A Review of the Department of Environment and Conservation's (DEC's) Legal Position and Enforcement Options as to the Management of Timber Harvesting Operations

TERMINAL REPORT (Draft)

Prepared by

Forest Policy & Practices Branch DEC Division of Sustainable Forest Management Bunbury, 10 July – 30 November 2007

FOREWORD

Timber harvesting operations & associated activities being undertaken by the Forest Products Commission (FPC) on State forest and timber reserves are required to comply with the current legislative framework, as well as meet the requirements of the *Forest Management Plan 2004-2013* (FMP). The overall objective of this legal review project is to clarify the legal arrangements affecting the ability of Department of Environment and Conservation (DEC) staff so as to effectively manage all those activities.

Minh-Tam Ha, Forest Practices Officer, Forest Policy and Practices Branch is assigned to implement the Project No. 3663 that requires the following activities.

- 1. Project implementation on schedule during 10/07 10/10/2007
 - 1.1 Determine the current legal position, as well as identify key issues in regard to DEC's ability to effectively manage timber harvesting operations undertaken on State forest & timber reserves
 - * Review legal advice received from State Solicitors Office during 6/2002- 6/2007
 - * Select background reading and a list of references
 - * Gather further information through another data generation methods, such as documentary review and field observation that can help to contextualise this relevant information for references
 - * Continue to conduct the SFM survey combined with semi-structured interviews: During the period 9/08/07 to 9/10/07, the project has received 31 responses. The main challenge is to maintain good communication with, and/or relevant follow up procedures to be applied to the delayed respondents.
 - 1.2 Preparation of Terminal Report
 - * Make the structure of the report further refined.
- 2. Project implementation scheduled for 11/10 30/11/2007
 - 2.1 Complete the first draft report
 - 2.2 Make the draft report available for peer review (including all respondents)
 - 2.3 Finalise and officially release the terminal report
 - 2.4 Evaluate and close the project

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To those who have contributed to the data generation methods, either by way of completing the questionnaires – a list of their names is provided below – and/or personal communications, we hereby give our sincere thanks.

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Executive Summary

The Director General Office's Annual Audit Reports for the period 8/2002-7/2007 recorded incidents of non-compliance with environmental specifications that have occurred during the FPC's timber harvesting operations. These incidents, as they happened, are kept recurring in the same nature and intensity on a year-after-year basis. Based on an internal Environmental Management System (EMS) listed as "FPC EMS Incidents" for the first two full financial years following the release of the Forest Management Plan 2004-2013 (FMP), the FPC's Statutory Review (2006) has also given the statistics on non-compliance with two incidents recorded a week on average. Operations regularly fail tracking and compliance requirements which are further evident from the Auditor General's September 2007 Report on WA Public Sector Performance.

While all those incidents of non-compliance with ESFM standards highlighted an urgent need for both the DEC and the FPC to manage timber harvesting operations effectively and efficiently; they also raised the question of how can our current legislative and institutional system be improved to help achieve the FMP and ESFM goals?

The question has been examined in this legal review project. It is the purpose of the project to provide recommendations for improvements to the current management system that facilitates DEC in undertaking its role and responsibility, as are set consistent with the Government's policies on ESFM, as well as the FMP. Data were generated through a SFM survey by questionnaire with open-ended questions, field observation and documentary reviews.

The project found that the current legal and institutional framework is required continual improvement and adaptive management, as set out in the FMP. According to ESFM standards, improvements are needed to focus on the two elements in the management system of timber harvesting operations:

- A general cycle of at-a-coupe timber harvesting procedures;
- Mechanisms for compliance monitoring and auditing.

Based on the survey results, as well as dialectical theories and historical analysis, the project's recommendations have been made in accordance with the Montreal Process Criteria and Indicators (MPC&I, 1995).

Summary of Recommendations

Recommendation 1 – that Forest Management Plan 2004-2013 should be staged into two 5-year implementation phases: 2004-2008 and 2009-2013. Each should commensurately review all key performance indicators, either as primary and/or secondary ones. KPIs should be revised to meet the core MIRA planning standards which require *measurable*, *implementable*, *reliable*, as well as *achievable* at the all-levels of implementation, as appropriate. *Proposed completion timetable: before 30 June 2008*.

Recommendation 2 – that the memorandum of understanding (MOU), and as a component of MOU, the 3-month formal working arrangements (FWA) between the DEC and the FPC in regard to the timber harvesting should be prescribed in both the *CALM Amendments Act* 2000 and the *Forest Products Act* 2000. Together, the MOU and FWA are an essential means of communication to reach agreements between the DEC and the FPC. They aim to promote, establish and maintain a good working relationship of DEC with SFM decision-makers within the FPC, who are directly connected to the field harvesting operations and associated matters relating to the production and yield of forest products. *Proposed completion timetable: before 29 February 2008*.

Recommendation 3 – that the DEC and the FPC jointly develop a training & professional development program for harvesting supervision and monitoring & fire management. This program should also contain an integral component of public education and extention. Assessment of human-resource skills and training needs should be prioritised in accordance with the requirements of the FMP 2004-2013 and the Government's policies on regionalisation strategy. *Proposed completion timetable: before 30 June 2008*.

Recommendation 4 – that the *Manual of Management Guidelines for Timber Harvesting in Western Australia* and accompanied *Code of Practice for Timber Harvesting in Western Australia*, both of which have been published by CALM in March 1999, need now to be updated. The update with a focus on *Environmental Protection* section should be up to ESFM standards, signed off by the Conservation Commission, and uniformly referenced by both the DEC and the FPC for the conduct of timber harvesting operations on State forest and timber reserves. *Proposed completion timetable: before 30 June 2008*.

Recommendation 5 – that to meet the requirements of *Indicator 7.2e* developed in the Montreal Criteria, the laws, regulations, guidelines, as well as code of practice for timber harvesting need to be enforced. All these documents need to be unified and logically connected one with another on a uniformity basis. In particular, a comprehensive set of systematic and uniform standards for timber harvesting in Western Australia should be established and included:

- Manual of Management Guidelines for Timber Harvesting in Western Australia, 1993 & Code of Practice for Timber Harvesting in Western Australia, 1993: They should be updated, referred to in Recommendation 4;
- WA Forest Management Regulations 1993: that FM Regulations be revised in connection with the Code of Practice for Timber Harvesting in WA, 1993. As a result, it is the FM Regulations to impose penalties, in detail, for any recurring non-compliance with environmental specifications;
- Environmental Protection Act 1986: that the EP Act be amended to enforce non-compliance with environmental specifications, as are prescribed in the Code of Practice for Timber Harvesting in WA, 1993 and Forest Management Regulations 1993;
- CALM Amendment Act 2000 & Forest Products Act 2000: that these Acts be amended to include enforcement on non-compliance with environmental specifications, as are specified in the Environmental Protection Act 1986.

Under such a unifying system for ESFM standards, any non-compliance with the *Code of Practice for Timber Harvesting* is considered being against the *FM Regulations 1993*, and at the same time against all the Acts mentioned above. *Proposed completion timetable: before 30 June 2008*.

Recommendation 6 – that to enforce the laws, regulations, guidelines and code of practice for timber harvesting in Western Australia, a joint committee should be formed to deal with all issues relating to non-compliance with the Government's legislation and policies and ESFM standards, make rules and decisions on such legal matters. The joint committee should involve representatives from the DEC, the FPC and the Conservation Commission. The committee may require, when necessary, the participation of representatives from any external agencies, Local Government, stakeholder groups and/or local communities concerned. *Proposed completion timetable: before 29 February 2008*.

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1. Introduction

1.1 Forest Policy & Practices Branch and the legal review project No. 3663

In 2000, the commercial timber harvesting interests were officially separated from CALM and transferred to the newly established Forest Products Commission (FPC). This was to overcome a perceived conflict of interest in having the same agency responsible for both commercial timber harvesting & conservation. CALM was subsequently merged with the Department of Environment to form the Department of Environment and Conservation (DEC) in July 2006.

DEC is responsible for management of the forest. This includes development of the forest management plan for the Conservation Commission, longer term harvest planning, monitoring and auditing implementation, seeking compliance, research and development, land management and fire management. A part of this responsibility is setting the standards for timber harvesting operations, and monitoring implementation of those standards. This responsibility is undertaken predominantly by DEC's Sustainable Forest Management (SFM) Division and is done in accordance with an approved forest management plan.

The FPC is responsible for the harvesting and marketing of forest products from State forest and timber reserves and from Government owned or managed plantations on fee simple land held in the name of the CALM Act Chief Executive Officer. The FPC is also responsible for promotion of the development of the forest production requirements of the State and undertaking any project or operation for that purpose pursuant to section 10(1)(d) of the *Forest Products Act* 2000 (FP Act).

Forest Policy and Practices Branch (FPPB) was established in July 2004 to increase the capacity of SFM Division and provide a formal structure for the delivery of the SFM output following the gazettal of the *Forest Management Plan 2004-2013* (FMP). The FPPB functions are as follows:

- Establish the standards for ESFM through development and maintenance of policies and guidelines, manuals and advisory notes;
- Establish, maintain and support the systems to approve, monitor, achieve compliance and enforce the standards for disturbance activities on State forest, timber reserves and freehold land held in the name of the CALM Act Chief Executive Officer; and
- Provide policy advice and contribute to partnerships and public support of ESFM (FPPB, 2007:3-6; DEC, 2007:4-5).

The Forest Management Plan 2004-2013 (FMP) has adopted the Montreal Process Criteria & Indicators (MPC&I, 1995) of sustainability as the framework within which to identify management actions in line with the principles of ESFM (CCWA, 2004). The objectives and related Actions set out under *Plan Implementation* chapter (s.32: Monitoring & Audit) established that:

"The plan proposes the following Actions for the purpose of seeking ensure that forest management is undertaken in accordance with the plan and is continually improved so as to achieve best practice.

- Action 32.1: The Department and the Forest Products Commission, in consultation with the Conservation Commission, will:
 - 32.1.1 cooperate in the development of an annual audit program to monitor the extent to which the plan applies is undertaken in accordance with the plan; and
 - 32.1.2 conduct audits in accordance with the annual audit program, and report the results to the Conservation Commission.

Action 32.5 The Forest Products Commission will publish annual report on the compliance of its staff and contractors with the provisions of the plan and subsidiary management guideline documents" (CCWA, 2004:61).

In accordance with the plan, the objectives of this legal review project managed by the FPPB are to:

- (i) review and improve the ability of DEC staff so as to effectively manage timber harvesting operations and associated activities undertaken by the FPC on State forest and timber reserves in accordance with the requirements of relevant State and Commonwealth legislation, as well as the FMP; and to
- (ii) develop recommendations to improve the understanding and appropriate use of various instruments & enforcement options available to the DEC staff, so that this facilitates DEC in undertaking its legal obligation and responsibility, as well as ensures compliance with the provisions of the plan and subsidiary management guideline documents.

Thus, the scope of this project is to focus upon an effective legal and institutional framework to support biodiversity conservation and sustainable management, as is specified under the seventh criterion developed within the Montreal Process Criteria & Indicators (MPC&I, 1995) (**Appendix I**).

1.2 Organisation of the report

The remainder of this report is organised into three main parts. The first focuses on Forest Management Plan 2004-2013 (FMP) as an effective instrument of the State

Government's new policy on ecologically sustainable forest management (ESFM). It sets out the context of Western Australia's legal and institutional framework under which the FMP has been developed and implemented. The need for timber harvesting operations to comply with the FMP and ESFM goals is also discussed.

Founded upon dialectical theories and historical analysis, the second part presents chosen methodology, and the key methods of data generation and analysis.

The third, guided by the seventh criterion developed within the MPC&I 1995, examines and discusses the legal issues and enforcement options available to DEC staff to ensure that timber harvesting operations are compliant with the FMP and ESFM goals and standards. Then, recommendations are made with a proposed timetable for continual improvements to the current legislative and institutional system pertinent to the plan's comprehensive mid-term review that has been scheduled by 31 December 2008 (CCWA, 2004:61).

2. Background and context

2.1 Forest Management Plan 2004-2013 as an effective instrument of forest policy shift in Western Australia (WA)

A statutory review of the *Forest Products Act 2000* conducted by the Forest Products Commission (FPC) in November 2006 acknowledged that:

"The FMP is an important document, which establishes how the FPC may conduct its business in State forest or timber reserves. The FPC must adhere to the goals set in the FMP for such factors as biological diversity, productive capacity, socioeconomic benefits and yields of specific trees" (FPC, 2006:7).

The FMP is indeed a high-level strategic document. The plan, when gazetted, has established a legal and institutional framework to achieve the goals of the Government's policy on ESFM under the particular political and socio-economic conditions in Western Australia (CCWA, 2002a & b; CCWA, 2003a & b; CCWA, 2004; Jones, 2005). For the purpose of the legal review project, a précis of this legal and institutional framework deserves a particular emphasis.

The FMP is the first plan since amendments to the *Conservation and Land Management Act 1984* (CALM Act) separated the management of forests from commercial timber operations. The amendments passed in November 2000 also defined the principles of ESFM and made it a function of the new Conservation Commission of Western Australia (CCWA) to advise the Minister for the Environment on the application of these principles, so there is both statutory support and a policy imperative that the FMP be consistent with the principles of ESFM. A key component of the plan is implementation of the State Government's *Protecting our old growth forests* policy.

The Montreal Criteria of sustainability represent a common understanding of what is meant by ESFM. The FMP has adopted three management scales: the whole of forest, landscape and operational, to accommodate better planning for the maintenance of biodiversity. Actions are set for each of those criteria for sustainability, where appropriate at each of the scales of management.

The plan covers all land categories vested in the CCWA within the Swan, South West and Warren Regions of the Department of Environment and Conservation (DEC). This is prescribed in Part V of the CALM Act. However, there is a focus on the management of State forest and timber reserves because it is primarily on these land categories that disturbance activities are permitted. The DEC manages them according to management plans that have been prepared under the CCWA's direction and approved by the Minister for the Environment. The FPC is responsible for the harvesting and regeneration of the forest and the sale of forest products, and associated industry development issues.

The CCWA is the proponent for the purpose of the assessment of FMP undertaken by the Environmental Protection Authority (EPA) under the *Environmental Protection Act 1986* (EP Act). The CCWA, DEC and FPC will seek to achieve the FMP's objectives by undertaking the Actions specified. The CCWA is responsible for giving effect to the conditions imposed on the plan by the Minister under the EP Act. The plan had 18 Ministerial conditions and 18 commitments attached to its implementation pursuant to the EP Act.

The Wildlife Conservation Act 1950 (WC Act), administered by DEC, provides for the conservation of flora and fauna throughout the State. The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 also contains provisions relating to the protection of nationally-listed threatened species and ecological communities. In that part of the plan area covered by the Regional Forest Agreement (RFA), the Commonwealth and State Governments have agreed that the Comprehensive, Adequate & Representative (CAR) reserve system, and the forest management system, meets the requirements of that Act for the protection of threatened flora and fauna and ecological communities (RFA Clause 56). Therefore the provisions of that Act for environmental assessment are not triggered for forestry operations. The Commonwealth has also confirmed that its obligations under the Australian Heritage Commission Act 1975 for the protection of listed and interim listed national estate places have similarly been met (RFA Clause 20).

The FMP comes into operation on 1 January 2004, and continues to operate until 31 December 2013. The CCWA will undertake comprehensive mid-term and end-of-term audits of the extent to which management of land to which the plan applies has been undertaken in accordance with the plan, which will include consideration of the extent to which all key performance indicators (KPIs) have been achieved. These audits will be provided to the Environmental Protection Authority (EPA) for

review by 31 December 2008 and 31 December 2012 respectively.

The majority of Actions specified within the plan be implemented by the DEC and the FPC. The CALM Act and the FP Act require them respectively to operate in accordance with the plan. They are committed to the implementation of FMP.

2.2 Recorded incidents of non-compliance occurred during timber harvesting operations

Table 1 summarises the recorded incidents of non-compliance with environmental specifications that have occurred during the FPC's timber harvesting operations for the period 8/2002-7/2007 (DGOMA, 2002-2007). The project presents these incidents, as they happened, with a view that they are kept recurring in the same nature and intensity on a year-after-year basis.

It should be noted that in 2002 and 2003 respectively - (these two years preceded the release of the FMP 2004-2013) - the annual audits were then conducted jointly between CALM (now DEC) and the FPC to determine whether the FPC's timber harvesting operations meet the requirements of the former Forest Management Plan 1994-2003, the Ministerial Conditions and Proponent Commitments on its implementation, and CALM's Environmental Code of Practice and subsidiary management guidelines.

The FPC's Statutory Review (2006) otherwise provides different figures in relation to the non-compliant incidents that were based on an internal Environmental Management System (EMS) listed as "FPC EMS Incidents" for the first two full financial years following the release of the current FMP 2004-2013 (**Table 2**).

