



REPORT OF THE

STANDING COMMITTEE ON ECOLOGICALLY
SUSTAINABLE DEVELOPMENT

IN RELATION TO

MANAGEMENT OF AND PLANNING
FOR THE USE OF STATE FORESTS IN WESTERN
AUSTRALIA - THE SUSTAINABILITY OF CURRENT
LOGGING PRACTICES

Presented by Hon Dr Christine Sharp MLC (Chairman)

Report 4

STANDING COMMITTEE ON ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Date first appointed:

26 June 1997

Terms of Reference:

- . A Standing Committee on Ecologically Sustainable Development is established.
- . The committee consists of 5 members.
- . The functions of the committee are to inquire into and report to the House on:
 - (a) any matter in Western Australia concerning or relating to the planning for or management, use or development of natural resources and the environment having particular regard to demographic, economic, ecological, technological and lifestyle and settlement factors and concerns; and
 - (b) any Bill or matter referred to it by the House.

Members over the time of this inquiry:

Hon Dr Christine Sharp MLC (Chairman)
Hon Murray Criddle MLC (until 29 July 1998)
Hon Dexter Davies MLC (from 12 August 1998)
Hon Norm Kelly MLC
Hon Ljiljanna Ravlich MLC
Hon Greg Smith MLC

Staff over the duration of this report:

Mr Michael Coleman (Resigned 26 February 1999), Dr Steven Churches, Mr Nigel Pratt and Ms Anne Turner: Advisory/Research Officers

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STANDING COMMITTEE ON ECOLOGICALLY SUSTAINABLE DEVELOPMENT

MANAGEMENT OF AND PLANNING FOR THE USE OF STATE FORESTS IN WESTERN AUSTRALIA - THE SUSTAINABILITY OF CURRENT LOGGING PRACTICES

This Report has a Minority Report attached.

The Report is unanimous for the most part and agreed to by all Members of the Committee:

Hon Dr Christine Sharp MLC (Chairman)
Hon Dexter Davies MLC
Hon Norm Kelly MLC
Hon Ljiljana Ravlich MLC
Hon Greg Smith MLC

Those sections agreed to by a Majority are indicated. The Majority of the Committee comprised:

Hon Dr Christine Sharp MLC (Chairman)
Hon Dexter Davies MLC
Hon Norm Kelly MLC
Hon Ljiljana Ravlich MLC

The Minority of the Committee comprised:

Hon Greg Smith MLC

The Report of the Committee is presented before the Minority Report



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SCOPE OF THIS REPORT

This Report sets out the Committee's findings in relation to one of the seven terms of reference of a broad inquiry into *Management of and Planning for the Use of State forests in Western Australia*. The term of reference considered in this report is:

- (a) the sustainability of current logging practices.

TERMS OF REFERENCE OF THE INQUIRY

The Committee established its inquiry into the management of and planning for the use of State forests on 22 July 1997, with the following terms of reference.

“That the Committee inquire into and report to the House on the management of and planning for the use of State forests in Western Australia. This inquiry will review:

- (a) the sustainability of current logging practices;
- (b) timber royalties;
- (c) the *Wood Chipping Industry Agreement Act 1969*;
- (d) the Regional Forest Agreement process;
- (e) protection of high conservation value forests;
- (f) substitution by plantation resources; and
- (g) employment opportunities and long term forest-related industry planning.”

The Committee reported on term of reference (d), the Regional Forest Agreement process, in its 2nd report, presented to the Legislative Council in August 1998. Copies of that report are available from the Legislative Council Committee Office (ph (08) 9222 7300, fax (08) 9222 7805).

The Committee intends to report its findings in relation to remaining terms of reference (b), (c), (e), (f) and (g) in due course as its work load permits.

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GLOSSARY

ACFMP	Advisory Committee on Forest Management Plans
Allowable Cut	The amount of sawlogs permitted to be harvested as recommended by the Meagher Committee in June 1993
Bridgetown/Greenbushes case	<i>Bridgetown-Greenbushes Friends of the Forest Inc & Anor v CALM and the Minister & Ors</i> (1997) 18 WAR 126
CALM	Department of Conservation and Land Management
CALM Act	<i>Conservation and Land Management Act 1984</i> (WA)
CALM Response	CALM's response to the EPA's Bulletin 912 titled <i>Report to the Hon Minister for the Environment on CALM's Compliance with Ministerial Conditions on the Forest Management Plans 1994-2003 - A Response to the Environmental Protection Authority Bulletin 912, November 1998</i>
CAR	Comprehensive, Adequate and Representative (used in relation to the reserve system under the JANIS criteria)
CRA	Comprehensive Regional Assessment
Codd Report	<i>Forest Management Plans 1994-2003 Mid-Term EPA Report on Compliance</i>
DEP	Department of Environmental Protection
EMS	Environmental Management System
EP Act	<i>Environmental Protection Act</i>
EPA	Environmental Protection Authority
EPA Compliance Report	The EPA's advice to the Minister for the Environment on the Progress and Compliance Report prepared by CALM in relation to the Forest Management Plan 1994-2003: titled " <i>Progress Report on Environmental Performance and mid-term Report on Compliance: Forest Management Plans 1994-2003</i> "
EPA Report	Advice in Relation to the development of the regional Forest Agreement in Western Australia: " <i>Progress Report on Environmental Performance and mid-term Report on Compliance: Forest Management Plans 1994-2003</i> "

ESD	Ecologically Sustainable Development
ESFM	Ecologically Sustainable Forest Management
FIF(WA)	Forest Industry Federation (Western Australia)
FMP	Forest Management Plan
FMRC	Forest Monitoring and Research Committee
FPC	Forest Production Council
FORSCHED	CALM's Harvest Prediction Model
FPS	Forest Protection Society
FMRC	Forest Monitoring and Research Committee
Hilmer Report	The Hilmer Report on National Competition Policy (1993)
IEAG	Independent Expert Advisory Group
JANIS criteria	Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests
LFC	Lands and Forests Commission
NPNCA	National Parks and Nature Conservation Authority
PCP	Public Consultation Paper <i>Towards a Regional Forest Agreement for the South West Forest Region of Western Australia - a Paper to Assist Public Consultation</i> , published by the Joint Commonwealth and Western Australian Regional Forest Agreement (RFA) Steering Committee (1998)
RAC	Resource Assessment Commission
RFA	Regional Forest Agreement
Steering Committee	Joint Commonwealth and Western Australian Regional Forest Agreement (RFA) Steering Committee
WACAP	Western Australian Chip and Pulp Co Pty Ltd
WC Act	<i>Wildlife Conservation Act 1950 (WA)</i>

CHAPTER 1

EXECUTIVE SUMMARY AND RECOMMENDATIONS

1.1 EXECUTIVE SUMMARY

The issue of whether logging practices in Western Australia are sustainable is complex. The Committee has sought to answer this question within the context of ecologically sustainable development (“ESD”) principles. ESD is a national goal, its genesis being a 1992 Strategy agreed to by the Council of Australian Governments. The majority of the Committee agreed that the strategy for WA purposes, was a commitment on the part of the Western Australian government to protect old growth and wilderness forest values on public land. Ultimately the strategy found expression in all the Australian States’ Regional Forests Agreements.

Current forest management techniques in Western Australia are the subject of much debate. A number of witnesses endorsed the concept of the multiple use forest, but believed that the current management regime failed to achieve an appropriate balance where different uses were incompatible. Others took the extreme view that harvesting of timber is destructive to the point that it can never be ecologically sustainable.

The Committee decided that before determining whether logging practices are sustainable, a definition of “sustainability” would be useful. The Committee considered three definitions. The first is the lowest threshold, that is, sustaining gross bole volume of wood fibre. The second is a higher threshold, an even and long term yield of sawlogs of a consistent quality. The third is ecologically sustainable forest management (“ESFM”), that is, sustaining the eco-system. This is a relatively new refinement of sustainability developed internationally under what is known as the Montreal Process. Self - evidently ESFM requires that not only is the wood harvest sustainable but also that water quality, flora and fauna, soil characteristics and so forth are maintained.

Of these three definitions, Western Australia has only managed to achieve the first level. The majority of the Committee agreed that overcutting has made the second severely constrained to the detriment of future generations. However, it is to be acknowledged that low volume high value uses such as fine furniture forest products may be accommodated and offer significant employment opportunities. ESFM by contrast is in its infancy and is at this time, indeterminable due to the limited scientific knowledge available about the impacts of logging.

The majority of the Committee agreed that ESFM’s two main principles of intergenerational equity and the Precautionary Principle, in combination with Australia’s response to the Montreal

Process, requires the development of complex environmental indicators. These indicators can determine whether logging practices impact upon the eco-system itself. The majority of the Committee agreed that ESFM is therefore the highest threshold of sustainability yet it cannot be evaluated at this time. The Western Australian community will appreciate its success or failure once the monitoring, first proposed by the Environmental Protection Authority (“EPA”) in 1992, is finally in place and providing adequate scientific data. Progress on monitoring the range of data has been disappointingly slow.

This report investigates whether the management of timber harvesting in areas outside the forest reserve system are managed on a sustainable yield basis and whether the method of forest management production protects a whole range of environmental values. Of the many forest types which are being managed under the Forest Management Plan 1994-2003 (“FMP”), the Committee discovered a bewildering array of estimates of sustainable yields. The Committee was conscious of a requirement to examine sustainable yields within both a quantitative and qualitative sense, that is, whether we are maintaining not only the quantity but also the quality of saw logs. This is especially pertinent in the light of evidence from conservationists and scientists that reviews of harvest levels consistently identify overcutting.

Assessments of sustainable yields under the Meagher Report, the Barnett Report, the EPA Review of the proposal for the FMP, Dr Martin Rayner of CALM and the Comprehensive Regional Assessment (“CRA”) all indicate that the current level of jarrah sawlog cut appears unsustainable in the long term.

Under the 1987 Timber Strategy the cut was to be reduced to a sustainable level over two stages, in 1990 and 1996. However, the reductions to achieve this sustainable level have not occurred. Moreover, jarrah and woodchip contracts set before required environmental assessment by the EPA took place in 1992 meant that a sustainable cut of jarrah could only be achieved by the State Government reneging these contracts. The *Conservation and Land Management Act 1984* (WA) (“CALM Act”) allows the Executive Director of CALM to enter into contracts without any reference to either the Minister or Parliament. The Government subsequently decided in 1993, not to follow this difficult option of changing the contractual commitments. For social and employment considerations, the FMP postponed the planned decrease to sustainable levels until 2003. Again this year, under the Regional Forest Agreement (“RFA”), reductions to the “Allowable Cut” (as set out in the Meagher Committee report) have been constrained by the requirements of existing contracts.

History suggests that at the time when the Allowable Cut will be re-considered, there will be pressure from industry to maintain the level of over-harvest for a further period. The government of the day will be tempted to allow this to occur, justifying the decision as a short term measure to assist the industry.

This Report is a response to an observable change in community attitudes towards forests during the last 20 years. This public interest in natural environments has led to a greater recognition of the non-economic value of forests and an increasing level of scrutiny of forest activities. Nowhere is this concern more evident than in information the Committee received about levels of waste from logging. Contractual commitments require 80% of the timber to be supplied as first grade. The majority of the Committee agreed that this bias confirms and explains the experience of the general public that extensive areas of jarrah forest are cut, the best timber removed, whilst large quantities of cut logs are left on site unused and eventually burnt.

Both conservationists and industry groups have accepted the necessity of shifting their thinking on biological resources away from a maximum yield approach towards ecologically sustainable yield. The conceptual differences between sustainable yield and ESFM must be overcome. This should give rise to a new set of relationships between conservationists and industry as they both argue for long term preservation of forests from different paradigms.

The Committee listened to the message from many witnesses that the whole issue of forest management, the future of the timber industry and the South-west is at a critical juncture. As a result of its investigations, the Committee has been confronted by very serious issues regarding the conflicts of interest inherent in the structure of CALM; its performance in achieving sustainable logging practice; and the evasion of accountability which has marked its corporate approach. Not only was the Allowable Cut for jarrah sawlogs set at an unsustainable level in 1993 because of the pressure of precipitous resource commitments, but also the Committee found, on the basis of the evidence provided by CALM, that the contracts for jarrah sawlogs since 1994 have exceeded that Allowable Cut. The Committee had great difficulty in determining this finding due to a lack of transparency in the information.

By driving its own agenda of self funded state corporatism, CALM has effectively made the hard task of resolving forest policy conflicts nearly impossible. The majority of the Committee agreed that CALM's rhetoric that it extols the virtues of ESFM has been found wanting, particularly for example, in implementing Ministerial Conditions attached to Forest Management Plans and in risking exposing the salt risk zones of the Northern and Central jarrah forest to further environmental degradation.

The Committee has also cast a critical eye over CALM's various roles in forest management, noting serious conflicts of interest between functions and responsibilities. Some credible witnesses did not perceive CALM being both conservator and regulator to be a problem, but the Committee believes that such a situation makes it inherently difficult for CALM to achieve objective decisions about forest management. Contemporary models of excellence in government advise against the combination of operational and regulatory functions in the one agency. The inevitable consequence of CALM performing both its operational and regulatory

functions means that CALM is less accountable and responsible for its actions. The Committee believes that part of the solution is to separate these functions.

The majority of the Committee agreed that throughout the course of this inquiry, the Committee has been made aware of a culture of mistrust between CALM and the general public. There is a perceived lack of consultation between CALM and various community groups. Many submissions reflected a frustration with CALM that it had not consulted or had not fulfilled an obligation to consult. This, strictly speaking, is a mistaken perception because CALM has no statutory obligation to consult with any community sectors on an ongoing basis. Once a Forest Management Plan has been approved, there is no further impediment to CALM harvesting timber and entering into contracts to sell forest products as it sees fit. CALM's consultation from that point is purely voluntary. The Committee has made suggestions to improve the relationship between CALM and community groups.

1.2 RECOMMENDATIONS

Recommendation 1: That future proposals for Forest Management Plans be prepared by a body independent from the operator of forestry, with input from the operator of forestry and other groups as appropriate.

Recommendation 2: That the process for conversion from weight to volume measurement of timber should be made transparent and accountable.

Recommendation 3: That an alternative resource allocation system which is both more equitable and less wasteful be investigated and implemented as soon as is practicable.

Recommendation 4: That a key criteria on which contracts or licences are allocated be on the basis of improved saw mill utilisation of lower grade logs and higher recovery rates.

Recommendation 5: That the allocation system improve access for small scale users of forest products.

Recommendation 6: That the silvicultural objective of logging practices should be to maintain a sustainable yield of quality sawlogs.

Recommendation 7: That the use of gross bole volume measurement not be allowed to substitute for log quality indicators which are consistent over time.

Recommendation 8: That where issues of serious or irreversible harm to the environment in situations of scientific uncertainty arise, forest managers should apply the Precautionary Principle.

Recommendation 9: That the government continue to conduct trials and research as appropriate into estimating sustainable jarrah and karri yields, to inform the findings of the proposed State Expert Panel which will determine the long-term Allowable Cut for inclusion in future Forest Management Plans.

Recommendation 10: That the proposed State Expert Panel's terms of reference and organisational arrangements should be such as to deliver a clearly independent, scientifically credible and transparent outcome.

Recommendation 11: That the proposed State Expert Panel's terms of reference and organisational arrangements be made public.

Recommendation 12: That the objectives of the model used to determine the long term sustainable yield should incorporate the principles of ecologically sustainable forest management.

Recommendation 13: That management changes be required to implement ecologically sustainable forest management before non declining yields are calculated.

Recommendation 14: That the *Conservation and Land Management Act 1984 (WA)* be amended to require forest management to be conducted on ecologically sustainable forest management principles.

Recommendation 15: That a representative range of baseline indicators as set out in the Montreal Process be established and incorporated in the regulation of forest management in Western Australia.

Recommendation 16: That an inquiry be conducted into the economic and social impacts of phasing out clearfelling of native forests, within sufficient time so as to allow for consideration of phasing out clearfelling in the new Forest Management Plan.

Recommendation 17: That the Minister adopt the recommendations of the Environmental Protection Authority in regard to the establishment of an independent Forest Systems Research Advisory Committee.

Recommendation 18: That CALM's scientific literature be publicly available and subject to peer review.

Recommendation 19: That the Codd Report recommendations be fully implemented.

Recommendation 20: That the Executive Director of CALM apply Ministerial Conditions and Policy.

Recommendation 21: That the Forest Management Plan and Ministerial Conditions be varied to set clear parameters about areas of harvestable forest and silvicultural prescriptions.

Recommendation 22: That a system of pre-logging fauna assessment be established as a matter of priority.

Recommendation 23: That in order to restore public confidence in the integrity of forest management, the government should remove CALM's current conflicting interests of conservation and resource utilisation; and bind CALM to Ministerial Conditions and management plans imposed on either it or its subcontractors.

Recommendation 24: That CALM's regulatory functions be separated from its operational function.

Recommendation 25: That CALM's officers be excluded from membership positions on the National Parks and Nature Conservation Authority and the Lands and Forest Commission.

Recommendation 26: That an independent auditor for the forest industry be established and effectively resourced.

Recommendation 27: That the government adopt a licensing system for the extraction of forest resources.

Recommendation 28: That the *Wildlife Conservation Act 1950 (WA)* be amended or replaced with legislation which binds CALM in respect of fauna.

Recommendation 29: That such legislation provide for reasonable exemptions to allow for the extraction of forest resources.

Recommendation 30: That any system of exemption from having to adhere to the *Wildlife Conservation Act 1950* (WA) be tabled in Parliament for the purposes of scrutiny.

Recommendation 31: That the government urgently review the *Conservation and Land Management Act 1984* (WA) to provide regulation of forest management under the control of the responsible Minister, and that the process of forest management be independent of involvement in the sale of forest products.

Recommendation 32: That there be a separate Minister for Conservation from the Minister responsible for the extraction of forest resources.

Recommendation 33: That advisory documents prepared by statutory bodies under the *Conservation and Land Management Act 1984* (WA) for the purpose of advising the Minister be subject to a general requirement of publication.

Recommendation 34: That ways should be investigated to improve local consultation and participation in forest management in forthcoming amendments to the *Conservation and Land Management Act 1984* (WA).

Recommendation 35: That forest management and planning take into account Aboriginal sites of significance, and enhance Aboriginal employment opportunities by considering Aboriginal conservation and land management skills and knowledge.

CHAPTER 2

PROCEDURE OF THE INQUIRY

The Committee obtained information in a number of ways for the purposes of the inquiry.

2.1 PUBLIC HEARINGS IN THE SOUTH-WEST REGION

The Committee conducted public hearings in the south-west region between 27 and 30 October 1997, at Denmark, Pemberton, Bridgetown, Manjimup and Collie. The hearings were advertised in local newspapers. At each meeting persons who wished to make a submission appeared before the Committee for around 10 to 15 minutes each, to present their views to the Committee and answer follow-up questions. A list of persons who made submissions at these hearings is set out at Appendix A.

2.2 HEARINGS IN PERTH

The Committee conducted a number of hearings in Perth with representatives of key groups and others involved in debate about management and use of forests in Western Australia. A list of persons who made submissions at these hearings is set out at Appendix B.

The Committee visited the offices being used by personnel working on the RFA in Hayman Road, Como, in order to receive a briefing on the RFA process and view the technology being used.

The Committee thanks each of the representatives and their key groups for making their time and expertise available to the Committee.

2.3 VISITS TO SITES IN THE SOUTH-WEST

In the course of the inquiry the Committee travelled twice to the south-west forest region and visited a number of sites to obtain a better understanding of forest management and the timber industry. The Committee thanks its hosts at each site for making their time, facilities and expertise available to the Committee.

The second of these trips was hosted by Mr Alan Walker, the Manager of the RFA for CALM, and included briefings from a number of CALM personnel. The Committee thanks Mr Walker for his efforts in organising the trip.

2.4 OTHER SITE VISITS

The Committee visited the Leeuwin Centre for Earth Sensing Technologies in Floreat Park and thanks Mr Adrian Allen for the provision of satellite imaging information.

2.5 PUBLIC SUBMISSIONS

The Committee sought written submissions to the inquiry through advertisements in the *West Australian* and a number of regional newspapers. A list of written submissions is set out at Appendix C.

2.6 RESEARCH

The Committee obtained information from a number of sources and is grateful to all those people who met what were often difficult requests for information.

