2011 Strategic Review of NSW Crown Native Forestry Regulatory Framework



Authors: Troy Collings, Managing Director, BPRS Pty Ltd
Gillian Chappell, Barrister
Email: nswforestreview@bprs.com.au

Date: September 2011

Best Practice Regulatory Services

Building capability, increasing efficiency, demonstrating effectiveness"

Foreword

Please find attached a report into The Strategic Review of NSW Crown Native Forestry Regulatory Framework.

This report, commissioned by the Office of Environment and Heritage (OEH), and Forestry NSW, is an independent analysis of the current effectiveness and efficiency of legislation, and the policy and operational arrangements for meeting obligations associated with the management of NSW Crown native state forests. These areas were assessed and benchmarked against best practice principles in areas of regulatory compliance and forestry management.

This review was largely focused on internal approaches between the two respective agencies, so the scope of stakeholder engagement was restricted predominately to staff within OEH and Forests NSW. However, a wide range of opinions and recommendations expressed through previous reviews and reports were carefully considered as part of the analysis process.

The report contains seven sections, highlighting the analysis process undertaken and a range of identified issues. A summary of the key challenges faced by the two agencies can be found in section two, along with the 69 specific improvement options contained within the 19 primary recommendations. Particular findings of the review included a need for effective assurance of environmental outcomes, while improving the efficiency of forestry operations through streamlined administrative reporting requirements.

While undertaking this review, it was important to recognise the:

- Divergent views held by stakeholders regarding the harvesting of Crown native state forests in NSW.
- Complexity of the environmental management issues.
- Likely public availability of this report.
- Potential risk of politicisation of these matters.

In the context of these sensitivities, an objective, outcome-oriented approach has been adopted throughout the report which focuses on recommending improvements to address the underlying issues, rather than emphasizing the particular problem itself.

Lastly, we would like to acknowledge the assistance and cooperation provided by staff from both OEH and Forests NSW. We particularly thank the OEH's Deputy Chief Executive, Mr Greg Sullivan and Forests NSW CEO, Mr Nick Roberts for their drive and willingness to make this project a reality. We also wish to acknowledge the generous support provided by OEH's Mr Steve Hartley, and the Crown Forestry Policy and Regulation unit, as well as Mr Dean Anderson and Mr Andy Stirling of Forests NSW.

Troy Collings

Managing Director

Best Practice Regulatory Services

Gillian Chappell

Barrister

Auckland, New Zealand

Contents

1. Introduction 6
1.1 Strategic overview 7
1.2 Approach 9
1.3 Project criteria 10

2. Summary of key challenges identified and recommendations 12
2.1 Key challenges 12
2.2 Summary of recommendations 13

3. Improving the legislative and policy framework: review findings and recommendations 23
3.1 Factors contributing to the parties' concerns 26
3.2 Ecologically sustainable forestry management and wood supply 28
3.3 Overcoming the complexity of the legislation 29
3.4 Problem duplication and inconsistencies between documents 32
3.5 Whether the licence conditions achieve good environmental outcomes/enforceability issues 35
3.6 Working with multiple agencies 39
3.7 Summary and recommendations 42

4. Achieving regulatory best practice: review findings and recommendations 45
4.1 What is regulatory best practice? 45
4.2 Compliance theories on offending 48
4.3 The Crime Triangle model – need for a "capable guardian" 50
4.4 The potential for a coercive deterrence strategy 52
4.5 The potential for a regulatory trust strategy 54
4.6 Applying these theories to the OEH context 55
What is the regulatory goal? 56
Risk based enforcement 57
The Importance of prioritisation 58
Prioritisation within a risk management framework 59
Workflow and reporting 60
Best practice monitoring and auditing 62
Design of audit tools 64
Compliance monitoring and audit training/skills for authorised officers 66
Prosecution 67
Engagement 68
OEH Forestry Regulatory Strategy 69

5. The NSW regulatory framework: an overview 71
5.1 Roles and responsibilities 71
Forests NSW 71
The Office of Environment and Heritage 73
5.2 Legislative background 73
Commonwealth framework 74
NSW legislation 75
NSW Forest Agreements 78

Integrated Forestry Operations Approvals (IFOAs) 80
IFOAs and licenses 81

6. Other jurisdictional examples: New Zealand 84
6.1 Background 84
6.2 Types of forestry 86
6.3 Role of Central Government 87
6.4 Role of Local Government 89
6.5 Key Legislation 89
6.6 Bylaws 93
6.7 Enforcement 97
6.8 Issues with the current regulatory approach to forestry 98
6.9 Alternatives to the current regulatory approach 98
National environmental standards 98
Greater reliance on Codes of Practice 100
A National Accredited Operator Standard 100

7. Other jurisdictional examples: Canada 101
7.1 British Columbia 101
Background 102
Regulatory and policy environment 102
Legislation 102
Roles and responsibilities 103
Primary regulatory tools 104
7.2 Victoria 107
Background 107
Regulatory and policy environment 107
Legislation 108
Roles and responsibilities 108
Primary regulatory tools 109

Bibliography 114

1. INTRODUCTION

> *"The complexity of public policy, of organisational behaviour, and of human nature are such that prevention of an environmental crime will usually not require a 'magic bullet' but, rather a combination of policy tools"*[1].

The New South Wales (NSW) Office of Environment and Heritage (OEH) and Forests NSW are seeking to strengthen the existing operational and regulatory frameworks underpinning the management of the states' Crown native forests. Specifically, both agencies wish to improve future deliverables and outcomes sought through the overarching Regional Forestry Agreements and Integrated Forestry Operations Approval (IFOA) instrument.

An independent analysis was undertaken on the current effectiveness and efficiency of legislation, and the policy and operational arrangements in meeting obligations associated with the Crown's management of the state native forests. These areas were assessed and benchmarked against best practice in areas of regulatory compliance and forestry management.

To a large extent, the working relationship between OEH and Forests NSW has been shaped by an historical regulatory framework that was put in place over a decade ago. This framework is neither contemporary, nor flexible. It was created in the late 1990s when the state grappled with economic and environmental issues associated with the best way to manage the state's Native Crown Forests.

The current framework seeks laudable environmental outcomes through a rigid, prescriptive licensing regime. It aims to preserve natural values, while simultaneously facilitating the economic benefit from that which it seeks to protect. As such, aspects of the framework are inherently contradictory and have the net result of facilitating conflict between two state government entities.

OEH discharges its regulatory obligations through this licensing regime predominately via limited auditing and enforcement resources, largely focused on narrow 'command and control' techniques. Forests NSW has the expectation that it will operate as a 'semi-

[1] Grabosky. Gant F. 2000 Improving Environmental Performance: Preventing Environmental Crime. Australian Institute of Criminology Research and Public Policy Series No 27. http://www.aic.gov.au

private' and agile enterprise. However, its corporate agility is somewhat hamstrung by extensive reporting and administrative burdens that it argues do not necessarily achieve the best of environmental outcomes. Both agencies find aspects of the current operating environment difficult, and at times, untenable.

Now that it is more than halfway through the anticipated 20 year term of the forestry agreements, it is timely that further consideration is given to improve the overall operating environment.

In progressing suggested reforms, this report has focused on two characteristics recognised as cornerstones of good regulatory practice and governance. These are the degree of efficiency or effectiveness demonstrated by the particular legislative instrument, practice or mechanism reviewed, and the practical options to improve desired outcomes. Relative best practices are examined, and applied within the unique context that is found in NSW.

The key findings outline a range of practical and workable options for future reform and improvement. Outcomes of the review included ensuring the effective assurance of environmental outcomes, while improving the efficiency of forestry operations through streamlined administrative reporting requirements.

1.1 **Strategic overview**

Both OEH and Forests NSW seek to deliver their respective outcomes diligently and professionally. Tensions arise when these deliverables conflict. Broadly speaking, OEH is focused on ensuring NSW's entire environment is sustainably managed. Forests NSW, as a government-owned trading entity, is focused on the business of sustainable forest management.

The complex strategic and operating environment that exists between these two agencies is broadly represented in the "**Mapping the NSW Crown Native Forests Regulatory Framework"** (Figure One below). The framework represents the areas considered by the Review Project, from the attendant business drivers and mechanisms supporting Forests NSW, to the best practice regulatory approaches implemented by OEH.

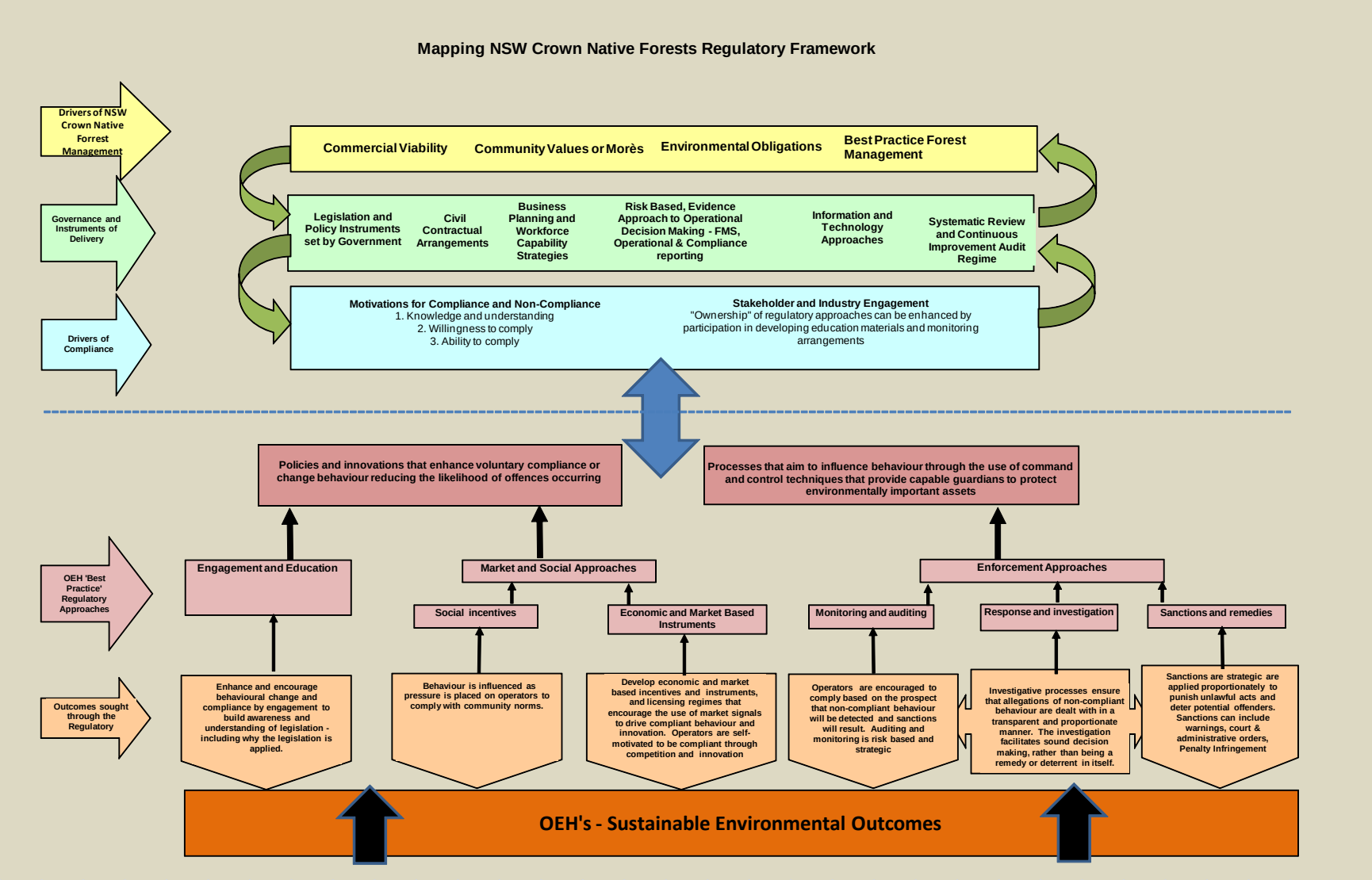


Figure One *Mapping the NSW Crown Native Forest Regulatory Framework*

If we consider the above framework, we note that there are both common grounds between the two agencies, as well as clear differences of view and priority. These differences need not be mutually exclusive to an ongoing professional relationship – they just need to be acknowledged and managed.

This report addresses existing and potential 'gaps' in the framework that underpins the management of NSW's Crown native forests, and suggest ways to address them.

1.2 **Approach**

At the macro level, the review sought to achieve two things:

- To identify areas of improvement from Forests NSW's perspective – that is, issues associated with their service delivery as well as their knowledge, willingness and ability to comply with their lawful responsibilities, and
- To improve OEH's overall effectiveness as the key regulator of NSW's Crown native forests.

While a holistic approach was emphasized, eleven key challenges were identified and nineteen primary recommendations made. The primary recommendations are comprised of a further 69 elements for suggested improvement. Some of the recommendations are stand-alone considerations for the respective agencies. Others will require joint cooperation and resources to address them.

In undertaking a full functional regulatory diagnostic, the authors carried out a range of qualitative analysis, to better understand the 'As is'. The 'As is' mapped:

- Existing Forests NSW regulatory framework and strategic objectives.
- Attendant legislative and policy instruments.
- Other Crown forestry management arrangements used in Australian and international jurisdictions.
- The operating environment of both agencies relevant to native forest management, current business rules and supporting documentation.

- Key agency roles, responsibilities, structural effectiveness, dependencies and areas of risk.
- The current regime of incentives and disincentives to support sustainable forest management.

The 'As is' analysis provided a considered platform to assess the existing regulatory framework and then identify areas for strengthening regulatory arrangements, service delivery models, areas of risk and proposed remedial actions.

The analysis methodology was applied to:

- All key NSW Crown native forestry legislative instruments.
- NSW Crown forest related regulatory and operational management practices against select best practice jurisdictions.
- Stakeholder analysis, and input from identified parties with an interest in improving the management of NSW Crown native forestry management.

As well as this, a review of the legislative context existing in New Zealand, as well as British Columbia and Victoria in Canada was conducted to highlight lessons from these jurisdictions. However, while various attributes of forestry regulation in New Zealand, British Columbia and Victoria were of interest, and have theoretic application in NSW, it was quickly determined by the report authors that none of the other jurisdictions approaches could be simply transposed to the unique operating environment that is NSW Crown native forest management. In short, there is no 'magic bullet' solution.

1.3 **Project criteria**

The recommendations were developed with consideration to the following three factors:

1. Organisational and institutional arrangements to improve the efficient operation of the Crown native forest management framework. This included consideration of fit-for-purpose licensing and of functional groupings (policy, planning, operational and regulatory) and the appropriate separation of responsibilities within these, as well as consideration of the role of the private sector in service delivery.

2. Improved regulatory approaches to landscape management issues. This includes approaches to address outcomes that:

- Manage the impact of new threatened species, communities and population listings on timber supply commitments.
- Ensure a balance between meeting timber supply commitments, long-term timber supply sustainability and social and environmental values.
- Link accountability for on-the-ground operations with environmental performance.
- Identification and associated management of threatened species, communities and populations across State forests and other tenures.

3. Advice in relation to contract / contractor management, including consideration of:

- The appropriate balance between risks born by Forests NSW and contractors.
- Delivery of an incentive-based contract management system.
- Regulatory management options for contractors (as distinct from licensing of Forests NSW), including consideration of potential licensing of individual contractors and management of contractors under 'general' legislative provisions.
- Linking of contractor performance to incentivized contracts.

2. SUMMARY OF KEY CHALLENGES IDENTIFIED AND RECOMMENDATIONS

2.1 Key challenges

Eleven key challenges were identified in this review:

- **Reforming legislation and policy instruments:** There is a level of complexity and duplication in the current existing legislative and policy instruments that contributes to inefficient and ineffective regulatory practice. The regulatory framework needs to be reviewed and recast to better reflect current practices, outcomes based philosophies and to reduce the inherent duplication and overlap between respective agencies.
- **Streamlining IFOA licensing conditions:** The current prescriptive and complex licensing regime should be streamlined with a move towards a performance based, outcome orientated system that is easier to administer, and simpler to regulate – but does not lesson core environmental values and obligations.
- **Defining the Forests NSW operating model:** The current 'hybrid' private/public model that Forests NSW works under contributes to inefficient regulatory practice, and further work should be undertaken to move to a more clearly defined private model.
- **Utilising innovative sanctions:** OEH should have greater capacity to utilise more flexible civil and administrative sanctions for licence and other environmental breaches, rather than reliance on blunt and administratively expensive punitive tools such as Penalty Infringement Notices, and prosecutions.
- **Improving audit and compliance monitoring:** OEH's auditing framework should be better supported to reflect best practice – particularly in areas of risk assessment, and program methodology.
- **Greater utilisation of the Forest Management System (FMS):** Forests NSW's FMS should be assessed, and then routinely accessed, by key OEH staff to improve understanding of Forests NSW's efforts in meeting environmental obligations.

- **Consolidating reporting:** Reporting processes are overly complex and should be consolidated (with a focus on proactively identifying, and dealing with, the most important environmental priorities) with greater utilisation of technology.
- **Developing engagement strategies:** Engagement strategies (not just communication strategies) need to be developed and documented clearly articulating the collaborative outcomes sought. The goal should be to facilitate mutual understanding and trust between each agency, while proactively educating contractors as to their regulatory obligations and risks.
- **A joint approach to technology:** There is a need for greater joint project work on the adoption of a range of technology applications to each agency.
- **Performance based contracts:** Incentivised, performance based contract agreements with harvesting contractors, incorporating both business efficiency targets and greater environmental KPIs should be explored.
- **Increasing focus on licensing and training:** Contractor training and licensing regimes need to be better utilised as a catalyst for change to more clearly articulate environmental obligations and risks.

2.2 Summary of recommendations

Recommendation 1

1.1 That OEH and Forests NSW further review the scope and prioritise the proposed legislative time table, assess existing mechanisms that may already be addressing legislative issues, and assign joint project resources as is appropiate.

Recommendation 2

2.1 Establish a joint working group to define the priorities and expectations of the parties. This may require input from the respective Ministers in the event of any failure to agree, and should be undertaken within the context of the existing wood supply agreements.

It is acknowledged that the Regional Forests Agreements and wood supply contracts are binding. In that context it is important that the Government ensures that commitments made for future wood supply agreements are sustainable and consistent with ESFM.

Recommendation 3

3.1 An external review group should be convened to assess the specific areas of overlap within the legislation and how the complexity of the legislation could be reduced. This is likely to have a broader impact than forestry operations and would require support from the appropriate Ministers.

Recommendation 4

4.1 Further amalgamations of the licenses within the various IFOAs.

4.2 Streamlining reporting including:

a. Aligning to financial year.

b. Decreasing the frequency of reporting.

c. Eliminating reports that do not add value / are duplications.

d. Simplifying report content to address high risk issues.

4.3 Assessing which licence conditions lead to improved environmental outcomes and are enforceable.

Recommendation 5

5.1 The departments develop a joint working group to specifically progress silvicultural management, with a focus on scientifically justifiable environmental outcomes and long term sustainability.

a. How to achieve increased flexibility of conditions within the licenses to take into account changing environmental and economic circumstances. Consideration

should be given as to how to balance flexibility with transparency and accountability.

b. Review of silviculture prescriptions to capture recent scientific advances, for example, the growth habits of eucalypts, hydrological connectivity and remote sensing technology (LIDAR).

c. Review of the Threatened Species Licence, Fisheries Licence and Environmental Protection Licence conditions based on risks to threatened species populations and the aquatic environment to take account of the broader regional "landscape". The objective should be to move from record-based protection conditions towards the protection of important elements of habitat, the monitoring of threatened species populations and adaptive management responses. This should involve a shift in focus away from low-risk harvesting activities and towards higher risk activities associated with roads and crossings and riparian protection. The counter to this type of approach is a potential shift towards site-by-site assessments and site specific conditions which could narrow the broad application of the licences.

d. The opportunity to increase focus on the use of forestry guidelines, codes of practice and best practice[2].

e. The role of the Certification of Forests NSW operations to the Australian Forestry Standard and accreditation of its Environmental Management System to ISO 14001 and how those documents can be better recognised as part of a regulatory regime which focuses and documents environmental outcomes rather than processes[3].

2 Note that the NPS Forestry contemplates the use of codes of practice: "Ecologically sustainable forest management and codes of practice,
Ecologically sustainable forest management will be given effect through the continued development of integrated planning processes, through codes of practice and environmental prescriptions, and through management plans that, among other things, incorporate sustainable-yield harvesting practices. The management plans will provide a set of operational requirements for wood harvesting and other commercial and non-commercial uses of forest areas, including conservation reserves and leased Crown land."

3 This approach is consistent with the Government's Better Regulation Principles which aim for clarity, simplicity, efficiency and effectiveness

f. Review of the state of the current forest landscape which may necessitate updating of the Comprehensive Regional Assessments with particular consideration to sustainable yield[4].

5.2 Ideally any review of the conditions would describe the outcomes required with regard to the protection of various features. This might necessitate reserving increased discretion as to the achievement of the outcomes to Forests NSW, with some form of escalated corporate penalty (including civil and administrative) or prosecution ensuing when those outcomes were not achieved.