Table 1 – Audit Reports on the FPC's non-compliances with ESFM standards for the period 8/2002–7/2007 (Source: The Director General Office's Management Audit)

Date of Issue	Descriptions of the incidents of non-compliance occurred during timber harvesting
	* Protection of reserved areas during harvesting: 5 incidents of trees being removed from stream reserves in 1 coupe. 2 incidents of trees being removed
	from diverse ecotype reserves in 2 coupes.
July 2007	* Protection of crop trees: Only 57% of required tops disposal work around marked crop trees carried out.
	* Protection of threatened flora: Records of threatened flora field searches unable to be obtained for 2 coupes.
	* 4 Work Improvement Notices (WINs) & 2 Management Letters (MLs) were issued for non compliances with environmental specifications.
	* Protection of zone boundaries during harvesting: 5 incidents of trees being removed from reserved areas in 2 coupes.
July 2006	* Protection of crop trees: Only 42% of required tops disposal work around marked crop trees carried out. 14% damage to marked crop trees in 1 coupe.
-	* 6 WINs and 3 MLs were issued for non compliances with environmental specifications.
	* Protection of zone boundaries during harvesting: Removal of trees from within a Level 1 Travel Route Zones in 1 coupe.
	* Protection of crop trees: Only 54% of required tops disposal work around marked crop trees carried out. 10% damage to marked crop trees in 1 coupe.
July 2005	* Retention of ground habitat: Inadequate marking of ground habitat in 5 out of 9 coupes assessed.
•	* Protection of soil: Inadequate erosion control measures in 2 out of 9 coupes assessed. * 8 WINs and 2 MLs were issued for non compliances with environmental specifications.
	* Protection of zone boundaries during harvesting: 24 minor & 8 major incidents with removal of trees and logs from within a demarcated stream zone.
	* Protection of crop trees: Only 59 % of required tops disposal work around marked crop trees carried out.
August 2004	* Retention of ground habitat: Inadequate marking of ground habitat in 8 out of 11 coupes assessed.
	* Protection of soil: Inadequate erosion control measures in 3 out of 12 coupes assessed.
	* Protection of zone boundaries: 37 minor & 4 major incidents with removal of trees from within demarcated stream zones & a demarcated ecotype zone.
	* Protection of crop trees: Only 44% of required tops disposal work around marked crop trees carried out.
	* Retention of ground habitat: Inadequate marking of ground habitat in 5 out of 10 coupes assessed.
June 2003	* Harvesting operations inspections & certification: Records of general inspections, FPC's 105, unable to be supplied for 8 coupes.
	* Protection of threatened flora: Records of a threatened flora field search unable to be supplied for 1 coupe.
	* Pollution: Hydraulic fluid drums and grease cartridges left in coupe by one contractor.
	* Protection of zone boundaries: 50 minor incidents and 7 major incidents, including the removal of trees from outside demarcated coupe boundaries.
August 2002	* Protection of crop trees: 9 % of crop trees sampled damaged. Only 21% of required tops disposal work around marked crop trees carried out.
August 2002	* Harvesting operations inspections & certification: Limited areas of checking, especially crop tree damage, tops disposal and zone boundary protection.
	* Protection of threatened fauna: Inadequate marking of ground habitat in 8 out of 12 coupes sampled.
ID. In Amount 2002	& June 2003, the guidity were conducted jointly between CALM & the EDC to determine whether the EDC's harvesting operations meet the requirements of

<u>MB:</u> In August 2002 & June 2003, the audits were conducted jointly between CALM & the FPC to determine whether the FPC's harvesting operations meet the requirements of the former FMP 1994-2003, the Ministerial Conditions & Proponent Commitments, and CALM's Environmental Code of Practice and subsidiary management guidelines.

Table 2 – Non-compliances corrected for the years of issue (Source: Reproduced from the FPC's Statutory Review, 11/2006, p.48)

	2004/05	2005/06
CALM Annual Report	13 WINs, 9 MLs, 22 Total	19 WINs, 28 MLs, 47 Total
Actual	24 WINs, 11 MLs, 35 Total	8 WINs, 26 MLs, 34 Total
FPC EMS Incidents	94 (i.e. 2 incidents recorded per week on average)	98 (i.e. more than 2 incidents a working week)

The FPC's Statutory Review (2006) self-explained:

"Recorded incidents of non-compliance in the FPC operations was around three times the number of notices issued by the DEC. WINs and MLs are recorded as EMS incidents by the FPC so an incident may arise by self-reporting, as a result of a DEC notice, or sometimes both. The figures therefore indicate that the FPC staff and contractors are self-reporting around twice as many incidents as are being picked up by the DEC in its regulatory role. Moreover, about 20 per cent of reported incidents were procedural matters which had no 'on ground' impact but which were routinely reported as part of the continual improvement process within the EMS. This allows the FPC to identify issues, monitor trends and amend procedures accordingly" (FPC, 2006:49-50).

Worldwide, the most important development towards an Environmental Management System (EMS) approach has been the introduction of the International Standards Organisation's (ISO) 14000 series of standards, and in particular the environmental management standard, ISO 14001. An EMS is defined as "that part of the overall management system which includes organisational structure, planning, activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy" (AFFA, 1999; Thomson CPD & Brown, 2002). It is commendable that the FPC's commitment has been made to apply to the principles of ESFM in all native forest operational activities in accordance with relevant State and national standards, and that the FPC has sought and successfully received third party certification for its operations under EMS ISO 14001:1996 (FPC, 2005; FPC, 2006 & FPC, 2007). Nevertheless, it is essential to realise that this development of an EMS ISO 14001 does not exempt the FPC's timber harvesting operations from compliance with the legal requirements or Government's policies at all times (Turnbull & Vanclay, 1998; AFFA, 1999; Thomson CPD & Brown, 2002; Zaelke, Stilwell & Young, 2005).

In September 2007, the WA Auditor General has tabled in Parliament the results of an examination conducted into how the FPC records and tracks southwest native forest

log timber harvested by its contractors. Key findings of the examination have revealed that the FPC's methodology for tracking the delivery of log timber does not allow tracking of individual harvested logs or the extent of any theft to be determined; and FPC has a reasonable framework for compliance monitoring but the extent of monitoring is low. As a result of these failings in the system, the FPC is unable to quantify exactly how much or what grade of log timber is stolen or cut and left on the forest landing. Under Section 50 of the *Forest Products Act 2000* and the provisions relevant to the *Auditor General Act 2006*, the WA Auditor General has officially asked the FPC to give priority to developing and implementing compliance programs to compliment its current system, or any future tracking system of harvested timber (AGWA, 2007).

Why was it so? It should be noted here according to a comment that was made by the FPC's Statutory Review (2006):

"There is a significant number of compliance monitoring tools currently in operation, as follows:

- the FPC EMS
- the FPC Internal Audit
- FMP Compliance report (the FPC/the DEC)
- the DEC Sustainable Forest Management and Audit
- Conservation Commission of WA Audit
- Community Forest Inspections

Further mechanisms are unlikely to add value to efforts by the parties to improve performance and supporting systems" (FPC, 2006:51).

The FPC's Statutory Review (2006) went on to further explain:

"Under the CALM Act, the Conservation Commission is responsible for the FMP, prepared through the agency of CEO of CALM (now DEC). In the past, the FPC had a formal part in developing the FMP, but in 2002 s.60 of the CALM Act was amended to remove this provision. The FMP contains a statement of policies or guidelines to be followed, and a summary of the operations proposed to be undertaken, and gives substance to ESFM principles referred to in both the CALM Act and the Forest Products Act... Some stakeholders felt that the forestry industry had not been best served by the current FMP, which did not adequately address social and economic concerns:

"The restoration of the previous situation where DEC and the FPC, and their respective Ministers, were equal partners in development of the FMP is of vital importance to the industry. If this is not within the scope of the review we request that the matter be brought to the Government's attention by way of comment or recommendation. The current FMP does not address social or economic matters, though this is required by the Act."

Other stakeholders, however, felt that the current FMP gave the forestry industry too much support and strong positions were expressed, for example, that all logging in native forests should cease.

These views raise questions about whether the FMP is a suitable mechanism for ensuring that timber harvesting is managed sustainably. In the course of the Review, members of the Conservation Commission told the Review that the Conservation Commission is an entity with a strong focus on the environment, as its name suggests.

Similarly, the DEC, as its name suggests (the Department of Environment and Conservation) focuses strongly on the environment, as reference to its functions under its legislation will attest. As the FMP is the primary responsibility of the Conservation Commission, and is prepared by the DEC, it is the opinion of this Review that a strong mechanism is in place to address environmental aspects of forest management" (FPC, 2006:47-48).

As previously mentioned, the FMP adopted the principles of ESFM, referred to in both the *CALM Amendment Act 2000* and the *Forest Products Act 2000*. Thus, it is not a question about whether the FMP or the raison d'etre of both CCWA and DEC is a suitable mechanism for ensuring that timber harvesting is managed sustainably, but one of why do we need the Government's policy on ESFM to achieve this? Furthermore, how can the current legislative and institutional system be improved to help achieve the FMP and ESFM goals? The project is going to address these questions in the sections followed.

2.3 WA Government's policy on ESFM in a global and national context

What is ESFM?

ESFM or forest sustainability is a complex concept that may be defined in various ways relating to the management of forests in perpetuity for the benefits of society by ensuring that the forest values are not lost or degraded for current and future generations. In broad terms, it is such a management system that seeks to sustain ecosystem integrity, while continuing to provide ongoing social & economic benefits to the community through the sustainable access to timber and non-timber resources and enjoyment of other forest values (CCWA, 2004:11).

The maintenance of forest values such as those enunciated in the MPC&I, 1995 at the national level (**Appendix I**), or within the *A Framework of Regional (Sub-National) Level Criteria & Indicators of Sustainable Forest Management in Australia, 1998* (FRC&I) clearly defines what is meant by ESFM in Australia. (CoA, 1992; CoA, 1997; Davey *et al.*, 1997; Raison *et al.*, 1997; CoA, 1998; Cork & Kanowski, 1998; CSIRO/DWE, 1996 & 1998; National Forest Inventory, 1998; Jones, 2005).

Why is ESFM needed?

During the past few decades there has been considerable debate and controversy, both within Australia and internationally, about global and domestic environmental issues, including the use and management of forests. In 1972, for instance, the UN Stockholm Conference on the Human Environment was the first time that attention was drawn to the need to preserve natural habitats to produce a sustained improvement in living conditions for all, and the need for international cooperation to achieve this. The emphasis was on solving environmental problems, such as soil erosion, tropical ecosystem management, desertification, water supply, and human settlement, but without ignoring social, economic and development policy factors (Ha, 1988a, b, & c; Warfvinge *et al.*, 1998; Young, 1998).

In 1987, the World Commission on Environment and Development (WCED, or Brundtland Commission) published a report entitled "Our common future." The

document came to be known as "Brundtland Report." It developed guiding principles for sustainable development that is defined as a global standard: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The Brundtland Commission proposed long-term environmental strategies for achieving sustainable development by the year 2000 and beyond, and particularly emphasised a global agenda for change to pursue this goal:

"The real world of interlocked economic and ecological systems will not change; the policies and institutions concerned must... The time has come to break out of past patterns. Attempts to maintain social and ecological stability through old approaches to development and environmental protection will increase instability. Security must be sought through change" (Brundtland Commission, 1987:25-37).

The global focus culminated in the UN Conference on the Environment and Development in Rio de Janeiro in June 1992, at which Australia endorsed the Global Statement of Principles on Forests (GSPF) and signed a number of UN conventions relating to Biological Diversity and Climate Change. The GSPF set out guiding principles for the management, conservation and sustainable use of forests (CoA, 1992; CoA, 1998).

That same year, the publication of the National Forest Policy Statement (NFPS) marked a milestone in the history of Australian forestry development. As Florence (1993) from Australian National University recorded:

"All Australian governments committed themselves to meeting as much as possible of the demand for wood from previously unmanaged forests on public lands. Overall, the "primacy of wood production" continued to dominate forest policy and practice until well into the 1970s, when the seeds of environmental conflicts were sown and then vigorously developed.

Wood supply strategies after World War II were designed to meet demand for timber at a time of rapid economic growth, but these generated, at the same time, serious environmental conflicts. While environmental laws were to provide more objective land use and environmental review processes, they could not fully resolve the underlying conflicts. Conflicts became progressively more polarised, leading to the intervention in forestry of a Federal Government committed to the cause of environmental conservation... This came to be based on the emerging concept of "ecologically sustainable development" (ESD). A framework for such an approach evolved through a number of inquiries into forestry and, eventually, the formulation of the broadly acceptable National Forest Policy Statement, 1992" (Florence, 1993:322-323).

Then, one of the most important developments in forestry since the 1992 Rio Earth Summit has been an international agreement known as the Montreal Process. In February 1995, the Montreal Process Working Group endorsed a statement known as the "Santiago Declaration," including a comprehensive framework of seven (7) criteria and associated 67 indicators. Within Australia, they are being applied at the national level (CoA, 1998). Seven criteria agreed by the Montreal Process involve maintaining:

- (i) Biodiversity conservation;
- (ii) Productive capacity;
- (iii) Ecosystem health and vitality;
- (iv) Soil and water resources;
- (v) Global carbon cycles;
- (vi) Socio-economic benefits; and
- (vii) An effective legal, institutional and economic framework.

The seven (7) criteria are the broad forest values that society seeks to maintain, while their associated 67 national indicators – that less than those, but more relevant ones being applied in regional Australia – enable us to measure how well the forest values are being protected. Australia has a great opportunity to incorporate these internationally agreed criteria and indicators into its forest management practices. Much effort has gone into developing the FRC&I, 1998 based on the MPC&I, 1995 (CoA, 1998).

In 1996, the Commonwealth and State and Territory Governments endorsed the National Strategy for the Conservation of Australia's Biodiversity to which Western Australia is a signatory. The Strategy especially emphasised that:

"Community and industry attitudes to the use of biological resources are now changing from the "maximum yield" approach to one of ecologically sustainable yield, which recognises the need for conservation of biodiversity and maintenance of ecological integrity. Integration of management regimes within and between industry sectors to meet environmental, economic and social objectives must be improved to reflect this attitudinal change" (CoA, 1996:17).

Together, national integrated policies – the National Forest Policy Statement, 1992 in line with the National Strategy for the Conservation of Australia's Biodiversity, 1996, MPC&I, 1995 and FRC&I, 1998 – have formed both the foundations and the frameworks of a new stage of ecologically sustainable forest management (ESFM) across Australia. Hence, ESFM has been regarded as "the new starting point" (CCWA, 2003:5) in the process of developing the FMP 2004-2013.

"The FMP represents a balanced package, implementing the principles of ESFM. It would be possible to adopt a different position that sought to provide a greater level of ecological protection or a greater level of timber production, but not without compromising the achievement of ESFM" (CCWA, 2003:5, emphasis added).

How ESFM was first introduced into Western Australia?

ESFM was first introduced into Western Australia via the Regional Forest Agreement (RFA) for the State's south-west forest region that was then signed by Premier Richard Court and Prime Minister John Howard on May 4 1999. Following a report by the Western Australian Ministerial Advisory Group in December 1999, the State Government announced its commitment to implementing this new forest policy on ESFM (CoA & WAG, 2000; Stewart & Jones, 2003).

Under the Australian Constitution, the management of forests rests with the States, (except where this is subject to Australia's international obligations). Thus, the Commonwealth and State Governments, in consultation with stakeholders and using

results of the comprehensive regional assessment (CRA), negotiated an agreement that is called a Regional Forest Agreement (or a RFA).

The RFAs, the principal instrument of National Forest Policy (1992), were used as a means of resolving environmental and forest use conflicts, or managing forest politics while providing certainty for the future forest management and uses. They were fared in the fresh forms of participatory & decentralisation approaches (except privatisation approach) to balance the conflicting demands of conservation and production in native forests that have been an area of debate and controversy for over the last three decades in Australia (CoA, 1992; Kanowski, 1996; CoA, 1997; CoA, 1998; National Forest Inventory, 1998; Young, 1998; Lane, 1999; Hutton & Connors, 1999; Slee, 2001; Buchy & Race, 2001; Brown, 2002; Flannery, 2003; Hillier, 2003; Lloyd, 2005). This could be seen in their intended outcomes, reflecting the national goals, which were to:

- establish a comprehensive, adequate and representative reserve system;
- establish ecologically sustainable forest management (ESFM) practices both within and outside reserves; and
- provide certainty of long-term resource base for industry and community (CoA, 1995a&b; CoA, 1998; National Forest Inventory, 1998; Bartlett, 1999).

In 2000, the principles of ESFM were defined under Section 19(2) of the *CALM Amendment Act 2000* and Section 12(2) of the *Forest Products Act 2000* as follows:

- (a) that the decision-making process should effectively integrate both longterm and short-term economic, environmental, social and equitable considerations (the sustainability principle);
- (b) that if there are threats of serious or irreversible environmental damage, the lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the precautionary principle);
- (c) that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the intergenerational equity principle);
- (d) that the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and
- (e) that improved valuation, pricing and incentive mechanisms should be promoted (the efficiency principle).

The decision-making process the Conservation Commission has used to develop the FMP 2004-2013 was to give effect to these principles (CCWA, 2003; Jones, 2005).