In particular, the Committee thanks the Minister for the Environment, Dr Syd Shea and Mr Alan Walker of CALM, Dr Beth Schultz of the Conservation Council (WA), Mr Peter Robertson of the WA Forest Alliance, Mr Ron Adams of Bunnings Timber Products, the Institute of Foresters (both the WA Branch and the Southern Branch) and Mr Cam Kneen, formerly of the Forest Industry Federation (WA) (“**FIF(WA)**”) for the provision of information which might not otherwise have been available.

Throughout this Report the Committee refers to Dr Syd Shea as the "Executive Director" of CALM. Although Dr Shea resigned from CALM just prior to the tabling of the Report, references to him remain as if he were the current Executive Director.

CHAPTER 3

THE REASONS FOR THIS INQUIRY

3.1 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

This is a Report into the **sustainability of current logging practices** in the State of Western Australia. The question of sustainability in the context of forest management is a complex one, requiring consideration of biology, forestry, economics, conservation, environmental law, administrative practices and other fields. The concept of **ecologically sustainable development**, often referred to as **ESD**, provides the context for this inquiry and much other recent work on forest management, as well as the name and rationale for this Committee. By way of establishing a framework for the rest of this Report, in this chapter the Committee briefly discusses the principles of ESD.

3.1.1 National Forest Policy

The *National Forest Policy Statement* agreed by Commonwealth and State Governments in 1992 identifies three key requirements for ecologically sustainable development in relation to forest use:

- "a. maintaining the ecological processes within forests (the formation of soil, energy flows, and the carbon, nutrient and water cycles);*
- b. maintaining the biological diversity of forests; and*
- c. optimising the benefits to the community from all uses of forests within ecological constraints."*¹

Much of the impetus towards adopting ecologically sustainable development as a uniform national goal for forest management came from a 1992 Strategy agreed by the Council of Australian Governments ("COAG") and published as the *National Strategy for Ecologically Sustainable Development* ("National Strategy"). The National Strategy defines ESD as:

¹ Commonwealth of Australia (1992a), p.47

“development which aims to meet the needs of Australians today while conserving our eco-systems for the benefit of future generations.”²

3.1.2 National Strategy for ESD

ESD is, according to the National Strategy, characterised by:

- i. consideration of the wider economic, social and environmental implications of governmental and private actions;
- ii. taking a long term rather than short term view when assessing those actions;
- iii. reduction of the likelihood of serious environmental impacts;
- iv. reduction of divisive and damaging confrontations which have characterised some developments;
- v. improvements in the quality of our land, air and water; and
- vi. the development of new environmentally friendly products and processes.³

A key statement of the National Strategy for ESD insofar as forest management is concerned, is the commitment on the part of governments (including the Western Australian government) to:

“Protect old growth and wilderness forest values on public land in a comprehensive, adequate and representative reserve system by the end of 1995, supported by complementary management outside reserves, conditional on satisfactory agreement on criteria.”⁴

3.1.3 Regional Forest Agreements

Government action to fulfil this commitment has taken the form of the RFA processes in various forest regions around Australia. In Western Australia the RFA was signed on May 4 1999, the proposed 1995 timing having proved unrealistic.

² Commonwealth of Australia (1992b), p.6

³ Commonwealth of Australia (1992b), pp.6-7

⁴ Commonwealth of Australia (1992b), p.31

The RFA process has a number of other proposed outcomes as well as the conservation-oriented goal quoted above. Some of these have obvious potential to conflict with each other. The extent to which the RFA process is likely to meet each of its proposed outcomes in Western Australia has been hotly debated since the release of the Western Australian RFA Public Consultation Paper (“PCP”) in mid 1998.

This Committee reported in August 1998 on the RFA process and its likelihood of meeting its proposed outcomes. In this Report, the Committee will continue to address issues related to the RFA process insofar as they are relevant to the question of sustainability of logging practices.

A definition of ESD provided by the World Commission on Environment and Development and adopted by the Resource Assessment Commission (“RAC”) is development “...that meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁵ Similarly, the principle of “intergenerational equity” is often cited as one by which the present generation should be guided.

The concept of ecological sustainability has come to occupy a central position in Australian forest policy. For instance, the Australian Forestry Council’s first principle of forest management, adopted in the *National Forest Policy Statement*, is that:

“Legislation in each State will provide for the management of State Forests under sustainable management principles and the relationship with associated industry to ensure conservation and the protection of the environment.”⁶

3.1.4 ESD and accounting for non-financial values

One issue which recurs consistently in environmental debate is the capacity, or lack thereof, of decision making frameworks to take into account the full range of environmental values present in forested areas (or other areas for that matter). Environmentalists appear to regard decision making concerning forests to be driven by a narrow and poorly thought out economic paradigm which fails to account for non-financial values. This leads to conflict which operates both at a fundamental philosophical level (what values are important?) and a practical level (where should timber harvesting be allowed to take place?).

The ecologically sustainable development model of decision making offers a method of minimising conflict at all levels. Thus it has been adopted by governments, at least on paper, as

⁵ Resource Assessment Commission *Forest and Timber Enquiry, Final Report* (1992), p.8, in Parliamentary Papers (Commonwealth) (1992), vol.10

⁶ Australian Forestry Council, Standing Committee (1991), p.43

the central plank of Australia's environmental management framework. The National Strategy sets out the Council of Australian Governments' view of the potential of ESD:

“By developing this Strategy, we have demonstrated our belief that a co-ordinated approach to ESD is required ... The goal is development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.”⁷

One important facet of ESD is its potential to minimise conflict between stakeholders in the debate over the forests. The dissatisfaction felt by many concerned in environmental debate over the perceived failure of current decision making processes can be redressed by ESD. The National Strategy requires that:

“Governments will promote institutional and market structures that are capable of better accommodating environmental values, and will work to ensure that resource allocation mechanisms and ESD-related decision making processes facilitate effective conflict management and dispute resolution.”⁸

ESD is often promoted as an effective approach to achieve conflict resolution of “jobs versus the environment” debates. The strength of ESD is that it works to make ecology and economics compatible. The standard approach in the past has been to regard the financial and employment benefits of development as a legitimate trade-off for a resultant deterioration of the environment. Still today this trade-off is often considered to be inevitable.

ESD aims to avoid this confrontation between the environment and economic values by seeking to devise economic models which are either neutral or actually enhance environmental quality. When this can be achieved, arguments are resolved.

Compatibility is therefore two-fold: conflict between stakeholders is mediated and employment and environmental benefits can coexist.

The challenge is to develop new models of natural resource management, in this case forestry, which can deliver both goals. ESD is a far more challenging paradigm to implement than the traditional model of forest management which simply divides forests into reserves for conservation and production forests available for intensive logging.

⁷ Commonwealth of Australia (1992b), pp.6-8

⁸ Commonwealth of Australia (1992b), p.104

3.1.4.1 The utility of ESD

Dr Sharp, Chairman of this Committee, has noted in a previous publication:

“If applied with rigour and imagination E.S.D. can provide environmental protection, employment and resource availability. Everyone uses the term but who is actually making the tough decisions necessary to apply it?”⁹

However, the mere fact that the concept of ecologically sustainable management has gained such broad acceptance is encouraging. As noted by Mr Ewald Valom, Manager of the timber company Bunnings Forest Products, industry people broadly accept the necessity of achieving ecologically sustainable management: this should give some cause for optimism to conservationists and others arguing for long term preservation of the forests.

3.1.5 Legislating for all values involved in forest management

The Independent Expert Advisory Group (“**IEAG**”) review of ESFM, conducted under the auspices of Western Australia’s RFA process, proposes that ESFM should be a **legislated objective** for forest managers such as CALM, which it is not at present:

“The Government of Western Australia should amend the Conservation and Land Management Act, Mining Act 1978 and other relevant legislation for the South-West Forest Region to explicitly incorporate the two over-arching principles and the six specific principles of ecologically sustainable forest management used in the Regional Forest Agreement process.”¹⁰

The two overarching principles are: intergenerational equity; and the Precautionary Principle. The specific principles are: conservation of biological diversity; maintenance of the productive capacity of forest eco-systems; maintenance of forest eco-system health and vitality; conservation and maintenance of soil and water resources; maintenance of global carbon cycles; protection of natural and cultural heritage values; and maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies.

The IEAG concludes its summary as follows:

⁹ Sharp (1995), p.21

¹⁰ Independent Expert Advisory Group (1997), p.7

“Concluding Remarks

The expert advisory group considers that the current environment management system for the South-West Forest Region meets many of the requirements of a system to pursue ecologically sustainable forest management. The strengths of the system include a well developed system for integrated planning and implementation on a Regional basis, supplemented by individual management plans for specific areas. The predominantly top-down approach uses modern technology, research, specialist skills and professional judgment to advantage.

Deficiencies include overlapping and sometimes inconsistent Commonwealth legislation; duplication of processes due to the provisions of two overlapping pieces of State legislation and associated administrative arrangements; insufficient monitoring of outcomes of forest management to provide for continuing improvement, and gaps in legislation, policy formulation, planning and implementation concerning specific areas - notably flora and fauna legislation, biodiversity, heritage management and private forests.”¹¹

Application of ESD principles should not be thought of as incompatible with sound economic management. A thorough economic analysis of forest use will provide valuable guidance as to how decision makers can and should go about identifying “the benefits to the community” flowing from a particular course of action. A 1996 study of forest economics by the Federal Department of Environment, Sports and Territories entitled *Estimating Value* describes this process as follows:

“This process of analysis seeks the combination of uses and non-uses that most meets the value preferences of society, both now and in the future. The process is intended to be value-neutral in that it is based on the given or expected values of society - whatever those values may be.”¹²

ESFM appears to have broad acceptance as encompassing the full range of “values of society” mentioned.

¹¹ Independent Expert Advisory Group (1997), p.vii

¹² Environment, Sport and Territories, Department of (Cth) (1996), p.10

3.2 THE DEBATE ABOUT FOREST MANAGEMENT

It is an issue of consistent concern to conservationists that it is easy for a forest management agency such as Western Australia's Department of Conservation and Land Management ("CALM") to extol the virtues of ecologically sustainable management, regardless of whether the appropriate principles are actually implemented. The concern was stated by Ms Mary Frith, Biologist:

*"CALM states its support for the concept of sustained yield which is related to both rate and intensity of cut across the whole forest, but present practice is at variance with that concept."*¹³

Certainly, CALM has aggressively marketed its operations as being in accordance with ESFM. For instance, the opening statement of CALM's response in 1998 to the EPA's review of CALM operations under the FMP and associated Ministerial Conditions was as follows:

*"CALM is satisfied that on all objective measures its management of the native forests of Western Australia has been carried out in accordance with the principles of ecologically sustainable forest management."*¹⁴

Such a broad-brush assertion, however, leads to semantic difficulties for CALM where in a particular area, such as harvest levels of first and second grade jarrah sawlogs, there is general agreement (including from CALM) that harvest levels have not been sustainable. CALM's attempt to explain this anomaly in the same document is as follows:

*"Successive Governments and successive EPA reviews, by their endorsement of forest management plans, recognised that the jarrah forest was being managed sustainably but the sawlog harvest of jarrah logs at current specifications was above the level that could be sustained at those specifications. . ."*¹⁵

3.2.1 The goals of ESFM

The broadly agreed goal of achieving ESFM can be broken into a broad range of individual goals. However, as a generalisation, debate about the forests tends to focus on how successful current forest management is in three areas:

¹³ Ms Mary Frith, transcript of evidence, 29/10/1997, p.7

¹⁴ Department of Conservation and Land Management (1998b), Preface

¹⁵ Department of Conservation and Land Management (1998b), Preface

- i. first, establishing an adequate **forest reserve system** (described in the RFA process as a Comprehensive, Adequate and Representative (CAR) system), within which forest is protected from high impact activities such as timber harvesting;
- ii. secondly, managing timber harvesting in areas outside the forest reserve system (often called “production forest”) for **sustainable yield**, meaning broadly that the volume and quality of timber harvested from the forest remains constant over time; and
- iii. thirdly, managing production forest to achieve ESFM, meaning broadly that the whole range of environmental values is maintained in those forests over time despite whatever high impact activities are allowed in them.

This Report is concerned with logging practices and consequently deals with the second and third of these areas.

3.2.2 Public concern and enquiry into forest management

There can be no doubt that as a matter of observable fact, conservation matters have gained and continue to gain currency in the debate relative to resource considerations. As expressed by the RAC in 1992:

“Community attitudes towards forests have changed significantly in the last two decades. The [Commission’s] Inquiry expects that attitudes will continue to change. There is much greater public recognition of the ecological values of forests and of their potential for uses such as recreation, tourism and other non-wood purposes.

This trend has been evident worldwide and has provided a basis for resource policy in many countries. As explained in the 1970s by Krutilla and Fisher, two eminent resource economists, the average cost of production for ordinary goods and services has fallen dramatically as a result of technological progress and, in addition, many substitutes have become available. As a result, the relative value of ordinary goods and services has been declining. By contrast, the supply of natural environment is fixed or diminishing. Combined with growing community demand, the relative value of natural environments has therefore been increasing.”¹⁶

The increasing public interest in natural environments has led to an increased level of scrutiny of forest activities by government. Some witnesses such as the Forest Protection Society

¹⁶ Resource Assessment Commission *Forest and Timber Enquiry, Final Report* (1992), p.13, in Parliamentary Papers (Commonwealth (1992), vol.10

("FPS"), a pro-timber industry lobby group, regard the level of scrutiny of Western Australia's forests which has already occurred as more than adequate:

*"...it needs to be said that there have been more inquiries into the use of forests in the last 20 years than almost any other land tenure. All of these and in particular the extensive Resources Assessment Commission headed by Justice Stewart, concluded that our forests are being managed on a sustainable basis."*¹⁷

Other witnesses welcomed this inquiry, such as Mr Peter Robertson of the WA Forest Alliance, who signalled the importance from a conservation viewpoint of there being a non-government review of forest management:

*"There is no doubt that the whole issue of forests, forest management, the future of the timber industry and the south west is at a very critical juncture. A number of processes are taking place, one of which is the Regional Forest Agreement, and there are many others. There is increasing concern in the south west about old growth forests - what is being lost, at what cost and who is benefiting. Those issues are very current and there is an increasing mood of support for major change throughout the south west."*¹⁸

3.2.3 Policy on the mix of uses for forests

A useful framework for the debate about finding the appropriate mix of uses for Western Australia's forests is provided by the *National Forest Policy Statement*. The governments agreed in the *National Forest Policy Statement* that:

*"...they will manage for the conservation of all species of Australia's indigenous forest fauna and flora throughout those species' ranges, and they will maintain the native forest cover where a reduction in this cover would compromise regional conservation objectives, consistent with ecologically sustainable management."*¹⁹

The Committee's survey of literature and policy in the area suggests that in principle, this formulation of what amounts to a minimum level of protection is accepted by all interested parties. The FPS put its view as follows:

¹⁷ FPS, Submission No.13

¹⁸ Mr Peter Robertson, transcript of evidence, 10/9/1997, p.1

¹⁹ Commonwealth of Australia (1992a), p.8

*“Logging for timber production in State forests takes place within the framework of a State government endorsed management plan which provides for the sustained production of a range of values such as wildlife, water, recreation and honey. Where timber production conflicts with the sustained production of these other values, timber production is either excluded or greatly modified. Such a system allows the various values that the community seeks from State forests to be delivered in a sustainable way but it does require a degree of tolerance and willingness to share the forest with other users.”*²⁰

The political dimension of decisions relating to forest management has led to a polarised debate which has been characterised as follows by Dr Sharp, Chairman of this Committee, in a previous publication:

*“On the one hand the conservationists continually assert that the industry are “destroying the forests.” This is not strictly true and naturally makes the timber people feel angry when they know that logging is always followed by regeneration. On the other hand the foresters/industry claim that they are a shining model of sustainable development when in fact the model being followed is [a] pattern of forest depletion...”*²¹

3.2.4 Views of the timber industry and the conservation movement

The Committee attempted to encapsulate the often complex positions held by various proponents in the debate. Typical views of those involved in the forestry industry and the conservation movement are represented as follows:

3.2.4.1 The view of the native timber industry

The native timber industry would take the view that once a minimum level of protection has been afforded to native flora and fauna by a reserve system, all forest outside that reserve system should be available for timber harvesting, subject to safeguards such as preventing soil erosion, protecting some habitat, a requirement to regenerate and so on.

A number of submissions endorsed this view, such as that of AA Lewis, Perth resident:

“Logging of “old growth” forest is said to be unsustainable because it leads to the destruction of old growth forest. This argument is flawed (i) because old growth forests

²⁰ FPS, Submission No.13

²¹ Sharp (1995), p.19

are retained in reserves and other retention areas and (ii) because old growth values return as regrowth forests mature.”²²

People working in forestry industries have a generally positive attitude to the concept of sustainability and an attachment in the long term to retaining forest for use in a number of ways. Mr Ewald Valom, Manager Bunnings Forest Products, describes the attitude of the people in Manjimup as follows:

“The people of Manjimup Shire have a strong tie to the forest. In economic terms, it is a basis for our jobs, and much of the economic activity and development of the region has come from the forest. We have a very strong tie to the forest not only economically, but also socially and culturally. We live here, we love it here and we are strongly attached to the forest in which we live. However, that is not necessarily in a static sense; it is a dynamic sense in the realisation that all the values of the forest must be protected and managed, whether they be environmental or scenic values. We agree, and have agreed for years, that the forest must be managed sustainably. If it were not, the people of this shire would be the first to question that activity.”²³

3.2.4.2 The view of the conservation movement

The conservation movement argued that the *National Forest Policy Statement* and good management for multiple use impose more rigorous requirements. All native forest constitutes part of at least some species’ ranges, by definition. Therefore, any reduction in forest cover compromises the *National Forest Policy Statement* agreement that governments “...will manage for the conservation of all species of Australia’s indigenous forest fauna and flora throughout those species’ ranges”. In some circumstances the loss may be justified by the demand for resource, but all possible measures should be taken to allow such loss to occur only where there is a demonstrated need to harvest an area for the promotion of values which cannot be met by non-native forest resources, such as plantations.

Mr Peter Robertson of the WA Forest Alliance focused on old growth forests as being of particular importance because they are irreplaceable:

“Fundamental to the whole issue is old growth forests. We believe that our old growth forests are an irreplaceable resource or asset. In its major study six years ago, the Resources Assessment Commission found that old growth forests are an irreplaceable asset or resource and that they cannot be regrown after clearfelling. It is apparent now

²² AA Lewis, submission No. 3

²³ Mr Ewald Valom, transcript of evidence, 28/10/1997, p.5

that what is left of our old growth forests is worth far more to us and will continue to be worth more as time goes by than it ever will be if used for the production of timber and woodchips, which is the current major use. Fundamental to our concerns and what we consider to be the dead-end nature of what is happening in the south west is the ongoing loss and disturbance of old growth forests. Many other things arise from that, but that is the fundamental issue.”²⁴

There is a widespread perception within the timber industry that the conservationists’ ultimate aim is to close the timber industry altogether, but according to Dr Beth Schultz of the Conservation Council of WA that is not the case:

“Conceptually, we are coming from the position that we do not want any of our remaining old growth forest to be logged. There are areas of non-old growth forest, particularly jarrah forest, on which a genuinely sustainable jarrah industry could be based. On top of that there is the post clear fell regrowth karri which could also have a genuinely sustainable timber industry. Of course, there is the very large and increasingly important plantation resource which should be the basic resource for the timber industry in Western Australia. These are three areas in which there is the possibility of a genuinely sustainable timber industry both in native forest and plantations.”²⁵

3.2.4.3 Submission critical of present forest management

A number of submissions focused on logging of particular areas as symptomatic of the problems occurring in forest management, as in the following comment by Mr Brian Young, resident of Manjimup:

“The southern region of Bridgetown shire is part of the CALM Southern Forest logging area. As mentioned, the Kingston forest and the contiguous forests occupy this region. Part of that is the Wannup Forest, which is listed in the Interim Heritage Commission for its values. It also is rich in endangered or threatened species.

