

SUBMISSION TO THE HOUSE OF REPRESENTATIVES (ARFF) STANDING COMMITTEE INQUIRY INTO THE AUSTRALIAN FOREST INDUSTRY



South East Forest Rescue 2011



SUBMISSION SUMMARY

The State run agencies of Forests NSW, VicForests and Forestry Tasmania have gone beyond their scope as the public caretakers of native forests, have broken their pact with the community, and therefore the native forest logging industry is needing immediate reform.

On the South Coast of New South Wales thousands of hectares of native forests are being clearfelled every year. The Forestry Commission of NSW, trading as Forests NSW, descriptions for these practices vary from ‘Single Tree Selection: Heavy’ to ‘Australian Group Selection’ to ‘Modified Shelter Wood’, yet they all amount to clearfelling or patch clearfelling on the ground.¹ Eighty five per cent of trees felled are turned into woodchips, either at the Eden chipmill or at the various saw mills on the South Coast and then trucked down to the chipmill.

Old-growth, rainforest and mature age forests are being logged at an unsustainable rate. To meet wood supply commitments, the native forest under Forests NSW tenure is being cut faster than it is growing back.² Forests NSW have continuously logged over ecologically sustainable limits since the implementation of the Regional Forest Agreements (“RFAs”).

The Australian native forest industry pretense of implementing ecologically sustainable forest management has failed, has been corrupted, and has not delivered on obligations. These unacceptable outcomes are at the expense of the current and future generations and are to the detriment of our unique flora and fauna.

Native forestry operations in areas covered by RFAs have failed to be subject to an independent environmental assessment that is scientifically sound and rigorous. The scientific processes in the RFAs were politically compromised, the established Joint ANZECC/Ministerial Council on Forestry Fisheries & Aquaculture National Forest Policy Statement Implementation Subcommittee (“JANIS”) criteria for forest conservation were not fully applied. There are large areas of high-value conservation forest that would have been reserved if the original RFA criteria for forest conservation had been fully employed.³

The current government RFA reporting approach adopted is perverse, capricious, and lacking in material substance. The scope or terms of reference are too narrow in the process therefore the processes have been flawed and a successful outcome has not been reached. This is further indication that the current RFA policy is irrational and must be subject to reform as a matter of urgency. Further the allegations of openness and transparency of both Forests NSW and the native forest industry is verging on corrupt.⁴

The extent to which RFA milestones and obligations have been met, the results of monitoring of ESFM sustainability indicators is disingenuous and exceedingly below satisfactory. The performance of Forests NSW ‘implementation’ of the RFAs in meeting specific milestones has been an abject failure, consistently late, and professionally inadequate.

There is a dis-connect within the private companies of the native forest logging industry in that they have exerted undue influence to ensure desirable outcomes for their profit margins at the expense of the current and future generations of the State. This is immoral.

The National Park additions to date, and the recent NSW Riverina Red Gums decision are a progressive step, however the world-class benchmark was set by New Zealand in 2002, and Australia has been tardy and negligent in its attempts at meeting this world standard.

There should be an immediate enactment of clause 8 of the RFAs, for which the grounds have been triggered,

¹ See photos on front page of this submission.

² Performance Audit ‘Sustaining Native Forest Operations’ Auditor-General’s Report, (2009); “reviews of yield estimates for the southern region, due in 2004 for Eden and 2006 for Tumut and the south coast, have not been completed”.

³ Above n1.

⁴ See *Watt v Forests NSW* [2007] NSWADT 197; see also *Digwood v Forests NSW* [2009] NSWADT 107.

giving effect to ending the RFAs as the mode of Australian native forest mis-management.

South East Forest Rescue calls for indigenous ownership of all public native forest, a complete stop on logging of endangered ecological communities, complete transfer of wood product reliance to the plantation timber industry and salvage recycled hardwood timber industry, a single authority for national native forest stewardship modelled on the New Zealand example, and an immediate nation-wide program of catchment remediation and native habitat re-afforestation. We assert that urgency is needed in this forest reform.

INTRODUCTION

This submission is informed by active monitoring and auditing of the ongoing operations of native forestry management since the *Forestry and National Park Estate Act 1998* (NSW) (“FNPE Act”) was voted through the NSW Legislative Council by the Labour government and Coalition opposition. That evening in November 1998 marked the point where the community lost the right to affect what happened to its native forest environment.

This submission has the purpose of reviewing the state of the native forests of the south east of New South Wales. The performance of the RFAs are scrutinised, outcomes to date examined, and recommendations for action presented.

These conclusions are based on extensive research and on-ground examination of the implementation or non-implementation of the RFAs and Integrated Forestry Operations Approvals (“IFOAs”) on unprotected native forest mainly in the Southern and Eden regions, but also the whole of New South Wales, Victoria, and Tasmania since the year 2000.

Definition Of Ecologically Sustainable Development

Before proceeding, erroneous and mistaken definitions of Ecologically Sustainable Development (“ESD”) must be clarified. The definition of ecologically sustainable development had its origins in the report of the World Commission on Environment and Development, *Our Common Future*.⁵ Development was defined as sustainable if:

“It meets the needs of the present without compromising the ability of future generations to meet their own needs.”

In the international community the term is ‘sustainable development’. In Australia Bob Hawke had need to place the word ‘ecological’ in front of the phrase as developers believed they now had carte blanche to demolish the environment.⁶ Thus the term is now defined in Australia as development that is ‘ecologically’ sustainable.

The RFAs state that their purpose is to provide for the ecologically sustainable management and use of forested areas in the regions.⁷ The definition currently in place is contained within the *Protection of the Environment Administration Act* at s6(2):

Ecologically sustainable development can be achieved through the implementation of the following principles and programs:

(a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

⁵ The World Commission on Environment and Development, ‘Our Common Future’ The Brundtland Report, (1987) p8.

⁶ Harris and Throsby, ‘The ESD Process: Background, Implementation and Aftermath’ (1997) a paper presented at a workshop ‘The ESD Process Evaluating a Policy Experiment’ Hamilton and Crosby [eds] Academy of Social Sciences in Australia; Hawke R J, ‘Our Country Our Future’ (1989) (Statement on the Environment by the Prime Minister of Australia), Canberra: Australian Government Publishing Service.

⁷ *Regional Forest Agreement for Southern New South Wales between the Commonwealth of Australia and the State of New South Wales April 2001, Recital B (b).*

- (a) (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
 - (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and *ecological integrity*—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration.

There is much uncertainty on the effects of climate change, but one of the certainties is that deforestation is one of the biggest causes.

The loss of natural forests around the world contributes more to global emissions each year than the transport sector. Curbing deforestation is a highly cost-effective way to reduce emissions; large scale international pilot programmes to explore the best ways to do this could get underway very quickly.⁸

The Stern Review goes on to state in Annex 7f:⁹

Deforestation is the single largest source of land-use change emissions, responsible for over 8 GtCO₂/yr in 2000.

Deforestation leads to emissions through the following processes:

The carbon stored within the trees or vegetation is released into the atmosphere as carbon dioxide, either directly if vegetation is burnt (i.e. slash and burn) or more slowly as the unburned organic matter decays. Between 1850 and 1990, live vegetation is estimated to have seen a net loss of 400 GtCO₂ (almost 20% of the total stored in vegetation in 1850).¹⁰ Around 20% of this remains stored in forest products (for example, wood) and slash, but 80% was released into the atmosphere. The removal of vegetation and subsequent change in land-use also disturbs the soil, causing it to release its stored carbon into the atmosphere.¹¹ Between 1850 and 1990, there was a net release of around 130 GtCO₂ from soils.

Also a definition of 'CAR' is in order. The original definition was:

Comprehensiveness: which refers to the extent to which a reserve system contains samples of the major forest ecosystem types in a region.

Adequacy: entails a suite of considerations that enable an evaluation of the extent to which the long term ecological viability of conservation values is ensured.

Representativeness: assesses the extent to which the variation and diversity within each major forest ecosystem is protected.¹²

There is an obvious disjunction between what the native forestry industry consider to be 'best practice' and what independent scientists, academics and eighty per cent of the community believe is sustainable. Forests NSW seem to be oblivious to the word 'ecologically'. Given what is now known on greenhouse gas emissions and forest degradation Forests NSW would have difficulty arguing that their practices are sustainable. The loss of species yet to be discovered and carbon sinks will affect future generations.

⁸ The Stern Review on the Economics of Climate Change, <http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm>

⁹ The Stern Review, above n8, 'Emissions from the land-use change and forestry sector'.

¹⁰ Baumert, Herzog and Pershing 'Navigating the numbers: Greenhouse gas data and international climate policy' Washington, DC: World Resources Institute (2005); see also Houghton 'Revised Estimates of the Annual Flux of Carbon to the Atmosphere from Changes in Land Use and Land Management 1850-2000' (2003) 55 *Tellus B* 378.

¹¹ Houghton JT, 'Tropical Deforestation as a Source of Greenhouse Gas Emissions' (2005) in *Tropical Deforestation and Climate Change*, Moutinho and Schwartzman [eds]; see also Intergovernmental Panel on Climate Change (2001): 'Climate change 2001: the Scientific Basis, Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change' Houghton JT, Ding Y, Griggs DJ, et al (eds), Cambridge: Cambridge University Press; also Food and Agriculture Organization of the United Nations (2005): 'State of the World's Forests' Washington, DC: United Nations.

¹² Mackey B, 'Regional Forest Agreements -Business as Usual in the Southern Region' (1999) 43 *National Parks Journal* 6.

Regional Forest Agreements

Brief Historical Background

*“The RFAs are widely perceived in the scientific community to have failed to deliver the intended protection for environmental, wilderness and heritage values that state and federal governments committed to when they signed the National Forest Policy in 1992”.*¹³

The Regional Forest Agreement process constituted an abandonment by the Commonwealth of its responsibilities for forests. Under section 38 of the *Environment Protection Conservation and Biodiversity Act 1999* (Cth) (“EPBC Act”) the Commonwealth undertook to refrain from exercising its environmental legislative powers for the duration of the Agreements (until 2023 if no extensions are granted).

RFAs were endorsed by the Commonwealth on the basis that the States had conducted a thorough environmental assessment of their forests. Reviews of the data used for the Comprehensive Regional Assessments (“CRAs”) reveals the data was either flawed, hastily cobbled together, or non-existent. Areas that fell under these RFAs were made exempt from the EPBC Act on the basis that environmental assessments had already been undertaken and that environmental considerations were contained in the RFAs.

However, the RFA ‘negotiations’ were flawed. Scientists became increasingly concerned when a political decision was made to further modify the RFA measures so that scientifically-based criteria were no longer independently applied as a first step in establishing an ‘Ecological Bottom Line’. This was a crucial decision as it was very unlikely that any RFA would deliver Ecologically Sustainable Development, as the modified criteria allowed ecological values to be traded off against economic values.¹⁴

As an example of industry subterfuge, in Victoria members of the Victorian government bureaucracy removed crucial chapters of a state government commissioned report *Ecological Survey Report No.46 - Flora and Fauna of the Eastern and Western Tyers Forest Blocks and Adjacent South-Eastern Slopes of Baw Baw National Park, Central Gippsland, Victoria* which recommended the protection of the Baw Baw plateau and escarpments. The removal of these chapters ensured that one of the world’s most significant ecosystems remained available for clearfell logging.¹⁵

The principles of ecologically sustainable development (“ESD”) are now widely accepted after their introduction in 1992 through the signing of the Rio Declaration: the *Convention on Biological Diversity*.¹⁶ Commonwealth, State and Local governments became bound by the *Intergovernmental Agreement on the Environment 1992*, which contains the ratified principles.¹⁷ We have observed that these principles are being systematically ignored by Forests NSW.

The RFA ‘negotiations’ were also flawed from a conflict dispute resolution perspective. When the level of compromise is not active, if the negotiations satisfy processes not outcomes, if the relevant stakeholders have not been identified accurately, if the stakeholders do not have authorisation to speak on behalf of others or make decisions, and if the parties do not come to the table in good faith then the process is flawed.¹⁸ This was the case with the RFA. The RFA process was a political attempt to quash conflict, and as the process progressed it became apparent that the government had not come to the table in good faith, therefore the process was doomed to fail. Environmentalist’s energies were diffused through the myriad different committees and processes, plus associated travel burdens, and were often confounded by a lack of relevant data to make proper and frank assessments. This settlement process bypassed the regulatory process in which the public interest, not

¹³ Bekessy S, Bonyhady T, Burgman M, Hobbs R, Kershaw P, Kirkpatrick J, Krebs C, McQuillan P, Norton T, Recher H, Rose D B, and Robin L, ‘Statement From Concerned Scientists: Statement of Support for Change on Tasmania’s forests’ (2004) Protecting Forests, Growing Jobs, Hobart, The Wilderness Society, 601.

¹⁴ Mackey B, above n12.

¹⁵ See Mount Baw Baw Report, <http://www.tcha.org.au/Baw_Baw_Report/Baw_Baw_Report.html>.

¹⁶ The Rio Declaration, *Convention on Biological Diversity*, Rio de Janeiro, 5 June 1992, Entry into force for Australia: 29 December 1993; Australian Treaty Series 1993 No 32.

¹⁷ *National Environment Protection Council (New South Wales) Act 1995* (NSW), Schedule 1.

¹⁸ Susskind L, and Weinstein A, ‘Towards a Theory of Environmental Dispute Resolution’ (1980) 9 *Environmental Affairs* 311.

represented by private parties, could be aired.

Environmental issues have a strong moral dimension. Environmental destruction and pollution is immoral and unethical. Some mediation theories suggest that environmentalists should abandon their moral judgements and principles and acknowledge that the position of industrial polluters is as legitimate as their own.¹⁹ However, the assumption that business and environmental interests are fundamentally compatible is erroneous. In denying there are any serious moral issues involved in the forestry dispute, the mediation of the dispute, involving moral principles or values, promotes a moral irresponsibility.²⁰

...as between black and white, grey may sometimes seem an acceptable compromise, but there are circumstances in which it is entitled to work hard towards keeping things black and white.²¹

The RFA process was presented as negotiation, but the outcomes were finally determined and announced by the Government.

The regulation defining Regional Forest Agreements requires that all RFAs:

- (a) identifies areas in the region or regions that the parties believe are required for the purposes of a comprehensive, adequate and representative national reserve system, and provides for the conservation of those areas; and
- (b) provides for the ecologically sustainable management and use of forested areas in the region or regions; and
- (c) is expressed to be for the purpose of providing long-term stability of forests and forest industries; and
- (d) is expressed to be a Regional Forest Agreement for the purposes of these Regulations;

Having regard to studies and projects carried out in relation to all of the following matters that are relevant to the region or regions:

- (e) environmental values, including old growth, wilderness, endangered species, national estate values and world heritage values;
- (f) indigenous heritage values;
- (g) economic values of forested areas and forest industries;
- (h) social values (including community needs); and
- (i) principles of ecologically sustainable management.

There arises the factual question in all cases as to whether Forests NSW have complied with these requirements.

Forests NSW must exercise its powers in accord with a number of environmental, social and economic objectives.²² In doing so, it must take into account other matters including preservation and enhancement of the environment.²³ Every State forest must be managed in accordance with a management plan, either individually or collectively within a forest management area.²⁴ The plan must define the forest management strategy to be adopted and the conditions of harvesting.²⁵ Plans are binding unless approval is sought from State Forests.²⁶ A harvesting plan must be prepared for each logging operation in accordance with the Code of Practice.²⁷ The harvesting plan must be consistent with the management plan, and must specify a number of conditions aimed at environmental protection.²⁸ Working plans for flora reserves must be prepared prior to operations.²⁹ Threatened Species Licences (“TSLs”) and Environment Pollution Licences (“EPLs”) must be adhered to.

The obligations which arise cannot merely be declared to have been met. The Commonwealth and the various

¹⁹ Amy D, ‘Environmental Dispute Resolution: The Promise and the Pitfalls’ in Vigg N J and Craft M E *Environmental Policy in the 1990s: Towards a New Agenda*, CQ Press, (1990).

²⁰ Preston B, in ‘Limits of Environmental Dispute Mechanisms’ (1995) 13 *Australian Bar Review* p158 quoting Amy D, *The Politics of Environmental Mediation*, Columbia University Press, New York, (1980) pp163-87.

²¹ Preston B, above n20, quoting Fuller L L, ‘Mediation- Its Forms and Functions’ (1971) 305 *Southern California Law Review* at [328].

²² *Forestry Act 1916* (NSW), ss 17(3)(a) – (d).

²³ *Forestry Act 1916* (NSW), s 8A(2).

²⁴ *Forestry Regulation 1999* (NSW), reg 5(1) and 5(2).

²⁵ *Forestry Regulation 1999* (NSW), reg 5(6).

²⁶ *Forestry Regulation 1999* (NSW), reg 5(7).

²⁷ See State Forests of New South Wales, Code of Logging Practice.

²⁸ These are imposed by statute see *Environmental Planning and Assessment Act 1979* (NSW); *Protection of the Environment Operations Act 1997* (NSW); *National Parks and Wildlife Act 1974* (NSW).

²⁹ *Forestry Act 1916* (NSW), s25A(5).

Ministers and departments are required to meet their statutory obligations. ‘Provide’ and ‘must’ have the meaning that the regulations must be adhered to. Procedures which are required by law to be observed and are not observed render the action as unlawful. Where there are specific procedures that are required to be followed and those procedures are not followed then the legislation could be overturned.

An exporter will only be able to remove logs from a source in an RFA area if removal of logs is in accordance with the RFA. If the RFA and IFOAs requirements have not been met, then the exemption under the *Export Control Act 1982* does not apply and the exporter must obtain a licence.

The *Regional Forest Agreement Act 2002* at clause 6 states:

(2) An export control law does not apply to RFA wood unless it expressly refers to RFA wood. For this purpose, **export control law** means a provision of a law of the Commonwealth (other than the *Export Control Act 1982*) that prohibits or restricts exports, or has the effect of prohibiting or restricting exports.

(4) Part 3 of the *Environment Protection and Biodiversity Conservation Act 1999* does not apply to an RFA forestry operation that is undertaken in accordance with an RFA.

The conditions which are required for RFAs have not been met. There is significant on-ground, historical and contemporaneous evidence available to demonstrate this. Therefore if the RFA and legislated requirements have not been met South East Fibre Exports cannot receive the tax and licence exemptions under the *Export Control Act* and further Forests NSW logging operations no longer receive exemption under the EPBC Act.

Finally and further in *South Australia v The Commonwealth* (1962)108 CLR 130 Dixon CJ stated:

the High Court of Australia has more than once affirmed the rights and obligations subsisting between individuals as the guide to the ascertainment of the legal rights of which the Court has cognizance. That principle includes agreement as a category of right, but it would exclude agreements of which the subject of the mutual undertakings is the exercise of political power: the agreements are not such as are capable of existing between individuals, their subject-matter is the peculiar and exclusive characteristic of governments. Even an agreement of the Crown with an individual respecting the future exercise of discretionary powers - that they will or will not be exercised in a particular way - probably cannot be a valid contract.³⁰

We are of the opinion that it is not possible for the Commonwealth to enter into agreements which bind the legislative and executive arms of government, which the RFAs do in NSW by way of s40 of the *Forestry and National Park Estate Act 1998* (NSW) (“FNPE Act”). This in effect renders the whole of the delegated legislation *ultra vires*. Therefore all native forest logging under this legislation is unlawful regardless of compliance issues.

Regional Forest Agreements: Non-Reviews and Non-Compliance

The NSW Government’s directive was that there were clear limitations on the scope and purpose of the RFA review, including that the review would not revisit previous decisions. This is in conflict with all RFAs which state:

The purpose of the five-yearly review is to provide an assessment of progress of the Agreement against the established milestones, and will include:

1. the extent to which milestones and obligations have been met, including management of the National Estate
2. the results of monitoring of sustainability indicators, and
3. invited public comment on the performance of the agreement.

(NE RFA clause 40, Southern RFA and Eden RFA clauses 38)

In the light of the review being incredibly overdue, it is erroneous that a milestone can be considered completed if it was reached after the due date of the first five yearly review. When milestones that were due five years ago are either not completed, or not attempted, an indication is given of the lack of will of legislators and their agencies, both past and present, to adhere to international and domestic obligations. The *Regional Forest Agreement for Southern 2001* clause 38 states that:

within each five year period, a review of the performance of the Agreement will be undertaken.

³⁰ *South Australia v The Commonwealth* (1962)108 CLR 130 Dixon CJ, citing Sir Harrison Moore, at [147].

And:

the mechanism for the review is to be determined by both parties before the end of the five year period and the review will be completed within three months.

At the close of submissions annual Ecologically Sustainable Forest Management Implementation Reports were only publicly available for the years 1999-2003.

When undertaking forestry operations on State forests and Crown timber land in the Upper and Lower North East, Southern and Eden regions, Forests NSW and its contractors must comply with the licences and conditions in the IFOAs. Annual reports contain details of breaches and compliance with IFOAs for each region.

Annual Progress Reports

- * Progress Report 1999-2000
- * Progress Report 2000-2001
- * Progress Report 2001-2002
- * Progress Report 2002-2003
- * Progress Report 2003-2004
- * Progress Report 2004-2005
- * Progress Report 2005-2006
- * Progress Report 2006-2007

DECCW Page last updated: 19 October 2009

Tardiness of reporting is in breach of the FNPE Act. It is impossible to review the sustainability indicators without annual reports. Yet as the Department of Environment, Climate Change and Water (“DECCW”) ‘page last updated’ information shows, the last of these reports was two years late, but available only a few weeks before the Independent Assessor gave his report to government for the current review in November 2009. The submission period to comment on the Draft Report on Progress with Implementation of the New South Wales RFAs closed on Monday 7 September 2009. The reports from 2003 onwards were not available by the submission deadline. Since that time the Progress Reports for 2007-2008 and 2008-2009 have been posted on the DECCW, but this was once the reviews were over.

On the Commonwealth Department of Agriculture, Fisheries and Forestry (“DAFF”) website the Southern region annual reports currently range from 1999-2006, still very far behind the times.

Eden Region

- * Regional Forest Agreement for Eden New South Wales Annual Report - 2004-2005
- * Regional Forest Agreement for Eden New South Wales Annual Report - 2003-2004
- * Regional Forest Agreement for Eden New South Wales Annual Report - 2002-2003
- * Regional Forest Agreement for Eden New South Wales Annual Report - 2001-2002
- * Regional Forest Agreement for Eden New South Wales Annual Report - 2000-2001
- * Regional Forest Agreement for Eden New South Wales Interim Annual Report - 25 August 1999-30 April 2001

Southern Region

- * Regional Forest Agreement for Southern New South Wales Annual Report - 24 April 2005-30 June 2006
- * Regional Forest Agreement for Southern New South Wales Annual Report - 24 April 2004-30 June 2005
- * Regional Forest Agreement for Southern New South Wales Annual Report - 24 April 2003-30 June 2004
- * Regional Forest Agreement for Southern New South Wales Annual Report - 24 April 2002-30 June 2003
- * Regional Forest Agreement for Southern New South Wales Annual Report - 24 April 2001-30 June 2002

Last reviewed: 08 Dec 2010

The milestone of the non-compliance with legislated requirements by Forests NSW and the various legislators is a case in point. The reviews were required to be completed ‘within’ each five year period.³¹

The Commonwealth will table in the Commonwealth Parliament the signed Regional Forest Agreement and, when completed, the annual reports detailing achievement of the milestones for the first four years of the Agreement and the first five-yearly review on performance against milestones and commitments.³²

The word ‘will’ in the Oxford Concise Dictionary is defined as:

³¹ *Regional Forest Agreement for Southern New South Wales between the Commonwealth of Australia and the State of New South Wales April 2001*, cl 38.

³² *Regional Forest Agreement for Southern* cl 41.

1 (In the second and third persons, and often in the first; see ‘shall’) expressing the future tense in statements, commands or questions.

Section 9 of the *Interpretation Act 1987 (NSW)* states:

In any Act or Instrument, the word ‘shall’, if used to impose a duty, indicates that the duty must be performed.³³ Thus Forests NSW have been operating outside the law since 2004.

Whilst some reports are available, none of them have been completed and tabled in time annually. The first reports for Eden and the Upper and Lower North East were one year overdue. The next two reports for Eden and Upper and Lower North East were three and four years overdue respectively. The last two reports for those areas were four and five years overdue respectively. Southern Region reports are similarly late. Again there was no mention of this, and to call the review conclusion complete is misleading to say the least.

When RFA reports where tabled in the Senate in 2005 Senator Ridgeway stated:

Essentially what we have is four slim annual reports dated 2001 and 2002 covering New South Wales, Victoria, Western Australia and Tasmania. The considerable time lapse between the date of the reports and the tabling of the reports is of great concern, especially when this is a contentious issue and one that I believe all Australians are certainly interested in, and one that came up during the recent federal election campaign. I hope it is not indicative of the attention to detail that the government is exercising in the management of Australia’s forests and forest reserves.³⁴

The time lag between tabling of the Upper and Lower North East RFAs in the House of Representatives in 2000 and tabling in the Senate in 2005 is extraordinary. The Southern RFA was tabled in 2002, more than a year after signing in 2001. The progress of this RFA milestone is appalling. Termination procedures under clause 8 should be instigated forthwith. The option to extend the RFAs, given what is now known about climate change, the environment, threatened species decline and the Forests NSW performance of the agreements, is without doubt a moot option.

It is noteworthy that there were thirty one submissions to the review, of which eighteen were made public on the DAFF website, and only two of the eighteen were in support of the native forest industry. Those two supporters, Vince Phillips and Peter Mitchell, are both managers of the South East Fibre Exports woodchip export mill, owned by the Japanese company Nippon Paper Group, at Eden.³⁵

Paucity and Transparency

There is a paucity of detailed information proving that public moneys and grants have been productively used. Insufficient transparency for this milestone signifies that the process is open to corruption. There is strong evidence that logging contractors who were recipients of the FISAP program did not purchase machinery that the grants were earmarked for. Cocks Pulp received \$50,190 for Business Exit Assistance.³⁶ This company is still logging and hauling pulp to the Eden chipmill. One logging contractor purchased a truck then sold the truck within the week of purchase. Some logging contractors took redundancy/retraining packages and are now back working. State and Federal Governments have a responsibility to fully disclose where all the money went.

The provision of information from the Industry and Investment NSW and Forests NSW is dispositive to the ideas of transparency. For example, The RFA and FAs require Forests NSW to establish long term wood supply agreements however when questioned, Ian Barnes, Southern Regional Manager of Forests NSW stated that ‘I am not aware of a document which describes these wood supply agreements’.³⁷

The legislation is nefarious to the conservation and ecological health of the native forests under its domain. It is

³³ See the *Interpretation Act 1987 (NSW)* s9 (2).

³⁴ Commonwealth, *Parliamentary Debates*, Senate Official Hansard No 5, Monday 7 March, 2005, p71, <<http://www.aph.gov.au/hansard/senate/dailys/ds070305.pdf>>.

³⁵ See <<http://www.daff.gov.au/rfa/publications/annual-reports/nsw>> last accessed 22/3/11.

³⁶ New South Wales, *Parliament of New South Wales Legislative Assembly* 1997, 3rd Session of the 51st Parliament, Questions and Answers No. 12 Tuesday 11 November 1997, Table(b) p183,

<[http://www.parliament.nsw.gov.au/prod/LA/LApaper.nsf/0/33A5F8339324F8E0CA256EEB002D4C74/\\$file/A513012S.pdf](http://www.parliament.nsw.gov.au/prod/LA/LApaper.nsf/0/33A5F8339324F8E0CA256EEB002D4C74/$file/A513012S.pdf)>.

³⁷ Barnes, 4/3/09 pers com in reply to an information request.

now in breach of domestic and international obligations. The *Regional Forest Agreement Act 2002* (Cth) should be repealed as should amendment 75 2 (B) of the *Environment Protection Biodiversity and Conservation Act 1999* (Cth) be repealed and part 3, section 38 of the EPBC Act to be reinstated.

The notion that the CAR Reserve System is genuinely based on the principles of Comprehensiveness, Adequacy and Representativeness is false as the declining populations of forest-dependent threatened species does not support the Government's argument. The output of the CAR was deeply biased towards industry objectives and as such is a flawed document.³⁸

...serious flaws in the information and scientific process underpinning the RFAs undertaken to date have been identified.³⁹

Most of the assessments conducted depended largely on the then existing incomplete information, out-dated maps and not on localised, on the ground information about particular areas. In many cases the science underpinning the assessments was uncertain and based on ad hoc information.⁴⁰ Moreover, the assessments were not conducted based on ecological criteria but on state boundaries.⁴¹ As a result, contiguous areas on various state borders were categorised as separate regions despite clear ecological connections.

The post-RFA additions of Monga and Upper Deua into the national parks estate are welcome, though it is a pyrrhic victory, as evidenced by the ongoing use of the 'buffer-on-buffer' IFOA amendments as they are currently being interpreted on the ground.⁴²

Effectiveness of the Threat Abatement Plan

Output from the studies on the effectiveness of the Threat Abatement Plan have not been forthcoming. This plan cannot have proved effective at removing foxes due to the fact that the 1080 baiting program is continuing beyond 2010.⁴³ The effect on non-target native species is of concern.

Non-target animals can also be at risk if they consume poisoned animals or their carcasses. Among native mammals, unadapted wombats, macropods, possums and some rodents can be killed by herbivore baits. Birds may also be killed by 1080 baiting. Scavenging species such as magpies and crows have been recorded as occasional casualties, together with some introduced species (sparrow, starlings, doves and pigeons). There are also reports from the early 1990s of crimson rosella (a highly sensitive species) being killed by carrot baits laid for rabbits.⁴⁴

Most rodent species that have been tested in Australia and elsewhere are highly sensitive to 1080 poison.⁴⁵ There is some concern over the effects on Tiger Quoll populations. While Kortner et al state one of the nine deaths of tiger quolls in the study could be directly attributed to 1080 poisoning, the research by Belcher suggests there are grounds for concern.⁴⁶

one population in southern NSW declined dramatically, coinciding with 1080 baiting for wild dogs.

Population declines were found to correlate with 1080 poison baiting programmes.⁴⁷

³⁸ Compliance with the criteria meant that the protected reserves had to cover the full range of forest community types, be sizeable enough to allow for species survival and reflect the diversity of the individual communities see Hollander R, 'Changing place' Commonwealth and State Government Performance and Regional Forest Agreements' Paper presented to the Australasian Political Studies Association Conference, University of Adelaide, (2004).

³⁹ See McDonald J, 'Regional Forest (Dis)agreements: The RFA Process and Sustainable Forest Management' (1999) 11 *Bar Law Review* 295; Redwood J, 'Sweet RFA' [2001] 26 *Alternative Law Journal* 255.

⁴⁰ Hollander R, 'Changing place? Commonwealth and State Government Performance and Regional Forest Agreements' Paper presented to the Australasian Political Studies Association Conference, University of Adelaide, (2004).

⁴¹ Mackey B, above n12.

⁴² The Reserve system is contained within the FNPEA sch1-13; each IFOA has a Comprehensive Adequate Reserve System; for an historic overview of the CAR see Dailan Pugh, Carr's CAR reserve system (1999) <<http://dazed.org/npa/npi/199904/Pp0912.htm>>.

⁴³ See Public Notices section of 26 August 2009 edition of the Narooma News.

⁴⁴ 'The Reconsideration of Registrations of Products Containing Sodium Fluoroacetate (1080) and their Associated Labels' Preliminary Review Findings' (2005), Australian Pesticides & Veterinary Medicines Authority, Canberra,<http://www.apvma.gov.au/chemrev/downloads/1080_prelim_review_findings.pdf>

⁴⁵ Mcilroy J C, 'The Sensitivity of Australian Animals to 1080 Poison IV Native and Introduced Rodents' 9 *Australian Wildlife Research* 3, 505, <<http://www.publish.csiro.au/paper/WR9820505.htm>>.

⁴⁶ Gerhard Körtner A B, and Peter Watson A, 'The Immediate Impact of 1080 Aerial Baiting to Control Wild Dogs on a Spotted-tailed Quoll Population' (2005) 32 *Wildlife Research* 8, p673.

⁴⁷ Belcher C L, 'Demographics of Tiger Quoll (*Dasyurus maculatus maculatus*) Populations in South-eastern Australia' 51 *Australian Journal of Zoology* 6, p611<<http://www.publish.csiro.au/paper/ZO02051.htm>>; see also Belcher CL, 'The Diet of the Tiger Quoll, *Dasyurus maculatus* in

Sensitivity of selected native Australian species to 1080.⁴⁸

Species	Weight kg.	Sensitivity	Baits required
Magpie	0.3	1	1.3
Wedge-tail eagle	4	1	15.2
Eastern Quoll	1	3.1	3.5

Sensitivity: the higher the number the more sensitive a species to the poison '1080'.

