrub Endangered Ecological Community - critical habitat recommendation On public exhibition to 18 April 2006.
Wollemia nobilis (the Wollemi pine) - critical habitat recommendation On public exhibition to 9 December 2005.

Critical habitat declaration - final

Gould's Petrel - critical habitat declaration
Little penguin population in Sydney's North Harbour - critical habitat declaration
Mitchell's Rainforest Snail in Stotts Island Nature Reserve - critical habitat declaration
Wollemi Pine - critical habitat declaration

So only 4 small areas of NSW are declared critical habitat, with a further 2 stuck in limbo despite having been recommended and placed on public exhibition. The process of declaring critical habitat has been such a complete failure in NSW that there is really very little to consider when it comes to how it is managed!

ToRs (f) the historical record of state and territory governments on these matters; and
and (g) any other related matter.

NCEC who we are, why we have an interest.

The North Coast Environment Council is a completely voluntary organisation and currently receives no Government funding being unsuccessful in all but one of our attempts at a GVEHO grant over the last decade or so. We are a decentralised council with several dozen members, both groups and individuals, and our specific area of interest is the Hunter to the Queensland border and west from the coast to the New England Tablelands. We are of course interested in the larger environmental issues, and from time to time provide support or expertise for groups further afield.

NCEC was formed in 1976 in response to the environmental threats to the environment of the north coast of NSW. At that time the main threats were mining, particularly sand mining, coastal development and forestry activities. In the 37 years we have been in existence those threats have not changed, only expanded and of course in many places they are no longer threats but became destructive actions.

As a result, our region, recognised as a global biodiversity hotspot, has hundreds of threatened plants, animals and ecological communities, the existence of which becomes daily more precarious and which governments have absolutely failed in their responsibilities of a duty of care.

The NCEC is a member of the North East Forest Alliance. We have read that submission, concur with the points made and do not intend to repeat that information.

While we are pleased at the opportunity to make this submission, we note that our earlier submissions on a range of similar matters fall on deaf ears. Parliamentary committees, or reviews commissioned by Government on the whole have failed threatened species. Where there are calls for action, nothing happens. It is for this reason that our biodiversity is in peril. Maybe this committee will be different?

What are the key threats to threatened species and ecological communities?

NCEC is of the view that logging, land-clearing, fishing and mining remain and encapsulate the key threats. They all stem from a fundamental lack of respect for our Mother Planet Earth and a failure to acknowledge that all our life support systems ultimately come from her and depend on her. In 2011 there was a huge gathering in Cochabamba, Bolivia, of 35,000 from around the world. They gathered to discuss the Rights of Mother Earth and developed the Universal Declaration for the Rights of Mother Earth. In several countries now (Ecuador, Bolivia) there is a process towards legally enshrining rights of Mother Earth, or as it is called in some places The Rights of Nature.

This is not some airy-fairy hippie movement. It is supported by legal practitioners around the world and variously described as Wild Law or Wild Jurisprudence. It acknowledges that these days Nature is treated as property under current law. Nature has no standing and therefore, cannot be represented directly in a court of law. Our call is for humans and corporations to value Nature as a living being, in all its life forms, with the right to exist, persist, maintain and regenerate its vital cycles rather than being seen as property - a resource to be consumed.

If the aim of threatened species management is to see species become abundant and safe, then their habitats must be respected and protected. This is not happening under our current legislative framework. Australia needs a Law which enshrines the Rights of Nature.

Recommendation 1. That the Senate Inquiry support a Charter of Rights for Nature

Relevant NCEC experience and views on the key threats.

Logging:
Logging in Northern NSW can be divided into logging on public land and logging on private land. There are 2 different regulatory regimes. The North East NSW IBRA bioregion is covered by a Regional Forest Agreement. This agreement covers both private and public land. However the so-called 'Comprehensive Regional Assessment' was anything but comprehensive with respect to all tenures and basically assessed public land. While some data was available for private land, there were almost no threatened species surveys. In fact the logging industry association actively discouraged landholders from allowing surveys on their land.

Numerous threatened species and endangered, rare or heavily cleared ecosystems were not adequately protected on the public land reserve system. That is, they did not meet the minimum targets set by the expert panels.

Despite clauses in the various Forest Agreement documents that there would be incentives for private land conservation, this is a drop in the ocean compared to the Government money that has gone into promoting logging on private land.

In NSW, bizarrely, this comes under the auspices of the Environment Department (the name changes every few years).

Logging on private land is covered by the Private Native Forestry Code of Practice, however the Code actually undermines protection for environmental values and allows virtual open slather on threatened species habitat.