Yet CALM is at present roading with the intention of logging this area of heritage listing. For this to be taking place when timber products are difficult to sell, housing demand is depressed, viable alternative materials exist, timber mills are closing and employees being dismissed is a disgrace. Effectively, the Shire of Bridgetown is losing an asset which will carry it into the future (tourism, intrinsic public value) whilst being

²⁴ Mr Peter Robertson, transcript of evidence, 10/9/1997, p.1

²⁵ Dr Beth Schultz, transcript of evidence, 10/9/1997, p.7

looted for minimal gain to society - in that royalties are low, yield from the area is low and the material (mostly wood chip stock) is used in a low employment, export business for which alternatives also exist.”²⁶

3.2.5 Vision of the National Forest Policy Statement

To place the inquiry and the conflicting views outlined above in context, the over-arching vision intended to shape forest management in Australia was expressed in the *National Forest Policy Statement* as follows:²⁷

“The Vision

The [Federal and State] Governments share a vision of ecologically sustainable management of sustainable forests. This vision has a number of important characteristics:

- *The unique character of the Australian forested landscape and the integrity and biological diversity of its associated environment is retained.*
- *The total area of forest is increased.*
- *There is a “holistic” approach to managing forests for all their values and uses so as to optimise benefits to the community.*
- *Private forests are managed in an ecologically sustainable manner and in close co-operation with public forest managers, to complement the conservation and commercial objectives of public forest.*
- *A range of sustainable forest-based industries, founded on excellence and innovation, will be expanding to contribute further to regional and national economic and employment growth.*
- *Forests and their resources are used in an efficient, environmentally sensitive and sustainable manner.*
- *Forest management is effective and responsive to the community.*

²⁶ Mr Brian Young, Submission No.54

²⁷ Commonwealth of Australia (1992a), p.3

- *The Australian community will have a sound understanding of the values of forests and sustainable forest management, and will participate in decision making processes relating to forest use and management.”*

The challenge for Western Australia is to implement this vision.

3.3 APPROACH OF THE COMMITTEE

Although the terms of reference of this inquiry are fairly self-explanatory, the Committee wishes to make one point about its approach to the inquiry. The forest debate, to which the Committee has been a witness over the course of the inquiry, is characterised by a high degree of conflict and mistrust. All sides see themselves as in some way under siege and because of this are reluctant to give any ground or consider the position of others interested in the issues. The Committee regards it as a high priority to find solutions which will take some heat out of the debate.

This means that the Committee’s findings tend in some cases towards promotion of community involvement, inclusive forest management, education, better communication, a legal regime which allows for community involvement, and accountable administrative practices, rather than being restricted to forest management *per se*. The sciences of forestry and conservation have an essential role in promoting good outcomes in forest management, but it also needs to be recognised that forest management is not just a science but an issue in which the Western Australian community has a substantial and legitimate interest.

3.4 COMMITTEE FINDINGS

The Committee finds that:

1. the Western Australian community has a role in ESFM and that this role be better reflected in the future administrative and legal apparatus for forest management.

CHAPTER 4

SUSTAINABILITY OF CURRENT LOGGING PRACTICES

4.1 INTRODUCTION

To set the discussion of sustainable logging practices in context, the *National Forest Policy Statement* states that:

*“The Governments recognise that integrated harvesting of sawlogs and pulplogs is an important use of native forests and that it can be done in an ecologically sustainable manner.”*²⁸

The same document also emphasises the importance of treating forest industries in the context of conservation goals:

“The State Governments will determine the amount of wood available from public forests for sale to industry, taking account of the following:

- a. decisions on the nature conservation and wilderness reserve system;*
- b. protection of ecological processes;*
- c. requirements for other forest uses, such as water catchment protection, flora and fauna conservation, recreation, and tourism development;*
- d. codes of forest practice.”*²⁹

These quotes illustrate the general hope Australian Governments have of reconciling timber production/logging demands and conservation demands on forests.

²⁸ Commonwealth of Australia (1992a), p.16

²⁹ Commonwealth of Australia (1992a), p.16

4.1.1 “Logging” not to be used as a restriction on the range of enquiry

Before commencing discussion of this term of reference, the Committee notes that one of a number of helpful points made to the inquiry by the Southern Branch of the Institute of Foresters of Australia (WA) is that use of the term “logging” in the Committee’s terms of reference could narrow the inquiry in an unintended way:

“In the context of the current inquiry into forest management, the term ‘logging’, which refers directly to tree felling and log removal from a forest stand would be better referred to as timber harvesting and regeneration. The latter term more aptly describes the complex sequence of planning, environmental management, regeneration operations, and fire protection that are an essential adjunct to harvesting operations in native forests.”³⁰

The Committee agrees with this comment. In fact the approach suggested essentially accords with the approach the Committee has taken to this term of reference. The Committee’s inquiry has reviewed not only logging but also the other aspects of forest management to which the Southern Branch refers, while retaining a particular focus on logging because of the intense public interest in decisions relating to the actual harvesting of trees.

4.1.2 Views on present logging and forest management practices

It is a truism to note that current forest management techniques in Western Australia are the subject of much debate. The Forest Industries Federation (WA) was of the view that criticism of forest management is not warranted:

“Forest Industries Federation (WA) is convinced that current forest management and forest industry operations in WA are responsible, are based on the best science currently available, and are not leading to a loss of forest or a decline in forest values.”³¹

A number of witnesses, such as apiarists K, D and M Spurge, endorse the concept of the multiple use forest, but believed that the current management regime failed to achieve an appropriate balance where different uses were incompatible:

“The so-called “multiple-use forest” is inapplicable to forestry and beekeeping in the context of clearfelling and intensive logging - they are mutually exclusive. We believe

³⁰ Southern Branch of the Institute of Foresters of Australia, Submission No.25

³¹ Forest Industries Federation (WA), Submission No.16.

that the current system has resulted in a forest that is not a multiple-use forest but one that is almost exclusively for the timber industry.”³²

Some witnesses such as Mr John Vukovich, resident of Bunbury took the extreme view that harvesting of timber is destructive to the point that it can never be ecologically sustainable:

“Current logging practices in W.A. are not even sustainable for timber production as is evidenced by the greatly reduced availability of mature large-section jarrah or blackbutt. Another factor is the spread of dieback diseases in the forests resulting from logging operations, and from prescribed burning. Logging operations are also to blame for the increase in other forest diseases such as armillaria and cankers as well as salination, waterlogging and erosion. These are only some of the factors which degrade a forest after logging and which make the difference between a virgin and regrowth forest. Any forest which is logged is permanently degraded so logging is obviously unsustainable.”³³

Perhaps surprisingly, the RAC in its 1992 assessment of Western Australia’s forests added some weight to this view, although it referred only to logging of old growth forests. The Commission concluded that:

“...logging old growth forests potentially violates the Precautionary Principle of sustainable development in that an irreplaceable resource is being destroyed.”³⁴

4.2 FOREST TYPES IN THE SOUTH-WEST

All discussion of the South-West forests is complicated by the fact that there are a large number of forest types in the South-West. As part of the RFA, the Joint Federal/State Steering Committee (“**Steering Committee**”) produced a CRA of the RFA Region. The CRA describes 26 eco-system types in the RFA Region, of which 19 are classed as forest types.

However, for management purposes, forest types are usually divided into two main types, the karri forest and the jarrah forest. From a resource point of view they are treated as different forest types yielding different products. They have, therefore, different management prescriptions. A brief review of the two forest types follows.

³² K, D and M Spurge, Submission No.20

³³ Mr John Vukovich, Submission No.19

³⁴ Resource Assessment Commission (1992), p.xxxvi, Parliamentary Papers (Commonwealth) (1992) vol.10

4.2.1 Karri forest (*Eucalyptus diversicolor*)

Karri forest occurs often as pure karri and otherwise together with marri (*Corymbia calophylla*) and other trees. Its principal range is in the extreme south-west, south of a line from Nannup in the north-west through Manjimup to the Frankland River in the south-east. It extends further eastwards to Denmark, Torbay and Albany, but in this area it is confined to within 15-20 km of the coast. Outlying areas occur at Karridale and the Porongurup Range, with smaller outliers at Yallingup, Margaret River, Black Point, Rocky Gully and Mt Manypeaks.³⁵

Since 1967 clearfelling has been the principal method of harvesting karri forest, for silvicultural reasons and for economic efficiencies. The practice of thinning regrowth stands has been adopted for similar reasons. Karri grows back quickly: CALM research indicates that overall, forest canopy density in regrowth karri forest reaches the same value as unlogged forest within 5 years of logging. Overstorey canopy reaches the unlogged value in 10 years. However, other values such as biomass, species abundance and cover do not recover within these time frames.³⁶

Harvesting of karri forest produces chiplogs suitable for use in paper pulp production, sawlogs for use in construction and some higher value uses, and thinnings for use in paper pulp or chipboard manufacture. It also produces marri sawlogs, generally of lower grade, and marri chiplogs for production of paper pulp.³⁷

4.2.2 Jarrah forest (*Eucalyptus marginata*)

Jarrah forest consists chiefly of jarrah with some marri, wandoo (*Eucalyptus wandoo*) or sheoak (*Casurina spp.*) trees, although in areas which have been previously harvested for jarrah the proportion of marri can be greatly increased. Jarrah forest occurs in a band about 60 kilometres wide from Gingin in the North to Albany in the south. The height and density of jarrah declines from west to east as a consequence of diminishing rainfall. East of the 900 mm rainfall isohyet the jarrah forest gradually gives way to wandoo and flooded gum forest on the plains, with jarrah and marri on the ridges.³⁸

Jarrah does not regenerate as quickly as karri. Forest canopy density in regrowth jarrah forest takes about 20 years after logging to reach the same value as unlogged forest. As with karri,

³⁵ Commonwealth of Australia (1995), p.17

³⁶ Department of Conservation and Land Management (1992a), p.37

³⁷ Department of Conservation and Land Management (1993), pp.35-36

³⁸ Commonwealth of Australia (1995), p.17

biomass, species abundance and other values associated with mature forest take much longer than this to recover from harvesting.

Jarrah logs have traditionally been used principally for construction. As the construction market moves towards reliance on softwood from pine plantations in Western Australia and elsewhere, jarrah is likely to become used more for higher value purposes such as furniture. Jarrah is not suitable for production of paper pulp with current technologies. Some jarrah unsuitable for logging is used as feedstock for Simcoa's silicon works, and to a small degree by craft industries.

4.2.3 Other forest types

Other forest types recognised by CALM in the south-west are yarri/ WA blackbutt (*Eucalyptus patens*), pure marri, wandoo, tuart (*Eucalyptus gomphocephala*) and tingles (red: *Eucalyptus jacksonii*, yellow: *Eucalyptus guilfoylei* and rates: *Eucalyptus brevistylis*), often occurring with jarrah and karri. These forest types occur over relatively small areas and are in most cases reasonably well protected in formal or informal reserves.³⁹

Non-forest eco-systems and forest eco-systems which do not fall within the predominant jarrah or karri types require significantly different management to the predominant types.

4.3 FMP AND HARVESTING ISSUES

In this section the Committee discusses the extent to which the FMP, currently the key document governing logging practices in the State, is consistent with sustainable logging practices.

4.3.1 Key points from the FMP

The key document governing use of Western Australia's south-west forests is the FMP, prepared by CALM in 1992 and 1993 and approved by the then Minister for the Environment, the Hon Kevin Minson MLA.

The FMP was a proposal by CALM, as proponent under s.45 of the *Environmental Protection Act* ("*EP Act*"), to set out its timber harvesting strategy (a variation on its 1987 Timber Strategy). Such a proposal required the approval of the Minister for the Environment, who gave approval subject to 18 Ministerial Conditions setting parameters and accountability standards for timber harvesting. The CALM proposal (the FMP) was a plan involving land use, and as it would have a significant effect on the environment, it required referral to the EPA under Part IV of the *EP Act*, and was placed on public record. The Minister then had power to sanction the proposal,

³⁹ Commonwealth of Australia (1995), pp.18-19

subject to conditions, breach of which conditions by a proponent would result in the commission of serious offences: s.47(3) and Schedule 1 of the *EP Act*. Ministerial Conditions are discussed in Chapter Six.

The FMP sets out in broad terms the maximum annual tonnage of jarrah, marri and karri which may be taken from the south-west forests. The FMP adopts the following overall objective for the management of native forest in Western Australia:

*“To manage the native forests of the south-west of Western Australia, in consultation with the community, so that they provide the values required by society while sustaining indefinitely their biological and social diversity.”*⁴⁰

The Committee notes that under the FMP, CALM’s timber harvesting prescription is based on the premise that all land outside the conservation reserve system is available to be utilised for timber. As CALM puts it:

*“The balance of forest allocated to productive and conservation priority use is now such that if new conservation reserve proposals are accepted they can only be implemented by an exchange with existing conservation reserves or a reduction in the sustainable timber yields.”*⁴¹

The Western Australian Government has agreed to implement the national objective for conservation in production forest, set out in the *National Forest Policy Statement*:

“To ensure that nature conservation objectives are met in forests, the management of public native forests outside the reserve system will complement the objectives of nature conservation reserve management. Forest management agencies will continue to assess forest areas for the purpose of developing strategic management plans and, where necessary, operational harvesting plans. As a consequence of these forest assessments, areas that have important biological, cultural, archaeological, geological, recreational and landscape values will continue to be set aside and protected from harvesting operations or managed during operations so as to safeguard those values.

Accordingly, and in keeping with the ‘Precautionary Principle’, the State Governments will undertake continuing research and long term monitoring so that adverse impacts

⁴⁰ Department of Conservation and Land Management (1993), p.1

⁴¹ Department of Conservation and Land Management (1993), p.14

that may arise can be detected and redressed through revised codes of practice and management plans."⁴²

4.3.1.1 FMP: Figures for maximum annual yield of timber

The Committee considers the recent history of the Allowable Cut warrants detailed examination. The Committee acknowledges that the figures set out in this section have been subsequently altered by the RFA of May 4 1999.

The FMP will be referred to on a number of points in this Report. At this stage, to explain the context which has given rise to much of the dispute about forest management heard by the Committee, it is worth setting out the key figures from the FMP relating to the maximum annual yield of timber. These determine that the maximum yield of timber for the ten years from 1994 to 2003 would be as follows⁴³:

Karri	first grade sawlogs	214,000m ³ /yr
	other logs	203,000m ³ /yr
Marri	(mostly chiplog)	559,000m ³ /yr
Jarrah	1st & 2nd grade sawlogs	490,000m ³ /yr
	gross bole volume increment per annum	1,360,000m ³ /yr

Looking in more detail at **jarrah harvest by area**, according to CALM's 1996-97 Annual Report, in 1996 22,320 ha of jarrah forest was harvested. Of this area, 1,900 was thinned, 14,780 was for the "release" or "establishment" of regeneration and 3,600 ha was single tree selection or selective felling and "other" was 2,040 hectares.⁴⁴

⁴² Commonwealth of Australia (1992a), p.12

⁴³ Department of Conservation and Land Management (1993), p.35

⁴⁴ Department of Conservation and Land Management (1997), p.15

4.3.1.2 Jarrah harvest by volume

Turning to jarrah harvest by volume, CALM gave the Committee the following breakdown of jarrah sawlogs harvested in 1996/97.⁴⁵

1996/97 Jarrah Sawlog Production from Crown land	
Product type	m³
high grade feature log	505
premium grade sawlog	2,983
first grade sawlog	381,964
bole log	4,216
second grade sawlog	67,984
third grade sawlog	7,731
small sawlog	628
short sawlog	53
low grade feature log	693
Total	466,757

4.3.1.3 Karri harvest by area

Looking at karri harvest by area, according to CALM's 1996-97 Annual Report, in 1996 1,300 ha of karri forest was clearfelled or cut to seed trees and 60 ha were thinned.⁴⁶

An interesting point made to the Committee by Mr Alan Walker of CALM was that to achieve CALM's targeted quota for karri sawlogs, a greater area of karri/marri forest has been felled in recent times because of the unavailability of certain high-yield areas for production. Two factors were said to contribute to this: firstly, the Deferred Forest Agreement, under which certain areas of karri in the Southern Forest Region were unavailable for production pending completion of the RFA process; and secondly, litigation over logging which led CALM to agree not to log particular blocks pending finalisation of legal action. According to Dr Shea:

⁴⁵ Dr Syd Shea, Responses to Standing Committee questions following the field trip to South-West forests (Attachment to letter to the Committee, 17/3/1998)

⁴⁶ Department of Conservation and Land Management (1997), p.75

“Deferred Forest Areas (DFA) and those subject to litigation invariably contain high volume stands, particularly of karri sawlog. This accords with the criteria by which they have been chosen as DFA. If selected coupes from DFA areas were able to be included in 1997 and 1998 Harvest Plans, it is estimated that about 400 less hectares of karri and mixed karri/jarrah stands (6 coupes) and 200 less hectares of jarrah forest (5 coupes) would have been included in logging plans for each of the two years. This is in the context of the 1998 Harvest Plan for the Southern Forest Region which comprises 93 coupes and 4400 hectares of total coupe area.”⁴⁷

CALM stated that because it had negotiated supply agreements with buyers prior to these restrictions on production forest arising, it was not able to consider lowering the harvest level to account for the diminution in available production forest. Contracts for the sale of log timber to timber purchasers, viewed by the Committee, do not allow the Executive Director of CALM to lower the amount of timber under any circumstances. As some witnesses noted, it is questionable whether such lack of flexibility is appropriate in conducting a primary produce business such as forestry, where so many variables can foreseeably affect the amount of resource available for sale.

4.3.2 Three reports prior to the FMP

In the course of preparation of the FMP three significant reports were undertaken:

- i. a review of CALM’s initial proposal to amend the FMP by the EPA pursuant to its statutory powers under the *EP Act*;
- ii. the **Barnett Report**, prepared by Mr Tos Barnett appointed by the Minister for the Environment as Appeals Committee, to hear appeals brought under the *EP Act* concerning the EPA’s approval of the Plan; and
- iii. the **Meagher Report**, prepared by a Committee headed by Mr Kevin Meagher commissioned by the Minister for the Environment following the Minister’s approval of the Plan, to investigate certain matters which had not been resolved to the Minister’s satisfaction during the Plan’s preparation.

Among other things, the 3 reports illustrated the substantial disparities between various estimates of sustainable yield of **first and second grade jarrah sawlog**. They are discussed in the following sections.

⁴⁷ Dr Syd Shea, Responses to Standing Committee questions following the field trip to South-West forests (Attachment to letter to the Committee, 17/2/1998)

4.3.3 The EPA review

The 1987 Timber Strategy, the strategic document at the time of CALM's proposal, suggested lowering the annual cut of **first and second grade jarrah sawlog** to 461,000m³ then 345,000 m³ before the year 2000. Eventually the supply of this quality log would fall to 105,000m³/yr in the period 2031-2040, when the Strategy assumes an additional supply of smaller regrowth logs of 140,000m³ becomes available.⁴⁸

CALM's initial proposal to amend harvesting levels in the proposed FMP was to increase the harvest to **675,000m³/yr**. The EPA reviewed the proposed FMP in its Bulletin 652.

The EPA summarised CALM's arguments for advocating this course as follows:

“As a consequence of re-evaluation of the jarrah forest inventory and the adoption of new definitions of acceptable grades for saw logs, CALM now proposes to maintain the 1992 levels of 1st grade sawlogs to the year 2002 and beyond, in perpetuity.”⁴⁹

In evaluating the ecological sustainability of this approach the EPA claimed that it was hindered by a lack of information and the difficulty of comparing the 1987 and 1992 proposals (principally because CALM used different scales of measurement in 1992 to those used in 1987). Nevertheless, the EPA accepted CALM's proposal. It did so with some reluctance, citing uncertainty as to:

- a. the salinity response of the catchments to the management and silvicultural prescription;
- b. the effect of the salinity response on water resources and aquatic species;
- c. the localised faunal impacts of the management and silvicultural prescription;
- d. dieback interaction with intensive harvesting; and
- e. the long term community acceptability of a significantly restructured forest.⁵⁰

⁴⁸ Timber Production in WA (CALM 1987), pp 42 and 49

⁴⁹ Environmental Protection Authority(1992) *Report and Recommendations of the Environmental Protection Authority: Proposals to amend the 1987 Forest Management Plans and Timber Strategy and proposals to meet Environmental Conditions on the Regional Plans and the WACAP ERMP*, Bulletin 652, p.ii.