Baits required: the average number of baits consumed where death is likely.

The *Threatened Species Legislation Amendment Act 2004* (NSW) has enabled government departments to turn a blind eye to the full extent of the species decline throughout the state. Conversely it has enabled Forests NSW to view the IFOA licence conditions as able to be broken with impunity at a significant cumulative detriment to the forest-dependent threatened species of the state, as long as it was 'an accident', which is reportedly seventy eight per cent of the time. The community was assured by government that:

The NSW RFAs provide for environmental protection in respect of forestry operations through management prescriptions and the CAR reserve system.⁴⁹

What the community has seen is that this statement is erroneous. The environment in the areas covered under the NSW RFAs is in drastic decline as evidenced by the ever growing list of threatened species, the lack of water in all rivers where logging is occurring in their catchments, and the closure of oyster farmers business due to siltation.

...it can be estimated that the annual sediment export from the catchment in an undisturbed condition would be of the order of 1,056 tonnes/year, and 2,640 tonnes/year for the existing catchment logging land use scenario.⁵⁰

As recently as 16 Aug 10 it was reported from the northern forests that:

...a recent NEFA audit of Girard State Forest, near Drake, found numerous breaches of 45 logging prescriptions and the destruction of a stand of high quality old growth forest...

They did not even comply with standard logging prescriptions, let alone any special ones. This is a disgrace and unacceptable treatment of what was meant to be a "Special Prescription Zone" contributing towards our national reserve system.

Recent audits have exposed illegal logging of rainforest, wetlands, endangered ecological communities and now old growth forest. These are what the Regional Forest Agreement was meant to protect. And this is only the tip of the iceberg.⁵¹

Environmental Management Systems

Evidence collated clearly demonstrates that the Environmental Management Systems ("EMS") of Forests NSW has not improved its practices or shown responsible forest custodianship. In the Eden region it has taken almost ten years to instigate the production of a clear and concise set of identification rules for Rocky Outcrops for use and implementation in the field. The EMS Manual was not even thoroughly checked for typographical errors before public release, for example on page two the word 'environmental' is misspelt. Many documents are not available for public scrutiny and therefore any claims of accountability by Forests NSW are simply not credible. The most ironic of these examples is 'Example 2', page five of the EMS: where the 'Communications Strategy' hotlink, is not publicly available. More examples ensue because there has been no genuine attempt by Forests NSW to perform to the expectations of their obligations. Page fourteen of the EMS describes a Forest Health

south-eastern Australia' PhD Thesis, Deakin University, (2007) 55 *Australian Journal of Zoology* 2,
<<http://www.publish.csiro.au/paper/ZO06102.htm>>.

⁴⁸ Saunders G, Coman B, Kinnear J, and Braysher M, 'Managing Vertebrate Pests: Foxes' (1995) Australian Government Publishing Service, Canberra, quoted in Marshall J, 'Fox in the Hen House' The Introduction of the European Red Fox (*Vulpes Vulpes*) Into Tasmania, and The Potential Threat to the Fauna Biodiversity it Represents' <<http://www.socsci.flinders.edu.au/geog/geos/PDF%20Papers/Marshall.pdf>>.

⁴⁹ A Draft Report on Progress with Implementation of the New South Wales Regional Forest Agreements, Resource and Conservation Unit, NSW Department of Environment and Climate Change NSW, Sydney, (2009), p45.

⁵⁰ McAlister T, and Richardson D, 'Wonboyn Lake and Estuary - Estuary Processes Study' (2004)
<http://www.begavalley.nsw.gov.au/environment/estuaries/pdfs/Wonboyn_Processes_Study.pdf>.

⁵¹ Pugh D, North East Forest Alliance media release 15 August 2010.

Strategy assessment in preparation, these documents were needed when the EMS was released. On page eleven the EMS states that:

Monitoring of disturbance regimes is carried out through the Landscape Biodiversity Monitoring program, piloting in Western Region as of August 2008, and research.⁵²

The monitoring and research output should be publicly available now but seems allusive.

Fire

The fire regime practiced by Forests NSW is anachronistic and below standard. For example in 2005-06 seven percent of State forest was burned in wildfire and 38,008 hectares were burned as ‘hazard reduction’ for a total expenditure of over eight and a half million dollars.⁵³ This is a waste of taxpayers’ money given the concerns citizens are expressing over climate change and biodiversity impact.

An example of these ‘mitigation measures’ is the incident of 27 August 2009. A ‘fuel management’ fire that was started by Forests NSW in compartments west of Gulaga Mountain, jumped containment lines and ‘got away’ burning out of control up the mountain and continued burning down the eastern flank threatening the two Tilba villages.⁵⁴ Previously communities had called for no burns on the mountain and requested Forests NSW to extinguish this fire. This fire had been burning for two weeks. Forests NSW ignored community concerns and the severe drought weather conditions. Homes were threatened, sacred sites burned, rainforest decimated and threatened species like the Long Nosed Potoroo in extreme danger if not exterminated.

The Rural Fire Service states:

In southern NSW (generally from the Illawarra south) bush fire hazard reduction burning is typically conducted in autumn. Burning in spring (after fuels have dried out sufficiently following winter rainfall) is usually avoided because there is potential for re-ignition in summer when rainfall is lowest and conditions are hot and dry. Spring burning in the south should only be carried out by, or with the assistance of, very experienced burning crews and should be avoided in years of below average rainfall.⁵⁵

The other factor on the South Coast is the high wind season which is in August through to October. The RFS also state:

These conditions will take into account environmental factors such as:
 the presence of threatened species or endangered ecological communities;
 the risk of soil erosion or mass movement;
 fire history and minimum fire frequency intervals for specific vegetation types;
 the location of water bodies and waterside vegetation; and
 the effect of smoke on the local community.

The conditions may include measures to protect biodiversity by limiting the frequency of burns, or excluding fire from specific areas. Failure to comply with the conditions will result in fines if damage is done to the environment.⁵⁶

This is not an isolated incident. There have been numerous instances of fires ‘getting away’ from Forests NSW and burning out of control.

There is a perception among forest fire management that prescribed burning is simply lighting fires to burn-off the undergrowth and that this can be carried out with only a basic understanding of fire behaviour...Indeed where burning off has been carried out this way the results have been less than favourable and has resulted in injury and death. In the eastern states prescribed burning is largely carried out using rules of thumb based on a MacArthur’s original burning guide for dry eucalypt forests produced in the 1960s. (MacArthur 1962)⁵⁷

Forests NSW administrative breaches might seem insignificant but they can result in damaging consequences. For instance Forests NSW ‘Southern Region Burning Proposals 2007’ contains Burning Plan Number

⁵² Australian Forest Standard (AS 4708:2007) and EMS(ISO 14001:2004) Manual, Forests NSW.

⁵³ Forests NSW Seeing Report 2005-06, p28.

⁵⁴ 13/08/2009 Eurobodalla, Mountain Rd, Bodalla State Forest CENTRAL TILBA, Forests NSW, <http://www.rfs.nsw.gov.au/dsp_more_info.cfm?CON_ID=7929&CAT_ID=689>.

⁵⁵ NSW Rural Fire Service, ‘Standards for Low Intensity Bush Fire Reduction Burning’ s5, <http://www.rfs.nsw.gov.au/file_system/attachments/State08/Attachment_20060131_C4C3FB83.pdf>.

⁵⁶ NSW Rural Fire Service above n55, Step2.

⁵⁷ Submission from CSIRO to House Select Committee on the Recent Australian Bushfires, (2003), Sub No.434 <<http://www.aph.gov.au/House/committee/bushfires/inquiry/subs/sub434.pdf>>.

07BAN3053 (the one that ‘got away’) further stating that the areas last burn was in 1996, yet on the adjoining Burning Plan Number 07BAN3048 parts of the area are mapped as last burned in 2000, 2001 and 2005. These areas have been heavily logged which leaves incredibly high amounts of tree heads, leaves, tree butts and bark. For example post logging fuel loads are said to be fifty to one hundred and fifty tonnes per hectare of logging slash and ten to twenty tonnes per hectare in between tree heads.⁵⁸

Forests NSW states it is committed to the RFA ESFM practices and will ensure that Forests NSW will:

Minimise adverse impacts on the environment; Minimise the risk of escape causing wild fire; and Monitor the impacts on the environment.⁵⁹

Forests NSW has not performed its duty to these principles.

Clearfelling and burning, which is likened by forest industries as akin to the natural disturbance of a high intensity bush fire, causes even-aged forest regrowth, and has been shown to be detrimental to those organisms that rely on successional growth.⁶⁰ This is especially true for those organisms that rely on the retention of tree hollows.⁶¹

Further, to use ‘grazing’ as a fire mitigation measure is definitely ingenious.⁶² The development of cows that eat sticks and leaf litter must be a world first.

The change in species composition of ecosystems due to the preferential grazing of palatable species is only one effect from grazing. Cloven-hoofed animals have contributed to soil compaction and general degradation of ecological processes by causing the loss of leaf litter and the associated loss of soil micro-organisms and available carbon, reduced soil water infiltration rates and an increase in soil erosion.⁶³ These effects are particularly pronounced in temperate woodlands.⁶⁴

Although fire may be a natural disturbance, periodical prescribed burning can alter both long and short-term ecological processes, and irreversibly affect ecosystem diversity and productivity. In particular, prescribed burning may affect natural succession, organic production and decomposition, nutrient and water circulation, and soil development.⁶⁵ Current scientific opinion is in conflict with Forests NSW fire practices.⁶⁶

The Results of Monitoring of Milestones and Sustainability Indicators

Forests NSW, regulators and legislators have failed in the performance of meeting their legislated obligations.

Last year we noted some areas of non-compliance with RFA milestones. The Commission advised that it is addressing areas of non-compliance.⁶⁷

The Commonwealth’s State of the Forests Reports (“SOFRs”) quality of reporting is substandard. Basic facts such as the land area of NSW changing between the 2003 and 2008 report where it shrank by 96,000 hectares.⁶⁸

The long-awaited *Final Report on Progress with Implementation of NSW Regional Forest Agreements*:

⁵⁸ Wandera Cpts 584,585,586 Harvesting Plan, approved 1/5/08, p35.

⁵⁹ ESFM Plan, Southern Region 2005.

⁶⁰ Lindenmayer D B, and Franklin J F, ‘Managing Stand Structure as Part of Ecologically Sustainable Forest Management in Australian Mountain Ash Forests’ (1997) 11 *Conservation Biology* 1053; see also Lindenmayer D B, and Franklin J F, ‘Re-inventing the Discipline of Forestry - a Forest Ecology Perspective’ (1997) 60 *Australian Forestry* 53; and Lindenmayer D B, Norton T W, and Tanton M T, ‘Differences Between Wildfire and Clearfelling on the Structure of Mountain Ash Forests of Victoria and Their Implications for Fauna Dependent on Tree Hollows’ (1990) 53 *Australian Forestry* 61.

⁶¹ See ‘Reserve Adequacy and the Management of Biodiversity’ Land Assessment Unit, National Parks and Wildlife Service, A Supplement to the Reserve Design Report, A Project Undertaken as Part of the NSW Comprehensive Regional Assessments, Project Number NA 43/EH, July, 1999.

⁶² The NSW Forest Agreements Implementation Report (2001/2002) published in 2006, p63.

⁶³ See NSW Forest Agreements Implementation Report, above n62.

⁶⁴ See ‘Reserve Adequacy and the Management of Biodiversity, above n61.

⁶⁵ See ‘Reserve Adequacy and the Management of Biodiversity’, above n61, quoting Ovington J D, ‘Ecological Processes and National Park Management’ National Parks, Conservation and Development: ‘The Role of Protected Areas in Sustaining Society’ Proceedings of the World Congress on National Parks, Smithsonian Institution Press, Washington D C, (1984).

⁶⁶ Driscoll D, Lindenmayer D B, Bennett A, Bode M, Bradstock R, Cary G, Clarke M F, Dexter N, Fensham R, Friend G, Gill M, James S, Kay G, Keith D A, MacGregor C, Russell-Smith J, Salt D, Watson J, Williams R J, York A, ‘Fire Management for Biodiversity Conservation: Key Research Questions and our Capacity to Answer Them’ (2010) 143 *Biological Conservation* 1928.

⁶⁷ Auditor-Generals Report, Vol 1,2009, <http://www.audit.nsw.gov.au/publications/reports/financial/2009/vol1/pdfs/31_0173_forestry_commission_of_new_south_wales.PDF>.

⁶⁸ Commonwealth State of the Forests Report, 2003 and 2008.

Report of Independent Assessor confirms observations that the Regional Forest Agreements are failing to meet their transparency and sustainability obligations.

If as stated, the NSW RFAs were to provide for the ‘conservation of areas, for Ecologically Sustainable Forest Management and twenty year certainty for native forest industries’, then the results of this report show clearly that the agreements have failed dismally on all accounts.

The report, dated November 2009, was actually due several years ago to coincide with the RFA reviews, which the report acknowledges. The report states:

However, fundamentally, the first reviews should have been completed in the 2004-2006 period, i.e. five years from their initialisation. The fact that these reviews have been delayed 3-4 years is of considerable concern, has reduced public confidence in the outcomes and seriously distorts the process for the future.

And:

Timeframes were included in the RFAs for a reason and the failure to deliver in any reasonable timeframe could have a major impact on both public confidence in the process and the achievement of the basic objectives of the RFAs. Even if it is accepted that, in an undertaking of this nature, some delays are inevitable, delays of three to four years and in at least one case 9 years, indicate a basic problem or problems.

The report goes on to state:

...the significant delays for the Southern and Eden regions reviews (3 years behind schedule) need to be addressed as soon as possible to minimise uncertainty and to allow an accurate picture about sustainability of current harvesting to emerge...No real reason is provided for the delays.

In reply additional information was provided to the independent assessor by Forests NSW which stated:

Monitoring designed to assess performance at a much finer scale (at an operational level) and/or to determine the causes of detected variation (via post-harvest assessment) would be prohibitively expensive and would involve unsatisfactory occupational health and safety risks.

Forests NSW seems to be arguing that entering post-logged forest to monitor their operations is prohibitively expensive and unsafe for their trained employees. If it is unsafe for Forests NSW employees to enter post-logged forest it must be equally expensive and unsafe for their employees to enter forest while logging operations are underway therefore, if it is so expensive and unsafe, Forests NSW should heed conservationists call and end native forest logging.

Compliance To The Regulations

There is now substantial evidence indicating that the Integrated Forestry Operations Approvals are inoperable, unenforceable, and systemically riddled with non-compliance.⁶⁹ The non-compliance register at the Forests NSW Batemans Bay office is only available to 2009 being only one instance among many.

Compliance milestones have not been taken seriously by Forests NSW. Non-compliance is situation normal. Auditing reporting on a public level might be provided in the FA and IFOA reports but because these documents are either not tabled or consistently late they are effectively not in the public domain.

The auditing mechanisms of the RFAs are not credible, lack the necessary comprehensiveness, are underfunded and understaffed, systematically abused, lack objective independence, are overly reliant of self-auditing processes, have not utilised, or been excessively weak in the enforcement of non-compliance and have not resulted in demonstrably improved practices. For example DECCW condoned breaching the TSL conditions for tree retention by saying:

Forests NSW did acknowledge that whilst some of the trees marked for retention did not strictly meet the requirements of hollow-bearing, an adequate number were retained across the landscape when unmarked trees were included in the count.⁷⁰

⁶⁹ All correspondence between SEFR and DECCW from 2001.

⁷⁰ DECC ref.FIL06/1449 Ian Cranwell 16/2/09.

Non-compliance is par for the course during forestry operations. It is obvious that warning letters and in three cases small fines are issued but the instances of non-compliance are taken no further. Further it is evident that the Department Of Fisheries compliance role has been relegated to rubberstamping with only one reporting anomaly non-compliance for the whole period the statistics cover, but recently the Department of Fisheries issued Forests NSW with a \$1000 fine. Forests NSW has seriously dropped the ball on operating within its legal framework.

There have been no prosecutions of breaches in the Southern and Eden regions since the RFAs were implemented. The ‘accounting report for breaches and audit results’ in the Draft Report is erroneous. Table 4.2 Audit results in the lower North East Region 2002/03 notes there were no complaints for breaches of the EPL and no Clean-up notices issued. Yet SEFR has documents and correspondence between the Black Bulga Range Action Group and the EPA during that year regarding several complaints of non-compliance issues which resulted in the issuing of a Clean-up notice.⁷¹

EPL Breaches from 2000 to 2006⁷²

During 1999–2000, State Forests identified 2,039 (875) breaches of EPL conditions for the whole estate. Breaches included incorrect felling of trees into filter strips, machine encroachment in filter strips, excessive rutting and inadequate slashing of extraction tracks.⁷³

2000

EPL Condition No	Brief description of Condition	No. of Times Breached
Sch 4, Con 18	Tree felled into filter strip	353
Sch 4, Con 41	Snig track exceeded 25 degree in land classified as IHL 2 or 3	2
Sch 4, Con 22	Machine operator not complying with operating condition for buffers	3
Sch 4, Con 20	Machine entered filter strip	5
Total		363

In 2000-01 the number of checks were 3,424 and Forests NSW identified 1,538 breaches. There were five fines issued by the EPA for breaches of water regulation.⁷⁴

2002

EPL.	Brief description of Condition	No. of Times Breached
Sch. 4, Con 17	Tree felled from within filter strip	1
Sch. 4, Con 18	Tree/Part of tree into filter strip	463
Sch. 4, Con 19	Tree/Part of tree removed from filter strip	1
Sch. 4, Con 20	Machinery entered filter strip	4
Sch. 4, Con 41	Grade of snig track exceeded 25 degrees	1
Sch. 4, Con 70/1/2	Inadequate snig track drainage	1
Sch. 5, Con 9	Inadequate road drainage spacing	1
Total		472

The number of checks conducted was 3 431. Forests NSW identified 1 242 breaches made by internal and external contractors. Sixty-six per cent of these breaches related to accidental felling of trees into filter strips or other exclusions relating to drainage features. Other breaches include damage to habitat or trees to be retained

⁷¹ See <<http://www.environment.nsw.gov.au/prpoeo/Notices/N1024598.pdf>>.

⁷² Annual Report to the EPA for the Environment Protection License No: 0004022 (2000, 2002, 2003, 2004, 2005, 2006) Appendix 1.

⁷³ Auditor-General's Report to Parliament, Vol 1 2001. <<http://www.audit.nsw.gov.au/publications/reports/financial/2001/vol1/173Forestry.PDF>>.

⁷⁴ Auditor-General's Report to Parliament, Vol 5, 2002,

<http://www.audit.nsw.gov.au/publications/reports/financial/2002/vol5/173_ForestryCommission.pdf>

for future habitat. The EPA issued four fines for breaches of water regulation.⁷⁵

2003

EPL	Brief description	Full description of Breach	No.
Sch. 4, Con 18	Trees must not be felled into filter strips	Trees felled into filterstrips and determined by State Forests to be negligent or poorly judged	65
Sch. 4, Cond. 19	Trees/Parts of trees felled into filterstrips must not be removed	Instances where trees or parts thereof that were felled into filterstrips were removed	4
Sch. 4, Cond. 20	Machinery must not enter filterstrips	Machinery entered filter strip	3
Sch 4, Cond. 18	Trees must not be felled into filter strips	Trees felled into filterstrips and determined by State Forests to be negligent or poorly judged	8
Total			80

2004

EPL	Brief description	Full description of Breach	No.
Sch. 4, Cond. 18	Trees must not be felled into filter strips	Trees felled into filterstrips and determined by State Forests to be negligent or poorly judged	96
Sch. 4, Cond. 19	Trees/Parts of trees felled into filterstrips must not be removed	Instances where trees or parts thereof that were felled into filterstrips were removed	2
Sch. 4, Cond. 20	Machinery must not enter filterstrips	Machinery entered filter strip	1
Sch. 4, Cond. 70	Requirement to construct snig track drainage	Failure to construct snig track drainage structures or retain groundcover where required to do so	1
Sch. 5, Cond. 22	Wet weather restriction	Haulage on natural surface roads must cease when there is runoff from the road surface	1
Sch 4, Cond. 20	Machinery must not enter filter strips	Falling machine was backed into filter strip to allow positioning to fall adjacent tree.	1
Sch 4, Cond. 18	Trees must not be felled into filter strips	Trees felled into filterstrips and determined by State Forests to be negligent or poorly judged	6
Total			108

Forests NSW say they completed 3,558 reviews (3,701 in 2004-05), covering items of compliance and identified 565 breaches (1 615)-this was for the whole estate.⁷⁶

2005

EPL	Brief Description of Condition	Full Description of Breach	No.
Sch. 4, Cond. 6	Filter strips must be retained along all drainage lines	Section of 1 st order stream boundary left unmarked	1
Sch. 4, Cond. 18	Trees must not be felled into filter strips	Trees felled into filter strips and determined by Forests NSW to be negligent or poorly judged	15
Sch. 4, Cond. 20	Machinery must not enter filter strips	Harvester and dozer entered unmapped drainage line	2
Sch. 4, Cond. 20C	Trees within protection zones must not be felled	Tree felled 8m from 1 st order drainage line	1
Total			19

⁷⁵ Auditor-General's Report to Parliament, above n74.

⁷⁶ Auditor-General's Report to Parliament 2007 Volume one.

2006

EPL	Brief Description	Full Description of Breach	No.
Sch. 4, Cond. 18	Trees must not be felled into filter strips	Trees felled into filter strips and determined by Forests NSW to be negligent or poorly judged	12
Sch. 4, Cond. 20	Machinery must not enter filter strips	Harvester and dozer entered unmapped drainage line	1
Sch. 5, Cond. 37	Roads must be drained between 5m & 30m of drainage feature crossings	Rubber flap and mitre drain at drainage feature crossing ineffective.	1
Sch. 5, Cond. 52	Soil stabilisation must be undertaken to all disturbed areas within 20m of crossings	Fill batter of crossing unstable and depositing some sediment into filter strip	1
Sch. 4, Cond. 70	Drainage of snig tracks	Snig track drainage doesn't meet EPL conditions	4
Total			19

Thus there have been 701 breaches of the EPL in this period in the Southern region. These figures are provided by Forests NSW and as such can be viewed in light of the history of Forests NSW provision of data.

Conversely Forests NSW states there were 322 breaches for these periods. There is a dramatic difference. The RFA Progress Report 2003-04 states 44 EPL/TSL breaches and 592 Forests NSW breaches. The EPL Annual Reports for that year state 108 breaches, the Non-compliance register states 212 breaches

Summary of South Coast Non-compliance Register for 2002-2007

Registered Incidents					Disciplinary Action Taken			
Breach	Licence Condition	No. of Breaches	Accident	error	Verbal	Written	Other	None
Tree/Part of tree over filter/stream exclusion zone	5.7g 5.7a11	874 115	703 81	171 34	9 5	9 9	16 5	840 96
Tree/part of tree over exclusion zone - rare forest ecosystem	5.5a	1		1				1
Tree/part of tree over exclusion zone - Rocky Outcrops	5.11a	2	2					2
Tree/part of tree over exclusion zone - Ridge/Headwater Habitat	5.8f	11	7	4				11
Tree/part of tree over exclusion zone - Rainforest	5.4f	21	14	7	1			20
Tree/part of tree over exclusion zone - Subterranean Roost	5.14.2	1		1				1
Tree felled into stream exclusion zone	5.7.1A 11	2	2					2
Removal of Tree/Part of tree from filter/stream exclusion zone	5.7.14J	1		1	1			
Excessive logging debris against retained tree	5.6.g11	27	20	7	7			20
Damage to retained tree	5.6g	63	56	7	1		1	61
Damage to and debris under retained tree	5.6.A.G(1+11)	2	2					2
Machine entry into filter strip/stream exclusion zone	5.7h 5.7.1a111	9	1	8	2	1	1	5
Machine entry into exclusion zone - Owl Habitat	6.4.2	1		1		1		
Machine entry into exclusion zone - Yellow Belly Glider Den Site	6.13	1		1		1		
Machine entry into exclusion zone - Flying Fox exclusion	5.14.4 5.14.5	1 1	1 1					1 1
Filter strips and protection zones not correctly or completely marked for 1 st order stream	5.7a	1		1	1			
Total		1,134	890	244	27	21	23	1,063

Non-compliance Statistics by Year

Year	No. of Breaches	Percentage	Year	No	Percentage
2002	485	43%	2005	57	5%
2003	369	33%	2006	11	<1%
2004	212	19%			

The telling feature of these statistics is that ninety three percent of the time no action is taken against the non-compliance breach and any action taken is administrative. The general decline in statistical information on the occurrence of breaches is either due to vastly improved performance in the field, or a decrease in collection and auditing. The evidence in recently logged compartments suggests the latter.

Some examples given for non-compliance from the Register are:

- Two trees pushed into Rocky Outcrop/Tiger Quoll buffer prior to tree marking in the field.
- Operator was parking machine (977 Track Loader) out of sight for weekend in filter strip.
- Push out dead stag for safety reasons. Stag broke up falling across line 20m F.S.
- Enter a stream exclusion zone with dozer whilst pushing a tree off the 1st order stream boundary.
- Contractor has attempted to remove debris from 1 tree but placed another 2 more trees with debris around base near filter unable to remove without putting machine over buffer.
- Tractor driver pulled two heads out of 15m filter.
- Skidder was stuck facing downhill. Winch rope was too short to reach anything. Owing to safety risk of skidder rolling over it could not be turned before the line. Driver was left with no option but to drive over line to turn with safety.

These excuses are not only grossly inadequate they highlight the lack of care by the logging contractors and, in accepting these excuses, the lack of genuine will on the part of the State Forest Officers (“SFOs”) to regulate. This has a compounding effect in that DECCW will not do any enforcement of worth on SFOs or Regional Managers.

Perhaps the worst excuse we have seen so far is taken from the 2009 TSL Non-compliance register:

Nature of the Non-conformance	Reasons for the Non-conformance	Remedial Action	Mitigating Action
Incursion into old growth boundary Harvesting within mapped old growth TSL 5.3(c)	GPS was inoperable. Boundary marked by compass and hip chain	Verbal warning	SFO to pack additional batteries and request assistance when required

When threatened species and their habitats are in danger through industrial logging practices and being negligently managed by belligerent bureaucracies there currently is no protection for them. The only protection and conservation is for Nippon Paper Group, trading in Australia as South East Fibre Exports, the sawmill owners Boral, Blue Ridge Timbers and through the filter on effect, a handful of logging magnates.⁷⁷ These businesses have been guaranteed product for twenty years and guaranteed exemption from legislation and regulation. Erroneously Forests NSW states for the period 2000 to 2006:

No significant non-compliances of the TSL were found.⁷⁸

In the Tumut sub-region very little compliance monitoring is evident. DECCW has not undertaken a field audit in the years 2007-09. Annual Implementation Reports (2006-07) no audits, no mention at all in 2005-06, 2004-05, 2003-04. During 2002/2003 two proactive audits were undertaken for the TSL for the Tumut sub-region. Six TSL conditions were investigated in each audit. Clearly the Tumut sub-region has been allowed to run as

⁷⁷ Cocks, Heffernans, Mathie & Sons.

⁷⁸ A Draft Report on Progress with Implementation of the New South Wales Regional Forest Agreements, (2009), Resource and Conservation Unit, NSW Department of Environment and Climate Change NSW, Sydney, p172.

feral as the blackberry infestations with many systemic breaches and non-reporting.

Recent evidence from South Brooman State Forest Compartment 62 plainly shows that the Rainforest Identification protocols are in no way being adhered to. Documented evidence suggests rainforest breaches are systemic in daily logging practices.

Compliance and Enforceability

Illegal forestry practice has been defined as:

- logging species protected by national law
- logging outside concession boundaries
- logging in protected areas
- logging in prohibited areas such as steep slopes, river banks and catchment areas
- removing under/over-sized trees
- extracting more timber than authorised
- logging when in breach of contractual obligations
- restricting information about procurement contracts
- tailoring contract specifications to fit a specific supplier
- failing to meet licence provisions including pollution control standards.⁷⁹

Currently in NSW all of the above is occurring.⁸⁰ Illegal forest activities have far-reaching economic, social and environmental impacts including ecological degradation and exacerbation of climate change. On the South Coast there are varying forms of State-sanctioned land clearing. From farmers wanting to obtain more land for their commercial purposes, as they, or past owners have degraded their land to such an extent that they cannot grow crops on it (climate change being a mitigating factor), to Forests NSW desperately trying to sustain twenty year wood supply agreements with the chipmill and Boral.⁸¹ Logging is undertaken by Forests NSW or their contractors, whether on private or public land.

Although codes of practice are generally ‘aspirational’ they may be recognised as legal instruments and accorded formal stature as legislative instruments. Where they set out standards for compliance then they create enforceable obligations. We would suggest the IFOAs are such instruments.

Forests NSW, or any other person is subject to the conditions of the IFOAs including the terms of the relevant licences.⁸² Under the Private Native Forestry Code (“PNF Code”) forestry operations under an approved Property Vegetation Plan (“PVP”) must be conducted in accordance with all provisions of the Code.⁸³ Both the IFOA and the PNF Code contain the precautionary principle and principle of inter-generational equity.

In *Environment East Gippsland Inc v VicForests* [2009] VSC 386 Mr Justice Forrest held at 80:

I am not persuaded that the reference to the precautionary principle is, at least on the analysis required for this application, simply a statement of objective or lofty principle... It is the terms of the Code and the emphasis on the mandatory nature of the obligation on VicForests both before and during operations that satisfies me that there is a *prima facie* case that it was obliged to comply with the Code in relation to both the application of the precautionary principle and the consideration of expert evidence relevant to the area the subject of logging.

The case as it stands is that in practice either the logging contractors are not reading the legislation or the drive

⁷⁹ Best Practices For Improving Law Compliance in the Forestry Sector, FAO Forestry Paper 145, Food and Agriculture Organisation of the United Nations, International Tropical Timber Organisation, Rome, 2005.

⁸⁰ See all correspondence SEFR to DECCW 2001-2010.

⁸¹ On the south coast logs from private native forestry make up 10% of the total volume that goes to the Eden chipmill, URS Environmental Assessment Eden Biomass Power Station; on the north coast the estimated annual volume of private native forest timber harvested is 270,000 m3.

⁸² *Forestry and National Park Estate Act 1998 Integrated Forestry Operations Approval for the Eden Region 1999*; the new unreviewed amended IFOAs make no mention of this clause.

⁸³ *Private Native Forestry Code of Practice for Southern NSW 2008* cl 1(2).

for financial gain outweighs the need to comply with regulations.⁸⁴ This combined with the threat of enforcement and monetary loss being minimal could be a compelling factor for non-compliance. As Forests NSW and contractors are currently out of control when it comes to regulation and compliance there is therefore little hope that the legislation will have the desired affect regardless of adequacy.⁸⁵

Regulatory Response

Non-compliance relies on lack or inadequacy of regulatory response. The current ‘whole of government’ approach has resulted in the original regulator being subsumed, the establishment of a ‘forestry unit’ within a government department which regulate another government department, who both seem to have the same goal.⁸⁶

In deciding whether or not to prosecute the most important step is the decision. In the interests of the environment, the offender and the community at large care must be taken to ensure that the right decision is made. The wrong decision will undermine the confidence of the community in the criminal justice system.⁸⁷

Justice Lloyd stated in *Director-General of the Department of Land and Water Conservation v Greentree & Anor* [2002] NSWLEC 102 that:

In my opinion the balancing of the legitimate public interest in the conviction of a crime and punishment of those who may be guilty against ensuring that the defendants are able to meet the case sought to be made against them, requires that greater weight should be given to the former.⁸⁸

If the offender has made deliberate attempts to conceal their offences, previous administrative responses to contraventions have not resulted in compliance, the offender shows no contrition and the community of the area, and indeed Australia as a whole, expect that the offences will be dealt with by prosecution, conducted in public before a court, then there are good grounds for prosecution.⁸⁹

The two strongest forces ensuring environmental compliance are criminal prosecutions and potential clean-up liability.⁹⁰ Regulators in Australia have been accused of not utilising the full scope of the penalty provisions and focusing on the ‘less robust options’.⁹¹ This is evidenced by the current regulatory response practice of relying on voluntary agreement. If regulators continue to implement the softer penalty provisions the deterrence objects of the legislation will be, and have been, greatly undermined.