Forest policy science establishes that one of the fundamental prerequisites for a forest policy to function is coercion, or the use of the legal system to regulate social behaviours. Governments may demand that an individual stakeholder and/or a group of stakeholders and/or their organisations engage in particular activities and refrain from engaging in others. The laws, the courts and police may also be used to regulate relations between and amongst them (Cubbage, O'Laughlin & Bullock III, 1993; Mintzberg & Quinn, 1996; Dawkins & Philip, 1998).

To sum up, all the recorded incidents of non-compliance with ESFM standards, as shown in **Tables 1 & 2**, highlight an urgent need for both the DEC and the FPC to manage timber harvesting operations effectively and efficiently. To achieve this, an effective legal and institutional framework must be in place to support ESFM. It is the purpose of this legal review project to provide recommendations for improvements to the current management system that facilitates DEC in undertaking its role and responsibility, as are set consistent with the Government's legislation and policies on ESFM, as well as the FMP.

In accordance with the Montreal Criteria for forest sustainability (MPC&I, 1995), the seventh criterion assesses the level of effectiveness of the legal and institutional frameworks of a nation that facilitate the biodiversity conservation and sustainable management of forests covered by the first six criteria. What are the institutions, and the institutional framework? Our project utilises the two common definitions below:

- 1. "Institutions are the determinants of human behaviour that act beyond the individual. They include the organisations formed by government, industries and communities and their policies and programs, as well as their traditions and the norms & practices. They also include laws, regulations, codes of practice, management guidelines, and the operation of markets" (Ball, 1996; Mobbs & Dovers, 1999; Gleeson & Piper, 2002).
- 2. "The institutional framework is the overall network of institutional arrangements that has the capacity to influence group and individual behaviour at various levels. It also enables them to act in the public good. It is the institutional framework that enables governance, the exercise of political power to manage a nation's affairs" (Saul, 1997; Wiseman, 1998; Weller, 2000; Gleeson & Piper, 2002).

Founded on these definitions, it can be seen that an effective legal and institutional framework, as is required in the MPC&I 1995 must reflect the whole society's beliefs, values and ideas, and when shared these new concepts of forest sustainability constitute new culture, a socially constructed-shared system of meanings (Ball, 1996; Saul, 1997; Wiseman, 1998; Mobbs & Dovers, 1999; Weller, 2000; Ha, 1999; Ha, 2000; Gleeson & Piper, 2002; Lloyd, 2005).

3. Methodology

3.1 Dialectical theories and two dichotomies: "conservation-and-production" and "regionalisation-and-globalisation"

Central to the dialectical theories are the art of discovering and testing the essential dichotomies that govern the motion and development or change in all spheres that range from inorganic nature, the organic world, social life to human consciousness. In applying these theories to an epoch or a society, the dialectical philosophers made a sharp distinction between the *substructure* and the *superstructure* of society. The *substructure* is the economic system, whereas the *superstructure* consists in the order

of human ideas and simply reflects the configurations of that commensurate system of economic.

In other words, the *superstructure* contains the institutional, legal, political (policy), management system mechanisms, cultural & artistic, scientific research, educational frameworks that result from the *substructure* – the economic system on which a society is based. The economic system, in turn, is constituted by the sum total of the dynamic relations of production, or primarily the way people are related to each other in the process of production – in conjunction with the factors of production such as the raw materials (e.g. timber, agricultural crops, stock, minerals, etc), instruments, as well as the experienced labour skills, by which things are produced to sustain life.

History of a society is the ceaseless process of changes that are unfolded in accordance with the inherently dynamic correlations between the economic system and those institutional, legal, political (policy) and management system mechanisms, cultural, scientific research, educational frameworks that must be maintained and/or compatibly balanced overtime. While the economic system consists in the most decisive factors or energising forces that move history, whereas the *superstructure* is, in turn, influential over the whole economic system (Harrison-Barbet, 1990; Stumpf, 1994; Cooper, 1996).

From a dialectical point of view, conservation and production co-exist within the forestry sector as a most common dichotomy. Their inherent relationship contains both the "opposite" and "unity" obverses. Together, they make up the two basic sets of the use and development of forest resources in the forestry sector. The dialectical theories indicate that the imbalance in the conservation-and-production correlation is always reflected, sooner or later, in the varying degrees and forms of forest-use conflict that are bound up with particular historic stages during the process of forestry development.

Based on the dialectical theories, it can be said that the history of forestry development in Western Australia is a history of unfolding and reflecting both the "opposite" and "unity" obverses in their inherent correlation between conservation-and-production that are bound up with particular historic stages. They are affecting and depending on each other, one cannot develop without the other throughout the history of WA's forestry. It is a philosophic principle that to balance the conflicting demands of conservation and production in WA's forests, the "unity" obverse must be more emphasised than the "opposite" one (Harrison-Barbet, 1990; Stumpf, 1994; Hellstrom & Reunala, 1995; Cooper, 1996; Vanclay, 1996; Kanowski, 1998). In particular, the changing roles and correlations between them have evolved significantly through the three main periods marked with the adopting of various forest policies by the Governments since the Forest Act 1918 came into force (Jones, 2005:2):

• Period 1918-1985: The *Forests Act 1918* provided for the creation of the Forests Department, who singly managed State forests and timber reserves. The "primacy of timber production" or "mono-use forestry" was dominated both forest policy and practices until the 1970s (Florence, 1993; Dargavel, 1995 & Dargavel, 1998).

- Period 1985-1990s: The Conservation & Land Management Act, 1984 (CALM Act) established the Department of Conservation and Land Management (CALM). It has been marked with a great turbulent time caused by forest debates and controversies nationwide and internationally over policy & development issues on how Australia's forests to be managed and used on an ecologically sustainable basis (Jones, 2005).
- Period 2000-Present: The CALM Amendment Act 2000 split CALM, while the Forest Products Act 2000 established the Forest Product Commission (FPC). The principles of ESFM are introduced into the legal and institutional framework and prevailed both policy and practices in WA's forestry sector.

In an analysis of the importance of forest management strategies to ensuring a secure outcome for the Western Australia's native forests, Paul Jones (2005) has come up with the following conclusions of significance:

"What actually constitutes a secure outcome for the forests? I don't believe it matters from which perspective this is viewed, long-term stability in the available resource and in the conditions of access to the resource is what provides a secure outcome for the forests. This holds whether the outcome sought includes the harvesting of forest products or is one of pure conservation, devoid of any forest product harvesting.

The purpose of the Forests Act 1918 was "to provide for the better management and protection of forests". It sought to do this principally by providing for the creation of dedicated forest land, State forest, and a Government Department, the Forests Department, to manage the forests. This was the first step in Western Australia in providing for a secure outcome for the forests and the communities dependent on the forests. The same basic approach to security has been applied ever since. It can be distilled to three main factors:

- Achieving security of the forest land base;
- The implementation of sustainable management; and
- Public acceptance of the management objectives and the sustainable management strategies" (Jones, 2005:1-2).

True, the conclusions are reinforced by the fact that the development of WA forestry throughout its earlier historic stages for about the past 100 years with the characteristics of timber production was dominant, and thus the "opposite" obverse in the inherent relationship between conservation and production had been emphasised. This inexorably led to the forest-use conflicts, as we all have seen. Within WA's forestry sector, the *substructure* – the forest economic system that used to be based on the *primacy of timber production* or *mono-use* policies for about a century – (in which the 1980s and 1990s saw great instability, no security of outcome, particularly for those dependent on the harvesting of timber) - has now changed to ESFM with *multiple-use* approach.

As such it forced their direct corresponding *superstructure* into changing by virtue of the fact that all those former legal & institutional frameworks have now become outdated and incompetent or incompatible with the new-born conditions of forest sustainability. In the *superstructure*, although the establishment of the both Commonwealth's and State's new policy on ESFM, an effective legal and institutional framework is much needed in order to put ESFM into practice effectively and

efficiently. Following the signing of RFA in May 1999, a number of significant developments occurred. In July 1999, the WA Government announced a series of changes to the management of native forests in the south-west Region. This new course in forest management includes encouraging greater community involvement in the decision making about forest management, together with an accelerated program to re-structure the timber industry (CoA-WAG, 2000:2).

Historical cycles do prove that countries or communities in the world go through different stages in the exploitation of their forest resources. These stages also reflect broader economic conditions in a country. When people are well housed and well fed, they are more willing to conserve resources for the future. Economic development often occurs before forest conservation does. Utilisation of the forest resources is often necessary to promote economic development in the earlier stages or even to help promote sustainable forest use in the later ones (Cubbage *et al.*, 1993).

An historical approach to forest policy reveals that many countries in the world have followed similar patterns in the use and development of forest resources. Marty (1986 cited in Cubbage *et al.* 1993) describes three stages of forestry development that commonly occur – the settlement, the protective custody, and the management. Each corresponds particularly to certain socio-economic and institutional conditions. The development of WA forestry and its forest policies can fit within this historical analysis:

- * The settlement stage evolves using forest resources to create lumber and other wood products that help a society develop and expand its frontiers. Jobs and income are created, and land is cleared for agriculture. But all too often this stage is characterised by destructive logging practices, uncontrolled fires, and indiscriminate conversion of unsuitable areas from forests into farmlands.
- * The custodial stage commonly follows settlement and is a constructive response to previous destruction. It recognises that forests are limited resources, and that it is possible to conserve forests by controlling logging practices and fires and by regenerating them. In this stage, forest-based industries decline as readily accessible wood supplies are exhausted. Forest lands are placed under professional management, and the rebuilding of forest resources is usually initiated.
- * The management stage evolves from the custodial stage, and forests, once again, become capable of supporting forest-based industries. Management includes planned or natural restoration, wood stand improvement, wood harvest scheduling, and forest environmental protection. Non-commercial uses of the forests such as recreation also are developed to benefit broader segments of society. The management stage may be broken into various phases: (i) the cooperative public/private forest protection; then to (ii) the multiple-use recognition; and finally to (iii) the fully-planned sustainable management.

The dichotomy: "regionalisation-and-globalisation"

Wardojo & Roch (2005) synthesize the two fundamental characteristics of a forestry

sector worldwide into the dichotomy "regionalisation-and-globalisation" as follows:

"Forests are profoundly local. Each one is unique and is adapted to its particular climate, soils and topography, and its history, as well as its use, depends heavily upon its specific social and economic context. People with formal forest management responsibilities are more successful in their endeavours if they tailor their efforts to local conditions. It is hard to maintain forests long without local support, and to achieve such support, communities must feel they benefit.

At the same time, forests are truly global. The whole world benefits from their rich biological and cultural diversity. Changes in forest size and composition affect the global climate. Wildlife and plants move from one place to another without regard for national borders. The same applies to the smoke and haze from bush fires, the sedimentation of rivers and the lack of drinking water caused by deforestation.

Governments bear the responsibility for the future of their forests. Their citizens look to them to ensure that forest resources provide economic growth and jobs, and to enforce the laws and protect the environment. The challenge is to find a legal and institutional framework that can balance the various local, national and global interests related to forests. Everyone agrees that local groups should be allowed to come up with solutions that reflect their own needs and circumstances; but regional, national and global concerns must also be addressed" (Wardojo & Roch, 2005:10).

Perhaps, this is why DEC's Annual Reports for the period 2003-2007 under sections Regional Activities stipulated that "*CALM is committed to Regionalization*" (CALM, 2004; CALM 2005; DEC 2006 & DEC, 2007). Moreover, it is worth noting that over the past two decades, on the other hand, a previous baseline research derived from the CSIRO program for Australian Forest Sector Model 1983 concluded that:

"When we come to consider the relationship of the forestry sector to other sectors of our national economy, it is important to recognise that forestry inherently is a regional activity, especially so is its forest-based industries. Distinctions are made with respect to the mobility of industries. World industries are regarded as free to locate in any nation, national industries in any region and so on. The forest industries are not footloose, but are surely and closely tied to the locations of the forests themselves. It is in this sense that it must be classified as regional, even though its final products may be transported between regions and nations" (Batten, 1983:126).

Having successfully combined the factors of regionalisation and globalisation into the sustainable forest management strategies for southwest WA, the Forest Management Plan 2004-2013 (FMP) has achieved such a widely public support (Jones, 2005:2). The historical wheel of WA's forestry development keeps moving on and no-one can stop it. As we all know, history must run its own course (IFA, 2000; Ryan, Spencer & Keenan, 2002; Smedley, 2004; Shea, 2005; Underwood, 2007; Porteous, 2007).

3.2 Data generation methods

As part of the legal review project, the Forest Policy and Practices Branch (FPPB) has conducted a sustainable forest management (SFM) survey by questionnaire with openended questions and interviews during the period between 9 July and 9 October 2007 (**Appendix IIa&b**). The survey aimed to gather a variety of viewpoints or perspectives held from within DEC staff and other agencies on legal issues

surrounding the management of timber harvesting operations undertaken on State forest and timber reserves.

In particular, the survey received 31 responses, involving the DEC Divisions and other agencies concerned, and included:

- Regional Services Division,
- Sustainable Forest Management (SFM) Division,
- Parks & Visitor Services (P&VS) Division,
- Nature Conservation Division,
- Strategic Development & Corporate Affairs Division,
- WA Conservation Commission, and
- The Director General's Management Audit.

A list of respondents (or contributors) is presented in *Acknowledgements* section. A summary of their viewpoints or perspectives is provided at **Appendix III**.

To help provide background information on the setting and context in connection with the questionnaires and interviews, another data generation methods by documentary reviews and field observation have been further utilised in this project.

3.3 Data analysis

In data analysis, to respect the anonymity of respondents, their responses are coded as R1-31, and then divided into four (4) categorised groups, for those who are engaged either directly and/or indirectly in a cycle of harvesting management procedures, and mechanisms for compliance monitoring & auditing:

- SFM decision-makers;
- SFM compliance & monitoring;
- Regional or District practices; and
- Auditing

Within the current legal and institutional framework, to commence at-a-coupe timber harvesting operations undertaken on State forest and timber reserves, a general cycle of management procedures must be prepared beforehand, as shown in **Table 3**.

Notice that while implementation of the FMP can achieve a great progress towards ESFM, the plan is not, in itself, a surrogate for ESFM. Thus, the responses are analysed and guided by the seventh criterion and its applicable indicators reproduced from the Montreal Process Criteria & Indicators (MPC&I, 1995). Wherever appropriate, the excerpts from questionnaire transcripts are largely drawn upon. To avoid excessive using of direct quotes in the text, only one illustrative quotation is selected, indicating all the other respondents who hold similar viewpoints or comments, and sentiments.

Table 3: A cycle of at-a-coupe harvesting procedures and accompanied management mechanisms for compliance monitoring & auditing

A cycle of harvesting procedures	Compliance monitoring & auditing
 Forest Management Plan 2004-13 DEC three-year plan FPC annual plan Roading plan Fauna Habitat Zone location FPC 109 Pre-harvest checklist Permission to take listed flora Disease Risk Area (DRA) Permit Dieback Hygiene plan Soil management plan Winter coupes approvals Basic Raw Materials extraction plan (where applicable) 	 FMP compliance report by DEC & FPC DEC SFM and Audit FPC's EMS FPC's internal Audit Conservation Commission's Audit Auditor General's Audit Community Forest Inspections

- 4. "Criterion 7: An effective legal and institutional framework for forest conservation and sustainable management (MPC&I, 1995)
- 4.1 Indicators 7.1: Extent to which the legal framework (laws, regulations and guidelines), supports the conservation and sustainable management of forests, including the extent to which it:
 - Provides for periodic forest-related planning, assessment, and policy review that recognises the range of forest values, including coordination with relevant sectors (Indicator 7.1b).
 - Provides opportunities for public participation in public policy and decision making related to forests and public access to information (Indicator 7.1c).
 - Encourages the development and application of best practice codes for forest management (Indicator 7.1d).

Indicators of the legal framework (laws, regulations & management guidelines) enable any Government agencies, including the DEC & FPC, and the community to assess periodically whether all forest uses and in particular, timber harvesting operations undertaken on State forest and timber reserves are consistent with the FMP 2004-2013, and as a result, with achieving the principles of ESFM (Indicator 7.1b). In other words, the FMP plays a major role in the general cycle of timber harvesting procedures, and management mechanisms for compliance monitoring & auditing (Table 3). The plan, in chronological order, is the sixth forest planning instrument to try and deliver a secure outcome for WA's forests in the last 18 years (Table 4).

Table 4: A list of successive forest management planning instruments in Western Australia (Source: Reproduced from Paul Jones, 2005:5)

1987 – 1997	Northern, Central and Southern Forest Regional Management Plans and the associated Timber Strategy. These plans were replaced before expiry by the development of the -		
1994 – 2003	Forest Management Plan 1994-2003. The outcomes in this plan were replaced before expiry by the -		
1999	Regional Forest Agreement (RFA).		
	The RFA outcome was varied (not formally) by the -		
1999	Ministerial Advisory Group (MAG) on improving the management of karri and tingle forests in Western Australia's South West.		
	The MAG outcomes and the RFA outcomes were both superseded by the –		
2001	Protecting our old-growth forests policy.		
	The policy commitments of which were formalised in the -		
2004	Forest Management Plan 2004-2013 (FMP)		

Notice that each of these planning instruments was to have responded to instability in forest policy and outcomes caused by a lack of public support for both the mix of management objectives as well as forest practices employed in the forest. The period was one of marked instability for the timber harvesting industry, as having its inherently regional resource base dwindled significantly with each successive planning instrument.