The Code provides prescriptions that limit logging to some extent should there be a record of a threatened species on the property. However there is no requirement for pre-logging survey and on greater than 99% of properties there has been no survey. Hence there are no records to trigger a prescription. Thus the appearance of protection exists but not the fact.

Similarly with oldgrowth forests. The Code claims that no oldgrowth forest should be logged. However it provides a significantly limited definition of oldgrowth which is about half of that mapped by the CRA. It then allows a landholder to challenge the identified oldgrowth. This then triggers a re-mapping exercise. Significant areas of oldgrowth forest have been thus made available for logging. This is important because it is the large old trees that provide habitat for many of the unique forest fauna that are listed as threatened.

It was only a long-running battle with the Department for a Freedom of Information application that enabled us to determine that oldgrowth was being arbitrarily assigned to the harvestable area.

The diminution of the area off limits to logging has a direct impact on threatened species, as these areas were deemed to be 'surrogates' for actual protection.

The RFA reporting process doesn't apply to private land. In NE NSW industry and government alike claim that private land logging is of an equivalent scale to that of the public forests. And yet there has been no assessment, no CAR reserve system to provide connectivity across the landscape and there is virtually no monitoring or compliance auditing, and besides, the Code is so weak it would be extremely difficult to get a conviction for anything other than blatant and extreme breaches.

Private land logging should be immediately removed from the RFA exemption. While the NSW Government has been prepared to abrogate its responsibilities to threatened species the Commonwealth should not. Where it can be shown that a nationally threatened species exists on land subject to private forestry operations, the EPBC should apply.

This is particularly important for the koala where the Forestry and Environment agency have been in cahoots, making koala habitat available for logging when the local council had zoned the koala habitat as protected. The fact that the Forestry agency is facing difficulties supplying the timber it has committed, particularly to its largest customer, BORAL, means that it is buying private land timber and thus encouraging landholders adjacent to public forests to have their properties logged concurrently!

We have copies of correspondence, legal advice etc that demonstrates that the NSW Government agencies are seeking to log koala habitat on private land.

The protection given to the koala in the Northern Code of Practice states *"Koala (Phascolarctos cinereus)*

Prescription
(a) Forest operations are not permitted within any area identified as 'core koala habitat' within the meaning of State Environmental Planning Policy No. 44 - Koala Habitat Protection.
(b) Any tree containing a koala, or any tree beneath which 20 or more koala faecal pellets (scats) are found must be retained, and an exclusion zone of 20 metres must be implemented around each retained tree.
(c) Where there is a record of a koala within an area of forest operations or within 500 metres of an area of forest operations or a koala faecal pellet (scat) is found beneath the canopy of any primary or secondary koala food tree (see Table I below), the following must apply:
(i) A minimum of 10 primary koala food trees and 5 secondary koala food trees must be retained per hectare of net harvesting area (not including other exclusion or buffer zones), where available.
(ii) These trees should preferably be spread evenly across the net harvesting area, have leafy, broad crowns and be in a range of size classes with a minimum of 30 centimetres diameter at breast height over bark.
(iii) Damage to retained trees must be minimised by directional felling techniques.
(iv) Post-harvest burns must minimise damage to the trunks and foliage"

The main protection relates to the areas of 'core koala habitat' within the meaning of State Environmental Planning Policy No. 44. However until recently there was only one such plan on the north coast and the Environment Department have disputed its identification of 'Core koala habitat' and given out logging licences for thousands of hectares of habitat. This would no doubt have remained secret had not the NCEC obtained some documents under FOI and exposed the bullying behaviour of the pro-logging Environment Department and it's refusal to accept the outcome of the gazetted Coffs Harbour City Council Koala Plan of Management (KPoM). (It should be noted that while the department has been weak for years in its monitoring of public land forestry, it is

positively pro-logging on private land as the result of a departmental restructure which saw the forestry unit from the Department of Land and Water Conservation brought under the auspices of the Environment Department).

So, firstly, there have been almost no areas identified under a SEPP 44 KPoM. There are still several large local government areas that have no KPoM. So when there has been no work done by the local government to identify koala populations, what protection does the Government offer? Where a koala is found in a tree, or where a certain number of faecal pellets are found... a prescription is triggered. THERE IS NO REQUIREMENT TO LOOK! Needless to say, where koalas are likely to hinder logging, operators don't look. Several times we have been able to expose logging in areas with known koalas populations, but again, the Department has failed to act because the loggers aren't required to scrabble around in the leaf litter and find the faecal pellets to determine if koalas were using the area.