A successful strategic approach to better law compliance in the forest sector is needed by increasing clarity, transparency and consistency of forest and forest-related legislation. This could be achieved by encouraging consistency of the regulatory framework to ensure that laws do not contradict others within the forest legal framework or other sectors, ensuring accountability and control of forestry operations at the local level,

⁸⁴ See *Minister for the Environment & Heritage v Greentree (No 2)* [2004] FCA 741; for the classic “I thought I didn’t need approval”, and “the clearing was routine agricultural management activities”; and Appellants ‘outline of argument’ at <<http://www.envlaw.com.au/greentree13.pdf>>; and see also *Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No 2)* [2010] NSWLEC 73; Shoalhaven Council are seemingly at the forefront of action compared to Bega and Eurobodalla Councils, see <<http://www.shoalhaven.nsw.gov.au/council/pubdocs/soe/region/indicator%20results%202005/Vegetationclearing%202005.htm>>.

⁸⁵ See Smith J, ‘Making Law Work: Compliance and Enforcement of Native Vegetation Laws in NSW’ (2009) 88 *Impact* 3; for an insightful history of the ‘Redgums decision’ see Flint C, ‘River Red Gum: Barking Owls and Broken Laws on the Murray River’ (2009) 88 *Impact* 6.

⁸⁶ ‘DECCW will continue to work with Forests NSW. The State forests of the Eden Forestry Region...were set aside by the Eden RFA 1999 to provide a guaranteed timber supply to industry. Please be assured that the NSW Government and DECCW are working to protect the koala population and at the same time promoting regional economic development and employment’ Letter to L Bower from M Saxon, Acting Director South, DECCW Environment Protection and Regulation, May 7, 2010.

⁸⁷ *Prosecution Policy of the Commonwealth*, DPP Prosecution Guidelines, 2009.

⁸⁸ See *Director-General of the Department of Land and Water Conservation v Greentree & Anor* [2002] NSWLEC 102, Lloyd J at [126] quoting Mason CJ, Deane and Dawson JJ in *Ridgeway v The Queen* [1994] HCA 33 at [38]; see also Australian Government Department of the Environment, Water, Heritage and the Arts, *Compliance and Enforcement Policy*.

⁸⁹ DEWHA *Compliance and Enforcement Policy*, Australian Government, 2009,

<<http://www.environment.gov.au/about/publications/pubs/compliance-enforcement-policy.PDF>> viewed 16 June 2010.

⁹⁰ Smith S L, ‘Doing Time for Environmental Crimes: The United States Approach to Criminal Enforcement of Environmental Laws’ (1995) 12(3) *Environment and Planning Law Journal* 168; see *Chief Executive Officer Department of Environment and Conservation v Szulc* [2010] WASC 195, a three month jail sentence for Munglinup farmer Maxwell Szulc, 27 July 2010 <<http://au.news.yahoo.comthewest/a-/breaking/7659368/wa-farmer-jailed-for-contempt/>>.

⁹¹ The Australian Network of Environmental Defender’s Offices, *Independent Review of the Environment Protection and Biodiversity Conservation Act 1999*, Submission 189, p15, <<http://www.environment.gov.au/epbc/review/submissions/pubs/189-australian-network-of-environmental-defenders.pdf>> viewed 16 June 2010.

ensuring that in-country industrial capacity does not exceed sustainable supplies, for instance, by conducting feasibility studies and/or closing down mills.

It could also be achieved by promoting the independence of the regulator, giving the regulator and authorised officers stronger enforcement powers and creating transparency of the regulatory processes.

As none of the above suggestions will be implemented and as the current criminal behaviour is so entrenched we have little faith that any code or legislative instrument will be adhered to and less faith that the regulator will enforce compliance.

ECOLOGICALLY SUSTAINABLE: THE ESFM MYTH

There is no genuine attempt to implement and enforce the ESFM principles in any diligent manner. The five principles of Ecologically Sustainable Forestry Management are:

1. Maintain or increase the full suite of forest values for present and future generations across the NSW native forest estate;

Clear felling, under whatever guise put forward by Forests NSW spin doctors, the demise of species and the water shortages are all a breach of the principles of inter-generational equity. Australia has an obligation under international law to ensure that human rights are protected.⁹² These obligations arise through Australia's ratification of various international human rights instruments like the *International Covenant on Civil and Political Rights* and the *International Covenant on Economic, Social and Cultural Rights*. Australia has agreed to 'respect, protect and fulfill' these rights.⁹³ Principle human rights which are subject to degradation as a result of climate change are the right to life,⁹⁴ the highest standard of physical and mental health,⁹⁵ and the right to water.⁹⁶

The Australian Human Rights commission in its submission to the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) review stated that the Act:

requires formal and direct linkages to the *Water Act 2007* as a matter of urgency.⁹⁷

Deforestation and degradation is one of the biggest causes of climate change.⁹⁸ Water quality and availability has been dramatically reduced by logging of most catchment areas.⁹⁹

Article 2 of the *International Covenant on Civil and Political Rights* (1976) states at (3):

Each State Party to the present Covenant undertakes:

1. To ensure that any person whose rights or freedoms as herein recognized are violated shall have an effective remedy, notwithstanding that the violation has been committed by persons acting in an official capacity; to ensure that any person claiming such a remedy shall have his rights thereto determined by competent judicial, administrative or legislative authorities, or by any other competent authority provided for by the legal system of the State, and to develop the possibilities of judicial remedy;
2. To ensure that the competent authorities shall enforce such remedies when granted.

And at (5):

1. Nothing in the present Covenant may be interpreted as implying for any State, group or person any right to engage

⁹² UN Office of the High Commissioner for Human Rights, "What are Human Rights?" (2008).

⁹³ UN Committee on Economic, Social and Cultural Rights, *General Comment No 9 – the Domestic Application of the Covenant* (1998) UN Doc E/C.12/1998/24, UN Human Rights Committee, *General Comment No 31 – Nature of the General Legal Obligation imposed on State Parties to the Covenant* (2004) UN Doc CCPR/C/21/Rev.1/Add.13, UN Committee on Economic, Social and Cultural Rights, *General Comment No. 3 - On the Nature of State Parties' Obligations* (1990) UN Doc, E/1991/23, annex III.

⁹⁴ The right to life is contained in Article 6 *International Covenant on Civil and Political Rights*, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976); Australia ratified the ICCPR on 13 August 1980 and the CRC on 17 December 1990.

⁹⁵ Article 3 of the *Universal Declaration of Human Rights*, GA Resolution 217A(III), UN Doc A/810 at 71 (1948).

⁹⁶ See Articles 11 and 12 ICESCR, Article 14, paragraph 2(h) CEDAW, Article 28, paragraph 2(a) CRPD and Article 24, paragraph 2(c) CRC.

⁹⁷ See the Australian Human Rights Commission "Independent Review of the EPBC Act," 30 January 2009.

⁹⁸ Garnaut R, *Garnaut Climate Change Review*, 2008.

⁹⁹ Mackey B, Keith H, Lindenmayer D, and Berry S, 'Green Carbon: The Role of Natural Forests in Carbon Storage, Part 1, A Green Carbon Account of Australia's South-Eastern Eucalypt Forest, and Policy Implications' ANU E Press, (2008) available at <http://epress.anu.edu.au/green_carbon_citation.html>.

in any activity or perform any act aimed at the destruction of any of the rights and freedoms recognized herein or at their limitation to a greater extent than is provided for in the present Covenant.

Forests NSW are breaching these treaties by fact of section 40 of the FNPE Act and by industrial logging practices.

Australia has obligations for forestry operations under international environment law. Section 1.4 (c) of the *Southern Region Forest Agreement 2002* states:

Note the obligations on the Commonwealth of Australia arising from the *Intergovernmental Working Group in Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests (Montreal Process)*, the *Convention on Biological Diversity, Agenda 21* and the *Kyoto Protocol on Climate Change*.

Conversely *Agenda 21* states:

11.1. There are major weaknesses in the policies, methods and mechanisms adopted to support and develop the multiple ecological, economic, social and cultural roles of trees, forests and forest lands...More effective measures and approaches are often required at the national level to improve and harmonize ..legislative measures and instruments...participation of the general public, especially women and indigenous people.

There is no fruitful participation of the public in any forest industry decision making processes.

In the *Vienna Convention on the Law of Treaties 1969* Article 18 states:

A State is obliged to refrain from acts which would defeat the object and purpose of a treaty when:

(a) it has signed the treaty or has exchanged instruments constituting the treaty subject to ratification, acceptance or approval, until it shall have made its intention clear not to become a party to the treaty.

A material breach of a treaty is:

(a) a repudiation of the treaty not sanctioned by the present Convention; or
 (b) the violation of a provision essential to the accomplishment of the object or purpose of the treaty.

Therefore by exempting civil litigation from preventing the destruction of NSW state forests, for not enforcing the legislative requirements for compliance, for wilfully contributing to climate change and for the destruction of forests Australia is not only in breach of its domestic obligations, it's in breach of international obligations.

2. Ensure public participation, access to information, accountability and transparency in the delivery of ESFM;

For Forests NSW record of adhering to this principle see *Watt v Forestry Commission* and *Digwood v Forestry Commission*. There have been numerous breaches of provision of publically available documents.

There is no environmental democracy and no consultation in areas covered by the RFAs. Individuals or communities call a meeting, the community objects, Forests NSW log regardless. The rights of public participation are limited to making submissions to the state and federal governments if the various pieces of legislation come up for review.

Agenda 21 states:

23.2. One of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making...This includes the need of individuals, groups and organizations to participate in environmental impact assessment procedures and to know about and participate in decisions, particularly those which potentially affect the communities in which they live and work.¹⁰⁰

Forests NSW are exempt from preparing EIS in RFA areas and there is no assessment of the impacts of logging on native forest ecosystems.

¹⁰⁰ *Agenda 21* also states at 23.2: Individuals, groups and organizations should have access to information relevant to environment and development held by national authorities, including information on products and activities that have or are likely to have a significant impact on the environment, and information on environmental protection measures, <<http://www.un.org/esa/dsd/agenda21/index.shtml>>; for an example of Forests NSW unwillingness to inform the public see *Watt v Forests NSW* [2007] NSWADT 197; the royalty rate is \$6.90/tonne for pulp logs from the Southern Region and \$13/tonne for Eden; Forests NSW has received 2 warning letters for not providing the public with publicly available documents and still every office visit there is argument on providing documents; for example in the first two weeks of August 2010 Forests NSW refused information to 5 members of the public.

3. Ensure legislation, policies, institutional framework, codes, standards and practices related to forest management require and provide incentives for ecologically sustainable management of the native forest estate;

In contrast the FNPE Act and subordinate legislation provide incentives for unlawfulness without fear of capture. When penalties are low, and the possibilities of being found out are light, people take risks.¹⁰¹ Regulatory systems rely upon the enforcement of statutory requirements.

When there is no enforcement contraventions go unpunished and the incentive for compliance is nil.¹⁰²

‘Sustainable use’ means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.¹⁰³ Despite the rhetoric on ‘sustainable forestry’ the RFAs have not been effective in protecting forest species and habitats and they do not comply with the principles of ecologically sustainable development and the conservation of biodiversity.¹⁰⁴

4. Apply precautionary principles for prevention of environmental degradation;

The Precautionary Principle is based on German and Swedish environmental laws and policies. The relationship between economic development and environmental degradation was first placed on the international agenda in 1972, at the UN Conference on the Human Environment, held in Stockholm. After the Conference, Governments set up the United Nations Environment Programme (“UNEP”), which today continues to act as a global catalyst for action to protect the environment.

By 1983, when the UN set up the World Commission on Environment and Development, environmental degradation, which had been seen as a side effect of industrial wealth with only limited impact, was understood to be a matter of survival for developing nations. Led by Gro Harlem Brundtland of Norway, the Commission put forward the concept of sustainable development as an alternative approach to one simply based on economic growth. This gave rise to the *Ministerial Declaration of the Second International Conference on the Protection of the North Sea 1987*.

After considering the 1987 Brundtland report, the UN General Assembly called for the UN Conference on Environment and Development (“UNCED”). The primary goals of the Summit were to come to an understanding that would prevent the continued deterioration of the environment, and to lay a foundation for a global partnership between the developing and the more industrialized countries, based on mutual needs and common interests, that would ensure a healthy future for the planet.

The Precautionary Principle is Principle 15:

Where there are threats of serious or irreversible environmental damage full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment.

As McClellan CJ stated:

Thus, the inherent uncertainty or bias in the scientific method combined with (generally speaking) a perennial lack of resources and a consequential lack of data to assist scientists, leads inevitably to the conclusion that there is likely to be an incomplete understanding of the full extent of the environmental impacts of any particular act or activity proposed. That prospect, supported by empirical observations gathered world-wide, led to the development of the precautionary principle as a commonsense approach to avoid or minimise serious or irreversible harm to the Environment.¹⁰⁵

The precautionary principle should have been triggered prior to the RFA process beginning in 1998.

¹⁰¹ Dr Gerry Bates, Lecture on Fundamentals of Environmental Law, ANU, 16 July, 2009.

¹⁰² Macintosh A, ‘Why the Environment Protection and Biodiversity Conservation Act’s Referral, Assessment and Approval Process is Failing to Achieve its Environmental Objectives’ 21 EPLJ [2004] 288, p302.

¹⁰³ Convention on Biological Diversity (Rio de Janeiro, 5 June 1992), Entry into Force Generally and for Australia: 29 December 1993 Australian Treaty Series 1993 No. 32.

¹⁰⁴ Convention on Biological Diversity (Rio de Janeiro, 5 June 1992), Entry into Force Generally and for Australia: 29 December 1993 Australian Treaty Series 1993 No. 32.

¹⁰⁵ In *BGP Properties Pty Limited v Lake Macquarie City Council* [2004] NSWLEC 399 citing Trenorden J et al in *Conservation Council of South Australia v Development Assessment Committee and Tuna Boat Owners Association (No 2)* [1999] SAERDC 86.

5. Apply best available knowledge and adaptive management processes;

It is absurd to allege that these principles are at the helm of native forest management, given what is observed of day-to-day forestry operations. One of the biggest myths is that Forests NSW replant after logging native forests. This is very far from the truth. Once logged and burned the forests may take decades to regenerate or they might not regrow at all, and at any rate replanting is not sufficient to offset the biodiversity losses created by clearing because of lags in species becoming established and differences in species composition.¹⁰⁶ Forests are altered inexorably. The public are subsidising the logging of native forests, which hold and remove vast amounts of carbon, so they can be woodchipped and sent to Japan. This is certainly not sustainable.¹⁰⁷

The government has not ensured the adoption of ESFM practices, environmental safeguards have not improved and DECCW has not ensured the maintenance of existing regulatory controls.¹⁰⁸

The ESFM plans for lands under the *Forestry Act 1916* (NSW) were not completed and published by December 2001.¹⁰⁹ Eden, Upper and Lower North East,¹¹⁰ Southern¹¹¹ and Tumut became available to the public in 2005,¹¹² Hume, Riverina, Monaro, Macquarie, Western, Upper and Lower North East in 2008.¹¹³ Further, these plans have a five-year lifespan, and to date the 2005 plans have not been reviewed and renewed which compounds the perception that forest management is operating outside its legal requirements.

‘Sustainable’ Yield

In 1998 Forest Resource and Management Evaluation Systems (“FRAMES”) data was run using all land tenure, that is, land that would be included in the future reserve system. Later Forests NSW hid real data from the Auditor-General audits by amalgamating plantation and native forest volume figures.¹¹⁴ Further the native forest logging industry has increasingly been overcutting to meet wood supply agreements and has not undertaken legislated reviews of sustainable yield.

The term ESFM was used in drafting of forestry law and delegated legislation. State and Federal Governments confirmed their commitment to the *National Forest Policy Statement 1992* by agreeing to develop and implement Ecologically Sustainable Forest Management.¹¹⁵

As a requirement of ESFM NSW agreed to undertake a review of Sustainable Yield every five years using FRAMES and information bases. Results of which would inform the annual volume which could be logged from the Southern region ‘being mindful of achieving long-term Sustainable Yield and optimising sustainable use objectives consistent with this Agreement’.¹¹⁶

The authors would agree with Mr Scott Spencer in that Forests NSW are not aware of the meaning of the term ‘required’:

It is somewhat concerning that Milestone 41 relating to the requirement (i.e. it is not optional) to produce annual reports of progress on meeting regional ESFM targets in ESFM Plans has not been delivered. This is surely central to accountability under the RFAs.¹¹⁷

¹⁰⁶ Forests NSW proposed to burn 23,263 hectares just in the Southern sub-region, Forests NSW Southern Region Burning Proposals 2007.

¹⁰⁷ See Performance Audit ‘Sustaining Native Forest Operations,’ Auditor-General’s Report, 2009; see this report below p31.

¹⁰⁸ The *Southern Region Forest Agreement 2002*, Environmental Management Systems 2.1, “The EMS shall be the mechanism by which Forests NSW will implement commitments and obligations under the NSW *forest agreements* and RFAs and effectively contribute to Australia’s international obligations under the Montreal process” ESFM ‘initiatives’ are in s2.11.

¹⁰⁹ Southern Regional Forest Agreement cl47 (d).

¹¹⁰ See <http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0006/266190/esfm-northeast-lower.pdf>.

¹¹¹ See <http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0011/266195/esfm-southcoast-southern.pdf>.

¹¹² See <http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0004/266188/esfm-eden.pdf>.

¹¹³ See <http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/266189/esfm-hume.pdf>.

¹¹⁴ Auditor-General’s Report to Parliament, vol 1, 2009, at <

http://www.audit.nsw.gov.au/publications/reports/financial/2009/vol1/pdfs/31_0173_forestry_commission_of_new_south_wales.pdf >.

¹¹⁵ *Regional Forest Agreement for the Southern Region of NSW 2001* s7(a); *Forestry and National Park Estate Act 1998 Integrated Forestry Operations Approval for the Southern Region* cl 7(1); the PNF Code carefully avoids the word sustainable but provides: ‘supply of timber products from privately owned forests at a regular rate that can be maintained indefinitely for present and future generations’.

¹¹⁶ *Regional Forest Agreement for the Southern Region of NSW 2001* cl 8; like all reviews legislated for forestry operations either undertaken four or five years late or not undertaken at all, this review has not been undertaken.

¹¹⁷ *Final Report on Progress with Implementation of NSW Regional Forest Agreements: Report of Independent Assessor*, November 2009<http://www.daffa.gov.au/_data/assets/pdf_file/0007/1546711/assessors-report.pdf>, viewed 24 July 2010.

The statutes provide clear direction and guidance as to their intent for interpretation of supply commitments contained in RFAs. It is provided that Regional ESFM Plans, *Forest Agreements*, and IFOAs will collectively specify the wood supply commitments and their relationship to Sustainable Yield.¹¹⁸ Further it was stated when the Southern IFOA was in process of enactment:

the IFOA also contains maximum timber volumes allowed to be harvested annually.¹¹⁹

Allowable volume of trees logged is legislated to be based on ‘sustainable yield’ and FRAMES. The volume of pulp removed in the Southern region for the period 2002 to 2007 is equal to twelve percent above the legislated allowable cut.¹²⁰ This is above the five percent allowed in IFOA clause 5(a) where it provides, in essence, that Forests NSW must stay within the five percent range.¹²¹

It is alleged that allowable volume figures in legislation can be overridden by contractual commitments.¹²² This seemingly defeats the purpose of sustainable yield and indeed legislation. On this assumption terms such as ‘no more than’ and ‘up to’ therefore are taken to mean minimum volumes. If we were to take this erroneous assumption further it would mean the legislation and delegated legislation serves no purpose.

The focus on the one term ‘reflects contractual commitments’ at the expense of remaining legislation is in itself indicium. There are many other clauses in various pieces of legislation, intended to work in conjunction with each other. Assumptions that there is no maximum volume required therefore seems in tension with the objects of legislative instruments.

Overtcutting

Dominating much desktop and industry documents is claims that strict public forestry regulation and ‘locking up’ of areas has caused the need for private forestry.¹²³ However, long before RFAs were enacted, questions of whether the native forest logging industry was sustainable were being asked.¹²⁴ It seems real causes of lack of wood supply are overcutting and erroneous figures of sustainable yield. This has resulted in shortened rotation times.¹²⁵

The NSW Scientific Committee suggests a safe rotation period for species conservation is 150-220 years.¹²⁶ Analysis using this rotation period over a fifteen year timeframe in the Southern region would suggest 50-90 compartments should have been logged, yet more than six times that, a total of 365 compartments, have been clear felled or patch clear felled.¹²⁷

In a letter dated 29 October 1998 from Ross Sigley, Forests NSW sales manager, Northern Rivers region it states:

It has taken us just 2 years to completely exhaust the quota volume in Casino, Urbenville, and Murwillumbah MA’s and Tenterfield is all but finished. It must dawn on our top resources people eventually that stands carrying a level of volume which is only a fraction of their capacity are already seriously in trouble. The only way to realise any of the

¹¹⁸ *Southern Region Forest Agreement 2002* 8(2)(a); the Southern, Eden and Northern ESFM plans are due to expire this year.

¹¹⁹ Recommendation letter to enact IFOA, Letter (HOF2042) from David Nicholson NSW EPA to DPI, 18 April, 2002, signed by Director Waters and Catchments Policy (signed 18/4/02), Acting Assistant Director General (Water and Air), Director General (signed Lisa Corbyn 19/4/02).

¹²⁰ A Draft Report on Progress with Implementation of the New South Wales Regional Forest Agreements (2009), Resource and Conservation Unit, NSW Department of Environment and Climate Change NSW, Appendix 4, p227.

¹²¹ *Forestry and National Park Estate Act 1998 Integrated Forestry Operations Approval for the Southern Region* cl 5(a); *Forestry and National Park Estate Act 1998 Integrated Forestry Operations Approval for the Eden Region* cl 5(a).

¹²² *Forestry and National Park Estate Act 1998 Integrated Forestry Operations Approval for the Southern Region* cl 5(3) To avoid doubt, the quantities of timber products specified in paragraphs (a) and (b) of subclause (2) do not impose any limitation on the quantities of those products that may be harvested under this approval. The quantities referred to simply reflect contractual commitments existing at the date of this approval.

¹²³ This erroneousness is perpetuated within the IFOAs themselves see *Forestry and National Park Estate Act 1998 Integrated Forestry Operations Approval for the Southern Region* Note for cl 5(b).

¹²⁴ See *South East Forests Conservation Council Inc v Director-General National Parks and Wildlife and State Forests of NSW* [1993] NSWLEC 194, Deputy Director (Policy and Wildlife).

¹²⁵ The current rotation times are between 5-15 years; for example compartment 62 of South Brooman State Forest has had ‘Timber Stand Improvement’ twice and been logged nine times since 1954, which is virtually every six years; see Southern Region - Compartment 62, South Brooman State Forest, Bateman’s Bay Management Area, Harvest Plan approved 8/5/09.

¹²⁶ *Loss of Hollow Bearing Trees Key Threatening Process*, Department of Environment, Climate Change and Water, NSW Threatened Species Website, <http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=20079> viewed 25 July 2010.

¹²⁷ Forests NSW Compartment Map and Annual Logging Records for period 1995 to 2010, this shows 691 total number of compartments.

volume that is there...would be to have an unlimited pulp market and clear fall the forest...I suspect they [the greens] do know that we are playing the game of Brer rabbit. I hope a re-run of the frames data without using the plots that end up in the reserve system will give a more realistic picture [of the] state of the forests...I wait with hope that the Frames data can deliver some figures, which support what we know to be the case on the ground. We have just one last chance to come clean and be honest about the way things are before this UNE RFA is signed. State Forests will be held accountable for whatever happens as a result of the RFA decision and if the industry has been led to believe that the volume is there in this part of the State then we should be held responsible...¹²⁸

A memo from Ron Wilson, Forests NSW Marketing Manager to Bob Smith CEO of Forests NSW on a meeting with Davis and Herbert in 2001 is revealing.¹²⁹ Davis and Herbert (now Boral) expressed dissatisfaction with Forests NSW supply of logs. The company's allocation was 8000 cubic metres. Forests NSW stated 'the company is currently undercutting its allocation of high quality large sawlogs'. The company claimed the reason they were undercutting was that Forests NSW had not provided sufficient areas to produce sawlogs. Forests NSW denied there were any problems of supply but offered to extend the allocation period and 'let the company cut the 8000cu over two years'. Forests NSW also stated Davis and Herbert were at fault because they weren't 'value adding'. The company stated they were unhappy about 'log merchandising' and that timber was being sent 'elsewhere' which could be used by the company. Forests NSW told the company that 'without a residue market on the south coast the cost of producing sawlogs will be significantly higher'.¹³⁰

Unfortunately in the Southern and Eden regions there is an unlimited and voracious pulp market. A rerun of FRAMES was due in 2006 as part of ESFM requirements. No rerun of FRAMES has yet been undertaken. Review or no review, logging more intensively will affect remaining stand condition and ultimately sustainable yield. Given overcutting whether public and private native forestry can ever achieve the ideal of ESFM is doubtful.¹³¹

The FRAMES industry modelling system used to derive volumes substantially over-estimated available timber volumes. To achieve the unsustainable volumes sought for the first twenty years, the system has had to dramatically over-cut for twenty years and thus result in much decreased volumes available thereafter. This is clearly reflected in the industry modelling, which shows a volume reduction of almost fifty percent after 2018. For example, in the Eden Region, in 2008, Forests NSW was over quota and has been over quota for each of the previous nine years.

Notably, in 2003 the NSW Government re-issued timber supply contracts, without conducting the promised timber review, for a further twenty years (thus extending the contracts out to 2023). Therefore, timber supplies have been committed outside the twenty year timeframe of the RFAs, without a wood supply review or any required RFA review. These contracts have been extended well past the point at which timber supplies will fall in 2018.

The erroneous audacity of the claim that the review of the FRAMES systems and processes 'also meets the milestone as it applies to the Southern region' is obvious. One aspect is applicable:

The robustness of wood supply estimates...are commonly evaluated by conducting large numbers of scenario analyses rather than by consideration of statistical measures....If the level of cut is set at a high level...in the short-term and growth is less than expected, then over-cutting will occur and the predicted long-term cut will not be sustainable.¹³²

It was made known by the NSW Auditor-General that Forests NSW does not routinely compare harvesting results to its yield estimates. However the authors consider these reviews necessary to test the validity of Forests NSW estimates.¹³³ No tangible efforts have been made by Forests NSW to ensure sustainability or to

¹²⁸ New South Wales, *Legislative Assembly*, Forestry and National Park Estate Bill, 17 November, 1998, (Fraser), p10052.

¹²⁹ Forests NSW internal memo Ron Wilson to Bob Smith and Gary Keating, 9 October 2001, H.O. 61342; the 'Use or Lose' 20 yr wood supply agreement provides for 'increased volumes of HQL and small sawlogs at one half of the company's intake' as of 2001.

¹³⁰ Forests NSW internal memo, above n129.

¹³¹ Lunney D, Matthews A, Eby P, and Penn A M, 'The Long-Term Effects of Logging for Woodchips on Small Mammal Populations' (2009) 36 *Wildlife Research* 691; see Gibbons P, Lindenmayer D B, Barry S C, Tanton M T, 'The Effects of Slash Burning on the Mortality and Collapse of Trees Retained on Logged Sites in South-Eastern Australia' (2000) 139 *Forest Ecology and Management* 51.

¹³² Forests NSW, 'A Review of Wood Resources on the North Coast of New South Wales' September (2004) p12.

¹³³ Performance Audit In Brief, NSW Auditor-Generals Report to Parliament, April 2009 p2.

produce any reporting showing that efforts are being made. Forests NSW are operating in the gloom of uncertainty. For the Upper and Lower North East region the Auditor-General stated:

To meet wood supply commitments, the native forest managed by Forests NSW on the north coast is being cut faster than it is growing back.¹³⁴

The authors believe this to be true for the Southern region, if ever real data becomes available. The audit report mentioned for Southern was not completed by June 2009. 'It may not be ready until mid 2010' and 'the report will be ready by June 2010'. The report is still not available as of March 2011.

It is my understanding that the review of the sustainable yield for the Southern Region was expected to be completed by June 2009 but is still being done. Forests have indicated it will take time to check the review and are unlikely to publish the results and methods of calculating the sustainable yield (covered by Milestone 54 in the RFA review report) before mid-2010.¹³⁵

Our most recent information from Forests NSW tells us that:

*In regard to your inquiry on the comparison of harvest results with yield estimates that was due in February 2011 I am advised that recent changes to the yield estimate methodology have meant that this work will take an additional one to two months to complete. This work will be made available on the website when it is finalised.*¹³⁶

Removal of other products from forest ecosystems

The level of firewood removal from the Southern Region is significantly greater than other RFA areas. There is no evidence of studies/reports that have been undergone to review whether this level of removal is sustainable. There have been calls for help to stop the rampant firewood removal from the Golburn area especially from private land and leasehold land sources.

Honey is one of the few viable products from State forests. Of particular concern to bee farmers is the knowledge that:

forestry activities that remove flowering and/or mature trees are a continuous threat to the floral resources accessed by beekeepers.¹³⁷

The four year study undertaken by Law et al amounts to one page in a report on honeybees. It states:

This project has shown that current logging practices in NSW halve the nectar resource.¹³⁸

After many conversations with apiarists in the south east of New South Wales the conclusion to be drawn is that Forests NSW is logging unsustainably without thought to the future of the honey industry.

Removal of wood products compared with sustainable volume

Any data given by Forests NSW does not describe accurately the relationship to forest cut versus sustainable volume, due to the lack of independent sustainable yield review data. Merely reporting on to what extent wood supply commitment volumes are being met does not address questions of sustainability. Without knowledge of volume and regeneration rates the assurance that wood supply agreements can be met without degrading the ability of the forest to maintain supply in perpetuity is an erroneous assertion.

The information Forests NSW has provided does not describe accurately the relationship to forest cut versus sustainable volume, due to the lack of independent sustainable yield review data. Merely reporting on what extent wood supply commitment volumes are being met by providing excerpts of FAs, RFAs and the IFOAs does not address questions of logging over quota.

If this information provided is the best on offer after ten years then the assumption is that this reports assertions

¹³⁴ Performance Audit 'Sustaining Native Forest Operations,' Auditor-General's Report, 2009; it was also stated 'reviews of yield estimates for the southern region, due in 2004 for Eden and 2006 for Tumut and the south coast, have not been completed.'

¹³⁵ Michael Davies, Department of Environment and Climate Change, Environment Protection and Regulation Group, Crown Forestry Policy and Regulation Section (ex-Resource and Conservation Unit) 14/7/09.

¹³⁶ email to Tony Whan from Michael Scotland, Principal Ministerial and Policy Officer Forests NSW, Sent: Wednesday, March 02, 2011 11:43 AM.

¹³⁷ Commonwealth, *Senate Standing Committee, 'More Than Honey: the Future of the Australian Honey Bee and Pollination Industries'* p 48, see <<http://www.aph.gov.au/house/committee/pir/honeybee/report/chapter%203.pdf>>.

¹³⁸ Law B, and Chidel M, 'The Impact of Logging on Nectar Producing Eucalypts' (2007) Publication Number 07/138, Rural Industries Research and Development Corporation, Canberra <<http://www.rirdc.gov.au>>.

are correct. It seems Forests NSW are relying on what is ‘generally referred to’ and one or two clauses without detailed analysis of the whole of legislation approach nor any real evidence of volume figures.

Statutes provide guidance as to their intent at the beginning, usually in an ‘objects clause’. Courts prefer interpretation of statutes that promote objects of legislation. At clause 1.4(d) of the *Southern Region Forest Agreement 2002* it states:

In making this agreement we:

d) State that the overriding intention of forest management across all tenures is to maintain and enhance all forest values in the environmental, social and economic interests of the State.

Clause 7 of the IFOA states:

(1) In carrying out, or authorising the carrying out of, forestry operations SForests NSW must give effect to the principles of ecologically sustainable forest management

In the Southern RFA it states NSW agrees to:

undertake a review of Sustainable Yield every five years using enhanced FRAMES systems and information bases. The results of which will inform the annual volume which may be harvested from Southern region (or sub-region) being mindful of achieving long-term Sustainable Yield and optimising sustainable use objectives consistent with this Agreement.¹³⁹

The fact that the sustainable yield audits have not been undertaken is indicative of the inherent failure of the whole native forest logging industry to abide or adhere to any legislated requirements.

Allowable Volume of Logs

The allowable volume of trees logged was legislated to be based on ‘sustainable yield’ and FRAMES. Forests NSW alleges that the allowable volume figures in the legislation can be overridden by contractual commitments. This defeats the purpose of sustainable yield and indeed the legislation.

To take this erroneous assumption further it would mean the legislation and subordinate legislation serves no purpose. This assumption therefore does not meet the objects of the various Acts and subordinate legislation.