The CALM Act, which commenced operation in 1985, only requires that a draft plan be released for not less than 2 months to allow for public comment. Such was a limited consultation period and mechanism by the standards of 2001, which was obviously inadequate for an area of such a high public interest. The Conservation Commission put a very large effort into communication and consultation in order to bring the community along with the proposals being developed for the FMP (**Indicators 7.1c**). Following are the main steps undertaken along the process:

• June 2001 - Public displays across the south west to inform the community that development of the FMP was commencing;

- August 2001 ongoing to the completion of the plan A Round Table of industry, unions, conservation groups, local government and State government established to meet regularly throughout the development period and discuss issues as they arise;
- August/September 2001 Five public forums were held in metropolitan and country venues to explore the forest management issues that were to be in the plan. Issues discussed were collated and a response published;
- January 2002 Discussion paper produced detailing the values in the area of the plan and proposed management objectives and strategies. A draft plan could not be produced at this time because a number of processes that would affect the land base were not completed. The Discussion paper was released for 2 months public comment and the comments collated and published.
- March 2002 A Science forum was conducted, which explored approaches to three of the Montreal Process Criteria: maintenance of biodiversity, maintenance of ecosystem health and vitality and maintenance of soil and water resources. The results were published.
- July 2002 Draft FMP published for public comment. Approximately 5,600 submissions received of which approximately 940 were substantive.
- August/September 2002 A further six metropolitan and country forums on the contents of the draft plan were held. Outcomes were published.
- July 2003 Indicative plan plus the response to issues raised in the public submissions on the draft plan was submitted to the Environmental Protection Authority (EPA) for assessment.
- September 2003 The EPA produces their assessment report.
- October 2003 Public appeals on aspects of the EPA's assessment report.
- November 2003 The Convenor investigates appeals & makes recommendations to the Minister for Environment, who makes decisions to finalise the FMP.
- January 2004 The FMP has been officially published and commenced (Jones, 2005:12-13).

Consequently, the FMP outcome for the forests has taken the majority of the heat out of the forest debate that had been intense and divisive over for the previous ten years. Protest activity has taken place at one particular timber harvesting coupe under the FMP, however this is a carryover from a long-running campaign by locals for an area that was not selected for reservation under the *Protecting our old-growth forests* policy. By and large the public has accepted that the balance between biodiversity conservation and the use of the forest for timber production is acceptable (**Indicator 7.1c**). Paul Jones (2005) made a realistic anticipation of the stability of the FMP outcome and argued convincingly that:

"So, what the threats will be to the secure outcome delivered by the FMP? Past experience demonstrates that public support for forest outcomes can be tenuous. If what the community thinks is acceptable turns out to be not as they believed it to be, then support evaporates. The two main areas where the FMP delivered the secure outcome are the allocation of the forest into land categories for conservation and production and ecologically sustainable forest management. The allocation of land categories is not going to be revisited in the life of the plan. Consequently, the biggest threat to the stability of the FMP outcome will come from forest practices – that are justified by the community about whether or not those are ecologically sustainable, as promised by the Government's policy" (Jones, 2005:13).

To achieve best forest practices, as indicated in the preceding sections, the FMP has established a legal framework that recognises the range of forest values (**Indicators 7.1b&d**), and includes a comprehensive system of laws, regulations, subsidiary

guidelines and code of forest practice in place. The plan has been resulted from application of the principles of ESFM under the particular political and socioeconomic conditions in Western Australia. These conditions have been introduced into Western Australian legislation such as:

- *CALM Amendment Act 2000*
- Forest Products Act 2000
- Wildlife Conservation Act 1950
- Environmental Protection Act 1986
- Bush Fires Act 1954
- Soil and Land Conservation Act 1945
- Aboriginal Heritage Act 1972 & Heritage of Western Australia Act 1990
- Waterways Conservation Act 1976.

Despite this legal framework in place, there are still difficulties in implementation and/or achieving of the requirements of FMP and in particular KPIs with respect to the management of timber harvesting operations. The survey found that:

"The FMP prescribed a set of requirements that were difficult to achieve operationally. It created a higher expectation performance than was achievable under the current framework" (Quoted from the respondent R29; similar views expressed by R3 & R28).

"The FMP did not appear to achieve adequate standards in logging coupes and roading alignments, risking soil damage due to logging in wet conditions and harvesting pressure exerted by FPC. Forest health may also be compromised due to the levels of firewood removal, DRA incursions, and the spread of pests and pathogens. Further, the FMP lacks enforceability. The links to legislation are poor and result in difficulties when users have incentives/pressures that lend themselves to non-compliance. KPIs are difficult if not impossible to perfect, however some of the KPIs will give misleading results if, for example, proportions of removals are unknown" (Quoted from the respondent R31; similar views expressed by R 13).

"FMP did not achieve clear legal accountability to the proponents and added additional layers of complexity to management. Also, it is not backed by clear legal authority, while its KPIs are difficult to measure, or not directly linked to other recording/reporting frameworks, and to legally binding consequences. No clear alternatives are available. Yet, their solutions depend upon political imperative, either adopt a collaborative approach via working arrangements or seek legal avenues, e.g. based on completion criteria" (Quoted from the respondent R14; similar views expressed by R6 & R12).

It should be noted that the Conservation Commission recommended a management system to ensure on-the-ground delivery of the FMP, through a series of subsidiary management guidelines with key performance indicators (KPIs) monitored, evaluated and responded to for the delivery of continuous improvement. Using KPIs, forest management outcomes are to be monitored. The results of this monitoring are evaluated against targets specified in the FMP. Any shortfalls are reported to the Conservation Commission and responded to as appropriate. In other words, KPIs as a valuable guide are used to assess the effectiveness of the plan in meeting its

objectives, as well as to measure progress towards the implementation of its targets or standards (CCWA, 2003; CCWA, 2004; DEC, 2007). As such, KPIs are the soul of the FMP.

In March 2007, the publication of a document entitled *Protocols for Measuring and Reporting on the Key Performance Indicators of the Forest Management Plan 2004-2013* reported:

"This document provides the protocols for 20 of the 33 KPI in the Forest Management Plan. The other 13 KPI are not sufficiently developed to publish at this stage... The extent to which a performance indicator can be implemented may be limited by the availability of data for reporting, capacity to obtain measurable data, and the cost of implementation. Performance indicators therefore target 'key' aspects of the plan" (DEC, 2007:4).

Unfortunately, amongst 13 KPIs so far not sufficiently developed, there are KPIs 5, 6, 7, 9, 10, 11, 12 & 13 (*Productive Capacity*); 16, 17 & 18 (*Ecosystem Health & Vitality*); 19 & 22 (*Soil and Water*) relating to the management of timber harvesting operations.

It is well recognised that actions for a plan that covers an extensively area for a 10-year term need to be set at a strategic level, with operational details that are likely to change over that period as a result of continual improvement and adaptive management set out in a serries of subsidiary management guidelines (CCWA, 2004:10). Notwithstanding this, all key performance indicators (KPIs), as are set out in the FMP, should be revised to meet the core MIRA planning standards, requiring *measurable*, *implementable*, *reliable*, as well as *achievable* at the all-levels of implementation. At the same time, a strategic or long-term plan should be broken into multi short-term implementation phases, as appropriate.

Recommendation 1 – that Forest Management Plan 2004-2013 should be staged into two 5-year implementation phases: 2004-2008 and 2009-2013. Each should commensurately review all key performance indicators, either as primary and/or secondary ones. KPIs should be revised to meet the core MIRA planning standards which require *measurable*, *implementable*, *reliable*, as well as *achievable* at the all-levels of implementation, as appropriate. *Proposed completion timetable: before 30 June 2008*.

Furthermore, there is also a great deal of concern about legal and compliance issues that have occurred during timber harvesting operations being undertaken by the FPC on State forest and timber reserves. The following examples typify this concern:

"The FMP seems to engender discord and disagreement between the government administrating agencies. It seems to create an adversarial working arrangement rather than a co-operative and aligned one. Those were caused by the way the interpretation of the FMP has been done legally and the areas where it is silent and needs direction, the way the FPC is structured, EMS type accountability and reporting systems are separate from the FMP, the way the industry has been

downsized...? Solutions are that DEC should have a working relationship with decision-makers within the FPC, who are directly connected to the field operations: FPC are currently in the process of an internal restructure, the way the operations units are organised is a great blocker to improving the current working relationships, if SFM can influence the new structures to better link the influence and power of policy, strategy and silviculture with the field ops, now is the time to do it. It seems to me that if we are wrangling at the bottom line of the legalities of ESFM practices between government agencies then we have lost the plot and are fair game for the industry to exploit to maximise their interests" (Quoted from the respondent R25; similar views expressed by R21 & R23).

"The FMP created a series of expectations and standards that the department appear to be unable to enforce due to legislative uncertainty. Due to uncertain legal position, DEC and FPC seek, and are often provided with different opinions about the legal circumstances. These differences continue the uncertainty of the legal position for each agency. FPC continue to question the DEC's right to set planning & management conditions for their operations, and frequently ignore legal requirements for access to timber on particular land tenures, and authority for access to BRM, despite these issues being raised with them... The FPC's failure to abide by the conditions of the Forest Products Act 2000 in terms of requirements for consultation with DEC about contracts. This often results in FPC actions being in conflict with DEC requirements, and causes frustration because DEC has to try to introduce issues after the contracts have been awarded. These were identified by personal involvement in trying to have DEC requirements taken on board by FPC over the last 5 years or so... Solutions? I think, the FPC must abide by the FP Act. It would be useful to have clarity of the legal position, so that the two agencies can establish a common expectation and clear working arrangements for planning and field implementation" (Quoted from the respondent R10; similar views expressed by R16).

"The FMP also made fire management at a landscape scale more complex and expensive. It caused a great deal of uncertainty in planning fire operations due to the inadequacy and lack of certainty associated with forecasting where and when harvesting operations would take place...

The working arrangements between DEC (land manger and regulator) and FPC (resource harvester and quasi-commercial organisation) that are based on understandings that are not enforceable under appropriate legislative or commercial regulation instruments - do not always result in the most effective, efficient or competent outcomes... There is a lack of appropriate head-power in the appropriate legislation and associated regulations to allow DEC to regulate enforce, audit, compel or punish. This leads to a lack of clear and transparent working arrangements between DEC and FPC with clear and binding responsibilities and accountabilities" (Quoted from the respondent R3).

Sections 9 and 10(1)(l, n & o) under Part 3 of the *Forest Products Act 2000* specify the functions of the Forest Products Commission (FPC):

"9. Compliance with written laws

Subject to section 43, nothing in this Act is to be read as conferring on the Commission in the performance of its functions any immunity from the operation of any written law.

10. Functions of Commission

(1) It is a function of the Commission —

(l) to enter into a memorandum of understanding (MOU) with the CALM Act CEO relating to the performance of the Commission's and that CEO's respective functions and any other matter prescribed under the CALM Act; (n) to participate in the preparation of any management plan under Part V of the CALM Act in relation to land that is State forest or a timber reserve; (o) to provide the CALM Act CEO with records of the quantities and types of all forest products harvested on public land and, if applicable, the grade of forest products so harvested."

Recommendation 2 – that the memorandum of understanding (MOU), and as a component of MOU, the 3-month formal working arrangements (FWA) between the DEC and the FPC in regard to the timber harvesting should be prescribed in both the *CALM Amendments Act* 2000 and the *Forest Products Act* 2000. Together, the MOU and FWA are an essential means of communication to reach agreements between the DEC and the FPC. They aim to promote, establish and maintain a good working relationship of DEC with SFM decision-makers within the FPC, who are directly connected to the field harvesting operations and associated matters relating to the production and yield of forest products. *Proposed completion timetable: before 29 February 2008*.

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

- Provide for public involvement activities and public education, awareness and extention programs and make available forest information (Indicator 7.2a).
- Undertake and implement periodic forest-related planning, assessment, and policy review, including cross-sectoral planning and coordination (Indicator 7.2b)
- Develop and maintain human-resource skills across relevant disciplines (Indicator 7.2c).
- Enforce laws, regulations and guidelines (Indicator 7.2e)

"Department of Conservation and Land Management or CALM model 1985 – Western Australia's approach to integrated forest management"

The above phrase was first used in 1991 within the major report *Ecologically Sustainable Development Working Groups on Forest Use*. This Commonwealth report was then deemed as a major part of the National Forest Policy Statement, 1992. Here, it may be interesting to look back to the Department of Conservation and Land Management (CALM) that was formed in 1985 as a single State forest agency responsible for all biodiversity conservation and timber production aspects in Western Australia. By reason of the report's importance, the following are verbatim reproduced.

"A number of States have moved to develop closer organisational and planning linkages, even to the extent of establishing a single government agency which is responsible for all conservation and timber production aspects, for example, CALM in Western Australia (see **Box 1**). There is a concern that separate agencies within the States have not developed adequate liaison mechanisms or a full awareness or

appreciation of the policy objectives and responsibilities of other agencies involved in forest management. Mechanisms which ensure integrated development of strategic and management plans by State agencies are more likely to mean that all values and uses of forests are addressed, that research is coordinated, and that forests are managed for all objectives. Moreover, those State agencies that integrate operational management also have advantages through resource sharing and the avoidance of duplication. Community involvement in the development of strategic and operational management plans is considered important: it provides a mechanism for community input into the decision-making process, and is likely to result in broader public understanding and acceptance of land-use decisions and sustainable management practices" (CoA, 1991:1951-153, emphasis added).

It is evidently in practice that CALM model 1985 was well ahead of the rest of all commercial and corporate models of State forest services across the nation (Dargavel, 1995; Ferguson, 1996). Interestingly, CALM model once had a great advantageous potential to meet all *Indicators 7.2a,b,c&e*, as are required at present under the context of ESFM and supportive institutional framework. As it happened, history has its own course, anyway.

Now, let us see how CALM (currently DEC) functioned since 2000, at the time when the commercial timber production was separated from CALM to establish the FPC under the *Forest Products Act 2000*. The survey found that:

"A structural problem is in the creation of the FPC's economic unavailability (unviability) of native forest timber supply. The key issue is having the incentives in the harvesting system working to achieve the compliance outcome. At present they don't. It needs a change in the way timber harvesting contracts that are set and supervised. Even if legal protection of DEC was strengthened, DEC would have to monitor and enforce, which is not comfortable between Government agencies" (Quoted from the respondent R29; similar views expressed by R2-4, R6-9 & R17).

To strengthen management mechanisms for harvesting procedures, and also for compliance monitoring & auditing (**Table 3**), there is an urgent need to better integrate and coordinate the Forest Management Plan 2004-2013 and operational management planning between the DEC and the FPC, particularly in training, and/or developing & maintaining human-resource skills at the groundwork and field monitoring level. In addition, public education and extention programs for forest policy and practices are also needed (**Indicator 7.2a&c**). Given one of the critical success factors in ESFM policy, as well as plan development and implementation is recognition of the community as a key stakeholder (Grimble & Wellard, 1996; World Bank, 1996; Hobley, 1996; FAO, 1998; Neville, 1998; Buchy & Race, 2001; Vanclay, 2001; Gregersen, *et al.*, 2004; Lane, *et al.*, 2004; WADPC, 2006).

"FPC is obviously unstable and it shows all of those signs, likened to a tumbling after the divorced. Whether under the same CALM roof before or now separated, a conflict of interest is always there. The issues that SFM Division has to deal with are essentially because of those signs. DEC needs the Authority to effectively manage State forest & timber reserves; FPC needs to do it right in this sense. Both agencies need to go to the same place. Instead of being conservative & restrictive, it should revisit the threats being posed to the currently SFM system" (Quoted from the respondent R8; similar views expressed by R6 & R7).

Box 1: CALM – ONE APPROACH TO INTEGRATED FOREST MANAGEMENT

Source: Reproduced from CoA (1991, p.152)

Background

The many values of Australia's forests point to the necessity for effective integration of management planning to obtain the benefits which flow from their multiple uses. The Department of Conservation and Land Management (CALM) is Western Australia's way of achieving this integration.

CALM was formed in March 1985, as an amalgam of the National Parks Authority, the Forests Department and the wildlife section of the Department of Fisheries and Wildlife. The amalgamation of agencies was the most public aspect of this development. Less conspicuous but important innovations were:

- (a) legislation which established the framework for integrated planning & operations;
- (b) the establishment of fully integrated operational teams in Regions
- (c) a strong commitment to research and to planning & policy development which incorporates public participation.

Increased efficiency

The skills and management systems required to manage all ecosystems for all of the values recognised by the community are essentially the same. Thus, there are major efficiencies to be gained by providing the opportunity for these skills and management systems to be integrated. For example, fire and die-back management require immense scientific and logistical resources which would require excessive imposing on the taxpayers were their management duplicated.