Conservationists have raised for years in meeting and submissions, the need for pre-logging surveys to protect threatened species. The only way to determine presence or absence is by looking. By failing to require pre-logging surveys, the NSW Government has condemned the threatened species on private land to be killed, maimed, made homeless or starved. That is the simple reality of current Government policy for threatened species on private land when the logging industry needs wood. It is also worth pointing out that with the advent of LIDAR, Google Earth etc, there is active recruiting of landholders where it can be seen they have extensive timber resources. Such landholders are solicited both by logging contractors and Forests NSW to part with their timber.

Recommendation 2 : The EPBC should apply to Forestry operations on private land.

In NSW the five yearly reviews of the NSW Forest Agreement have not occurred and numerous of the reporting requirements specified in those agreements, including regular reports to Parliament, have not been met. What is clear to anyone who looks at the forest is that it is being logged more intensively than ever before and this is to meet wood quota agreements that were made way too high. (BORAL timber and Forests NSW have been to court and then Arbitration over a failure to supply.) Even former timber workers are horrified at the virtual clear-felling now occurring on public land.

The effect of this intensive logging on fauna and flora has not been assessed in any meaningful way by the NSW Government. It was not considered during the regional assessment process nor in the setting of prescriptions to mitigate the impact of logging on particular species. There has been no peer-reviewed study that has looked at the species present prior to logging and then returned to survey the same site over time.

Therefore any claims of ecological sustainability have no basis in fact and are more likely to be wishful thinking.

There were two full time equivalent positions in the NSW Environment Department charged with monitoring and auditing forestry compliance. The wording of the Integrated Forestry Operations Approvals is loose and it is almost impossible to prove breaches due to phrases such as 'average'; 'reasonably practicable', 'minimise' etc.

There is no empirical evidence that the threatened species prescriptions protect threatened species. Further, compliance has been so weak under the RFA and implementation of the RFA conditions so inadequate, there is grounds for the Agreement to be terminated.

There are numerous examples and case studies that document these assertions. For example the North East Forest Alliance and the Clarence Environment Centre have carried out numerous audits of logging operation. The results have shown conclusively that logging approval conditions are being breached regularly. The failure of the Environment Department to do sufficient audits to create a culture of compliance is one thing, their failure to adequately follow-up on complaints made by the public is a second failing and their concurrence in changing or altering licence

conditions to facilitate access to forest that has high numbers of a particular threatened species is criminal.

For example, the Threatened Species Licence states in Condition 2.1 b) *Where the application of these conditions results in twenty percent or more of the area of net logging area of a compartment being made unavailable because of exclusion zones, SFNSW may request that NPWS review the conditions applying to that compartment. Areas retained in lieu of conducting pre-logging and pre-roading surveys as described in condition 7 (b) of this licence must not be counted towards the twenty percent. In compartments where exclusion zones have been retained under condition 6.9.2 of this licence (Large Forest Owl Landscape Approach), a maximum of 3% of the area specifically retained in the compartment as owl exclusion zones can be counted towards the twenty percent. Areas of the net logging area that are made unavailable due to the prohibition of new roads or snig tracks through High Conservation Value Old Growth Forest can be included in calculations towards the 20% threshold.*

Where more than 20% of the Net Harvest Area is excluded from logging due to a species- specific condition, it means that the species or the cumulative exclusion for species is due to a large and obvious population or healthy ecological community existing in the area. To allow a reduction in the required logging exclusion threatens such healthy populations and ecological communities. These levels of exclusion are not common and should not be reduced to allow for increased logging intensity in areas where such healthy populations and communities exist.

To be clear, the current licence conditions mean that where an area is a strong-hold say for a particular species, arrangements are made to lessen the protection requirements. This has happened with the Brush-tailed Phascogale. In Yarratt State Forest, a stronghold for this unusual animal, instead of the area getting even the minimal licence condition logging exclusion protections the requirements for protecting areas from logging have actually been decreased. Again, there is no follow-up post-logging survey work to determine the impact of logging on these populations.

Another and more blatant example is for the Hastings River Mouse, a nationally listed species. In those few areas where this species has actually been detected in any number, a whole raft of changes to the licence conditions have been brought in to lessen the area that will be protected from logging and thus lessen the area of undisturbed habitat that this species prefers. These changes have occurred under both Labor and Liberal State Governments. The area known as the stronghold for this species is the subject of special licence amendments that see its protection reduced in order to facilitate logging.

There is a stunning example of sleight of hand that occurs right across State Forests and it is exemplified in the report attached from the Clarence Environment Centre. An area of forest shown on one harvest plan as an exclusion – which covers significant areas of other compartments,- is not similarly shown as an exclusion on the harvest plans of other compartments.