⁵⁰ Environmental Protection Authority (1992) Bulletin 652, p.33

4.3.3.1 EPA conclusion

The EPA's conclusion was as follows:

“The Environmental Protection Authority has noted that CALM's silvicultural prescriptions for the jarrah forest have been developed with incomplete knowledge of their long term consequences; and therefore concludes that the proposals to amend the 1987 Timber Strategy should be implemented cautiously. The Authority recommends that the annual sustainable yield estimates in the Timber Strategy should only be applied for the life of the Strategy [that is, until 2003].”⁵¹

4.3.4 The Barnett Report

Following the Report and Recommendations of the EPA on the CALM proposal, the Minister for the Environment appointed an Appeals Committee to examine appeals submitted in relation to the Report. Mr Tos Barnett constituted the Appeals Committee, and the Report of the Appeals Committee is referred to as the Barnett Report.

The Barnett Report rejected CALM's argument in support of increasing the jarrah saw log cut to 675,000m³/yr, concluding that the figures in CALM's 1987 Timber Strategy remained appropriate in 1992. The key recommendation of the Barnett Report was that:

“The EPA concerns about a possible increase in the allowable sustainable level of cut in State forest should be made more specific by imposing a condition that there must be no increase in the level of cutting in the State forest beyond the level approved in the 1987 strategy.”⁵²

Other significant recommendations of the Barnett Report were that:

- i. all streams should be linked by forest habitat corridors at least 70 to 100 metres wide across the saddles between them, to create a network of old growth wildlife habitat;⁵³
- ii. all or part of Hester Block should be reserved or managed on a 200-300 year rotation;⁵⁴

⁵¹ Environmental Protection Authority (1992) Bulletin 652, p.33

⁵² Department of Conservation and Land Management (1987)

⁵³ Barnett (1992), p.iv

⁵⁴ Barnett (1992), p.v

- iii. the minimum width of stream reserves should be 60 rather than 40 metres; and⁵⁵
- iv. in second order catchments in the intermediate and low rainfall areas in jarrah forests at least 30% of the catchment area must be permanently reserved, as opposed to EPA recommendation 10, that this area be reserved for only 15 years after harvesting.⁵⁶

The Barnett Report recommendations were not put into place by the Minister.

4.3.4.1 CALM on response to the Barnett Report

CALM commented on the Barnett Report in its own response to the EPA's 1998 *Progress Report on Environmental Performance and mid-term Report on Compliance: Forest Management Plans 1994-2003* ("**EPA Compliance Report**"), suggesting that in 1992, in relation to the preparation of the Ministerial Conditions attaching to the FMP:

*"There were also difficulties created by the fact that it was difficult to reconcile some of the recommendations of the Barnett Committee . . . with realistic forest management."*⁵⁷

4.3.5 The Meagher Report

The Meagher Committee was established in fulfilment of Ministerial Condition 2 attached to the Minister's approval of CALM's Forest Management Plan for 1994-2003. The Meagher Committee in its report described its functions as follows:

*"...the major responsibility of the Committee was to evaluate the long-term yield of jarrah sawlogs, together with an appropriate level of harvest of sawlogs for the next 10 years and the adequacy of conservation reserves associated with the jarrah/marri forest. The same process was applied to the karri/marri forest."*⁵⁸

⁵⁵ Barnett (1992), p.v

⁵⁶ Barnett (1992), p.vi

⁵⁷ Department of Conservation and Land Management, *Report to the Hon Minister for the Environment on CALM's compliance with Ministerial Conditions on the Forest Management Plans 1994-2003, A Response to the Environmental Protection Authority Bulletin 912*, November (1998), p.13

⁵⁸ Meagher (1993), p.1

The Meagher Committee did not, despite the reference to evaluation of the adequacy of conservation reserves in the above summary of its functions, attempt any analysis of conservation reserve issues.

4.3.5.1 Harvest limits on jarrah sawlog

The main area of contention under the Meagher Report concerned first and second grade jarrah sawlog harvest limits. The extreme disparities between the jarrah first and second grade jarrah sawlog harvest estimates presented to the Meagher Report are illustrated by the following series of estimates detailed in that report.

Each of the estimates was based on a figure which was generally accepted throughout the process for **gross jarrah increment** of 1,360,000m³/yr. The Committee has seen the document *Application of Modern Inventory Techniques in the Forests of Western Australia*, a report on the methods by which this figure was arrived at in the first comprehensive jarrah resource inventory since the 1964 - 1971 review. The Committee has also spoken to Dr Martin Rayner of CALM on this issue. The scientific expertise contributing to the inventory is impressive.

4.3.6 The range of estimates of sustainable yield

- i. there was CALM's initial proposal, set out in its draft Forest Strategy presented to the Minister as a proposal for the FMP in 1992. CALM proposed that of the 1,360,000 m³/yr gross jarrah volume increment, about 50% would be recoverable as first or second grade sawlog, leading to a first and second grade jarrah sawlog production level of **675,000m³**.

This figure was not seriously considered by any of the Barnett Committee, the Meagher Committee or the Minister in making the final determination, largely because the projected 50% recovery rate is unachievable over the forest as a whole. A recovery rate of between 33% and 36% was accepted by Meagher and the Minister. CALM itself appears not to have placed great store in this first estimate, lowering it considerably once it was challenged, as can be seen from the figures below.

- ii. there was a report commissioned by Barnett from Turner and Wood, two Canberra-based foresters who confirmed CALM's arguments that a greater volume of timber was available than predicted in 1987 but did not support CALM's claims of 50% recovery:

"CALM's 1987 projections...projected a generally decreasing supply of sawlogs from the jarrah forests, from 523,000 m³ in 1992-1995 to 239,000 m³ in about 2030. The proposed sustainable yield is a constant 1,360,000 m³ of

jarrah and 469,000 m³ of marri. Further differences are due to somewhat different definitions of sawlogs and increased utilisation of bole volume resulting in significant increases in the quantity of lower grade logs. (We note that estimated supply of first grade logs for 1992 - 1995 was previously 400,000 m³ and the proposed sustainable yield of first grade logs is **459,000 m³**).

The differences noted above reflect the substantially higher sawlog volumes estimated in the recent inventory (57.2 million m³) (CALM 1992) compared with the 18.25 million m³ estimated in the previous inventory (CALM 1987).⁵⁹

- iii. CALM information provided to the Meagher Committee set out a much lower figure than was eventually endorsed by that Committee. As the Meagher Report described it:

*“CALM has developed a scheduling model which estimates long term sawlog yield by applying a range of operational and silvicultural schedules on 33 different forest strata. This scheduling model, which assumes that the current log utilisation standards and the forest management proposals in the 1992 Forest Management Review apply, predicts that the long term sustainable yield of jarrah sawlogs is approximately **300,000 cubic metres/year**.⁶⁰*

- iv. CALM made a formal submission to the Meagher Committee as follows:

*“A sawlog (1st plus 2nd grade) harvest of between 450,000m³ and 550,000m³ would result in a removal of 1.36 million to 1.5 million m³ of total bole volume increment, assuming that the proportion of total bole volume utilised varied between 33-36%. The harvest level over a 10-year planning period of between 450,000m³ and 550,000m³ would not adversely affect the long term sustainable total bole volume increment levels of the forest. The proportion of forest with significant “old growth” structural elements would exceed 60% in the year 2100 if an annual harvest level of **500,000m³ for 10 years, followed by a harvest level of 300,000m³ to the year 2100 was applied.**”⁶¹*

⁵⁹ Turner and Wood, *Review of the New Jarrah Inventory System and Associated Timber Estimation Procedures*, (1993) as quoted in the Barnett Report, p.8

⁶⁰ CALM submission to Meagher Committee, Appendix 4, p.4

⁶¹ CALM submission to Meagher Committee, Appendix 4, p.4

- v. the Meagher Committee considered an alternative method of calculating sustainable harvest, the “FORSCHEID” method also used by CALM. Using that method a yield of:

“somewhere close to 250,000 cubic metres /year of [jarrah] sawlogs would be sustainable in perpetuity.”⁶²

4.3.7 Meagher Committee Findings

On the basis of the above series of estimates, the Meagher Committee found that its preferred estimate of first and second grade jarrah sawlogs was 450,000m³/yr. This finding was made not primarily on silvicultural grounds but on the basis that a lower figure such as 300,000m³/yr would cause too much social disruption and discourage investment:

- *“On balance, it is wise to be cautious with estimates of jarrah yield. On the basis of conservative forecast (300,000 m³/year) the present sawlog harvesting commitments for the jarrah forest are more than the resources can sustain in perpetuity.*
- *However a harvest close to 450,000 m³/year for 10 years will not irrevocably damage the long-term yield even if the conservative 300,000 m³/year is subsequently proven to be more appropriate.*
- *The justification for over-harvest is dependent upon the social and commercial benefits that can occur as a consequence.”⁶³*

Consistent with this line of reasoning, CALM’s submission to the Meagher Committee (appended to the Meagher Report) cited industry expectations of the limits proposed in 1987 not being adhered to as justification for in fact not adhering to those limits.⁶⁴

The Meagher Report noted that contracts for the supply of timber become renewable periodically. At the time of the Report:

⁶² Meagher (1993), p.24

⁶³ Meagher (1993), p.27

⁶⁴ CALM submission to Meagher Committee, Appendix 4, p.5

*“If all contracts are renewed as they fall due, there will be a requirement to provide 530,000 cubic metres per year. However, the timber industry has been purchasing 460,000 cubic metres of jarrah over the past few years.”*⁶⁵

On the other hand, at the time of the Report, because a number of supply contracts were drawing to a close, it would also have been possible to lower the cut substantially without breaching any contractual obligations:

*“If CALM does not renew contracts that fall due this year [1993] the ongoing level of harvest would approximate the conservative estimate of long-term sustainable yield (300,000 m³/yr).”*⁶⁶

4.3.8 Meagher Committee Recommendations

Based on its finding that 450,000 m³ was the sustainable yield, together with industry considerations, the Meagher Report recommended that the Minister approve a harvest of 490,000 m³/yr instead of the 675,000m³ CALM had originally proposed.

The Minister adopted this recommendation in August 1993, and the FMP was subsequently prepared on that basis.⁶⁷

The government was aware of the uncertainties involved in determining first and second grade jarrah sawlog harvest levels. The Minister for the Environment in his response to the Meagher Report made the following statement about the figures for first and second grade jarrah sawlog:

*“In their advice CALM and the [Meagher] Committee noted that the long term non-declining level of sawlog supply is likely to be around 300,000 m³/yr but may be as high as 450,000 m³/yr if utilisation rates increase. Even if the conservative level is accepted it represents a dramatic improvement over the long term projections from the previous two strategies. The 1982 Strategy had jarrah sawlog production ceasing in about 2030 for 30 or 40 years whereas the 1987 Timber Strategy estimated a supply of 140,000 m³/yr over this period.”*⁶⁸

⁶⁵ Meagher (1993), p.1

⁶⁶ Meagher (1993), p.27

⁶⁷ Hon Kevin Minson MLA: Minister’s Response to the Report of the Scientific and Administrative Committee, 5 August 1993

⁶⁸ Hon Kevin Minson MLA: Minister’s Response to the Report of the Scientific and Administrative Committee, 5 August 1993, p.7

Dr Martin Rayner of CALM told this Committee in late 1997 that first and second grade jarrah sawlog yield would need to be stabilised at 300,000 m³/yr soon after the year 2000 in order to remain sustainable. Dr Shea of CALM subsequently supplied the Committee with a diagram headed “*Sustained Jarrah Sawlog Supply*” which showed the volume of first and second grade jarrah sawlog supply dropping from the current 490,000m³/yr to about 325,000m³/yr immediately upon the expiry of the current FMP in 2003, then to below 300,000 m³/yr in 2010. Dr Rayner’s estimate was also adopted by the RFA’s 1998 CRA.⁶⁹

4.3.9 Are current harvest levels sustainable in a *quantitative* sense?

In this section the Committee reviews the issue of whether current harvest levels are sustainable in a quantitative sense. This question must be distinguished from the question of whether current forest management is sustainable in a qualitative sense, discussed in the following section. The further question of whether ESFM is being achieved is addressed in Chapter 5.

CALM made the claim in the FMP (as well as in general publications such as its Internet home page) that it was managing Western Australia’s forests on a sustainable basis. An example is where the FMP described the yield calculation as being arrived at according to sustainable yield criteria:

*“The quantity of timber which can be harvested from publicly owned native forest in Western Australia is constrained to be within the overall growth capacity of the forest. This means that the timber yield may be sustained in perpetuity.”*⁷⁰

However, it appears to be the case, based on any of the estimates of sustainable yield considered by the Meagher Committee, that the recent yield of jarrah first and second grade sawlogs has not been sustainable. CALM gave the following answer to a question from the Committee as to whether this is the case:

*“The volume of jarrah sawlog to the current specifications approved under the 1994 Plan is not claimed to be available in perpetuity. The availability of these sawlogs is predicted to decline and then increase over time.”*⁷¹

The approved yield of 490,000m³ of jarrah first and second grade sawlogs a year is:

⁶⁹ Joint Commonwealth and Western Australian Regional Forest Agreement (RFA) Steering Committee (1998c), p.16

⁷⁰ FMP, p.35

⁷¹ Dr Syd Shea, letter to the Committee, 17/2/1998

- i. 96% greater than the sustainable yield predicted by CALM's FORSCHED modelling method (250,000m³/yr);
- ii. 63% greater than the sustainable yield predicted by one of CALM's initial submissions, confirmed to the Committee by Dr Martin Rayner of CALM and published in the PCP for the RFA process (300,000m³/yr); and
- iii. 11% greater than CALM's revised submission to Meagher (450,000m³), adjudged by the Meagher Committee to be the best estimate of sustainable long term yield.

4.3.9.1 Evidence of overcutting

Conservationists and independent scientists told the Committee that the history of Western Australia forestry demonstrated that reviews of harvest levels consistently identify overcutting and, recognising the short term value of preserving jobs and the industry, allow it to continue on the basis that at some later date the harvest will return to a sustainable level. Dr Michael Calver, Senior Lecturer in Biological Sciences at Murdoch University stated:

"I was fortunate in getting hold of some reports between 1920 and 1938 that were made by various conservators of forests in Western Australia.

The first thing that struck me was the language. Now there is all this business about mining of the forests, timber butchery and wreckage of the forests in Western Australia. These are not recent terms coined by environmental activists. Lane-Poole [conservator of forests] was using them then. He was upset at what he considered massive overcutting of Western Australian forests.

By the time we move to 1938, there were two new conservators of forests and two new reports. The worry in both those reports was overcutting of the forests, and correcting that. They were working towards what they considered to be a sustainable yield but they were worried about overcutting. In all these cases the overcut is partially justified and explained in terms of an employment imperative - the health of the employment in the local communities and so on".⁷²

CALM's response was that:

"Dr Calver fails to realise that the concept of overcutting only has meaning in relation to a particular time frame.

⁷² Dr Michael Calver, transcript of evidence, 17/9/1997, p.10

For example, it is possible to over-cut a forest in 10 years and then undercut in the following 50 years.”⁷³

4.3.9.2 Failure to reduce the cut

The situation identified by Dr Calver, Senior Lecturer in Biological Sciences at Murdoch University, as occurring in the 1920s has parallels with the current situation under the FMP. The Meagher Report, the Barnett Report, the EPA Review of the proposal for the FMP, Dr Martin Rayner of CALM and the RFA’s CRA all indicate that the current level of jarrah sawlog cut appears unsustainable in the long term.

Under the 1987 Timber Strategy the cut was supposed to drop back to a sustainable level in two stages, in 1990 and 1996. However, the reductions in cut did not occur. On the basis of social and employment considerations, the FMP postponed the planned decrease to sustainable levels until 2003. History suggests that at that time there will be pressure from industry to maintain the level of over-harvest for a further period, and that the government of the day will be tempted to allow this to occur, justifying the decision as a short term measure to assist the industry.

Since the above was drafted, the RFA has been made public, and provides in clause 75 that the State and the Commonwealth “agree that [the RFA] is expected to provide” 324,000m³ per annum of jarrah first and second grade sawlogs as the sawlog sustained yield level for the period 1992-2003, and to reduce to 286,000m³ per annum for the same quality jarrah for the period 2004-2018.

4.3.10 Are current harvest levels sustainable in a qualitative sense?

The above paragraphs discussed the issue of whether the **quantity** of forest harvest, particularly in relation to first and second grade jarrah sawlogs, is sustainable. A further issue is whether the **quality** of timber is sustainable over time.

The Southern Branch of the Institute of Foresters of Australia has the following view as to what amounts to sustainable management from a purely production-oriented point of view:

“The concept of sustainability has traditionally been applied in the context of a sustained yield of wood products of a defined size and quality, for example large diameter sawlogs having minimal levels of defect. Implicit in this definition of

⁷³

CALM, letter to the Committee 10/3/1998: Responses to evidence by Dr Michael Calver and Dr Pierre Horwitz, 17 September 1997, p.10

sustainability is the requirement to also sustain the fundamental site resources of soil and water on which the productive capacity of the forest depends."⁷⁴

The Southern Branch's parent body, the Institute of Foresters, WA Division, takes a more pragmatic approach:

*"The bulk of logging activity in the past has been the removal of larger trees from the forests present at the time of European settlement. This will decrease in the future and most logging will be from the regrowth forests where log sizes will be smaller. Regeneration after logging operations in South West forests is generally very satisfactory and is an indication that the forests in the South West are being managed in a sustainable manner."*⁷⁵

Mr Geoff Bertolini of the Forest Industries Federation accepts that log sizes are diminishing but does not regard this as a problem for sawmillers:

*"Over a number of years the size of logs will definitely decrease in size. The volume will remain, and to sustain the industry we would need to look at the volumes. I guess it is a fact of life that almost all sawmillers are accepting the fact that the size of log is coming down, but that the quality of log is increasing. With current technology, and with controlled burns, we do not have very hot burns in forests where a bushfire can get away from us and produce gum within the log. By controlling our forests, the quality of our timber will be a lot better in the future, given that it will be a little smaller. In future, sizeable logs will be produced because in the jarrah forests seed trees are being left. As they grow they are harvested because a tree that is growing alongside it would be a better tree as a seed tree. Therefore, that would be harvested, and we would still get the large size logs. We are talking about regrowth areas where trees are being harvested probably a little sooner than in the past. Therefore the logs are that little bit smaller. As I said, the quality of the logs will increase."*⁷⁶

A 1997 report prepared by consultants Beca Simons Australia Pty Ltd ("**Beca Simons**") for the Department of Resources Development, "*Further Development of the Forest Products Industry in Western Australia*", built into its projections of timber volumes for the forest industry the assumption that first grade sawlogs would be replaced by second grade sawlogs over time. This suggests the consultants did not foresee that the quality of the forest resource was likely to be

⁷⁴ Southern Branch of the Institute of Foresters of Australia, Submission No.25

⁷⁵ Institute of Foresters, WA Division, Submission No.27

⁷⁶ Mr Geoff Bertolini, transcript of evidence, 19/11/1997, p.6

maintained under current management practices. No explanation was given as to why this view was taken, although one of the sources for the information was CALM. At the same time, Beca Simons' projection was that 450,000m³/yr of this jarrah sawlog resource (the same as the upper limit of the Meagher Committee's estimated range of long term sustainable yield) would continue to be available in the year 2020.⁷⁷

Mr Alexander Syme, resident of Denmark noted in his submission the importance of maintaining the quality of the forest resource:

"It should be noted that quality has been achieved in a natural forest that is managed by nature. It is not a forest that has been restructured into what CALM calls a normal forest. To achieve these qualities a tree must grow slowly and competitively to an age of several hundred years. Even by managing the forest to grow trees quickly, it is more than likely that the quality the natural forest has produced will be lost. CALM is ignoring the key requirement of sustainable yield under the CALM Act; that is, to sustain the quality of the wood, as well as the quantity, in perpetuity.

*I refer the committee to the final report of the all party Western Australian Legislative Assembly Select Committee on Land Conservation in 1991. That committee recommended it was critical for the timber industry to operate on an ecologically sustainable basis, which means maintaining in perpetuity the ecological values of the forest and the high value sawlog resource available to the industry for appearance grade and furniture uses while providing for lesser value uses such as structural timber and woodchips from farmland grown sources."*⁷⁸

CALM's Silvicultural Specifications set out the following objectives for management of forests:

"2.3 Timber Management and Supply

Management Objectives

to manage native forests so that an efficient timber industry is able to be sustained indefinitely, based on the following principles;

⁷⁷ Beca Simons (1997), *A Report to the Western Australian Department of Resources Development on the Further development of the forest products industry in Western Australia*, Appendix A, p.1

⁷⁸ Mr Alexander Syme, transcript of evidence, 27/10/1997, p.17

all cutover areas will be regenerated to a full stocking and all previously regenerated forests will be managed to optimise the attainment of all forest values;

harvesting will only occur where the potential productivity is sufficient to cover costs of regenerating, establishing and managing those forests;

the harvest from the forest will be regulated to levels that can be sustained indefinitely.”⁷⁹

This statement appears to recognise that to achieve ecological sustainability, the quality of the resource must not diminish over time. That is, if the objectives are to be met, cutover areas must be regenerated to a full stocking and all forest values must be re-attained following logging.