CALM's planning process

CALM is required to provide for multiple uses and sustained yield from State forests, to satisfy long-term social and economic needs. It does this through a comprehensive planning process. A Strategic Plan, which is updated annually, sets out the Department's mission, goals and specific aims in each area; this is a public document. At the operational level, several different types of plans are produced, for example, wildlife management programs, national park management plans, regional plans & issue plans.

Box 1: CALM – ONE APPROACH TO INTEGRATED FOREST MANAGEMENT (Continued)

Source: Reproduced from CoA (1991, p.152)

Irrespective of the subject matter, a similar process is followed.

A draft plan is prepared by an interdisciplinary planning team, consulting widely both within CALM and with identified stakeholders and their interested parties. The consultation process includes an advisory committee which provides detailed advice on the contents of the draft plan and on conflict resolution. After consideration by the controlling bodies (see below) the draft plan is released for public comment. The public submissions are taken into account in preparing a new plan which is again widely debated, resulting in a final plan which is submitted to the Minister (and sometimes Cabinet) for approval. In 1987, CALM's first regional plans were produced, considering all aspects of land tenure and policy in forest areas.

Consultation

Under the CALM Act, the organisation is required to undertake extensive public consultation.

The CALM Act created two important controlling bodies: the National Parks and Nature Conservation Authority (in which nature reserves and national parks are vested) and the Lands and Forests Commission (in which State forests and timber reserves are vested). Both bodies comprise representatives of the community. They are ultimately responsible for management plans & policy, and can make independent recommendations on management of conservation lands and forests to the Minister.

Also, as mentioned earlier, the whole planning process is open to public scrutiny and influence. For example, CALM received over 4,000 submissions in response to the first set of draft plans in 1987, which were considered in the preparation of the final plans.

Outcomes

Although forest management and timber cutting in hardwood forest still remains controversial, in Western Australia as in other States, the 1987 plans and timber strategy are widely regarded in the community as having provided a balanced approach to sustainable forest management in Western Australia. Even so, a review of the forest management strategy is underway; to take into account present research results and to address some remaining issues. CALM is still developing the potential for integrated management but improvements in efficiency and effectiveness are already evident.

"The FMP achieved the establishment of new national parks and FHZs – biodiversity protection measures; improved wet soil operating outcomes. But it did not achieve improved planning or quality of operation. Nor did it achieve outcomes as good as possible, because of industry & FPC/DEC staff disruption, loss of experience. Their roles and responsibilities still unclear from FPC/CALM split" (Quoted from the respondent R21; similar views expressed by R12 & R19).

"FPC have inadequate staff nor suitably trained and/or inclined and/or capacity to manage the requirements appropriately. We need appropriate use and allocation of timber resources, appropriate application of silviculture & adequate regeneration, as well as protection of regeneration by Fire Management Services (FMS)... The FPC needs to select additional, appropriate staff to manage their legal requirements and provide management data to document their performances" (Quoted from the respondent R2; similar views expressed by R18 & R24).

"Currently the communication of forest policy and practice is minimal. The development of Demonstration Forests such as Wellington and Wungong is commendable. There is not a lot of public interest but the Demonstration Forests need to be there anyway for the few enquiring folks, and especially those studying the environment, land management & resource use. Also, there is renewed effort in dieback management and communication that will be interesting to see the promotion, training and evaluation of the outcomes from this program.

I think industry training & professional development need to address management issues. Increased staff on patrol for inappropriate visitor impact/use, and for compliance of the timber harvesting regulations. There is an excellent opportunity to put forests & timber harvesting into the climate change and water supply issues that are hot at the moment, and should continue to be for a long time. I have concern that FPC working with a single mandate of commercial forest product is not an ethical or appropriate view of sustainable forests. FPC must take responsibility for forest sustainability through intent as much as legal obligation from DEC" (Quoted from the respondent R5; similar views expressed by R9).

Recommendation 3 – that the DEC and the FPC jointly develop a training & professional development program for harvesting supervision and monitoring & fire management. This program should also contain an integral component of public education and extention. Assessment of human-resource skills and training needs should be prioritised in accordance with the requirements of the FMP 2004-2013 and the Government's policies on regionalisation strategy. *Proposed completion timetable: before 30 June 2008*.

Under the CALM Amendment Act 2000, DEC has legal obligations to establish the standards for ESFM via development and maintenance of policies, guidelines, manuals and advisory notes, as well as support the systems to approve, monitor, achieve compliance and enforce the standards for disturbance activities on State forest, timber reserves and freehold land held in the name of the CALM Act Chief Executive

Officer. It is unfortunate, however, that the FPC may not have always perceived this, and thus inevitably leading to unnecessary tensions between the two agencies. The following technical views and/or comments made by the majority of respondents illustrate the point:

"Now it needs to clarify whether the position of the Annual Harvest Plan and 3-year Harvest Plan as authority documents. Establish a "Controlled Document" checklist for pre-harvest checklist and approval, as there are currently FPC form (not approved by DEC) and a DEC document (not used by FPC) and a draft DEC document, each with different content and authorities required" (Quoted from the respondent R10).

"No formally agreed process for FPC to access forest produces. DEC has been relying on the FPC 109, but FPC does not view this as the binding document that allows access. No formally agreed coupe hand back process which stipulates a set of criteria that FPC must complete prior to handing coupes back to DEC. No uniform process for the management of BRM within harvest operations. So, the DEC and the FPC operating under a separate set of guidelines. Training for SFM staff is not adequate. FPC planning tends to be very much "hand-to-mouth" resulting in DEC SFM staff having to react to ensure approvals are timely without adequate timeframes to ensure all aspects have had due consideration... Government's policies need to be completed and endorsed. ALL parties need to be operating under the same set of guidelines and all aspects need to have ambiguities removed" (Quoted from the respondent R13; similar views expressed by R19).

"Based on the record of WINs/MLs and general discussion held with FPC, it seems most of the non-compliance issues can be attributed to procedural breaches, e.g. commence harvesting without all required documentation being complete. Either is through misunderstandings or ignorance (?)... At this stage continued communication and ensuring there is enough time to address, i.e. ensure timelines are appropriate. Only that it seems DEC's position is not a strong one legally, especially in the area of plantation harvesting" (Quoted from the respondent R12).

"Not properly separated many functions of the FPC and the now DEC which can influence on the achievement of objectivity & impartiality in monitoring FPC activities. Introduced a level of 'double handling' when it comes to forest management operational activities. The FPC is locked into contract supply in order to meet its commercial obligations. An example is tree-marking standards. Interpretation of tree selection can sometimes appear to be influenced by meeting immediate product supply rather than marking to meet long-term timber supply requirements and SFM standards.

Created a difficult situation in which one department monitors another. There is an urgent need for the clarity on responsibilities. For example both DEC and FPC develop works manuals on practices and procedures with each organisation adhering to their own guidelines. I believe one document for each topic be produced and signed off by the Conservation Commission as the uniform standard to be adopted by each agency" (Quoted from the respondent R19).

"There is also a need for a sign off for silviculture prior to harvest, otherwise the FPC will continue to push Silvic guidelines to the bottom end for each prescription, and thus creating a non-sustainable forest... Remove the tree-marking process from

FPC as this is a true conflict of interest" (Quoted from the respondent R30).

"There is currently no formal hand back process in place. The 109 Checklist forms the basis for hand over and approval for the FPC to commence. However, there is no system whereby the FPC is formally asked whether it has completed its obligations. Thus, a process may be needed to formally arrange a review of the 109 at the end of an operation, whereby FPC formally advises DEC that operations within the coupe have been completed (this should be undertaken at the completion of regeneration activities)... The solutions are to develop a single Code of Forest Practices which is referenced by both the DEC, the FPC and industry. Streamline the annual harvest planning process. Annual harvest plan should be out 6 months prior any harvest year. Hygiene and rare flora interpretation requires significant forward planning. At present these factors have restricted FPC's ability to meet environmental approvals and scheduling time-frames" (Quoted from the respondent R16; similar views expressed by R28).

Interestingly, all those matters of concern raised above by the respondents as to the clarification of responsibilities between the DEC and the FPC for timber harvesting standards are also recognised by the FPC's Statutory Review (2006):

"There are definite gains to be made in both efficiency and the quality of the working relationship between the FPC and the DEC if the respective roles can be better defined and agreed. In simple terms the FPC should have responsibility for ensuring that its operations are conducted in a manner that is compliant with all its obligations under the FMP, while the DEC, assisting the Conservation Commission, has roles in ensuring that the areas the FPC proposes to harvest are appropriate, that the standards to which the FPC are to perform are clearly stated and an audit role in ensuring that compliance is occurring. It is noted that the DEC also has a management role for State Forest in general, but clarity is needed to avoid duplication of the FPC's role in timber harvesting" (FPC, 2006:57).

Recommendation 4 – that the *Manual of Management Guidelines for Timber Harvesting in Western Australia* and accompanied *Code of Practice for Timber Harvesting in Western Australia*, both of which have been published by CALM in March 1999, need now to be updated. The update with a focus on *Environmental Protection* should be up to ESFM standards, signed off by the Conservation Commission, and uniformly referenced by both the DEC and the FPC for the conduct of timber harvesting operations on State forest and timber reserves. *Proposed completion timetable: before 30 June 2008*.

Under the current institutional framework, to meet the requirement of **Indicator 7.2e**, the majority, 92% of respondents, believe enforcement is necessary to deter the recurrence of non-compliant incidents during timber harvesting operations. They regard enforcement of laws, regulations and guidelines as a positive aspect in both the educational and incentive measures. Here are typical views expressed by the majority of respondents:

"Non-compliance is currently addressed in either of two ways. On an informal basis where discussions are held with the contractor and FPC to resolve the issue or on a formal basis where WINs and MLs are issued to FPC... DEC appears unable to impose any penalties on either FPC or their contractors for non-compliance with environmental specifications during logging operations. Without any meaningful penalties in place for non-compliance, there is no incentive for contractors to comply. The WA Conservation Commission needs to become more involved in the non-compliance issues" (Quoted from the respondent R11).

"The problem seems to be that much of the objectives and procedures put in place to achieve those objectives are not enforceable. I believe the CALM Act needs to be amended to prescribe specific penalties for breaches of the ESFM. These should be sufficiently severe enough to provide a real deterrent to the FPC and its contractors. From my observations and knowledge of the situation, it would appear that the FPC and its contractors regard DEC's efforts to ensure the provisions of the ESFM are implemented, as nothing more than a minor nuisance and are prepared to disregard any provisions that they consider impede their harvesting operations. This is evident from the number of WINs and MLs that have been issued over the years and the lack of response from the FPC. Those issues were, I think, caused by inadequate legislation:

- A lack of <u>suitably trained</u> field staff (SFM officers) to oversee timber harvesting operations and deal with compliance issues;
- Inadequate support by some managers for officers tasked with dealing with timber harvesting compliance issues;
- A lack of will on the part of the Department to "take the FPC to task" when it does step over the line" (Quoted from the respondent R17).

"The current FMP has made very significant gains in forest management to achieve ESFM. Weakness is in implementation of FMP and reality that organisations such as FPC & forest industry companies can thumb their nose at compliance to FMP & legislation, knowing they will not be made accountable from a legal perspective... Currently, DEC is unable to enforce FPC addressing of remediation of their noncompliance. Example is FPC's refusal to deal with in a transparent manner follow up actions of WINs and MLs. Inability to have FPC to conform to legislative and statutory obligations such as road management, e.g. road design & construction below Australian Standards. I am concerned that FPC... (and) their culture of only doing what they must do to achieve production targets and not striving for best practices in regard to achieving ESFM... Without DEC having the power to enforce compliance FPC performance in regard to achievement of ESFM and DEC's inability to influence forest product utilisation standards are weaknesses. Lack of a clear description or the clarity of what is DEC legal responsibility, and what is FPC legal responsibility" (Quoted from the respondent R28).

"WINs, MLs and Incident reports are the key documents for recording non-compliance, whilst they are a useful tool for recording as such, the FPC chooses to essentially ignore them, or the reply is to appease the reporting system. Lack of replies to these notices over several years tells me that FPC has little regard for the process. The same non-compliant issues keep happening, suggesting that they do not wish to comply and simply carry on with their own agenda" (Quoted from the respondent R30).

Some more views expressed by other respondents, however, are with an emphasis on the training and educational approaches, improved supervisory responsibilities at the District and/or Regional levels, as well as better dialogue between the DEC and the

FPC, or even better management of the conflict of interests among and between Government agencies:

"Legal and enforcement issues are not necessarily the most appropriate mechanism. More routine site visits and supervision from DEC would probably improve outcomes especially cooperatively undertaken with the FPC. It needs clear responsibility for activities; DEC must take up its supervisory responsibilities at District/Region levels. Also, better clear dialogue between DEC and FPC is needed. These were identified by observation & talking with both DEC & FPC officers, and getting mixed messages about who is responsible for what actions. Audit findings that clearly show lack of systems and consistency between DEC Districts and Regions. Solutions are to recognise all shortcomings, including those within DEC and act on them. Establish the management systems — not to complex to help with consistency of application" (Quoted from the respondent R21).

"Apart from the fact that many of the FMP targets and actions are yet to be achieved, an important element of ESFM is continual improvement... I am not in a position to respond to this, except to note that legal and enforcement responses are not always the best means of achieving ESFM goals. Other approaches, such as education, are also important so that those who are non-compliant in some way know why it is an issue, what the goals actually are and what their role in the process is. This is based on (my) observation & experience in getting cooperative responses on a wide variety of issues (both related to timber harvesting and not related). The aim is to achieve the FMP and ESFM goals which involve getting behavioural changes, so approaches should, ideally, be designed to achieve the required behavioural changes.

<u>Suggested solutions:</u> Identify the individual issues and the reasons for them and develop and implement appropriate approaches to addressing them. In some instances these will be educational approaches and other instances punitive, with a range of combinations in between. The responses should be appropriate to both legal requirements and have the best chance of changing behaviour so that the FMP goals can be achieved" (Quoted from the respondent R23).

"A more clearly defined role between DEC and the FPC needs senior Management and Ministerial support, better information sharing, agreed policies and procedures. A lot seems to be there already, but just not in a form that is to some extent agreed and final – policies, procedures, guidelines need to be endorsed as this provides for consistency. It doesn't mean they can't be changed as new situations arise, at least there is a 'point of departure'" (Quoted from the respondent R9).

"Based on my observation and experience over the last 7 years, I see lack of the capacity to effectively audit FPC and other agency [and DEC] activities on State Forest. To date, the funding and resource allocation to this role has not been sufficient to adequately audit all activities and then to ensure remedial actions are put in place. At an operational level, WINs, MLs, & Caution Notices have been used to date. There is no mechanism to ensure that actions documented in WINs and MLs are implemented, and that improvements are made to ensure there is no re-occurrence of non-compliant incidents.

<u>Suggested solutions:</u> There needs to be some penalty associated with non compliance that will ensure swift remedial action and improvements to prevent a reoccurrence. However, this is a very difficult issue, because Governments are not interested in Government agencies fining each other or prosecuting each other" (Quoted from the respondent R22).

It is a fact that enforcement between and amongst Government agencies, not only, is a very difficult issue. But it is also a serious matter directly relating to the foundations on which the entirely Government mechanisms have been built and functioned. The note made above by the respondent R22 is supported by the State Solicitor's Office's (SSO's) advice on the clarity of the role and responsibilities of CALM and the FPC. The SSO's letter of advice dated 10 April 2006 is read as follows:

"(Our) above view is essentially that the specific provisions of the CALM Act and the Forest Products Act 2000 (FP Act) must be interpreted in the context of two fundamental concepts. First, is the underlying policy of the reforms introduced by the CALM Bill and the FP Bill. Second, is the plain fact that CALM manages the land and does not cease to do so by entering into any arrangement with the FPC. As a result, we would reiterate that contained in the two Acts is no clear machinery by which obligations and responsibilities can be clearly defined. The reason for this is that both bodies are government entities controlled by a Minister, rendering a legal dispute of this nature a waste of public resources and inappropriate. In essence, the statutory framework proceeded on the basis that a common sense approach would prevail" (SSO, 2006:7).

Here, it remains a question of how to deal with the contractor's non compliance in ESFM standards? Under Section 10(1)(i) of the *Forest Products Act 2000*, the FPC is allowable "to enter into contracts with any person for the harvesting of forest products." Consequently, it is the FPC's responsibility to ensure their contractors must comply with the Government's policies and legislative system, and also the FMP at all times during their harvesting operations on State forest and timber reserves. Having both the DEC and the FPC shared statutory obligations, as well as fully committed to implement and achieve the FMP and ESFM goals under the current framework.

Recommendation 5 – that to meet the requirements of *Indicator 7.2e* developed in the Montreal Criteria, the laws, regulations, guidelines, as well as code of practice for timber harvesting need to be enforced. All these documents need to be unified and logically connected one with another on a uniformity basis. In particular, a comprehensive set of systematic and uniform standards for timber harvesting in Western Australia should be established and included:

- Manual of Management Guidelines for Timber Harvesting in Western Australia, 1993 & Code of Practice for Timber Harvesting in Western Australia, 1993: They should be updated, referred to in **Recommendation 4**;
- WA Forest Management Regulations 1993: that FM Regulations be revised in connection with the Code of Practice for Timber Harvesting in WA, 1993. As a result, it is the FM Regulations to impose penalties, in detail, for any recurrent non-compliance with environmental specifications;
- Environmental Protection Act 1986: that the EP Act be amended to enforce non-compliance with environmental specifications, as are prescribed in the Code of Practice for Timber Harvesting in WA, 1993 and Forest

- Management Regulations 1993;
- CALM Amendment Act 2000 & Forest Products Act 2000: that these Acts be amended to include enforcement on non-compliance with environmental specifications, as are specified in the Environmental Protection Act 1986.