This is a common feature of Forests NSW double accounting system. Exclusions that cross compartment boundaries are not permanent. They do not seem to persist through the FNSW planning system. So when the other compartments come up for logging, there is no record of the exclusion, even though it was the justification for the intensity of logging in the first compartment. In this way, the entire area can be heavily logged and 'exclusions' moved around the landscape for logging convenience. Whether they constitute appropriate habitat or not. There is no ecological rationale for this, simply one of resource extraction.

This also happens now with logging intensity. FNSW are only meant to log 40% of the basal area of a compartment 'in a singe logging operation'. So they set aside 60% of the compartment and virtually clearfell the rest. They then come back a few months later and take 40% of what is left and

then again... Thus we are seeing up to 80% basal area removal in many logging operations. The impact of this on threatened species is enormous: from the point of view of individuals harmed or killed during logging, loss of nesting habitat, loss of food resources, increased accessibility to feral animals and weed invasion, as well as increased heat and dessication resulting from the removal of the shady canopy.

Over the course of the last few years the NCEC has commissioned the services of several independent ecologists to assess claims made by our conservationist colleagues. We have employed botanists to confirm our layperson view that Forests NSW have indeed been logging Endangered Ecological Communities. Similarly that they have logged habitat that according to their own licence conditions should have been protected. These reports, when submitted to the Environment Department have led to long and protracted interactions, that on occasion have ensured that the statutory time for taken legal action against FNSW has passed.

Treatment of the iconic koala is another good example of how logging practices in public forests are resulting in population decline.

The NCEC has recently worked with several other environment groups (The National Parks Association, the Clarence Environment Centre, the Bellingen Environment Centre, the Nambucca Valley Conservation Association) to commission a koala habitat study for the area south of the Clarence River to north of the Nambucca River. Initial results suggest that there are 2 significant koala populations in this area. These populations however, are in decline. Sightings made to Council and NPWS databases and records of dead and injured koalas with WIRES etc suggest that if the habitat of these populations is not protected from other threatening processes such as clearing and logging, these populations could become so fragmented they may not recover. (The results of the report will be published in late February 2013).

One of the reasons we were motivated to initiate such a study was the belligerence and intransigence demonstrated by Forests NSW as they prepared to log Boambee State Forest, a known koala hotspot. The pre-logging survey work was minimal, known high-use areas for koalas were not identified. After some public criticism they made some minimalist revisions to their logging plans but went ahead anyway. They also undertook an advertising campaign, distributing brochures to neighbours suggesting they might like Forests NSW to log their forest concurrently. The fact that most of the neighbouring forest was identified as 'core koala habitat' in the Coffs Harbour City Council Koala Plan of Management made no difference. Of course the Environment agency, responsible for approving plans for logging on private property forest has been actively seeking to undermine the provisions for 'core koala habitat' in the Coffs CC, KPoM, and contrary to the Council's wishes, has been licensing logging in these areas.

Another recent example pertaining to the koala is when a colleague noticed that a 'high use koala area' was not marked on a Harvest Plan. He brought this to the attention of the Environment Department. Their response was " *The EPA notes that the Threatened Species Licence that applies to this operation does not require FNSW to map koala high use areas."* the Licence states " *ix. The Harvest Plan Operational Map must be amended to indicate the location and extent of the Koala high use area."* So what is going on? This is but one of dozens of examples of the Kafkaesque interpretation of the rules that is daily fare in NSW.

You may not be aware that the third party appeal rights of the public or a group like ours, to challenges breaches of the RFA or logging licences, were removed. Despite demonstrating a culture of non-compliance and lack of regulatory rigour, the NSW Forestry agencies are beyond the law in the sense that only the Environment Department can prosecute the Forestry agency. Despite the Department's reluctance to prosecute, sometimes the offences are so blatant they have no choice.

Perhaps that is why Justice Pepper said in 2011 when hearing a case brought by the Environment Department for undertaking hazard reduction burning in the habitat of the Smokey Mouse in contravention of the Licence conditions pertaining to Nullica State Forest, that the repeat offences

by Forests NSW suggested a pattern of continued disobedience. She said " Given the number of offences the Forestry Commission has been convicted of operations of and in light if the additional enforcement notices issues against it, I find that the Forestry Commission's conduct does manifest a reckless attitude towards compliance with its environmental obligations."