The Committee notes that information provided by CALM indicates that over the lifespan of CALM (since 1985), and particularly over the last decade, CALM has either accepted or set (the mode of CALM’s communication does not make CALM’s role clear) harvesting specifications for acceptable log size at progressively lower levels “...to increase better use of the native sawlog resource” and “...to achieve both a greater utilisation of the log timber resource and to achieve a higher value.”⁸⁰

4.3.11 Waste and utilisation standards

The Committee heard general concerns from several witnesses about the surfeit of unsold logs being cut. For example, Mr Rob Troeth, a professional forester and former CALM employee stated that:

“In the Jarrah forest, 2nd and 3rd grade sawlogs are often left in the bush because there are no buyers. However, there is a guaranteed supply of 1st grade logs at a low price for a product considered to be one of the world’s top ten hardwoods. Where is the incentive for buyers to purchase low grade jarrah products? A contributing factor which is well recognised is the high rate of cut in both Jarrah and Karri forests. This

⁷⁹ Department of Conservation and Land Management, Silviculture Specification 2/91 (attached to Submission No.9), paragraph 2.3

⁸⁰ Dr Syd Shea, letter to the Committee, 3/3/1999

has undergone little or no change for many years regardless of fluctuations in market demand, contributing to the level of wastage.”⁸¹

In reference to the Preston block Ms Sally Coulsen, representative of the Pristine Environment Group, stated:

“... enormous amounts of waste equating to thousands of tonnes of millable timber are left in stockpiles there; and major weed infestation is occurring. In huge areas of intense regeneration burns, the regeneration has been very poor. Few habitat trees remain and where they do, they are inappropriate in size, many being burnt beyond habitation. Some of them were on the side of the road, but not the number required by the ministerial conditions. The stockpiles that remain equated to thousands of tonnes, not only in Preston block, but also in other surrounding once-forest areas - which again are too many to name - and are left to rot and/or to burn. This is waste at its maximum. The practice is gross mismanagement and it is just downright criminal.”⁸²

The Committee members have viewed this waste in various forest blocks⁸³ and have also received complaints that despite the enormous volumes of unused timber cut, it was hard for small scale users to gain access to regular and reliable supplies.

According to information in CALM's 1997-8 Annual Report, approximately 1.66 million tonnes of jarrah, karri and marri was sold from the State forests in 1997-98. However, a further 1.12 million tonnes was cut and left to waste or burnt on the forest floor.⁸⁴

Thus of total hardwood cut in 97-98, it comprised:

28%	saw logs;
27%	woodchip logs;
5%	charcoal & firewood;
0%	industrial wood; and
40%	forest waste. ⁸⁵

⁸¹ Mr Rob Troeth, Submission No. 56

⁸² Ms Sally Coulsen, transcript of evidence, 30/10/1997

⁸³ See photographs on the following page

⁸⁴ National Party of WA, Policy on Forest and Conservation Management, February 1999, p.6

⁸⁵ National Party of WA, Policy on Forest and Conservation Management, February 1999, p.6



An example of log piles currently left to waste. The Committee has found that the jarrah sawlog contracts commit approximately 80% of the supply as first grade. This is one of the reasons for the levels of waste of lower grade materials.



On the left, young jarrah, conservatively aged 2 - 3 years old. On the right, redgum regrowth illustrates that the log pile has been there quite a while.

4.3.11.1 Contracts for jarrah logs

The Committee examined the timber supply contracts current at May 1994, between CALM and buyers of premium, first and second grade jarrah sawlogs⁸⁶. It was found that the contracts to supply the then two major saw millers (Bunnings and Whittakers) with jarrah hardwood logs was restricted to first-grade Jarrah logs only.⁸⁷ Since that examination, Whittakers passed into receivership and closed, leaving Bunnings as the only major sawmiller in Western Australia. Thus the two largest saw millers are not obliged to mill any other than first-grade jarrah in very large volumes.

The timber supply contracts show that 80% of the overall Allowable Cut for jarrah sawlogs was **first grade** irrespective of which company received the resource but individual milling companies did not receive an even distribution. For example:

- (a) Bunnings Forest Products Ltd received an annual proportion of 279,220m³ first grade jarrah sawlogs, this being 64.2% of the resource;
- (b) Whittakers Ltd received an annual proportion of 49,411m³ first grade jarrah sawlogs, this being 11.4% of the resource; and
- (c) Adelaide Timber Co received an annual proportion of 14,000m³ first grade jarrah sawlogs this being 3.2% of the resource.

These contracts show that 78.8% (of the total resource under the Allowable Cut for jarrah sawlogs), of premium and exclusively first grade jarrah sawlogs was allocated to the then three largest timber companies. Thirty four minor millers received 21.2% of premium and first grade jarrah sawlogs⁸⁸.

The bias towards the supply of first grade jarrah sawlogs in these contractual commitments would therefore confirm and explain the experience of the general public that extensive areas of jarrah forest are cut, the best timber removed whilst large quantities of cut logs are left on site unused and eventually burnt.

⁸⁶ These contracts are for the most part current, the majority continuing until 2003.

⁸⁷ CALM, Contracts of Sale 2304, 2305 and 2349.

⁸⁸ See the Schedule in Appendix D.

The Committee's purpose in examining these ten year contracts was to ascertain whether they complied with the Allowable Cut for jarrah sawlogs. However, the Committee found the process of scrutinising these contracts extremely complex.

Of the thirty eight contracts examined, twenty nine were expressed in cubic metres, the remaining nine in tonnes. What should have therefore been a straightforward mathematical calculation of tonnes to cubic metres was complicated by the disclosure from CALM that it used a different conversion figure⁸⁹ to that of the Committee and other industry sources. To further complicate the matter, CALM also disclosed that it used different conversion figures if the sawlogs came from the northern or southern supply areas.

The Committee found it is possible to calculate a range of totals depending on the conversion figure applied. This exercise resulted in amounts which vary from CALM's total of 481,010m³/yr through to 523,000m³/yr⁹⁰.

The Allowable Cut for jarrah sawlogs is only expressed in cubic metres. Hence the figure used to convert tonnes to cubic metres becomes critical in determining whether or not those thirty eight contracts complied with the Allowable Cut for jarrah sawlogs in 1994. The Committee had great difficulty in determining whether the contracts complied with the Allowable Cut for jarrah sawlogs as the process of determining compliance is not transparent.

When requested to explain its use of particular conversion factors, CALM failed to supply any evidence to the Committee to substantiate the use of the conversion factor of 1.315 (also expressed as 0.760) which was used in all but one of those contracts which were expressed in tonnes.⁹¹ Moreover, CALM's other figure (used for a part of only one contract) was based on a change in the type of timber volume table being used. Even if one accepts the validity of CALM's decision to move from Hubers to the Cubic Contents Table which took place in 1988, which is unexplained⁹² and apply this to the rest of the contracts set in tonnes as the minimum figure for which evidence has been provided, nevertheless, the total of contracts set in place after the Meagher Report still exceeded the Allowable Cut for jarrah sawlogs by 9,084m³/yr.

⁸⁹ CALM facsimile to the Committee, 18/11/99

⁹⁰ If using Western Australia Forests Department *Forestry in Western Australia* (1957): Bulletin No 63's conversion factor of 0.8561.

⁹¹ CALM facsimile to the Committee, 18/11/99

⁹² Perriman WS and Boughton GN, *Assessment and Development of Weight Scaling Factors for Jarrah Sawlogs* (1988) School of Mathematics Curtin University of Technology

CALM asserted that as at May 1994, its contractual commitment for jarrah sawlogs was "...481,010 cubic metres".⁹³ However, using CALM's own information and evidence provided to the Committee, the contracts appear to have committed at least 499,084m³ of jarrah sawlogs since 1994.

Moreover, the Committee observes that CALM's own 1998 - 99 Annual Report⁹⁴ contains a graph of jarrah sawlog contracts from 1994 to 1999. This graph clearly indicates that the contracts were well over the Allowable Cut for jarrah sawlogs of 490,000m³/yr for the periods 1994/5; 1995/6; 1996/7; 1998/9, even though the amount of jarrah actually harvested was under the prescribed amount. This graph further demonstrates that CALM set timber contracts in excess of the Allowable Cut for jarrah sawlogs.

4.3.11.2 Difficulties of access to timber for small scale users

A number of witnesses, including the Dwellingup Holmes Block Action Group, shared a concern that better use be made of residue timber not removed from log coupes:

*"Our group believes that there could be better 'value adding' through use of the canopy and other discarded timber by artisans. This 'excess' should also be more fully utilised for firewood. Our concern is that there is a lot of wastage which is ultimately burnt. All options should be explored to ensure that if a tree is felled then every piece of timber is being used to its optimum. We are of the view that there is an element of 'casualness' about felling trees without consideration being given to the uniqueness and sustainability of our valuable forests."*⁹⁵

Mr Stephen Ayling, a craftswood supplier, commented:

*"... I notice that it is increasingly the case that the bush available to us for collection is becoming less and less. This is a factor for all those who access our native bush, whether it be the firewood supplier sourcing firewood or the wildflower collector. We are all finding that the areas available for supply are decreasing dramatically. Because the forest is being shut down to small operators, only large corporate operators have ready access to the resource. In the South West the forest debate is a social issue."*⁹⁶

⁹³ CALM facsimile to the Committee, 18/11/99

⁹⁴ At p. 61

⁹⁵ Dwellingup Holmes Block Action Group, Submission No. 18

⁹⁶ Mr Stephen Ayling, transcript of evidence, 30/10/1997

Mr Rodney Lee, a firewood contractor from Collie, raised a related equity issue of the costs charged to salvage users:

“My concern relates to the diminishing supply of jarrah. I am talking only from the perspective of my own firewood business in dry Jarrah. A firewood business is similar to running a butcher shop or a delicatessen. I buy my wood from the Department of Conservation and Land Management. I tender for it, process it and deliver it. My tender is \$6.00 a tonne; that is, \$5.75 for dry wood and \$6.75 for green wood. By the time I get the wood it has cost me \$40.00 a tonne. There are administration charges, cartage and road maintenance costs. Therefore, it goes from \$6.00 to \$40.00 a tonne, and it must be delivered as I am not allowed into the bush to cut it. I receive this wood at \$40.00 a tonne - some of it is full of white ants, some is rotten, some has charcoal on it, and some is double-hearted and if it is green, I could lose half the weight, so it could cost me anything up to \$80.00 a tonne. I am selling this wood for about \$70.00 a tonne. I am not very bright, but I am bright enough to know I cannot make much money doing that.”⁹⁷

Mr William Atherden, Director of Quarter Sawn Timbers in Mandurah, commented:

“Each year hundreds of hectares of our forested land in Western Australia are cleared for mining purposes. Alcoa Australia Ltd, for example, clears 450 hectares - nearly 1000 acres - of State forest a year in order to mine bauxite. After the basic commercially viable timber has been harvested, the residue is ripped from the ground, pushed, piled and burnt. Alcoa estimates its annual residue wood at between 150,000 and 200,000 tonnes per annum. It is known that this residue timber, currently wasted, could be used by various groups and businesses to produce saleable products. With commonsense and planning and the co-operation of major players, rather than high pollution levels, we could have increased employment and productivity levels within the districts that contain these forests.”⁹⁸

4.3.11.3 Low conversion of trees logged to useful production

The pattern of resource management which emerges from this range of information is that of very low conversion of trees logged to useful production. Moreover, the high contractual requirements for first-grade jarrah are driving cutting of extensive areas of jarrah. However, this extensive cutting is creating vast volumes of under utilised lower grade material, much of which

⁹⁷ Mr Rodney Lee, transcript of evidence, 30/10/1997

⁹⁸ Mr William Atherden, transcript of evidence, 30/10/1997

(40% of total harvest) is left to waste. This is a pattern of resource management known as 'highgrading'.

The Committee has noted the concern of the EPA at the change in implementation of silvicultural prescriptions in the jarrah forest in recent years, and at variance to the prescriptions which it approved in its 1992 assessment⁹⁹.

The EPA has found that since its 1992 assessment the percentage of jarrah forest cut to a Shelterwood prescription has increased from 8% to 46% in 97-98. This increase appears to have also led to a significant increase in the area of jarrah forest being logged which was at 14,000 ha in 1992/3 but peaked at 22,320 ha in 1996/7.

This Committee is concerned that this increase may be linked to the high proportion of contractual commitments for first grade timber in comparison to other grades and the highgrading problem discussed above. In this context it looks forward to reading CALM's explanation of the increased use of the shelterwood prescription, foreshadowed in the Codd Report¹⁰⁰ ("**Codd Report**"), that is due to be provided in the form of a written report by January 2000.

4.3.11.4 Whole bole logging

One approach to improving utilisation on lower grade timber has already been put forward and is being trialled. This is known as "whole bole logging" where mills are required to remove the entire log bole (trunk section) to the mill regardless of quality specifications.

This approach, and reservations about its viability, were discussed by Mr Cam Kneen, formerly of the Forest Industries Federation:

"The concept of whole bole logging is that the tree is cut at the base and the crown, and what is left is the whole bole. If technically feasible it is transported to a mill, otherwise it must be cut into shorter lengths. If it is not straight enough it may need to be cut. That is a different log production system from the current system which involves grading logs in the forest. The industry and CALM are doing some trials on the concept of whole bole logging, and the main objective is to increase the overall utilisation of the timber resource.

⁹⁹ See paragraph 6.5.1 and following

¹⁰⁰ M. Codd, *Forest Management Plans 1994-2003 Mid-Term EPA Report on Compliance*, (1999)

However, early indications from the trials are that we are just transferring a waste product from the forest to the mill at fairly great expense. All sorts of ideas need to be explored to utilise more of the wood from any one coupe but, as I understand the system, first and second grade logs from any coupe are automatically delivered. We could have a situation where the production gets out of balance, and the contracts do not balance with what the forest throws up. I am not sure to what extent that is a problem. Of course, the third grade logs are sold on a buyer's choice. They are offered and willing buyers can take them if they wish. That has been the system for some years and it helps to make use of fairly low grade logs.”¹⁰¹

In the Minister's 1993 determination of harvesting volumes the Minister noted the desirability of setting quotas in terms of gross bole volume rather than sawlog volume:

“...I recognise that the regulation of the allowable harvest by sawlog volume is really only an indicator of gross bole volume felled - the fundamental measure of forest production and sustainability. Fixing set sawlog levels has inherent disincentives to making the fullest possible use of timber felled. I therefore believe it is desirable to develop a system of yield regulation based on gross bole volume felled rather than sawlog volume removed. Once such a system is developed, harvest levels should be expressed in terms of gross bole volume felled, at a maximum level equal to the gross bole volume increment - thus ensuring both forest sustainability and optimum log utilisation.”¹⁰²

4.3.12 The FMP and harvesting issues

The Committee has found that the current over-cut of long term 'sustainable' yields of jarrah sawlogs indicates a mismanagement of the resource to date. It is also concerned that the Allowable Cut for jarrah sawlogs is largely translated into contractual commitments to supply exclusively first-grade jarrah timber to the State's principal saw millers, which has worsened unsustainable practices by compounding over cutting with highgrading practices.

This privileged intake of 64.2%¹⁰³ of the Allowable Cut for jarrah sawlogs of premium and first grade timber which Bunnings enjoys, is causing a variety of side effects. It has generated large

¹⁰¹ Mr Cam Kneen, transcript of evidence, 19/11/1997, p.7

¹⁰² Environment, Minister of (1993), p.6

¹⁰³ Including the Adelaide Timber company and when Whittakers was operating, this privileged intake was 78.8%.

quantities of woodchip logs (at roughly the same volume as sawlogs) and an additional **forty per cent** of the total cut left behind to waste in the forest.

Nevertheless, equity issues of fair allocation of timber and fair access to small-scale users are not being addressed by the current system. The Committee is alarmed at both the levels of waste and the inequities of the current allocations.

The Committee considers that a fairer and less wasteful system of allocation should be based on improved lower grade utilisation. This may be achieved by the adoption of whole bole logging. However, early tests of whole bole logging have been inconclusive and the system should not be adopted until its feasibility has been fully proven.

The Committee is also concerned that the adoption of a whole bole logging system should not facilitate the abandonment of the management objective to maintain a yield of high quality saw logs. Furthermore, the use of gross bole volume measurement should not substitute for log quality indicators which are consistent over time. The Committee has found that log specifications have declined over time. Whilst the Committee supports wholeheartedly the object of utilising lower grade timber, we have concern that log quality indicators need to be consistent over time to prevent the adoption of a bole logging system as a precursor to a further decline in log quality. The Committee is most concerned that other methods should also be considered in order to reform the current practices. These could include allocating contracts on the basis of the performance of individual saw mills in achieving high levels of utilisation. Alternatively, the allocation of the resource might occur on an area basis so that a licence holder has the incentive to maximise the returns from the licensed area.

A system of licence areas was used by the Forests Department many years ago. This system would require careful regulation of prescriptions to achieve acceptable long term multiple-use management based on the principles of ESFM.

To achieve the goal of sustainability, the government must ensure that harvest levels for Western Australia's jarrah and karri forests are sustainable in both a **quantitative** and **qualitative** sense. If these aims are not met, it is questionable whether the timber industry can remain viable in the future. The further question of whether ESFM is being achieved is addressed in Chapter 5.

Looking at the **quantitative** issue of determination of what level of timber harvest, particularly of first and second grade jarrah sawlog, is sustainable, the process by which harvest levels were determined for the FMP is open to criticism for being cumbersome, expensive and time-consuming. The process entailed separate reviews by each of CALM, the EPA, the Barnett Committee and the Meagher Committee, as well as the Ministerial determination which ultimately decided harvest levels in 1993.

Obviously valuable work was done along the way, exemplified by the apparent improvements in the accuracy of estimated sustainable yield of first and second grade jarrah sawlogs. CALM's initial claim in 1992 was that 675,000m³/yr is sustainable. The Meagher Report had to choose between estimates generated by CALM ranging between this figure and 250,000m³/yr and in the end accepted a figure of 450,000m³/yr as the best estimate, primarily on the basis of social considerations. However, the Committee also advised the Minister to approve harvest of 490,000m³/yr. The Minister followed this advice. Under the RFA, the jarrah cut was reduced to 324,000m³/yr but this is still over the long term sustainable yield. For the period 2004-2018, the RFA is expected to provide sawlog sustained yield levels of 286,000m³/yr.¹⁰⁴

The Committee notes that the bewildering range of figures presented by CALM and others as credible estimates of sustainable first and second grade jarrah sawlog harvest levels can only create confusion and uncertainty in the public mind.

The determination of harvest levels should follow a process which is shorter, less complex and more acceptable to the general public in terms of its independence and transparency than the present process. In light of CALM's and the Western Australian Government's commitment to keeping harvest levels at sustainable levels, this is an anomaly which should be corrected as soon as practicable.

The Minister, who is ultimately responsible for the determination, should be able to rely on objective, generally accepted information prepared by a specialist committee (and reviewed by the EPA as required by statute).

Looking at sustainability in the **qualitative** sense, the Committee is concerned that the outcome of the process described in this section pays insufficient attention to the issue of maintaining the quality of the forest resource. The FMP gives very little detail on how quality is to be maintained. The process should be capable of integrating considerations of rotation length, harvesting patterns, regeneration techniques and so on.

The IEAG reaches a similar conclusion in its review of ESFM in the State:

“The Government of Western Australia should review and, where necessary, amend the review provisions of the Environmental Protection Act and Conservation and Land Management Act to encompass a joint review of environment protection, management plan requirement, and environmental management systems; such that the strategic issues of balancing and integrating forest uses, including social, economic and

¹⁰⁴

Regional Forest Agreement for the South-West Forest Region of WA, (1999) clause 75

environmental implications, can be considered together. The review process should include some expert representation from outside the State."¹⁰⁵

The difficulties with the current format are demonstrated in the need for repeated review. In the Committee's view the difficulties, and the need for ongoing review, would be diminished if the IEAG's recommendation were adopted.