In the Southern RFA it states:

7 The Parties confirm their commitment to the goals, objectives and implementation of the *National Forest Policy Statement (NFPS)* by:

(a) Developing and implementing Ecologically Sustainable Forest Management (ESFM);

To focus on one clause at the expense of the remaining legislation is in itself indicium. There are many other clauses in the various pieces of legislation. At Attachment 8 (2)(a) of the Southern RFA:

2. New South Wales will further improve its Forest Management System across forest management agencies and land tenures by:

(a) developing consistent with this Agreement, a Regional ESFM Plan, a New South Wales *Southern Region Forest Agreement*, and an Integrated Forestry Operation Approval.

They will collectively:

specify the wood supply commitments and their relationship to Sustainable Yield;

If Forests NSW cannot provide actual volume figures the authors have attempted to. The volumes are tied to the High Quality Log volumes, yet it is reported in Appendix 4 of the *Draft Interim Report* that in the Southern region the ratio started at 100:101 in 2002 and jumped to 100:240 in 2006. Below are data sets on volume logged by Forests NSW from various sources.

¹³⁹ *Regional Forest Agreement for the Southern Region of NSW 2001.*

HQL to Pulp Ratio for the Southern and Eden Regions¹⁴⁰

Southern		Eden	
Year	HQL	PULP	% >
2002/03	62 329	65 484	
2003/04	70 021	78 291	12
2004/05	53 369	64 049	20
2005/06	60 673	109 447	80
2006/07	62 272	150 700	140
2007/08	70 124	135 231	93
2008/09	62 276	113 404	

Year	HQL	PULP	% >	HQL	PULP	%>
2002/03	62 329	65 484				
2003/04	70 021	78 291	12	26 131	309 088	1 182
2004/05	53 369	64 049	20	22 434	277 952	1 239
2005/06	60 673	109 447	80	23 936	294 519	1 230
2006/07	62 272	150 700	140	19 417	314 400	1 619
2007/08	70 124	135 231	93	24 871	315 839	1 270
2008/09	62 276	113 404				

These next figures Forests NSW provided to the Auditor General:

Volume Harvested Auditor-Generals Report 2009 Appendix 1

	03/04	04/05	05/06	06/07	07/08
South Coast					
HQL	43,571	34,927	42,699	43,314	46,563
Pulp	59,055	45,894	91,583	124,992	105,172
Tumut					
HQL	26,450	18,442	17,974	18,958	23,561
Pulp	19,236	18,155	17,864	25,708	30,059
Eden					
HQL	26,131	22,434	23,936	19,417	24,871
Pulp	309,088	277,952	294,519	314,400	315,839

These figures are based on data provided by Forests NSW who have proved to be erroneous in the past. From data analysis and observation these figures should be much higher. Also note that South Coast and Tumut are now the one area called Southern.

The following figures were provided by Forests NSW to Terrence Digwood (FOI Request):

Eden			Southern			
year	HQL	PULP	area	HQL	PULP	area
98/99	36,237	317,508	3,238	43,253	59,303	
99/00	27,770	352,282	3,170	39,165	51,356	
00/01	31,656	337,434	4,254	34,618	69,030	
01/02	26,846	278,379	3,339	34,056	42,735	3,794
02/03	25,558	313,896	3,546	54,581	55,224	3,710
03/04	29,726	320,581	4,160	52,094	60,210	4,363
04/05	28,286	297,080	3,580	43,568	64,050	3,361
05/06	27,922	307,669	4,786	51,416	91,854	5,095
06/07	22,839	342,914	5,043	49,995	107,367	7,618

The next table shows the volume figures in the Southern and Eden Regions according to the Draft RFA Implementation Report, page 121 and 122. The Pulp figures for Southern are from Appendix 4, p227.

¹⁴⁰ NB: 2008 and 2009 figures are different from the 'Report to conform to IFOA Condition 31 Annual Report on Logging Operations by financial Year 2007-08'; see IFOA Condition 31 report for 2008-09 figures.

Eden		Southern	
Year	HQL	PULP	HQL
1999	23 735	352 282	
2000	27 056	337 434	
2001	25 329	279 854	
2002	21 901	313 870	62 329
2003	26 131	309 088	70 021
2004	22 434	277 952	53 128
2005	23 936	294 119	60 673
06/07	19 417	314 400	62 272
			150 700

The annual IFOA Implementation Reports figures are:¹⁴¹

YEAR	Eden		Southern	
	HQL	PULP	HQL	PULP
01/02	25 329	279 854		
02/03	24 068	313 870	62 329	65 484
03/04	26 131	309 088	70 021	78 291
04/05	22 434	277 952	53 414	64 049
05/06	23 936	294 119	60 673	96 087
06/07	20 408	324 960	57 982	115 808

Pulp is defined as being subservient to logging of High Quality Logs. This is the intent of RFA clause 83 as the volumes referred in RFA cls 80, 81 and 82 are to be as a by-product of harvesting for the volumes specified in RFA cl 76. These volumes also include the volumes obtained from thinnings and timber products, which are related to the committed volumes and also to sustainable yield.

As evidenced by all the figures and amounts shown, pulp can in no way be interpreted to be subservient in either region. It seems the actual volume of pulp removed in the Southern region for the period 2002 to 2007 is equal to twelve percent above the allowable cut.¹⁴² This is above the five percent allowed in IFOA clause 5(a). In essence Forests NSW must stay within the five percent range.

There is some concern with the differing volumes between the reports and the Digwood FOI figures. The difference is too great to be attributed to the averaging of the years. Differing reporting methods and figures are provided to obscure actual volume figures of RFA regions.

Incorrect figures aside, it can also be seen that in all the years the volume of pulp is inconsistent with the volume for HQL. The IFOAs do state that sole purpose pulp operations are disallowed, however Forests NSW have a myriad of ways around this. The main one is to call the operations 'thinning operations' or 'Australian Group Selection' or 'Modified Shelter Wood'. As most logging now is done by mechanical harvesters this renders most logs unfit for being a sawlog and creates pulp.¹⁴³ We would have to strongly disagree that compartments in the southern and Eden regions are chosen 'for the volume of high quality sawlogs they can deliver'. On ground evidence suggests compartments are logged to meet the wood supply agreements for pulp with SEFE.

¹⁴¹ 2006 IFOA Implementation Report for 2001/02; 2007 IFOA IR for 2002/03; 2008 IFOA IR for 2003/04.

¹⁴² A Draft Report on Progress with Implementation of the New South Wales Regional Forest Agreements (2009), Resource and Conservation Unit, NSW Department of Environment and Climate Change NSW, Appendix 4, p227.

¹⁴³ Connell M J, 'Log Presentation: Log Damage Arising From Mechanical Harvesting or Processing' Prepared for the Forest and Wood Products Research and Development Corporation, Project no: PN02.1309, CSIRO Forestry, (2003).

Consistency

Volumes of HQL over the past five years from South Coast sub region have been lower than the committed volume of 48 500m³, ranging from 2 000m³ to 11 000m³ under. In 2006-07 HQLs volumes were 43 314m³. Pulp volumes should also have stayed relatively constant or been ‘consistent’ at around the 2002/03 and 2003/04 volumes of approximately, yet the figure was 150 700t.

Continuing supply of *high quality small (HQS) logs* and provision of *residue timber* for charcoal and *pulpwood* **consistent** with the *HQL log* volumes in the Region will also occur.¹⁴⁴

And:

The harvest intensity will be determined by the 48 500 m3 HQL commitment and not commitments for *residue timber*.¹⁴⁵

Forests NSW have departed from the legislation, evidenced by the dramatic increase in pulp volume logged. Therefore pulp figures are definitely not consistent with the HQL figures. If there is no maximum figure markets can keep demanding more ad-infinitum, this is impossible when constrained by sustainable yield. The only way volumes can be increased is by logging more area, or by logging more intensively. Both of these outcomes will have an effect on sustainable yield.

If the maximum volume for pulp is 97 000t per year and Forests NSW have logged 102 372t on average for the past seven years then, as evidenced, Forests NSW are definitely logging over quota. Unless this figure was deliberately set as a smoke screen to have it seem that the industry was sawlog driven then this figure must stand as a maximum figure.

While RFA clause 82 states that supply of other forest products will be ‘in accordance with current and future market demands’, this must be taken in context with sustainable yield. Committed volume is already above sustainable yield thus there can be no increased volumes on the basis of market demand without throwing sustainable yield out the window.

The pulp volume in RFA clause 80 is a maximum volume until there has been a recalculation of sustainable yield showing that this can be increased. The volumes for the various timber products in the RFA and FA are the only volumes allowed unless the agreements are amended. There has been no recalculation of sustainable yield nor have the agreements been amended. As these have not occurred there must therefore be a breach of the RFA and FA by Forests NSW.

It is clear the intent of all the various Acts and Agreements is the establishment of an ESFM framework as the core principle for the management of the forest estate of NSW. It is also clear that sustainable timber yield is a cornerstone of ESFM. Timber volumes that are unsustainable will have negative implications for not only the environmental values of forests but also for future socio-economic values.

In Depth Analysis Of ESFM and Over-Logging in the Eden Region-(Ecologically She's Finished Mate)

The timber volume of 23,000m³ that is common to all Eden agreements is not a minimum volume but a maximum volume. This volume can only be increased by a recalculation of sustainable yield using enhanced FRAMES.

The timber volume allocated in the NSW FA/RFA for the Eden region is not derived from a legitimate FRAMES run and is not a sustainable yield volume. The allocated volume is approximately 2,350m³ above sustainable yield which over the past ten years has seen more than one years worth of future timber volume already harvested. When combined with the actual over cutting of timber volume above that allocated, the future timber supply has been severely compromised.

This situation should have been rectified years ago when the review of sustainable yield was due to be conducted and if DECCW enforced compliance with the allocated timber volumes being harvested by Forests NSW. It is indicative of the failure of the NSW FA and RFA process and outcomes to deliver truly sustainable

¹⁴⁴ The Southern Region Forest Agreement 2002 (NSW), p25.

¹⁴⁵ The Southern Region Forest Agreement 2002 (NSW), p27.

forest management.

Forests NSW is claiming that timber supply is tight and that they have long term timber contracts to fulfill as to the reasons why they have to log the Koala habitat of Mumbulla SF. The real reasons are that the long term contracts are based on unsustainable yields and that Forests NSW have mismanaged the forest by over cutting.

Even if Forests NSW log the contentious areas it will not solve the long term problems that have already been caused. Therefore the NSW Government needs to cease all operations in the Eden region due to the unsustainability of these forestry operations. Industry buyouts and a move to the plantation estate are required immediately to protect the remaining multi-aged forests.

The RFA for the Eden Region 1999 has a definition for sustainable yield which ties in with the definition of ESFM.

“Sustainable Yield means the long term estimated wood yield from forests that can be maintained from a given region in perpetuity under a given management strategy and suite of sustainable use objectives;”

Sustainable yield plays a major role in the credibility and integrity of ESFM and without this core component any claims that forestry operations are in accordance with ESFM are false and misleading.

This submission demonstrates that the concept of ESFM and especially ‘sustainable yield’ have been abused during the CRA process by the granting of unsustainable timber volumes and the subsequent over cutting for many years above these timber volumes by Forests NSW.

It is for this reason that Forests NSW are claiming that timber supply is tight and that they only have ‘2 to 3 years timber supply from the multi-aged forests’.¹⁴⁶ This situation is of Forests NSW own making with DECCW and the government sharing culpability for failing to monitor the sustainability of timber volumes.

Legislation and Agreements in Relation to Eden ESFM

The *National Forest Policy Statement 1992* outlined objectives and policies for the future of Australia’s forests. ESFM has been incorporated in this statement in the vision, national goal and specific objectives and policies chapters.

The NFPS vision statement states:

The Governments share a vision of ecologically sustainable management of Australia’s forests. This vision has a number of important characteristics... Forests and their resources are used in an efficient, environmentally sensitive and sustainable manner.

In the National Goals chapter it says ‘The goal is for Australia to develop internationally competitive and ecologically sustainable wood production and wood products industries.’

The Objectives and Policies chapter, section 4.1 Conservation-ESFM and codes of practice says ‘ESFM will be given effect through the continued development of integrated planning processes, through the codes of practice and environmental prescriptions and through management plans that, among other things, incorporate sustainable yield harvesting practices.’

Section 4.3 Intergovernmental arrangements- Comprehensive regional assessments also states ‘...In this respect, the guidelines will cover, for example, management for sustainable yield...’

Forestry and National Parks Estate Act 1998

The FNPE Act enables the making of NSW FAs. Clause 15 requires a regional forest assessment to be carried out prior to making a FA, and part of the assessment is to include ESFM.

Clause 16(2) states that a forest agreement must contain;

provisions that promote ESFM

provisions with respect to sustainable wood supply from forestry operations covered by the agreement.

¹⁴⁶ Ian Barnes, Forests NSW Regional Manager, pers com to Daines.

The inclusion of ESFM principles and especially sustainable timber supply in the FNPE Act is important as this act forms the legislative basis for the NSW FAs and IFOAs to be made and these in turn enable RFAs to be made, all of which have driven forest management for the last 10 years. It should also be noted that s40 of the act takes away the rights of third parties to take legal action against Forests NSW for breaches of this act, NSW FAs, RFAs and IFOAs.

NSW Forest Agreement for the Eden Region 1999

Following on from the CRA for the Eden region a NSW *Forest Agreement* came into effect in March 1999. The agreement sets out the principles and strategic framework for the cooperative management of all forests by the government and its agencies.

Section 2 is titled Promoting ESFM in the Eden region. Section 2.2.1 requires the preparation of regional ESFM Plans, and that these plans must have the status of management plans under the Forestry Act 1916.

Section 2.10.1 acknowledges that ‘ESFM is the guiding philosophy for forest management’. Criteria and indicators for ESFM have been developed to evaluate and review the sustainability of forest management practices. Section 2.10.2 lists the ESFM indicators adopted for the Eden region. Under the criteria The Productive Capacity and Sustainability of Forest Ecosystems, indicator 2.1b requires reporting on the ‘annual removal of timber and non-timber products from forest ecosystems compared with those estimated to be ecologically sustainable by tenure’.

Section 3 sets the framework for sustainable timber supply for the region. Section 3.1, Sustainability strategy for timber supplies, sets the High Quality Large Sawlog (HQL) timber volume at 23,000m³ from the Eden region, 1,000m³ from Ingebirah and 1,000m³ for the first 5 years from the South Coast region. ‘Any increases to these volumes must be sustainable and consistent with modeling using the Forest Resource And Management Evaluation System (FRAMES)’.

Section 3.5 Timber Resource Assessment requires the refinement of resource availability. This is to be achieved through improvements to FRAMES and resource inventory measurement. Comparison of actual volumes to predicted volumes are to be made. These results must then be used to ‘review the performance in achieving the implementation of sustainable yield of timber products’.

Regional Forest Agreement for the Eden Region 1999

The RFA is an agreement between the State and Commonwealth Governments to facilitate forestry operations. In the agreement the Commonwealth acknowledges that the State Government has undertaken a CRA and created a CAR reserve system. In return the Commonwealth exempts RFA regions from the EPBC Act and export control regulations.

Developing and implementing ESFM in the Eden region is a fundamental aspect to the RFA and many clauses deal with this issue. Clause 46 (c) requires NSW to publish a Regional ESFM Plan under the Forestry Act 1916 and 46 (f) requires a review of sustainable yield consistent with attachment 11 of the RFA and FRAMES.

While clause 72 notes the NSW FA for Eden “establishes the sustainability strategy for timber supplies”, clause 73 confirms the timber volumes contained in the NSW FA. Clause 76 requires NSW to review timber volumes using processes described in cl 46 (f), and only additional sustainable timber volumes are to be made available.

Clause 95.6 requires NSW in accordance with cl 46 (f) to review sustainable yield consistent with attachment 11 and FRAMES in time for the first 5 year review. It should be noted that a failure to comply with cl 46 (f) and review sustainable yield by the first 5 year review is a trigger for termination of the RFA (cl 99 (iv)).

Attachment 11 ‘Sustainable Yield Systems and Processes’ sets out the requirements for reviewing sustainable yield calculations. Point 4 requires any changes to the volumes in clause 73 to be based on sustainable yield and consistent with FRAMES.

Integrated Forestry Operations Approvals

The IFOA brings all the environmental assessment, planning, and regulatory regimes that apply to forestry operations together into one document. There is a general requirements section, called the non-licence conditions, an EPL, TSL and a Fisheries Licence.

It is clauses 5(2) (a) and 5(3) of the non-licence conditions that define the volume of HQL that can be harvested each year.

5. Description of forestry operations to which this approval applies:

(2) This approval applies to logging operations, being the cutting and removal of timber for the purposes of producing any of the following:

(a) High Quality Logs (including an amount of up to 23,000m³ per year, being a quantity which reflects contractual commitments existing at the date of this approval);

5(3) To avoid doubt, the quantities of timber products specified in paragraphs (a) and (b) of sub clause (2) do not impose any limitation on the quantities of those products that may be harvested under this approval. The quantities referred to simply reflect contractual commitments existing at the date of this approval.

It is clearly impossible to have a sustainable yield that is based on contractual commitments alone.

ESFM plan for Eden region

Part 7 of the ESFM plan pertains to sustainable timber supply with the policy statement saying: 'Forests NSW will optimize the supply of timber products within ecological constraints and within a long term framework as specified in the Regional Forest Agreement for Eden NSW'.

The background section starts with 'The NFPS identifies ecologically sustainable wood production..... as one of the broad national goals for native forests'. It then goes into a description of FRAMES. This is trying to infer that the figures used in the plan have some validity as sustainable yield from FRAMES. It will be shown later that the timber yield in the ESFM plan is not a FRAMES volume.

In the section Ecological sustainability of wood supply it says 'Ecological sustainability is assured by incorporating an ecological framework in the modeling process and applying the Integrated Forestry Operations Approval for Eden Region (IFOA) and license conditions during operations.

The ecological framework is comprised of...

Periodic review of wood availability and supply commitments based on monitoring of areas and volumes harvested and improvement of the FRAMES models'

Page 4 of the ESFM plan has a table titled 'Developing Ecological Sustainability in Wood Supply in Eden Region'. This has the gross area of native forest at 156,963ha, a net area of 137,510ha and a net harvestable area ("NHA") of 124,071ha for an annual volume of 23,000m³. The net area excludes Forest Management Zones ("FMZ") 1, 2 and 3a. The NHA excludes FMZs and all other mappable features.

Analysis of Sustainability of Eden Timber Yields

FRAMES was designed during the CRA process as a tool to determine the ecologically sustainable timber yield for forest regions under various management systems and NHAs. The Eden FRAMES Report 12/5/98 formed the basis for the timber volumes adopted in the NSW FA and RFA for Eden.

Whilst there are many concerns with aspects of FRAMES methodologies, assumptions and error limitations, the estimates produced by FRAMES are all there is to calculate sustainable yield and FRAMES should be regularly reviewed, updated and adhered to. Any changes in sustainable yield need to be validated by FRAMES as required by the NSW FA and RFA. However, the yields of timber currently supplied from the Eden region are not sustainable because:

1. The use of clear-fell logging which converts multi-aged forests into regrowth precludes the maintenance of forest values in perpetuity and breaches criteria for ecological sustainability.
2. The 'sustained yield' volumes included in the IFOA were not based on a legitimate run from the FRAMES software, but were merely derived by applying an inflated mean volume per hectare

figure.

3. Data shows that the estimation process that FRAMES was based on – predicting alternate coupe volumes from logged coupes – has become increasingly unreliable, but it has not been updated to account for this fact.
4. The specified annual ‘sustained yield’ volumes have been consistently overcut by Forests NSW in breach of the FA and RFA.

Each of these four factors is addressed in detail below.

Conversion Of Multi-Aged Forests To Regrowth

In the period 1997-2019 the majority of the timber volumes will come from the multi-aged forests of the region with the transition from 2016 onwards to full regrowth. Multi-aged forests are clear-felled in the Eden region in 10-100 hectare coupes, in a practice which Forests NSW refers to as ‘Modified shelterwood harvest system’. The Resource Assessment Commission in 1992 stated that even though some silviculture systems (including Modified shelterwood harvesting system) retain habitat and seed trees these systems are still classified as clear-fell logging. This conversion of multi-aged forests into regrowth forests is against the principles of ESFM and sustainable yield. The Eden region is the only region in NSW that the multi-aged forest is to be converted to a regrowth forest. It is questionable how this management strategy is to maintain all forest values in perpetuity.

One very important forest value is the ability of the forest to sustain biodiversity. The loss of hollow bearing trees has been listed as a Key Threatening Process (“KTP”) in New South Wales. The conversion of multi-aged forests into regrowth results in a massive reduction of hollow bearing trees from a sub-optimal 13+ per hectare to 2-6 per hectare. This will have a severe impact on hollow dependent fauna into the future.

Sustainable Yield Volumes Not Based On Legitimate FRAMES Run

The analysis conducted below shows that the timber volumes in the NSW FA and RFA are not based on a legitimate FRAMES run and are higher than the sustainable yield. This analysis has at its base a comparison of the differing areas and timber volumes that have been used for different yield estimates, and compares the estimates of sustained yield from three different reserve scenarios that were considered during the development of the forest agreement.

The three scenarios are:

The base case – sustained yield over the full area of State Forest without any new reserves

The NSW department position – sustained yield available if recommended reserves are created

The actual reserve outcome – sustained yield available given the final reserve outcome and off-reserve constraints that were implemented.

Scenario Area and Sustainable Yield

Scenario	Net area (ha) *	Sustained Yield (m ³)	Source of yield estimate	Notes
Base Case	175,401	28,300	FRAMES run	Reference Point 1 Information from Towards an Eden RFA 1998
Departmental Position	149,813	23,000	FRAMES run	Scenario B Information from Towards an Eden RFA 1998
Actual Reserve Outcome	137,510	23,000	Unknown	Regional Forest Agreement outcome Information from the ESFM Plan for the Eden region

*The net area only excludes FMZ areas and is not the NHA which further excludes other mappable features.

This comparison shows that even though the Actual Reserve Outcome resulted in 12,303 ha less available for logging than that recommended by the Government departments, the estimated timber yield was exactly the same. This timber yield is the volume that has been committed for supply through the Forest Agreements and other regulatory instruments.

The Actual Reserve Outcome estimate appears to be based on application of the average volume per hectare from the Base Case, and not from a legitimate FRAMES run. The NHA for the base Case and RFA were used to calculate the yield. This can be seen in the tables below:

Volume per Hectare Comparison

	Volume per hectare (m ³ /ha)
Base Case	0.18539
Reserve Outcome	0.18537

From FRAMES Report, Base Case – RFA Relationship

	Gross Area ha	Net Harvest Area ha*	Volume M3	Yield m3/ha
FRAMES	198,315	152,651	28,300	.18539
RFA	156,963	124,071	23,000	.18537
		81.27%	81.27%	

* These figures are the NHA. FMZ and all mappable exclusions have been accounted for.

It is too coincidental for the volumes per hectare to match exactly in this manner. This leads to the conclusion that the current yields were derived by applying the base case volumes per hectare to the area available after the reserves were implemented. However, this is likely to lead to a major overestimate of sustained yield, because large areas of high yielding forest were reserved which means that the average yield per hectare can be expected to decline substantially.

Compounding the difference between the RFA and scenario B net areas is the large amount of area allocated to FMZ 3b special prescription zones in the RFA outcome. These areas generally modify the logging practices to 50% canopy reduction instead of the usual 70-90%. The effect of this volume reduction has not been estimated in this analysis.

A more accurate sustainable yield figure for the reserve outcome could be obtained from using the volumes per hectare from the Departmental Position scenario. This holds because the Departmental Position and the Actual Reserve Outcome were much closer in configuration and area than the base case was to either.

The volume per hectare for the Department Position is 0.15018m³/ha. Applying this to the Actual Reserve Outcome position of 137,510ha results in an estimate sustained yield of 20,651m³.

This shows that the RFA timber allocation of 23,000m³ is completely unsustainable by approximately 2,350m³ per annum. As this situation has been in effect for 10 years approximately 23,500m³ has been extracted from the region which is more than 1 year of supply at the sustainable yield of 20,650m³. These figures are extremely conservative as they do not take into account the volume reduction from increased FMZ 3b areas.

Unreliable FRAMES Estimation Without Proper Review

FRAMES timber volumes have reported confidence limits of +/-30%. However, there is evidence to suggest that the differences between estimated yields and actual yields are in fact far greater than this.

FRAMES relies on actual timber volumes logged in cut coups to estimate likely timber yields in uncut coups. However, the Eden FRAMES report 1998 noted that post 1994 the yield relationship between cut and uncut coups starts to break down with a subsequent decline in actual volume/ha compared to the estimated volume. The FRAMES report recommended investigation into the declining yields since 1994 as this could have important ramifications to sustainable yield calculations. However, there has been no investigation nor any change in sustained yield estimations in response to this information.

Possible causes for the decline in yield could be increased tree mortality due to Drought Associated Dieback, climate change or Bell Minor Associated Dieback. Even if BMAD or DAD are not the reason for the past decline they will become a concern for future timber volumes as the area of forest affected is increasing. The impact of climate change on future timber yields was not accounted for in the CRA process.

Consistent Overcut of Committed Yields

SEFR sent a report to DECCW on 8/9/08 regarding the over cutting of committed timber yields by Forests NSW being in breach of the NSW FA, RFA and IFOA. The information detailed in the legislation section of this report and in the breach report establishes the principles of ESFM and especially sustainable timber yield. SEFR stands by its opinion that Forests NSW is in breach of the NSW FA, RFA, ESFM plan and the Forestry Act 1916 by the over cutting of sustainable timber yield.

While the RFA/FA state 'a minimum of 23,00m³ from the Eden Region' this has to be taken in the context of ESFM and sustainable yield. In both the RFA/FA it also states any increase to these volumes has to be sustainable and consistent with FRAMES. There has been no recalculation of sustainable yield to date for the Eden Region, and so although it says minimum, the 23,000m³ is also a maximum. The whole concept of sustainable yield is the maximum volume that can be harvested each year in perpetuity; any other interpretation is completely untenable in the context of ESFM and sustainable yield.

DECCW's interpretation of clause 5(3) of the Eden IFOA as to why Forests NSW are not in breach of over cutting is shallow reasoning, against one of the core concepts of ESFM, against all other Acts and Agreements and is also demonstrably in error.

While clause 5(3) does seem to negate any limitations on timber volumes there are other clauses in the IFOA which also need to be taken into account and this is what is meant by shallow reasoning on behalf of DECCW.

Eden IFOA

PART 2 – Provisions applying to forestry operations generally

7. Ecologically sustainable forest management

(1) In carrying out, or authorising the carrying out of, forestry operations SForests NSW must give effect to the principles of ecologically sustainable forest management as set out in Chapter 3 of the document entitled, "ESFM Group Technical Framework" (Ecologically Sustainable Forest Management Group, New South Wales and Commonwealth Governments, July 1999).

This clause states that Forests NSW must give effect to the principles of ESFM. These principles are in attachment 14 of the RFA:

ATTACHMENT 14 (clause 44)

PRINCIPLES OF ECOLOGICALLY SUSTAINABLE FOREST MANAGEMENT (ESFM)

Principle 1: Maintain or increase the full suite of forest values for present and future generations across the NSW native forest estate

Aims for values include

B The productive capacity and sustainability of forest ecosystems

Ensure the rate of removal of any forest products is consistent with ecologically sustainable levels.

Again this reinforces the concept of sustainable yield which Forests NSW must give effect to. Clause 7(2) requires Forests NSW to monitor the indicators for ESFM. As stated earlier indicator 2.1b is to report on actual yield against sustainable yield. Clause 7(3) states Forests NSW 'must have regard to any data or information'

from the monitoring of indicators. This monitoring should have told Forests NSW and DECCW, as DECCW writes the annual ESFM reports, that over cutting of sustainable yield was occurring.

PART 7 - Miscellaneous

44. Most restrictive requirement to be complied with

(1) If, in a particular set of circumstances:

(a) more than one requirement applies to the carrying out of forestry operations, and
 (b) by complying with the most restrictive of those requirements, all of the requirements will be satisfied, then the most restrictive of the requirements is the one which must be complied with.

(2) A requirement for the purposes of this clause is a requirement imposed by a term of this approval (including a term of a licence set out in this approval) or a document with which this approval requires compliance.

This clause also needs to be taken into account. As there are obviously differing requirements and inconsistency between the IFOA and other Acts and Agreements and also within the IFOA itself then clause 44 must have effect and enforce compliance with the concept of sustainable yield.

As shown earlier the FNPE Act 1998 requires provisions with respect to sustainable timber supply. SEFR finds it hard to accept that Forests NSW are not in breach of the IFOA when they are in breach of the FNPE Act which enables the granting of IFOAs.

These clauses in the IFOA override 5(3) with respect to timber volumes and obviously were not taken into account when considering SEFRs breach report.

Since sending the breach report and waiting almost a year for a reply there has been an additional cl 24 annual volume report obtained by SEFR. Updating the data in the breach report shows Forests NSW are still logging at an unsustainable level.

Section 3.3 Timber Supply Arrangements states 'Continuation of arrangements under existing agreements to allow for the carrying forward into subsequent years of volumes of under cut and over cut'. This clause allows slight variations of over or undercut each year to give some flexibility due to operational constraints. While there are no values for these arrangements for Eden all other IFOA regions have the same specified values and these are applied in this analysis.

The maximum overcut allowed each year is 25% of 23,000m³ (23,000 x 1.25=28 750m³).

Every 5 years the maximum overcut allowed is 5% of 5 x 23,000m³ (5 x 23,000= 115,000m³ x 1.05=120,750m³).

At the end of the RFA period of 20 years the allowable volume harvested is to be no more than 20 x 23,000m³= 460,000m³.

HQL Harvested Above Allocated Volumes

IFOA cl24 Year	Volume	Excess	5yr Volume	excess
2000	25,378	2,378		
2001	23,726	726		
2002	25,154	2,154		
2003	26,806	3,806		
2004	26,513	3,513	127,577	6,827
2005	23,126	126	125,325	4,575
2006	24,708	1,708	126,307	5,557
2007	25,261	2,261	126,414	5,664
2008	24,311	1,311	123,919	3,169
Total		17,983		

* 23,000 x 5 x 1.05 = 120,750m³

The year 2004 was the first 5 year period for which there is available data. The 5 year volume column shows the total volume harvested in this period. The volume above 5 years + 5% column shows the volume harvested in excess of that which is allowable. Forests NSW are still harvesting above the FA/RFA allocated volume of 23,000m³ and all 5 year periods are above the allowable volume plus 5%. The total over cut of 17,983m³ is almost one year's supply of the true sustainable yield of 20,650m³.

Inconsistency Between Data Sets

There are three different data sets on timber volumes harvested in the Eden region that are in existence. The first data set, the one that SEFR relies upon, are the annual volume reports required by clause 24 of the IFOA. These reports are to be on a calendar year basis. SEFR has been obtaining these reports since 2001.

The second data set is that contained in the annual reports on the NSW FA/IFOA which are also repeated in the Draft Report on Progress with Implementation of the NSW RFA's. These cover the period 1999/2000 - 2006/2007 and are on a financial year basis.

The last data set is from the Auditor-General's Report: Performance Audit-Sustaining Native Forest Operations 2009, Appendix 1. It reports on a financial year from 03/04 to 07/08.

HQL Harvested

Yr	CI24 IFOA	Yr	FA/IFOA/RFA	Yr	Auditor General
		99/00	23,735		
		00/01	27,056		
01	23,726	01/02	25,329		
02	25,154	02/03	21,901		
03	26,806	03/04	26,131	03/04	26,131
04	26,513	04/05	22,434	04/05	22,434
05	23,126	05/06	23,936	05/06	23,936
06	24,708	06/07	20,408	06/07	19,417
07	25,261			07/08	24,871
08	24,311				

Analysis Of Data Sets

There is one obvious difference between the AG report and the FA/IFOA/RFA report for the year 06/07. After comparing the clause 24 reports and the FA/IFOA/RFA reports it is impossible to reconcile the two, with clause 24 reports showing greater timber volumes, to a significant amount in some years. Converting the FA/IFOA/RFA volumes to calendar years, eg (year ab + year bc)/2, and comparing the total volume harvested between 2001 and 2006 produces the following figures.

HQL harvested adjusted to calendar year

CI 24 IFOA Yr	Volume	FA/IFOA/RFA Report	Volume
01	23,726	01	26,192
02	25,154	02	23,614
03	26,806	03	24,015
04	26,513	04	24,282
05	23,126	05	23,185
06	24,708	06	22,172
Total	150,292	Total	143,460

The difference of 6,573m³ is too great for any slight discrepancies in the averaging method used. Only in year 2005 are the volumes in alignment. The reasons for these differing data sets need to be resolved and the exact volumes harvested reported.