Recommendation 6

6.1 There is a need for a working group to further investigate whether:

a. Compliance with the licenses, at least in the first instance, can be managed by one agency.

b. The review process is the most efficient and effective method to review conditions of the IFOA. This issue should form part of the joint working group terms of reference.

Recommendation 7

7.1 The prescriptive licensing regime, with its associated administrative and reporting requirements, impacts on the efficiency of Forests NSW. Equally, these matters constrain OEH's capacity in responding to the more serious, big picture environmental issues quickly and effectively. Assuming parties want to progress from the status quo, the previous recommendations are summarised as:

Short term (next 12 months):

a. Establish a joint guiding philosophy (ESFM based).

b. Consolidate the IFOA licences into one document.

c. Investigate streamlining reporting requirements.

4 This is consistent with the Auditor General's Report (2009) "Sustaining native forest operations, Forest NSW", The Audit Office of NSW, http://www.audit.nsw.gov.au/publications/reports/performance/2009/forests/forests.pdf

d. Establish a joint working group to progress silvicultural management.

e. Investigate use of formal review processes and opportunities for more reactive responses to continuous improvement within the conditions.

Short to medium term (next three years):

a. Investigate review of the Comprehensive Regional Assessments and Forest Agreements.

b. Better integrate non-regulatory documents such as the Codes of Practice and environmental management systems together with improved technologies.

Medium to long term (next five years):

a. Ensure that commitments made to future wood supply are sustainable and consistent with ESFM.

b. Establish a review working group to assess overlap within the regulatory regime with a view to reducing complexity and consolidating multiple agency responsibilities (including management of IFOAs by one department).

Recommendation 8

8.1 OEH needs to demonstrate the existence of being a capable guardian to contractors through enhanced engagement and education approaches, and increased use of existing mechanisms such as licensing and training regimes.

Recommendation 9

9.1 OEH should further consider adopting a regulatory strategy that actively aims to build trust and engage with relevant stakeholders. An important element of managing Forests NSW and harvesting contractors (and other industry and stakeholder groups) is to build trust and respect.

9.2 As part of the regulatory strategy, OEH should actively promote and publish its proactive compliance program, and provide information and assistance that is regularly reviewed.

Recommendation 10

10.1 As part of the OEH performance development program, a skills analysis of relevant forestry related staff qualifications in areas of regulatory compliance, investigation and auditing should be undertaken.

10.2 All OEH staff involved in auditing and subsequent investigations should undertake OEH's Authorised Officer course training as a minimum standard. Further, staff should be provided an opportunity to undertake the Certificate IV (Government Investigations) or Diploma level course.

Recommendation 11

11.1 All forestry related audit investigations should be documented in a central investigations case management system. A running log, and scanned copies of relevant evidentiary material should be electronically documented as an investigation progresses. Consideration needs to be given to moving away from paper files as a concept, which will have flow on effects for those regulated. OEH should further consider:

a. 'Live' on-line operational interaction with Forests NSW at critical milestones of harvesting procedures.

b. Greater use of exception based reporting to inform audit regime.

c. Joint projects, further looking at application of online reporting, GPS, and satellite/spatial imagery to monitor activity. OEH may wish to further engage with the NSW Roads & Traffic Authority who are trialing the application of telematics and GPS to monitor heavy vehicle access through the Intelligent Access Project.

Recommendation 12

12.1 OEH should review its auditing regime and its application of risk management and priorisation. Better intelligence, information and trends will be vital in ensuring limited regulatory resources are allocated in an informed manner. As an example, audits should not be driven solely by a single complaint – unless evidence substantiates it as a high

priority. Certainly however, a 'Public Interest' test or the like is an important consideration in assessing complaints.

12.2 OEH should have access to an 'intelligence and analysis' resource. Auditing and investigation responses should be prioritised and attended to from a state perspective, addressing the most 'at risk' environmental matters first.

Recommendation 13

13.1 In conjunction with Forests NSW, OEH should develop a prioritization process that incorporates the use of assigning a numerical weighted value as part of an assessment and response process - either utilising a standard 'likelihood and consequence model', or a system that applies weightings for specific environmental offences as prescribed by legislation. Criterion such as the Public Interest, Ministerial Interest, a range of environmental values and even a diminished value over time (to raise the profile of the most recent offences) should be further explored.

Recommendation 14

14.1 In conjunction with Forests NSW, OEH should review its auditing regime to ensure that a more strategic application of resources is applied. Adopting the SARA approach, OEH should document its strategic objectives in regulating Forests NSW through audit and investigation.

14.2 The audit strategy should address:

a. What is the fundamental purpose of the auditing regime?
b. Where are the high-risk forestry operations by region and environmental values?
c. What are the most important environmental outcomes to be preserved in NSW's Crown native forests?
d. What are the metrics to rate non-compliance issues?
e. What are the audit design, and tools to be utilised?

Recommendation 15

15.1 OEH's staff should be better supported through the application of an electronic auditing system incorporating a Visual Basic Application. The system should be compatible with other existing OEH systems.

Recommendation 16

16.1 OEH should have in place a risk-based approach in setting audit objectives, scope and gathering evidence of which administration decisions can be made. The agency needs to apply the principles of compliance management and the importance of a longitudinal approach, and ideally, establish a state calendar for compliance auditing. In short, the practical audit framework should be graduated and strategically risk-based, covering:

a. Audit planning, scope and focus.

b. Risk management and OH&S issues.

c. Documented operational policy and procedures.

d. Communication frameworks and contingency planning.

e. Standard of evidence required during the audit to validate the level of compliance to statutory instruments.

f. Collection and storage of evidence and the relevance of audit evidence to later compliance actions.

Recommendation 17

17.1 OEH's Prosecution Guidelines were dated 2004. These guidelines should be reviewed and updated, reflecting contemporary investigation and prosecution standards.

17.2 Guidelines for Forestry related Enforcement Options have not been able to be reviewed. If these Guidelines have not been recently reviewed they should be, forming a part of the broader review of Prosecution Guidelines.

Recommendation 18

18.1 An OEH Forestry Engagement Strategy should be documented, and detail three key components of the engagement process – how to engage, who to engage and what to engage on:

18.2 How

a. The agency's philosophical approach in engaging key stakeholders.

b. Specific approaches as to how stakeholders such as Forests NSW will be engaged (i.e. through formal processes such as a FMS working groups).

c. Educational mediums to be used - such as the use of SMS/email to provide stakeholders compliance updates, emerging issues, forward audit program overview, related prosecutions etc.

d. Education material resources available – revisited and updated annually.

e. Qualitative mechanisms to inform regulatory approaches (use of surveys, focus groups).

f. Specific web based links, 'chat' capacity, FAQs.

18.3 Who and What

a. Scheduled workshops and other proactive activities. Identify the topics to be addressed, which OEH and Forestry NSW staff are involved and the outcomes sought (for example, discussion on silviculture practices).

b. Joint project/collaborative initiatives (i.e. performance based contracts, adopting greater use of technology, reporting consolidation, legislative review, contractor licensing and training projects etc).

c. Contractor initiatives – consolidated plan by OEH to engage and educate contractors through greater use of the existing licensing regime, and training/certification processes.

Recommendation 19

19.1 OEH documents a Crown Native Forests Regulatory Strategy.

The strategy would outline:

a. Purpose and objectives to be achieved through the strategy (define with Forests NSW ESFM outcomes sought, what is 'sustainable' harvesting, silviculture practices, development of outcome based regulation etc).

b. The overarching principles for selecting cases for audit and investigation, and referral for prosecution.

c. Engagement and Education Strategy.

d. Application of market based instruments – licensing regime, performance based contracts.

e. Intelligence assessments, risk management and strategic targeting.

f. Forward legislative/policy instrument timetable (focusing on the development of a strategic approach) with a move towards greater civil and administrative options.

3. IMPROVING THE LEGISLATIVE AND POLICY FRAMEWORK: REVIEW FINDINGS AND RECOMMENDATIONS

In view of the legislative background, this section of the Report examines the issues raised by both OEH and Forests NSW and provides commentary on various aspects of the regulatory environment.

One of the key issues identified is a level of complexity and duplication in the current existing legislative and policy instruments that contributes to inefficient and ineffective regulatory practice. The legislative framework needs to be reviewed and recast to better reflect current practices, outcomes based philosophies and reduce inherent duplication and overlap between respective agencies.

As seen in the diagram shown below (Figure Two), a framework is proposed to address future priority areas of legislative review, and assigned an indicative timeframe over the short, medium and long term.

Recommendation 1

1.1 That OEH and Forests NSW further review the scope and prioritise the proposed legislative time table, assess existing mechanisms that may already be addressing legislative issues, and assign joint project resources as is appropiate.

Legislative Review Time Table

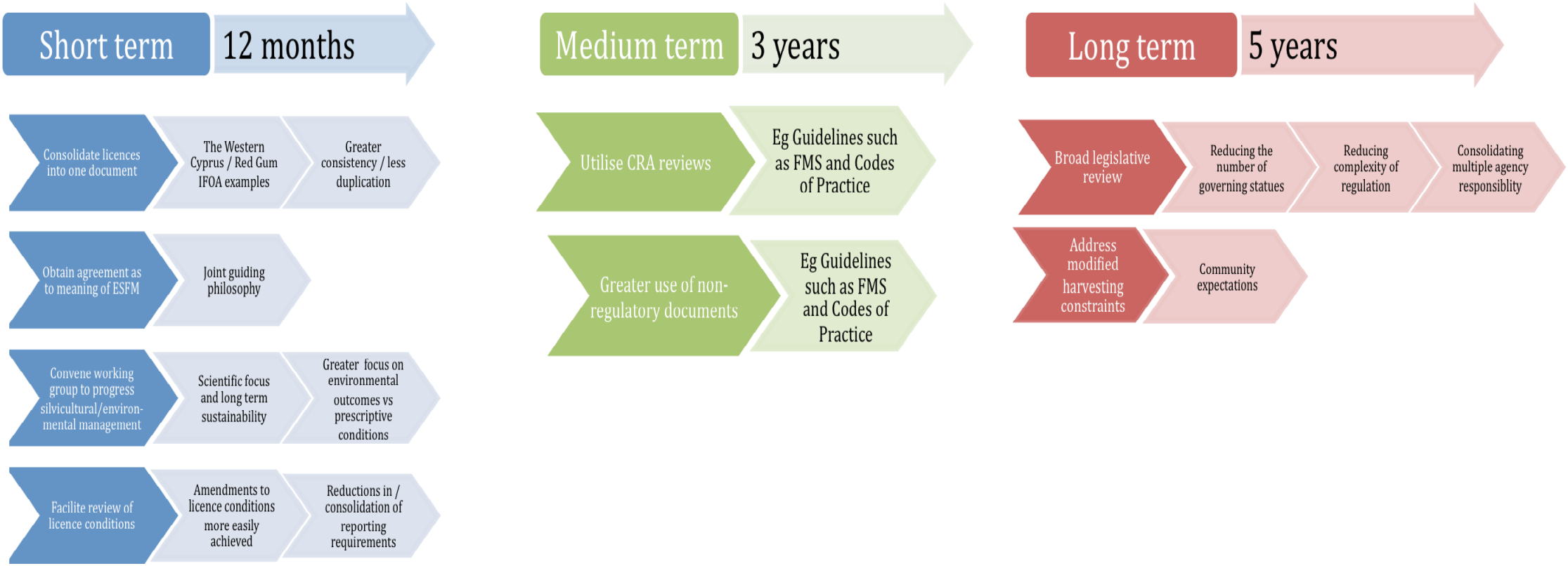


Figure two Recommended legislative review timeline

To a large extent, the working relationship of OEH and Forests NSW has been shaped by an historical regulatory framework that is over a decade old. This framework is neither contemporary, nor flexible. It was created in the late 1990s when the State grappled with political, economic and environmental issues associated with the management of the State's native forests. During that time, both departments have continued to work within the regulatory framework, but over time, as technologies have advanced and experience has informed operational outcomes, the regulatory framework has failed to keep up. As a result there is concern by both departments that change is required.

There are a number of issues identified in this report, some of which are raised by either one or both parties, or which are apparent from an external perspective. The problem can best be summarised as a common concern that the current regulatory environment is neither efficient nor effective. The objective is to improve the effectiveness of the regulation in providing assurance of environmental outcomes while improving the efficiency of forestry operations.

Consultation with the parties has identified that the problem can be characterised as having the following components:

- There is a divergence of interpretation of the underlying regulatory drivers.
- The legislation is complex.
- There is duplication and inconsistency as between documents.
- The licence conditions do not always achieve good environmental outcomes, and raise issues of enforceability.
- The need for Forests NSW to work with multiple agencies.

The sections below outline the factors contributing to the parties' concerns and set out recommendations to address those concerns. It is noted that in some cases the recommendations overlap or are complementary.

3.1 **Factors contributing to the parties' concerns**

There are underlying regulatory drivers and a divergence of views about the meaning of key outcomes that the existing framework seeks to achieve. For example, the term Ecologically Sustainable Forest Management (ESFM) creates some division between those dealing with environmental and forestry matters.

In the first instance, the definition of ESFM is encapsulated by the vision and objectives contained within the National Forestry Policy Statement. These are broad and overarching goals, objective and policies that together make up ESFM.

Within the forest agreements, ESFM is further defined as:

> "*managing forests so that they are sustained in perpetuity for the benefit of society by ensuring that the values of forests are not lost or degraded for current and future generations*".

In the ESFM Eden NSW Plan, the overriding intention of the Government is described as:

> *"The NSW Government has identified the overriding intention of forest management across all tenures to be the maintenance and enhancement of all forest values in the environmental, social and economic interests of the State"*[5].

The policy of the ESFM Plan is that:

> *"Forests NSW will manage the State forested lands of Eden region in an ecologically sustainable manner to deliver benefits to the community from all uses of the forest both now and for future generations while maintaining ecological processes and biodiversity"* [6].

The executive summary of the ESFM plan refers to the following matters:

- Natural heritage
- Aboriginal cultural heritage
- Non-aboriginal cultural heritage

[5] See ESFM for Eden Region as an example. (Forests NSW - Sustainable forest management , 2011)
[6] See ESFM for Eden Region, p 4. (Forests NSW - Sustainable forest management , 2011)

- Nature conservation
- Forest health
- Sustainable timber supply
- Economic development
- Social development
- Forestry operations
- Consultation, monitoring and reporting strategy

The Eden Region Forestry Agreement states:

> *"ESFM is the guiding philosophy for forest conservation and management. This philosophy is based on the recognition that the forest holds many values in society and that they include ecological as well as socio-economic factors..."*[7]

The Department of Primary Industry's website notes:

> *"Ecologically sustainable forest management (ESFM) is our guiding philosophy. ESFM is about managing forests to maintain ecological principles and biodiversity while optimising the benefits to the community from all uses of the forest - all within the framework of running a profitable business for the people of NSW. This means more than just delivering our social, environmental and economic outcomes. It's about being forest stewards, managing forests for today and tomorrow..."*[8]

From the National Policy Statement to the regional forestry agreements and forestry agreements, there is a clear focus on ESFM. Where Forests NSW tends to emphasize "benefits to the community from all uses of the forest both now and for future", the Department of Primary Industry's statements emphasize ecological principles and biodiversity over delivering on social, environmental and economic outcomes. This differing emphasis, while subtle in the documentation, belies the contrasting focus of the different stakeholders to the way in which the forest resource should be managed – in

[7] Eden Region Forest Agreement Clause 2.10.1 (New South Wales Government , 1999)
[8] Source: http://www.dpi.nsw.gov.au/forests/management

other words, the primary goals of the stakeholders are not the same. This was particularly apparent in interviews with staff from both agencies.

The differing primary focus flows down from the guiding documents, which in turn influence the operational conduct of the forest managers. Instead of focusing on an agreed hierarchy of environmental outcomes, each party manages the issue in accordance with their own primary goal. The inevitable result is that a tension is created which sets the scene for conflict. From the regulators' perspective enforcement is justified to redress the perceived imbalance.

3.2 Ecologically sustainable forestry management and wood supply

At the time of introduction of the Forestry and National Park Estate Act 1998, one of the criticisms leveled by the Opposition included that the increase in area of National Park and the consequent reduction in productive forest wood supply to the industry could only be maintained by over cutting the available resource.[9] It appears that 14 years later those criticisms still exist. Internally, OEH employees hold concerns relating to the long-term sustainability of the native forest resource in NSW and the restrictive nature of the wood supply agreements. These concerns are acknowledged by Forests NSW, who note that harvesting areas are progressively distant from the mills or that the wood resource is of lower quality.

It has also been acknowledged that during the last ten years a number of changes in the industry have occurred, which affected forest management and maintenance of timber supply. The Auditor-General's report of April 2009 found that:

> *"...Forests NSW should have sufficient timber to meet its wood supply commitments which are fixed for periods up to 2023 using both native and plantation hardwood. However, the cost and difficulty of harvesting and hauling this timber is likely to increase over time. This presents a significant challenge for Forests NSW to manage."*[10]

[9] Smith S, Forests in NSW: An Update 1999, NSW Parliamentary Library Research Service, see section 6.0

[10] Auditor General's Report (2009) *"Sustaining native forest operations, Forest NSW"*, The Audit Office of NSW http://www.audit.nsw.gov.au/publications/reports/performance/2009/forests/forests.pdf

With higher stumpage costs, there is the potential risk that economic constraints translate into reduced environmental compliance to reduce costs and meet supply agreements and a number of successful prosecutions have been undertaken in recent years[11].

Summary

In summary, it is clear that the pressures on wood supply, coupled with a divergence of philosophy as to the interpretation of ESFM, underpins the difficult working relationship between the parties. It is observed that without a joint guiding philosophy, which achieves better clarity and guidance for both parties, a breakdown in the working relationship between OEH and Forests NSW is almost inevitable and should come as no surprise.

Recommendation 2

2.1 Establish a working group to jointly define the priorities and expectations of the parties. This may require input from the respective Ministers in the event of any failure to agree, and should be undertaken within the context of the existing wood supply agreements.

It is acknowledged that the Regional Forests Agreements and wood supply contracts are binding. In that context it is important that the Government ensures that commitments made for future wood supply agreements are sustainable and consistent with ESFM.

3.3 Overcoming the complexity of the legislation

There are a number of environmental based statutes that influence forestry activities. Several other statutes separately regulate plantation forestry. While the Forestry and National Park Estate Act and the introduction of the IFOAs substantially reduced the requirement for compliance with general environmental legislation, a complexity remains.

[11] Hammond-Deakin, N. And Higgison, S. (2011), *If a Tree Falls, Compliance Failures in the Public Forests of NSW*, Environmental Defender's Office (NSW) Ltd, Sydney, Australia

This is seen most clearly through the resulting use of three separate licenses within the IFOAs, each developed under the auspices of different statutes.

A specific example of a complication inherent in the IFOA is where Forests NSW has the option to apply, or not apply, the Environmental Protection Licence. This is an issue of concern to OEH and some stakeholders who consider that it is not appropriate that Forests NSW has the option of 'turning off' the licence[12,13]. The main advantages to Forests NSW of not seeking Environmental Protection Licence authority are listed below, and are illustrative of the complexity of the provisions of the Environmental Protection Licence:

- There is no need to comply with numerous administrative requirements of the Environmental Protection Licence, such as sending to OEH for each non-scheduled forestry activity, summaries of operations, notifications of commencement of licence authority, notification of temporary cessation of licence authority, notification of recommencement of licence authority, final cessation of licence authority.
- It allows for harvest of some trees that are growing close to unmapped drainage lines.
- Forests NSW does not have to include summary information about those operations for which licence authority is not sought, such as summaries of those operational details, summaries of complaints received and summaries of non-compliance for the purposes of the annual return.
- There is no requirement to comply with any of the planning and operational conditions in the Environmental Protection Licence (it is noted that Forests NSW 'voluntarily' complies with those conditions as 'best practice').
- It reduces the risk of prosecution. Forests NSW has not been prosecuted for any activities where it has not sought Environmental Protection Licence coverage, although it has been issued with Penalty Infringement Notices under the Protection

[12] Outcomes from the Review of the NSW forest agreements and the integrated forestry operations approvals, November 2010 DECCW 2010/981

[13] Note that even where the Environmental Protection Licence is turned off third parties may not bring restraining, remedial or prosecution proceedings under s219 and 252 of the POEO Act or any other Act.

of the Environment Operations Act 1997 for causing or having been likely to cause water pollution.

The number of prosecutions under the Environmental Protection Licence when turned off, as compared to enforcement under the Act, suggests that it is much easier to prosecute for non-compliance with a prescriptive licence condition, than it is to prosecute for causing or being likely to cause water pollution. There appears to be a link between turning on the Environmental Protection Licence and enforcement.

That Forests NSW seeks to rely directly on the IFOA, rather than the Environmental Protection Licence, may be indicative that many of the matters that Forests NSW is required to comply with under the Environmental Protection Licence are unnecessary to achieve the outcomes sought by the legislation. Equally, it may be perceived as a valid means of avoiding compliance. Whatever the reason, it is symptomatic of underlying problems and a system that is not operating effectively for any of the parties. One conclusion is that the legislation has created a set of complex regulatory interactions that has diluted the efficiency and effectiveness of the statutory regime.

The above review has touched on areas of complexity in the legislation and while it has highlighted as one example, the turning off of the Environmental Protection Licence, this should be understood as one example only.