If the initial proposal for a Forest Management Plan was prepared in the form of advice to the Minister by a body other than the operator of forestry in the State, according to a comprehensive set of ESD principles, it would appear likely to more accurately reflect ESD objectives, be more acceptable to interested parties, cause less dissent and hence require less revision. The body should be required to advise the Minister on how best to sustain both the quantity and the quality of the timber resource.

4.4 DIFFICULTIES WITH SUSTAINABLE YIELD ESTIMATES

4.4.1 Optimistic yields

The discussion in para 4.3 illustrates the kinds of uncertainties faced by all parties in determining jarrah first and second grade sawlog yields. Some witnesses also raised queries about estimates of karri yields, and estimates generally. Mr Ross Young, former CALM consultant, expressed a commonly held concern that the projected maximum yield, on which the current approved jarrah sawlog cut is based, is far too optimistic:

"The common theme heard among retired foresters is that the jarrah forests are being grossly over cut, and that the 1982 Forest Working Plans was probably the most accurate forecast produced on the future productivity of our Jarrah Forests. They believe that the updated jarrah timber harvest projections were "blue-sky" figures. It appears that there is an unwillingness to speak openly on this due to the current culture within CALM."¹⁰⁶

The Meagher Report predicated its discussion of sustainable yield on an estimate by CALM¹⁰⁷ that the gross bole volume increment in jarrah forest is 1,360,000m³/yr and karri is 417,000m³/yr. However it is generally acknowledged that a small discrepancy between the predicted volume of increment per hectare and the actual volume can lead to substantial differences over time in

¹⁰⁵ Independent Expert Advisory Group, (1997), p.23

¹⁰⁶ Mr Ross Young, Submission No.9

¹⁰⁷ Department of Conservation and Land Management, (1992b), pp.29, 30

available timber. If the annual gross bole volume increment is in fact less than the predicted amount for whatever reason, the ratio of timber harvested to the gross bole volume increment will be higher than expected. This means that over time, harvesting at the approved level will result in an exponentially faster diminution of the timber resource than anticipated.

A number of witnesses raised queries about particular matters which in their view have the potential to influence timber yields detrimentally. These queries are outlined in the following sections.

4.4.2 Dominance by marri

CALM's 1987 *Strategy to take WA's south-west forests into the 21st century* identified the natural tendency of marri to regrow faster than jarrah as posing a threat to the ongoing yield of jarrah:

*"The recent cutting history [of jarrah in the southern forest] has resulted in better regrowth but the dominance of marri in the forest has inhibited much of its development. Jarrah regrowth is often severely repressed, particularly by faster growing marri trees, and is not expected to reach millable size until well into the next century. Even then, it will require intensive silvicultural treatment in the next 15 to 20 years to maintain growth on selected crop trees."*¹⁰⁸

The FMP in 1993 did not explain whether this factor was still a problem or, if not, why the situation had changed since 1987.

If in fact marri dominance is a problem, the consequences for management of jarrah-marri forest are potentially significant. The determination of production levels is not in terms of a permitted area for logging but a permitted volume of first and second grade jarrah sawlogs and secondly total bole volume of jarrah. If the proportion of marri trees in a jarrah-marri forest is greater than expected, the volume of jarrah in a given area will be less than expected, meaning that a greater area would have to be logged to reach projected jarrah volume. This militates against the achievement of sustainable yield.

¹⁰⁸

Department of Conservation and Land Management, (1987b)

4.4.3 Incipient rot and brown rot

Dr Elaine Davison, Senior Research Associate at Curtin University, has carried out work on timber yields for CALM and cites a number of factors which she believes will affect yield over time, including rot:

“CALM’s timber inspectors have long been concerned that the quality of wood from regrowth stands of karri is lower than that from mature (old growth) trees. The main problems are incipient rot (brown wood) and rot. Surveys have shown that the incidence of incipient rot and rot are greater in regrowth than mature saw logs, and incipient rot and rot are present in 12 to 14 year old regrowth karri trees.. Rots increase as trees grow. If rots are present in 12 to 14 year old regrowth, they will be extensive in 100 year old trees.”¹⁰⁹

Dr Davison’s submission also points to other problems with projected yields from regrowth: insect borers; armillaria in karri; and rising water tables in jarrah forest. Dr Davison notes that a number of reports produced by her and others for CALM on these matters are unpublished.

4.4.4 Lack of thinning

Mr Robert Hagan of the Southern Branch of the Institute of Foresters of Australia (WA) notes the importance of thinning for forest productivity:

“Silvicultural thinning is an important strategy that has the capacity to maintain and improve the productive capacity of regrowth stands of both karri and jarrah forest types. In addition, by accelerating the growth of retained trees, thinning can contribute to the achievement of structural goals for forest stands.”¹¹⁰

The Southern Branch expanded on this in its oral submission to the Committee, noting in addition, the commercial considerations applying to thinning:

“Mr HAGAN: The thinning is a natural process and the mechanical thinning tends to do two things: Firstly, it salvages what would otherwise be a wasted resource - that is, something in the forest that dies, rots and falls over; and, secondly, it aims to make the thinning as even as possible so that any subsequent growth is put on what would

¹⁰⁹ Dr E M Davison, Submission No.14

¹¹⁰ Southern Branch of the Institute of Foresters of Australia, Submission No.25

become crop trees. Once again, we decrease the time scale between regeneration and size reached for economic value.

...Thinning attempts to manage that process rather than let the resource go to waste. It is harvested while it is still available and saleable. The remaining growth is then put on fewer trees to produce a better shaped and sized lot.

HON NORM KELLY: So it would be economically beneficial to do those thinnings to get a better output for the remaining trees... ?

Mr HAGAN: Yes. It is economically viable in the sense that there is currently a market for those small wood thinnings. The aim of the thinning is to produce saw logs, not to produce chip, but chip is a byproduct of that thinning. In the absence of some form of chip wood or residue market, thinning itself would then have to be a non-commercial operation, which would then probably make it unviable.”¹¹¹

Mr Hagan explained in response to further questioning from the Committee that in fact thinning in many areas is unviable because the volume of timber generated is not sufficient to make the operation economic, meaning that thinning either does not occur or takes the form of poisoning:

“The CHAIRMAN: I live in the central forest region and we have quite a lot of pole stands. I am not aware that there is any commercial application for that product; in fact, it is largely poisoned at the moment.

Mr HAGAN: Some silvicultural poisoning is done but some stands are thinned as well. It depends on the size they have reached at the time. Hopefully as the area of those thinnings and the amount of wood that is available in those small sizes from those thinnings builds up in a certain sphere, say a circle around Bunbury, the plant, which is similar to that in the northern forest, would then be able to establish there.

...We need a whole heap of those stands established and then at a certain point the thinning becomes economically viable to sustain an operation into the future. At the moment in the central forest the available area of stands requiring thinning is not sufficient to sustain that market, but as the area of those stands increases it is likely that that will occur.”¹¹²

¹¹¹ Mr Robert Hagan, transcript of evidence, 28/10/1997, p.17

¹¹² Mr Robert Hagan, transcript of evidence, 28/10/1997, p.19

Mr Geoff Fernie of the Walpole Nornalup National Parks Association quoted from CALM's 1987 Timber Strategy:

"The impracticability of commercially thinning the hardwood regrowth forest in the past and changes in land use are the most significant contributors to the projected deficit in sawlogs.

It is proposed to further upgrade management during the planning period by:

- 1. Thinning 4,000 ha of jarrah regrowth stands per annum; and*
- 2. Commence thinning 500ha per annum (rising to 2,000 ha per annum by 1992) of karri regrowth stands at between age 15 and 20.'*

There is a real commitment in an important policy document. There is a reason for that: If we do not thin, we increase competition between trees, their stress and their vulnerability to disease.

*I refer to CALM's 1995-96 annual report. Members should remember we were striving for 2,000 ha per annum of thinnings in karri regrowth by 1992. By 1991 there were 230 ha; by 1992, 310 ha - that is the target year; by 1993, 80 ha; by 1994, nil; and by 1995, nil. No explanation was given."*¹¹³

Mr Fernie also noted that the 1987 Timber Strategy identified a need for and commitment to "*intensive silvicultural treatment*" of jarrah stands which would not otherwise be productive. This is contrasted with CALM's 1995-96 annual report which claimed that "*...in many cases the silvicultural objective is achieved completely or nearly completely by the harvesting operation itself.*" In Mr Fernie's opinion this results in jarrah forest regrowth in marginal areas having a predominance of coppice, dominance of marri, and a high proportion of waste stumps and branches.

In response to these concerns, Dr Shea of CALM was of the view that thinning is not necessarily appropriate unless a market can be found for the product obtained:

"Hon NORM KELLY: People at a few of the public hearings we had down south referred to thinning programs conducted by CALM and referred to it in its annual report. I believe there has been a marked drop-off down to zero in karri thinning. It is

¹¹³ Mr Geoff Fernie, transcript of evidence, 27/10/1997, p.5

suggested that there is neither the will nor the money to implement proper management of the forest. Will you explain why it has been reduced to zero?

Dr SHEA: One of the main reasons is that we do not want to waste the resource. We now have 40 000 hectares of vigorously growing karri. An expressions of interest process is out currently, part of which is directed specifically to that. I would love to attract somebody who will open a value adding factory based on that resource. There are 150 000 cubic metres and if someone comes in we will - I should not say this because it alters my bargaining position - take a lower price to get a factory. We desperately need manufacturing of this resource, for the very same reason you mentioned; we want more people.”¹¹⁴

Mr Alan Walker of CALM elaborated on Dr Shea’s response from a silvicultural point of view:

“I would like to add a point to the question on why karri thinning has dropped to zero. There is another very logical explanation for that. A very clear pattern appears in the annual report. From about 1980 through to about two years ago, a fairly consistent area of karri forest was thinned each year. That thinning was picking up the backlog of intermediate stands, as we call them, which were regenerated from about 1930 through to about 1945. The thinning that occurred during that period of about 10 to 15 years was of those stands regenerated during that period. Effectively all of that backlog has been caught up, so the next task of thinning karri is looking at stands regenerated from about 1965 onwards. That is where that question of timing that Dr Shea mentioned comes into play.”¹¹⁵

Dr Shea also suggested that thinning is not inherently desirable in jarrah forests:

“Most of the high quality jarrah regrowth forest in the northern jarrah forest has already been thinned. The benefit of thinning is to simply grow selected trees to a desired size more quickly than would occur naturally. There is no inherent problem with regrowth jarrah forest that has not been thinned.”¹¹⁶

As far as the Committee’s own observations are concerned, a number of areas of jarrah forest appear to have a very high proportion of “pole stands”: that is, small jarrah trees growing in stunted clumps, and few if any large jarrah trees. In these areas the size of stumps indicates that

¹¹⁴ Dr Syd Shea, transcript of evidence, 26/11/1997, p.15

¹¹⁵ Mr Alan Walker, transcript of evidence, 26/11/1997, p.15

¹¹⁶ Dr Syd Shea, letter to the Committee, 17/2/1998

there had previously been very large trees. There appear to be grounds for concern that the occurrence of pole stands is due to lack of thinning following intensive logging many years ago. The concern is that new pole stands may be caused under the current methods of intensive silviculture, whereby thinning occurs only where it is commercially viable in the immediate term.

Mr Ross Young, former CALM consultant proposed that CALM used its contractual leverage to require timber purchasers to take thinnings:

“The woodchippers, as a condition of their licence, should be forced to take so many thousand hectares of thinnings as part of the licence conditions for harvesting the forests.”¹¹⁷

In September 1997 the Minister for Resources Development, Hon Colin Barnett MLA, issued a “Brief Ministerial Statement - Wood Chipping Industry”. The Minister stated that:

“CALM has been authorised to call for expressions of interest for up to 150,000 cubic metres per year of regrowth Karri thinnings for use in local higher value added processing, such as reconstituted wood products.”

The Committee understands that no suitable expressions of interest were received. However, in the RFA announcement of 4 May 1999, the Western Australian Government stated it would contribute \$3 million over the next five years to enhance the forest through thinning of jarrah regrowth stands.

In a Media Statement dated 1 September 1999, the Minister for the Environment outlined an initiative whereby 25 workers, retrenched from timber industry closures, would be employed on jarrah thinning and a further 12 on recreation. The initiative focuses on thinning jarrah forests near Greenbushes north of Manjimup and east of Nannup.

4.4.5 Lack of demonstrated success in regeneration

The Committee found marked disagreement as to whether harvesting and regeneration methods are successful. Mr Brian Young, resident of Manjimup argued that they are not:

“Without exception, logging operations in jarrah forest have been experimental in attempts to combine resource extraction and the maintenance of an ecological system. The operations have trialed clear fell, coppice growth and latterly coupes. No system has yet demonstrated efficacy in regeneration under natural conditions (ie without the

¹¹⁷ Mr Ross Young, transcript of evidence, 27/10/1997, p.36

*need for human interventions such as fertilising or seeding/fire regimes/seedlings) in the lower south west where marri exists as a co-dominant or dominant species. CALM is and always has been behind in its programme in forest regeneration. Hence predictions of available resource are probably overstated and deceptively promulgated.*¹¹⁸

CALM is confident that jarrah regeneration levels are acceptable and that harvesting prescriptions are sufficiently adaptable to promote regeneration in forest areas of varying quality:

*“The jarrah forest regenerates naturally from a pool of advance growth that exists on the forest floor. Criteria have been set as to the level of advance growth that reflects acceptable stocking. Where the level of advance growth is acceptable harvesting creates gaps in the forest to release the regeneration to begin growth into saplings and trees. Where the level of advance growth is not acceptable harvesting retains a shelterwood of mature trees to provide seed for establishing regeneration. CALM ensures that all areas harvested for timber are adequately regenerated. Silvicultural guidelines are provided to managers and updated from time to time as the results of continuing research are adopted in operational practice.”*¹¹⁹

4.4.6 Failure to lower karri cut following reservations

Probably because this issue arose in 1983, it has not been discussed in detail by witnesses. However, there have in the past been concerns about the fact that when the Shannon National Park was proclaimed, taking a large area of karri forest out of production, there was no commensurate lowering of the karri cut. The significance of this in light of the forestry aim of achieving sustainable yield was highlighted by Mr Lachlan McCaw of the Southern Branch of the Institute of Foresters of Australia (WA):

“A particularly important point is that changes in tenure which affect land use may require the redefinition of the level of sustained yield that can be produced from the forest. The obvious example is that where areas have changed from multiple use forest to conservation reserves, there may need to be a commensurate reduction in the level of allowable timber harvest.

That redefinition must take into account the productive capacity of the land involved. For example, if there is a 20 per cent reduction in the area of forest from which timber can be harvested, that may translate into more or less than the 20 per cent change in

¹¹⁸ Mr Brian Young, Submission No.54

¹¹⁹ Dr Syd Shea, letter to the Committee, 17/2/1998

level of harvest, depending on whether you are putting forest that has high timber values or low timber values into conservation reserves.

The CHAIRMAN: In the past has there been a commensurate readjustment of the cut when areas have been set aside?

Mr McCaw: No, not always. That was not the case in 1983 with the reservation of the Shannon National Park. I cannot quote examples from earlier than that.

The CHAIRMAN: The level of karri cut, for example, remains constant despite that?

Mr McCaw: Yes. That is documented in CALM's timber supply strategy, which covers that issue in length."¹²⁰

Dr Shea alluded to this issue, stating that the decrease in availability of karri forest for logging was compensated for by increased efficiency, which explains why there was no reduction in volume of karri harvested. It appears to follow that if any decrease in resource availability occurred now, because the industry is running at more or less peak efficiency, a concomitant reduction in volume harvested would have to occur.¹²¹

The Committee further notes that karri yields determined by the RFA of May 4 1999, if implemented, would have required a reduction in karri rotational lengths to accommodate the agreed cutting level.¹²²

4.4.7 Credibility of sustainable yield estimates

It is clearly a problem for the credibility of yield estimates that such an enormous range of figures, from 250,000m³/yr to 675,000m³/yr, was presented by CALM as estimates for sustainable yield of first and second grade jarrah sawlogs in the course of preparation of the FMP.

As noted in an earlier chapter, the EPA in its EPA Compliance Report reached the same conclusion as a number of the witnesses quoted above. It notes that:

¹²⁰ Mr Lachlan McCaw, transcript of evidence, 28/10/1997, p.13

¹²¹ Dr Syd Shea, transcript of evidence, 26/11/1997, p.16

¹²² Report by the Expert Panel on the RFA, 2 May 1999

*“Since CALM’s 1992 estimations of sustainable jarrah yield were made scientific review has highlighted the optimism of the yield forecasts and recommended lower, more conservative levels of sustainable jarrah harvesting. Comments by Turner, and in the RFA Public Consultation Paper, point to uncertainties related to CALM’s yield predictions.”*¹²³

It now appears to be accepted that 300,000m³/yr is a reasonably accurate estimate of first and second grade jarrah sawlog yield, although the EPA recommends that on the basis of the Precautionary Principle the lower figure of 250,000m³/yr ought to be adopted.

The Committee is optimistic that the difficulties associated with estimating sustainable yields and the lack of acceptance of the figures will be overcome after the proposed State Expert Panel is established. This panel was first proposed by the Minister for the Environment in January 1999 and will externally review the provisional sustainable yield figure set for the RFA process.

4.4.8 The Precautionary Principle

Australia has ratified the 1992 *Convention on Biological Diversity*, which formulates the Precautionary Principle as follows: “Where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimise such a threat.” The 1992 *Intergovernmental Agreement on the Environment*¹²⁴ carries the following definition: “Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the Precautionary Principle, public and private decisions should be guided by: (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and (ii) an assessment of the risk-weighted consequences of various options.”

The Precautionary Principle, its basis in international law and incorporation into Australian domestic law at Commonwealth and State level, have been the subject of litigation: *Leatch v DG National Parks and Wildlife*¹²⁵ and *Friends of Hinchinbrook Island v Minister for the Environment*. These two cases are only two of the more important cases on this subject. The fact that the Precautionary Principle is the subject of a Convention which Australia has ratified

¹²³ Environmental Protection Authority (1998) *Progress Report on Environmental Performance and mid-term Report on Compliance: Forest Management Plans 1994-2003*, Bulletin 912, p.15

¹²⁴ A Commonwealth-States agreement.

¹²⁵ (1993) 81 LGERA 270 at pp.281-2

attracts the principle in *Teoh's case*¹²⁶ where the High Court ruled that there was a legitimate expectation that administrative actions of government would be performed in accordance with Australia's treaty obligations. That case dealt with Commonwealth administration, but the relevant Commonwealth-States agreement in this field would seem to leave the States covered by the *Teoh* principle as regards environmental issues.

Leatch and *Hinchinbrook*, cited above, illustrate the uses and limits on the Precautionary Principle when it is tested in court. In *Leatch*, the New South Wales Land and Environment Court found that the proposed issuing of licences of exemption under that State's conservation legislation, so that a local council could develop without fear of prosecution if its building work killed specimens of the rare Giant Burrowing Frog, would infringe the Precautionary Principle. The Court said that:

"...the Precautionary Principle is a statement of common sense and...is directed towards the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty. Its premise is that where uncertainty or ignorance exists concerning the nature or scope of environmental harm (whether this follows from policies, decisions or activities), decision makers should be cautious."

On the other hand, in *Hinchinbrook*, the Federal Court was confronted with a claim that the Federal Minister had not taken account of the Precautionary Principle as a necessary relevant consideration. The Court found that, on the evidence available, the Minister had turned his mind to the application of the Precautionary Principle, and had thus satisfied the requirements which could be scrutinised by the Court.

4.5 COMMITTEE FINDINGS

The Committee finds that:

1. there is sufficient evidence from a number of credible sources to indicate that the current level of jarrah sawlog cut is unsustainable in the long term;
2. under the 1987 Timber Strategy the objective was to reduce the cut to a sustainable level in two stages in 1990 and 1996, but the reductions did not occur;
3. on the basis of social and employment considerations, the FMP postponed the planned decrease to sustainable levels until 2003;

¹²⁶ (1995) 183 CLR 273

4. the current over-cut to date of long term sustainable yields of Jarrah sawlogs indicates a mismanagement of the resource;
5. on the basis of the evidence provided to it by CALM, the contractual commitment for jarrah sawlogs exceeded the Allowable Cut for jarrah sawlogs by at least 9,000m³/yr each year from 1994 onwards;
6. small-scale industry users have difficulty accessing the timber resource and complain about the allocation system. This inequity is not being addressed by the current system;
7. there is substantial waste in the current allocations and that a fairer and less wasteful system of allocation should be based on improved lower grade utilisation;
8. log specifications have declined over time. Log quality indicators need to be consistent over time to prevent the adoption of a bole logging system as a precursor to a further decline in log quality;
9. the FMP gives little detail about how the quality of the forest resource is to be maintained. The process should be capable of integrating considerations of rotation length, harvesting patterns and regeneration techniques;
10. unless harvest levels for jarrah and marri forests are sustainable in both a qualitative and quantitative sense then it is questionable that the timber industry can remain viable; and
11. there have been repeated reviews of forest management because of community concerns about the evolution of management practices.