Conclusion for the Eden Region

It is clear the intent of all the various Acts and Agreements is the establishment of an ESFM framework as the core principle for the management of the forest estate of NSW. It is also clear that sustainable timber yield is a cornerstone of ESFM which is being neglected. Timber volumes that are unsustainable will have negative implications for not only the environmental values of forests but also for future socio-economic values.

The timber volume of 23,000m³ is a maximum volume. If this volume is taken as a minimum then there can be absolutely no claim that forestry operations are conducted in accordance with the principles of ESFM and sustainable yield.

The timber volume allocated in the NSW FA/RFA for the Eden region is not derived from FRAMES and is not a sustainable yield volume. The allocated volume is at least 2,350m³ above sustainable yield which over the past ten years has seen several years of future timber volume already harvested. When combined with the actual over cutting of timber volume above that allocated in the NSW FA/RFA, the future timber supply has been severely compromised.

This situation should have been rectified years ago when the review of sustainable yield was due to be conducted with an updated FRAMES, and if DECCW enforced compliance with the allocated timber volumes being harvested by Forests NSW. It is indicative of the failure of the NSW FA and RFA process and outcomes to deliver truly sustainable forest management.

Forests NSW is claiming that timber supply is tight and that they have long term timber contracts to fulfill as to the reasons why they have to log the Koala habitat of Mumbulla SF. The real reasons are that the long term contracts are based on unsustainable yields and that Forests NSW have mismanaged the forest by over cutting.

Even if Forests NSW log the contentious areas it will not solve the long term problems that have already been caused. Therefore the NSW Government needs to cease all operations in the Eden region due to the unsustainability of these forestry operations. Industry buyouts and a move to the plantation estate are required immediately to protect the remaining multi-aged forests.

Statistics on historic yields show that since 1995 Forests NSW wood production moved increasingly from native forest to plantation. As the figures show, the plantation estate has been the main timber provider prior and during the RFA period. The Figures below are from Forests NSW Annual Reports.

Native Forest, Softwood Plantation Historic Yields.

Year	TOTAL	Native Forest	% of total	Plantation	% of total
1995/96	3 538 554	1 822 560	51.5	1 539 213	43.5
1996/97	3 259 545	1 497 744	45.9	1 653 144	50.7
1997/98	3 512 765	1 404 370	40	2 003 050	57
1998/99	3 471 892	1 167 190	33.6	2 195 338	63.2
1999/00	4 001 015	1 340 521	33.5	2 558 613	63.9
2000/01	3 681 742	1 246 858	33.9	2 250 277	61.1
2001/02	4 116 148	1 121 121	27.2	2 712 429	65.9
2002/03	4 133 000	1 257 497	29.2	2 765 514	64.3
2003/04	4 489 397	1 331 225	29.6	3 158 172	70.3
2004/05	4 334 034	1 233 249	28.5	3 100 749	71.5
2005/06	4 445 424	1 276 113	28.7	3 138 478	70.6
2006/07	4 696 032	1 212 403	25.8	3 433 210	73.1
2007/08	4 827 955	1 190 251	24.6	3 582 127	74.2
2008/09	4 454 402	1 076 966	24.1	3 306 452	74.2

Conclusion for Both Regions

There is no justification for the sharp rise in pulp volumes over the past three years other than trees are being felled specifically for pulp, at a substantial loss to the taxpayer, to subsidise the profits of SEFE.

An analysis of compartments logged in the past five years shows that the quality of forest has remained relatively constant and therefore volumes should also have stayed relatively constant. The volume figures for pulp have risen dramatically, no matter which figures are used. The only way for this to happen is by logging more intensively, which will affect the remaining stand condition and ultimately sustainable yield.

As stated above there has been no noticeable difference in forest quality and so the only explanation is that pulp operations are the driving force in the region, not HQL as is alleged. At this rate of logging it brings the rotation time down to five to ten years, which is unsustainable. A legacy of ecological deserts where once was forest is all the future generations have to look forward to.

The RFA, FA and IFOA have not been amended over the years. There has also been no recalculation of sustainable yield over this time. Therefore Forests NSW are in breach of these agreements and are contrary to the principles of ESFM.

The Regional Manager of Forests NSW has stated:

‘The remaining multi-age forests resource is coming to an end in the next two to three years.’

Ian Barnes, The Eden Magnet Thursday, March 11, 2010.

If the objects of the Forestry Commission are:

- (a) to conserve and utilise the timber on Crown-timber lands and land owned by the commission or otherwise under its control or management to the best advantage of the State,
- (b) to provide adequate supplies of timber from Crown timber lands and land owned by the commission or otherwise under its control or management for building, commercial, industrial, agricultural, mining and domestic purposes,
- (c) to preserve and improve, in accordance with good forestry practice, the soil resources and water catchment capabilities of Crown-timber lands and land owned by the commission or otherwise under its control or management¹⁴⁷

As evidenced the Commission has not only failed to meet its legislated requirements it has failed to meet the objects of the Commission and the Act.

The last word on this is from the now Director-General of the Department of Environment Climate Change and Water giving advice on the IFOAs and why the Minister should sign an agreement:

The IFOA provides the mechanism to implement the operational provisions of the Southern Forest Agreement. It contains the Terms of Licences issued by NSW Fisheries and NPWS as well as the EPA’s current Environment Protection Licence for the Southern Region. The IFOA also contains **maximum timber volumes allowed to be harvested annually**.¹⁴⁸

¹⁴⁷ The *Forestry Act 1916* (NSW) s8(a1).

¹⁴⁸ Letter to DOPI from Lisa Corbyn and David Nicholson, 18 April, 2002, signed by Director Waters and Catchments Policy (signed 18/4/02), Assistant Director General (Water & Air), Director General (signed Lisa Corbyn 19/4/02), emphasis added.

BIODIVERSITY

The numbers of threatened species, threatened populations and ecological communities increased significantly since the RFAs were signed and many threatened and endangered flora and fauna species are at extreme risk from current logging operations. The Reserve system gazetted to date, along with the off-reserve protection measures of the IFOAs, are neither comprehensive, representative, or adequate to meet the needs of threatened species survival. The number of threatened plant and animal species, and the number of endangered ecological communities in NSW between 2001 and 2009, threatened animal species increased by 21% in that time to reach 353 species, the number of threatened plant species grew by 23% to 663 species and the number of endangered ecological communities grew by 115% so that there were 101 threatened communities in 2009.¹⁴⁹

The Scientific Committee's figure for NSW species, populations or ecological communities threatened with extinction in 2009 was 1035.¹⁵⁰ This figure, when compared to the 1998 figure of 868 is the most indicative of the RFAs effect on our environment.¹⁵¹

A recent report by Professor Richard Kingsford, Professor Brendan Mackey and a think tank of thirteen eminent scientists stated that:¹⁵²

Loss and degradation of habitat is the largest single threat to land species, including 80 percent of threatened species.¹⁵³

As evidenced the greatest threats to Australia's biodiversity are caused by broad-scale land clearing and forestry operations including establishment of plantations and fire management practices, yet these industrial forestry practices continue to remain exempt from legislation.¹⁵⁴

The Intergovernmental Agreement 1992 states that:

The parties agree that policy, legislative and administrative frameworks should provide for:

- (iv)consultation with affected individuals, groups and organisations;
- (v)consideration of all significant impacts;
- (vi)mechanisms to resolve conflict and disputes over issues which arise during the process;
- (vii)consideration of any international or national implications.¹⁵⁵

The Expert Panel stressed that the persistence and perpetuation of hollow bearing trees is imperative for the survival of forest fauna.¹⁵⁶ A discussion of the conservation measures in place to maintain these hollow bearing trees highlighted the following points:

- Tree mortality is high; the ratio of one recruit tree to one hollow bearing tree is unlikely to maintain the targeted number of hollow bearing trees in Net Harvest Areas in the mid to long term. This is particularly the case in the regrowth zones. Modelling is required to define a more appropriate ratio of recruits to hollow bearing trees.
- The rotation time between harvesting events within a compartment requires revision. Current rotation intervals are too short to allow recruitment trees to form hollows. Additionally, hollow bearing trees retained from the previous harvesting event are not permanently marked therefore could be removed in the next rotation.
- Guidelines or criteria should be developed for the selection of recruitment and hollow bearing trees. Trees with the potential to develop a broad range of hollow types should be targeted for selection. Suppressed trees should

¹⁴⁹ See 'A statistical portrait of the environment in NSW' by Talina Drabsch, NSW Parliamentary Library Research Service, February 2011, [http://www.parliament.nsw.gov.au/Prod/parlment/publications.nsf/0/5ED2A6066A06121ECA257839007C6E6B/\\$File/Environment+Paper.pdf](http://www.parliament.nsw.gov.au/Prod/parlment/publications.nsf/0/5ED2A6066A06121ECA257839007C6E6B/$File/Environment+Paper.pdf)

¹⁵⁰ For 2008 figures see <<http://www.threatenedspecies.environment.nsw.gov.au/index.aspx>>.

¹⁵¹ For 2000 and 2003 figures see <http://www.environment.nsw.gov.au/soe/soe2003/chapter6/chp_6.3.htm#6.3.69>; and for 2006 figures <http://www.environment.nsw.gov.au/soe/soe2006/chapter6/chp_6.3.htm#6.3.71>.

¹⁵² See <<http://www.threatenedspecies.environment.nsw.gov.au/index.aspx>>; two examples illustrate this point: firstly, in relation to the endangered Hasting River Mouse, the conditions contained in the Integrated Forestry Operations Approval for this species have recently been weakened for certain core areas for the Hasting River Mouse at the behest of the Forests NSW to increase access for logging; secondly, in relation to the endangered Spotted-tailed Quoll, Forests NSW were found illegally logging a Spotted-tailed Quoll exclusion zone in Forestland State Forest in Upper and Lower North East NSW; they admitted the fact, but claimed it was a 'mistake'.

¹⁵³ Kingsford R T, Watson J E M, Lundquist C J, Venter O, Hughes L, Johnston E L, Therton J A, Gawel M, Keith D A, Mackey B G, Morley C, Possingham H P, Raynor B, Recher H F, and Wilson K A, 'Major Conservation Policy Issues for Biodiversity in Oceania' (p 834-840), Published Online: (2009), <<http://www3.interscience.wiley.com/journal/118487636/home?CRETRY=1&SRETRY=0>>.

¹⁵⁴ See The National Strategy for the Conservation of Australia's Biological Diversity (1996).

¹⁵⁵ *Intergovernmental Agreement 1992* sch 2 (3).

¹⁵⁶ From 'Review of Protective Measures and Protective Measures and Forest Practices - Biodiversity Workshop Southern Region' Ecologically Sustainable Forest Management Group, July 1999, Project No. NA45/ESFM p176-177.

not be selected as recruit trees.

- Prescriptions for the retention and recruitment of hollow bearing trees in the NHA should be rewritten to emphasise, not only maintaining these features during a single cutting cycle, but managing them to persist in the landscape.
- Specific prescriptions should be developed for hotspots, defined as areas of high species richness. A sliding scale, where incremental increases in species diversity are matched by increases in prescription strength, was suggested.

Observations, from on-ground monitoring ten years later, see little change to the prescriptions; the habitat to recruitment ratio is still one to one; the regrowth zone is weaker, because only the hollow-bearing trees present (up to a maximum of ten per two hectares) are retained - if ten are not present then consequently less recruitment trees are retained; there are no stipulations in any harvest plans to retain previously retained trees and rotation times have shortened. For example compartment 62 of South Brooman State Forest has had 'Timber Stand Improvement' twice and been logged nine times since 1954, which is virtually every six years.¹⁵⁷

There is no available ESFM data on the marking up of retention trees, both habitat and recruitment trees, and consequently many trees that had been retained have now been logged. Indeed currently there is no available data on past history of retention trees and their location thus previously retained trees are constantly available for logging.¹⁵⁸

Habitat and recruitment tree selection is getting more parlous by the year. Many suppressed recruitment and very small habitat trees (often with no visible hollows) are always found when auditing logged areas, though strangely the stumps are invariably of the largest size class. The sliding scale idea was put in place in Eden yet the solid data on exact amounts of each habitat class that has been logged since 1999 seems non-existent and the volume of "high" class habitat is not reported on.

Forests NSW have been informed on the extent of threatened species in their region yet could only find fifteen percent of these species in the Eden region and thirteen percent in the Lower North East in the pre-harvest fauna surveys.¹⁵⁹

The lack of care for threatened and endangered species is nowhere more apparent than in the ESFM report which states:

Any change to the number of species recorded on the estate are likely to reflect research and survey effort rather than true species richness of forest areas.¹⁶⁰

Further scientific judgment on surveying runs thus:

Unless the probability of detecting a species when it is present is equal to 1, false negative observation errors will occur in species surveys. The probability of detecting the presence of the case study species in any single standard survey based on spot-lighting and call elicitation has been found to be very low ($Pr[\text{detection/ presence}] \sim 0.12-0.45$); making the reliability of absence data a potentially serious form of uncertainty in our case study. Recent studies have demonstrated the negative impact that false-negative observation error may have on species habitat analyses, meta-population models and monitoring studies.¹⁶¹

Scientists advocate an approach based on maintaining ecosystem structure and function, and therefore ultimately protecting more species.¹⁶² Protecting species and diversity within functional groups is a key way to

¹⁵⁷ Southern Region – Compartment 62, South Brooman State Forest, Bateman's Bay Management Area, Harvest Plan approved 8/5/09.

¹⁵⁸ Gibbons P, Lindenmayer D B, Barry S C, Tanton M T, 'The Effects of Slash Burning on the Mortality and Collapse of Trees Retained on Logged Sites in South-Eastern Australia' (2000) 139 *Forest Ecology and Management* 51.

¹⁵⁹ NSW Government 2006 ESFM 'Criteria and Indicators monitoring Report- 2001/2002: Upper North East, Lower North East and Eden Regions' A Supplementary Report to the NSW Forest Agreements Implementation Report, Forestry and Rural industry Policy, NSW Department of Natural Resources, Parramatta, p25.

¹⁶⁰ NSW Government 2006, ESFM 'Criteria and Indicators monitoring Report- 2001/2002: Upper North East, Lower North East and Eden Regions' A Supplementary Report to the NSW Forest Agreements Implementation Report, Forestry and Rural industry Policy, NSW Department of Natural Resources, Parramatta, p37.

¹⁶¹ Wintle B A, Elith J, and Potts J M, 'Fauna Habitat Modelling and Mapping: A Review and Case Study in the Lower Hunter Central Coast Region of NSW' (2005) 30 *Australian Ecology* 719.

¹⁶² McIntyre S, Barrett G, Kitching R, and Recher H, 'Species Triage – Seeing Beyond Wounded Rhinos' (1992) 6 *Conservation Biology* 4 p604; see also Walker B, 'Conserving Biodiversity Through Ecosystem Resilience' (1995) 9 *Conservation Biology* 4, p747.

do this thereby enhancing ecosystem resilience, so that they are able to maintain their functions and processes. Further it is not enough to merely record species, the impact of the logging must be recorded.

The authors note with great concern that slow growing species such as *Macrozamia communis* (Burrawangs), *Dicksonia youngiae*, and *D antarctica* (Soft Tree Ferns), *Cyathea australis* and *C cunninghamii* (Rough Tree fern) and *Xanthorrhoea spp* (Grass Trees) are particularly vulnerable in logging areas. Most of these plants have been alive long before white settlement, they grow up to one cm of trunk per year, and when young will take up to ten years to start forming a trunk. Research shows that only between two to thirteen per cent of tree ferns regenerate after logging and never regrow on snig tracks or log dumps. Tree ferns, which play a vital role in maintaining the moisture of the forest floor and providing protection for the growth of other forest plants, are often casualties of logging.¹⁶³ There are no prescriptions for these flora even though they are protected under NSW legislation.

IFOA and PNF Prescriptions for Species

In the Southern and Eden regions there are currently 31 compartments active in State forest and 73 Property Vegetation Plans which mainly feed the pulp market. All of these contain threatened and/or endangered species.¹⁶⁴ Once a species has been listed by the Scientific Committee it triggers numerous obligations for habitat conservation.¹⁶⁵ Thousands of dollars have been spent both State and Federally on each species recovery plan and threat abatement plan, yet despite this, and there being a plethora of legislation and regulations to conserve biodiversity, native forestry operations are exempt.

Scientists advocate an approach to conservation based on maintaining ecosystem structure and function, and therefore ultimately protecting more species.¹⁶⁶ Protecting species and diversity enhances ecosystem resilience therefore species are able to maintain their functions and processes.

The object of IFOAs are stated at s25 of the FNPE Act as being ‘for the protection of the environment and for threatened species conservation’.¹⁶⁷

The Scientific Committee’s main recommendations to protect hollow dependant species were to establish appropriate recruitment tree ratios as part of the Private Native Forestry Code under the *Native Vegetation Act 2003* (NSW), and adopt appropriate policies for recruitment tree ratios with a stipulated minimum retention density in areas of State forestry operations.¹⁶⁸

Both of these strategies for different land tenures are given High priority, both of these strategies have not been implemented. Given that generally eucalypts form hollows after about 120 years of age a sustainable rotation age would be one that allows forest values to regenerate.¹⁶⁹ Reducing forests to a flat rate of 5 or less hollow bearing trees per hectare from an optimum of 27-37 hollow bearing trees per hectare puts at risk expectations that future generations will see fauna such as the Greater Glider in the wild.

Prescriptions for threatened species and habitat conservation in IFOAs and the PNF code are grossly

¹⁶³ Unwin G L, and Hunt M A, ‘Conservation and Management of Soft Tree Fern *Dicksonia Antarctica* in Relation to Commercial Forestry and Horticulture, *Pteridology in Perspective*, Camus J M , Gibby M and Johns R J [eds], (1996) pp 125-137, Royal Botanic Gardens, Kew : London.

¹⁶⁴ There are 91 forest dependent species of fauna in the region, National Parks and Wildlife, Atlas of NSW Wildlife, <<http://wildlifeatlas.nationalparks.nsw.gov.au/wildlifeatlas/watlasSpecies.jsp>>, viewed 19 July 2010.

¹⁶⁵ See the *Environment Planning and Assessment Act 1979* (NSW); the *Protection of Environment Operations Act 1997* (NSW); the *Threatened Species and Conservation Act 1995* (NSW); the *Environment Protection Biodiversity and Conservation Act 1999* (Cth); *National Parks and Wildlife Act 1974* (NSW).

¹⁶⁶ McIntyre S, Barrett G, Kitching R, and Recher H, ‘Species Triage – Seeing Beyond Wounded Rhinos’ (1992) 6 *Conservation Biology* 4 p604-606; Walker B, ‘Conserving Biodiversity Through Ecosystem Resilience’ (1995) 9 *Conservation Biology* 4, p747.

¹⁶⁷ *Forestry and National Park Estate Act 1998* (NSW) s25.

¹⁶⁸ *Threatened Species Conservation Act 1995* (NSW) Sch 3 s8, *Loss of Hollow Bearing Trees Key Threatening Process*; <<http://www.environment.nsw.gov.au/determinations/LossOfHollowTreesKtp.htm>>; clicking on ‘Threat Abatement Strategies’ will take you to ‘Review and Amend or Adopt Existing Legislation or Policies’, clicking on this will take you to ‘All Priority Actions for this KTP’, clicking on that will take you back to ‘All Priority Actions for this KTP’.

¹⁶⁹ Crane M J, Montague-Drake R M, Cunningham R B, and Lindenmayer D B, ‘The Characteristics of Den Trees Used by the Squirrel Glider (*Petaurus norfolkensis*) in Temperate Australian Woodlands’ (2008) 35 *Wildlife Research* 663.

inadequate. Furthermore, neither a FOP or Harvest Plan can be classed as a species impact statement.¹⁷⁰ It is perfunctory to merely record species. Impacts of logging and post-logging burning on species and their habitat must also be recorded and monitored to ensure due process in achieving conservation objectives.

A comparison with a species recovery plan and threat abatement plan for species and prescriptions contained within the PNF Code and the IFOA TSLs highlights the inadequacy of these prescriptions. The results of this practice is reflected in numbers of threatened and endangered species rising in line with the increase in forests logged.¹⁷¹

The regulators misconception of implementation of TSLs prescriptions has ensured that many breaches of licence conditions which have destroyed habitat have gone unpunished. Furthermore Forests NSW have recommended to DECCW that many prescriptions be nullified.¹⁷²

Further the PNF Unit in DECCW have shown themselves to be completely incapable of managing and implementing the PNF Code and operations, approving more than 70% of old-growth high conservation value native forest for logging, according to information obtained through Parliament that is 7,898 hectares over a 3 year period.

Fragmentation

There is nothing positive to report. Fragmentation has increased but conveniently no data exists to show this. Scientifically, habitat corridors need to be one hundred to two hundred and fifty metres wide to be beneficial, the current forty to eighty metres is simply not adequate.

Fauna experts consulted during the Response to Disturbance Project have recommended that corridors and riparian buffers be expanded to 200 m for yellow-bellied gliders, 1 km along major rivers for owls, 240 m for fishing bats and golden tipped bats, and 1km (with low-intensity logging) between catchments for stuttering frogs.¹⁷³

Roads bring more people into an area which results in fragmentation of the landscape, but they also have much broader and wide ranging effects. At the landscape scale, roads disrupt ecosystem processes and, at both a fine and coarse scale, cause a loss of biodiversity.¹⁷⁴

Fragmentation of the landscape and the consequent habitat loss is the major threat to biodiversity.¹⁷⁵ It has been suggested that fragmentation within a forest will force the inhabitants of the logged forest patch into the surrounding forest, thereby causing dysfunctional behaviour due to higher than normal densities.¹⁷⁶ This phenomenon is reduced when the remaining forest is large and intact.

Listing forest-dwelling species

Forests NSW state that the reporting of forest dependent species depends on the reporting of SFOs prior to logging. This does not instill confidence. Forests NSW give no data on this from the Southern Region at all to the Independent Assessor. The data appeared to be CRA data which is blatantly untrue. There are greater glider and squirrel glider habitats within State forests in the Southern region. To base decisions on this type of

¹⁷⁰ ‘I am obliged to note that, in my opinion, the Eden FIS is an appallingly inadequate document, even by Commission standards. It suggests they do not take the Act (and the conservation of endangered fauna) very seriously’ *South East Forests Conservation Council Inc v Director-General National Parks and Wildlife and State Forests of NSW [1993]* NSWLEC 194, Deputy Director (Policy and Wildlife) Mr David Papps.

¹⁷¹ For 2008 figures see <<http://www.threatenedspecies.environment.nsw.gov.au/index.aspx>>; for 2000 and 2003 figures see <http://www.environment.nsw.gov.au/soe/soe2003/chapter6/chp_6.3.htm#6.3.69> and for 2006 figures see <http://www.environment.nsw.gov.au/soe/soe2006/chapter6/chp_6.3.htm#6.3.71>.

¹⁷² Original Eden TSL cl 6.6 Southern Brown Bandicoot *Isoodon Obesulus* a) An exclusion zone of at least 200 hectares must be implemented around each record of the species; amended Eden TSL now has very small buffer zone as evidenced by Nadgee SF Cpt 62 harvest plan; the SBB is an EPBCA endangered species.

¹⁷³ From CRA Report ‘Draft Assessment of Forest Management Practices for the Eden RFA’ CSIRO Forestry and Forestry Products and Andrew Smith, Sestcan and Pat O’Shaughnessy and Associates, (1997), ne27esfm, ISBN 0-642-28398-2 p48.

¹⁷⁴ Forman R T T, and Alexander L E, ‘Roads and Their Major Ecological Effects’ (1998) 29 *Annual Review of Ecology and Systematics* 207.

¹⁷⁵ Benson J, ‘Past, Present and Future: the Role of Scientific Knowledge in Nature Conservation’ (1993) *National Parks Journal* February, p17; see also Wilcove D S, Rothstein D, Dubow J, Phillips A, and Losos E, ‘Quantifying Threats to Imperiled Species in the United States’ (1998) 48 *BioScience* 607.

¹⁷⁶ Hagan J M, Vander Haegen M, and Mckinley P S, ‘The Early Development of Forest Fragmentation Effects on Birds’ (1996) 10 *Conservation Biology* p188.

erroneous data would be unjustifiable.

Status of threatened forest-dwelling species

During the review reporting period there was a recognised increase in threatened species, endangered populations, endangered ecological communities, and key threatening processes, which is material evidence on the failure of the RFAs. KTPs such as the removal of dead trees and the loss of hollow-bearing trees occur on a daily basis on the State forest estate, creating an ecological desert with impunity.

Species extent and abundance:

Current RFA mechanisms are not functioning positively. There has been no action on KTP abatement. For example the Southern Brown Bandicoot, for which the Eden IFOA initially stipulated a two hundred hectare exclusion zone, in Nadgee SF compartment 62, SBBs have been given no exclusion zone (see Operational Plan approved 30/06/09). There has been an amendment at Forests NSW request of the SBBs prescriptions on the strength of alleged SBB monitoring surveys. The authors can find no documentation to substantiate the claim that the monitoring plans mentioned by Forests NSW exist. There is a 2007 species management plan but no further monitoring reports.

The IFOA is a flawed document and the conditions it holds are therefore flawed, it is worded so that carte blanch non-compliance can be explained away as an accident, and is seriously undermining threatened species extent and abundance. To merely list a threatened species - to 'take note' of a species and its location - is not considering the impacts of logging on that species or its habitat, nor is that in any way affording protection to these species. These species have been legislated into extinction and Forests NSW, the regulatory agency DECCW, the State governments and the Commonwealth are all liable under domestic and international obligations.

Climate change will dramatically increase other threats to species in the region, through increased spread of invasive species, increased fire frequency and severity, increased spread of forest dieback, and reduced stream flows. The cumulative impact of all these threats compounded by industrial logging operations operating under an exemption to the EPBC Act and the RFAs, have resulted in a major impact on threatened species.

Forest Type By Area:

There seems to be no data for the Southern Region. Updated information regarding changes to the extent of forest type in the CAR is not available. The Forests NSW statement stating the system was established in accordance with the JANIS is erroneous for a number of reasons, mainly due to the lack of willingness by legislators to promote ecology over economy.

Forests NSW has stated:

Changes to the extent of forest type on state forests are reported through data obtained from the forest management zoning (FMZ) system. This zoning is based on the nationally agreed JANIS reserve criteria which give effect to the CAR reserve. The system defines a number of zones and specifies what activities are permissible within each zone. The extent of reservation of different forest vegetation communities is a measure of the degree of protection of biological diversity at the species and ecosystem levels. The modelled forest type extents listed in the RFAs are used as the baseline to measure changes to the extent of forest types. The *State of the Parks 2004* report and ESFM annual reports provide further detail on the extent and management of forest ecosystems *in each region*.

This information is vital for proper assessment, yet it is being left aside in Southern, and is lacking to the extent that the regionally produced 'harvesting plans' are not providing any information of how many hectares of each forest type yield association is within the net harvest areas. The information given in the recent Wandera Harvest Plan only gives basic statements such as 'stands of multi-aged regrowth with patches of maturing stands...forest stands of mixed age'.¹⁷⁷ This implies that previously undisturbed forest is being logged under this plan. This is in tension with the *National Forest Policy Statement (1992)* and the need to preserve old-

¹⁷⁷ See Site Specific Harvesting Plan, Southern Region -Compartments 584, 585, and 586 Wandera State Forest, Batemans Bay Management Area, approved 1/5/08, Forests NSW.

growth forest.

The ESFM Monitoring Report for 2001/02 tells us that:

any change to the extent of forest ecosystem types can only be presented separately for each tenure, and cannot accurately identify change to the extent of forest ecosystem types across the whole public forest estate. Forest ecosystem type data are currently derived from different data sets for the national park estate and State forests and therefore cannot be directly compared.

This confounding effect needs to be emended.

Area of forest type by growth stage:

All observations made to date of forestry operations under the RFAs have shown that logging old-growth is a high priority, indeed it is generally recognised that the Forests NSW achievement of finalising the removal of unprotected old-growth is less than four years away. Information showing the effect on forest type by area and growth stage (under Forests NSW Research Note 17 classification) on the State forest estate is not publicly available. There is a lack of informative data on what type of forest is used as classification and again assert that classification by growth stage is not classifying by forest type.

Unfortunately, RFAs have developed and utilised relatively simple forest ecosystem classifications - note that in my professional estimation even classifications with 100-150 types are inadequate to assess comprehensiveness.¹⁷⁸

Regeneration

The white elephant in the room is the regeneration of native forest after industrial logging. The meaning of Forests NSW statement that there is a hundred percent regeneration target set for harvested native forest is obscure. The research and data that the forest does regrow after industrial logging and burning is inadequate. The Forests NSW publicly available data is cursory to say the least, and even what little forest was surveyed did not equal 'one hundred percent regenerated'.

From the period 2001 to 2006 the number of surveys for the Southern region was twenty one covering a total of 2,176 hectares.¹⁷⁹ There is no information provided by Forests NSW or the RFA regime on the effectiveness of regeneration.

The vascular floristics about a decade after harvesting operations differed significantly from the floristics of similarly aged forest regenerating after wildfire. In clear-felled areas, weed and sedge species occurred more

Residue versus Habitat Protection

A case study of the conditions of the Threatened Species Licence in the Southern Region.

Late in 2001 the pressure was on agency players to finalise prescriptions of the TSL within the context of the heated issue of a Charcoal Factory proposal. The factory was being promised 200,000 tpa of residue timber feedstock by Forests NSW. When the RFA process began, this proposal was not in the mix. Luckily, the factory never received approval, but the ramifications of the threat continue to this day.

It became an over-riding concern for the National Parks and Wildlife Service ("NPWS") that during the negotiations for the TSL the removal of up to 200,000 tonnes a year of residual timber was not considered to be part of Forests NSW operations in the South Coast sub-region.¹

A further concern was that the residual timber supply proposal forecasted the use of mechanical harvesting and grapple snagging. These techniques had not previously been used on the South Coast and therefore the impacts, negative or beneficial, of these types of operations in the forests of the region were not fully understood. Consequently, it was difficult for the NPWS to fully anticipate the implications of the residual timber supply proposal for the threatened species of the region. To ameliorate these concerns, NPWS proposed to include a review in the TSL to enable comprehensive assessment of the on-ground implications of the operations and for consideration of these implications in the TSL conditions.

2.1 k) SForessts NSW must assist the NPWS in a review of the on-ground implications of the removal of residual timber and mechanical harvesting / grapple snagging techniques as they relate to the management of threatened species. This review must commence within 18 months of the start of supply to residual timbers to the charcoal plant.

Forests NSW considered this reasonable and agreed to the wording of this proposal. However, the condition never made it into the final TSL document. Indeed the current prescriptions include such conditions like:

5.4 g 4) Nothing in this condition (being condition 5.4) prevents the use of a harvesting arm of a mechanical harvester to rehabilitate or reinstate ground or soil in Rainforest or an exclusion zone around Warm Temperate Rainforest or Cool Temperate Rainforest in accordance with another term or condition of this approval.

¹⁷⁸ Mackey B, 'Regional Forest Agreements – Business as Usual in the Southern Region?' (1999) 43 *National Parks Journal* 6.

¹⁷⁹ Southern IFOA Clause 52 Assessment of Regeneration Report 20/6/07, Forests NSW Batemans Bay; this 'report' is a thin five line by five column table.

frequently than on wildfire sites and *Acacia dealbata* was much more abundant, whereas resprouting shrubs, tree ferns and most ground-fern species were more abundant in wildfire regeneration sites. The low survival rate of resprouting species reported in an increasing number of studies suggests that soil disturbance is likely to be a major contributor to differences.¹⁸⁰

There should be full disclosure of the actual results of this monitoring.

Forests NSW do not ‘replant’ native forest. Once logged and burned the forests may take decades to regenerate or they might not regrow at all and they are altered inexorably.¹⁸¹ If Forests NSW ever did replant, they’d then fail again as replanting is not sufficient to offset the biodiversity losses created by clearing because of lags in species becoming established and sustained differences in species composition.

The one hundred percent regeneration rate for Southern in 2005-06 stated in the Draft Report is not only erroneous but highly incredible given that there were no regeneration surveys undertaken in the Tumut subregion in that period. There is no data given showing how much area was assessed, except:

In 2005–06 there were no regeneration surveys in the UNE or Eden regions.¹⁸²

Information from Forests NSW concerning Southern Region regeneration assessments for the period 2001-02 to 2005-06 stated that a total of 2019 hectares had been surveyed in the southern sub-region, and only 167 hectares in the Tumut sub-region.¹⁸³ The analysis reports that ‘are available’ on this clause 52 data are actually unavailable. The assessment report completed by 31 December 2006 is similarly ‘unavailable’. There is a lack of comprehensive information available showing the full extent of regeneration surveying efforts and the results thereof.