It is clear that there are numerous terms in the licence which make many of the clauses unenforceable. For example: the requirement that a certain number of habitat trees be maintained in each 2 hectares. This has been interpreted by the agencies as an average across the Net logging area. They then claim that the only way to determine if the condition has been met is to survey the entire net logging area and mark all the habitat trees. This has never been done! There is no record whatsoever as to whether this important condition which makes an enormous difference to the survival of a whole raft of threatened species, has ever been audited! There are several other licence conditions to which this 'we would need to survey the whole compartment (200 ha) to determine a breach' is the standard response. For years we have suggested that Habitat trees could be marked by GPS and then counted, their location would also then be able to be audited. The agencies have refused to adopt this measure and thus there has been NO evaluation in the 13 years of the RFA, of whether these conditions are being implemented or whether they work to protect threatened species.

Furthermore, should an important population of a threatened species be located in a logging area, the Environment Department no longer has the power to apply a Stop Work Order. The Licence says "Stop work orders under the *National Parks and Wildlife Act 1974 and Threatened Species Conservation Act 1995*, and interim protection orders under the *National Parks and Wildlife Act*, do not apply to the carrying out of forestry operations covered by the approval."

Recommendation 3. The EPBC should apply to logging on public land .

In 2013 NSW is likely to see an even further diminution of protection for threatened forest fauna and flora. There are currently a number of secret internal reviews occurring. One is to look at changing the threatened fauna prescriptions and other conditions of the logging licence (known as the IFOA or Integrated Forestry Operations Approvals). Another is looking at sourcing timber including from inside National Parks. Robert Brown of the Shooters and Fishers Party as the chair of a recent Legislative Council committee, made it clear he favoured opening up some Parks for logging. The Forest Products Association called for 'one million hectares' of protected forests to be opened up for logging.

So called reviews of the RFA which were meant to have been every five years have not really occurred. There was a shadow of a process that had a submission period of one month, that many of us with a long-standing interest in the issue didn't even hear about. This review (and there should have been 2) had very narrow terms of reference. It did not consider new scientific evidence about biodiversity decline, water resources: and the impact of logging, or climate change. These three absolutely critical fields of science have NOT BEEN CONSIDERED with respect to current forestry practice.

The RFAs were to result in Ecologically Sustainable Forest Management. Simply having a milestone that requires an ESFM Plan, is not the same as actually achieving ESFM in practice.

In NSW the RFAs were predicated on unsustainable forest management. The wood volumes committed to the industry, by the Government's own modelling, were shown to collapse around about 2018. At this point it was envisaged that there would either be no more native forest logging, or that the industry would need another dramatic restructure in order to do more with less.

While across Australia, the volume of sawn wood products from native forests has declined, there is evidence that logging remains a key threat to biodiversity. One of Australia's leading scientists, Richard Kingsford and his colleagues have identified the loss and degradation of habitat as the first of six major threatening processes driving biodiversity decline in Oceania, threatening more terrestrial species than any other process. In Australia about 70% of our remaining forests are

ecologically degraded from logging, including of course, most of the State and private forests of NSW.

The fact that so many species of native mammals, birds, reptiles and amphibians are considered threatened or vulnerable, speaks for itself. The situation is similar for threatened plants and ecological communities. The numbers being added to the Threatened Species schedules continues to grow. Clearly all the Recovery Plans, Priority Action Statements, and supposed mitigation measures are not working.

Is this committee going to recognise this fact and make recommendations to do something about it? Can you seriously address the problem while allowing threatened species habitat to be destroyed by the thousands of hectares every year in our public forests, under agreement with the Commonwealth?

Logging is transforming our forests. From complex, multi-age ecosystems, they are being converted to single age, single species, plantation-like systems. Less resilient to fire, pest and disease and less productive for biodiversity and water storage.

Another significant issues is what is known as the 'Regrowth Zone'. This arbitrary line drawn in felt pen on a regional map (and almost impossible to find a copy of on any government website) is responsible for what will be a collapse in all hollow-dependent fauna on the east side of the line. The 'regrowth line' deems all those forests east of the line as being predominantly regrowth, and thus there is no requirement to leave large, older trees for habitat purposes. Yes, if there is a hollow-bearing tree, a recruitment tree must be left, but if there are no hollow-bearing trees NO large trees are required to be left to become hollow-bearing. After more than 15 years of this policy, many coastal forests are now better described as stick forests. There is little age diversity. In many you can spend an hour and hear and see virtually no birds, except perhaps the larger predatory birds such as currawongs and kookaburras. There are so few nesting hollows in these forests, and in many it will take hundreds of years before new hollows re-develop, even if logging were to cease tomorrow.

The issues surrounding the poor treatment of threatened species in public land logging operations go on and on... if the committee would like more detailed information and copies of complaints made over more than a decade etc we can supply.

Recommendation 4. Any diminution of threatened species protections by the NSW Government should be deemed by the Commonwealth to be a breach of the RFA.