Recommendation 1: That future proposals for Forest Management Plans be prepared by a body independent from the operator of forestry, with input from the operator of forestry and other groups as appropriate.

Recommendation 2: That the process for conversion from weight to volume measurement of timber should be made transparent and accountable.

Recommendation 3: That an alternative resource allocation system which is both more equitable and less wasteful be investigated and implemented as soon as is practicable.

Recommendation 4: That a key criteria on which contracts or licences are allocated be on the basis of improved saw mill utilisation of lower grade logs and higher recovery rates.

Recommendation 5: That the allocation system improve access for small scale users of forest products.

Recommendation 6: That the silvicultural objective of logging practices should be to maintain a sustainable yield of quality sawlogs.

Recommendation 7: That the use of gross bole volume measurement not be allowed to substitute for log quality indicators which are consistent over time.

Recommendation 8: That where issues of serious or irreversible harm to the environment in situations of scientific uncertainty arise, forest managers should apply the Precautionary Principle.

Recommendation 9: That the government continue to conduct trials and research as appropriate into estimating sustainable jarrah and karri yields, to inform the findings of the proposed State Expert Panel which will determine the long-term Allowable Cut for inclusion in future Forest Management Plans.

Recommendation 10: That the proposed State Expert Panel's terms of reference and organisational arrangements should be such as to deliver a clearly independent, scientifically credible and transparent outcome.

Recommendation 11: That the proposed State Expert Panel's terms of reference and organisational arrangements be made public.

CHAPTER 5

ECOLOGICALLY SUSTAINABLE FOREST MANAGEMENT

5.1 ESFM AND THE NEED FOR BIO-DIVERSITY

The question of keeping harvest levels within the sustainable maximum yield of product is addressed in para 4.4. In this section, the Committee considers the further question of whether ESFM is being achieved in Western Australia's forests.

The distinction is based on that drawn by the *National Biological Diversity Strategy*, entered into by Western Australia and other Australian Governments. That document suggests that the adoption of ESFM principles would reflect current Australian thinking on the environment:

“Community and industry attitudes to the use of biological resources are changing from the ‘maximum yield’ approach to one of ecologically sustainable yield, which recognises the need for conservation of biological diversity and maintenance of ecological integrity.”¹²⁷

The EPA notes in Bulletin 912 (“**EPA Report**”), on Forest Management, that the adoption of the principles of ESFM is a key development for new directions in West Australian forest management:

“The key findings arising from the Report are:

*There have been significant International and National developments since 1992 which are of considerable relevance to the environmental and biodiversity protection aspects of forest activities being carried out within a framework of Ecologically Sustainable Forest Management”.*¹²⁸

¹²⁷ National Biological Diversity Strategy, p.17

¹²⁸ Environmental Protection Authority (1998) Bulletin 912, p.i

In principle, the government endorses the broad ESFM approach ahead of a narrow sustainable yield approach. The opening paragraph of the FMP's Vision Statement by the then Minister for the Environment reads as follows:

*“The Government requires that the State’s forests are managed so as to provide in perpetuity for biodiversity, fresh water, timber, recreation and tourism, heritage values and other products such as honey and wildflowers.”*¹²⁹

5.1.1 Timber other than as a resource

However, in key documents such as the Meagher Report and the FMP¹³⁰ there is little or no discussion about the maintenance, in production forest, of forest values other than the timber resource. For example, discussion of “biological diversity” in the FMP occupies half a page and sets no benchmarks or performance targets by which any indication could be gained as to whether ESFM goals are being achieved in this area. Sections on ecological processes, areas of special significance, forest tourism, national estate values and hydrological values similarly offer scant information.

A number of witnesses, such as Ms Kathleen Chindarsi, Economist, emphasised the need for forest management to concentrate on ESFM:

*“According to the Resources Assessment Commission Australia’s forest management agencies have now adopted strategies for sustainable-yield management of forests producing timber. Whether or not the strategies are successful may well be an issue. But even if the strategies are successful, sustainable-yield management would be optimal for society only if it were compatible with ecological sustainability.”*¹³¹

The difficulty of re-establishing old growth values in regrowth forest is noted by Mr Rob Troeth, a professional forester and former CALM employee:

“Now a situation exists where for various reasons virtually everyone involved in forestry laments the lack of large old growth trees which were prevalent before the days of 200 ha clearfell operations in the 1980's. There are also many unanswered questions regarding the economic viability of the regrowth. For the record, in forestry terms, large old growth trees yield higher volumes, provide a more diverse range of habitats,

¹²⁹ Department of Conservation and Land Management (1993), p.i

¹³⁰ See para 4.3.1

¹³¹ Ms Kathleen A Chindarsi, Submission No.21

are less susceptible to disease affecting juvenile forests, represent an eco-system that has been less disturbed by human impacts and have high scenic and cultural values. Conversely, new regrowth forests yield only a portion of these values in relation to the ongoing investment in their maintenance.”¹³²

5.1.2 Conflicts between maximum sustainable yield and ESFM

Some differences in practical terms between the concepts of maximum sustainable yield and ESFM are as follows:

- i. maximum yield of timber is only one factor to be taken into account in forest management. ESFM is not achieved unless matters such as maintenance of water and soil quality, biodiversity, economics of alternative forest uses and full costing for timber extraction are taken into account;
- ii. it can be argued that sustainable yield of wood fibre is actually increased in a sense by over-cutting, as cutting stimulates growth, resulting in higher yield over the years to come. However this increase comes not only at the cost of timber quality, but also non-timber values, which therefore tends against achievement of ESFM. The Chairman of this Committee noted in an earlier publication:

“The problem with using the sustainable yield as the measure of the environmental acceptability of modern forestry practices is that the faster that the trees are cut down the higher becomes the sustainable yield that can be estimated as an allowable cut. This is because young forests grow at a faster rate than mature forests.”¹³³

The result is that the highest sustainable yield is obtained where trees are harvested as young as possible. *Eucalyptus globulus* stands harvested at 10 years show a very high sustainable yield but are useable only for woodchips and do little or nothing to promote other values such as habitat, conservation and tourism. The sustainable yield paradigm looks only at the wood yield, ignoring any concomitant degradation of biological qualities of the eco-system; and

- iii. if however, the annual increment of wood fibre is, over time and through thinning, allowed to accumulate into larger and older trees, the quality of both the timber and the biological qualities of the forest system are enhanced. Very young, small diameter tree

¹³² Mr Rob Troeth, Submission No.56

¹³³ Sharp, Dr Christine, (1995)*Using the Forests*, p.5

stems will be unsuitable for sawn timber and only acceptable for residue projects such as woodchips. Older and larger trees will produce a saw log yield. The longer the rotation length, the greater are the potential ecological benefits of the standing trees, particularly in the provision of hollows for sheltering forest mammals. Thus to simplify this argument, longer rotations are more compatible with ESFM.

5.1.3 Longer rotations of old forests supporting greater biodiversity

The Committee is aware that scientific opinion suggests that older forests managed on longer rotations support greater biodiversity. For example, one RFA study concluded:

“Rotational length:

Depending on the site quality and the silvicultural condition of the jarrah forest, and hence the numbers of large old unmerchantable ‘potential habitat trees’ which are retained, numbers of large possums, in particularly Ringtails may decrease following timber harvesting. The current system of dispersion of coupes and cutting only small cells and leaving uncut strips in between lessens the immediate impact but it cannot prevent the ultimate local decline in numbers due to trees with large hollows becoming limited in the second and subsequent rotations. Competition with the larger and more aggressive Brushtail possum is likely to exacerbate the situation. The decrease in Ringtail possum may or may not be permanent depending on what proportion if any, of the production jarrah forest is managed on a long, over 120-150 years, rotation.”¹³⁴

However, Alan Walker of CALM, had a different view. He maintained that a maximum wood fibre yield and forests of small young trees are as valuable as longer rotations of older and larger individual trees:

“Mr WALKER: when the ministerial determination was made on the allowable level of cut, a clear distinction was made between the biological sustainability of the 1.36 million cubic metres of jarrah and the sawlog yield about which there is considerable variation due to utilisation standards, the extent to which those standards might change and the extent to which other changes might occur, such as the introduction of whole-bole logging. The ministerial determination made it very clear those matters would be addressed during the 10-year life of the plan.

¹³⁴ Per Christensen (October 1997) *A Review of the Knowledge of the Effects of Key Disturbances on Fauna in the South-West Forest Region*. A Report to the Commonwealth and Western Australian Governments for the Western Australian Regional Forest Agreement”

The CHAIRMAN: Are you saying that the sawlog yield is irrelevant to biological sustainability?

Mr WALKER: Yes."¹³⁵

There are strong indications that at least some sections of the timber industry have accepted the *National Biological Diversity Strategy* focus on ESFM. A number of timber industry representatives spoke to the Committee about the importance of maintaining the quality of the resource. For example, Mr Lachlan McCaw of the Southern Branch of the Institute of Foresters of Australia (WA) described the evolution of forestry attitudes:

"Historically, the context of sustainability has tended to be defined in terms of sustained yield of a particular wood product because that is something that has been fairly easy to quantify. We have tended to use the sustained yield of a particular product such as first grade saw logs. Implicit in that definition is the need to protect and sustain the site resources on which that forest growth depends. Therefore, if you do not sustain the site resources, you do not sustain the growth of your products.

In recent years that concept of sustainability has come somewhat further along the track in looking at whole eco-system management. A strong international focus has been placed on the development of criteria and indicators that can be used to assess the achievement of ecologically sustainable forest management."¹³⁶

The Committee notes in this context the recent recommendation by the EPA that forest research should be based on an eco-systems approach.¹³⁷

5.2 WESTERN SHIELD

The Western Shield project is a project which CALM has carried on for a number of years across wide areas in the South-West. Under the project, meat baited with "1080", a synthetic poison derived originally from compounds found in some indigenous shrubs (*gastrolobium spp*) is dropped from aeroplanes. Native mammals are immune to the poison from long association, but it is deadly to feral foxes and cats. The aim of the program is to reduce fox numbers in

¹³⁵ Mr Alan Walker, transcript of evidence, 26/11/1997, p.7

¹³⁶ Mr Lachlan McCaw, transcript of evidence, 28/10/1997, p.12

¹³⁷ Environmental Protection Authority (1999) *Amendments to the 1987 Forest Management Plans and Timber Strategy and Proposals to Meet Environmental Conditions of the Regional Plans and the WACAP ERMP - Change to Environmental Condition 17*, Bulletin 928, p.3

particular, thus removing what is arguably the most significant threat to species numbers in the South-West.

Dr Shea regards Western Shield as a turning point in conservation in Western Australia, suggesting that insufficient credit has been given to CALM for undertaking the project:

“The continual negativity concerns me. I find simply extraordinary the criticism of Western Shield. I am still getting parliamentary questions about ethics committees and goodness knows what. This would have to be one of the most outstanding conservation coupes ever undertaken in the world. I wish I had done it. I am desperately trying to claim credit for it but I cannot. We are bringing back animals literally from the brink of extinction. We have been able to convince the Government in a time of quite high constraint to spend \$1.5m. I have mining companies lining up to give us money to do it. We are talking about five million hectares and bringing back these animals from the brink of extinction, but we have had constant criticism and constant negativity. One of my scientists said to me, “I feel that I have to be so careful. If I do the slightest thing wrong, they will be on me.” So it does have that effect.”¹³⁸

5.2.1 Criticism of Western Shield

A criticism levelled at the Western Shield project was the disparity between the claims of success and release of information to support this. Dr Michael Calver, Senior Lecturer in Biological Sciences at Murdoch University saw this as an example of the difficulty of obtaining information from CALM which would enable evaluation of the state of the forests in Western Australia:

“A lot of talk is going on about the management of the forest on the ground, but as an independent scientist I have real trouble laying my hands on some of the information that is relevant to this situation. That is fundamentally because a heck of lot of good information is out there that the Department of Conservation and Land Management does not publish. I would like to see a much higher level of publication of its data in the scientific literature.

...if you want to try to get a decent argument up in the scientific literature about the success of that program in the south west of Western Australia, you fall flat on your face because the information that supports the assertions that it...is making with regard to management is not published in the mainstream scientific literature... There are odd articles in Landscape, which I am sure many of us know. That is a glossy magazine intended for non-specialist lay readers and school children. It is not an appropriate

¹³⁸

Dr Syd Shea, transcript of evidence, 26/11/1997, p.22

place in which to put scientific information first up. Most of that information is in that magazine. A lot of the other information is goodness knows where. It is in people's notebooks and the like. It has not crept out into the light of day. What I would like to see the department do far more conscientiously is put its data up openly and let people look at it.

An embarrassment that I find in the example that I have chosen is that having a background in predator control and being interested in and supportive of what it is doing, I cannot even go out and build a case for it. I cannot even go out and be a good advocate and defend it in a scientific forum because I do not have the information available. If I cannot get that information in an area in which I think it is doing really well, why should I believe and accept any other comments and assertions that are coming out if they are areas about which I have an intrinsic doubt?"¹³⁹

CALM's response to this assertion is that:

"CALM is committed to publishing all information. However, before research results can be published the collection of data in the field has to cease and the data have then to be analysed and a paper written. A scientific paper cannot be prepared in a few weeks. It then frequently takes 1-2 years for a research paper to be published in a science journal."¹⁴⁰

Dr Jean-Paul Orsini of the Friends of Greater Kingston Forest group sees the Western Shield program as merely treating the symptoms indicating species loss, while loss of habitat remains the key problem:

"Logging is a major disturbance to the habitat of other species, and the high level of burning will remove a significant proportion of the hollow logs on the ground or the old trees that have remained. This will also increase the impact of fox predation.

The Committee is of the view that the Western Shield program has been very valuable in reducing the pressure on indigenous mammals from exotic predators, but the long term welfare of native species can only be secured by the provision of an adequate area of natural habitat.

¹³⁹ Dr Michael Calver, transcript of evidence 17/9/1997, p.12

¹⁴⁰ CALM, letter to the Committee 10/3/1998: Responses to evidence by Dr Michael Calver and Dr Pierre Horwitz, 17 September 1997, p.11

5.3 KINGSTON PROJECT

At the Kingston Block east of Manjimup CALM has undertaken a project investigating the impact of logging operations on animal numbers. The Committee visited the site during the course of the inquiry and extends its thanks to CALM officers for their informative briefing on the project.

The Kingston Project was described in CALM's 1997/98 Annual Report as:

"...a study investigating the impacts of timber harvesting on jarrah forest eco-systems. The study has demonstrated that fox control is a critical management tool for conservation of medium sized mammals, either in the presence or absence of timber harvesting, and that disturbance from harvesting and post harvest burning has little impact on medium sized mammal population sizes."¹⁴¹

The latest results from the Kingston Project are contained in CALM's 1998/99 Annual Report and are as follows:

"Trap success rates for medium-sized mammals in Kingston block, near Manjimup, show numbers have increased seven-fold since baiting began in 1992. Only nine percent of traps in August 1992 yielded any native mammals, while almost 77 percent of traps in August 1998 held native species."¹⁴²

5.3.1 Criticism of the Kingston Project

The Kingston project is regarded by Dr Michael Calver, Senior Lecturer in Biological Sciences at Murdoch University as a welcome addition to the learning on Western Australia's forests. At the same time the criticism is made by the majority of the Committee that until the study commenced there had been no attempt made to ascertain the effect of logging on mammals in jarrah forest:

"Until the Department of Conservation and Land Management began the Kingston study in 1993, we had no study on the impact of logging on jarrah forest mammals. The Forests Department kicked off some of that with surveys in the 1970s, and it has done some work, and the Department of Conservation and Land Management has continued that work, but the work is spotty and not always necessarily of a high standard by today's standards. I do not mean to denigrate previous work - people work to the

¹⁴¹ Department of Conservation and Land Management, (1998), p 18

¹⁴² Department of Conservation and Land Management, (1999), p 3

standards of their time and they do the best job they possibly can, and sometimes they work under serious financial and logistic constraints - but to quote from the Resource Assessment Commission report, in Western Australia only about 16 per cent of the environmental studies done actually used a before and after design of the type that Dr Pierre Horwitz described, where you have the monitoring before and go back and look again afterwards. If you do not have the before, how you interpret the once only post disturbance observation is incredibly loose and not particularly scientific.

...Some of the environmental impact studies we have waited an enormously long time for - a worrying length of time - and some of the stuff that is in the literature as environmental impact may not stand up against today's standards..."¹⁴³

CALM's response is that:

"This statement falsely suggests that CALM was remiss in not studying logging impacts on mammals. The reason is that observation and ecological principles have never indicated logging to be a problem for mammals. Rather, the introduced fox is the true cause of mammal decline in the forests."¹⁴⁴

The Committee has noted in an RFA document authored by the Western Australian Museum, the finding that there is a limited database on the extent of forest mammals, both in numbers and range. It is therefore difficult to draw any conclusions about the long term impact of logging on fauna.¹⁴⁵

5.4 INTEGRATED HARVESTING

A claim made to the Committee by a number of CALM and industry representatives is that in no circumstances is forest logged to obtain chiplogs: rather, forest logged to obtain sawlogs is logged using the "integrated harvesting" method whereby chiplogs are also obtained.

A number of witnesses queried whether this is the case, suggesting that much logging takes place only because the woodchips produced make the operation financially viable. Arguments against and for integrated harvesting are set out in the following paragraphs.

¹⁴³ Dr Michael Calver, transcript of evidence, 17/9/1997, p.13

¹⁴⁴ CALM, letter to the Committee 10/3/1998: Responses to evidence by Dr M Calver and Dr P Horwitz, 17 September 1997, p.13

¹⁴⁵ Western Australian Museum of Natural Science, *Attribution and Modelling of Fauna for the South West Forests*, 1998, pp. 7-8

5.4.1 Arguments against integrated harvesting

Mr Ross Young, former CALM consultant, claimed that the fact that woodchip volumes do not vary in accordance with variations in sawlog volumes proves that woodchip logs are being logged in their own right, not merely as a by-product of sawlog harvesting operations:

“The Diamond Tree chipmill was constructed to salvage the waste produced from sawlog production. Therefore it would be reasonable to expect that when sawlog production drops, the quantity of salvage material for chipping also drops. This situation doesn’t match the reality, because export quotas for old growth hardwood forests have been renewed at their current level for another 6 years, and a quota for regrowth hardwood forest resource has been issued in addition.”¹⁴⁶

Ms Laurie Bullied, Councillor of the Shire of Bridgetown-Greenbushes, believed that CALM’s claim that integrated harvesting is a sensible utilisation of timber that would otherwise be wasted was misleading the public:

“The concept that woodchipping is based on waste products needs to be exposed. Governments in Australia have been extraordinarily successful in convincing the public that this is the case, knowing full well that in the public mind this is sawlog waste from the mill floor. In fact, woodchipping is based on old growth forest that is not waste to anyone other than a timber miller.”¹⁴⁷

Mr Brian Young, resident of Manjimup, proposed that the claim made by CALM and industry that sawlogs, not chiplogs, drove logging practices should be put to the test on a case by case basis:

“[Logging of southern jarrah-marri] demonstrates the dependence of the timber industry on native forest for woodchips to fund profits. It is uneconomic to log these drier eastern jarrah forests (in terms of timber volumes) without marri as woodchip stock. It is therefore again deceptive for CALM to claim logging occurs for timber and that woodchips are an unexpected bonus. If an area cannot be proved to an independent body ... to be economic on the basis for which it is claimed to be logged, it should be excluded.”¹⁴⁸

¹⁴⁶ Mr Ross Young, Submission No.9

¹⁴⁷ Mr Laurie Bullied, transcript of evidence, 29/10/1997, p.24

¹⁴⁸ Mr Brian Young, Submission No.54

5.4.2 Arguments in favour of integrated harvesting

The party with most at stake in the debate on integrated harvesting is Bunnings Forest Products. Through its wholly owned subsidiary the Western Australian Chip and Pulp Co Ltd (“WACAP”), the company has an effective monopoly over purchase of native forest chiplogs under the *State Agreement Act (WA) 1969* and is also the major purchaser of sawmill residues which are used for chip. Bunnings’ views on integrated harvesting were put to the Committee as follows:

“We don’t accept there is “public unrest” about woodchipping. Certainly elements of the conservation movement target woodchipping in their attacks on native forest operations but whether this will increase is by no means certain.