In economic terms, it is noted that the complexity of the regulatory environment inevitably adds to the costs of compliance. Total regulatory costs for Forests NSW in 2007/2008 were estimated at $7.86 M. In 2008/2009 these had risen to $8.26 M. Costs fell in 2009/2010 due to reduced tree marking and harvest planning costs[14].

Comment

The Red Gum IFOA, which came into effect 1 January 2011, is an example of how an IFOA can reduce complexity by integrating the three licenses into one document with a negotiated set of conditions. Although it has been observed that the environmental issues

[14] The costs provided to Forests NSW Treasury include, ecological surveys, tree marking, harvesting supervision and environmental compliance, and EPA licence fees. (Source Forests NSW)

are not as acute in relation to this area, say as compared to the coastal IFOAs,[15] the recently completed review of the IFOA for this region indicates that consistencies can be achieved as between the licenses. One of the most significant changes to this IFOA is that the drainage line issues have become consistent. The Western Cyprus IFOA (which recently took effect from 1 July 2011) also amalgamated the licence conditions. Importantly, this IFOA has moved away from requiring threatened species surveys to protecting important habitats, an outcome which is considered to be more efficient and effective as it targets active, rather than passive, protection.

Recommendation 3

3.1 An external review group should be convened to assess the specific areas of overlap within the legislation and how the complexity of the legislation could be reduced. This is likely to have a broader impact than forestry operations and would require support from the appropriate Ministers.

3.4 Problem duplication and inconsistencies between documents

There are a number of guiding documents at an operational level:

- The relevant Forest Agreement
- The IFOA – one for each area
- Three licenses for each IFOA
- The ESFM Plan
- The Forestry Code of Practice
- The Environmental Management System (mandated by the EPSM)

With the exception of the Code of Practice, all of these documents are mandatory. In particular, as noted above, the inclusion of three separate licenses within the majority of the IFOAs for each area creates duplication, which leads to inefficiencies and

[15] Pers com Forests NSW

inconsistencies. This is particularly the case as between the Fisheries Licence and the Environmental Protection Licence. For example, because the Fisheries Licence conditions are largely aimed at protecting riparian habitat and the aquatic environment, most of the conditions in the Fisheries Licence apply concurrently to, or overlap, the Threatened Species Licence and Environmental Protection Licence conditions that relate to the protection of riparian habitat and the aquatic environment.

Example one – unmarked drainage lines

There are multiple definitions of similar terms: For example, within the Environmental Protection Licence there are varying definitions of watercourse, unmapped drainage line and unmapped drainage depression[16].

Example two

The standards and conditions required by the IFOA duplicate the requirements of the Best Practice Manuals and Codes of Practice (as part of the Environmental Management System requirements). The IFOA requires the use of best practice in addition to compliance with the licence conditions but gives limited opportunity for amendment. For example, the IFOA specifies road maintenance planning requirements including assessing and documenting of a number of physical attributes of roads that are to be used during harvesting operations. Forests NSW applies best management practices and Codes of Practice in preference to the IFOA to assist it to determine things such as (using the example of road construction):

- Acceptable road grade (steepness).
- Construction technique – spill batter or fill cut depending on slop.
- Size of drainage pipes depending on catchment area, ground cover and anticipated rainfall"[17].

Example three

There are a number of reports that are duplicated as between the agencies[18].

[16] See internal memo Forests NSW – 27 July 2006.
[17] Personal Communication, Forests NSW
[18] Elements of the Forests NSW reports required under the Regional Forest Agreement/Forest Agreement/ IFOA are used by OEH for reporting to the NSW Parliament on the NSW Forest Agreements, IFOA and to the Commonwealth on the Regional Forest Agreements. Some elements also form part of Forests NSW ESFM reporting at the state, national and international levels.

Reports addressing the ESFM and compliance with the IFOAs, including achievement of milestones, must be submitted annually. Plans and reports submitted to regulatory agencies include:

- Annual Plans of Operations (logging, thinning, forest products, burning etc).
- Annual Reports of Operations.
- Monthly Reports of Operations.
- Environmental Protection Licence Annual Return – operations register, compliance register, complaints register, water quality monitoring reports.

Administrative requirements include preparation and submission to both OEH and Fisheries NSW of:

- Summaries of Operations
- Notification of Commencement of Operations
- Notification of Variations of Operations
- Notification of Temporary Cessation of Operations
- Notification of Recommencement of Operations
- Notification of Final Cessation of Operations
- Notification of dates for commencement and completion of numerous operational activities

The parties appear to generally accept that much of the reporting documentation before, during and post-harvesting adds to the costs of compliance, without adding commensurate environmental value. However, it has been observed by OEH that a failure to comply with reporting requirements may be also indicative a need for improved planning.

An example of improved efficiencies in administrative requirements and a reduction in condition inconsistency can be seen where IFOA licenses have been amalgamated and where resources have been channeled towards active, rather than passive, protection. Although consolidation of the licenses will highlight and potentially reduce inconsistencies,

to achieve real reductions in duplication and inconsistency within the IFOA licenses across the board, consideration should be given to how the legislation can be amended to reserve overall regulatory control of forestry activities to one department – for example OEH, possibly with specialist input where required.

Recommendation 4

4.1 Further amalgamations of the licenses within the various IFOAs.

4.2 Streamlining reporting including:

a. Aligning to financial year

b. Decreasing the frequency of reporting

c. Eliminating reports that do not add value / are duplications

d. Simplifying report content to address high risk issues

4.3 Assessing which licence conditions lead to improved environmental outcomes and are enforceable.

3.5 Whether the licence conditions achieve good environmental outcomes/enforceability issues

All three IFOA licenses contain similar but different conditions and there are concerns expressed by both parties as to the merit of the conditions. For Forests NSW the perception is that:

> *"Many of the IFOA conditions are procedural in nature, do not influence operational outcomes and do not recognise the concept of environmental harm. Monitoring, auditing and reporting compliance with all conditions is not practical or efficient, and detracts from the objective of continually improving the performance of operations that have the potential to cause significant environmental impact"*[19] .

[19] Pers com Forests NSW

On OEH's part it has expressed concerns that, particularly in the threatened species licence, many of the conditions are difficult to enforce. They cite use of terms such as "as far as practicable" as being problematic.

Both parties' comments illustrate the tension between accountability and effectiveness.

The following examples highlight the types of concerns that arise from the IFOAs and licence conditions.

Example one

Clause 5 of the IFOAs (for example, Upper North East) prescribes the way silviculture practices must be carried out. Forests NSW considers that those prescriptions:

a. Do not take into account the growth and regeneration habits of the eucalypts with the consequence that natural regeneration of the forest is discouraged and growth of young trees is limited.

b. Act against the effective and efficient planning and implementation of forest operations, putting the profitability and sustainability of forestry and the timber industry at risk.

Example two

The Threatened Species Licence and Fisheries Licence conditions are perceived as aiming to protect every individual of a threatened species on each and every hectare of State forest. From Forests NSW's perspective, this approach limits its ability to take into account the 'landscape' context of each site of State forest (its position in relation to the network of informal reserves and undisturbed areas) or the broader region (its position in relation to the network of formal reserves on National Parks). Similarly, the conditions of the Environmental Protection Licence are aimed at protecting the aquatic environment from water pollution at each site on State forest without having regard to the broader 'landscape' context or the normal cycles of forest management (disturbance and recovery).

Example three

Many conditions prescribe in great detail 'how' things are to be done rather than describing the desired 'outcome'. Using the Upper North East IFOA as an example, condition 5.7 (f2) of the Threatened Species Licence describes how to remove an

accidentally felled tree from a Protection Zone (hard). It also requires the date on which the tree was accidentally felled into the zone to be recorded. Condition 19 of the Environmental Protection Licence does the same and condition 19A prescribes that furrows created by the removal of the tree must have 70% ground cover achieved within five days of the creation of the furrow. Conditions 7.5 (f) and 8.3 (a) (ii) of the Fisheries Licence have similar provisions. There are a number of requirements to record and store dates activities commenced and ceased so that they can be provided to the regulating agencies, when requested.

Example four

Forests NSW considers that many conditions are not necessarily underpinned by science or logic. Using the IFOA for Eden as an example, Condition 5.9 of the Threatened Species Licence prescribes that wetlands less than 0.5 ha in area must have an exclusion zone 10 m wide surrounding them. It also prescribes that wetlands between 0.5 ha and 2.0 ha must have an exclusion zone 20 m wide and wetlands larger than 2.0 ha must have an exclusion zone 40 metres wide surrounding them. There is no apparent basis for prescribing 10 m as the minimum width of the exclusion zone (it is not clear what attributes of the wetland are being protected from what threats) and therefore the logic of doubling the width of the exclusion zone and doubling it again for larger and larger wetlands is questioned. This same approach is applied to the protection of wetlands in the Environmental Protection Licence and Fisheries Licence and to the protection of rocky outcrops, heath and other features in the Threatened Species Licence.

Summary

It is observed that the natural tensions that exist between prescribing outcomes and enforceability have resulted in prescriptive regulation, which if it fails, is backed up by enforcement. Recently, the Victorian EPA noted that there is a need to "*move beyond compliance: Encouraging business to go beyond current standards, to build the case for continuously improving standards, and informing the development of future standards*".[20] Prescriptive and inflexible regulatory measures can lead to inefficiencies that include capping the threshold for improvements.

[20] EPA Victoria *"Compliance and Enforcement Review: A Review of EPA Victoria's Approach"*, Publication 1368, February 2011, p23

Continuous improvement is vital to better environmental outcomes, but continuous improvement depends on the ability to alter practices to reflect the lessons learned. This requires a degree of flexibility, which is presently not well provided for in the existing licence system.

Enforcement mechanisms are only one of the tools for achieving improved environmental outcomes. The theory suggests that with clear Ministerial direction, it should be easier to move 'beyond compliance' as between two public sector agencies, than between a government agency and private sector entity. But in practice this does not seem to be the case. With multiple agencies involved this appears more complex than it might otherwise be.

Recommendation 5

5.1 The departments develop a joint working group to specifically progress silvicultural management, with a focus on scientifically justifiable environmental outcomes and long term sustainability. Matters for consideration include:

g. How to achieve increased flexibility of conditions within the licenses to take into account changing environmental and economic circumstances. Consideration should be given as to how to balance flexibility with transparency and accountability.

h. Review of silviculture prescriptions to capture recent scientific advances, for example, the growth habits of eucalypts, hydrological connectivity and remote sensing technology (LIDAR).

i. Review of the Threatened Species Licence, Fisheries Licence and Environmental Protection Licence conditions based on risks to threatened species populations and the aquatic environment to take account of the broader regional "landscape". The objective should be to move from record-based protection conditions towards the protection of important elements of habitat, the monitoring of threatened species populations and adaptive management responses. This should involve a shift in focus away from low-risk harvesting activities and towards higher risk activities

associated with roads and crossings and riparian protection. The counter to this type of approach is a potential shift towards site-by-site assessments and site specific conditions which could narrow the broad application of the licences.

j. The opportunity to increase focus on the use of forestry guidelines, codes of practice and best practice[21].

k. The role of the Certification of Forests NSW operations to the Australian Forestry Standard and accreditation of its Environmental Management System to ISO 14001 and how those documents can be better recognised as part of a regulatory regime which focuses and documents environmental outcomes rather than processes[22].

l. Review of the state of the current forest landscape which may necessitate updating of the Comprehensive Regional Assessments with particular consideration to sustainable yield[23].

5.2 Ideally any review of the conditions would describe the outcomes required with regard to the protection of various features. This might necessitate reserving increased discretion as to the achievement of the outcomes to Forests NSW, with some form of escalated corporate penalty (including civil and administrative) or prosecution ensuing when those outcomes were not achieved.

3.6 **Working with multiple agencies**

Forests NSW works with multiple agencies in order to meet its lawful obligations. In relation to the IFOAs, the principal authorities are:

- OEH – Department of Premier and Cabinet.
- Fisheries NSW – Department of Primary Industries.

21 Note that the NPS Forestry contemplates the use of codes of practice: "Ecologically sustainable forest management and codes of practice,
Ecologically sustainable forest management will be given effect through the continued development of integrated planning processes, through codes of practice and environmental prescriptions, and through management plans that, among other things, incorporate sustainable-yield harvesting practices. The management plans will provide a set of operational requirements for wood harvesting and other commercial and non-commercial uses of forest areas, including conservation reserves and leased Crown land."

22 This approach is consistent with the Government's Better Regulation Principles which aim for clarity, simplicity, efficiency and effectiveness

23 This is consistent with the Auditor General's Report (2009) "Sustaining native forest operations, Forest NSW", The Audit Office of NSW, http://www.audit.nsw.gov.au/publications/reports/performance/2009/forests/forests.pdf

Other agencies include the National Parks and Wildlife Service, the Heritage Branch[24] and the Environment Protection Authority. In matters associated with land, Forests NSW also works with the Lands Department, State Property Authority, Sydney Water, Local Councils and the Rural Fire Services.

Working with multiple agencies, particularly in relation to the oversight of the IFOAs potentially creates duplication, a lack of certainty and inefficiencies.

Example one: day-to-day operations

If an allegation is made by a third party that Forests NSW has intruded into a riparian protection zone, the non-compliance may be investigated by both parties being OEH and Fisheries NSW, either party or neither party. If either party does decide to investigate, they almost certainly do it independently of the other, their findings may be different (because of slightly different conditions or different interpretations of conditions or definitions) and their responses may be different. This does not seem efficient from a 'whole of Government' perspective.

Example two: The IFOA review process

If Forests NSW wishes to amend conditions relating to riparian habitat and/or aquatic environment protection, they would need to negotiate changes with both OEH and Fisheries NSW. An example of this occurred in relation to the issue of best management practices for unmapped drainage lines. Forests NSW developed its own best management practices for the protection of unmapped drainage lines where the risk is determined to be low, and Environmental Protection Licence coverage is not sought. OEH did not agree that Forests NSW's best management practices provided adequate protection for unmapped drainage lines and proposed retaining the conditions of the Environmental Protection Licence (with some modification) provided that Environmental Protection Licence coverage was retained at all times. Fisheries NSW declined to amend the Fisheries Licence to align it with the Forests NSW / OEH's proposal with the result that no changes were agreed and the inconsistencies remain[25].

24 A state government agency within the Department of Planning

25 Pers com Forests NSW 22 June 2011

Theoretically the IFOA reviews provide an opportunity to:

- Reduce the cost of regulation by simplifying and reducing the administrative and documentation burden.
- Assess progress of the achievement of milestones/commitments defined in the agreements and approvals with a view to specifying realistic targets.
- Address issues relating to the implementation of the agreements and approvals in particular components of the licence that are resource intensive adding significant costs to business without any tangible environment benefits.
- Consider the suitability of the ESFM criteria and indicators to measure the achievement of ecologically sustainable forest management with a view to aligning these to the nationally and internationally sanctioned Montreal Process Criteria and Indicators.

Comment

The 2010 review terms of reference released in June 2009 were the result of negotiations between the parties and were narrow in scope. They were publicly notified with twenty-one submissions received, out of which many addressed issues beyond the scope of the report. As a result of the review process there were 63 licence amendments designed "to help streamline and improve the effectiveness of the IFOA's conditions" [26].

Summary

On the face of the reviews, it does not appear that improved environmental outcomes have been the driving factor. For example, discussions appear to have been approached as adversarial negotiations, with parties typically seeking some issues brought to the table before others can be progressed.

[26] DECCW 2010/981"Outcomes for the Review of the NSW Forest Agreements and the Integrated Forestry Operations Approvals"

It is acknowledged that there is difficulty obtaining multi party agreement where inconsistencies are identified - it is inevitable that multiple departments will not always agree. Where disputes arise, these can be referred to the Director or CEO/Director-General level. Failing resolution at this level, disputes are referred to the respective Ministers. The involvement of multiple departments with respect to the different licenses creates the potential for conflict and inefficiency, particularly if there is a breakdown in relationships. The benefit of working with one agency is that relationships can be efficiently enhanced through engagement and education strategies.

In practice, there are tensions between the opportunities provided by the review process and the ability of the parties to maximise those opportunities. There is no recent evidence to suggest that the review process is capable of addressing the underlying concerns expressed by both OEH and Forests NSW regarding the efficacy of the IFOA and licence requirements. It may be that the negotiation process regarding the scope of the reviews is more comprehensive than the review process itself.

As noted above, the issue of multi-department involvement in forestry operations is not limited to the review processes.

Recommendation 6

6.1 There is a need for a working group to further investigate whether:

a. Compliance with the licenses, at least in the first instance, can be managed by one agency.

b. The review process is the most efficient and effective method to review conditions of the IFOA. This issue should form part of the joint working group terms of reference.

3.7 Summary and recommendations

The attempts to integrate planning requirements for forestry within the IFOA framework were commendable, but now that it is halfway through the anticipated 20 year term of the

forestry agreements the workability of the existing framework is being questioned by all parties. It is timely that further consideration is given to what developments should be addressed, and what (if any changes) should occur.

Both parties (OEH and Forests NSW) agree that the licences are problematic. They are variously described as "*a product of their time*" and a reflection of a negotiated outcome in a climate where "*the posts have changed but the ball park hasn't moved*". Overall, it is apparent that the parties agree that the regulatory system contains inefficiencies, and importantly, limits the thresholds for improvement (by way of administrative costs, duplication, lack of continuous improvement etc).

Recommendation 7

7.1 The prescriptive licensing regime with its associated administrative and reporting requirements impact on the efficiency of Forests NSW. Equally, these matters constrain OEH's capacity in responding to the more serious, big picture environmental issues quickly and effectively. Assuming parties want to progress from the status quo, the previous recommendations are summarised as:

Short term (next 12 months):

a. Establish a joint guiding philosophy (ESFM based).
b. Consolidate the IFOA licences into one document.
c. Investigate streamlining reporting requirements.
d. Establish a joint working group to progress silvicultural management.
e. Investigate use of formal review processes and opportunities for more reactive responses to continuous improvement within the conditions.

Short to medium term (next three years):

a. Investigate review of the Comprehensive Regional Assessments and Forest Agreements
b. Better integrate non-regulatory documents such as the Codes of Practice and

environmental management systems together with improved technologies

Medium to long term (next five years):

a. Ensure that commitments made to future wood supply are sustainable and consistent with ESFM.

b. Establish a review working group to assess overlap within the regulatory regime with a view to reducing complexity and consolidating multiple agency responsibilities (including management of IFOAs by one department).

4. ACHIEVING REGULATORY BEST PRACTICE: REVIEW FINDINGS AND RECOMMENDATIONS

This section deals more specifically with OEH's function as the key regulator, and explores regulation best practice, non-compliance theory and seeks to identify approaches, practices, processes, systems and training that will improve the Agency's regulatory effectiveness and efficiency - both strategically and operationally.

It is the authors' view that OEH's resources are clearly limited, and that the small Crown Forestry Policy and Regulation unit has by necessity been predominately outwards focused given its oversight role of the much larger entity that is Forests NSW. While it is acknowledged that more resourcing is unlikely, the below recommendations are intended to 'dove tail' into existing practices to provide benefits over the medium and longer term. In essence the objective is to make OEH adopt a more strategic approach – to be more in the business of steering, rather than in the business of rowing.

4.1 What is regulatory best practice?

In its narrowest definition, regulation refers to a set of laws and rules overseen usually by a public sector entity. At a macro level, good regulatory practice must focus on the outcomes of regulatory aims, not just about compliance with prescriptive rules[27]. Good regulation should advance self-regulation[28].

For regulatory practitioners such as OEH, it is useful to align regulatory objectives with business goals[29]. Underpinning this ideal is a robust evidence-based regulatory compliance strategy – where a proportionate and rational progression of penalties for non-compliance ultimately results. It is accepted that for recidivists and the worst offenders that severe penalties such as imprisonment, licence revocation or severe financial penalties ("corporate capital punishment"[30]) should apply.

[27] May P & Burby R 2008. Making sense out of regulatory enforcement. *Law and policy* 20(2): 157–182
[28] Ayres I & Braithwaite J 1992. Responsive regulation: transcending the deregulation debate. New York: Oxford University Press
[29] Parker C 1999. Compliance professionalism and regulatory community: the Australian trade practices regime. *Journal of law and society* 26(2): 215–239
[30] Ayres I & Braithwaite J 1992. Responsive regulation: transcending the deregulation debate. New York: Oxford University Press

However, while regulation has been around for a very long time, it is important to note that the volume of laws and legal obligations has grown dramatically in recent years. Since 1990, the Australian Parliament has passed more pages of legislation than were passed during the first 90 years of federation. And while the regulatory burden for industry has increased and become more complex, regulation itself in the 21st century is progressively being charcterised by flexible options.

It is now generally accepted that good regulatory practice will focus on the regulatory outcome, rather than concern strictly about compliance with prescriptive rules. An outcome-orientated approach such as this is difficult to achieve within the current prescriptive NSW native forests regulatory environment.

There has been much research on what exactly responsive regulation means and how regulators should be responsive to the conduct of those they seek to regulate, and more particularly, as to how effectively industry are regulating themselves before "*deciding on whether to escalate intervention*"[31].