Comparisons to other reporting is incongruous in relation to effective regeneration. For example, in the State of the Forests Report 2008 (“SOFR”) at Table 37 on page 67 it is noted that in 2005-06 NSW had 3,870 hectares effectively regenerated; meanwhile in the Draft Report on Implementation on page 129 there were no regeneration surveys in Upper North East and Eden Regions; noted above Tumut also had zero surveys for the year; which means that 3,438 hectares must have been assessed solely in the Lower North East region that year. This seems like an incredible focus of regeneration surveying for the year 2005-06.

Based on the state and territory listings the largest increases in numbers of threatened taxa nationally are occurring on the south coast of New South Wales. Change in status of listed taxa in New South Wales is concentrated in subregions along the east coast. All species have as reasons for listing or decline, habitat loss, fragmentation due to road construction, intensive timber harvesting and altered fire regimes.¹⁸⁴

Ecosystem Health And Vitality

The biggest and most common ‘negative agents’ to the health and vitality of ecosystems are logging contractors and Forests NSW. The ecosystem health and vitality of a native forest becomes severely affected once logged and burnt.

Commercially logged forests have substantially lower carbon stocks and reduced biodiversity than intact natural forests, and studies have shown carbon stocks to be 40 to 60 per cent lower depending on the intensity of logging.¹⁸⁵ The data shows ongoing areas treated and expenditure on feral animals, but does not indicate what quantities are present, or what quantities have been exterminated, and therefore does not show how effective this program is.

Forests NSW stated at Table 5.18 on page 132 of the Draft Report that in 2004-05 in the Southern Region 877

¹⁸⁰ Ough K, ‘Regeneration of Wet Forest Flora a Decade after Clear-felling or Wildfire - Is There a Difference?’ 49 *Australian Journal of Botany* 5, p645, <<http://www.publish.csiro.au/paper/BT99053.htm>>.

¹⁸¹ Forests NSW burned 23,000 hectares in the South East alone in 2007, Forests NSW Annual Report 2007.

¹⁸² A Draft Report on Progress with Implementation of the New South Wales Regional Forest Agreements, (2009), Resource and Conservation Unit, NSW Department of Environment and Climate Change NSW, Sydney, p129.

¹⁸³ ‘Southern IFOA Clause 52 Assessment of Regeneration’, Forests NSW Batemans Bay Office, 20/6/07.

¹⁸⁴ *Assessment of Australia’s Terrestrial Biodiversity 2008*, Biodiversity Assessment Working Group of the National Land and Water Resources Audit for the Australian Government, Canberra, Department of the Environment, Water, Heritage and the Arts 2009.

¹⁸⁵ Mackey B, Keith H, Lindenmayer D, Berry S, ‘Green Carbon: The Role of Natural Forests in Carbon Storage, Part 1, ‘A Green Carbon Account of Australia’s South-Eastern Eucalypt Forest, and Policy Implications’ ANU E Press, (2008), Online version available at: <http://epress.anu.edu.au/green_carbon_citation.html>.

734 hectares of Forests NSW forest estate were treated for introduced predators, but earlier on page 101 it states at Table 5.1 that in the same year in the same region there were only 205 545 hectares of forest estate managed by Forests NSW.

There is a lack of independent scientific assessment examining the effectiveness of the RFA feral animal and weeds program. An example of weeds control in the Southern region can be found in compartment 516 of Buckenboura State Forest, an area of unprotected wilderness west of Batemans Bay, where logging machinery introduced Scotch Thistle to the recently logged environment. The famous ring of lantana around Gulaga Mountain in State forest compartments has not lessened in extent yet \$575 965 was spent by Forests NSW on weed management during the period 2002-2006.

Hundreds of thousands of dollars was spent in the Southern region but again there is no data on what outcomes or effects this spending had on noxious weeds. We note the whole of this criterion manages to evade mention of climate change, whereas it was stated in the SOFR 2008 that climate change will have a profound effect on forests.

Post Fire Recovery And Research

The roll out of RFAs throughout the State's forested zones was the first step to increasing fire risk for NSW.

One of the major planning constraints associated with thinning is *the higher level of fuel present after the operations*. It is not considered feasible in Tasmania to carry out fuel reduction burns in thinned coupes because of the high fuel loads and the sensitivity of the retained trees to fire. The location of thinned coupes amongst conventionally logged coupes is problematic, as it is not recommended that any regeneration burn take place within two kilometres of areas with high levels of flash fuel within two years of harvest (Cheney 1988).

And:

Tree crowns (heads), bark, and other harvest residue make up the fuel load. The climate on the floor of the forest is altered by thinning, with higher wind speeds and temperature, lower humidity, and lower moisture content in the fuel itself. Understorey vegetation characteristics change because of these changes to the microclimate, especially increased light. Bracken ferns and cutting grass may grow vigorously, each having a far higher flammability than the replaced woody species (Cheney and Gould 1991).

Strangely this is from the Forestry Commissions own data but is only now coming to light and certainly was not mentioned in 1998, when the RFAs were signed.

Native forests can take hundreds of years to recover from Forests NSW mismanaged and very hot 'post harvest burns'.

Soil and Water Resources

...the most fundamental resources of a forest environment: soil and water.¹⁸⁶

As reported, in the State of the Forests Report 2008, NSW has about 200,000 hectares managed specifically for water supply. This equates to 0.24% of the land area of the state, or 0.76% of the NSW native forest area.¹⁸⁷

Many studies have shown that microbial biomass decreases following forest harvesting, and that these changes occurred before measurable changes in soil organic matter quantity were found. The decline of microbial Carbon and Nitrogen following tree removal ranged between twenty seven percent and sixty four percent. When bacterial and fungal biomass were determined separately, it was found that fungal biomass declined more sharply than bacteria. The often rapid decrease in fungal biomass may be explained by a reduction in ectomycorrhizal fungi, which decline sharply once the root system of cut stems can no longer support them.

Conventional practices in intensive forest use such as short rotations, use of heavy machinery, harrowing and high intensity burning of slash can be viewed as detrimental to soil health. After burning, the organic content of forest soils can be transformed into ash and mineralised nutrients. This may result in an intense pulse of nutrients that can change the soil pH and can easily be leached, leaving a nutrient and humus poor soil, with a significantly different structure

¹⁸⁶ *Australia's State of the Forests Report 2008*, Montreal Process Implementation Group for Australia (2008), Bureau of Rural Sciences, Canberra, p87.

¹⁸⁷ See the State of the Forests Report, 2008, above n186, pp7 and 89.

from the original condition.¹⁸⁸

Research by the CSIRO states:

Timber harvesting and its associated activities cause drastic changes in soil physical structures and hydraulic properties. In situ changes of surface soil hydraulic properties using a newly developed disc permeameter are assessed. Five forest sites, two radiata pine forests near Oberon and three native eucalypt forests near Eden NSW, were investigated for the impact of timber harvesting on soil structure and hydraulic properties. On most sites, there was an increase in soil bulk density and a declining trend in sorptivity and hydraulic conductivity associated with logging. Changes in hydraulic properties suggest that the logging and associated activities had resulted in soil compaction, attributable mainly to redistribution of soil pore sizes and with a decrease mostly in pores greater than 3mm in diameter. This reduction in macroporosity suggests a reduction in aeration and a change of water retention characteristics.¹⁸⁹

Usually the majority of forestry operation non-compliances reported are on EPL breaches and how they relate to soil and water protection practices. One CRA report stated that all impacts of logging were significant at only buffer widths of less than 30 metres.¹⁹⁰

Currently all unmapped, first and second order streams have less than thirty metre buffers, which suggests that current logging adjacent to these streams is having a significant impact. This report went on to say that the methodology used for the EPLs is not scientifically defendable. Even more recent research found in the SOFR 2008 suggests that twenty metre buffers need to be retained to generally reduce turbidity levels.¹⁹¹

Forestry machinery compacts soil, preventing absorption of rainwater. When it rains the run-off carries a significant amount of sediment into streams. Movement of this machinery and other logging-related vehicles along forest roads raises a large volume of dust (30 -90 tonnes per year for every hectare of unsealed road, compared to 0.3 tonnes for unsealed roads in undisturbed forests). Erosion is the largest contributor to turbid water in Australia.

A study of the Eurobodalla catchments in NSW showed that approximately 905 tonnes of sediment were transported through the river in one four-day storm. This is compared with thirteen tonnes for the previous six-month period.¹⁹² Significant sediment loads have also been identified as coming from the 50,000 kilometres of unsealed roads within state forests and reserves.¹⁹³ Suspended sediment loads in inland waters caused by gully erosion and degraded flow paths, can have significant impacts such as siltation of river channels, infilling of wetlands, reduced light penetration inhibiting photosynthesis, and loss of habitat and spawning sites for gravel-bed dependent fish.¹⁹⁴

Water costs have soared since the CRA analysis was done. The price per kilolitre in the Eurobodalla in 2000 was \$0.80.¹⁹⁵ It is currently \$2.40 per kilolitre and \$3.60 for consumption of over one hundred fifty kilolitres. When forests are logged, the amount of water flowing in creeks and rivers, after a short initial increase, can decrease by up to fifty percent. It may even cease to flow in dry periods. Regrowth needs much more water to

¹⁸⁸ Green D, and McQuillan P, 'The Soil Mites of Warra and their Recovery Under Modern Forestry Practices' (2004) <http://www.warra.com/warra/research_projects/research_project_WRA103.html>.

¹⁸⁹ Hung J (CSIRO, Division of Soils); Lacey ST (State Forests of New South Wales); Ryan PJ (CSIRO, Division of Forestry) 'Impact of Forest Harvesting on the Hydraulic Properties of Surface Soil' (1996) 02 *Soil Science* 161 (2), p79-86.

¹⁹⁰ From CRA report 'Water Quality and Quantity for the UNE, LNE and Southern RFA Regions' (1998) Project NA61/ESFM, p54.

¹⁹¹ See the State of the Forests Report 2008, above n186, p109.

¹⁹² Drewry J J, Newham L T H, Greene R S B, Jakeman A J and Croke B F W, 'An Approach to Assess and Manage Nutrient Loads in Coastal Catchments of the Eurobodalla Region, NSW, Australia' (2005), MODSIM 2005 International Congress on Modelling and Simulation, pp 2658-2664.

¹⁹³ Drewry J J, Newham L T H, and Greene R S B, 'An Index-Based Modelling Approach to Evaluate Nutrient Loss Risk at Catchment-Scales' (2008) Integrated Catchment Assessment and Management Centre, The Australian National University, Canberra <http://www.mssanz.org.au/modsim07/papers/43_s47/AnIndex-Basedsd47_Drewry_.pdf>.

¹⁹⁴ See Monitoring and Evaluation Trials, New South Wales Region, Southern Catchment, Phase 1 Report, (2004) National Land & Water Resources Audit, <<http://lwa.gov.au/files/products/national-land-and-water-resources-audit/er050846/er050846.pdf>>; and also NSW Diffuse Source Water Strategy, DECC 2009/085, <<http://www.environment.nsw.gov.au/resources/water/09085dswp.pdf>>.

¹⁹⁵ See the Water Use and Allocation in the Eurobodalla <<http://www.esc.nsw.gov.au/site/plans/Documents/Archive/1999/SOE/SOERd/TheReport/Eurobodalla/IndicatorResults/WaterDemandManagement.htm>>.

grow than mature trees.

In 1999 it was estimated that the cost of water lost by the logging of 2000 hectares of native forests in the Eurobodalla catchments in one year to be over ten million dollars. This amount is compounded each year that these catchment forests continue to be logged.¹⁹⁶ Therefore there is a need to independently reassess the economic costs of the RFA as it applies to water quantity and security.

The severity of the prolonged drought and inclement climate change conditions is readily portrayed by the flow recordings of the three rivers, the Tuross, Deua, and Buckenboura, in the Eurobodalla Shire. The Shire's water supply depends upon these rivers. Logging in these catchments is continuing to compound the negative effects of this form of land use on catchment hydrology. Since the last minor flood peak in February 2008 these rivers have been extremely low.

SOCIO-ECONOMIC BENEFITS

The task was made difficult by the limited time frame and the need to commence and undertake studies without knowledge of the options that would arise from the negotiation process.¹⁹⁷

The only economic benefits of logging are to the chipmill and logging contractors. Forests NSW is currently running a staggering two hundred plus million dollars in the red.

I can only see this loss increasing as Forests NSW continues to look for new sources of hardwood timber and the costs of harvest and haulage increase. This will be very difficult to manage.¹⁹⁸

Forests NSW figures do not delineate between native and plantation sectors. Further detailed reporting should be done to allow the public to understand the true socio-economic 'benefits' of native forest logging.

It should be obvious for Forests NSW to recognise that there is no socio-economic benefit in logging native forests when consideration of Forests NSW employee numbers show a drop of 2,183 employees over the period 2002 to 2008.¹⁹⁹ Forests NSW state it will maximise its contribution to the social wellbeing of the communities, yet in Forests NSW Annual reports its shown that Forests NSW did not make any grants to non-Government community organisations during 2005-06, 2006-07, 2007-08 and 2009-10.²⁰⁰ Further the present system is uneconomical, as the supposed income is generated by the depletion of capital assets.

South Coast NF Employment Figures²⁰¹

Place of employment	employees
Blue Ridge	55
Boral Nowra	55
Boral Batemans Bay	17
Boral Narooma	20
South East Fibre Exports	75
Eden logging workers	21
Southern logging workers	27
Tumut logging workers	3
Log truck drivers	53
Total	326

We would propose that the saw mills could use plantation as could SEFE.

¹⁹⁶ Atech Group, 'Southern Forests Catchment Values and Threats' (1999) <<http://www.atechgroup.com.au>>.

¹⁹⁷ Draft Interim Assessment report, 'Socio-economic Assessment Framework' <http://www.racac.nsw.gov.au/reports/rap/chapter2/ch2_700.htm> Ch 2.7>.

¹⁹⁸ The Auditor-General, Mr Peter Achterstraat, Media Release, Auditor-General's Report, Sustaining Native Forest Operations, 29/4/2009, <<http://www.audit.nsw.gov.au>>.

¹⁹⁹ The NSW Forest Agreements Implementation Report (2001/2002) published in 2006, p69 and Forests NSW Annual report 2007-08, p88.

²⁰⁰ Forests NSW Annual Reports; 2005-06 p59, 2006-07 p69, 2007-08 p81.

²⁰¹ These figures are pers comm to author, however on ocular evidence there is never more than 10 or 11 cars parked at Batemans Bay, 11 at Narooma, 20 at Blue Ridge and 20 at Nowra therefore it would be interesting to find out what the real figures are; there is one crew in the Southern region Bodalla SF Cpt 3043 who are from Tasmania and should not be counted when considering a NSW payout; the truck driver figures are a conglomerate of Victorian and NSW truck drivers.

LEGISLATIVE FRAMEWORKS

To tell deliberate lies while genuinely believing in them, to forget any fact that has become inconvenient, and then, when it becomes necessary again, to draw it back from oblivion for just so long as it is needed, to deny the existence of objective reality and all the while to take account of the reality which one denies—all this is indispensably necessary.²⁰²

Foresters have eagerly endorsed part of Principle 1 of the UN *Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests* which states:

(a) States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies...

But the Principle goes on to state:

And have responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.²⁰³

The strict statutory obligations of the *Environment Planning and Assessment Act 1979* (NSW) (“EPA Act”), the *Protection of Environment Operations Act 1997* (NSW) (“POEO Act”), the *Threatened Species and Conservation Act 1995* (NSW) (“TSC Act”), *National Parks and Wildlife Act 1974* (NSW) (“NPW Act 1974”) and the *Environment Protection Biodiversity and Conservation Act 1999* (Cth) (“EPBC Act”) are such that, arguably, anyone contemplating illegal activities against native flora, fauna or the environment does so at their peril.²⁰⁴ Not so the Forestry Commission, trading as Forests NSW, for areas covered under the IFOAs and RFAs.

Forestry operations are bound by the *Protection of the Environment Operations Act 1997* and are licensed under Section 55. Under the IFOA these licences provide that State Forests must comply with Section 120 of the POEO Act:

Except as may be expressly provided in any condition of this licence.²⁰⁵

Under clause 29(3A) and (3B) Forests NSW can turn the EPLs on and off depending on whether they want to log unmapped drainage lines with immunity.

There are several international agreements and domestic policy documents that are legally and morally binding on the Commonwealth.

The Rio Declaration, *Convention on Biological Diversity* 1992 at Article 8(c) states:

Each Contracting Party shall, as far as possible and as appropriate:

Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas with a view to ensuring their conservation and sustainable use;

and

(d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings.²⁰⁶

Commonwealth, State and Local governments are governed by the obligations of the *Intergovernmental Agreement on the Environment* 1992 which states:²⁰⁷

The parties consider that the adoption of sound environmental practices and procedures, as a basis for ecologically sustainable development, will benefit both the Australian people and environment, and the international community

²⁰² Orwell G, *Nineteen Eighty-Four*, (1949) Penguin Books, England, (reprint 1980), p171.

²⁰³ *Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests* (Rio de Janeiro, 3-14 June 1992) A/CONF.151/26 (Vol. III) emphasis added.

²⁰⁴ Macintosh A, ‘Why the Environment Protection and Biodiversity Conservation Act’s Referral, Assessment and Approval Process is Failing to Achieve its Environmental Objectives’ (2004) 21 *Environment and Planning Law Journal* 288.

²⁰⁵ Southern Region IFOA at Appendix A 5 (emphasis added).

²⁰⁶ The Rio Declaration, *Convention on Biological Diversity*, Rio de Janeiro, 5 June 1992, Entry into force for Australia: 29 December 1993, Australian Treaty Series 1993 No 32.

²⁰⁷ *National Environment Protection Council (New South Wales) Act 1995 (NSW), Schedule 1, InterGovernmental Agreement on the Environment* 1992.

and environment. This requires the effective integration of economic and environmental considerations in decision-making processes, in order to improve community well-being and to benefit future generations.²⁰⁸

The Montreal Process at Criteria 7 states:²⁰⁹

Legal, institutional and policy framework for forest conservation and sustainable management

7.1 Extent to which the legal framework (laws, regulations, guidelines) supports the conservation and sustainable management of forests, including the extent to which it:

- Clarifies property rights, provides for appropriate land tenure arrangements, recognizes customary and traditional rights of indigenous people, and provides means of resolving property disputes by due process;
- Provides opportunities for public participation in public policy and decision-making related to forests and public access to information;
- Provides for the management of forests to conserve special environmental, cultural, social and/or scientific values.²¹⁰

Criteria 7.2 states:

7.2 Extent to which the institutional framework supports the conservation and sustainable management of forests, including the capacity to:

Provide for public involvement activities and public education, awareness and extension programs, and make available forest-related information;

7.5.d Enhancement of ability to predict impacts of human intervention on forests;

7.5.e Ability to predict impacts on forests of possible climate change.²¹¹

And at 7.2e is the requirement to: Enforce laws, regulations and guidelines.²¹²

Despite numerous legitimate breaches referred to DECCW there has been no prosecutions for breaches of the EPLs on the South Coast since the signing of the RFAs, and in fact there has only been one prosecution in the whole of NSW.²¹³ Nevertheless, the output to date of regulatory enforcement actions in no way reflects the rate of non-compliance. On ground assessment evidence suggests that non-compliance rates are now running at four per hectare of forest logged, that is, over ten percent of all areas logged are in breach. The Draft Implementation Report states breaches can run up to ninety one per audit.²¹⁴

Commonwealth Legislation

The Regional Forest Agreements Act 2002 (Cth) (“RFA Act”) removes RFA areas from the scope of the *Export Control Act 1982* (Cth) and other associated regulations. Operators are not required to obtain a yearly licence to export woodchips and there are no limits on the amount of woodchips which can be removed.²¹⁵ The significance of this is that currently over eighty percent of NSW native forest is turned into woodchips.

The RFA Act also reinforces those provisions of an RFA agreement which require the Commonwealth to compensate a State.²¹⁶ Under an RFA when the Commonwealth takes any action to protect environmental or heritage values in native forests, which prevents or limits the use of land for any forestry operations, compensation is required.

Section 6 removes forestry operations conducted on land covered by an RFA from being subject to the

²⁰⁸ For an in-depth analysis on inter-generational equity see Dr Laura Horn, ‘Climate Change Litigation Actions for Future Generations’ (2008) 25 *Environment and Planning Law Journal* 115.

²⁰⁹ Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests ‘*The Montréal Process*’ Third Edition, December 2007, <www.rinya.maff.go.jp/mpci/>.

²¹⁰ *The Montréal Process*, above n210 at a) c) d) e).

²¹¹ The authors have had many conversations with Forests NSW officers who truly believe there is no such thing as climate change.

²¹² The Montreal Process also states at 7.4 Capacity to measure and monitor changes in the conservation and sustainable management of forests, including: 7.4.a Availability and extent of up-to-date data, statistics and other information important to measuring or describing indicators associated with criteria 1-7; 7.4.b Scope, frequency and statistical reliability of forest inventories, assessments, monitoring and other relevant information; 7.5.b Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest-related resource depletion or replenishment in national accounting systems; of which have not been adhered to by Forests NSW.

²¹³ See title page of this report.

²¹⁴ See A Draft Report on Progress with Implementation of the New South Wales Regional Forest Agreements (2009), Resource and Conservation Unit, NSW Department of Environment and Climate Change NSW, Sydney, p175.

²¹⁵ Note: The *Export Control Act 1982* regulates the export of ‘prescribed goods’; in 2008 SEFE exported 977,074 tonnes of green wood and recorded a record profit of \$10,907,529.

²¹⁶ *Regional Forest Agreements Act 2002* (Cth) s8.

environmental impact assessment provisions in the EPBC Act. This means that no environmental impact assessment under Commonwealth legislation is required.²¹⁷

The EPBC Act effects public participation in environmental law enforcement in a number of ways.²¹⁸ The Act states that Part 3 does not apply to forestry operations. Part 3 contains requirements for environmental approvals of activities with a significant impact on a declared World Heritage property, a National Heritage place, a declared Ramsar wetland, a listed migratory species, and actions on listed threatened species or endangered communities are prohibited without approval. It also contains the offences and penalties for breaches of these sections.

For a very comprehensive and insightful critique on issues of Indigenous cultural heritage see the Australian Network of Environmental Defenders Offices ‘Submission to the Independent EPBC Act Review’ (2009) available on the Commonwealth Department of Environments website.²¹⁹ The Australian Network of Environmental Defenders Offices in quoting *The Declaration of the Rights of Indigenous People*, Article 19 stated:

The *EPBC Act* currently fails to implement robust Indigenous engagement provisions. ANEDO submits that the Act should be amended to implement a process of “free prior and informed consent before adopting and implementing legislative or administrative measures that may affect them (Indigenous peoples)”

The *Amendment Act 2006* (Cth) reduced rights of the public to participate in decision making processes under the EPBC Act. The public cannot request an emergency listing on the National Heritage list and there is no longer a right to appeal to the Administrative Appeals Tribunal against various decisions by the Minister under Part 13A or s303CC(5), s303FN, s303FO and s303FP.²²⁰

Although the *Administrative Decisions (Judicial Review) Act 1977* (Cth) states individuals or groups do not have standing to apply for a review unless they have a private right affected, the definition for ‘person aggrieved’ has been broadened under the EPBC Act.²²¹ If the person or group that has been, for the two years prior to the offence, protecting, conserving or researching the environment, and is recognised by the public and governments as the protector of those environmental interests, they can establish standing.²²²

The greatest threats to Australia’s biodiversity are caused by broad-scale land clearing and forestry operations including establishment of plantations and fire management practices, yet these industrial forestry practices continue to remain exempt from legislation because of the RFA regime.²²³

Section 117 of the *Commonwealth of Australia Constitution Act* (The Constitution) states:

A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

If citizens are entitled to ‘their day in court’ under common law equity and being disallowed this right by discriminatory legislation that is State-centric, then the NSW legislation is unconstitutional. The remedy required is that government repeal sections 38–41 of the EPBC Act (those sections relating to forestry operations occurring in areas covered by a RFA that do not currently require approval under the EPBC Act).

²¹⁷ *Regional Forest Agreements Act 2002* (Cth) s6 (4).

²¹⁸ For discussion on the effectiveness of the EPBC Act in protecting the environment see McGrath C ‘Swirls in the Stream of Australian Environmental Law: Debate on the EPBC Act’ (2006) 23 *Environment and Planning Law Journal* 165; and see also Macintosh A, and Wilkinson D, ‘EPBC Act – The Case for Reform’ (2005) 10 *Australian Journal of Natural Resource Law and Policy* 1, p139; see also Macintosh A, ‘Environment Protection and Biodiversity Conservation Act An Ongoing Failure’ The Australia Institute, July 2006; section 38 is the corresponding section to s36 in the *Forestry and National Park Estate Act 1998* (NSW).

²¹⁹ ANEDO submission on the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), (2009), <<http://www.environment.gov.au/epbc/review/submissions/pubs/189-australian-network-of-environmental-defenders.pdf>>.

²²⁰ See s303GJ of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

²²¹ A person or organisation with a ‘mere emotional or intellectual concern’ or belief affected by the administrative action did not have standing to seek review; see for example *Onus v Alcoa of Australia Ltd* (1981) 149 CLR 27; and *North Coast Environmental Council Inc v Minister for Resources* (1994) 55 FCR 492.

²²² For definition of person or group aggrieved see the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) s487.

²²³ See The National Strategy for the Conservation of Australia’s Biological Diversity (1996).

NSW State Legislation

The *Forestry and National Park Estate Act 1998* (NSW).

There are many exemptions to civil litigation under the FNPE Act. The Act states at s36 that if logging or roading is in an area covered under the IFOAs that Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW) does not apply, an environmental planning instrument under the EPA Act cannot ‘prohibit, require development consent for or otherwise restrict forestry operations’ and in (5): this applies to an environmental planning instrument made before or after the commencement of this section.²²⁴

Forestry operations cannot be declared to be a project under Part 3A of the EPA Act, an order under Division 2A of Part 6 of the EPA Act does not have effect, any approval of forestry operations that is in force under Division 4 of Part 5 of the EPA Act has no effect during any period that Part 5 of that Act does not apply to the forestry operations, and any development consent for forestry operations that is in force under Part 4 of the EPA Act has no effect during any period that development consent under Part 4 of that Act is not required for the forestry operations.²²⁵

Stop work orders and interim protection orders of the NPW Act and the TSC Act do not apply.²²⁶ An order under section 124 of the *Local Government Act 1993* does not have effect.²²⁷ At s39 an area in which forestry operations authorised by an IFOA may be carried out cannot be proposed or identified as, or declared to be, a wilderness area under the *Wilderness Act 1987* (NSW) or the NPWA Act.

At s 40 proceedings may not be brought if the breach is:

a breach of the FNPE Act (including a breach of any forest agreement), a breach of an IFOA (including a breach of the terms of any licence provided by the approval), a breach of an Act or law that arises because any defence provided by any such licence is not available as a result of a breach of the licence, the Act that includes the statutory provision (including a breach of an instrument made under that Act) if the breach relates to forestry operations to which an IFOA applies.²²⁸

Section 40 also exempts the Act from:

..a provision of an Act that gives any person a right to institute proceedings in a court to remedy or restrain a breach (or a threatened or apprehended breach) of the Act or an instrument made under the Act, whether or not any right of the person has been or may be infringed by or as a consequence of that breach.

When the legislation was introduced by the government the community was given assurances that:

The agencies which currently have enforcement and compliance powers will continue to have those powers and continue to use them to ensure that the licences are adhered to.²²⁹

A contravention of the terms of a relevant licence makes the person carrying out the forestry operations liable for offences for which the licence provides a defence (eg. damage to critical habitat of threatened species under the NPW Act; offence of polluting waters under the POEO Act 1997.²³⁰

²²⁴ *Forestry and National Park Estate Act 1998* (NSW) s36 (1).

²²⁵ *Forestry and National Park Estate Act 1998* (NSW) s36(2), (2A), (3), (4).

²²⁶ *National Park and Wildlife Act 1974* (NSW) s37 Part 6A; the *Threatened Species Conservation Act 1995* (NSW) Division 1 of Part 7 (*Forestry and National Park Estate Act 1998* (NSW) s37).

²²⁷ *Forestry and National Park Estate Act 1998* (NSW) s38.

²²⁸ *Forestry and National Park Estate Act 1998* (NSW) s40 (2)(a), (b) (c),& (d); at 40 (1); the *Forestry and National Park Estate Act 1998* (NSW) is also exempt from s 219, s252 and s253 of the *Protection of the Environment Operations Act 1997*.

²²⁹ Minister Yeadon, NSW Legislative Assembly Hansard, 12 November 1998.

²³⁰ *Forestry and National Park Estate Act 1998* (NSW) note on p21.

Remedies of Threatened or Apprehended Breaches Since the Date of Assent.²³¹

EDEN	1999 2000	2000 2001	2001 2002	2002 2003	2003 2004	2004 2005	2005 2006	2006 2007	2007 2008	2008 2009	TOTAL
Audits	5	3	7	3	3	4	1	2	3	4	35
Breaches	57	34	39	24	33	17	91	104	108	79*	586
Warning Letter	3	3	3	2	3	3	1	2	3	1*	24
Remedial Works	17	17	5	2	13	5	8	8	4	0	79
Clean-up Action	0	0	0	0	0	0	1	0	0	0	1
PINS	0	0	0	0	0	0	0	0	0	2*	0
Prosecution	0	0	0	0	0	0	0	0	0	0	0

* investigations ongoing.

SOUTHERN	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	TOTAL
Audits	1	6	4	2	2	6	3	4	28
Breaches	3	196	35	1	107	1	115	27*	485
Warning Letter	1	1	2	0	2	1	3	2*	12
Remedial Works(per site)	2	4	7	1	14	1	6	0	35
Clean-up Action	0	0	0	0	0	0	1	0	1
PINS	0	1	0	0	0	1	0	2	2
Prosecutions	0	0	0	0	0	0	0	0	0

An oft favoured quote by Forests NSW and DECCW EPRG is found in the EPA Prosecution Guidelines:

It has never been the rule in this country ... that suspected criminal offences must automatically be the subject of prosecution.²³²

In fact the full quote from Sir Hartley Shawcross goes on to state:

Indeed the very first Regulations under which the Director of Public Prosecutions worked provided that he should ... prosecute "wherever it appears that the offence or the circumstances of its commission is or are of such a nature that a prosecution in respect thereof is required *in the public interest*."

Sheahan J held in *EPA v Forestry Commission (1997)* that:

The Forestry Commission, although gaining a profit from its activities, carries out a function in the public interest, and the public looks to the public body involved in the industry to set some standard.

²³¹ DECCW, Provided by Ian Cranwell, 2009.

²³² EPA Prosecution Guidelines at 3: Sir Hartley Shawcross QC, UK Attorney General and former Nuremberg trial prosecutor, speaking in the House of Commons on 29 January 1951, emphasis added.

Mr Justice Sheahan also held that:

The forestry industry must be persuaded to adopt preventative measures because the potential for harm to the environment is great, and is a public concern reflected in the relevant legislation.²³³

Section 25b of the FNPE Act states the purpose of the IFOAs are:

...for the protection of the environment and for threatened species conservation.

It was a condition under the FNPE Act that the EPA, now DECCW 'continue to enforce the conditions' of the Act.

The protection of native forests and the mitigation of climate change impacts is definitely in the public interest. Yet responses to forest auditing breaches have resulted in an apparent unenforceability and lack of compliance with the FNPE Act.

'...there is some difficulty in making a determination on the suitability of trees selected for retention after a harvesting event'.²³⁴

This situation is wholly due to the IFOA being riddled with grey-wording, myriad loopholes and allowances the forestry industry has white-anted into the prescriptions, making conservation bottom priority and DOPI output high priority. The promised maintenance of the enforcement of the FNPE Act has not materialised and has been budgeted to redundancy status. In Mogo State Forest for example DECCW took no further enforcement action against Forests NSW for a breach when told by Forests NSW that:

Forests NSW did acknowledge that whilst some of the trees marked for retention did not strictly meet the requirements of hollow-bearing, an adequate number were retained across the landscape when unmarked trees were included in the count.²³⁵

There is no clause in the Southern Region IFOA allowing unmarked trees to be used in habitat tree retention counts.

The NSW Scientific Committee made a determination in 2007 that the loss of hollow-bearing trees is a key threatening process. During forestry operations thousands of hollow-bearing trees per week are routinely destroyed. Representations have been made to the relevant Ministers recommending changes to forestry operations prescriptions to ameliorate this environmental impact but no change has been made to on-ground forestry activities to prevent this on-going loss.²³⁶

DECCW Environment Protection and Regulations Forestry unit often resort to sending Forests NSW officers to investigate breaches. Therefore, it should come as no surprise, that when the perpetrator of the crime is sent to report on the crime the result is no evidence of the crime.