Under such a unifying system for ESFM standards, any non-compliance with the *Code of Practice for Timber Harvesting* is considered being against the *FM Regulations 1993*, and at the same time against all the Acts mentioned above. *Proposed completion timetable: before 30 June 2008*.

Recommendation 6 – that to enforce the laws, regulations, guidelines and code of practice for timber harvesting in Western Australia, a joint committee should be formed to deal with all issues relating to non-compliance with the Government's legislation and policies, and ESFM standards, make rules and decisions on such legal matters. The joint committee should involve representatives from the DEC, the FPC and the Conservation Commission. The committee may require, when necessary, the participation of representatives from external agencies, Local Government, stakeholder groups and/or local communities concerned. *Proposed completion timetable: before 29 February 2008*.

4. Conclusions

The Director General Office's Annual Audit Reports for the period 8/2002-7/2007 recorded incidents of non-compliance with environmental specifications that have occurred during the FPC's timber harvesting operations. These incidents, as they happened, are kept recurring in the same nature and intensity on a year-after-year basis. Based on an internal Environmental Management System (EMS) listed as "FPC EMS Incidents" for the first two full financial years following the release of the Forest Management Plan 2004-2013 (FMP), the FPC's Statutory Review (2006) has also given the statistics on non-compliance with two incidents recorded a week on average. Operations regularly fail tracking and compliance requirements which are further evident from the Auditor General's 9/2007 Report on WA Public Sector Performance.

While all those incidents of non-compliance with ESFM standards highlighted an urgent need for both the DEC and the FPC to manage timber harvesting operations effectively and efficiently; they also raised the question of how can our current legislative and institutional system be improved to help achieve the FMP and ESFM goals?

The question has been examined in this legal review project. It is the purpose of the project to provide recommendations for improvements to the current management system that facilitates DEC in undertaking its role and responsibility, as are set consistent with the Government's policies on ESFM, as well as the FMP. Data were generated through a SFM survey by questionnaire with open-ended questions, field observation and documentary reviews.

The project found that the current legal and institutional framework is required continual improvement and adaptive management, as set out in the FMP. According to ESFM standards, improvements are needed to focus on the two elements within the management system of timber harvesting operations:

- A general cycle of at-a-coupe timber harvesting procedures;
- Mechanisms for compliance monitoring and auditing.

Based on the survey results, as well as dialectical theories and historical analysis, the project's recommendations have been made in accordance with the Montreal Process Criteria and Indicators (MPC&I, 1995). Recommendations can be abbreviated as follows:

- **Recommendation 1** that Forest Management Plan 2004-2013 and KPIs should be revised to meet the core MIRA planning standards: *Measurable, Implementable, Reliable,* and Achievable at the all-levels of implementation, as appropriate. *Proposed completion timetable: before 30 June 2008.*
- **Recommendation 2** that the memorandum of understanding (MOU), and the formal working arrangements (FWA) between the DEC and the FPC in regard to the timber harvesting should be prescribed in both the *CALM Amendments Act* 2000 and the *Forest Products Act* 2000. *Proposed completion timetable: before 29 February* 2008.
- **Recommendation 3** that the DEC and the FPC jointly develop a training and professional development program for harvesting supervision and monitoring & fire management. This program should also contain an integral component of public education and extention. *Proposed completion timetable: before 30 June 2008*.
- **Recommendation 4** that the *Manual of Management Guidelines for Timber Harvesting in Western Australia* and accompanied *Code of Practice for Timber Harvesting in Western Australia*, both of which have been published by CALM in March 1999, need now to be updated. These updates with a focus on *Environmental Protection* should be up to ESFM standards, signed off by the Conservation Commission, and uniformly referenced by both the DEC and the FPC for the conduct of timber harvesting operations on State forest and timber reserves. *Proposed completion timetable: before 30 June 2008*.
- **Recommendation 5** that to meet the requirements of Montreal Criteria, the laws, regulations, guidelines, and code of practice for timber harvesting need to be enforced. All these documents need to be unified and logically connected one with another on a uniformity basis. In particular, a comprehensive set of systematic and uniform standards for timber harvesting in Western Australia should be established and included:
 - Manual of Management Guidelines for Timber Harvesting in Western Australia, 1993 & Code of Practice for Timber Harvesting in Western Australia, 1993;
 - WA Forest Management Regulations 1993;

- o Environmental Protection Act 1986;
- o CALM Amendment Act 2000 & Forest Products Act 2000.

Under such a unifying system for ESFM standards, any non-compliance with the *Code of Practice for Timber Harvesting* is considered being against the *FM Regulations 1993*, and at the same time against all the Acts mentioned above. *Proposed completion timetable: before 30 June 2008*.

• **Recommendation 6** – that to enforce the laws, regulations, guidelines and code of practice for timber harvesting in Western Australia, a joint committee should be formed to deal with all issues relating to noncompliance with the Government's legislation and policies, and ESFM standards, make rules and decisions on such legal matters. The joint committee should involve representatives from the DEC, the FPC and the Conservation Commission. *Proposed completion timetable: before 29 February 2008.*

In conclusion, perhaps one of the Conservation Commission's famous statements has been made during the process of developing our Forest Management Plan 2004-2013, and ESFM policy and obligations, which are shared by the FPC's Statutory Review (2006), as well as by this project, deserves, once again, a particular emphasis:

"The FMP represents a balanced package, implementing the principles of ESFM. It would be possible to adopt a different position that sought to provide a greater level of ecological protection or a greater level of timber production, but not without compromising the achievement of ESFM" (CCWA, 2003:5, emphasis added).

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APPENDIX I - (Source: National Forest Inventory, 1998)

Montreal Process criteria and indicators for the conservation and sustainable management of temperate and boreal forests

Criteria	Indicators
Biological diversity	
1.1 Ecosystem diversity	1.1.a Forest types
	1.1.b Age/successional stage of types
	1.1.c Protected areas
•	1.1.d Protected area by age/successional class
1 2 Familia di carrito	1.1.e Fragmentation
1.2 Species diversity	1.2.a No. forest-dependent species
1.3 Genetic diversity	1.2.b Viability of populations
1.5 deficite diversity	1.3.a Species with diminished habitat range 1.3.b Population levels across range
2. Productive capacity	2.1.a Area of timber production forest
	2.1.b Merchantable and non-merchantable growing stock
	2.1.c Area of exotic and native plantations
	2.1.d Wood products versus sustainable production level
	2.1.e Non-wood products versus sustainable production level
3. Ecosystem health and vitality	3.1.a Impact of processes/agents
	3.1.b Impact of air pollution/ultraviolet B
1. Soil and water resources	3.1.c Extent of diminished biological components
. Son and water resources	4.1.a Area of soil erosion 4.1.b Protective areas/functions
	4.1.c Streamflow variations
	4.1.d Soil chemical properties
2	4.1.e Soil physical properties
F 10 18	4.1.f Stream biological diversity
Ci-L-II	4.1.g Accumulation of toxic substances
6. Global carbon cycles	5.1.a Ecosystem biomass
	5.1.b Ecosystem contribution to carbon budget
5. Long term multiple socio-economic bene	5.1.c Forest product contribution to carbon budget
i.1 Production/consumption	6.1.a Value/volume of wood products
	6.1.b Value/volume of non-wood products
	6.1.c Per capita supply and consumption
	6.1.d Percentage of gross domestic product
	6.1.e Extent of recycling
	6.1.f Supply/use of non-wood products
5.2 Recreation and tourism	6.2.a Available forest area
	6.2.b Facilities available
.3 Investment	6.2.¢ Visitor days
. 3 Misestillenr	6.3.a Value of investment
	6.3.b R&D expenditure 6.3.c Technology (use and adoption)
	6.3.d Rate of return
.4 Cultural, social and spiritual	6.4.a Area protecting cultural, social, spiritual values
	6.4.b Non-consumptive use values
.5 Employment and community	6.5.a Direct and indirect employment
.4	6.5.b Wage and injury rates
	6.5.c Forest community viability
. Effectiveness of legal, institutional	6.5.d Area used for subsistence
and economic framework	
.1 Lagal framework	7.1.a Property rights, tenure, traditional rights of Indigenous
	peoples, dispute resolution
	7.1.b Planning, assessment, policy review for range of values
	7.1.c Public participation in decisions/policy and access to
	information
	7.1.d Best practice codes
	7.1.e Conservation – environmental, social, cultural and/or
5 (scientific values
2 Institutional framework	7.2.a Public awareness/education
	7.2.b Planning, assessment, policy review (including cross-
	sectoral elements)
	7.2.c Human resource skills
	7.2.d Physical infrastructure
3 Economic framework	7.2.e Regulation, guidelines, law enforcement
z containe manierroix	7.3.a Investment, taxation, regulatory environment, capital flow
4 Capacity to measure conservation	7.3.b Non-discriminatory trade policies 7.4.a Data availability
¥.	7.4.b Scope, frequency, statistical reliability of inventories/assessments
	7.4.c Compatibility with other countries
5 Capacity for and application of R&D	7.5.a Scientific ecosystem understanding
	7.5.b Development of national accounting methodologies for
R#0	social costs/benefits, and resource depletion
	7.5.c Impact of technology
	7.5.d Human impact prediction
	7.5.e Climate change impact prediction

APPENDIX II (a)

A SAMPLE OF COVERING LETTER attached to Questionnaire Form

Forest Policy and Practices Branch DEC Division of Sustainable Forest Management PO Box 1693 BUNBURY WA 6231

Date: 9 August 2007

Dear Sir/Madam

Timber harvesting and associated activities being undertaken by the Forest Products Commission (FPC) on State forest and timber reserves are required to comply with the current legislative framework, as well as meet the requirements of the *Forest Management Plan 2004-2013* (FMP). As part of a project to review legal issues, we are conducting a survey that aims to clarify the legal arrangements affecting the ability of Department of Environment & Conservation (DEC) staff so as to effectively manage all those activities.

You have been nominated as the representative(s) of your Division in this survey. We believe your knowledge and experience will be a valuable contribution to the project outcome.

Your assistance in completing and returning the enclosed Questionnaire will be greatly acknowledged and we look forward to having your reply before 14 September 2007.

Should you wish to discuss with us any questions contained in the Questionnaire, please do not hesitate to contact us. Thank you for both your time and cooperation.

Yours sincerely

Bob Hagan

Phone: (08) 9725 5911

Email: bob.hagan@dec.wa.gov.au

Minh-Tam Ha

Phone: (08) 9725 5968

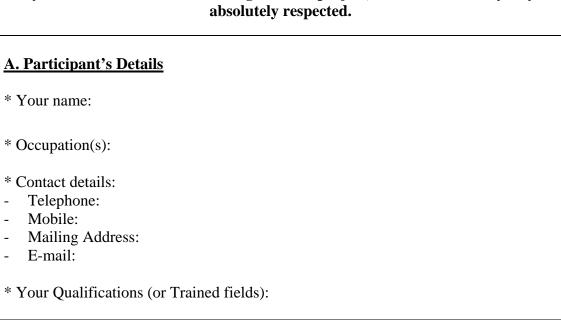
Email: tim.ha@dec.wa.gov.au

Fax: (08) 9725 4134

APPENDIX II (b)

Questionnaire Form

All information given herein is strictly confidential and is for survey purposes only. No names are revealed throughout this project, and thus the anonymity is absolutely respected.



B. List of Questions

- 1. How do you become involved and/or what is your individual role in the WA Government management system with regard to timber harvesting operations?
- 2. In your individual role and/or practical experience, which instruments have you been using as a contribution to achieve the objectives and requirements of the *Forest Management Plan 2004-2013* (FMP)? As a specific example, how did you tackle the issues that have arisen from an unexpected situation where you were unsure about the appropriate instrument to use?

3. As a WA public and/or DEC employee, from your viewpoints on our Government policy on ecologically sustainable forest management (ESFM),
(a) What did the FMP achieve and/or not yet achieve with respect to the management of timber harvesting operations being undertaken on State forest and timber reserves?
(b) What are the reasons for these?
(c) Is there any room for their improvement?
4. (a) In your assessment, what are the key legal and enforcement issues (e.g. forest legislation and policy on sustainability practices, monitoring & auditing, etc) within the DEC management system to address non-compliance that has occurred during timber harvesting operations?
(b) What is the basis for your assessment?
(c) What solution(s) would you suggest to each of those issues?
5. Would you like to make an additional comment on any matter of concern in relation to DEC's legal position and enforcement options as to the management of timber harvesting operations being undertaken by the FPC on State forest and timber reserves?

APPENDIX III - A summary of the respondents' viewpoints

Categorised Groups & Respondents Coded as R(1-31)	Responses
SFM decision-makers	
R 29	* Instruments based on the requirements of CALM Act 2000, FP Act 2000, FM Regulations 1993 are examined and interpreted. Sought advice from the State Solicitor on interpretation. * *Key legal & enforcement issues: The FMP prescribed a set of requirements that were difficult to achieve operationally. It created a higher expectation performance than was achievable under the current framework. A structural problem is in the creation of the FPC's economic unviability (unavailability) of native forest timber supply. The key issue is having the incentives in the harvesting system working to achieve the compliance outcome. At present they don't. * *Suggested Solutions:* - It needs to change the way timber harvesting contracts that are set and supervised. Even if legal protection of DEC was strengthened, DEC would have to monitor and enforce, which is not comfortable between Government agencies. I doubt DEC ever be able to adopt a strong legal enforcement model for timber harvesting. * Instruments I used are monitoring of activities to compare with predictions & guidelines or policies, no 'instruments' as such, but information sources, management systems, etc. * *Key legal & enforcement issues: - FPC have inadequate staff nor suitably trained and/or inclined and/or capacity to manage the requirements appropriately. We need appropriate use and allocation of timber resources, appropriate application of silviculture & adequate regeneration, as well as protection of regeneration by Fire Management Services (FMS). FMS do not prescribe, nor manage burns for SFM goals. SFM operations staff either does not monitor or have a conflict of interest to manage FMS activities. So, monitoring and legislation to ensure FMS and FPC fulfil their obligations. Alternatively, the sustained yields will need to be adjusted continually as future resource supply is compromised. Those were my perception of the consequences and observations of the current process and outcomes. * *Suggested solutions: - The FPC needs to select additional, ap