Land-clearing:

Land-clearing continues to remain a serious threat. Changes to the Native Vegetation Act list large numbers of native species, including many that are part of endangered ecological communities as 'invasive' and thus able to be cleared under exemption without assessment.

Clearing for development also is a serious threat particularly along the coast. There is a major concern that environmental assessments are done by consultants paid by the developer and have an interest in finding no impediments to the development going ahead. Thus we see most EISs finding that the development will have 'no significant environmental impact'.

Several years ago the NCEC commissioned a report on this. The report is appended to this submission as despite it having been written in 2004, it remains as relevant as it was then.

Fishing continues to be a significant threat in the marine environment. And we support the submission by John Jeayes that outlines the threats particularly as they apply to the Grey Nurse Shark.

CSG and mining:

While mining has previously had a localised impact on threatened species habitat where that land was cleared, this phenomenon is now much more widespread than previously. Most of the north coast of NSW is now covered by mineral exploration licences. These cover mainly coal (particularly in the Hunter and Upper Manning areas), minerals such as Antimony, Gold and Tungsten (Macleay, Nambucca, and Clarence Valleys) and Coal Seam Gas which seems to be everywhere.

As I write several thousand hectares of Leard State Forest is being cleared for an open cut coal mine. It is worth taking the time to look at Leard with Google Earth. It is the largest remnant (8000ha) of forest/ woodlands on the Liverpool plains, a landscape that has been almost entirely cleared. The mining proposals will see 5000ha cleared. Leard provides habitat for 34 threatened species including the Koalas. It contains over 1500 of Box Gum Woodland, listed as a critically endangered ecological community by the EPBC Act. 1,100 ha is to be cleared. It is one of the largest and most intact stands of Box-Gum left in Australia with over 100 tree hollows per hectare!

In a ridiculous example of the double standard which applies to the mining industry, adjoining farmers are no allowed to clear Box Gum Woodland, but miners are exempt! Is it any wonder these ecological communities are endangered when such huge areas can be cleared with impunity and when the Environmental Assessments for the mines suggest there is no significant environmental impact.

The failure of environmental impact assessments to consider cumulative impacts of several developments is also a major failing.

We now have the technology to have reasonably accurate databases that can keep track of the diminishing hectares or individuals of particular species. It is incredible that the available technology is not being used to do this. Could it be because the answer is embarrassing and governments of all persuasions don't want to know?

Clearing of endangered Box-Gum woodland at the Boggabri mine, Leard State Forest.

Other mining proposals of great concern to the NCEC are those targeting the Dorrigo Plateau,

which include antimony, tungsten, gold, copper, tin, zinc, molybdenum and silver. Previous antimony mining in the Macleay/ Nambucca catchments has led to the contamination of the Upper Macleay- what should be a pristine catchment is too dangerous to drink and residents have had to have drinking water trucked in for years. Likewise a significant area of the Urunga Lagoon is off-limits as a contaminated site.

The Dorrigo Plateau has one of the highest rainfalls in NSW- 3000mm/year. It feeds at least 7 major rivers. The potential for large-scale contamination and erosion from mining is great. Threatened species live in the areas proposed for mining, such as the Giant Barred Frog and the Stuttering Frog. Under the EPBC there are no third party referrals to enable the presence of such species to be considered, it is up to the mining companies to 'self assess'. Not surprisingly, these frogs listed as vulnerable nationally, did not rate consideration and no Review of Environmental Factors was required. Again the double standard for mining.

Across the entire State, coal seam gas exploration is proposed. This method of gas extraction often involves fracturing the deep layers of the earth's crust, several kilometres below ground. Recent work undertaken by Southern Cross University researchers, has shown that where such exploration has occurred there is a high-level of ground level methane. CSG is being promoted as producing less CO2 equivalents. However this work calls that into question and it is highly likely that numerous fractures are causing methane seepage across the landscape (including in river beds such as the Condamine).

As well, a variety of chemicals are used in the mining process. These are pumped into the drill holes. There has been almost no work done to map the connectivities between coal seams and underground water resources, but there have already been examples of where local groundwater has been contaminated and wildlife has been poisoned. The contamination is not just from the chemicals injected during drilling but from the heavy metals which are brought to the surface in the ancient waters which are pumped into waterways to be discarded. (this is happening in the Pilliga forests in NSW).

CSG is a risk not just to threatened species but to humans as well. In a decade's time no doubt it will be listed as a key threatening process. In the meantime it is important for this dangerous activity to be governed by the precautionary principle.