In regulatory enforcement, there is a body of argument to suggest that a compliance approach based entirely on strong punitive enforcement may produce a culture of regulatory resistance among some employers[32]. There is no doubt that tensions exist between OEH and Forests NSW. There is a view held by a number of Forests NSW staff that the current licensing system almost guarantees failure of some kind every time a harvesting operation is carried out through breaching of the rigid licence conditions. On the hand, some OEH staff believe that Forests NSW should focus more on protecting the environmental values of the state's forests, and less on its commercial success.

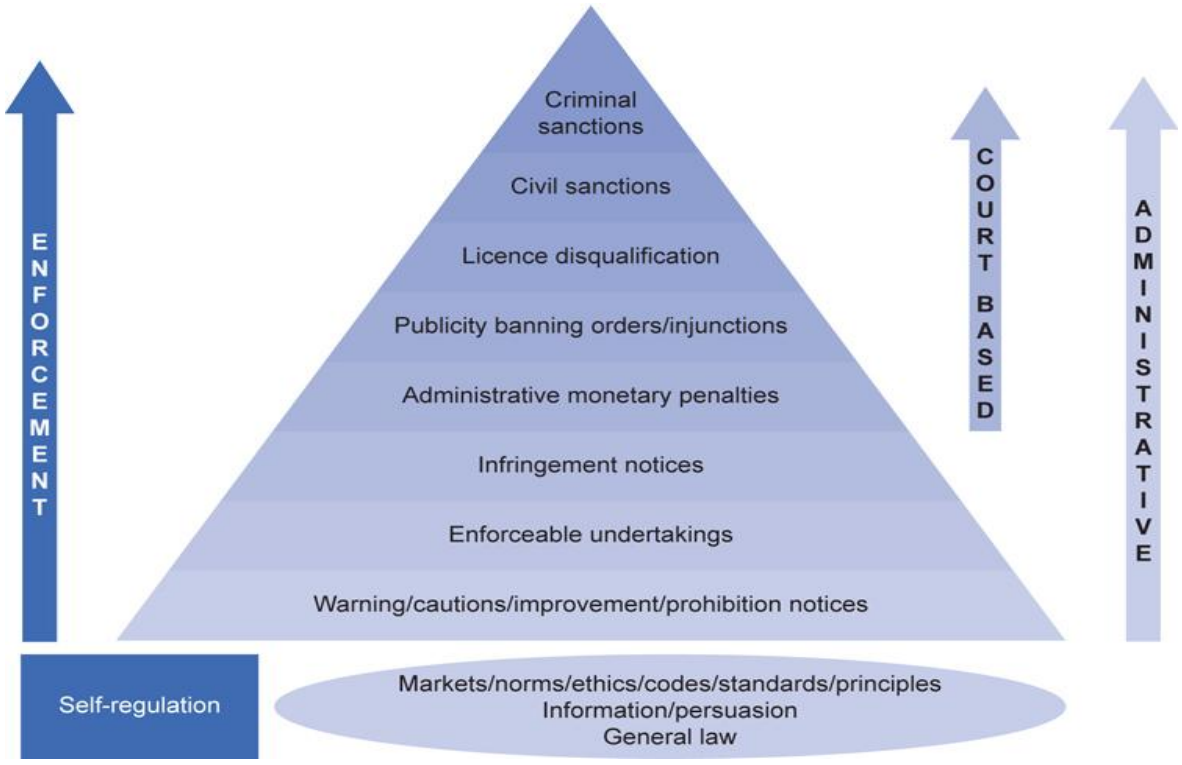
Regulators are also beginning to acknowledge that reliance simply on informal and non-punitive measures can "*easily degenerate into intolerable laxity and a failure to deter those who have no intention to comply voluntarily*"[33].

Getting the balance right is not easy. Regulatory theorists talk about finding the right mix to the "regulatory problem" or administering the correct dose/response. In order to

[31] Braithwaite J & Drahos P 2000. *Global business regulation*. Cambridge: Cambridge University Press
[32] Bottomley B 2009. Occupational health and safety management systems: strategic issues report. A report prepared for the National Occupational Health and Safety Commission
[33] Gunningham N & Johnstone R 1999. Regulating workplace safety: systems and sanctions. Oxford: Oxford University Press

illustrate the range of systems and sanctions (or mechanisms for redress) Figure three represents them around the well known Enforcement Pyramid, based on frequency of use and severity of sanctions.

Figure three – The Enforcement Pyramid[34]



Comment

The key for a lead environmental regulator such as OEH is to get the mix right. To ensure that there is a sustainable balance between educating industry, using market based mechanisms and social incentives, while being able to respond to serious transgressions of law. As outlined below, OEH needs to consider its regulatory strategy and ensure it is established upon best practice principles. Ideally, it would actively engage and educate the regulated community (in this specific instance Forests NSW and harvesting contractors), utilise existing licensing and training regimes effectively, while having a risk based evidence

[34] Ayres I & Braithwaite J 1992. Responsive regulation: transcending the deregulation debate. New York: Oxford University Press

approach to assessing non-compliance and carry out enforcement operations with surgical like precession.

4.2 Compliance theories on offending

A number of recent events requiring a formal investigation and response from OEH were examined as part of the review.

There are many criminological theories into why individuals commit deviant acts (for example, offend). Three of these, rational choice, routine activities and control/social bond theory are briefly examined to provide a potential theoretical base for explaining, managing and assisting in the prevention of Crown native forests related offences.

- **Rational choice and routine activities theory**

It is argued that 'the essence of rational choice perspective is that the individual (i.e. someone involved in a harvesting operation) will take advantage of an offending opportunity if the expected benefits exceed expected costs. These benefits can be 'tangible gains such as money or avoided inconvenience' or they can be 'psychic benefits associated with the act'. The possible costs 'are determined by the likelihood and severity of externally imposed formal and informal sanctions and the strength of moral regret' [35].

Put simply, the argument is this: a person who commits an offence has rationally weighed up the risks and benefits of the situation and has made a rational choice to commit that offence – that is, as an example, Forests NSW does not adhere to licensing conditions because the risk of detection is low, and financial benefit great.

The routine activity theory of crime, which is closely associated with rational choice theory, directs its attention, not at the 'characteristics of offenders', but 'upon the circumstances in which they carry out predatory criminal acts'[36].

However, when considering the efforts Forest NSW puts into systems to try and manage its environmental obligations (such as FMS), that it is directly answerable to a Minister, highly

[35] Nagin, Daniel. S & Paternoster, R. 1994. "Personal Capital and Social Control: The Deterrence Implications of a Theory of Individual Differences in Criminal Offending". American Society of Criminology, 32 (4): 581-596.
[36] Cohen, Lawrence E & Felson, M. (1979). "Social Change and Crime Rate Trends: A Routine Activity Approach". *American Sociological Review*, 44: 588-608.

visible and that there is no real direct gain for individuals employed by Forest NSW, it seems unlikely that related offences are carried out in a clinical, premeditated and calculating manner.

- **Control and social bond theory**

Control theory is a theory of conformity, which asks why people don't offend, as opposed to why do they offend? The answer is 'Social Bonding'. Put simply, control theory maintains that it is the strength of a person's social bond to conventional society that determines the likelihood of their conforming to societal norms or acting in a deviant manner. A strong bond to conventional society results in greater conformity, while a weak bond to conventional society, results in a greater tendency to commit deviant acts[37].

With regard to the control/social bond theory, which as previously stated is a theory of conformity in which people develop self-control and conform to community norms (laws) – if they are effectively bonded to the community. One of the four core elements of social bond theory: belief, states that there must be a belief on the individual's part in the commonly held community norms prohibiting deviant activities.

There are four core elements to Social Bond Theory:

- **Attachment.** People who develop strong attachments to significant others (i.e. parents, peers) are less likely to deviate from accepted community norms for fear of earning the disapproval of those significant others.
- **Commitment** refers to the personal investment people make in areas such as their education, businesses and careers. The greater the investment in time and effort in these areas, the greater the reluctance to place this effort at risk by engaging in behaviour deemed to be deviant.
- **Involvement.** This again involves the time and effort individuals place into accepted conventional activities. Put simply the more time and effort an individual places into conventional activities the less time they have to commit deviant acts.
- **Belief**. In effect this implies that there must be a belief on the individual's part in the commonly held community norms prohibiting deviant activities.

[37] Hirschi, T. 1969. Causes of Delinquency. Berkeley: University of California Press.

Rational choice theory maintains that:

- A person who commits an offence has rationally weighed up the risks and benefits of the situation and has made a rational choice to commit that offence.
- Benefits can be defined as tangible gains such as money or avoided inconvenience.

Comment

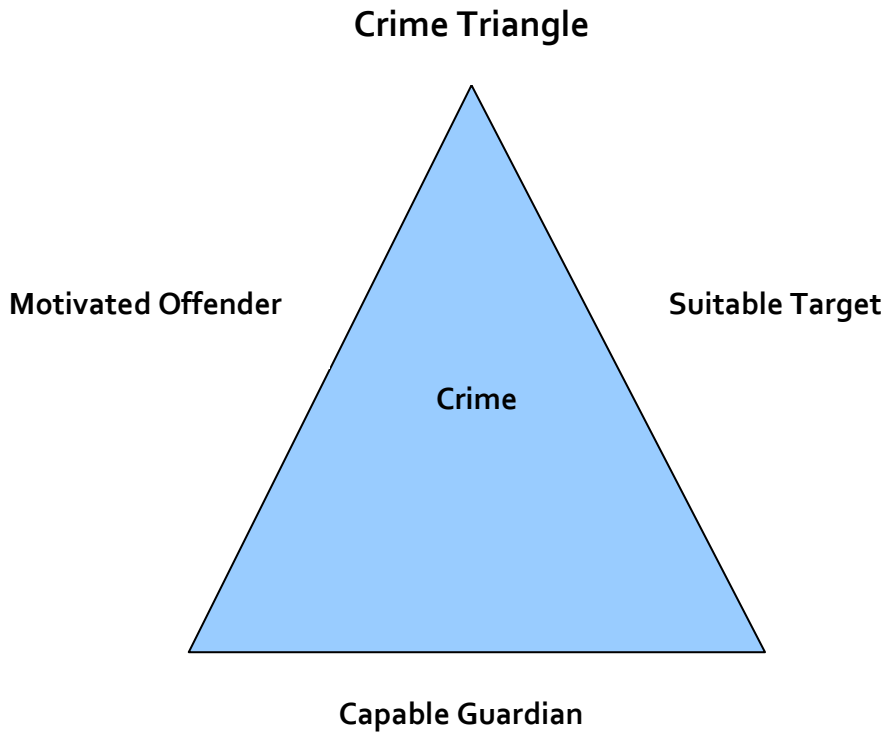
Given the fact that Forests NSW employees do not directly gain anything tangible in breaking the law, it is considered unlikely that they are making a rational choice to offend. However, as avoiding inconvenience can also be a motivator, administrative laxities may be more likely to arise if employees feel administrative reporting is burdensome and achieves little in the way of meeting environmental outcomes.

4.3 The Crime Triangle model – need for a "capable guardian"

This well accepted theory posits that, 'most criminal acts require convergence in space and time of likely offenders, suitable targets and the absence of capable guardians against crime'[38]. These three factors have become known as the crime triangle (see Figure four)[39].

[38] Cohen, Lawrence E & Felson, M. (1979). "Social Change and Crime Rate Trends: A Routine Activity Approach". *American Sociological Review*, 44: 588-608.
[39] Clarke, R. V. & Eck, J. (2003). *Become a Problem Solving Crime Analyst: In 55 small steps*. Jill Dando Institute of Crime Science University College London.

Figure four – The Crime Triangle



This convergence in space and time is facilitated by the legitimate 'routine activities' of our daily lives, which serve to bring us into contact with or mask the activities of motivated offenders, in effect allowing illegal activities to feed upon the legal activities of everyday life. A harvesting contractor may generally harvest tress adhering to high silviculture standards. However, if pushed for time, or delayed by rain, they may be tempted to remove more trees per hectare than is advisable, or cut down large trees along water ways, if they believe it unlikely that the offence will be detected.

As previously stated, routine activities theory explains how legitimate patterns of work and recreation can result in increased opportunities for illegal activities, while rational choice theory identifies the factors which 'encourage' offenders to take advantage of those opportunities[40].

Therefore, it could be argued that it would be easier for a motivated offender to be presented with a likely target in the perceived absence of a capable guardian. Staff at

[40] Clarke, R. V. (1999) *Reducing Opportunities for Crime*. A paper prepared for the UN Workshop on Community Involvement in Crime Prevention, Buenos Aires, February 8-10. Accessed on 25/10/05 at www.edoca.net/Resources/Conference%20Papers/UN_workshop_1999/Clarke_Reducing_opportunities_for_crime_Buenos_Aires.pdf

Forests NSW are acutely aware of the agency's regulatory obligations, and interact with OEH routinely. Based on the evidence provided, it does not seem likely that it considers OEH an incapable guardian. Harvesting contractors on the other hand deal predominately with Forest NSW, and appear to have little direct interaction with OEH. If contractors build a perception that the likelihood of detection is high, and subsequent consequences serious, the motivation to offend, and this cause environmental harm, will be low.

Recommendation 8

8.1 OEH needs to demonstrate the existence of being a capable guardian to contractors through enhanced engagement and education approaches, and increased use of existing mechanisms such as licensing and training regimes.

4.4 The potential for a coercive deterrence strategy

Can a coercive 'deterrence' strategy alone be used to advance compliance activities?

It can be argued that the adoption of a 'deterrence' strategy based only on highly punitive coercive measures, in combination with significantly elevated levels of observation and investigation, should be successful in reducing breaches of compliance.

In terms of rational choice theory, a punitive deterrence strategy should be able to reduce illegal activity through:

- Increasing levels of investigation and observation.
- Imposing severe punishments on those who breach compliance regulations.

Put simply, increasing the chances of being 'caught in the act' through increased observation in combination with a highly punitive compliance regime, should make potential offenders 'rationally' reconsider their actions, as the costs of committing the offence may now outweigh the gains.

In terms of routine activities theory, the increased levels of observation and investigation, in combination with a punitive compliance regime should serve to reduce breaches of compliance by:

- Disrupting the convergence in space and time of likely offenders and suitable targets (for example, use of satellite imagery, GPS tracking).
- Enhancing the power of the capable guardians (punitive 'deterrence' punishments – large court imposed fines).

However, as the previous information on control /social bond theory demonstrated, this may not be the case. It can be argued that if a harvesting contractor does not believe in (that is, not 'bonded') to the norms on which compliance regulations are based (for example, licensing conditions attached to Threatened Species Licence are unrealistic or unworkable) there is a probability that they will reject those regulations.

Furthermore, attempts to enforce regulations based on rejected norms may result in elements of industry developing 'a culture of resistance' to the 'unjust' regulations being forced on them.

Therefore, while compliance strategies based on punitive measures alone, may be successful in reducing breaches in compliance, they may be counterproductive in the long term, creating entrenched resistance that significantly reduces the voluntary uptake of compliance activity.

This view is supported by a growing body of criminological research, which argues that regulatory agencies, which significantly rely on coercive regulatory strategies to regulate 'industry', place themselves at risk of inadvertently encouraging 'a culture of resistance' within that industry[41]. When this occurs, those within the industry may embark upon a deliberate process of legal resistance, counterattack and political/public action to undermine the regulatory tools, actions and credibility of the regulatory agency.

Therefore, it could be argued that a deterrence (command and control) only approach may be a high-risk approach to compliance enforcement. The use of an engagement strategy promoting trust, in concert with an enforcement strategy, will best advance compliance objectives[42].

[41] Cherney, A. (1997). "Trust as a Regulatory Strategy: A Theoretical Review". *Current Issues in Criminal Justice*. 9 (1) 71-84.
[42] Collings, T. & Christensen, W "Regulating our Natural Resources - Farmers Friend or Farmers Foe? Have Regulators got the mix Right?" 10 Flinders Journal of Law Reform 467

There are a number of criminological studies which argue that engaging with those regulated and promoting trust can play a vital role in ensuring compliance in a range of regulatory environments[43]. These studies have demonstrated that:

- Regulatory agencies can improve levels of compliance by building 'trust' relationships[44].
- Corporations will respond positively, in terms of compliance, to regulatory strategies that are based on the assumption that the corporation wants to 'do the right thing'[45].
- Regulatory agencies need to gain the trust of those being regulated in order to promote voluntary compliance[46].
- Trust can form the basis of an effective regulatory strategy[47].

4.5 **The potential for a regulatory trust strategy**

Put simply, a best practice regulatory agency would understand the value of consulting with and engaging those who they regulate, and use trust as a mechanism to improve compliance. As stated by Professor Arie Freiberg at Smart Compliance for the New Millennium conference in 2000[48] **.**

> "*The gap between regulatory theory and practice can be narrowed, if extensive consultation between all the parties involved in the regulatory exercise is undertaken*".

Activities that focus on distrust should be kept in the background. It is also important to note that while a trust based compliance strategy attempts to improve compliance uptake

[43] Cherney, A. (1997). "Trust as a Regulatory Strategy: A Theoretical Review". *Current Issues in Criminal Justice*. 9 (1) 71-84.
[44] Braithwaite, J (1996). "Trust and Compliance". *Policing and Society*. 4: 1-12
[45] Fisse, B. & Braithwaite, J. (1983). *Corporations, Crime and Accountability*. Cambridge: Cambridge University Press.
[46] Pettit, P. (1990). "Virtues Normativa: Rational Choice Perspectives". *Ethics*, 100: 725-755.
[47] Ayers, I & Braithwaite, J (1992). *Responsive Regulation: Transcending the Deregulation Debate*, Oxford: Oxford University Press
[48] Freiberg, A (2000) *Effective Compliance and Enforcement Policies*. A paper prepared for the Smart Compliance for the New Millennium conference, Adelaide, 30-31 March 2000.

by initially trusting stakeholders, it can shift to a 'hard headed' punitive response when trust fails[49].

As stated by Cherney[50]:

> *"Rather than constraining the regulatory game, as is the habit of coercive strategies, a trust based strategy enables regulatory models to be designed around more dynamic and innovative frameworks. It can shift between praise and punishment, regulation and self-regulation, citizenship and self interest. It can hold out the possibility of nurturing virtue and it can respond aggressively when this fails".*

Recommendation 9

9.1 OEH should further consider adopting a regulatory strategy that actively aims to build trust and engage with relevant stakeholders. An important element of managing Forests NSW and harvesting contractors (and other industry and stakeholder groups) is to build trust and respect.

9.2 As part of the regulatory strategy, OEH should actively promote and publish its proactive compliance program, and provide information and assistance that is regularly reviewed.

4.6 Applying these theories to the OEH context

In considering where regulatory best practice constructs could be applied to OEH, the following 10 areas were examined, and a range of recommendations made:

1. What is the regulatory goal?
2. Risk Based Enforcement
3. The Importance of Prioritisation
4. Prioritisation within a Risk Management Framework

[49] Braithwaite, J (1996). "Institutionalising Distrust, Enculturating Trust" in Braithwaite, V & Levi, M (eds) *Trust and Democratic Governance*.

[50] Cherney, A. (1997). "Trust as a Regulatory Strategy: A Theoretical Review". *Current Issues in Criminal Justice*. (1) 88.

5. Workflow and Reporting
6. Best Practice Monitoring and Auditing
7. Design and Application of an Audit Program
8. Training/Skills for Authorised Officers
9. Engagement Strategy
10. OEH Forestry Regulatory Strategy

What is the regulatory goal?

It is important for regulators such as OEH to advance self-regulation and try to instill commitment to achieving regulatory goals. Good regulation is not a means in itself, but engenders and demonstrates strong leadership to ensure that compliance with regulatory aims are compatible with business goals.

> *"The enforcement of regulations affects businesses at least as much as the policy of the regulation itself. Efficient enforcement can support compliance across the whole range of businesses, delivering targeted, effective interventions without unreasonable administrative cost to business. Inflexible or inefficient enforcement increases administrative burdens needlessly, and thereby reduces the benefits that regulations can bring. I recommend:*
>
> - *comprehensive risk assessment should be the foundation of all regulators' enforcement programs;*
> - *there should be no inspections without a reason, and data requirements for less risky businesses should be lower than for riskier businesses;*
> - *resources released from unnecessary inspections should be redirected towards advice to improve compliance; and*

- *there should be fewer, simpler forms data requirements, including the design of forms, which should be coordinated across regulators"*[51].

In reviewing the Crown Forestry Policy and Regulation unit's approach, methodology and reporting processes against compliance best practice, the following observations are made.

Risk based enforcement

> *"The targeting of resources where they are most effective and at areas of highest risk is essential in providing the public with an effective service"*[52].

The following observations on priorisation are adapted from the paper presented at the 2005 AELERT conference, "Priorities – Sorting the Wheat from the Chaff"[53].

Responsibility for enforcing legislation, like other governmental functions, carries with it certain risks for the administering agency. Events surrounding the administration of legislation by public bodies have demonstrated the severe consequences that can eventuate when compliance/enforcement responsibilities are compromised.

The collapse of HIH for example brought with it intense scrutiny and ultimately criticism of the two regulators involved, the Australian Prudential Regulation Authority (APRA) and the Australian Securities and the Australian Securities and Investments Commission (ASIC). In Queensland, the Ombudsman's report into a series of electrocution accidents found the investigations conducted by the Division of Workplace Safety and the Office of Electrical Safety were grossly inadequate and recommended a major overhaul of the entire approach to regulatory responsibilities. In Western Australia, the Royal Commission into the Finance Broking Industry resulted in serious criticism of the Finance Brokers Supervisory Board and substantial legislative change.