R10	* Planning & administrative instruments I used such as Letter of Warning, Forest Offence Investigation Report, Works Improvement Notices (WINs) & Management Letters (MLs). I am also aware of the use of Infringement Notice and formal investigations by departmental enforcement officers (Wildlife Officers). * Key legal & enforcement issues: - The FMP created a series of expectations and standards that the department appear to be unable to enforce due to legislative uncertainty. Due to uncertain legal position, DEC and FPC seek, and are often provided with different opinions about the legal circumstances. These differences continue the uncertainty of the legal position for each agency. FPC continue to question the DEC's right to set planning & management conditions for their operations, and frequently ignore legal requirements for access to timber on particular land tenures, and authority for access to BRM, despite these issues being raised with them. - FPC failure to abide by the conditions of the FP Act 2000 in terms of requirements for consultation with DEC about contracts. This often results in FPC actions being in conflict with DEC requirements, and causes frustration because DEC has to try to introduce issues after the contracts have been awarded. These were identified by personal involvement in trying to have DEC requirements taken on board by FPC over the last 5 years or so. * Suggested solutions: - I think FPC must abide by the FP Act. It would be useful to have clarity of the legal position, so that the two agencies can establish a common expectation and clear working arrangements for planning and field implementation. - Now it needs to clarify whether the position of the Annual Harvest Plan and 3-year Harvest Plan as authority documents. - Establish a "Controlled Document" checklist for pre-harvest checklist and approval, as there are currently FPC form (not approved by DEC) and a DEC document (not used by FPC) and a draft DEC document, each with different content and authorities required.
SFM Monitoring	
R25	* The planning instruments I used include: - Open, transparent dialogue methods that enabled all parties to exchange view points concerns & issues in a manner that positively influences the Conservation Commission's decision- makers; and written workbook for participants to track information exchange and workshop outcomes. * Key legal & enforcement issues: The FMP seems to engender discord and disagreement between the government administrating agencies. It seems to create an adversarial working arrangement rather than a co operative and aligned one. Those were caused by the way the interpretation of the FMP has been done legally and the areas where it is silent and needs direction, the way the FPC is structured, EMS type accountability and reporting systems are separate from the FMP, the way the industry has been downsized? * Suggested solutions: - DEC should have a working relationship with decision-makers within the FPC, who are directly connected to the field operations: FPC are currently in the process of an internal restructure, the way the operations units are

	organised is a great blocker to improving the current working relationships, if SFM can influence the new structures to better link the influence and power of policy, strategy and silviculture with the field ops, now is the time to do it. It seems to me that if we are wrangling at the bottom line of the legalities of ESFM practices between government agencies then we have lost the plot and are fair game for the industry to exploit to maximise their interests.
	* By instruments I assume the question means tools and that can be as broad as the appropriate legislation – WC Act 1950; CALM Act; the appropriate MOU, or as narrow as the specifics of a WIN or Letter of Warning. It can include investigative techniques and resources. Currently, the roles I play in: – Enforcement: manage response to complaints of alleged offences or Regional requests for assistance to investigate timber related matters in State forest and on private property; and
	- Licensing: oversee private property commercial timber harvesting licensing.
R31	* <u>Key legal & enforcement issues:</u> - The FMP did not appear to achieve adequate standards in logging coupes and roading alignments, risking soil damage due to logging in wet conditions and harvesting pressure exerted by FPC. Forest health may also be compromised due to the levels of firewood removal, DRA incursions, and the spread of pests and pathogens. Further, the FMP lacks enforceability. The links to legislation are poor and result in difficulties when users have incentives/pressures that lend themselves to non-compliance. Gaining compliance from the FPC relies on their cooperation and that process incurs significant costs in terms of the commitment of resources and forest impact. There appear to be less resources monitoring compliance and investigating possible offences. - KPIs are difficult if not impossible to perfect, however some of the KPIs will give misleading results if, for example, proportions of removals are unknown. - The provisions of the FMP require legislative support. - Compliance monitoring and investigative capabilities require reviewing. Evidence based on the Reports of timber theft; FPC recidivism; increase in use of forest leading to increased pressures (ORV, Dieback, Ferals, Weeds, etc). * <u>Suggested solutions:</u> - Required legislative amendments; and review of compliance processes and resources.
R1	* Instruments being used are FMP2004-2013, SFM Manual # 1, Advisory Notes 1, 2, 3 & 4, approved FPC 109, FPC Contractors' Timber Harvesting Manual, and liaison with senior managers. * The FMP achieved improvement of weed management within harvest coupes. My assessment is limited to the better known weeds, broader knowledge base is required. Plus plants that come from the nursery for planting contain weeds in the jiffy pots. Weed assessment should be carried out during hygiene mapping. FPC's nursery stock needs to be free of weeds. * Key legal & enforcement issues: NIL responses to issued WINs and MLs. Similar breaches occurring regularly. There appears to be a fear that if DEC stops operations, then DEC would be liable for failure to supply. * Suggested solutions: Issue Caution Notices to Contractors and coupe OICs, or Infringements with financial penalties. Issued WINs and MLs are not a sufficient tool as a deterrent to prevent future similar breaches.

R3	* My involvement is in the planning and implementation of prescribed fire operations associated with pre-and post harvesting (silviculture burns) and the protection of fire vulnerable regrowth from fire (prescribed and wildfire). To achieve this outcome requires information from SFM detailing: 3-year harvesting plan; the silvicultural burns (location, boundaries and season of burn) that are required to be undertaken by Districts to achieve silvicultural outcomes; and the location, boundaries and duration of 'Conditional Burn Areas'- areas to be excluded from fire because of a timber harvesting constraint e.g. need to undertake dieback interpretation or areas to be excluded from burning because they contain fire vulnerable regrowth. * Key legal & enforcement issues: - In my experience – prior to and post FMP and FPC, the FMP was developed to satisfy the desires of the 'public' and the feasibility of integrating these desires spatially and temporally were not given sufficient recognition. The working arrangements between DEC (land manger and regulator) and FPC (resource harvester and quasi-commercial organisation) that are based on understandings that are not enforceable under appropriate legislative or commercial regulation instruments - do not always result in the most effective, efficient or competent outcomes There is a lack of appropriate head-power in the appropriate legislation and associated regulations to allow DEC to regulate enforce, audit, compel or punish. This leads to a lack of clear and transparent working arrangements between DEC and FPC with clear and binding responsibilities and accountabilities. - The FMP also made fire management at a landscape scale more complex and expensive. It caused a great deal of uncertainty in planning fire operations due to the inadequacy and lack of certainty associated with forecasting where and when harvesting operations would take place. The requirement for various reservations and their associated limitations has added complexity to fire management e.g. ha
	* <i>Key legal & enforcement issues:</i> The main area of relevance to fire management that is associated with timber harvesting
R4	operations on State forest & timber reserves is the ongoing review & development of silvicultural guidelines for Jarrah & Karri forests; and the soil disturbance management review. * <u>Suggested solutions:</u> Continued to ensure that fire planning and implementation of our Regional Services are undertaken in a safe, ecologically sustainable manner.
	* I coordinate communication programs for visitors including the timber industry, especially regarding signing. In communication, the practice is simple - issue, audience, message, method, evaluation. I respond to requests for assistance in the communication of forest issues. Community can be referred to the FMP

	* <u>Key legal & enforcement issues:</u> - Currently the communication of forest policy and practices is minimal. The development of Demonstration Forests such as Wellington and Wungong is commendable. There is not a lot of public interest but the
R5	Demonstration Forests need to be there anyway for the few enquiring folks, and especially those studying the environment, land management & resource use. Also, there is renewed effort in dieback management & communication that will be interesting to see the promotion, training and evaluation of the outcomes from this program. * <u>Suggested solutions:</u> - I think industry training & professional development need to address management issues. Increased staff on patrol for inappropriate visitor impact/use, and for compliance of the timber harvesting regulations. There is an excellent opportunity to put forests & timber harvesting into the climate change and water supply issues that are hot at the moment and should continue to be for a long time. I have concern that FPC working with a single mandate of commercial forest product is not an ethical or appropriate view of sustainable forests. FPC must take responsibility for forest sustainability through intent as much as legal obligation from DEC.
	* My main role is in aiding the senior silviculturalist in developing and monitoring silvicultural standards in State forests. I found the use of solid, unarguable datum/numbers that has had the desired affect of both gaining attention to an issue, as well as having progressed action upon the issue. Producing clear, valid evidence greatly strengthens any arguments we may have. The FMP seems to have succeeded in identifying/protecting appropriate areas from harvesting. Significant levels of pre-checking for rare flora, habitat zones, old growth etc. – that mean nowhere that shouldn't be touched is.
R6	* <u>Key legal & enforcement issues:</u> Major issues appear to be within the harvesting operations themselves – not the areas that they are happening. My work has involved in checking on tree-marking and post-harvest results. These have shown to be below standard. It appears that the FMP has done a great deal in terms of removing harvesting from areas where it is not appropriate, but not a great deal in terms of maintaining a good operating standard for harvesting itself. * <u>Suggested solutions:</u> Firm, clear requirements for harvesting operations that can be assessed at the end of an operation. Clear and enforceable penalties for failure to implement these requirements adequately.
R7	* <u>Key legal & enforcement issues:</u> The requirements set out in the FMP 2004-13 enable DEC's legal authority to effectively manage and enforce timber harvesting operations being undertaken on State forest & timber reserves. * <u>Suggested solutions:</u> Revisit the current legislation and empower DEC. DEC needs an appropriate legislation that can address non-compliances occurred during timber harvesting operations.
	* I have been empowered under the Bush Fires Act for many years. I need to protect/regenerate State forest and timber reserves. The FMP generally leaves the forest in a very over-stocked state that is vulnerable to disease, and climate change issues.
R8	* <u>Key legal & enforcement issues:</u> FPC is obviously unstable and it shows all of those signs - (that likened to a tumbling after the divorced. Whether under the same CALM roof before or now separated, a conflict of interest is always there). The issues that SFM Division has to deal with are essentially because of those signs. * <u>Suggested solutions:</u> DEC needs the Authority to effectively manage State forest & timber reserves; FPC needs to do it right in this sense. Both agencies need to go to the same place. Instead of being conservative & restrictive, it should revisit the threats

	being posed to the currently SFM system.
R9	* In respect to applying the general principles of the FMP to ensure accuracy when reporting to the Minister or responding to public queries, tend to use the intranet policy documents, advisory notes etc. The FMP has achieved a clearer picture of the extent of the resource available, as well as different land areas/categories that are considered as a whole (e.g. the contribution of reserves to the repopulation of harvested areas. Although this is something that has always been considered, but FMP seems to give it a degree of relevance and importance). Public participation was more transparent (although I know some wouldn't agree with me). It could be given a little more prominence, such as the contribution to the climate change debate; not entirely an FMP issue, but alignment of some basis processes and approaches across the regions, this would help better information sharing and possible easier movement of staff between the Regions (if this is what an individual was seeking). **Kev legal & enforcement issues:* - With respect to climate change, obviously due to the fact that when the FMP was drafted it didn't have the same level of prominence, but the Conservation Commission was in a position to single out certain FMP principles and provided DEC with some directions on how they can be tackled. Not sure how much this happens? - It needs benchmarks for comparison. With the exception of Annual Report reporting & status implementation reporting, I am unaware of any fixed benchmarks that can provide me with a clue of progress or rate of achieving progress. - It needs a more clearly defined role between DEC and the FPC; consistency between the Regions, for DEC and FPC; clearer/actual delineation of timelines, a lot appears to be very open-ended and this can lead to differing interpretations of process between DEC & FPC, also doesn't help with respect to public perception of timber harvesting operations (mainly related to native forests). Understand that this should not remove on the ground variation. * Suggested
R14	* Some instruments are listed here as Interim Manual for Soils (SFM Manual No. 1), the FMP's Appendix 6, CALM Act & FP Act, Checklist 109 Approval, Fellers Block-level Approval, etc. * <u>Key legal & enforcement issues:</u> FMP did not achieve clear legal accountability to the proponents, and added additional layers of complexity to management. Also, it is not backed by clear legal authority, while its KPIs are difficult to measure, or not directly linked to other recording/reporting frameworks, and to legally binding consequences. No clear alternatives are available. * <u>Suggested solutions:</u> Depend upon political imperative, either adopt a collaborative approach via working arrangements or seek legal avenues (e.g. based on completion criteria).
	* Initial training and first 10 years of a 25 year service with the department, I was involved directly with the harvesting industry, including tree marking, coupe management and post harvesting silvicultural operations. Then, the FMP was yet in place when I

	was directly involved with harvesting. Issues were dealt with using a harvesting manual, and overseen by the district Senior Operations Officer. Now I am indirectly involved with clearing of State forest where mining/infrastructure development occurs.
R15	* <u>Key legal & enforcement issues:</u> With my experience since the implementation of the FMP with regard to clearing of State forest for mining, it has been my observation and directly reported to me that the operations have not taken all products from the forest where there was supposed to be an integrated operation. Smaller fencing products and smaller logs were often left behind due to the mechanised harvesting methods used. Enforcement on the industry to become more thorough with their product removal at harvesting would appear to be a compliance issue. This has been my direct observation from field inspections and feedback from local district DEC officers and mining environmental officers of harvesting operations on mine sites where clearing of State forest is involved.
	* <u>Suggested solutions:</u> Enforcement on the industry to become more thorough with their product removal at harvesting would appear to be a compliance issue. The FPC, for what ever reasons, does not appear to be staffed, or inclined to carry out a stringent auditing of the harvesting operations. An independent auditing of harvesting product removal would be useful to maximise product removal within an integrated harvesting operation.
R17	* Using my knowledge of legislation and experience as an enforcement officer, I have interpreted and applied the appropriate provisions of the relevant legislation, including the CALM Act, the Forest Management Regulations & the Wildlife Conservation Regulations. This has involved using my investigative skills to gather evidence and my interviewing skills to interview witnesses and take down witness statements and Records of Interview. * Kev legal & enforcement issues: - The problem seems to be that much of the objectives and procedures put in place to achieve those objectives are not enforceable. I believe the CALM Act needs to be amended to prescribe specific penalties for breaches of the ESFM. These should be sufficiently severe enough to provide a real deterrent to the FPC and its contractors. From my observations and knowledge of the situation, it would appear that the FPC and its contractors regard DEC's efforts to ensure the provisions of the ESFM are implemented, as nothing more than a minor nuisance and are prepared to disregard any provisions that they consider impede their harvesting operations. This is evident from the number of WINs and MLs that have been issued over the years and the lack of response from the FPC. Those issues were, I think, caused by inadequate legislation: • A lack of suitably trained field staff (SFM officers) to oversee timber harvesting operations and deal with compliance issues; • Inadequate support by some managers for officers tasked with dealing with timber harvesting compliance issues; • A lack of will on the part of the Department to "take the FPC to task" when it does step over the line. The basis for this assessment is that there appears to have no improvement in the FPC's attitude regarding its responsibility to comply with the provisions of the CALM Act & the Wildlife Conservation Act. In fact, judging by the increasing number of occasions that they have been taken to task in recent times, I would venture to say they have been even more arrogant and disregardi

had been directed by FPC officers to disregard directions given by the officer to the contractors to cease operations is an example of this. Unfortunately, the infringement notices were only given to the contractors and were withdrawn several days later so it is doubtful that the FPC learned anything from this exercise.

- * <u>Suggested solutions:</u> Certainly "beefed up" forest legislation is essential if DEC's compliance approach is to be effective. There also needs to be a much greater emphasis on training up "suitable" SFM staff and equip them to deal with non-compliance issues. Such officers need to have not only knowledge of forest practises but the right aptitude for compliance and a willingness to get involved in this sort of work. The Department cannot continue to rely upon its ever-diminishing number of wildlife officers to deal with these issues. If a sufficient number of properly trained SFM officers were assigned the role of actively monitoring and auditing timber harvesting operations and were directed to deal firmly with any offence situations detected (and their actions received the full backing of the Department), I am sure this would result in a significant improvement in the approach to harvesting activities taken by the FPC and its contractors.
- * I am involved in developing policies and guidelines relevant to timber harvesting, in line with the FMP (including the development of reporting protocols for & reporting against key performance indicators (KPIs), and also in assessments of fauna habitat zones (FHZs) & helping with interpretation of FMP requirements; developing and commenting on policies and guidelines as required under the FMP.
- * To date the FMP achieved: improvements in & clarification of biodiversity conservation measures; set out a framework for better forest management (i.e. identified the elements necessary for ESFM and current status with regard to having guidance for achieving these elements, including gaps). While these outcomes were to be achieved under the FMP, in reality agencies have limited resources and make choices about where those resources are applied.
- * FMP has not yet achieved: adequate resourcing (especially staff) to develop and implement the ESFM elements identified (e.g. development of the guidelines identified in the FMP, such as those for FHZ selection & management; soil & water conservation). Having these elements in place will help ensure a consistent and appropriate approach to forest management to achieve the objectives of ESFM. Apart from the fact that many of the FMP targets and actions are yet to be achieved, an important element of ESFM is continual improvement.
- * <u>Key legal & enforcement issues:</u> I am not in a position to respond to this, except to note that legal and enforcement responses are not always the best means of achieving ESFM goals. Other approaches, such as education, are also important so that those who are non-compliant in some way know why it is an issue, what the goals actually are and what their role in the process is. This is based on (my) observation & experience in getting cooperative responses on a wide variety of issues (both related to timber harvesting and not related). The aim is to achieve the FMP and ESFM goals which involve getting behavioural changes, so approaches should, ideally, be designed to achieve the required behavioural changes.
- * <u>Suggested solutions:</u> Identify the individual issues and the reasons for them and develop and implement appropriate approaches to addressing them. In some instances these will be educational approaches and other instances punitive, with a range of combinations in between. The responses should be appropriate to both legal requirements and have the best chance of changing

R23

	habovious so that the EMD goals can be achieved
	behaviour so that the FMP goals can be achieved.
	* My only involvement in timber harvesting operations would be at the request of my manager to investigate alleged offences and associated offences under the CALM Act, Wildlife Conservation Act & Forest Management Regulations. It is matter of consultation, discussion and briefings with my work associates and manager as to how to most appropriately handle a particular matter and to collectively agree on the best practices, and most effective tools/resources to utilise under the circumstances.
R24	* <u>Key legal & enforcement issues:</u> - Needed thorough knowledge of the legislation and contract conditions is required by all staff involved from senior management to supervisors in harvesting operations A commitment by these staff members to ensure that all contractors and Govt officers involved abide by the conditions and legislation Regular consultation with the compliance branch of DEC and legal advisors to ensure all conditions and legal requirements are being adhered to. These are personal experience with confusion by industry based officers and breaches of the legislation and contract conditions within timber harvesting industry.
	* <u>Suggested solutions:</u> - More training and coordinated instruction for all staff at management and supervisory levels involved in
	this industry. Greater knowledge of industry legislation and contract conditions; knowing how and when to apply the legislation
	to prevent breaches in industry occurring. Apply the above suggestions & consult with Management at Nature Protection Branch
	Kensington for direction and training.
Da.	*I coordinate & implement disease interpretation of harvesting coupes, private & public lands, parks & reserves. From there I use the Disease Interpreter's Manual to look up previous practices. Disease Impact/Hazard mapping was phased out in the 1990's. The FMP has brought it back. I think FMP has achieved annual harvest now that is scientifically proven at a sustainable level; preservation of old growth/virgin areas of forest, FHZs, stream reserves, etc.
R26	* <u>Key legal & enforcement issues:</u> - I believe that some areas currently being harvested should be considered old growth, e.g. where once harvested prior to 1940. Breaches are not being addressed seriously by proponents. There needs to be more teeth in the ability to enforce FM Regulations. Identification of these issues is based on my discussions with District SFM staff.
	* <u>Suggested solutions:</u> - Higher penalties for breaches in conjunction with education & better dialogues. Also, some changes to practices are needed so that any breaches can be effectively detected. As a part of SFM Division, FMB needs a more PRO-active approach to the legal issues rather than its current RE-active approach.
	**
Region/Dist. Practices	
	* I regularly use Dept. policy, guidelines, and specifications & prescriptions relating to forest management to guide our management, monitoring & compliance works. Also are those related to the FMP and legal & statutory instruments, such as CALM Act & Regulations; Wildlife Conservation Act & Regulations that form the basis of our compliance work. I directly contact SFM Division for advice, support, clarification and provision of expert information, when required.