Even though the RFAs are not law, they are merely agreements, Forests NSW still must comply with its obligations under the RFAs in order to get an exemption from the EPA Act and TSC Act's requirements. In *Brown v Forestry Tasmania* Marshall J ruled that as Forestry Tasmania had not complied with the RFA it was not exempt from the EPBC Act and even though the case was overturned on appeal, the judgment still stands.²³⁷ If the Federal Court decision was brought down in NSW at this time, then all NSW forestry operations would have to cease.

National Parks and Wildlife Act 1974 (NSW).

Forests NSW buffer zones on sites of significance are very small at ten metres only. If sites are damaged or destroyed there is no enforcement of section 37 subsection (1) that states Stop work orders and interim protection orders of the NPW Act can be applied.²³⁸ Forests NSW state any destruction was an unfortunate accident.

²³³ *EPA v Forestry Commission of NSW* [1997] NSWLEC 96, Sheahan J.

²³⁴ Letter: DECCW to South East Forest Rescue(SEFR), 12/2/08.

²³⁵ Letter: DECCW to T Whan (SEFR) 16/2/09.

²³⁶ This also applies to the Key Threatening Process of removal of dead standing trees.

²³⁷ See *Brown v Forestry Tasmania and Others* [2006] FCA 1729, Marshall J.

²³⁸ *Forestry and National Park Estate Act 1998* (NSW) s37(2) states: However that does not prevent the making of an order for the purpose of protecting any Aboriginal relic or place.

An article by Ridge and Seiver concerning the Sandon Point Development sums up community feeling on this Act:²³⁹

The central fault with the NPW Act cultural heritage provisions is that an Aboriginal community cannot prevent an activity that is likely to result in the destruction of their heritage. The agency responsible for administering the NPW Act retains all ownership rights, including the right to consent to destruction of their property, Aboriginal heritage. The NPW Act does not protect Aboriginal heritage, it merely regulates its destruction.²⁴⁰

Therefore the legislation enables the listing of sites but does not protect them.²⁴¹ In 2006 the Gulaga Mountain blockade was an example.²⁴² Also see the recent logging of Mumbulla Mountain. Mumbulla Mountain is an Area of great Aboriginal Significance. Part of the Mountain was gazetted in 1984. Forests NSW illegally logged this place from March to May 2010.²⁴³

Threatened Species Conservation Act 1995 (NSW)²⁴⁴

Forests NSW hold licences granted by the Director-General of National Parks and Wildlife. The licence holder must comply with conditions and requirements of the licence. The person carrying out the forestry operations is liable for an offence under the NPW Act.²⁴⁵ The licence holder is not authorised to harm endangered populations or communities, pick plants that are part of those communities, damage critical habitat or damage the habitat of endangered populations or communities.

As is standard with forestry operations there is a loophole:

it may be a defence to a prosecution for an offence if the accused proves that the offence was authorised to be done, and was done in accordance with a general licence or was the subject of a certificate issued under s95 (2) of the TSC Act.²⁴⁶

The damage caused by the forestry worker's interpretation of the IFOA Threatened Species Licence prescriptions is systemic and across the board.²⁴⁷ Despite numerous legitimate breaches referred to the DECCW by many NGO and independent forest auditing groups, there has not been a prosecution for breaches of the TSLs since the signing of the RFAs.²⁴⁸

Garth Riddell sums up the TSC Act succinctly:

After 10 years in operation the TSC Act has not met its primary objectives. Although it has made a small contribution to the conservation of biological diversity and the promotion of ecologically sustainable development, it has not gone far enough. The Act's protections are procedural rather than substantive, its provisions are placatory rather than effective and its operation has been hampered by a lack of funding, lack of will and widespread misunderstanding of the concepts underlying it.²⁴⁹

The Purpose of Legislation

It should come as no surprise that the FNPE Act and its subordinate regulations were enacted to further the interests of the Forestry Commission, Harris Daishowa, the Construction Forestry Mining and Energy Union,

²³⁹ For an overview see *Minister for Planning v Walker* [2008] NSWCA 224.

²⁴⁰ Ridge K and Seiver A, 'Carriage: An Elders Journey through the Courts' (2005) 10 *Indigenous Law Bulletin*.

²⁴¹ For a very comprehensive overview of legislation effect on sites see Aliza Tubman, 'Protecting Aboriginal Sacred Sites: the Aftermath of the Hindmarsh Island Dispute' (2002) 19 *Environment and Planning Law Journal* 2.

²⁴² Uncle Guboo Ted Thomas, (Aboriginal elder and traditional owner) *Mumbulla Mountain; an Anthropological and Archaeological Investigation*, Brian J Egloff, Aboriginal and Historical Resources, NPWS, 1979.

²⁴³ *FNSW v Hughes and Ors* (2011) NSWLC (Batemans Bay).

²⁴⁴ Farrier D, 'Fragmented Law in Fragmented Landscapes: the Slow Evolution of Integrated Natural Resource Management in NSW' (2002) 19 *Environment and Planning Law Journal* 89; Farrier D, Kelly AHH, Comino M and Bond M, 'Integrated Land and Water Management in New South Wales: Plans, Problems and Possibilities' (1998) 5 *Australian Journal of Natural Resource Law and Policy* 153.

²⁴⁵ *National Park and Wildlife Act 1974* (NSW) s118A.

²⁴⁶ *National Park and Wildlife Act 1974* (NSW) s3 (a), s3(a1).

²⁴⁷ For example the Southern Brown Bandicoots original prescription was an exclusion zone of 200 hectares around each record of the species but in the latest harvest plan from Nadgee State Forest there is no prescription (Forests NSW Harvest Plan for Compartments 80/81 2009); Forests NSW was recently logging grey-headed flying fox habitat with immunity (Cpt 62 Sth Broome, NSW).

²⁴⁸ DECCW statistics, above n231.

²⁴⁹ Garth Riddell, 'A Crumbling Wall: The Threatened Species Conservation Act 10 years On' (2005) 22 *Environment and Planning Law Journal* 446.

National Association of Forest Industries, the logging and haulage contractors, the police and the State.²⁵⁰

Sometimes legislation arises to further the interests of one group or another, against other interest groups and sometimes the entire society.²⁵¹

An indication that this was the case is the reaction of the Commonwealth when the Queensland government refused to sign the Queensland RFAs and proposed instead a transition to hardwood plantations.²⁵² The Commonwealth Minister for Forestry, Wilson Tuckey, wrote personally to the thirty sawmills that would be affected, within three working days of the Queensland government's proposal announcement, opposing the proposal, couched in a concern for jobs.

Our fundamental view is that a SE Queensland RFA must provide for a continued, viable native timber industry...[it must fall] within the parameters of ...our requirement for real jobs protection and growth.²⁵³

This statement was proved erroneous when more jobs were created as part of the plantation sector proposal than under the status quo of the RFA proposal.

The legislation exemptions were put in place because the EIS processes were costly, time consuming and became increasingly more difficult for the Forestry Commission to comply with. Protests were also very expensive and time consuming for the police and the State.²⁵⁴ The Labour government attempted to deal with the conflict by imposing restrictions on civil litigation but:

Since the contradictions remain the same and the legislation is merely an overlay it is likely to give rise to further conflicts at a later date.²⁵⁵

This theory has become reality. The removal of third-party rights from the FNPE Act has resulted in the court systems being burdened with forestry related cases of misdemeanours, such as 'Pedestrian Obstructs Driver' (\$53 fine), for sometimes periods of more than two years. The cost to the State in policing terms is extraordinary: \$12,757 for one day in Bega, and \$288,000 total (\$46,971 in overtime) for a seventeen week blockade.²⁵⁶ There is no data on how much the private security firm was paid. The last Supreme Court action resulted in Forests NSW having to pay over \$30,000 in costs.²⁵⁷

Another example is the protests over the logging of Mumbulla Mountain which went from March to May last year. Police were present every day to enable the logging, twice Police Rescue were called. Eleven people were facing 31 charges from events over 4 days of protests. Crown solicitors were flown in from Sydney to prosecute on behalf of Forests NSW. The three day hearing resulted in all charges bar two being dismissed. Forests NSW were ordered to pay all costs. There are still further cases pending.

The conflict has not disappeared and the fact that the police force are used to enforce the breaches of the FNPE Act is a democratic anomaly.²⁵⁸

It seems there is no obstacle to the Commonwealth government overriding the State apart from political will.²⁵⁹ The amount of money in compensation and redundancy packages to logging contractors is paltry compared to other buyout packages in previous years.

²⁵⁰ Now Nippon Paper Group trading as South East Fibre Exports, there was a great piece of graffiti on the rear of a log truck, "I'm too young to Dieshowa"; NAFI is the very well funded lobbying body of the woodchip industry, based in Canberra.

²⁵¹ See Chambliss W and Seidman R, *Law, Order and Power*, 1982, Addison-Wesley Pub Co, (1982), pp77-78.

²⁵² Brown A J, 'Beyond Public Native Forest Logging: National Forest Policy and Regional Forest Agreements After Sth East Queensland' 18 *Environment and Planning Law Journal* 2.

²⁵³ Media Release, W Tuckey MP, "Report Does Not Support QLD RFA Proposal," REF AFFA99/130TU, 30 Nov 1999; the minister was in direct conflict with the QLD Timber Board.

²⁵⁴ For an extensive history of native forest logging and the RFA process see Dr J Ajani, *The Forest Wars* Melbourne University Press, 2007.

²⁵⁵ Bottomly S and Parker S, *Law in Context*, Federation Press, (1997), p81.

²⁵⁶ Reply to question from Sylvia Hale MLC to the Minister for Police David Campbell in Budget Estimates Questions Q19 Bodalla State Forest Logging, NSW Parliamentary Hansard; Forests NSW also paid a private security company (2 men and a dog) to guard the machines from 5pm-7am weekdays and 24 hourly on weekends.

²⁵⁷ See *Barnes v Mackenzie* [2008] NSWSC 455.

²⁵⁸ There have been 74 blockades and protests that the police have been called to since the RFAs were signed.

²⁵⁹ See *New South Wales v Commonwealth* (2006) 81 ALJR 34.

If the equity maxims that ‘equity will not suffer a wrong to be without a remedy’ and that ‘equity looks on that as done which ought to be done’ then the exemptions, in all of the legislation above, are inequitable.²⁶⁰ Aristotle stated:

The law bids us to do both the acts of a brave man (not to desert our post), a good tempered man (not to strike another), and those of a temperate man (not to commit adultery) and the rightly framed law does this rightly.²⁶¹

The legislation exemptions are not ‘rightly framed’ and are classic examples of ‘flawed legislation’.²⁶² They are in breach of international obligations on the environment and human rights, they are inequitable, unjust and unfair. Their only purpose is to serve the greedy at the expense of community.

CLIMATE CHANGE

It is somehow wrong to despoil the environment, to act in ways that waste natural resources and wildlife, and to gratify pleasures of the moment at the expense of living creatures who are no threat to us.²⁶³

Millions upon millions of taxpayer dollars were funnelled into consultants and workshops to produce a plethora of reports aiming to provide an ‘up-to-date snapshot’ of the whole issue of native forest conservation and timber production. The timeframe for the CRAs meant that comprehensiveness became a misnomer and the quality of the reports produced left much to be desired from a scientific and social point of view. Besides the fact that all reports begin with a disclaimer that the information therein cannot be relied upon as factual, the key conclusion from the bulk of the reports was that there was not enough scientific knowledge available about forests. For example:

The modelling project has highlighted some significant areas or species where there still exist gaps in quality data. In the future, it is recommend that further effort is put into systematic targeted surveying of these priority species to enable better presence-absence modelling.²⁶⁴

And:

The previous report concluded that the methodology for estimating the effects of logging management on catchment water yield provided a reasonable “best guess” that was unlikely to be much improved even with the expenditure of considerable effort. This statement applies equally well to this study. Within the limitations of current data availability the methodology represents the current best understanding of the different factors that influence water quantity and quality from forested catchments. However, the absolute magnitude of the estimates are subject to considerable uncertainty.”²⁶⁵

It is notable that this latter report makes no mention of climate change, even though nine years earlier the Intergovernmental Panel on Climate Change completed its report on the greenhouse effect.

The effects and rate of human-induced climate change have increased dramatically since the RFAs were signed in 1998. Climate change was not considered at all during the CRA process. Further, the significant carbon and water storage aspects of native forests have been inadequately or not addressed at all.

Numerous nationally-listed species in NSW are increasingly threatened by climate change, including species such as the Spotted-tailed Quoll, but the exemptions to the EPBC Act leaves things frozen in time, stopped at 1998, when climate change was not considered.

Climate change will dramatically increase other threats to species in the region, through increased spread of invasive species, increased fire frequency and severity, increased spread of forest dieback, and reduced stream flows. The cumulative impact of all these threats, plus industrial logging operations operating under an exemption to the EPBC Act and the RFAs, have resulted in a major impact on nationally-listed

²⁶⁰ Cook, Creyke, Geddes and Hamer, *Laying Down the Law* 7th ed, LexisNexis Butterworths Aust, (2009), p19.

²⁶¹ Aristotle, ‘The Nicomachean Ethics’ Book V in *Society, Law and Morality*, Frederick A Olafson (ed), Prentice-Hall Inc NJ, (1961) at p27, “The grasping man who is concerned with goods, and the unfair man who commits unjust acts are unjust, unfair and unequal” p26.

²⁶² Sax J L, *Defending the Environment*, Vintage Books, (1971), Ch 6 pp 155-156.

²⁶³ D’Amato A, ‘What Obligation Does Our Generation Owe the Next? An Approach to Global Environmental Responsibility’ (1990) 190 *American Journal of International Law*.

²⁶⁴ ‘Modelling Areas of Habitat Significance for Vertebrate Fauna and Vascular Flora in the Southern CRA Region’ project number NS 09/EH February 2000 NSW NPWS.

²⁶⁵ ESFM Project: ‘Water Quality and Quantity for the Southern RFA Region’ project number NA 61/ESFM November 1999 Sinclair Knight Merz.

species.

Conditions placed on logging to ameliorate impacts as a result of the RFAs are increasingly inadequate as climate change escalates. Forest authorities accounting and information systems fail to assess the true value of carbon and water resources that are stored in native forests.

Young people from four hundred and fifty nations gathered in Bonn for the UN Talks on Climate Change. Their declaration states:

World leaders and negotiators of the climate deal, our survival is in your hands. We trust that you will take immediate action to stop deforestation, and industrial logging of the world's biodiverse forests. We are depending on you to protect our forests and provide us with a healthy, ecologically sustainable, low carbon future.

They called for:

- Immediately end deforestation, industrial scale logging in primary forests, the conversion of forests to monoculture tree crops, plantations;
- Protection of the world's biodiverse forests including primary forests in developed countries (e.g. Australia, Canada and Russia) and tropical forests in developing countries;
- Respect for the rights of women, Indigenous peoples and local communities and allow them to lead healthy and sustainable lives whilst stopping deforestation and industrial logging of primary forests in their country, and;
- To not allow developed countries to use forest protection and the avoiding deforestation and industrial scale logging of primary forests in other countries as an offset mechanism for their own emissions.

Galaxy Research conducted a public opinion poll in July 2009. The question was:

The Australian National University has found that Australia's native forests contain a large amount of carbon that would be protected by ending forest clearance. In your opinion, do you agree or disagree that the Rudd government should stop the logging of native forests?²⁶⁶

The results were:

Strongly Agree: 43%	Agree: 35%	Total Agree: 78%	
Strongly Disagree: 3%	Disagree: 11%	Total Disagree: 14%	Don't know/refused: 8%

In 2010 Galaxy conducted another poll. Three in four (77%) Australians want the government to stop the logging of native forests and almost three in four (72%) Australians favoured the Federal Government assisting logging contractors to take redundancies, retrain or move permanently to a plantation based industry.

Given what is now known, and all that is still yet to learn, about native forest ecosystems and about the effects of climate change, the non-enactment of the precautionary principle verges on the criminal.

Maintaining the Forest Global Carbon Pool

The Government's land-use policy frame is fundamentally erroneous. Native forests, the less efficient resource for forestry industry competitiveness, are tagged for wood production with lost opportunities for the job they do best: carbon storage. Plantations, the less efficient and less reliable resource for carbon storage, are tagged for carbon storage with lost opportunities for the job they do best: wood supply.²⁶⁷

Both the State and Federal Governments have expressed the need to have full and frank regard for the urgency of action on climate change. One of the practices that must change is the degradation of the native forest estate.

With Australia's existing plantations able to meet virtually all our wood needs, whether for domestic consumption or

²⁶⁶ Galaxy Research, Sample: 1100 Australians, 24-26 July, 2009, <<http://www.galaxyresearch.com.au/index.php?page=galaxy-omnibus>>; Galaxy Poll, Galaxy Research- 28/30 May 2010, Job:100502A.

²⁶⁷ Ajani J, 'Australia's Transition from Native Forests to Plantations: The Implications for Woodchips, Pulp Mills, Tax Breaks and Climate Change' (2008) 15 *Agenda: A Journal of Policy Analysis and Reform* 3.

export, native forests are available for immediate climate change mitigation.²⁶⁸

Conditions placed on logging native forests to ameliorate impacts as a result of the RFAs are increasingly inadequate as climate change escalates. Forest authorities' accounting and information systems fail to assess the true value of carbon and water resources that are stored in native forests. There is no reporting on total native forest ecosystem biomass, the figures provided are for plantations only. The value of these stored resources in native forests far exceed the royalties received from logging operations, even when carbon is conservatively valued at a price of twenty dollars a tonne.

Brendan Mackey et al states:

Forest protection is an essential component of a comprehensive approach to mitigating the climate change problem for a number of key reasons. These include: For every hectare of natural forest that is logged or degraded, there is a net loss of carbon from the terrestrial carbon reservoir and a net increase of carbon in the atmospheric carbon reservoir. The resulting increase in atmospheric carbon dioxide exacerbates climate change.²⁶⁹

And

The remaining intact natural forests constitute a significant standing stock of carbon that should be protected from carbon emitting land-use activities. There is substantial potential for carbon sequestration in forest areas that have been logged if they are allowed to re-grow undisturbed by further intensive human land-use activities. Our analysis shows that in the 14.5 million ha of eucalypt forests in south-eastern Australia, the effect of retaining the current carbon stock (equivalent to 25.5 Gt CO₂ (carbon dioxide)) is equivalent to avoided emissions of 460 Mt CO₂ yr for the next 100 years.²⁷⁰ Allowing logged forests to realize their sequestration potential to store 7.5 Gt CO₂ is equivalent to avoiding emissions of 136 Mt CO₂ yr-1 for the next 100 years. This is equal to 24 per cent of the 2005 Australian net greenhouse gas emissions across all sectors; which were 559 Mt CO₂ in that year.²⁷¹

The report goes on to state:

We can no longer afford to ignore emissions caused by deforestation and forest degradation from every biome (that is, we need to consider boreal, tropical and temperate forests) and in every nation (whether economically developing or developed). We need to take a fresh look at forests through a carbon and climate change lens, and reconsider how they are valued and what we are doing to them.²⁷²

In NSW Forest degradation in 2006 created over seventeen percent of NSWs greenhouse gas emissions.²⁷³ Ending native forest logging would assist in reducing the greenhouse gas emissions of the State.

The clearing of native forests and woodlands and their degradation - mainly through logging - generates a conservatively estimated 18 per cent of Australia's annual greenhouse gas emissions.²⁷⁴

Professor Peter Wood and Professor Judith Ajani indicate that at CO₂ prices of just ten to fifteen dollars per tonne, which is less than the Garnaut Review's recommended starting price for carbon pollution permits, hardwood plantation owners will receive more money from growing carbon than wood.²⁷⁵

In the Garnaut Report 2011, Transforming Rural Land Use, the CSIRO estimated that if native forest harvesting were to cease, there is a technical potential for abatement of 47 million tonnes of carbon dioxide each year from 2010 to 2050.

Australia is very fortunate, by letting previously logged native forests regrow to their natural carbon carrying

²⁶⁸ Ajani J, 'Time for a Coherent Forest Policy - Finally' (2008) Centre for Policy Development, <<http://cpd.org.au/article/time-coherent-forest-policy-finally>>.

²⁶⁹ Mackey B, Keith H, Lindenmayer D, Berry S, 'Green Carbon: The Role of Natural Forests in Carbon Storage, Part 1, A Green Carbon Account of Australia's South-eastern Eucalypt Forest, and Policy Implications' ANU E Press, (2008), online version available at: <http://epress.anu.edu.au/green_carbon_citation.html>.

²⁷⁰ Gigatonne (Gt) equals one billion or 1.0 x 10⁹ tonnes; Megatonne (Mt) equals one million or 1.0 x 10⁶ tonnes.

²⁷¹ Mackey et al, above n269.

²⁷² Mackey et al above n269, pg 13.

²⁷³ Department of Climate Change 2008 *Australia's National Greenhouse Accounts 2006 State and Territory Greenhouse Gas emissions* p17, the figure is 17.2%.

²⁷⁴ Blakers M, 'Comments on Garnaut Climate Change Review: Issues Paper 1 Land-use – Agriculture and Forestry' (2008).

²⁷⁵ Wood P J and Ajani J, Submission to the Commonwealth Government on the Carbon Pollution Reduction Scheme Green Paper + Addendum, (2008).

capacity, the ANU scientists estimate that they would soak up around 7500 million tonnes of CO₂-e over the coming one hundred to two hundred years.²⁷⁶

Native Forest Woodchip Fed Power Stations

re•new•able /r{I}'nju:{shwajbl; NAME 'nu:/ adj.

1. capable of being renewed. 2. (of energy or its source) not depleted when used. 3. [usually before noun] (of energy and natural resources) that is replaced naturally and can therefore be used without the risk of finishing it all: renewable sources of energy such as wind and solar power.²⁷⁷

Background

Approximately 35 per cent of greenhouse gases in the atmosphere are due to past deforestation, and an estimated 18 per cent of annual global emissions are the result of continuing deforestation.²⁷⁸ In accordance with the *Rio Declaration*, the *Montreal Process* and the *Intergovernmental Agreement on the Environment 1992*, the *Heads of Agreement on Commonwealth and State Responsibilities for the Environment 1997* stated:²⁷⁹

The Commonwealth has a responsibility and an interest in relation to meeting the obligations under the United Nations Framework Convention on Climate Change, in co-operation with the States, through specific programmes and the development and implementation of national strategies to reduce emissions of greenhouse gases, and to protect and enhance greenhouse sinks.²⁸⁰

Following this a nationally ratified policy on reducing greenhouse gases (“GHGs”) was laid out in the National Greenhouse Strategy 1998 and yet, since these agreements, New South Wales has not furthered mechanisms to assess and arrest Forests NSW forest degradation or to reduce greenhouse gas emissions of native forest logging.²⁸¹ Rather, the increase in hectares of native forest logged and burnt on the south coast over the last two years suggests a ‘red-light’ mentality, the fear that the woodchipping industry has come to the end of its shelf life, driving the felling of forests at an ever increasing industrial rate.²⁸²

These industrial logging practices contribute significant and continuing emissions of carbon dioxide into the atmosphere which reduce the stock of carbon stored in the ecosystem.²⁸³ On the south coast of NSW logging operations in mixed-age, mixed-species forest removes approximately 60% to 90% of existing crown cover.²⁸⁴ In addition to this, road construction and post-logging burning is resulting in extensive accumulated damage to the environment and the atmosphere.²⁸⁵ There is little evidence of regeneration after FNSW logging, or care of the health of residual trees. Trees are selected for removal based on wood supply agreements to Boral, Blue

²⁷⁶ Ajani J, above n268.

²⁷⁷ Oxford English Dictionary.

²⁷⁸ Stern N, *The Stern Review on the Economics of Climate Change: Emissions from the Land-use Change and Forestry Sector*, Cambridge University Press, 2006; Houghton J T, ‘Tropical Deforestation as a Source of Greenhouse Gas Emissions’ (2005) in *Tropical Deforestation and Climate Change*, Moutinho and Schwartzman [eds]; see also Intergovernmental Panel on Climate Change, *Climate change 2001: the scientific basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change* Houghton JT, Ding Y, Griggs DJ, et al [eds], Cambridge University Press, [2001]; see also Food and Agriculture Organization of the United Nations (2005) *State of the World’s Forests*, Washington, DC: United Nations.

²⁷⁹ The Rio Declaration, *Convention on Biological Diversity*, Rio de Janeiro, 5 June 1992, entry into force for Australia: 29 December 1993, Australian Treaty Series 1993 No 32; the *Intergovernmental Working Group in Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests (Montreal Process)*.

²⁸⁰ Council of Australian Governments, November 1997, Matters of National Environmental Significance, Attachment 1, Part II (8) <<http://www.environment.gov.au/epbc/publications/coag-agreement/index.html>>.

²⁸¹ In fact, despite these agreements, the State and Federal governments introduced legislation in 1998, the *Forestry and National Park Estate Act 1998 (NSW)* and the subordinate Regional Forest Agreements that made logging exempt from environmental impact statements and civil litigation and made no mention of climate change or greenhouse gases.

²⁸² In 2004/05 Forests NSW logged 7592ha, in 2005/06 10 709ha, in 2006/07 13 811ha and 2007/08 14 388: NSW Forest Agreements Implementation Reports 2005/2006, 2006/2007: Upper North East, Lower North East, Eden and Southern regions, Resource and Conservation Unit, NSW Department of Environment and Climate Change NSW, Sydney; Digwood FOI figures 4 Feb, 2008 p; it is stated that FNSW has only 80 000ha as total land tenure in the Southern Region..

²⁸³ Mackey B et al, above n269; see also *The Stern Review on the Economics of Climate Change*, Summary of Conclusions, <http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm>.

²⁸⁴ Often residual crown cover is approximately 10% or less, particularly in the Eden region; this is illegal under the Southern Region IFOAs which state contractors must leave 55% of net basal area under Single Tree Selection: see Forests NSW Harvest Plan Compartment 186: Mogo, Batemans Bay.

²⁸⁵ For photographic evidence see <www.myspace.com/southeastforestrescue>; <<http://www.chipstop.forests.org.au/>>; <<http://www.serca-online.org>>; <<http://www.acr.net.au/~coastwatchers/>>; <<http://www.fiveforests.net>>.

Ridge Sawmill and SEFE woodchip mill.

Carbon neutral?

The accounting now used in Australia for assessing CO₂ emissions drawn from the *Kyoto Protocol* contains a flaw that severely weakens greenhouse gas reduction goals. CO₂ emissions from chimneys of biomass power stations when 'bioenergy' is used are discounted.²⁸⁶ This accounting erroneously treats all bioenergy as carbon neutral regardless of the source of the biomass, which causes large differences in net emissions. The clearing of long established native forests to burn wood or to grow energy crops is counted as a 100% reduction in energy emissions, despite causing large releases of carbon and despite international protocols against logging of native forests.²⁸⁷

At issue is the methodology that CO₂ released during combustion of biomass equals that taken up during growth and the basing of all GHG calculations on this. Eucalypt forests recovery for removal of CO₂ from the atmosphere can take more than a 100 years.²⁸⁸ On average the recovery rate is 53 years for 75% carrying capacity and 152 years for 90% carrying capacity.²⁸⁹ Currently logging rotations are sometimes barely five years.²⁹⁰ Forests NSW state:

Harvesting cycles vary between native forest types with a typical cycle of 5-30 years for native forest.²⁹¹

Therefore the assumption that there are near-equilibrium conditions (synchrony) in native forest logged by Forests NSW on the south coast is erroneous.²⁹² Forests NSW do not replant after logging native forest, have only 23,000 hectares available for sequestration and rarely do regeneration surveys.²⁹³

For Forest Land, synchrony is unlikely if significant woody biomass is killed (i.e., losses represent several years of growth and C accumulation), and the net emissions should be reported. Examples include: clearing of native forest.²⁹⁴

As ocular evidence suggests, currently on the ground, the native forests logged are not regrowing nor are they being replanted. If the forest regrew and was not logged with such frequency then this theory might hold, and perhaps holds in EU countries where this system was developed, and where the main source of wood is from plantations.²⁹⁵

Also at issue is Forests NSW claim that emissions from actual logging operations is separate and the responsibility of the contractors and therefore Forests NSW have no liability to count them. SEFE claim that the emissions from logging are indirect and they have no liability to count them. The definition of impact and direct and indirect effects of greenhouse gas emissions has been well defined in several jurisdictions of Australian Courts. In the *Nathan Dam* case Black CJ, Ryan and Finn JJ held that 'impact' is not confined to direct effects but includes effects that are or would be a consequence of the action.²⁹⁶ In both the *Hazlewood*

²⁸⁶ Kyoto Protocol Article 3 (7).

²⁸⁷ Mackey et al, above n269; 'For every hectare of natural forest that is logged or degraded, there is a net loss of carbon from the terrestrial carbon reservoir and a net increase of carbon in the atmospheric carbon reservoir. The resulting increase in atmospheric carbon dioxide exacerbates climate change.'

²⁸⁸ Roxburgh S H, Wood SW, Mackey B G, Woldendorp G, and Gibbons P, 'Assessing the Carbon Sequestration Potential of Managed Forests: a Case Study from Temperate Australia' (2006) 43 *Journal of Applied Ecology* 1149.

²⁸⁹ Dean C, Roxburgh S, Mackey B, 'Growth Modelling of Eucalyptus regnans for Carbon Accounting at Landscape Scale' in Amaro A, Reed D, and Soares P, [eds] *Modelling Forest Systems*, CAB International 2003.

²⁹⁰ For example Compartment 62 (Sth Brooman) logged in 1972, 1973, 1978, 1982, 1990, 2002, 2009.

²⁹¹ Forests NSW Consolidated Annual Financial Report, Year ended 30 June 2007, pp18-19.

²⁹² Performance Audit 'Sustaining Native Forest Operations' *Auditor-General's Report*, 2009: this statement was made concerning the North Coast RFA areas, Forests NSW had not provided data on the Southern and Eden areas, 'reviews of yield estimates for the southern region, due in 2004 for Eden and 2006 for Tumut and the south coast, have not been completed'.

²⁹³ SEFR requested these surveys from Forests NSW and received a five line five column table that stated there had been four surveys conducted but there was no documentation, pers com to author from Daniel Tuan, Forests NSW Batemans Bay; see the aptly titled Sustain Greenhouse Gas Consultation Paper Submission, Forests NSW, Nick Cameron, 1/5/2008.

²⁹⁴ 2006 *IPCC Guidelines for National Greenhouse Gas Inventories*, Vol 4: Agriculture, Forestry and Other Land Use, Chapter 2: Generic Methodologies Applicable to Multiple Land-Use Categories, 2.4; the figures used for boreal forests in the IPCC document are from research published in 1998 which has now been superseded by more current data <www.ipcc-ccip.iges.or.jp>.

²⁹⁵ 2006 *IPCC Guidelines for National Greenhouse Gas Inventories*, above n294; in Germany and throughout most of Europe foresters are employed to count and measure at dbh every tree in the plot.

²⁹⁶ *Minister for the Environment and Heritage v Queensland Conservation Council Inc* (2004) 134 LGERA 272 at 288; see also *Re Australian Conservation Foundation* [2004] VCAT 2029.

case and the *Anvil Hill* case it was held that the impacts of Scope 1, 2 and 3 emissions must be considered.²⁹⁷ In *Gray v The Minister* it was held that environmental assessments must also consider the emissions from the use of the product.²⁹⁸ Of course these findings were made in their particular statutory contexts.

Carbon accounts for industrialized forests must include the carbon emissions associated with land use and associated management, transportation and processing activities.²⁹⁹

Forests NSW also claim there is a lack of full scientific data on land use change and this makes it difficult to calculate GHG emissions. Although it seems widely acknowledged that Land Use Change and Forestry accounting is difficult and uncertain, given the great deal of data, including LandSat images and records kept in Arc View, ESRI and Forests NSW own office records on past compartments logged, it would seem this argument is alio intuitu.³⁰⁰ Article 3 of the *Kyoto Protocol* states at (3) that ‘The greenhouse gas emissions by sources and removals by sinks associated with those activities shall be reported in a transparent and verifiable manner...’

The total CO₂ emissions caused by native forest logging on the South Coast for 2006/07 were computed to be 26 383 239tCO₂e.³⁰¹ On these figures it is estimated that for every hour of energy generated more than 8000 tonnes of CO₂ would be released.³⁰²

The SEFE woodchip mill is situated in Eden at Twofold Bay. Twofold Bay provides important habitat for endangered and threatened marine life, cetaceans and migratory birds. Many bird species are listed under JAMBA or CAMBA and known to occur in the area.³⁰³ The SEFE land is foreshore land that also adjoins the Ben Boyd National Park, Towamba River and Twofold Bay estuary. It is an iconic tourist destination for whale watching. Twofold Bay is the only ocean embayment in the Twofold Shelf bioregion and the area has recently been declared a Marine Park.³⁰⁴ Tourism on the South Coast in 2009 provided \$1.9 billion dollars in revenue.³⁰⁵

The economic downturn in the export woodchip market signalled that perhaps there was hope for the protection

²⁹⁷ *Australian Conservation Foundation v Minister for Planning* above n296; *Gray v the Minister for Planning* [2006] NSWLEC 720.