Like all government agencies, OEH is faced with the reality of resource constraints, and these resources, whether they are human, financial or material, are finite. Unfortunately, the demand for responses to reports of alleged non-compliance often exceeds the capacity

[51] Hampton, P (March 2005). Reducing Administrative Burdens - Effective Inspection and Enforcement, Great Britain
52 UK Cabinet Office (1999). An introductory guide to performance management in local authority trading.
[53] Sullivan, Collings, Wills, (2005) "Priorities – Sorting the Wheat from the Chaff", Brisbane, AELERT conference

of the regulatory agency to respond. Inevitably therefore the need to make resource allocation decisions arises and with it brings scrutiny.

As Sparrow observes:[54]

> *"…the business of risk control not only obliges regulators to make such choices but to defend them and sometimes to reconsider them in public. Regulators will have to explain and defend their right to choose and the criteria and systems they use for choosing. Explaining new projects is always comparatively easy – much harder to explain what regulators have chosen not to do…or to explain to problem nominators outside the agency why their problems were not selected."*

The Importance of prioritisation

As noted above, demands for a response outweigh the resources available to meet those demands, thus inevitably leading to the need to make choices. Heightened scrutiny is a reality of modern public sector management. The crucial value of an effective prioritisation system lies in its ability to provide a transparent system upon which to justify choices regarding whether or not a particular complaint is investigated, and the extent to which resources are committed to those investigations that do proceed.

A robust prioritisation system provides defensibility at multiple levels:

- First, it provides the ability to respond to allegations that a particular individual was unfairly targeted. The use of a weighted numerical index negates any suggestion that an individual was unfairly targeted by the regulator.
- Second, a prioritisation system enables the regulator to demonstrate that resources were allocated to the most serious issues first.
- Third, a relatively sophisticated prioritisation system can demonstrate that resources were allocated to the cases, which had the most significance in terms of achieving the objectives set out in the legislation. The capacity to analyse data, trends and information becomes vital in this instance.

[54] Sparow, Malcolm (2000) The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance, The Brookings Institution, Washington DC

A prioritisation system may also assist in justifying the choice of enforcement tool used by the regulatory agency. For example, cases which receive a high priority are presumably more likely to lead to a prosecution or other more substantial enforcement response like licence forfeiture.

Prioritisation within a risk management framework

Accepting the broad premise that prioritisation is a critical process, the question remains – how does one approach the task of prioritising cases? What should be regarded as serious and what will be trivial? An obvious starting point is to assess the risks that apply to the particular agency.

In 2006, the Better Regulation Taskforce recommended that[55]:

> "*Government departments should produce risk frameworks or procedures which will underpin a goal-based approach to regulation and target enforcement in accordance with risk…and set down and publish the frameworks or procedures they use for reaching decisions on the areas of risk for which they are responsible".*

A prioritisation system operates best as a component of a comprehensive risk management system, rather than as a single stand alone measure. It is one tool amongst a suite of tools which should also include:

- Rigorous training of compliance staff
- A case management system
- Comprehensive policies and procedures
- Regular audits

Used in a systemic way the tools listed above can achieve a dramatic reduction in the risk profile of any regulatory agency, for example:

Training should reduce the risk of losing cases through inadequate investigation.

[55] Rethinking Regulation (2006) Report of the Taskforce on Reducing Regulatory Burdens on Business, January 2006.

Recommendation 10

10.1 As part of the OEH performance development program, a skills analysis of relevant forestry related staff qualifications in areas of regulatory compliance, investigation and auditing should be undertaken.

10.2 All OEH staff involved in auditing and subsequent investigations should undertake OEH's Authorised Officer course training as a minimum standard. Further, staff should be provided an opportunity to undertake the Certificate IV (Government Investigations) or Diploma level course.

Workflow and reporting

It is widely accepted that case management systems reduce the risk of failing to action notifications of non-compliance within statutory timeframes. Policies and standard operating procedures reduce the risk of inconsistency in decision-making and auditing is vital to ensure that policies, procedures and work practices are being adhered to. Prioritisation systems add to this risk management matrix by reducing the risks associated with being unable to justify decisions made with respect to resource allocation thus reducing the agencies vulnerability.

Recommendation 11

11.1 All forestry related audit investigations should be documented in a central investigations case management system. A running log, and scanned copies of relevant evidentiary material should be electronically documented as an investigation progresses. Consideration needs to be given to moving away from paper files as a concept, which will have flow on effects for those regulated. OEH should further consider:

a. 'Live' on-line operational interaction with Forests NSW at critical milestones of harvesting procedures.

b. Greater use of exception based reporting to inform audit regime.

c. Joint projects, further looking at application of online reporting, GPS, and

satellite/spatial imagery to monitor activity. OEH may wish to further engage with the NSW Roads & Traffic Authority who are trialing the application of telematics and GPS to monitor heavy vehicle access through the Intelligent Access Project.

A risk management approach to assessing complaints better enables difficult decisions to be made by staff with confidence and security. A part of the risk management profiling should include whole of program considerations, with resources directed to the most important, or most at risk, concerns first.

Recommendation 12

12.1 OEH should review its auditing regime and its application of risk management and priorisation. Better intelligence, information and trends will be vital in ensuring limited regulatory resources are allocated in an informed manner. As an example, audits should not be driven solely by a single complaint – unless evidence substantiates it as a high priority. Certainly however, a 'Public Interest' test or the like is an important consideration in assessing complaints.

12.2 OEH should have access to an 'intelligence and analysis' resource. Auditing and investigation responses should be prioritised and attended to from a state perspective, addressing the most 'at risk' environmental matters first.

> *"Prioritisation is an essential component of compliance work because investigation and prosecution resources are finite and, as a general rule, a regulatory agency needs to consider how it can best devote [its] resources…"*[56]

A number of factors can be identified that would apply regardless of the type of offences being considered. These would include:

[56] Queensland Ombudsman (2005): Report on the Workplace Electrocution Project.

- **Recidivism:** the repetition of offences by the same subject is traditionally a factor, which elevates the priority of cases.
- **Offence clusters/hotspots:** offence clusters may point to the need for closer analysis and the possible application of multi-faceted compliance strategies involving for example an education campaign and increased auditing.
- **Public interest:** public interest is an intangible but nonetheless critical factor that may manifest itself in a variety of ways, for example via media coverage, complaints received by the public or interest from members of parliament.

Recommendation 13

13.1 In conjunction with Forests NSW, OEH should develop a prioritization process that incorporates the use of assigning a numerical weighted value as part of an assessment and response process. Either utilising a standard 'likelihood and consequence model', or a system that applies weightings for specific environmental offences as prescribed by legislation. Criterion such as the Public Interest, Ministerial Interest, a range of environmental values and even a diminished value over time (to raise the profile of the most recent offences) should be further explored.

Best practice monitoring and auditing

Compliance monitoring and auditing outcomes can be enhanced by utilizing problem solving approaches that seek to identify non-compliance, the underlying causes of non-compliance and to develop strategies to remedy non-compliance.

This may inform education and engagement strategies, initiate innovation in monitoring and compliance auditing and focus compliance activities on specific activities or groups.

One example of a problem solving approach is the Scanning Analysis Response Assessment (SARA)[57] model (see Figure five).

57 Adapted from the problem oriented policing website http://www.popcenter.org/about-SARA.htm

Figure five SARA model

This model advocates:

- **Scanning** for non-compliance including confirming that specific instances of non-compliance exists, prioritising classes of non-compliance and setting objectives or outcomes that are to be achieved by addressing the non-compliance.
- **Analysis** of the non-compliance including what are the contributing factors that have given rise to the non-compliance, or why is the non-compliance occurring and in what circumstances.
- **Response** to the non-compliance. This includes identifying a range of potential responses to the non-compliance and adopting targeted programs aimed at addressing the non-complaint behaviour. These can include a mixture of compliance and investigative actions and programs aimed at addressing the underlying causes or circumstances of the non-compliance.
- **Assessment** of the action is a crucial step in any problem-solving framework, it provides an opportunity to review and adjust programs based on whether they have achieved the program objectives.

SARA is one of many models that can be adapted to address non-compliance through a problem solving methodology. However, these problem-solving approaches are not stand-alone and should be integrated into a broader compliance framework.

Recommendation 14

14.1 In conjunction with Forests NSW, OEH should review its auditing regime to ensure that a more strategic application of resources is applied. Adopting the SARA approach, OEH should document its strategic objectives in regulating Forests NSW through audit and investigation.

14.2 The audit strategy should address:

a. What is the fundamental purpose of the auditing regime?

b. Where are the high-risk forestry operations by region and environmental values?

c. What are the most important environmental outcomes to be preserved in NSW's Crown native forests?

d. What are the metrics to rate non-compliance issues?

e. What are the audit design, and tools to be utilised?

Design of audit tools

Once an agency has a clear strategic vision in delivering its audit regime, the next step is to build the necessary tools to support the program. The design of an audit framework and subsequent tools, ensures a consistent and accountable audit and compliance monitoring program is implemented.

These audit tools should provide a specific electronic environment in which Authorised Officers can:

1. **Plan Audit** (i.e. selection scope of audit and enforceable conditions against which audit will be carried out).
2. **Implement Audit** (i.e. clear guidelines, activities and processes for carrying out audits).
3. **Report on Audit** (data manipulation to justify audit outcomes – ensuring accountability and justification of post audit recommendations).

In the context of regulating third party activity, and establishing an audit program, best practice suggests that agency's should review relevant legislation, and existing compliance monitoring objectives should be undertaken to further identify:

- Regulatory instruments subject to audit activity.
- Statutory conditions subject to regulatory instruments.
- Priority risk areas for regulatory instruments.
- Substantive testing (for example, audit checks) to determine level of compliance.
- Acceptable evidence levels to validate compliance to statutory conditions.

Compilation of the above information then enables what audit tools need to be created. Audit tools should:

- Include access to the determinate information (conditions, tests etc).
- Provide a medium for consistent and accountable audit activity from which evidence based administrative decisions can be made (and justified) against audit findings.

Audit tools should also include access to the determinate information (conditions, tests etc) and be:

- Designed around a simple Visual Basics Application (VBA), which can be run on desktop computers or mobile devices (laptops, tablets etc).
- Able to be run in any windows based or Macintosh OS environment without the need to purchase any additional software.
- Designed to allow additional data to be added as required during the audit programs or on review of audit processes over time.

Recommendation 15

15.1 OEH's staff should be better supported through the application of an electronic auditing system incorporating Visual Basics Application. The system should be compatible with other existing OEH systems.

Compliance monitoring and audit training/skills for authorised officers

As a minimum standard, regulatory staff undertaking audits should understand the structure of regulatory frameworks and the interdependencies of the functions that make up the role and function of the auditor.

Operationally, they should be adept at undertaking the functional steps of:

- Audit planning, gathering and managing information during audits
- Conversation management (interviewing)
- Audit analysis
- Reporting

Recommendation 16

16.1 OEH should have in place a risk-based approach in setting audit objectives, scope and gathering evidence of which administration decisions can be made. The agency needs to apply the principles of compliance management and the importance of a longitudinal approach, and ideally, establish a state calendar for compliance auditing. In short, the practical audit framework should be graduated and strategically risk-based, covering:

a. Audit planning, scope and focus.
b. Risk management and OH&S issues.
c. Documented operational policy and procedures.
d. Communication frameworks and contingency planning.
e. Standard of evidence required during the audit to validate the level of compliance to statutory instruments

f. Collection and storage of evidence and the relevance of audit evidence to later compliance actions.

Prosecution

Many government agencies have prosecution functions. Some outsource court related actions to the Crown, or private practice, while others have in-house lawyers to attend to the same. For some agencies prosecutions are core business, while for others they form part of a much wider set of responsibilities. However, prosecution is one of the many compliance tools able to be applied from the regulatory spectrum. What is important however, is that prosecutions are initiated consistently, proportionately based on the merits of each case.

For a range of public interest reasons, prosecution is often an appropriate response for more serious breaches of legislation. But prosecutions are a blunt regulatory tool. They are also expensive, adversarial and extremely high-risk if not managed well – particularly in cases closely scrutinised by the media.

Therefore the management of the prosecution system and the associated decision-making process are critical to an agency's effectiveness.

All jurisdictions in Australia have consistent guidelines relating to exercising the prosecutorial discretion. These guidelines uniformly apply the Sufficiency of Evidence (is there a *prima facie* case), prospects of success, and Public Interest tests.

Recommendation 17

17.1 OEH's Prosecution Guidelines were dated 2004. These guidelines should be reviewed and updated, reflecting contemporary investigation and prosecution standards.

17.2 Guidelines for Forestry related Enforcement Options have not been able to be reviewed. If these Guidelines have not been recently reviewed they should be, forming a part of the broader review of Prosecution Guidelines.

Engagement

As identified previously, the ability to provide information through education programs is a key component of a holistic best practice regulatory strategy. The more effort taken to provide assistance in meeting legal obligations, the greater the perception of 'reasonableness' by those regulated, the public, and the courts.

Command and control techniques must be balanced with persuasion and information. Rather than being mutually exclusive, they are symbiotic and complimentary in achieving compliance best practice.

Education programs are ideally a two way process that encourages interaction between the regulator and those regulated. For many it will be sufficient to gain compliant behaviour by providing information on:

- The laws that apply to their operations or activity.
- How they can comply or adopt new practices to comply with the laws.
- The reasons it is important to comply including social norms.
- The benefits they will gain from compliance.

When regulating or controlling activity, it is accepted best practice that agencies should clearly articulate the proactive measures they will undertake to engage and educate those regulated.

Recommendation 18

18.1 An OEH Forestry Engagement Strategy should be documented, and detail three key components of the engagement process – how to engage, who to engage and what to engage on:

18.2 How

a. The agency's philosophical approach in engaging key stakeholders.
b. Specific approaches as to how stakeholders such as Forests NSW will be engaged (i.e. through formal processes such as a FMS working groups).

c. Educational mediums to be used - such as the use of SMS/email to provide stakeholders compliance updates, emerging issues, forward audit program overview, related prosecutions etc.

d. Education material resources available – revisited and updated annually.

e. Qualitative mechanisms to inform regulatory approaches (use of surveys, focus groups).

f. Specific web based links, 'chat' capacity, FAQs.

18.3 Who and What

g. Scheduled workshops and other proactive activities. Identifying the topics to be addressed, which OEH and Forestry NSW staff are involved in and the outcomes sought (for example, discussion on silviculture practices).

h. Joint project/collaborative initiatives (i.e. performance based contracts, adopting greater use of technology, reporting consolidation, legislative review, contractor licensing and training projects etc).

i. Contractor initiatives – consolidated plan by OEH to engage and educate contractors through greater use of the existing licensing regime, and training/certification processes.

OEH Forestry Regulatory Strategy

An overarching regulatory strategy ideally brings all the disparate elements of the regulatory program together. OEH should clearly outline how it administers and enforces its legislation in a coherent, consistent and objective manner using appropriate administrative, civil and criminal sanctions. It should promote the need to take appropriate action against offenders and operate efficiently and effectively within its resources.

The strategy would encapsulate the tenants of regulatory best practice and how they are to be applied. As a small entity with limited resources, the strategy would outline how it

will apply its audit and investigation resources efficiently and effectively – using a problem solving approach and risk based evidence to target the most appropriate cases.

Recommendation 19

19.1 OEH documents a Crown Native Forests Regulatory Strategy. The strategy would outline:

a. Purpose and objectives to be achieved through the strategy (define with Forests NSW ESFM outcomes sought, what is 'sustainable' harvesting, silviculture practices, development of outcome based regulation etc).

b. The overarching principles for selecting cases for audit and investigation, and referral for prosecution.

c. Engagement and Education Strategy.

d. Application of market based instruments – licensing regime, performance based contracts.

e. Intelligence assessments, risk management and strategic targeting.

f. Forward legislative/policy instrument timetable – focusing on the development of strategic – with a move towards greater civil and administrative options.

5. THE NSW REGULATORY FRAMEWORK: AN OVERVIEW

5.1 Roles and responsibilities

Forests NSW

Forests NSW[58] is the registered business name of the Forestry Commission of New South Wales and operates as a government trading enterprise within the Department of Primary Industries[59]. The Forestry Commission is constituted under the Forestry Act 1916, and is subject to the direction of the responsible Minister[60].

Forests NSW plays a major role in the Australian forestry industry with an 11.5% market share. It manages 1.9 million hectares within the public native forest estate and an additional 0.5 million hectares within the planted forest estate, of which over 210,000 hectares are retained native vegetation[61].

Forests NSW role has been described as "to sustainably manage state forests and timber supplies. It also provides community amenities such as camping areas and picnic grounds. In order to achieve this Forests NSW must balance resource management with conserving the natural environment and comply with the many laws and regulations that control where and what may be logged"[62].

The objects or purposes of the Forestry Commission are set out in the Forestry Act 1916 as follows[63]:

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,

[58] It was renamed Forests NSW in late 2005.
[59] Per "NSW Public Sector: Principal Departments and Other Bodies as at 17 August 2011" http://www.dpc.nsw.gov.au/__data/assets/pdf_file/0005/126086/NSW_Public_Sector_Principal_Departments_and_Other_Bodies_as_at_17_August_2011.pdf
[60] Forests NSW Annual Report 2009-10, Social, Environmental and Economic Performance, p4
[61] Lobb A, The Forestry Project Industry Assessment Study of the NSW Native Forestry Industry based on Crown Resources, DECCW (January 2011)
[62] Auditor General's Report Performance Audit "Sustaining Native Forest Operations: Forests NSW", (April 2009)
[63] Section 8A Forestry Act 1916

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 management,

d. To encourage the use of timber derived from trees grown in the State,

e. Consistent with the use of State forests for the purposes of forestry and of flora reserves for the preservation of the native flora thereon,

   (i) to promote and encourage their use as a recreation,

   (ii) to conserve birds and animals thereon, and

   (f) to provide natural resource environmental services (whether within or outside of New South Wales).[64]

The primary source of funding for Forests NSW is derived from revenue associated with services in private forest harvest planning, plantation establishment, carbon emissions trading, bio-energy and land repair in addition to the sale of timber. Public funding is also received from the NSW Government to provide specific public services such as education and recreational facilities[65].

Forests NSW's financial performance over the last 5 years has been "plagued by restructuring costs in 2004-5 as they were integrated into NSW Department of Primary Industries (now Department of Industry and Investment); natural disasters (fire damage in 2006-7 [which] resulted in a loss of $50 million, although this was halved due to salvage operations); and slumps in the domestic housing market (IBISWorld, 2010c)"[66].

In 2009 Forests NSW native forestry operations were reviewed by the Auditor-General with the following key findings:

- Forests NSW has an adequate understanding of timber stocks however yield estimates should be better reviewed especially for coastal regions.
- Forests NSW has sufficient timber to meet contractual wood supply commitments up to 2023 using native and plantation wood.

[64] This section of the Act was last amended in 1999
[65] Ibid – annual report page 4
[66] Ibid - Lobb report

- Costs of harvesting and hauling this timber is set to increase over time.
- Forests NSW has difficulty managing supply for high quality sawlogs.
- There will be a reduction in yield on the North Coast of NSW due to over harvest compensating for land that was converted to conservation areas in 2003.
- Native forest operations continue to run at a loss ($14.4 million in 2007-08) this raises questions of the financial viability of Forests NSW[67].

The Office of Environment and Heritage

The Office of Environment and Heritage (OEH) is a division of the NSW Department of Premier and Cabinet. OEH was formed on 4 April 2011 following an announcement of new administrative arrangements for the public service in NSW, which saw most of the functions of the Department of Environment, Climate Change and Water transferred to the new OEH[68].

Among its other functions OEH is an environmental regulator, and leads policy and reform in sustainability, biodiversity and native vegetation, coastal protection and Aboriginal cultural heritage.

In regulatory matters for environment protection, OEH acts under the powers of the statutory Environment Protection Authority (EPA) and its Board.

OEH supports the Premier, the Minister for the Environment and the Minister for Heritage in performing their executive and statutory functions. It manages 6.8 million hectares of national parks and reserves, which is almost nine per cent of NSW[69].

5.2 Legislative background

"The timber industry is one of the most restricted and tightly regulated industries in Australia"[70].

[67] Auditor-General's Report to Parliament 2010 Volume 9 page 86 http://www.audit.nsw.gov.au/publications/reports/financial/2010/vol09/pdfs/20_forestry_commission_of_new_south_wales_trading_as_forests_nsw_volume_9_2010.pdf
[68] http://www.environment.nsw.gov.au/aboutus.htm
[69] Source: http://www.environment.nsw.gov.au/whoweare/index.htm; updated: 08 April 2011

Commonwealth framework

As signatory to several international instruments the Commonwealth Government plays a key role in the regulation of forestry[71]. Various legislative policies, strategies and programs give effect to these international instruments with the most relevant to crown forestry being the Environment Protection and Biodiversity Conservation Act 1999, the 1992 National Forest Policy Statement and the Regional Forest Agreements Act 2002.

The Commonwealth Government's role is described by the Department of Agriculture, Fisheries and Forestry as being "to coordinate a national approach to environmental and industry-development issues. State and Territory Governments have Constitutional responsibility for forest management"[72].