Climate change:

Climate change is a major threatening process that is only going to become more dramatic during our lifetimes. A NSW Government report on this , "Priorities for biodiversity adaptation to climate change" acknowledges among other things that *" Rising temperatures and sea levels and climate-induced changes in fire regimes, water quality and ocean chemistry will have a wide-ranging impact on biodiversity in NSW. Climate change is also expected to intensify existing threats to biodiversity, such as habitat loss, weeds and pest animals and drought.*

"Species that have survived previous climatic changes by evolving, moving or changing their behaviour may find it more difficult to use these coping strategies when the change is rapid, especially where their habitat is degraded or lost."

This applies to most of the threatened species of NSW and many that are not yet threatened. Interestingly, the first point under Building the protected area system says *" 2.1 Revise guidelines for reserve acquisition to prioritise those landscape features important for biodiversity adaptation, such as refugia, functional connectivity, climatic gradients and water security."*

We wholeheartedly support this approach. A major problem with the current reserve system is it largely lacks connectivity and climatic gradients and takes no account of water security. It is patently obvious that these components are fundamental considerations for ensuring biodiversity survival.

In summary, various Biodiversity Management Plans, including the Federal (2012-2020) document that, despite regulations in place to protect threatened species, they are still in decline. Therefore it has to be said that the current threatened species and endangered ecological communities protection has been an abject failure.

That is not the fault of the legislation, but a monumental failure by governments, state and federal, to properly apply those regulations.

Those ongoing declines of threatened species are almost universally recognised as being caused by habitat loss and fragmentation. Therefore it stands to reason that any further loss has to be a further impact, but the word “significant” has been introduced into the equation, and the regulatory authorities have routinely been forced into accepting reports from ecologists, that are employed by the proponent, that their own development will <u>not</u> have a "significant" impact.

There is never any requirement for the developer to consider the cumulative impacts of the other 10,000 like developments that are up for approval each and every year, all of which are claiming to have the same no “significant” impact.

This has turned the State and Federal Environment Departments into licensing bodies to allow the destruction of threatened species. On the very rare occasion when a development is seen as having a “significant” impact, all the developer has to do is offer an offset, such as a conservation covenant on like habitat elsewhere, to allow the destruction to go ahead. As the conserved offset is almost always habitat that already exists, this means, once again, that there has been a net loss of habitat. One thing that is never stressed enough is the fact that a voluntary Conservation Agreement gives no protection against a state significant development, or any mining.

And that about sums it up. Unless the regulations guarantee the protection of threatened species and their habitat in its entirety, and backs that up with effective recovery plans, threatened species will continue to decline into extinction.

This Senate Inquiry needs to recommend that current State Government practice is not protecting threatened species. It needs to make recommendations that:

- Ensure that threatened species are protected at individual sites and the regional level and that resources are allocated to their recovery.

- Ensure that effective legal protection and objective environmental tests are embedded in local planning schemes.

- Legislate to prevent any clearing of threatened species habitat.

- Provide overarching legal appeal mechanisms so third parties can act to protect threatened species at all levels of the legal system.

- Provide funding to Increase the level of credible plant and wildlife surveys on private lands to better inform planning and land-use decisions

- Prevent the protection of Threatened Species from being overridden by socio-economic factors.

- Ensure that species listing through the scientific committee must remain free from political interference.

We support the recommendations in the NEFA submission, and repeat here those relevant to material raised in our submission.

RECOMMENDATIONS

1. The Inquiry needs to recognise that 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.

2. The Inquiry needs to recognise that in north-east NSW the grossly inadequate reserve system and off-reserve reserve management regime is condoned by the NE Regional Forest Agreement and thus exempted from the Environment Protection and Biodiversity Conservation Act 1999. The Commonwealth is culpable for the many environmental offences identified herein and their lack of any meaningful oversight is an abrogation of their national and international obligations.

4. The inquiry should specifically review the reserve status of federally listed species and ecosystems in north-east NSW in light of identified threats.

5. The inquiry should promote the need to significantly expand the reserve system in north east NSW to provide the needed protection for biodiversity and nationally threatened species, so as to bring it up to national standards.

6. The Inquiry needs to recognise that timber commitments given in the North East RFA are unsustainable and are currently being reassessed by the NSW Government. It is likely that the NSW Government may allow logging of National Parks and other conservation reserves, and reduce logging prescriptions for threatened species.

7. The Inquiry needs to ensure that any changes to the reserve outcomes or timber commitments given in the North East Regional Forest Agreement, made between the Commonwealth and NSW in 2000, are subject to review by the Commonwealth to ensure that existing protections for threatened species are maintained or improved.