R28	*The current FMP has made very significant gains in forest management to achieve ESFM. Weakness is in implementation of FMP and reality that organisations such as FPC & forest industry companies can thumb their nose at compliance to FMP & legislation, knowing they will not be made accountable from a legal perspective. I am aware that FMP delivery is those works in progress during the life of the plan. Therefore expect that we will always have work to do to improve. * *Key legal & enforcement issues: - Currently, DEC is unable to enforce FPC addressing of remediation of their non-compliance. Example is FPC's refusal to deal with in a transparent manner follow up actions of WINs and MLs. Inability of DEC to be able to gain information from FPC Environment Management System (EMS) to ascertain if and how remediation of their non-compliance. Example is FPC's refusal to deal with in a transparent manner follow up actions of WINs and MLs. Inability of DEC to be able to gain information from FPC Environment Management System (EMS) to ascertain if and how remediation of their non-compliance. Example is FPC's refusal to deal with in a transparent manner follow up actions of WINs and MLs. Inability of DEC to be able to gain information from FPC Environment Management System (EMS) to ascertain if and how remediation of their non-compliance. The deal with in a transparent manner follow up actions of WINs and MLs. Inability of DEC to be able to gain information from FPC Environment Management System (EMS) to ascertain if and how remediation of their non-compliance. PCC to be able to gain information from FPC legal responsibility on the product up to achieve production targets and not striving for best practices in regard to achievement of silviculture guideline specifications, we do not know if ESFM is being achieved? - Soil management in moist soil conditions is a significant improvement compared to previous FMP (But when soil damage continues at a low level, is this ESFM?); - Without DEC having the power to enforce compli
	* <u>Key legal & enforcement issues:</u> - No formally agreed process for FPC to access forest produces. DEC has been relying on the FPC 109, but FPC does not view this as the binding document that allows access No formally agreed coupe hand back process which stipulates a set of criteria that FPC must complete prior to handing coupes back to DEC. No uniform process for the management of BRM within harvest operations. So, the DEC and the FPC operating under a separate set of guidelines. Training for SFM staff is not adequate.

R13	- FPC planning tends to be very much "hand-to-mouth" resulting in DEC SFM staff having to react to ensure approvals are timely without adequate timeframes to ensure all aspects have had due consideration. FPC seems to have a political edge for log supply, or political requirements to supply logs to mills which tend to override environmental requirements of the FMP. Some issues with policy not being directed by what is required to actually manage coupes on the ground. * <u>Suggested solutions:</u> Govt. policies need to be completed and endorsed. ALL parties need to be operating under the same set of guidelines and all aspects need to have ambiguities removed.
	* I am responsible for the implementation of the developed approval, monitoring & recording systems associated with harvesting. I also assist in the development of the systems associated with harvesting, and provide feedback to the Division on the effectiveness of the systems associated with harvesting. Generally, my first step is to seek clarification from the SFM Division. In most cases there is associated history in the final requirement & knowing the context has been very important.
R12	* <u>Key legal & enforcement issues:</u> - The FMP provided a framework in which the two organizations can move forward all be it not very clear in all circumstances or practical. Not sure if an outcome can be fairly defined as yet being only 3 years into the plans implementation? Once all of the required guidelines and manuals are in place, implementation will be clearer from a DEC perspective. In their absence continued communication is essential. Based on the record of WINs/MLs and general discussion held with FPC, it seems most of the non-compliance issues can be attributed to procedural breaches, e.g. commence harvesting without all required documentation being complete. Either is through misunderstandings or ignorance (?). * <u>Suggested solutions:</u> At this stage continued communication and ensuring there is enough time to address, i.e. ensure timelines are appropriate. Only that it seems DEC's position is not a strong one legally, especially in the area of plantation harvesting, and if this was somehow boosted, it may give DEC the 'authority' to ensure appropriate harvesting practises are implemented.
R16	* Instruments I have been using include CALM Act 1984, Wildlife Conservation Act 1950, Forest Management Regulations 1993, Conservation and Land Management Regulations 2002, Forest Management Plan 2004-2013, and SFM Guidelines. * *Key legal & enforcement issues:* - Improvement of legislative framework is needed; - Investigate the option of a bond system and financial penalties for incidents of non-compliance by FPC and/or its contractors (for example, earlier this year (2007) the FPC commenced operations in Maryvale coupe without the written authority of the Department. The District Manager used Forest Management Regulations to initiate enforcement actions with the approval of the Director of SFM. There have been incidents where the District and Region has deferred to a higher Departmental authority to determine the approval for FPC to enter a coupe and to determine the validity of, for example, the search for threatened flora outside of season;
	- It needs to consider what is DEC's actual purpose in undertaking monitoring and evaluation: Is it a mechanism to deter the occurrence of non-compliance issues, or is it simply a reporting mechanism in which to report against the requirements of the FMP?

	* <u>Suggested solutions:</u> - There is currently no formal hand back process in place. The 109 Checklist forms the basis for hand over
	and approval for the FPC to commence however there is no system whereby the FPC is formally asked whether it has completed
	its obligations. Thus, a process may be needed to formally arrange a review of the 109 at the end of an operation, whereby FPC
	formally advises DEC that operations within the coupe have been completed (this should be undertaken at the completion of
	regeneration activities); - Strengthen the formal Working Arrangements between the FPC and DEC;
	- Develop a single Code of Forest Practices which is referenced by both the DEC, FPC and Industry; - Streamline the annual
	harvest planning process. Annual harvest plan should be out 6 months prior any harvest year; - Hygiene and rare flora
	interpretation requires significant forward planning. At present these factors have restricted FPC's ability to meet environmental
	approvals and scheduling time-frames; - Review of structures of similar government departments on the eastern seaboard.
	* In my role, I report/refer to District, Regional, and then Divisional manager, as plantation management seems to have slipped
	through the FMP net?! From a "pine" point of view we own the land; they can do almost anything to the trees on the land without
	our input.
	* Key legal & enforcement issues: Legally we still don't seem to have an agreed boundary to what is FPC pine? Non-compliance
	is more to do with silviculture than management. When we disagree with an FPC decision or action, often we cannot act on it in a
R18	swift manner, because we are unsure of our role and responsibilities.
K18	* Suggested solutions: - We need to agree to what the FPC owns, and agree formally to both parties' rights and roles on
	plantations. Life is better (smoother) when difficulties can be sorted out at a local level. The legal way may resolve a problem, but
	the bad blood caused by this path only leads to less communication and more distrust between/within both organisations!; - The
	main difficulty is as each department drifts further apart the lack of ground rules and clear roles causes grey areas that on
	occasions lead to poor/miss-communication and conflict; - Basically DEC owns the land but has little CONTROL over what
	happens on there land. Not a great situation to be in. On the other hand, the FPC owns the trees but not the land to access the
	trees? It's a bit like "Yes Minister" but at a higher cost to taxpayers!
	* The most useful instruments are to: - Refer the documents provided by the Policy & Practices Branch such as the SFM
	Advisory Notes series; - Refer to the Forest Management webpage to search for relative info.; - Contact other Officers as part of
	internal networking for opinions, interpretations & discussion; - Discuss with external stakeholders, such as FPC Officers and
	harvesting contractors to determine interpretations are similar & check all parties share the same understanding; - Attend internal
	training sessions on implementation of the adopted procedures; Support from the FMB's inventory for maps and information.
	* Key legal & enforcement issues: - Not properly separated many functions of the FPC and the now DEC which can influence on
R19	the achievement of objectivity & impartiality in monitoring FPC activities; - Introduced a level of 'double handling' when it
K19	comes to forest management operational activities;
	- The FPC is locked into contract supply in order to meet its commercial obligations. An example is tree-marking standards.
	Interpretation of tree selection can sometimes appear to be influenced by meeting immediate product supply rather than marking
	to meet long-term timber supply requirements and SFM standards;
	- Created a difficult situation in which one department monitors another. There is an urgent need for the clarity on responsibilities.

	For example both DEC and FPC develop works manuals on practices and procedures with each organisation adhering to their own guidelines. I believe one document for each topic be produced and signed off by the Conservation Commission as the standard to be adopted by each agency. - Lack of credibility in some aspects of monitoring because we are not directly involved in actively doing the work. This point refers to assessing standards. When entering discussions with FPC staff on the issue, it quickly becomes apparent that FPC staff is more experienced; and that DEC staff are relatively inexperienced. This gives us little authority. Examples are road construction work, tree-marking, etc. * <u>Suggested solutions:</u> - A level of shared responsibility and additional training. I think DEC has not responded quickly enough to establish its EMS, and the SFM Branch's website. To some level it compromises DEC's legal standing in enforcement by way of credibility. * I have responsibility for authorising operational aspects of harvesting, inclusive of pre- and post- harvest management.
	Instruments are used such as Forest Management Plan 2004-13 (FMP), Operational guidelines developed by DEC, Environmental Impact Assessment guidelines, Post-operation Rehabilitation guidelines, Conservation Commission's audit guidelines, and liaison with specialist sections within DEC on operational aspects.
R20	* <u>Key legal & enforcement issues:</u> The FMP achieved very little with regard to the ability of DEC to have the appropriate powers to do anything other than to watch from the outside. This is particularly frustrating when you know through previous experience that operations are not being conducted in a manner that maximises return of product while minimises environmental impacts (both short & long term). Simply because the process is driven by supply and demand economics, and tied to supply contracts that are unsustainable and inadequately priced. We have no power to manage the environment. * <u>Suggested solutions:</u> Provide DEC with the legislative power to demand stringent adherence by FPC or its agents to environmentally sustainable forest harvest practices, including pre-op approvals, resource utilisation and protection. Something with legislative teeth that are needed.
	* The instruments I used such as the FMP, CALM Act, WC Act, published & draft guidelines and working arrangements, DEC policy, discussion and advice from Directors and SFM Division, discussion and negotiation with FPC staff, CALM Act cautions, WINs & MLs, etc. The FMP provided greater focus on protection of fauna, improved management of informal reserves, improved soil and water quality protection. The establishment of a CAR reserve system and reservation of the new reserves under the Government's Protecting our Old Growth Forests Policy. Improved regeneration and rehabilitation. Effective Dept structure to manage SFM. In particular, introduction of FHZs, greater focus on weed & feral animal control and integration of control
R22	programs across the landscape. Classification of, and clear management guidelines for Informal Reserves. An effective vehicle for implementing the changes required as part of the protecting our old growth forests. Improved specifications for regeneration & rehabilitation works, and greater focus on sourcing seed from local communities. Growth and development of SFM structure at a corporate and operational level. * Key legal & enforcement issues: Based on my observation and experience over the last 7 years, I see lack of the capacity to

effectively audit FPC and other agency [and DEC] activities on State Forest. To date, the funding and resource allocation to this role has not been sufficient to adequately audit all activities and then to ensure remedial actions are put in place. At an operational level, WINs, MLs, & Caution Notices have been used to date. There is no mechanism to ensure that actions documented in WINs and MLs are implemented, and that improvements are made to ensure there is no re-occurrence of non-compliant incidents. * Suggested solutions: - There needs to be some penalty associated with non compliance that will ensure swift remedial action and improvements to prevent a reoccurrence. However, this is a very difficult issue, because Governments are not interested in Govt agencies fining each other or prosecuting each other. Perhaps a sliding scale of financial penalties as a percentage of gross income from each harvesting cell for non compliance, e.g. 0.1% for very minor non-reoccurring breaches up to 15% for major breaches with a 1% loading for re-occurring breaches, plus a 1% penalty per month until the appropriate remedial action is taken. This money could go into a trust account to pay for the remedial action, should the FPC [or other agency] not address the issue. If this approach is used need to be careful that the financial penalty is greater than the cost of the work [so they don't just walk away]. - Ongoing training & development of all DEC staff [not just SFM staff] in FMP requirements and ESFM. Increased funding for operational works and to create capacity to further improve and develop SFM works methods and processes – not just cover the essentials. DEC also needs to be able to respond in a timely manner that is acceptable to the Government and the general community and appropriate for the issues that need to be addressed. * Instruments I used on a regular basis – Soils Manual, Silvicultural Guidelines, The FMP, Management Plans, and Advisory Notes. Unexpected situation – seek advice from other staff within SFM from the Director down to district colleagues. While the FMP has achieved the establishment of FHZs, accountability for soils management, it has yet achieved sustainability of log supply, due to the increase in the Reserve system, as well as accountability of FPC to conform to guidelines, soils management, and silvicultural aspects. * Key legal & enforcement issues: Lack of respect from FPC to authority & accountability, unwillingness of DEC to put FPC through wringer as it is too political to stop log supply to customers; rules are always being amended/rubberised to accommodate FPC. There is also a need for a sign off for silviculture prior to harvest, otherwise the FPC will continue to push Silvic guidelines **R30** to the bottom end for each prescription, and thus creating a non-sustainable forest. - WINs, MLs and Incident reports are the key documents for recording non-compliance, whilst they are a useful tool for recording as such, the FPC chooses to essentially ignore them or the reply is to appease the reporting system. Lack of replies to these notices over several years tells me that FPC has little regard for the process. The same noncompliant issues keep happening, suggesting that they do not wish to comply and simply carry on with their own agenda. * Suggested solutions: - Remove the tree-marking process from FPC as this is a true conflict of interest. - Have a fines system in place that is enforceable for continual non-compliance. DEC needs to have stronger enforcement powers; a fine system needs to be given some thought as there is no disincentive for FPC to mend their ways. FPC and their contractors need to be made accountable for the waste in coupe, independent audit should be undertaken to make the FPC pay for this, or have the volume removed from their PI.

Auditing Group	
R11	* Planning & administrative instruments being used such as Monitoring and Auditing of logging operations; issuing of Work improvement Notices (WINs) and Management Letters (MLs); discussing issues with coupe OIC's and contractors to try to resolve issues in a cooperative manner. * The FMP reduced the level of logging to a more sustainable level, however it failed to clarify whether DEC or FPC have the overall responsibility for forest management. This issue needs to be resolved before we can move forward. * Key legal & enforcement issues: - Legislation, once key responsibilities are sorted out; - Key performance indicators (KPIs) in the FMP; - Ministerial conditions/commitments; Environmental Specifications and Guidelines; - Non-compliance is currently addressed in either of two ways. On an informal basis where discussions are held with the contractor and FPC to resolve the issue, or on a formal basis where WINs and MLs are issued to FPC. * Suggested solutions: Currently DEC appears unable to impose any penalties on either FPC or their contractors for non-compliance with environmental specifications during logging operations. Without any meaningful penalties in place for non-compliance, there is no incentive for contractors to comply. The WA Conservation Commission needs to become more involved in the non-compliance issues.
R21	* Instruments I used are as monitoring and auditing performance to ensure application of measures; helping with interpretation of FMP requirements; and commenting on policies and guidelines developed as required in FMP. * <u>Key legal & enforcement issues:</u> - The FMP achieved the establishment of new national parks and FHZs – biodiversity protection measures; improved wet soil operating outcomes. But it did not achieve improved planning or quality of operation. Nor did it achieve outcomes as good as possible, because of industry & FPC/DEC staff disruption, loss of experience. Their roles and responsibilities still unclear from FPC/CALM split. - Legal and enforcement issues are not necessarily the most appropriate mechanism. More routine site visits and supervision from DEC would probably improve outcomes especially cooperatively undertaken with FPC. It needs clear responsibility for activities; DEC must take up its supervisory responsibilities at District/Region levels. Also, better clear dialogue between DEC and FPC is needed. These were identified by observation & talking with both DEC & FPC officers, and getting mixed messages about who is responsible for what actions. Audit findings that clearly show lack of systems and consistency between DEC Districts and Regions. * <u>Suggested solutions</u> : Recognise all shortcomings, including those within DEC and act on them. Establish the management systems – not to complex to help with consistency of application.

R27	* Planning instrument being used is the FMP that has achieved a framework for the guidelines and methodology, and guided operations so that they can be implemented in an agreed way. * <u>Key legal & enforcement issues:</u> Hygiene/demarcation, and enforcement of operational boundaries identified by observations in the field and the results from DEC and Conservation Commission assessments that require for continuous improvement. * <u>Suggested solutions:</u> Improve levels of field monitoring by both DEC and FPC. Impose penalties for non-compliance.
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