- **National Forest Policy Statement (NFPS)**

The 1992 NFPS is a policy to which the Commonwealth, State and Territory Governments are signatories. It consists of a Vision, "the ecologically sustainable management of Australia's forests", eleven goals and specific objectives and policies. The NFPS set up the process for the development of Regional Forest Agreements between the commonwealth and individual states.

- **Regional Forest Agreements Act 2002**

The NFPS provides for the Commonwealth and individual States to complete a comprehensive regional assessment (CRA) of forestry, leading to a regional forest agreement. Regional Forest Agreements are established by the Regional Forest Agreements Act 2002 and are required to incorporate those principles and objectives articulated in the NFPS including environmental values, indigenous heritage values, economic and social values and the principles of ecologically sustainable management[73]. The Regional Forest Agreements set out, among other things, 20 year plans identifying which forests should be reserved for conservation purposes and for the use of forests, including for the long-term stability of forest industries.

---

[70] Source http://www.daff.gov.au/rfa/about/history
[71] These include the Convention for the Protection of the World Cultural and Natural Heritage and the Convention on Biological Diversity.
[72] http://www.daff.gov.au/rfa/about/why
[73] Section 4

Between 1999 and 2001 the NSW and Commonwealth of Australia governments agreed Regional Forest Agreements for three NSW regions - Eden, North East and Southern.

Regional Forest Agreements are seen as a tool for seeking "a reasonable balance between conserving Australia's forest estate and its enduring use for economic production and recreation"[74].

- **Environment Protection and Biodiversity Conservation Act 1999**

The key Commonwealth environmental statute is the Environment Protection and Biodiversity Conservation Act. However, the Regional Forest Agreement Act 2002 exempts forestry operations undertaken in accordance with a Regional Forest Agreement from the requirement for Commonwealth approval under the Environment Protection and Biodiversity Conservation Act 1999[75].

NSW legislation

The key legislation governing forest operations on Crown owned land[76] in NSW is the:

- **Forestry Act 1916, or**
- **Forestry and National Park Estate Act 1998.**

The Forestry Act is administered by the Department of Primary Industries and regulates forestry on Crown owned lands. However, as a result of the Forestry and National Parks Estate Act 1998, which establishes an approval system for Crown owned forestry, the Forestry Act has limited application in NSW - forestry operations which operate under an integrated forestry operations approval (IFOA) are regulated by the terms of that approval rather than the Forestry Act 1916. At its second reading the Forestry and National Park Estate Bill was described as follows:

> *The provisions set out in this bill represent a fair compromise amongst the differing positions, one which is scientifically and objectively based. The bill protects our forests and all of their values. At the same time it protects and*

[74] http://www.daff.gov.au/rfa/about/why
[75] S 6(4)
[76] In NSW plantations are regulated under different statutes which makes for a complex legislative regime - refer Montoya, D "Plantation Forestry in NSW: regulatory regimes and future prospects" Briefing Paper 12/2010, NSW Parliamentary Library

enhances the livelihoods of our forest industries and our forest dependent communities. I am confident that all fair and reasonable citizens will not only support but applaud the outcomes embodied in this bill. The proposition set out in this bill represents the culmination of key elements of the Government's forest policy and forestry reform agenda" [77].

The Forestry and National Park Estate Act 1998 provides for the establishment of the NSW forest agreements, and sets out the principles and strategic framework for the co-operative management of forests by OEH (under the Department of Premier and Cabinet) and Forests NSW.

As noted, the Act removes the application of other legislation, where forestry operations are conducted IFOAs. This restricted application includes the following:

- Removal of certain requirements under the Environmental Planning and Assessment Act 1979; such as the requirements for application of Part 5 (environmental assessment), Part 3A (declaration of a project) and environmental planning instruments.
- Stop Work Orders cannot be made under the National Parks and Wildlife Act 1974 and Threatened Species Conservation Act 1995 (excluding for the purpose of protecting any Aboriginal object or place).
- Orders cannot be given by a council under section 124 of the Local Government Act 1993.
- That areas cannot be proposed or identified as, or declared to be, a wilderness area under the Wilderness Act 1987 or the National Parks and Wildlife Act 1974.
- The removal of third party rights to initiate enforcement proceedings, which effectively remove the community's ability to initiate prosecution against Forests NSW for breaches of the IFOA. Only Ministers, the EPA or a government agency engaged in the administration of their Act may bring proceedings to remedy or restrain a breach of the Forestry and National Park Estate Act 1998[78].

[77] Page 9922 Second Reading
[78] Smith S, Forests in NSW: An Update 1999, NSW Parliamentary Library Research Service, see section 6.0

Other key legislation governing environmental management that is relevant to forestry operations includes the:

- Protection of the Environment Operations Act 1997
- Threatened Species Conservation Act 1995
- Fisheries Management Act 1994
- Environment Protection and Biodiversity Conservation Act 1999
- National Parks and Wildlife Act 1974 (amended 2010)
- Heritage Act 1977

It is observed that separate regulatory instruments such as the Plantations and Reafforestation Act 1999 and the Plantations and Reafforestation (Code) Regulation 2001 address the environmental management of plantation forestry in NSW. In some cases, the Code streamlines the application process for plantation operations.

- **Protection of the Environment Operations Act 1997 (POEO Act)**

The Protection of the Environment Operations Act 1997 is NSW's primary environmental protection legislation that provides a statutory framework for the protection of water quality. Harvesting is exempt from the provisions of the POEO Act if operating in accordance with an Environmental Protection Licence. Otherwise the POEO Act creates a range of pollution offences and penalties enforceable by regulatory authorities (and in some cases the public).

- **Threatened Species Conservation Act 1995**

The Threatened Species Conservation Act 1995 deals with the listing of species, the declaration of critical habitat, recovery plans, threat abatement plans, licensing, biodiversity certification and bio-banking. The Act, with some exceptions, prohibits actions that will affect threatened species and their habitats unless undertaken in accordance with an IFOA Threatened Species Licence.

- **Fisheries Management Act 1994**

This Act provides for the protection of fish habitat, threatened fish species and the maintenance of fish passage through the application of a Fisheries Licence administered by the Department of Primary Industry – Fisheries.

- **National Parks and Wildlife Act 1974**

The National Parks and Wildlife Act 1974 is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in NSW and is administered by OEH.

This Act, recently amended in 2010, provides, among other things for the protection and care of native fauna and flora, and Aboriginal places and objects throughout NSW. The Act creates criminal offences for harm to aboriginal sites and provides for the issue of 'stop work' orders if an action that is being, or is about to be, carried out is likely to significantly affect an Aboriginal object or Aboriginal place[79].

- **Heritage Act 1977**

Environmental heritage within Crown native forests is also protected under the Heritage Act 1977 and is the responsibility of the Planning Minister. Archaeological excavations require a permit if the person knows, or has reasonable cause to suspect, that they might discover, expose, move, damage or destroy a relic. There are three types of protection available:

a) Listing on the State Heritage Register

b) Interim heritage orders

c) Emergency orders

Cultural heritage issues are addressed within the ESFM plans, the CRAs and the Code of Practice. Forests NSW has developed Cultural Heritage Guidelines which outline the responsibilities, training and implementation of cultural heritage requirements.

NSW Forest Agreements

At a state level there are four NSW Forest Agreements signed by the NSW Government in support of the Regional Forest Agreements covering the eastern areas of NSW (Upper

[79] Section 91AA, see also, for example the Explanatory Note, IFOA for the Upper North East Region.

North East (UNE), Lower North East (LNE), and Eden regions made in 1999); and for the Southern Region (made in 2002).

The agreements are for 20 years with a requirement for annual reporting on their implementation. At the time of writing the Forest Agreements are approximately half way through their term.

The NSW Forest Agreements and the associated IFOAs were intended to give effect to ESFM (referred to in the National Forestry Policy Statement). Forest Agreements contain provisions for promoting ecologically sustainable forest management, sustainable timber supply, community consultation and Aboriginal involvement in forest management. Specifically the NSW Forest Agreements require the:

- Establishment of an Environmental Management System.
- Development of an ESFM plan.
- Application of the various codes of practice that apply.

NSW Forest Agreements are arrived at after a regional forest assessment and were established through a process of consultation with the NSW Government and major forest stakeholders.

OEH notes on its website that "Since 1995, the NSW Government's forest policy has aimed to secure a balanced outcome for forest regions, taking into account both the environmental values of forests and the social and economic needs of the community" and that the NSW forest agreements process has resulted in:

- Region by region assessments of forest resources and forest values.
- Over 1.5 million hectares of new national parks, and more than 460,000 hectares of informal reserves created in NSW since 1995.
- 20 year security of timber supply to industry, and creation of new jobs.
- Funding for industry development assistance and restructure.
- Ecologically sustainable forest management enshrined in legislation[80].

[80] http://www.environment.nsw.gov.au/forestagreements/index.htm;Updated 27 February 2011

- OEH also states that "By detailing the agreed basis for long-term decisions on forest use and management, they provide certainty for industry, conservation and the community, and deliver on the Government's forest policy:
    - To protect environmental values in a world-class system of national parks and other reserves.
    - To encourage the creation of strong and competitive ecologically sustainable forest industries.
    - To manage all native forests in an ecologically sustainable way"[81].

Integrated Forestry Operations Approvals (IFOAs)

The IFOA framework is intended to provide a transparent and enforceable tool to deliver against timber supply and ESFM commitments[82]. IFOAs are established by Part 4 of the Forestry and National Park Estate Act 1998 and regulate harvesting operations in the IFOA regions. They are intended to integrate the regulatory regimes for a range of environmental approvals. The Minister for the Environment and the Minister for Primary Industries jointly grant IFOAs in areas that are covered by NSW Forest Agreements.

The IFOAs in NSW include:

a. Riverina Red Gum
b. Upper North East Region
c. Lower North East Region
d. Southern Region
e. Eden Region
f. Brigalow Nandewar Region[83]

The IFOA is the key regulatory document applied to Forests NSW's forestry operations. As noted, in support of the NSW Forest Agreements, the Government removed the requirement for forestry operations carried out in an IFOA region to provide environmental

[81] http://www.environment.nsw.gov.au/forestagreements/index.htm; Updated 27 February 2011
[82] DECCW, Discussion paper DOC10-41384
[83] http://www.environment.nsw.gov.au/forestagreements/agreementsIFOAs.htm; Updated 4 July 2011

or species impact statements otherwise required by the Environmental Planning and Assessment Act. Instead the IFOA relies on the regional forest assessments[84].

Under the IFOA Forests NSW must apply best practice to all operations. Best practice is defined as 'the management of a forestry operation to achieve the ongoing minimisation of any adverse impacts of the forestry operation on the environment"[85] .

Variation of the IFOA

An IFOA may be amended, suspended or revoked at any time jointly by the Ministers who have granted the approval. Any amendments to the approval are required to be made publicly available[86]. The approval is automatically revoked if the relevant Forestry Agreement is terminated[87].

IFOAs and licenses

An IFOA describes the forestry operations and conditions covered by the approval, including a description of the area to which it applies. It is a single document which incorporates the terms of any relevant licence, including licenses issued under the Protection of the Environment Operations Act 1997 (the Environment Protection licence), the Threatened Species Conservation Act 1995 (the Threatened Species Licence) and the Fisheries Management Act 1994 (Fisheries Licence)[88] . Enforcement of the licenses rests with OEH or Department of Primary Industries – Fisheries, depending on the licence.

- **Environmental Protection Licence**

The schedules which form part of the Environmental Protection Licence contain a significant number (120+) of operating conditions including self monitoring requirements and self reporting. Many of these conditions are highly prescriptive in nature.

[84] Section 28 EPA Act
[85] Clause 8 IFOA Eden
[86] Explanatory Note, IFOA for the Upper North East Region granted under the Forestry and National Park Estate Act 1998.
[87] During the second reading of the Forestry and National Park Estate Bill in 1998 the situation was changed from one where variations to a licence could be made on a daily basis even without any requirement to inform the public or parliament to a set of provisions that created a "much higher standard for accountability and transparency".
[88] Section 34 of the Forestry and National Park Estate Act provides that an IFOA may set out the terms of any relevant licence. If the approval does so, any person carrying out forestry operations covered by the approval is taken to hold a licence in those terms under the relevant Act.

An Environmental Protection Licence provides a defence in proceedings against a person for an offence of water pollution under the POEO Act if the person establishes that:

a. The pollution was regulated by an Environmental Protection Licence held by the person or another person.

b. The conditions to which that Environmental Protection Licence was subject relating to the pollution of waters were not contravened[89].

Environmental Protection Licence coverage is mandatory where the forestry operation is "scheduled development work" or a scheduled activity under the POEO Act. Where the forestry operation is neither scheduled development work nor a scheduled activity, Forests NSW may, and does, opt out of licence coverage[90]. This is referred to as "turning the licence off".

Where licence coverage has been sought, it is incumbent on Forests NSW to conduct its activities in accordance with the conditions and restrictions set out in the schedules attached to the Environmental Protection Licence. Whether or not the licence is turned off, Forests NSW must conduct its activities in compliance with the provisions of the POEO Act which creates an offence to cause or permit any waters to be polluted[91].

- **Threatened Species Licence**

A Threatened Species Licence authorises a person to take action likely to result in one or more of the following:

a. Harm to any animal that is of, or is part of, a threatened species, population or ecological community.

b. The picking of any plant that is, or is part, of a threatened species, population or ecological community.

c. Damage to critical habitat.

d. Damage to habitat of a threatened species, population or ecological community.

[89] Section 122 POEO Act
[90] For example, refer clause 7.3 Eden Region Environmental Protection Licence
[91] Section 120 POEO and refer cl 5.1 Eden Environmental Protection Licence

A Threatened Species Licence is issued subject to the licence holder complying with the conditions and restrictions in the licence. Where the holder of a licence contravenes or fails to comply with any condition or restriction attached to the licence, they may be in breach of the National Parks and Wildlife Act 1974.

- **Fisheries Licence**

The Fisheries Licence, issued under s220ZW of the Fisheries Management Act 1994, authorises the carrying out of forestry operations that are likely to result in harm to threatened species, damage to critical habitats and habitats of threatened species, population or ecological communities subject to the conditions set out in the Fisheries Licence.

Enforcement of the licence rests with Department of Primary Industries – Fisheries rather than with OEH who only administers other sections of the Act.

6. OTHER JURISDICTIONAL EXAMPLES: NEW ZEALAND

6.1 Background

There are two key issues associated with native forest management in New Zealand: silviculture (management of the resource) and environmental effects (particularly associated with water quality and quantity). From a silviculture perspective New Zealand's management of its plantation forestry is distinct from the Australian State Native Forest context. However, when examining the effects of forestry on water, whether a forest is exotic or native, public or private, the effects of harvesting on water quality, aquatic habitat and cultural heritage are generally comparable, dependent on matters such as geography and location.

The Resource Management Act 1991 (RMA), which has been substantially amended since its introduction in 1991, represents a consolidation of attempts to manage the effects of activities rather than regulating activities. This heralded a move away from the command and control approach under previous legislation devolving environmental decision making from central to regional government. The enabling approach of the RMA has attempted to shift the emphasis in management from the application of prescriptive standards or rules to the assessment of environmental effects, encompassing social, cultural, ecological and economic impacts. The RMA seeks only to intervene where activities are likely to result in unacceptable environmental effects. This approach has been described as having the advantage of focusing on the reduction of environmental impacts and the disadvantage of "environmental planning being reactive rather than proactive, in plans being complex and difficult to understand, and in poor management of cumulative and diffuse impacts"[92].

There are several key distinctions between the NSW and NZ regulatory systems as they apply to forestry operations:

1. The NZ environmental legislation theoretically treats all activities consistently. By way of illustration, it does not differentiate between the effects of harvesting of native forest as compared to exotic forestry. The management of forestry has not been segregated or exempted from other environmental issues however it has

[92] Reference: Environmental Defence Society: http://www.rmaguide.org.nz/rma/introduction/approach.cfm

been developed in an 'ad hoc manner' as between regions, particularly where there are significant geographical differences.

2. In NZ third parties directly influence forestry operations via submissions and rights of appeal through the consent process. However, with long term consents in place this, and in some cases the limited ability for third parties to object, (depending on the notification requirements of a particular plan) has resulted in some stability in terms of the development of conditions. Arguably this level of involvement is only as much a practical issue in NZ as it is in NSW where third party enforcement rights have been reduced as a result of the IFOA development process. This is because reviews of the IFOA documents are not dissimilar to the processes undertaken for the review or negotiation of resource consents. Possibly the single biggest difference is the inability for third parties to bring enforcement proceedings in NSW, where an IFOA is in place.
3. The NZ native forest context is distinct from the NSW native forest context. It is noted that much of NZ's native forest is in mountainous areas, ill suited to the practicalities of harvesting. The majority of harvesting is conducted on privately owned land.

In summary, it is observed that the operating environments are unique to each country's broader constitutional arrangements and their respective development has been heavily influenced by public interest groups and cultural considerations, particularly where operations are undertaken on Crown owned land. In the forestry context the trends in NZ are towards less prescriptive regulation with a heavier emphasis on the development of self regulation and risk based approaches[93]. These appear consistent with wider regulatory trends in Australia that are yet to flow through to the regulation of forestry in New South Wales[94].

[93] See, for example, The Regulatory Standards Bill 2011
[94] See, for example the Victorian paper

6.2 Types of forestry

As in Australia there are two types of forestry managed in New Zealand – exotic and indigenous. NZ has approximately 8 million hectares of forest, which makes up 29.5 % of the total land area. Of this, indigenous forests cover 6.2 million hectares (23% of the total land area) and plantation forest accounts for 1.8 million hectares (7% of total land area). Radiata pine, a fast growing soft wood, makes up the majority (90 per cent) of the plantation forests in New Zealand, with Douglas fir, eucalyptus and other softwoods and hardwoods making up the remaining ten percent (MAF, 2009c).

Indigenous forestry

Approximately five-million hectares of indigenous forest is owned by the Crown and is managed by the Department of Conservation[95]. Since 2002 all state owned indigenous forests have been classified for conservation purposes and harvesting has been prohibited[96].

The twenty-one percent of the natural forest estate that is privately owned must be managed in accordance with the sustainable forest management provisions of the amended Forests Act 1949 which places controls on the harvesting, milling and exporting of timber from indigenous forests. As with all other land uses, indigenous forestry is subject to the provisions of the Resource Management Act 1991[97]. Major reform in 1993 to the Forests Act 1949 resulted in: "recognising the rights of landowners to obtain an economic return from a privately owned asset, yet identifying their responsibility to maintain a health forest and functioning eco-system with the aim of achieving an appropriate balance between productive use and maintenance of forests' natural values". The Forests Amendment Act 1993 introduced Part IIIA with the purpose of promoting "the sustainable forest management of indigenous forest land"[98].

Indigenous timber must be managed in accordance with a Sustainable Forest Management Plan, which is approved, by the Ministry of Agriculture and Forestry[99]. The Sustainable

[95] Ministry of Agriculture and Forestry, A Forestry Sector Study, April 2009
[96] Forests (West Coast Accord) Act 2000.
[97] Confirmed by the s67V of the Forests Amendment Act 2004
[98] Forests Act 1949, s67B Sustainable forest management is defined in the Forests Act as "management of an area of indigenous forest land in a way that maintains the ability of the forest growing on that land to continue to provide a full range of products and amenities in perpetuity while retaining the forest's natural values."
[99] Refer Schedule 2, Forests Act 1949

Forest Management Plan requires, *inter alia*, description of the land, the specification of protection measures (for example, in relation to fire, pests, flora, fauna and water quality) an annual logging plan, and compliance with "sustainable forest management prescriptions" which include matters such as the use of differing harvest techniques for different species: only single trees and small groups of trees can be felled for timber production. The plan must also identify those provisions applicable under the RMA. The "protection measures" outlined in the Sustainable Forest Management Plan will duplicate those matters that must be addressed as part of the RMA processes. These are outlined further below.

In summary, the guiding legislation for indigenous forestry is the same as for plantation forestry with the exception of the restrictions on silviculture practices.

Exotic forests

There are estimated to be 15,123 forest owners in New Zealand. About 15,000 hold less than 1000 hectares each, but in aggregate they own 30 per cent of the plantation forest estate. Some 13,000 of these owners have less than 40 hectares each (MAF, 2008).

Māori are forest owners, and the return of forest land through the Treaty of Waitangi settlement process means that Māori have significant interests in the sector (MAF, 2009a).

Kaingaroa Forest is the largest plantation forest in New Zealand, covering an area of around 190,000 hectares in the central North Island. Around 100 forest owners have forests that are over 1000 hectares, which account for 70 per cent of total forests by area. Over 90 per cent of forests are privately owned.

6.3 Role of Central Government

Following are some of the key central government agencies' roles in plantation forestry[100].

- **Department of Conservation (DOC)**

[100] Source: Ministry for the Environment.2010. Proposed National Environmental Standard for Plantation Forestry. Discussion Document. Wellington: Ministry for the Environment - Retrieved from: http://www.mfe.govt.nz/publications/rma/proposed-nes-plantation-forestry/page16.html

DOC is charged with conserving the natural and historical heritage of New Zealand. There are various pieces of legislation that establish the principles for managing land, including the Conservation Act, National Parks Act, Wildlife Act and Reserves Act. DOC's core functions include managing and preserving natural and historical resources while advocating and promoting conservation. DOC manages, for conservation, approximately 5 million hectares of indigenous forest (78 per cent of all indigenous forests in New Zealand) and limited areas of exotic plantation forest.