²⁹⁸ Rose A, ‘*Gray v Minister for Planning*: The Rising Tide of Climate Change Litigation in Australia’ (2007) 29 *Sydney Law Review* 725; if calculations were made on the cardboard that is made, used, then thrown away, from the woodchips of native forests, then the totals of GHG calculations would be much higher.

²⁹⁹ Mackey et al, above n269.

³⁰⁰ For example Forests NSW has logged 182 528 hectares of native forests in the south east alone since 1990; it is possible to compare Google Earth images with past LandSat images.

³⁰¹ Data is from Forests NSW Implementation Report 2004/05 and 2006/07, 2006/07 Forests NSW Harvest Plans; ESRI; Digwood FOI info 2009; ocular evidence; on Forests NSW data it seems one vehicle uses 110L per year.

³⁰² This is more than 6.4 times the amount of CO₂ released from burning coal to produce the same amount of energy.

³⁰³ *Japanese Australian Migratory Bird Agreement* Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction and their Environment (Tokyo, 6 February 1974) Entry into force: 30 April 1981 *Australia Treaty Series 1981* No 6; *Chinese Australian Migratory Bird Agreement* Agreement between the Government of Australia and the Government of the People’s Republic of China for the Protection of Migratory Birds and their Environment (Canberra, 20 October 1986) Entry into force: 1 September 1988 *Australia Treaty Series 1988* No. 22; the hooded plover (*Thinornis rubricollis*) and the shy albatross (*Diomedea cauta*), black-browed albatross (*Diomedea melanophrys*), sooty albatross (*Phoebetria fusca*) and pied oystercatcher (*Haematopus longirostris*) beach stone curlew, bush stone curlew, humpback whales (*Megaptera novaeangliae*) southern right whales (*Eubalaena australis*) and blue whales (*Balaenoptera musculus*) as well as other cetaceans including dolphins and pilot whales, the short-tailed shearwater (*Puffinus tenuirostris*), australian reef egret (*Egretta sacra*), white-bellied sea-eagle (*Haliaeetus leucogaster*) and grey plover (*Pluvialis squatarola*) little tern (*Sterna albatross*), black bittern (*Lybrychus flavigollis*), sooty oystercatcher (*Haematopus fuliginosus*), pied oystercatcher (*H longirostris*), sanderling (*Calidris alba*) and lesser sand plover (*Chardris mongolus*). Fish such as black cod, seahorses, benthic organisms, poseidon seagrass populations and habitat; the power station will have two process water requirements. Boiler make-up water will be required to replace blow-down water at the rate of 1 – 1 ½ % of the steam flow rate, or about 275 litres per hour and sea water will be used to dissipate the heat and be pumped from a point on SEFE’s wharf, through the heat exchanger and returned to the sea some 15 – 20 degrees warmer; Giant Kelp has receded to Tathra because of warming ocean temperature levels, Dr Alan Miller.

³⁰⁴ Breen D A, Avery R P, and Otway N M, *Broadscale Biodiversity Assessment of Marine Protected Areas in the Batemans Shelf and Twofold Shelf Marine Bioregions* (2005) Final Report, NSW Marine Parks Authority; an ocean embayment is a semi enclosed bay that is a transitional zone between estuaries and the oceans, which provides habitat for communities of both environments.

³⁰⁵ Employing 58 463 people, a higher than average proportion of the workforce; Tourism NSW, Travel to South Coast NSW region, Year ended March 2009,

<<http://corporate.tourism.nsw.gov.au/Sites/SiteID6/objLib18/South%20Coast%20NSW%20TOTAL%20REGION%20YE%20Mar%202009.pdf>> ; O’Neill J, *Review Into Tourism in NSW: Final Report for the Premier of NSW 2008*,

<http://www.atec.net.au/review_into_tourism_in_nsw__john_o_neill_ao.pdf>; this is compared to a total of 285 native forest industry employees (chipmill, sawmill, loggers, jinker drivers) and FNSW \$232 million dollars in the red.

of the remnant native forest of the south east.³⁰⁶ Prices for woodchips dropped, mills in Japan closed and the Eden chipmill closed for three weeks, reopening on a four day timetable.³⁰⁷ Then came the news that SEFE had submitted a development proposal to Bega Valley Shire Council for a five MW base load biomass power station, to be built on the site of the chipmill, fuelled by ‘waste’. The proposed site is less than three kilometres directly south of Eden on the other side of Twofold Bay.

The proposed power station will emit the products of combustion through an exhaust stack 20 metres high. The emissions will largely comprise carbon monoxide, carbon dioxide, nitrogen oxides, particulates and smoke.³⁰⁸ SEFE allege Biomass fired power systems are considered to be carbon-neutral technology when compared to other systems that burn fossil fuels and have minimal greenhouse gas emissions but as the woodchipping industry has a high GHG emission output and this power station will emit more GHGs than a coal fired power station, neither the industry nor the power station can be classed as carbon neutral.³⁰⁹

Climate change and pollution mitigation measures are currently great matters of public interest. Given the evidence on climate change, the adverse impacts of native forest logging’s GHG emissions, the effect on water supply, the loss of biological diversity, the loss of ecological integrity and the pollutants wood-fired power stations emit, it would therefore be difficult to argue that this project will have positive environmental outcomes and certainly does not fit the definition of zero emission technologies.

Public Interest

The alleged premise of the power station is to help the State government meet renewable energy targets at least-cost. As there are only labour and transport costs the least-cost philosophy has been superficially applied. With closer investigation it seems the subsidisation of the woodchipping industry is the hidden enabler. Without these subsidies electricity generation from biomass is not competitive with other fossil-based power stations because of high capital cost and large logging and transportation emissions.³¹⁰

Australia is only now, slowly, coming in from the cold. After eleven years of ridicule from international quarters the government has the chance to gain international respect if the right decisions are made. The governmental practice of decrying Indonesia’s illegal logging while sanctioning illegal logging in Australia has not gone unnoticed by the rest of the world.³¹¹ Thus it appears that the governmental sanctioning of native forest

³⁰⁶ Possibly due to the GFC, a number of hardwood and softwood plantations coming on line and a disease in Canada that forced the mass culling of trees creating a glut on the market; the introduction of the amendments to the *Lacey Act* in America has already had a significant impact on the import of woodchips in that country, importers are now required to declare species, country of origin, value and volume of the plant or plant products see *Amendments to the Lacey Act from H.R.2419 2008* (US), Sec 8204, *The Lacey Act*, Chapter 53 of Title 16, United States Code, ss3371 - 3378.

³⁰⁷ ABARE Australian Forest and Wood Products statistics, March and June Quarters 2009; there was a seven per cent fall in the value of woodchip exports, which fell below \$1 billion, the volume of woodchip exports also fell, with a decrease of 15 per cent;

<http://www.abare.gov.au/publications_html/news/news.html>; yet the rate of logging did not decrease.

³⁰⁸ The pollutants known to be emitted from wood fired power stations are Acetaldehyde, Alpha-pinene, Beta-pinene, Carbon monoxide (CO), Formaldehyde, Methanol, Naphthalene, Toluene, Turpentine, 2,3,7,8 Tetrachlorodibenzo-p-dioxin (TCDD) C/P, 2,3,7,8-Tetrachlorodibenzo-p-furan C, Hydrogen sulphide C/S, Nitrogen oxides (NOx), Beryllium, Cadmium and compounds, Chromium, Cobalt, Copper, Iron, Lead arsenate, Lead chromate, Magnesium, Manganese, Molybdenum, Nickel and compounds, Particulate matter (PM): Phosphorus, Selenium, Silver, Thallium, Zinc, Arsenic and inorganic arsenic compounds, Mercury, Hydrochloric acid, Sulphuric acid, Sulphur dioxide (SO2); 3240 Legislative Council Questions and Answers No. 92, Thursday 26 March 2009.

³⁰⁹ In SEFE’s original proposal to Bega Valley Shire Council they stated the project would not emit any GHGs.

³¹⁰ See Santisirisomboon J, Limmeechokchai B, Chungaibulpatana S, ‘Impacts of Biomass Power Generation and CO₂ Taxation on Electricity Generation Expansion Planning and Environmental Emissions’ (2001) 29 *Energy Policy* 975; Palmer K, and Burtraw D, ‘Cost-Effectiveness of Renewable Electricity Policies’ (2005) 27 *Energy Economics* 873; Spinellia R, Ward S M, Owendec P, ‘A Harvest and Transport Cost Model for Eucalyptus spp. Fast-growing Short Rotation Plantations’ (2009) 33 *Biomass and Bioenergy* 1265; see also Commission of the European Communities, Brussels, 7.12.2005 COM(2005) 627 Final Communication from the Commission ‘The Support of Electricity from Renewable Energy Sources’ {SEC(2005) 1571}; this analysis sheds light on international effectiveness of biomass energy see <http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&lg=en&type_doc>; Forests NSW sell logs to SEFE a \$6.90/tonne; the NSW and Victorian governments subsidised the Eden chip mill by approximately \$8 million in 2006-2007; SEFE made a \$9 million profit as declared on their 2006/07 ASIC disclosure; of note last financial year FNSW state they lost \$4.1 million before tax, SEFE stated they made a \$4.4 million dollar profit.

³¹¹ In 2009 young people from four hundred and fifty nations gathered in Bonn for the UN Talks on Climate Change, their declaration called for an immediate end to deforestation, an end to industrial scale logging in primary forests, the conversion of forests to monoculture tree crops, plantations; and protection of the world’s biodiverse forests including primary forests in developed countries (e.g. Australia, Canada and Russia) and tropical forests in developing countries; Australia won the Fossil Award in 2009; see also *Forestry Commission v Daines* 1/12/2009 Deniliquin Local Court where the Magistrate made a clear finding on the evidence that a Part 3A approval under the *Environmental Planning and Assessment Act 1979* (NSW) is required for the Barmah/Millewa logging operation and had not been obtained; he concluded, therefore, that the logging was unlawful.

logging endorses the huge amounts of GHG emissions released.³¹²

Until Australia and in particular NSW, remove the civil litigation exemptions from legislation, use separate accounting practices for native forest and plantation estates, conduct both pre and post-harvest audits, prepare environmental impact statements for the compartments and discontinue clearfelling practices, the native forest industry will continue to operate outside the law.³¹³

If the definition of renewable technologies are that they do not release greenhouse gases and utilise zero carbon resources then, as the industrial patch clearfelling of the south east is the antithesis of renewable, to continue to class native forest logging as carbon neutral seems willfully negligent and transparently disingenuous.³¹⁴

PRIVATE NATIVE FORESTRY

Despite much scientific knowledge about the value of healthy forests as habitat conservation and carbon sinks, native forests in New South Wales can be logged with approval in varying ways depending on land tenure.³¹⁵ Conservationists have for some time lobbied strongly for conservation of both public and private lands, effective regulation and regulatory response to native vegetation degradation and land clearing, and advocated for stronger legislation governing native forest management.³¹⁶

Over-logging of public forests has seen private forests, once envisioned as reservoirs of conservation, targeted, particularly in Northern regions, to supplement government wood supply agreements. Fortunately traditional distinction of conservation on land tenures within the wider community is changing. Due to increasing public knowledge on climate change it is understood there needs to be considerably more conservation, both on public and private land.³¹⁷

Both State and Commonwealth legislative instruments regulating conservation have thus far proved inadequate to meet international and scientific benchmarks of nature conservation. The statutes and delegated legislation is inadequate and there is lack of compliance and enforcement.

In New South Wales logging on private land is allowed through the NV Act's delegated legislation, the Private Native Forestry Code of Practice ("PNF Code").

Improving and Maintaining?

Under the PNF Code broadscale clearing for purposes of private native forestry 'improves and/or maintains environmental outcomes' if it complies with requirements of the Code.³¹⁸ The PNF Code provides that any area

³¹² "...the laws of nature that account for the global carbon cycle operate irrespective of political boundaries, therefore, a unit of carbon emitted due to deforestation and forest degradation in Australia, the United States, Canada or Russia has exactly the same impact on atmospheric greenhouse gas levels as a unit of carbon emitted from deforestation and degradation of forests in Indonesia, Papua New Guinea, the Congo Basin or Brazil" Mackey et al, above n269.

³¹³ See *Forestry and National Park Estate Act 1998* (NSW) ss38-40.

³¹⁴ Woolf T and Biewald B, 'Efficiency Renewables and Gas: Restructuring as if Climate Mattered' (1998) *Electricity Journal* January/February 64.

³¹⁵ Steffen W, Burbridge A A, Hughes L, Kitching R, Lindenmeyer D, Musgrave W, Stafford Smith M and Werner P A, *Australia's Biodiversity and Climate Change: a Strategic Assessment of the Vulnerability of Australia's Biodiversity to Climate Change*, A Report to the Natural Resource Management Ministerial Council commissioned by the Australian Government, CSIRO Publishing, (2009); see Park H, *Biodiversity: Regulatory Frameworks Briefing Paper 3/2010*, New South Wales Parliamentary Library Research Service (2010).

³¹⁶ For one example of lobbying of government to enact regulations on private land see National Park Association, <<http://www.npansw.org.au/web/journal/200604/logging.htm>> viewed 23 July 2010.

³¹⁷ Galaxy Poll, Galaxy Research- 28/30 May 2010, Job:100502A, three in four (77%) Australians want the government to stop the logging of native forests, almost three in four (72%) Australians favour the Federal Government assisting logging contractors to take redundancies, retrain or move permanently to a plantation based industry.

³¹⁸ For a comprehensive background and critique see Prest J, 'The Forgotten Forests: the Environmental Regulation of Forestry on Private Land in New South Wales between 1997 and 2002' Phd Thesis, Centre for Natural Resources Law and Policy, University of Wollongong, (2003), available at <<http://ro.uow.edu.au/theses/413>>; under the *Native Vegetation Conservation Act 1997* (NSW) regional committees were formed, to produce regional vegetation management plans allegedly to designate areas of high conservation value; the *Native Vegetation Act 2003* (NSW) did not come into effect until 2005.

cleared must be allowed to regenerate and not subsequently cleared ‘except where otherwise permitted’.³¹⁹ A landowner can also seek development consent to undertake private native forestry outside provisions of the Code under the *Native Vegetation Act 2003* (NSW) (“NV Act”).³²⁰ Landowners must prepare a property vegetation plan (“PVP”), then a Forest Operation Plan (“FOP”) which must contain recorded locations of any listed populations or endangered ecological communities.³²¹

While the FOP must contain details of flora and fauna management actions, it is not required to mention impacts logging will have on those species. Further, if there are records of species in adjoining areas of public land, species can be ignored for FOP preparation if it can be demonstrated that species have been protected and conditions of the relevant TSLS or IFOAs have been met.³²²

The PNF Code provides that if there are not enough hollow bearing trees, that extra recruitment trees from the ‘next cohort’ must be retained, so total numbers of hollow bearing and recruitment trees retained in each two hectare area is 20.

As discussed earlier in this report the loss of hollow bearing trees has been listed as a Key Threatening Process since 2007.³²³ A lengthy discussion of conservation measures to maintain hollow bearing trees has been discussed since 1999.³²⁴ There has been a priority action statement produced for this KTP, yet habitat to recruitment tree ratio in the PNF Code is still one to one.³²⁵ This is despite the Expert Panels findings.³²⁶

Rotation time definitions in the PNF Code seem parlous and seem dependent on a basal area count to assess the stocking rate of the stand.³²⁷ Of note is the inclusion of the out-dated native forest logging industry catchphrase ‘promote regeneration through disturbance’.³²⁸ This terminology is in conflict with much scientific knowledge. Many scientists doubt the success of what is called ‘natural seeding’ after logging for eucalypt species.³²⁹ If this argument held true there would be no burgeoning issue of lack of supply.³³⁰

³¹⁹ *Private Native Forestry Code of Practice for Southern NSW 2008* Introduction p1.

³²⁰ *Private Native Forestry Code of Practice for Southern NSW 2008*; the Silvicultural Guidelines state it is ‘heavily based’ on Florence RG, *Ecology and Silviculture of Eucalypt Forests*, CSIRO Publishing, Melbourne, 2004, which was prepared for use with the *Native Vegetation Conservation Act 1997*, yet there is no mention of climate change or its effects in this work; Florence stated in his 1984 thesis “When an mature, mixed eucalypt-rainforest community is felled and the debris burned, massive Acacia regrowth may develop very rapidly from soil-stored seed” in Florence R G, and Marsh J P, ‘Soil Factors Limiting the Establishment and Vigour of Spotted Gum Regrowth’ (1984) Department of Forestry, ANU Research Project.

³²¹ Listed under schedules of the *Threatened Species Conservation Act 1995* (NSW) and in the Listed Species Ecological Prescriptions for Southern NSW Forests.

³²² *Private Native Forestry Code of Practice for Southern NSW 2008* cl 2.1; the PNF Code also contains provisions for Australian Group Selection (“AGS”) despite the finding that this patch clear felling has significant impact on species and their habitat.

³²³ *Threatened Species Conservation Act 1995* (NSW) Sch 3 s8; see DECCW

<<http://www.environment.nsw.gov.au/determinations/LossOfHollowTreesKtp.htm>>.

³²⁴ See ‘Review of Protective Measures and Protective Measures and Forest Practices - Biodiversity Workshop Southern Region’ Ecologically Sustainable Forest Management Group, July 1999, Project No. NA45/ESFM p176-177.

³²⁵ *Threatened Species and Conservation Act 1995* (NSW) s74 and s90A; a threat abatement plan sets out recovery and threat abatement strategies that must be adopted for promoting the recovery of each threatened species, population and ecological community to a position of viability in nature and for managing each key threatening process.

³²⁶ Review of Protective Measures, above n324; see also Goldingay R, ‘Characteristics of Tree Hollows used by Australian Birds and Bats’ (2009) 36 *Wildlife Research* 394; see also Gibbons P, Lindenmayer D B, ‘Issues Associated with the Retention of Hollow-Bearing Trees Within Eucalypt Forests Managed for Wood Production’ (1996) 83 *Forest Ecology and Management* 245.

³²⁷ Lindenmayer D B, Franklin J F, Fischer J, ‘General Management Principles and a Checklist of Strategies to Guide Forest Biodiversity Conservation’ (2006) 131 *Biological Conservation* 433.

³²⁸ Bizarrely the PNF Code provides at cl 3.3: The minimum stand stocking...must be achieved within 24 months of a regeneration event; and at (2) In this clause, regeneration event is a harvesting or thinning operation.

³²⁹ See Fischer J, Lindenmayer D B, ‘The Conservation Value of Paddock Trees for Birds in a Variegated Landscape in Southern New South Wales: Species Composition and Site Occupancy Patterns’ (2002) 5 *Biodiversity and Conservation* 807.

³³⁰ Bauhus J, McElhinny C, and Alcorn P, ‘Stand Structure and Tree Growth in Uneven-Aged Spotted Gum (*Corymbia maculata*) Forests: Some Implications for Management’ (2002) 75 *Forestry* 451, ‘only a small proportion of trees are growing at an acceptable rate’; the forests in the Southern region have been targeted for woodchip production as there is a predominance of Spotted gum, Stringybark, Silvertop Ash and Brown Barrel forests. This is because they are blonde wood. Spotted gum is particularly targeted as it is a softwood. 10-15 years after heavy logging a quarter of a compartment will have no Spotted Gum regrowth at all, and in the remaining area any Spotted Gum will be relatively weak and usually dominated by more vigorous Acacias. Where Spotted Gum seedlings become established, they lack the early vigour of Acacia and other shrub species. The more vigorous Acacia regrowth often overwhelms eucalypt seedlings, because unlike the hard-coated Acacia seed, eucalypt seed will only remain viable for a short time in the soil, probably no more than 6-12 months.

It seems on analysis that prescriptions for habitat protection and conservation contained in the PNF Code are inadequate. Due to lack of available data it is difficult to know whether prescriptions are being met on private land.³³¹ Given that requirements for species ‘protection’ under the TSLs or IFOAs are not being met on public land, due to non-compliance of legislation and delegated legislation, if logging has occurred on adjoining State forest land it would be difficult to argue that species have been protected.³³²

A comparison of public and private forestry codes shows the PNF Code is modelled on the IFOAs that allegedly apply to public State forests which fall under RFA areas. Under IFOAs many severe breaches are being classed as ‘technical’ by the regulator. This is often without the regulator viewing the breach. While the regulator has instigated proceedings on land clearing enacted without approval there seems to be some reticence to enforce compliance of the PVPs.³³³

Issues for auditors hinge on access. Gaining access to audit public State forest can be difficult for non-government auditors. Gaining access to audit private forest logging operations is nearly impossible. A breach with proof of actual harm is not leading to civil penalty or injunction, what chance a breach without proof. While some law is better than none, if law is inadequate and not backed up with appropriate regulatory response it is dormant law.³³⁴

Logging Endangered Ecological Communities

The erroneous statement that broad scale land clearing can in any way be improving environmental outcomes, particularly in the context of logging endangered ecological communities (“EECs”), is indicative of the whole native forest logging industry publicity spin. If the point of listing a community is that it is endangered then to allow logging in endangered ecological communities seems in complete conflict with everything known about biodiversity, climate change and the link to forest degradation. It is also in tension with other legislative instruments.

For example the Guidelines breach the EPBC Act by opening up federally listed EECs for logging in areas both inside and outside RFA regions.

Logging can occur in endangered ecological communities as part of an approved ‘Ecological Harvesting Plan’ if approved by DECCW.³³⁵

Commercial logging does not ‘maintain or improve’ the environment under any circumstances - it is a recognised threat to the environment. This erroneous assumption would hold if ‘environmental outcomes’ are furthering species to extinction and increasing degradation of native forest.

Logging under so called Ecological Harvest Plans will not improve forest structure of the Endangered Ecological Community, particularly when it is 80% of the total EEC. This is more Forests NSW spin on an already flawed piece of delegated legislation. The Guideline refers to ‘thinning’ operations, but there is already a ‘thinning’ pathway under Property Vegetation Plans (“PVPs”). In the Southern and Eden regions the term thinning is synonymous for clearfelling or patch clearfelling.

³³¹ The *Annual Report on Native Vegetation 2008* provides that in New South Wales in 2008, 2060ha of land was legally cleared under approved private Harvesting Plans, while overall there was a total reduction of over 48 193ha of ‘native woody vegetation’; *NSW Annual Report on Native Vegetation 2008*, Department of Environment Climate Change and Water, p2; a condition of the *Native Vegetation Regulations* at s12: The Minister is to make publicly available on the Internet: (a) the Global Positioning System (“GPS”) coordinates of the location of land that is the subject of a development consent or PVP that provides for broadscale clearing of native vegetation on the land; of note is that the reporting of private native forestry on the regulators website is grossly inadequate, the map coordinates for PVPs are erroneous and there are no figures for actual logging events or area logged; if calculated on the PVP register for Southern 1097ha were logged in 2010, however without data, analysis is impossible, this is indicative of the secrecy that surrounds PNF.

³³² Of interest the ‘business as usual’ approach by State forestry is causing some concern among landowners post logging, the main concerns seem to be badly eroded snig tracks and the amount of debris left behind; for a Queensland example see Ryan S, Taylor D, ‘A Methodology for Private Native Forest Extension in South East Queensland’ (2001) The Regional Institute, <<http://www.regional.org.au/iufro/2001/ryan.htm>>.

³³³ See *Director-General of the DECC v John Rae* [2009] NSWLEC 137; *Director-General, Dept of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving* [2009] NSWLEC 182; *Director-General of the Department of Environment and Climate Change v Hudson* [2009] NSWLEC 4; *Department of Environment and Climate Change v Olmwood Pty Limited* [2010] NSWLEC 15.

³³⁴ Gunningham N, ‘Environmental Auditing: Who Audits the Auditors?’ (1993) August *Environmental and Planning Law Journal* 229 “If the audit is conducted, particularly internally, by the firm’s own employees, then the internal auditors may come to share the same corporate goals”.

³³⁵ *Private Native Forestry Code of Practice for Southern NSW 2008* cl 4 Table C.

The authors are absolutely opposed to the PNF Guidelines. We call for their immediate withdrawal. The PNF Code opens a massive loophole in the native vegetation laws and further entrenches the ‘cut and run’ mentality of the native forest logging industry.

SUBMISSION CONCLUSIONS

The disclaimer at the beginning of most of the documentation of Forests NSW is apt:

While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of NSW and the Commonwealth of Australia, its agents and employees, do not assume any responsibility and shall have no liability, consequential or otherwise, of any kind, arising from the use of or reliance on any of the information contained in this document.

‘Reasonable effort’ for establishment of fact has not been taken by the drafters of Forests NSW documentation. All criteria in every report reviewed are lacking in up-to-date verifiable scientific data, or in fact any data, to support any of the claims.

It is difficult to see how broadscale clearing of native forest can equate to improving environmental outcomes.³³⁶ Or how a logging event can be defined as regeneration. Carefully avoiding the word sustainable, the objects of the PNF Code are stated as ensuring a:

supply of timber products from privately owned forests at a regular rate that can be maintained indefinitely for present and future generations while at the same time maintaining non-wood values at or above target levels considered necessary by society for the prevention of environmental harm and the provision of environmental services for the common good.³³⁷

Due to failure to enact principles of ESFM, principles of inter-generational equity in meeting the above objective seems in doubt. Further due to current logging practices it is difficult to argue that maintaining environmental values at or above target levels can be achieved. Given current knowledge on causes and effects of climate change it would be difficult to argue that continuance of logging could maintain these levels given the amount of environmental harm caused. Certainly with regard to climate change and extinction of species it would be very difficult to argue that logging was ‘for the common good’.

Thus far legislative instruments regulating conservation have proved inadequate to meet standards of nature conservation. Regulatory response has proved inadequate to deter offenders. The combination of non-compliance, inadequate legislation and lack of appropriate regulatory response could ensure that extinction of species is a certainty.

On the south coast the distinction between conservation in protected areas in public ownership and conservation on privately owned land is becoming wider as more private native forestry is undertaken. It seems, while there is no guarantee of survival in the coming years, there is more chance for species if they are resident in National Parks, threats of habitat being consumed by ‘reduction burns’ aside.

Political will is crucial to improving forest law compliance and ensuring that measures taken have positive outcomes for conservation that are long-lasting. As there has been no compliance and continuous over-logging, the only positive outcome for conservation would be to end native forest logging. The challenge now for public native forest conservation is to pressure political will to transfer all State owned land to National Parks co-managed with traditional owners.

The anticipation is that, with increasing knowledge of the link between climate change and forest degradation, landowners and Government will cease logging of native forest. Until then species that cannot speak or defend themselves are reliant on political will and the care of developers, farmers, loggers and multinationals.

³³⁶ *Private Native Forestry Code of Practice for Southern NSW 2008* p1; see Gibbons P, Briggs S V, Ayers D, Seddon J, Doyle S, Cosier P, McElhinny C, Pelly V, Roberts K, ‘An Operational Method to Assess Impacts of Land Clearing on Terrestrial Biodiversity’ (2009) 9 *Ecological Indicators* 26.

³³⁷ *Private Native Forestry Code of Practice for Southern NSW 2008* p1.

SUBMISSION'S FINDINGS

- That the Forest Agreements, RFAs, IFOAs and other legislation did not consider the critical issues of climate change or water and are therefore inadequate instruments to determine forest management.
- The Regional Forest Agreements and IFOAs are severely inadequate to protect forest species and forest habitats. The conservation targets of almost all nationally-listed fauna species and many nationally-listed flora species were not achieved and substantial additional conservation action is still required to meet minimum benchmarks. Using the NSW government's own conservation analysis and data produced during the CRA, it is evident that only one of the twenty nationally-listed forest fauna species met their conservation targets after the RFAs, and many nationally-listed flora species have fallen dramatically short of their targets. The number of threatened and endangered species has risen since the RFAs were signed and many threatened and endangered flora and fauna species are at extreme risk from current logging operations. Current logging practices do not adequately protect Australia's native flora and fauna. The threat of native forest logging must be considered a matter of national significance.
- In the south east of NSW, that fall under the Eden and Southern RFAs, the annual net areas logged have rapidly increased and yields have fallen. In other words, the industry has to log ever greater areas to maintain the same levels of production. Demonstrably unsustainable timber volumes were committed for twenty years, and these even extend beyond the term of the RFAs. The 'FRAMES' industry modelling system used to derive these volumes substantially over-estimated available timber volumes. Consequently, after the twenty year period of the RFAs, there will be a dramatic short-fall in timber. Royalties in South East NSW are now less, in real terms than they were fifteen years ago and Forests NSW is making less in royalty revenue than it expends in managing woodchipping operations. The industrial logging practices in Australia's native forests by Forests NSW, VicForests and Forestry Tasmania are unsustainable, economically, culturally and environmentally. The outcomes are not sustainable, even from a timber-production perspective.
- Private lands were not assessed as part of the RFAs, but they are being logged with very weak regulation at an alarming rate under an EPBC Act exemption. Current prescriptions and legislation to protect native forests on private land are extremely inadequate.
- Other authorities catchment planning agencies have almost unanimously concluded that forests are more valuable left standing in catchments than sold as timber.
- The almost complete consensus of public opinion is the requirement to leave the land in a better state than it was found, and to eliminate or drastically reduce all native forest logging immediately. In concurrence with the Garnaut Report, the Stern Report and the Mackey Report, action to avoid further deforestation should be an urgent priority. Accordingly, if no action is taken, the health of native forests and therefore the Australian public will be severely detrimentally affected.
- The RFAs have not been properly implemented, review timeframes have not been met and key components have not been conducted. The conditions on logging under legislative regimes, on which the RFAs rely to deliver 'ecologically sustainable management', are inadequate, frequently breached and very poorly enforced. In addition, third party appeal rights have been removed in NSW and there is no avenue for the community to enforce the law directly, despite the transparent failure of the NSW Government to enforce it properly itself. There should be no exemption for RFA forestry operations which are demonstrably unsustainable, for which key agreements relating to sustainability reviews have been ignored and/or wood supply contracts signed outside the timeframe of the RFAs.
- There can be no support for exemptions for particular activities or areas, unless there is genuine duplication of assessment requirements, and it is guaranteed that best practice assessment will occur.

- If Forests NSW can prove it has adhered to the RFAs and IFOAs management obligations then the RFAs and IFOAs must be inadequate and flawed instruments with which to protect the environment and the communities interests. If, on the other hand, the RFAs and IFOAs are found to be delivering positive environmental outcomes then Forests NSW must be found to be mismanaging the native forest estate to a serious degree.
- Forests NSW, VicForests and Forestry Tasmania has shown themselves to be complete economic and environmental failures. The RFAs have not been found to be durable, the obligations and commitments that they contain are not ensuring effective conservation, and suffer chronic under-performance in the achievement of critical action milestones.
- The RFA regime has already effectively postponed inevitable environmental protection measures for ten years. As a matter of urgency these measures can no longer remain in limbo. There are significant economic, environmental and social benefits to support ending native forest logging and to ensure a swift transition of logging operations into the existing plantation estate.
- As it is not possible for the Commonwealth to enter into agreements which bind the legislative and executive arms of government native forest logging under the RFAs and delegated legislation is unlawful.
- Further the legislators have not enacted the legislation, the regulators have not regulated and the workers are not complying, therefore clause 8 of the RFAs has been triggered. This is giving effect to ending the RFAs as the mode of native forest management and the end to native forest logging as a whole.
- State and Federal Governments needs must have full and frank regard for the urgency of action on climate change and biodiversity protection by ending the rampant degradation of the native forest estate.

In light of these findings South East Forest Rescue calls for indigenous ownership of all public native forest, a complete stop on logging of EECs, the complete transfer from native forest wood product reliance to the plantation timber industry and salvage recycled hardwood timber industry, a single authority for national native forest stewardship and an immediate nation-wide program of catchment remediation and native habitat re-afforestation.

RECOMMENDATIONS

- **The creation of a genuine comprehensive, adequate, representative and resilient reserve system covering the Southern and Eden Regions of native forests.**
- **The creation of Indigenous/State jointly managed national parks.**
- **The protection of all extant native forest on public land, with real incentives for conservation of private native forest.**
- **Exit assistance to be provided to support the native forest/woodchipping industry to adapt to a true and real ecologically sustainable plantation based industry.**