8. The Inquiry must recognise that the Integrated Forestry Operations Approvals, and their constituent Threatened Species Licences, which underpin the North East Regional Forest Agreement made between the Commonwealth and NSW in 2000, are currently being reviewed in a secretive process by the NSW Government and are expected to significantly weaken already inadequate protection for nationally threatened species.

9. NEFA requests that the Commonwealth intervene in the IFOA review to ensure Commonwealth obligations for threatened species are fully discharged in north-east NSW.

10. NEFA suggests the Inquiry recommends the adoption of performance measures for flora and fauna prescriptions and auditing of their effectiveness in achieving those measures.

11. It is recommended that the Inquiry commission appropriate experts to review the likely effectiveness of prescriptions applied to reduce impacts of logging operations on nationally threatened species in north-east NSW. The review should identify explicit performance measures and auditing requirements.

12. The inquiry needs to recognise that the maintenance of large old hollow-bearing trees in perpetuity is a key requirement for the survival of numerous Australian species, including many species already identified as threatened with extinction.

13. NEFA recommends the Inquiry recognise the current and worsening crisis in the availability of large old trees and the essential resources they provide to numerous fauna species, and recommend the retention and protection of all large old trees (>140 years old) for their biodiversity and heritage values.

14. The Inquiry needs to recognise that the current crisis over extensive forested landscapes in the availability of large old trees, and the essential hollows they provide to numerous species, is worsening as remnant large old trees die or are killed without recruitment trees being available to replace them. The inquiry should identify the tree retention requirements across the range of age classes necessary to provide an adequate stocking of large old trees throughout native forests into the future.

15. Despite retention requirements being specified during some logging operations for the retention of hollow-bearing trees, and recruitments to grow into the hollow-bearing trees to replace them when they die, the achievement of requirements are often grossly inadequate and there appears to be a war of attrition being waged against hollow-bearing trees. The aim should be to retain, maintain or restore hollow-bearing trees and adequate recruits throughout native forests.

16. NEFA considers that in order to provide meaningful protection for Koalas there is a need for enhanced prescriptions in logging operations. It is suggested that the Inquiry recommend a more appropriate approach to Koala conservation in north-east NSW. *(The NCEC view is that logging should be completely excluded from areas where there are koala records. There has been so much habitat lost, further compromise is not viable for koala survival.)*

18. The Inquiry needs to recognise that there is no monitoring of prescriptions applied to supposedly reduce logging impacts on threatened species, and thus no adaptive management. The Inquiry should recommend a monitoring program to assess the impacts of forestry operations on nationally threatened species so as to objectively assess the effectiveness of logging prescriptions intended to mitigate impacts, and identify appropriate improvements.

19. In light of the inadequate protection applied for the endangered Hastings River Mouse on public land, and the lack of any meaningful protection on private land, it is requested that the Inquiry recommend that, in accordance with the Hastings River Mouse Recovery Plan, logging be prohibited within medium and high quality Hastings River Mouse habitat across all tenures, and be appropriately modified within 200m of such habitat. No further reductions to protections for Hastings River Mouse should be allowed unless part of a justifiable scientific trial overseen by independent experts.

20. The Inquiry needs to recognise that while there are theoretical prescriptions for most threatened plants, they are rarely applied because appropriately experienced botanists are not searching for them ahead of logging. It is suggested that the Inquiry recommend that pre-logging surveys for threatened plants be undertaken by appropriately experienced botanists on all land tenures.

22. The Inquiry should condemn the opening up of national parks in NSW for recreational shooting as this will increase the direct threat to a number of threatened species and divert limited resources and staff from systematic and prioritised feral animal control programs and thereby increase the impacts of feral animals on threatened fauna.

23. The Inquiry needs to recognize that logging is facilitating the spread of weeds through our forests and that this is causing the degradation of ecosystems and the loss of habitat for numerous threatened species. The Inquiry needs to recommend that significant weed infestations are identified before logging and rehabilitation works implemented.

24. The Inquiry needs to recognize that Bell Miner Associated Dieback is a major threat to many forest ecosystems and threatened species over large areas of north-east NSW, and appears to be rapidly worsening. Tens of thousands of hectares of forest in north-east NSW are affected and hundreds of thousands of hectares are vulnerable. It is a serious threat that has been procrastinated over for far too long.

25. Forests NSW are targeting Bell Miner Associated Dieback Areas for removal of all healthy remaining trees and then abandoning them to their fate as destroyed ecosystems. The Inquiry is requested to support a sustainable approach to the key threatening process Bell Miner Associated Dieback by recommending an urgent moratorium on logging in and adjacent to BMAD areas until such time as effective rehabilitation strategies for restoration of ecosystem health and threatened species habitat are implemented.