- **Ministry for the Environment**

The Ministry for the Environment is the Government's principal adviser on the environment and on international matters that affect the environment. The Ministry provides national direction on the environment through standards, policy statements and strategies.

A new environmental protection agency was established on 1 October 2009 as an office within the Ministry for the Environment, with its powers being exercised by the Secretary for the Environment. It is now a standalone Crown Entity known as the Environmental Protection Authority (EPA).

- **Ministry of Agriculture and Forestry (MAF)**

MAF is the Government's primary adviser on the economic and environmental performance of the forestry sector. MAF also leads New Zealand's biosecurity system and has lead roles in international forestry matters.

- **Ministry of Economic Development (MED)**

MED's role is to foster economic development and prosperity, which includes helping New Zealand firms use environmental integrity for economic benefit[101].

[101] In drafting this part of the report the author acknowledges the useful summaries of legislation provided in the Proposed National Environmental Standard for Plantation Forestry. Discussion Document. Wellington: Ministry for the Environment 2010- Retrieved from: http://www.mfe.govt.nz/publications/rma/proposed-nes-plantation-forestry/page16.html

6.4 Role of Local Government

New Zealand's local government agencies have responsibility for the regulatory management of plantation forestry within their areas. In summary:

- **Regional councils**

There are 16 regional councils, including four unitary authorities whose responsibilities' include the preparation of regional policy statements and regional plans, which may include provisions for managing plantation forestry. Their control extends to, among other things, the use of land for the purpose of soil conservation and enhancing water quality, maintaining the quality of water, maintaining and enhancing ecosystems, avoiding and mitigating natural hazards, and managing hazardous substances.

- **Territorial authorities**

There are 73 district and city councils, whose responsibilities' include the preparation of district plans and the issuing of resource consents. These may include provisions controlling plantation forestry activities. Territorial authorities control the effects of the use, development or protection of land (including hazardous substances, natural hazards and indigenous biodiversity), noise and the effects of activities on the surfaces of lakes and rivers.

6.5 Key Legislation

The following is the key legislation that influences forestry.

- **Resource Management Act 1991 (RMA)**

The RMA is the key statute regulating environmental effects and sets the regulatory framework for resource management in New Zealand. The purpose of the RMA is to "promote the sustainable management of natural and physical resources" (section 5), and the Act provides for a range of policy instruments to achieve this.

Central government policy instruments guide and direct regional government policy instruments. These include national policy statements, such as the New Zealand Coastal Policy Statement, which set out objectives and policies for matters of national significance that are relevant to achieving the purpose of the RMA, and national environmental

standards (NES) which are legally enforceable regulations. NES are discussed in more detail below.

Regional policy statements and plans contain objectives and policies (regional plans also contain rules) that may relate to forestry activities (for example land disturbance and activities in riparian areas). District plans may contain objectives and policies and rules to regulate aspects of plantation forestry activities. All regional and district policy instruments must be consistent with or give effect to any central government policy instruments. Further detail regarding the RMA is set out below.

- **Biosecurity Act 1993**

The Biosecurity Act deals with the exclusion, eradication and effective management of pests and unwanted organisms. The Ministry of Agriculture and Forestry (MAF), the Ministry of Fisheries, the Ministry of Health and the Department of Conservation all have responsibilities under the Act. Regional and territorial authorities also have a range of functions, powers and duties relating to the monitoring, surveillance and management of pests, pest agents and unwanted organisms, including the management of wilding trees.

- **Conservation Act 1987**

The Conservation Act established the Department of Conservation, the New Zealand Conservation Authority and Conservation Boards. The Act sets out broad principles for the management of conservation areas, indigenous freshwater fisheries, and natural and historical resources. The Department of Conservation also administers land under the National Parks Act 1980 and Reserves Act 1977, which are listed in the first schedule of the Conservation Act.

- **Environment Act 1986**

The Environment Act 1986 established the Ministry for the Environment and the Office of the Parliamentary Commissioner for the Environment.

- **Forestry Rights Registration Act 1983**

This Act was passed to facilitate the use of joint ventures for the development of plantation forestry. It provides for a forestry right to be granted by the owner or lessee of

land to another person to establish, maintain and harvest, or just to maintain and harvest, a crop of trees on that land.

- **Forests Act 1949 (Part 111A)**

The Forests Act regulates the sustainable harvesting of indigenous forest on private land and is administered by the Sustainable Programmes Directorate of MAF. Part IIIA of the Act promotes sustainable management of indigenous forest land. This Act requires indigenous forests to be managed in accordance with approved Sustainable Forest Management (SFM) plans and permits.

- **Forests and Rural Fires Act 1977**

This is the main legislation controlling rural fires. If a forestry organisation would like to clear vegetation by burning, it must obtain a permit from a Rural Fire Authority (set out in this Act). The Act also constrains the ability of landowners adjacent to designated forest areas to light any fire in the open.

- **Hazardous Substances and New Organisms Act 1996 (HSNO)**

The HSNO Act has regulations relating to the storage and use of agrichemicals in forests, and to bulk fuels and oil stored in forests and quarries. For example, secondary containment systems are required for fuel tanks over certain volumes to minimise the risk of spills to the land or water, etc. The Department of Labour monitors and enforces regulations set out under the HSNO Act. The HSNO Act regulates the introduction of any new bio-control agent for weeds and pests, or the genetic modification of any species.

- **Health and Safety in Employment Act 1992 (HSE)**

The HSE Act requires forest owners, principals to contracts, contractors and forest workers to take all practical steps to avoid, isolate or minimise hazards in forestry operations. In effect, worker safety has to take priority over all other activities undertaken in forests. The Department of Labour has issued an Approved Code of Practice for Safety and Health in Forest Operations, which constrains certain activities if they cannot be undertaken safely (for example activities like removing slash from streams).

- **Historic Places Act 1993**

The Historic Places Act is intended to promote the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. The Act is administered by the New Zealand Historic Places Trust (NZHPT), which processes consents for work affecting archaeological sites. The Trust also maintains a register of historic places and areas, Wahi Tapu and Wahi Tapu Areas (traditional sacred sites).

Any person wanting to destroy, damage or modify an archaeological site (as defined in the Historic Places Act) must apply to the New Zealand Historic Places Trust for an authority to do so. The provisions of the Act are very similar to the NSW Heritage Act 1977.

- **Local Government Act 2002**

The purpose of this Act is to provide for democratic and effective local government that recognises the diversity of New Zealand communities. The Act:

(a) states the purpose of local government; and

(b) provides a framework and powers for local authorities to decide which activities they undertake and the manner in which they will undertake them; and

(c) promotes the accountability of local authorities to their communities; and

(d) provides for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach.

- **South Island Landless Natives Act (1906) (SILNA)**

This Act provided for the transfer of land to approximately 4000 individuals of Māori descent. The transfer recognised long-standing calls for economic redress over land purchase agreements that left sections of the Māori population with insufficient land, or no land, with which to support themselves.

From 1993 to 2004, SILNA forests held certain exemptions under the Forests Act 1949. These were partially removed in a 2004 amendment. The legislation still distinguishes between SILNA and other privately owned indigenous forest land. SILNA owners can harvest their forests without an SFM plan or permit (subject to the provisions of the Resource Management Act 1991), and sell the resulting timber on the domestic market.

However, in the case of exports, SILNA forests are treated as any other privately owned indigenous forests and are subject to Part IIIA of the Forests Act 1949.

Other controls

The following also control plantation forestry in New Zealand.

- **New Zealand Forest Accord 1991**

The New Zealand Forest Accord was signed in 1991 (and updated in 2007) by a number of non-governmental organisations and forestry groups. The objectives of the Accord were to:

- Define the areas where it is inappropriate to establish plantation forestry.
- Recognise the value of indigenous forests and the need for their protection and conservation.
- Acknowledge the existing areas of natural indigenous forest that should be maintained and enhanced.
- Recognise that commercial plantation forests of either exotic or introduced species are an essential source of perpetually renewable fibre and energy, offering an alternative to the depletion of natural forests.
- Acknowledge the mutual benefits emanating from an accord between New Zealand commercial forestry enterprises and conservation groups, and the example this unique accord can provide to the international community (Harris, 2004).

6.6 Bylaws

Bylaws are usually made by a local authority, for example under the Local Government Act 2002. They exist alongside rules in RMA plans and can regulate issues such as environmental nuisance, traffic, food and recreational use, at a district or regional level. The Minister of Conservation can also make bylaws under the National Parks Act 1980 and the Reserves Act 1977, and regulations under the Conservation Act 1987.

Iwi management plans

An ‘Iwi management plan’ is commonly applied to a resource management plan prepared by an iwi, iwi authority, rūnanga or hapū (indigenous / maori groups). The RMA states that when preparing or changing any regional plan or territorial plan, councils shall have regard to any relevant planning document recognised by an iwi authority and lodged with that council, to the extent that its content has a bearing on resource management issues of that region or district.

FSC certification

FSC develops forest management and *chain of custody* standards, delivers trademark assurance and provides *accreditation* services. FSC certification is held by many forest owners and processors.

The RMA and management of plantation forests

The RMA integrates the management of fresh water, air, land, and marine areas into one piece of legislation. It sets the regulatory framework for land-use management in New Zealand, and provides for the preparation of plans and rules by regional councils and territorial authorities (collectively termed ‘local authorities’). The intent of the regulatory framework is set out in section 5 of the Act:

> “The purpose of this Act is to promote the sustainable management of natural and physical resources.
>
> (2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while -
>
> (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
>
> (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
>
> (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The concept of sustainable management underpins the management of land use and has been described in case law as the ‘overall broad judgment approach”. Local authorities

are charged with managing the effects of land-use activities within their region or district. The role of local authorities is outlined below.

Local authority plans may contain specific rules relating to plantation management, or more general provisions on activities such as the construction of culverts in rural land areas. Plan rules are developed via a statutory process involving consultation and community involvement, including input from iwi authorities and sector groups, such as the forestry industry and 'green' groups. The public nature of the plan development process, including submission and hearing processes, with appeals to the Courts, can take a number of years to complete.

Regional and district plan rules establish whether resource consents are required for forestry activities. Rules for plantation forestry vary across New Zealand as a result of the plan development process. Some plans may have a permissive approach to plantation forestry where consent is not required (usually subject to compliance with standards), while other councils apply more restrictive controls requiring resource consent for certain activities.

Activities are given a classification from 'permitted' ranging to 'prohibited'. A permitted activity does not require resource consent, provided that, if there are conditions specified in the plan these must be complied with. If the conditions cannot be complied with the plan will stipulate the 'default' activity status.

Under the Resource Management Act there are five types of activity classification:

- **Controlled:** The application must be approved by the consent authority, but may be subject to conditions of consent.
- **Restricted discretionary:** The consent authority may grant or decline the consent, subject to conditions, but only on matters to which it has restricted its discretion.
- **Discretionary:** The application can be declined or granted subject to any reasonable conditions.
- **Non-complying:** The application must meet statutory criteria before the consent authority is able to grant the application. Reasonable conditions may be imposed.
- **Prohibited:** An application for that activity cannot be considered.

The activity status and terms and conditions of consent can vary significantly throughout the country. This may occur because of local factors such as habitats of indigenous species or geology or as a result of the political positions and negotiations during the plan development phase. Generally:

- Planting, replanting and silviculture are permitted activities in rural zones subject to the meeting of standards.
- Earthworks and roading require resource consents, usually as restricted discretionary or discretionary activities.
- In some locations/ regions harvesting requires resource consent[102].

A recent review of regional council rules found that although rules are often more stringent within sensitive areas, council plans usually contain a 'permitted activity' rule for vegetation clearance within both riparian and erosion zones. Nevertheless, many Councils have limits on the amount, or area, of vegetation clearance that is permitted within these sensitive areas[103].

Councils generally have more rigorous rules for soil disturbance compared to vegetation clearance. Nevertheless all councils permit soil disturbance within general zones, and most councils permit soil disturbance within riparian and erosion zones (either by not regulating the activity or through a permitted activity rule). Those councils that do restrict soil disturbance restrict the area, volume or depth of soil disturbance under certain situations[104]. A number of councils apply more stringent rules to erosion zones or land with steep slopes. By way of example, water quality rules are generally a mix of quantitative and qualitative conditions.

Where a resource consent is required and applied for this may be notified or not notified to the public or identified affected parties depending on the specific district or regional plan provisions. Where applications are notified, third parties may submit in support or opposition of the application. The application may require a hearing before the Council.

[102] Brown & Pemberton Planning Group. 2010a. *Review of 12 Regional Council and 4 Unitary Authority RMA Plan Provisions Relating to Plantation Forestry*. Wellington: Ministry for the Environment.
[103] Brown & Pemberton Planning Group. 2010a. *Review of 12 Regional Council and 4 Unitary Authority RMA Plan Provisions Relating to Plantation Forestry*. Wellington: Ministry for the Environment.
[104] Brown and Pemberton Planning Group 2010. Review of 12 Regional Councils and 4 Unitary Authority RMA Plan Provisions Relating to Plantation Forestry. Wellington: Ministry for the Environment.

The applicant or third parties may appeal the decision of the Council to the Environment Court where a de novo hearing is held usually following mediation. Rights of appeal to the High Court, Court of Appeal and Supreme Court are limited to points of law.

Land use consents may be granted for a maximum term of 35 years. In some cases forestry companies with large forests apply for consents for the maximum term to cover the whole of forest operations[105]. Smaller forests generally apply for consents on an 'as needs basis' for specific harvesting and roading/ earthworks operations.

6.7 **Enforcement**

The RMA provides a number of enforcement mechanisms designed to ensure compliance with the statutory scheme. There are three tiers of enforcement including administrative enforcement (declarations, abatement notices, excessive noise directions and infringement offence provisions), civil enforcement (enforcement orders)[106] and offence provisions.

In the forestry context key mechanisms include infringement offences, abatement notices and prosecutions for breach of a resource consent or a rule in a plan. Charges are laid by the relevant local authority.

Infringement notices are generally comparable with a PIN with each offence carrying a maximum value of $1000.00. Payment of the infringement fee is deemed to be a complete defence to any proceedings. Any infringement fees paid may be retained by the local authority that issued the infringement notice. Infringement notices have been described as the equivalent of a parking fine, although the investigation required to support the issue of an infringement notice and the frequency with which they are issued would suggest otherwise.

[105] For example Kinleith Forest in the central North Island
[106] Enforcement orders may be applied for by any party to the Environment Court.

6.8 Issues with the current regulatory approach to forestry

The forest industry in NZ has identified an overarching issue of inconsistency in the current regulatory system is the inconsistency between regional and district plan rules under the RMA. This inconsistency results in:

- Re-litigation of the same issues across the country.
- Inconsistent treatment of forestry operations.
- Operational inefficiency.
- Investment uncertainty.

6.9 Alternatives to the current regulatory approach

National environmental standards

To address these concerns industry is currently working with the Ministry for the Environment to develop a national environmental standard for plantation forestry. National environmental standards (NES) are legally enforceable regulations made under the RMA. Standards can be numerical limits, narrative statements, or methodologies that are in a legally enforceable form[107]. Standards cannot contain guidance material. A standard can also indicate whether there is a requirement for a resource consent to be notified.

A NES may:

- Prohibit or allow an activity, or state that an activity is permitted.
- Specify that a resource consent is required, the classes of activity (controlled, restricted discretionary, discretionary or non-complying) and the matters over which control is reserved or discretion is restricted.
- Restrict the making of a rule or the granting of a resource consent to matters specified in the standard.
- Require a person to obtain a certificate from a specified person, stating that an activity complies with a term or condition imposed by an NES.

[107] Sections 43 to 44

The NES development process involves the convening of working groups, consultation with the public and interested parties and a submission process. The NES – Plantation Forestry is currently being drafted following the collation of submissions. At the time of writing, it is not known whether there will be sufficient support for the NES to proceed.

The NES has been described as having the following advantages:

- **National consistency:** an NES has the ability to provide a consistent set of rules that apply across the country.
- **Promotes the sustainable management of natural and physical resources:** an NES is an effective tool for managing resources, but it would rely on councils applying appropriate protection for resources for issues outside the scope of the NES.
- **Certainty:** national consistency would provide certainty about the status of plantation forestry activities, although some uncertainty would remain where there is an ability to be more stringent or activities are outside of the scope of the NES.
- **Implemented in an appropriate timeframe:** NES's take time to prepare but once they are gazetted, can take effect immediately.
- **Local input for different receiving environments and local values:** there would be an opportunity for local input into decision-making on consent applications for activities falling outside the scope of an NES or where councils can be more stringent.
- **Promotes best practice:** an NES could reflect best practice provided certainty and enforceability is retained.
- **Does not significantly tighten or loosen overall controls:** there would be an opportunity for an NES to determine and reflect a middle-ground approach to forestry regulation [108].

It is important to note that while aspects of forestry operations are permitted in some instances, consents are still required for many operations. Local authorities are required to

[108] Proposed National Environmental Standard for Plantation Forestry. Discussion Document. Wellington: Ministry for the Environment 2010- Retrieved from: http://www.mfe.govt.nz/publications/rma/proposed-nes-plantation-forestry/page16.html

determine the specific conditions to apply to those operations and third parties may have rights to be heard.

Greater reliance on Codes of Practice

Theoretically the high level of compliance with the Forestry Code of Practice by forestry operators means that the adoption of effects based conditions coupled with the best management practices set out in the Code should assist regulators in having confidence that effects based regulation is supported by best management practices. By focusing on outcomes the applicant can ensure that the Code of Practice best management practices appropriate to the situation are adopted. To date only a few regional plans incorporate codes of practice or forestry related technical publications. In a move which supports the enforceability of codes of practice and technical publications incorporated into planning documents including resource consents, a recent case has held that where a plan requires compliance with guidelines specific adherence with their contents may be required in order to remain within the bounds of the regulation, and failure to do so may result in prosecution [109].

A National Accredited Operator Standard

A national accredited operator system is being examined as an option that could apply in conjunction with the national environmental standard or as an alternative. Like the Bay of Plenty Regional Council accredited operator standard, it is envisaged that the standard would accredit competent forestry operators and allow the resource consent controls or the cost for obtaining approval to be minimised for those operators.

The standard could be beneficial because it would:

- Channel regulatory focus from 'low risk operators' to high-risk operators.
- Improve consistency of on-the-ground practice.
- Encourage and recognise best practice.
- Reduce monitoring costs for local authorities.
- Reduce consents and associated costs for the forestry sector.

[109] Auckland Regional Council v Holmes Logging Ltd, High Court, Auckland, CRI 2009-404-35, 17 June 2010, Woodhouse J

7. OTHER JURISDICTIONAL EXAMPLES: CANADA

The following information on forestry regulation in British Columbia and Victoria was largely provided by OEH's Crown Forestry Unit, and is included in the Report as a further reference.

7.1 British Columbia

During the review process, one of the Authors was able to meet with Ministry of Environment staff in British Columbia (BC) on 25 and 26 June 2011. The below observations provided by OEH were reviewed, and the information confirmed as broadly accurate, and contemporary.

Subsequent to discussions with Ministry staff, it became clear that the BC model of regulating native forests has some similarities, as well as major differences to that found in NSW. The operating environment (legislatively, politically and culturally) is significantly different to that of NSW. Challenges and issues however, remain remarkably similar:

- Contractors carrying out harvesting on behalf of the government, breach licensing conditions more frequently than government desires.
- Government has limited resources to effectively regulate and is only able to proactively audit a small percentage of areas harvested.
- Environmental groups consider too much in the way of native forests are harvested, and areas of high environmental value eroded through intense forestry practices.
- Forestry operations complain about impractical and rigid operating conditions.

The one notable difference is that BC has an independent watchdog - the Forest Practices Board, which is broadly recognised as being an effective 'umpire'. The Board is an independent body that monitors and enforces the Forest and Range Practices legislation.

While the board has had some success, it also has also been subject to criticism from industry groups, the media and even the courts. The Board also has raised concerns about

limited resources constraints. However, it is acknowledged that having a single and easily identified entity is an efficient means to impose regulation.

Background

British Columbia forests cover 60 million hectares of which 25 million hectares is old growth. About 96 percent of the forested land in the province is coniferous (softwood). British Columbia claims to have roughly the same amount of forested area as it did before European settlement. Only two per cent of the province's land has been permanently converted to other uses such as farming, ranching and urban development. Ninety five percent of British Columbia's forests are publicly owned and managed by the government.

Regulatory and policy environment

British Columbia has forest legislation, regulations and standards that set strict conditions for private companies, who are licensed by the government, to harvest public forests available to logging. Government inspectors within the Ministry of Forests and Range enforce these laws, impose penalties and order remedial work. This regulatory regime is then further strengthened by the independent Forest Practices Board, which is a combination auditor general, and ombudsman. The government regulates harvest levels on public and some private land via 'allowable annual cuts' (AACs) and forestry activities via licenses and permits.

Research review and monitoring of the system is undertaken through the Forest and Range Evaluation Program. The evaluation program is run by various branches within the Ministry of Forests and Range (key regulator of forestry activities) and the Ministry of Environment. This program evaluates whether practices under the Forest and Range Practices Act are meeting the intent of current objectives and whether the practices and the legislation itself, is meeting the government's broader intent for the sustainable use of resources.

Legislation

British Columbia's Forest and Range Practices Act 2004 and its regulations govern the activities of forest and range licensees in British Columbia. The legislation sets the requirements for planning, road building, logging, reforestation, and grazing. For forest activities, it specifies requirements to conserve soils, to reforest logged areas, and to protect riparian areas, fish and fish habitat, watersheds, biodiversity and wildlife. It also

specifies requirements for the construction, maintenance and deactivation of forest roads. It was enacted in 2004 with a transitional period which applied until 2006.

- Forest Act – classification of Forest Land, sets up Allowable Annual Cut requirements and identifies types of licensing and permits available.
- Provincial order - Old growth protection provisions, specifies an amount of old growth that must be reserved from harvesting in landscape units across the province.
- Other acts for wildfires, national parks and protected areas, culture and heritage and wildlife may apply to forest managers.

Roles and responsibilities

The Ministry of Forests and Range is the main government agency responsible for protecting the public interest in the use of the province's forest lands. The Compliance and Enforcement team within the Ministry regulates forestry activities under the Forest and Range Practices Act conducting routine and random audits and determining enforcement action i.e. where there is evidence of a contravention, an investigation is conducted, which may lead to the issuance of a violation ticket, penalty or eventual prosecution for serious offences. They conduct more than 16,000 inspections a year. The Ministry works with other ministries and the federal government to mitigate environmental impacts from forest activities.

The Forest Practices Board is an independent watchdog ensuring that resource ministries are appropriately monitoring and enforcing the Forest and Range Practices legislation. It informs both the British Columbia public and the international marketplace of forest and range licensees' performance in complying with legal requirements.

The Forest Practices Board also conducts independent audits and investigations and issues public reports on how well industry and government are meeting the intent of the legislation. While it does not lay penalties, its recommendations have led directly to improved forest practices such as stronger government decision-making processes and better communication among forestry professionals to manage risks to the environment.

Although other jurisdictions have forest watchdog bodies, British Columbia may be the only one with an arms-length relationship from government, and a mandate to hold both government and the forest industry publicly accountable for forestry practices. It chooses which operations to audit, and its reports and findings are published without government revisions or comments.

By law, the board must audit government and industry forestry practices, and it must deal with complaints from the public regarding forest practices and government enforcement. In addition, it may appeal enforcement decisions and penalties imposed by government, seek review of government decisions to approve plans for forestry operations, and carry out special investigations.

The Board conducts around eight to nine targeted and comprehensive audits a year. These audits can cover harvesting, roads, silviculture, protection activities, and associated planning in accordance with the Forest and Range Practices Act, the Wildfire Act (WA), and related regulations, as well as any transitional elements of the Forest Practices Code of British Columbia Act (the Code) if applicable.

An independent chief forester sets 'allowable annual cuts to regulate harvest levels. The Forest Analysis and Inventory Branch within the Ministry conducts timber supply reviews to support the chief forester's determination of allowable annual cuts (AACs); advising on timber supply implications.

Primary regulatory tools

- **Allowable annual cuts**

At least once every five years, British Columbia's independent chief forester is required by law to determine how much wood can be harvested in each of the province's 70 management units. The chief forester can postpone a timber supply review for up to five more years if the annual cut is not expected to change significantly or set a new harvest level earlier to deal with abnormal situations such an insect infestation.

- **Licencing**

The Ministry may enter into an agreement, granting rights to forest companies to harvest crown timber land. These agreements are referred to in Section 12 of the Forest Act and

may be in the form of a forest licence, a timber licence, a tree farm licence, a community forest agreement, a community salvage licence, a woodlot licence, licence to cut, free use permit or Christmas tree permit.

The Forest Act specifies that timber that is harvested from Crown land in a tree farm licence area and any wood residue produced from the timber, must be used in British Columbia unless exempted by the Lieutenant Governor in Council.

- **Forest stewardship plans**

Before a licensee can harvest timber from crown land they must submit a 'forest stewardship plan' as per the requirements of the Forest and Range Practices Act. The plan must show how operations will be consistent with objectives set by government for soils, timber, wildlife, water, fish, biodiversity and cultural heritage resources. The plans also indicate generally where forest development will be taking place. Before the government approves the plan, companies must invite and consider public and indigenous community comments. The independent reviewer – Forest Practices Board will audit and investigate to determine whether these results are being achieved and the Board will issue its finding publicly.

These plans are valid for five years and are like planning approvals (EIS's) or coup-by-coup approvals prior to harvesting operations.

- **Site plans**

The holder of a forest stewardship plan must also prepare a coup and road plan before harvesting to identify locations of coups and roads

- **Woodlot licence plans**

Before the holder of a woodlot licence harvests timber or constructs a road on land to which the licence applies, the holder must prepare a woodlot licence plan and obtain the minister's approval of the plan. The holder of a woodlot licence may obtain a cutting permit or a road permit only if it is consistent with a woodlot licence plan. The woodlot licence plan must include a suitable map, prescribed information about forest resources, intended results and strategies. It must also be consistent with objectives set by the government pertaining to:

- Retention of old forest,
- Seral stage distribution,
- Landscape connectivity, or
- Temporal and spatial distribution of cutblocks.

These plans are valid for 10 years.

Regulatory powers

- The minister can require the owner or licensee of a forested area to control insects, diseases, animals or abiotic factors affecting forested land.
- If the Lieutenant Governor in Council considers that a forest health emergency exists in an area of Crown land or private land, he or she may designate the area by regulation as a forest health emergency management area.

7.2 **Victoria**

Background

The Victorian forestry framework is significantly distinct to that of NSWs. With fewer tree species and less habitat pressures, different governance and legislative instruments and other pressures on wood supply agreements, it is not possible to simply transpose this regulatory framework to that which operates in NSW.

However, it is fair to characterise Victoria's operating environment as a more flexible arrangement to that of NSW. Historical milestones and dealing with forestry management matters has been progressed differently. As a result, management of Victoria's State forests occurs through a system of forest management zoning. State forest areas are designated as Special Protection Zone, Special Management Zone or General Management Zone. Sustainable timber harvesting is permitted in areas designated as General Management Zone and in Special Management Zone under certain conditions. Forest management zoning can change through time in accordance with relevant Regional Forest Agreements or Forest Management Plans.

Timber harvesting is not permitted in areas designated as Special Protection Zone. These areas complement dedicated conservation reserves, such national parks, in ensuring Victoria maintains a Comprehensive, Adequate and Representative (CAR) reserve system.

The gross area of State forest available for timber harvesting is 2.1 million hectares, about 70 per cent of the total State forest area or 30 per cent of Victoria's public native forests.

Regulatory and policy environment

In 2002, the Victorian Government announced the *Our Forests Our Future* policy initiative. The major components of the initiative include: a 31% reduction in logging across the State; an $80 million assistance package, new legislation to ensure resource security; independent auditing of forests; and the establishment of a new commercial entity, VicForests. This organisation manages the commercial forestry objectives of the state. This change of responsibility is legislated in the Sustainable Forests (Timber) Act 2004.

Legislation

State forests are managed by the Department of Sustainability and Environment (DSE) via three main pieces of legislation: Forests Act 1958; Conservation, Forests and Land Act 1987 Sustainable Forests (Timber) Act 2004.

Sustainable Forest (Timber Harvesting) Regulations 2006 – These regulations detail types of timber harvesting operator licenses and a process for demerit points whereby points may be incurred and a prescribed number of points may lead to suspension/cancellation of licenses – this system applies to environmental failures as well. For example feeling tress in reserved areas, working in wet conditions, failure to rehabilitate log dumps, prevent erosion on roads and remove rubbish from the forest after operations.

Roles and responsibilities

- **Department of Sustainability and Environment (DSE)**

The Department of Sustainability and Environment (DSE) is responsible for managing Victoria's forests. It directly manages Victoria's State forests across the state and also manages harvesting and sale of timbers in areas of Victoria where VicForests does not operate.

DSE has the following responsibilities:

- Act as the public land manager.
- Manage the permanent road network (VicForests has access to the road network for harvesting operations in eastern areas of Victoria).
- Develop Management Procedures and strategic and land use plans.
- Approve VicForests' Timber Release Plans.
- Audit compliance with the Allocation Order.
- Issue Timber Harvesting Operator Licenses.
- Responsible for ensuring compliance with the Code on public land.

The DSE is responsible for monitoring VicForests' ongoing operations to ensure that:

- Areas that have been allocated (by DSE through Wood Utilisation Plans) are harvested only.
- Replanting and regrowth of forests in all areas that have been harvested occurs using the same plant species.
- VicForests abides by the guidelines of the Sustainable Forests (Timber) Act 2004.

VicForests operates through two regions across eastern Victoria (namely the Central Highlands and East Gippsland regions). In other areas of Victoria VicForests DSE is responsible for the management of forest operations. Vic Forests is a Victorian State-owned business. It is responsible for the sustainable harvest, regeneration and commercial sale of timber from Victoria's public forests on behalf of the Victorian Government.

VicForests is responsible for determining long-term sustainable harvest levels from the forest stands to which it has access under the Allocation Order. VicForests must undertake strategic, tactical and operational planning for the management of timber harvesting operations to ensure the long-term productivity of the forest is maintained and the regulatory framework for sustainable forest management is complied with. This includes taking into account the impacts of fire on the structure and condition of State forests, and therefore the availability of timber resources.

VicForests also undertakes associated management activities in relation to that allocated timber including:

- Preparation of sites for timber harvesting.
- Construction of access roads to coupes.
- Site rehabilitation.
- Forest regeneration.
- Any other activities specified in the Allocation order.

Primary regulatory tools

- **Forest management plans**

Made under the Forests Act 1958, these strategic plans of management document the principles and actions that guide the management of State forests in Victoria. Each FMA

has a Forest Management Plan that establishes strategies for integrating the use of State forest for wood production and other purposes with the conservation of natural, aesthetic and cultural values. Forest Management Plans identify three management zones within State forest: the Special Protection Zone (SPZ); the Special Management Zone (SMZ); and the General Management Zone (GMZ).

- **Allocation orders (DSE responsibility)**
    - Allocates areas of State forest to VicForests for the purposes of harvesting and selling timber resources.
    - For a period of 15 years (divided into three five-year periods) and may be extended.
    - The Allocation Order describes:
        - The forests stands to which VicForests has access
        - The location and extent of those forest stands
        - The total available area of those forest stands
        - The maximum area available for timber harvesting in each five year period of the Allocation Order
        - Any additional activities that VicForests is permitted to undertake
        - The conditions with which VicForests must comply in carrying out its functions under the Allocation Order.
- **Timber Release Plans (VicForests responsibility)**
    - Operational planning information that sets out specific details of proposed harvesting operations on State forest.
    - When an Allocation Order is made, VicForests is required to prepare a Timber Release Plan in respect of any area that it proposes to harvest and/or sell timber resources from or undertake associated management activities within. A Timber Release Plan must include a schedule of coupes for timber harvesting and associated access road requirements, details of

the location and timing of timber harvesting in those proposed coupes and details of the location of associated access roads.

- A Timber Release Plan must not be inconsistent with the Allocation Order or any relevant Codes of Practice and must be approved by the Secretary to the Department of Sustainability and Environment (or delegate).
- The effect of an approved Timber Release Plan is to vest ownership of timber resources in VicForests so that it can be sold to the timber industry.
- VicForests is required to comply with the regulatory framework for sustainable forest management in Victoria when harvesting and selling timber resources. This framework includes relevant laws, the Code of Practice for Timber Production, 2007 and the Code of Practice for Fire Management on Public Land Revision No 1, 2006.
- VicForests to undertake associated management activities in relation to that allocated timber including:
  - Preparation of sites for timber harvesting.
  - Construction of access roads to coupes.
  - Site rehabilitation.
  - Forest regeneration.

- **Wood Utilisation Plans (DSE only)**

Victoria is divided into 14 Forest Management Areas for forest management purposes. Three-year Wood Utilisation Plans (WUP) are prepared annually for each FMA. WUPs provide a list of areas scheduled to be harvested, associated road requirements; details of the location and approximate timing of timber harvesting in the proposed coupes; and a plan for the allocation of wood to processors. Coupes scheduled in a WUP are selected for harvesting on the basis that they contain the required quantities and mix of wood products A WUP is prepared in accordance with the relevant Forest Management Plan and the Code of Forest Practices for Timber Production 2007.

- **Forest Coupe Plans**

For each commercial harvesting operation in State forest, Forest Coupe Plans are prepared. These plans contain a map identifying the area and a schedule incorporating the specifications and conditions under which the operation is to be administered and controlled. A Forest Coupe Plan is prepared in accordance with Code of Practice for Timber Production 2007.

- **Code of Practice for Timber Production**

The Code of Practice for Timber Production 2007 is a key regulatory instrument that applies to commercial timber production in both public and private native forests and plantations in Victoria. It is a statutory document prepared under Part 5 of the Conservation, Forests and Lands Act 1987. Compliance is required under the Sustainable Forest (Timber) Act 2004 and via its incorporation into the Victoria Planning Provisions.

The code contains requirements for forest planning, protection of environmental values, forest regeneration and management, road and timber harvesting

Compliance with the Code of Practice is mandatory for any person undertaking timber harvesting on public land. Under the Sustainable Forests (Timber Harvesting) Regulations 2006, penalties for non-compliance may apply if operations on public land are not in accordance with the Code. DSE is responsible for ensuring compliance with the Code on public land. Compliance by forest operators with the requirements of this Code on public land is monitored by authorised DSE officers appointed pursuant to the Conservation, Forests and Lands Act 1987.

Compliance is additionally monitored through an external independent audit process, the results of which are reported publicly. Audit findings inform the refinement of the Code and supporting documentation to ensure the effectiveness of the Code in achieving its outcomes.

Terms within the Code include:

- Code Principle is a broad outcome that expresses the intent of the Code for each aspect of sustainable forest management.
- Operational Goal states the desired outcome or goal for each of the specific areas of timber production operations, to meet the Code Principles.

- Mandatory Actions are actions to be conducted in order to achieve each operational goal. Failure to undertake a Mandatory Action results in non-compliance with the Code.
- Guidance provides possible means for achieving Operational Goals or Mandatory Actions, including reference to documents that may assist forest managers. Forest managers and operators are not obliged to conduct any of the actions covered under Guidance. This allows for innovation and advances in technology to provide continual improvement in addressing.

BIBLIOGRAPHY

Ministry for the Environment. (2010). *Proposed National Environmental Standard for Plantation Forestry. Discussion Document*. Retrieved September 2011, from Wellington: Ministry for the Environment: http://www.mfe.govt.nz/publications/rma/proposed-nes-plantation-forestry

Australian Government (n.d.). Retrieved September 2011, from Department of Agriculture, Fisheries and Forestry: http://www.daff.gov.au/rfa/about/history

Ayres, J. &. Braithwaite J (1992) *Responsive regulation: transcending the deregulation debate.* New York: Oxford University Press.

Bottomley, B. (2009). *Occupational health and safety management systems: strategic issues report.* A report prepared for the National Occupational Health and Safety Commission.

Braithwaite, J. (1996) Trust and Compliance *Policing and Society* 4:1-12.

Braithwaite, J. (1996) *Institutionalising Distrust, Enculturating Trust.*

Canada, Treasury External Advisory Committee on Smart Regulation, Smart Regulation. (2004). *A Regulatory Strategy for Canada*. Retrieved September 2011, from <http://dsp-psd.pwgsc.gc.ca>

Centre for problem oriented policing . (n.d.). *Centre for problem oriented policing* . Retrieved 2011, from http://www.popcenter.org/about-SARA.htm

Cherney, A. (1997). Trust as a Regulatory Strategy: A Theoretical Review. *Current Issues in Criminal Justice* , 9 (1) 71-84.

Clarke, R. V. (2003). *Become a Problem Solving Crime Analyst: In 55 small steps.* London : Institute of Crime Science University College London.

Clarke, R. V. (February 8-10 1999). Reducing Opportunities for Crime. A paper prepared for the UN Workshop on Community Involvement in Crime Prevention. Buenos Aires: www.edoca.net/Resources/Conference%20Papers/UN_workshop_1999/Cla.

Cohen, L. E. (1979). Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review* , 44: 588-608.

Collings, T. &. (2007/08). Regulating our Natural Resources - Farmers Friend or Farmers Foe? Have Regulators got the mix Right? *Flinders Journal of Law Reform:Vol 10* , 467.

DECCW. (2010). *Outcomes from the Review of the NSW forest agreements and the integrated forestry operations approvals.* NSW

Department of Primary Industries NSW. (n.d.). *Forests NSW*. Retrieved from Forests NSW: http://www.dpi.nsw.gov.au/forests

Environmental Defence Society. (n.d.). Retrieved September 2011, from : http://www.rmaguide.org.nz/rma/introduction/approach.cfm

EPA Victoria (2011) "Compliance and Enforcement Review: A Review of EPA Victori's Approach"*Publication 1368* , p23.

Fisse, B. (1983). *Corporations, Crime and Accountability.* Cambridge: Cambridge University Press.

Forestry Act 1916; Section 8A . (n.d.).

Forests NSW . (2009-10). *Forests NSW Annual Report: Social, Environmental and Economic Performance, p4.* NSW: NSW Government .

Forests NSW - Sustainable forest management . (2011). Retrieved September 2011, from Department of Primary Industries - Forests : http://www.dpi.nsw.gov.au/forests/management

Freiberg, A. A. (2000). Effective Compliance and Enforcement Policies. *Smart Compliance for the New Millennium conference30-31 March 2000.* Adelaide .

General, A. (2009, April). *Auditor General's Report (2009) "Sustaining native forest operations, Forest NSW", The Audit Office of NSW* . Retrieved September 2011, from Auditor-General NSW: http://www.audit.nsw.gov.au/publications/reports/performance/2009/forests/forests.pdf

Grabosky, G. F. (n.d.). *Australian Institute of Crimonolgoy Research and Public Policy Series No 27*. Retrieved from Imprioving Environmental Performance: Preventing Crime. : www.aic.gov.au

Group, B. &. (2010). *Review of 12 Regional Council and 4 Unitary Authority RMA Plan Provisions Relating to Plantation Forestry.* Wellington: Ministry for the Environment.

Hammond-Deakin, N. A. (2011). *If a Tree Falls, Compliance Failures in the Public Forests of NSW.* Sydney, Australia: Environmental Defender's Office (NSW) Ltd.

Hampton, P. (2005). *Reducing Administrative Burdens - Effective Inspection and Enforcement.* Great Britain: HM Treasury.

Hirschi, T. (1969). *Causes of Delinquency.* Berkeley: University of California Press.

Johnstone, G. &. (1999). *Regulating workplace safety: systems and sanctions.* Oxford: Oxford University Press.

Lobb, A. (2011). *The Forestry Project Industry Assessment Study of the NSW Native Forestry Industry based on Crown Resources.* Sydney: DECCW.

May, R. &. (2008). *Making sense out of regulatory enforcement. Law and policy, 20(2): 157–182.* America: Blackwell Publishers.

Ministry for the Environment. (2011). *The Review of Authority Rules* . Retrieved from www.mfe.govt.nz/laws/standards/forestry/index.html

Ministry of Agriculture and Forestry. (April 2009). *A Forestry Sector Study.* Wellington: Ministry of Agriculture and Forestry.

Nagin, D. S. (1994). Personal Capital and Social Control: The Deterrence Implications of a Theory of Individual Differences in Criminal Offending. *American Society of Criminology* , 32 (4): 581-596.

New South Wales Government . (1999, March 5). *Environment NSW: Firest Agreement for Eden Region* . Retrieved September 2011, from http://www.environment.nsw.gov.au/resources/forestagreements/edenagreement.pdf

NSW Department of Primary Industries . (2005). *NSW Department of Primary Industries* . Retrieved September 2011, from ESFM Plan: Ecologically Sustainable Forest Management Eden NSW: http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0004/266188/esfm-eden.pdf

NSW Government . (2011, August 17). *NSW Public Sector: Principal Departments and Other Bodies*. Retrieved September 2011, from http://www.dpc.nsw.gov.au/__data/assets/pdf_file/0005/126086/NSW_Public_Sector_Principal_Departments_and_Other_Bodies_as_at_17_August_2011.pdf

NSW Government. (2011). *NSW forest assessments, agreements and approvals*. Retrieved 2011, from Office of Environment and Hertiage: http://www.environment.nsw.gov.au/forestagreements/index.htm

Parker, C. (1999). Compliance professionalism and regulatory community: the Australian trade practices regime. *Journal of law and society* , 26(2): 215–239.

Press, B. J. (2000). *Global business regulation.* Cambridge : Cambridge University.

Queensland Ombudsman . (2005). *Report on the Workplace Electrocution Project.* Brisbane: Queensland Government .

Regulation Taskforce . (January 2006). *Rethinking Regulation: Report of the Taskforce on Reducing Regulatory Burdens on Business.* ACT : Australian Government .

Smith, S. (19989). Forests in NSW: An Update. *NSW Parliamentary Library Research Service*, section 6.0.

Smith, S. (1999). Forests in NSW: An Update. *Parliamentary Library Research Service* , section 6.0.

Sparow, M. (2000). *The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance.* Washington DC: The Brookings Institution.