With regard to campaigns against woodchipping, we will do all we can to ensure that the public is not misled by false claims that are so often made. The conversion of timber not suitable for sawn timber production into woodchips for export to Japan makes good economic and environmental sense. It provides the State with a \$70 million annual export industry and utilises material that will be produced under the State’s sustainable forest harvesting regime but which would otherwise be burnt or left to rot. We will also continue to explain the totally integrated nature of our forest products business where the existence of a market for residues makes a significant contribution to the overall viability of the timber industry.”¹⁴⁹

The Australian Workers’ Union offered strong support for integrated harvesting:

“Approximately eighty per cent of woodchip volume is marri. The balance is karri mill waste, logs from thinnings, limbs and log section containing faults that prevent economic milling. Less than 4% of marri in the southern forest is suitable for mill logs.

The integrated harvesting of marri for woodchip with jarrah and karri sawlogs brings efficiencies to logging operations. It allows for a better regeneration of forest after harvesting and provides work for almost everyone employed in the bush and not only those employed in chipping and transport.”¹⁵⁰

The FPS adopted a similar view:

¹⁴⁹ Mr Ron Adams, letter to the Committee, 24/11/1997

¹⁵⁰ Australian Workers’ Union, Submission No.8

“The ability to sell low grade material unsuitable for producing higher value sawlogs is a valuable silvicultural tool. No sawmiller would convert potential sawn products that could be sold for as much as \$1000 per cubic metre into woodchips when the price for woodchips is about \$80 per cubic metre.

Although woodchipping has been portrayed by some as an “evil” use of wood material, it is better to sell this material for commercial value than to leave it to rot on the ground.

Some parts of the jarrah forest that were logged prior to the 1970s when woodchip markets were not available, are dominated by marri trees to the extent that they could now be described as a marri forest. Few marri trees are suitable for sawlogs so unless a market exists for products such as woodchips these excess marri trees have to be removed non-commercially in a very expensive operation.”¹⁵¹

Similarly the Forest Industries Federation (WA):

“It is essential to recognise that the use of forests for sawlog production inevitably produces residue wood. It is sound practice to make use of these residues. The best available opportunity for using marri and karri residues at present is to convert them to woodchips which can be used in paper manufacture.”¹⁵²

The Southern Branch of the Institute of Foresters of Australia (WA) endorsed integrated harvesting on good forestry grounds for both karri and jarrah forests:

“In the clearfelling process the creation of the required gap for regeneration is mimicked at a particular scale. We believe that the smallest area of created gap to successfully establish regeneration is around a hectare because of the effect of shading from trees alongside and the potential for damage from, say, later harvesting of those trees.

...The selection process causes a significant amount of damage when such canopies are cut, if we have the second stage established under and around them. The rapid replacement of cut trees and the ability to protect the regrowth from either overtopping and competition or damage from subsequent harvesting have led us to need to go to some clearfelling. The size of those gaps is really the issue. Both karri and jarrah require the removal of some form of over wood to create a gap in the canopy to allow

¹⁵¹ FPS, Submission No.13

¹⁵² Forest Industries Federation (WA), Submission No.16

them to grow. It is a simple matter of growth habit. The size of the gaps seems to be the major issue in the forest. Gaps have changed over time from the early days of up to 200 hectare gaps in the southern forests down to maximum gap sizes of 80 hectares now, with averages around 40. The additional retention of riparian and other amenity zones further decreases the size of those gaps. Therefore, growth habit is translated into practical and economic shapes and sizes with which we can work."¹⁵³

The Institute of Foresters, WA Division, believe woodchips are an effective use of material which is unsuitable for sawlogs:

"Whilst other industries are applauded for minimising waste by selling their low grade products to provide additional income to the economy, it is a paradox that often whenever forest industries attempt to sell otherwise unsuitable material for products such as woodchips there is often unfounded opposition. Despite the criticism, woodchip exports are a very important revenue earner and employment creator directly and indirectly for Western Australia.

Much of the jarrah forest, logged before woodchip markets commenced in the 1970s now contain a very high proportion of marri trees, far higher than occurred in the original forests. These marri trees need to be removed to favour growth of the preferred jarrah and a market for marri woodchips provides this opportunity. Marri trees are commonly affected by defects and few are capable of producing an economically recoverable quantity of sawn timber. Those marri trees that do produce quality timber are highly prized and valuable. Consequently the likelihood that quality marri sawlogs are processed to make woodchips is very unlikely."¹⁵⁴

It appeared to the Committee that one good indicator that the integrated harvesting method was driven by demand for sawlog would be if variations in sawlog production were as a general rule accompanied by proportional variations in chiplog production. However when this was put to CALM, CALM responded that this was not necessarily the case:

Question: *CALM often claims that harvesting practices are sawlog driven, not chiplog driven. Recent harvesting contracts allow for reduction in sawlog cut. Will chiplog volumes automatically decrease when sawlog volumes decrease?*

¹⁵³ Mr Robert Hagan, transcript of evidence, 28/10/1997, p.17

¹⁵⁴ Institute of Foresters, WA Division

Answer: Harvesting contracts have been let to ensure CALM delivers sawlogs in compliance with CALM's contractual sale obligations which in turn comply with the allowable average annual harvest levels as set by the Minister.

The type and inherent quality of forest being harvested for sawlogs, together with the relevant silvicultural treatment required for any particular area of forest, determines the quantity of forest residue which can also be harvested and sold as chip. There is a wide variation in the sawlog to chiplog ratios in different forest areas.

The production of chiplogs from residue and from first thinning of regrowth forests is therefore not directly related to any level of sawlog production.”¹⁵⁵

These views are of course in direct contradiction to those of some witnesses as set out in paragraph 5.4.1 above.

Industry consultant Beca Simons offered strong support for integrated harvesting:

“Further, all industrialised countries with strong forest products industries produce a range of products from commodities to specialities. Countries play to their strengths - so Scandinavia is a world leader in technology and high value paper specialities; but it also continues to produce newsprint and linerboard.

...Our view is that the productive use of the State hardwood forest resource according to accepted ecologically sustainable principles will be maximised to the extent that the strategy aims at the productive use of both the forest and plantation resource, without constraint on the conjoint extraction of pulpwood and residuals.”¹⁵⁶

5.5 CLEARFELLING: THE VIEW FROM CALM

Closely related to the issue of integrated harvesting is the issue of clearfelling. As many trees used for chip are felled in a clearfelling operation, but would not be felled on a selective logging basis, it follows that clearfelling produces far more chiplogs than selective felling. There is therefore a strong financial imperative for CALM to promote clearfelling ahead of selective felling.

¹⁵⁵ Dr Syd Shea, letter to the Committee, 17/2/1998

¹⁵⁶ Beca Simons (1997), *A Report to the Western Australian Department of Resources Development on the Further development of the forest products industry in Western Australia*, pp.9-11

CALM and industry argue that clearfelling is advisable for sound silvicultural reasons. A clearfelled area is claimed to be analogous to fire in the natural course of events and to produce good regrowth, restoring many if not most of the forest's values over time.

The Committee visited the Leeuwin Centre for Earth Sensing Technologies in Floreat Park and examined satellite imaging of the south - west forest over time. These visual images for the periods 1988, 1992 and 1997 demonstrate the extent the forest has been disturbed during those time frames. The Committee has included a satellite Map with this Report showing these changes.¹⁵⁷

Clearfelling in jarrah/marri forest produces a large proportion of marri logs, almost all of which are currently used for chip because of difficulties in producing sawlogs from marri. Conservationists object to this on the basis that it is objectionable to chip whole marri trees: if a tree is not suitable for sawlog it should be left standing. However felling marri trees for chip is said by CALM to be the only method of avoiding marri dominance:

“Marri trees are harvested to produce sawlogs and to achieve silvicultural objectives to regenerate the forest and maintain a similar balance of species that was present prior to harvesting. Unfortunately a large proportion of the marri trees harvested contain significant faults making those logs unsuitable for conversion into sawn timber products. The logs from marri trees which cannot be sold as sawlogs are sold as woodchips rather than being removed.

Marri trees are removed from areas requiring regeneration otherwise the remaining trees would inhibit the regeneration and development of jarrah or karri lignotubers or seedlings. Also if marri was retained totally then the harvesting of jarrah or karri sawlogs would lead to the species mix changing in favour of marri.”¹⁵⁸

5.5.1 Contrary claims as to the effects of clearfelling

Claims such as these are disputed by a number of sources. Mr John Taylor, a retired forester, explained his view:

“First, I would like to address the so-called karri forest regeneration. I wish to do this because it is often misrepresented and used as an argument in favour of clearfelling all old growth forests. There is no doubt of the ability of karri to recolonise clearfelled

¹⁵⁷ See the Map titled *Forest Changes South West Western Australia February 1988, January 1992, December 1997* in the sleeve at the back of this Report.

¹⁵⁸ Dr Syd Shea, letter to the Committee, 17/2/1998

areas. Its growth rates and dominance particularly in deep ash beds is spectacular. Unfortunately, however, this "regeneration" has often been publicly promoted by both CALM and industry managers as being the only way in which the karri forest can be perpetuated. The works of Professor Peter Attiwill in the regrowth of Victorian mountain ash form part of the training of the minds of our forest managers...

It is clear to me that Peter Attiwill's views cannot be extrapolated to apply to our local forests. His conclusions are based on the assumption that the forest cannot regenerate without some form of devastating fire which kills mature trees and reduces the forest to one huge smouldering ash bed. He names large areas of forest in Victoria by the date of the destructive fires. He refers to the 1939 forest and 1898 forest. He states in his work, which was funded by the Forest Industry Federation and the Forest Protection Society, that nowhere do we find more than two or at most three aged classes of trees growing in one forest.

This is clearly not the case in our karri forest. Even a casual observer will note that most of our forests are of mixed age. There are no large contiguous areas of single age stands, outside of those areas that have been artificially made so by clearfelling...

So please do not allow those with an interest in the exploitation of our forests to seduce you with pseudo arguments that karri cannot be perpetuated without its wholesale sacrifice. It has survived for a long time without man's intervention and will survive a lot longer without it."¹⁵⁹

Dr Beth Schultz of the Conservation Council WA took the following view:

"Selective logging was always the preferred silvicultural practice in the jarrah forest. Only recently CALM moved to this so-called gap creation, which is another name for clearfelling. I see it as the final solution for the jarrah forest. Having overcut it so much and for so long, CALM is in the final stage where it clearfells in the hope that something comes back. That is doubtful. I spent a day driving through the northern jarrah forest with a beekeeper. He said that the forest is not growing back. That area has been turned into a marri forest. The red gum has taken over.

We know from the Andersen report that CALM's plan for the karri forest is to thin it at 20, 40, 60 and 80 years and to clearfell at 100 years with no regrowth to be allowed to grow on beyond 100 years. CALM's plan for the jarrah forest is to thin it at 20, 50, and 100 years and to clearfell - Andersen actually uses that word - at 150 years. That is not

¹⁵⁹ Mr John Taylor, transcript of evidence, 27/10/1997, p.13

even a process to obtain decent wood. CALM is turning healthy sustainable, self-sustaining, old growth forests into even aged, immature, disease ridden regrowth that cannot compete with the tree crops on clear farmland for wood production.

When one talks to the tourism industry, as old growth forest disappears around the world, our old growth forests will be a golden egg to attract tourists from around the world. Yet CALM is destroying them. Karri and marri are felled for woodchips, and jarrah and marri for charcoal and woodchips. It is so irrational as to be mind blowing, yet people cannot see it.”¹⁶⁰

Mr Ian Telfer of Bunnings Forest Products disagreed, emphasising that clearfelling is the most appropriate silvicultural practice. On this view, any material, standing or fallen, which is not a sawlog is therefore “residue”:

“Two premises drive the policy of timber production at the state and government level: One, we draw off saw logs to meet the needs contracted to the State; and second, the silvicultural objective is to ensure that when logging any patch of forest, you ensure that from a forestry perspective you can regenerate that forest. A number of silvicultural tools are needed to do that effectively, and the key tool is to remove either standing or fallen residue to allow an effective regeneration of the forest. You then have choices: You can either burn that material, as was done in the past, or you can find a commercial use for that material.”¹⁶¹

5.5.2 Log grading and residue

It should be noted that the forest industry uses the term “residue” in a specialist sense. Most of what is described as “residue” is in fact whole logs which go straight to the chipper. Tree branches and similar matter cannot be chipped as a general rule. Mill waste can be chipped, but forms only a small proportion of the volume chipped. In jarrah forest operations, no jarrah is chipped but almost all marri is chipped. In karri forest operations, some karri is used as sawlog and some is chipped, while again most marri is chipped. CALM informed the Committee that logging of predominantly marri forest produces up to 90% chip, all of which falls into the category of “residue” as the term is used by Mr Telfer and other witnesses¹⁶².

¹⁶⁰ Dr Beth Schultz, transcript of evidence, 10/9/1997, p.10

¹⁶¹ Mr Ian Telfer, transcript of evidence, 15/10/1997, p.5

¹⁶² Mr Alan Walker, Department of Conservation and Land Management

The Committee notes that the National Party (WA)'s February 1999 policy statement on Forest and Conservation Management was severely critical of the use of old-growth forest for chip logs, stating:

“Based on advice to the EPA in 1988, almost 84pc of chiplog requirements are now being supplied from forest logged before 1940 and old-growth forest. This is equivalent to more than 617,000 tonnes of timber per year.

Phase-out clear-felling in old-growth forest

Again, the Nationals do not believe that it is possible for old-growth and forest stands originally logged before 1940 to sustain this level of logging for chiplogs in the short-term, let alone the long-term, and concurrently to remain a significant supply source of sawlogs.

For these reasons, action must be taken now to ensure the rapid transition of industry reliance on old-growth forest to both regrowth forest and plantations as the principal source of logs for the complete variety of uses.

The Nationals believe that clear-felling in all old-growth forest should be replaced with less disruptive forms of more discriminating logging. This will require adherence to a rigid programme of visual resource management and tree-selection. Subsequent log-grading should be based on detailed analyses of the proportions of forest type within each coupe. It should also become a requirement that all second-grade old-growth logs cut under this regime be processed at a sawmill before being assessed for transfer elsewhere for other uses, such as woodchipping.”¹⁶³

5.5.3 Criticism of CALM philosophy on clearfelling

The Committee has found a degree of consistency in criticisms of the management philosophy of CALM, from not only environmentalists but also scientists and auditors. The following, written by Professor William McComb of the Department of Forest Science at Oregon State University following a year spent working with CALM, is typical of a number of submissions and materials viewed by the Committee (and is of particular interest because of the author's familiarity with, but independence from, the Department):

“My greatest concern actually falls not with the scientists, nor with the managers, but with the philosophies that seem to be represented somewhere within the upper administration of CALM. I don't have to look very far back into the past in the U.S. to

¹⁶³

Nationals Western Australia, *Forest & Conservation Management*, (1999) p. 10/27

find examples of a management philosophy of resource use that was incompatible with long-term even-flow sustained yield of forest resources on multiple use lands... it seems clear to me that the rate of harvest on jarrah forests cannot be sustained for long at its current level...

A similar management philosophy was once imposed on forests of the southern US and the Pacific Northwest of the U.S. In both examples, relatively short periods of high level resource extraction left industries well off, but jobs for forest workers declined and the long-term persistence of several species of forest fauna fell into question, despite policies and laws that spoke to multiple use, sustainable management and wildlife protection. In both regions, administrators are now realising that few options remain and that all options now cost much more to implement than if a less aggressive harvest policy had been followed in the past.

Managed portions of forest landscapes are now dominated by small-diameter trees recovery is low in these small pieces. Further, management costs, including harvesting costs, remain high per piece in these small stands. Finally, non-timber values associated with large trees (and the large pieces of dead wood they produce) are not being provided on these lands.

I am afraid that there is a similar aggressive philosophy to timber harvest within some high-level administrators of CALM and that they could be making the same mistakes as their colleagues have in the U.S. I hope that I am wrong. But if I am not wrong, then I strongly recommend that the administrators in charge of CALM forests recognise the likelihood of a serious problem in sustaining harvest levels in the jarrah forests, and assign a core group of scientists and managers representing a variety of resources (timber, flora, fauna etc) to develop a long term integrated plan for returning timber harvests to levels that can sustain timber, timber-dependent communities and non-timber resources. CALM has the people and the resources to accomplish this.”¹⁶⁴

5.6 THE MONTREAL PROCESS FOR MEASURING SUSTAINABILITY

The Committee found that members of the forestry profession are keenly aware of the desirability of conducting forestry in this State according to ESFM principles. One avenue being explored by the forestry profession in Australia with a view to enhancing recognition of the responsibilities and skills of the profession is the Montreal Process, described by the Southern Branch of the Institute of Foresters of Australia (WA) as follows:

¹⁶⁴ Professor William McComb (undated) *Perceptions on the Management and Research Programs in Forestry and Forest Wildlife in CALM*, p.1

*“In recent years, there has been a strong international focus on the development of criteria and indicators which can be used to assess progress in the achievement of ecologically sustainable forest management. Australia has been an active participant in this initiative through the Montreal Process Working group, which represents a group of 12 countries that together contain more than 90% of the world’s temperate and boreal forests. The Institute endorses the adoption and ongoing development of criteria and indicators for sustainable forest management, and recommends that the Montreal criteria and indicators, or an appropriate subset of them, form the basis for the Committee’s current inquiry into forest management in the south-west.”*¹⁶⁵

The Forest Industries Federation (WA) also takes the view that the Montreal Process will address many of the uncertainties currently colouring the sustainability debate:

*“At present there are no universally acceptable measures of sustainability against which our operations can be objectively judged. We are hopeful that sustainability measures will be developed through the current Montreal process and that some independent, publicly credible means of assessing compliance with them will also be developed. We are very confident that Western Australian logging operations will stand up to such scrutiny.”*¹⁶⁶

At present there is not enough information available to conclude whether Montreal criteria are being met. Mr McCaw of the Southern Branch of the Institute of Foresters of Australia explained that:

*“... a first approximation report has been prepared nationally, which presumably is based on input from each of the States and looks at how those criteria can be interpreted and what indicators are currently in place. Some of the indicators are quite complex. It is probably fair to say that we do not have the information to fully quantify all of those, but quite a considerable research effort is going towards validating those, as it were, and seeing whether they are appropriate for particular forest types. Therefore, it is being taken seriously.”*¹⁶⁷

¹⁶⁵ Southern Branch of the Institute of Foresters of Australia, Submission No.25

¹⁶⁶ Forest Industry Federation (Western Australia), Submission No.16

¹⁶⁷ Mr Lachlan McCaw, transcript of evidence, 28/10/1997, p.15

5.6.1 The Federal Government's Montreal Process Working Group

The Federal Department of Primary Industries and Energy has established a Montreal Process Working Group ("**Group**") to advise on implementation of Montreal criteria. In June 1997 the Group produced a report called "Australia's First Approximation Report for the Montreal Process", which does not purport to address the question of whether Australia is meeting the Montreal sustainability criteria but is in the nature of a scoping document. It sets out baseline measurements (such as current area of different forest types) which will be used as points of reference for assessment of Australian compliance over time. There are chapters on each of the following criteria, each of which has a set of "indicators", briefly outlined below.

Criterion 1 Conservation of biological diversity

Indicators relate to distribution, age classes and fragmentation of each forest type; number of forest dependent species; and number of species which are threatened or have lost part of their range.

Criterion 2 Maintenance of productive capacity of forest eco-systems

Indicators relate to area of production forest, total growing stock in forests and plantations and total volumes of produce removed each year.

Criterion 3 Maintenance of forest eco-system health and vitality

Indicators relate to areas of damaged forest, exposure to pollutants and diminution of indicative biological components such as fungi and epiphytes etcetera.

Criterion 4 Conservation and maintenance of soil and water resources

Indicators relate to areas of erosion, protective functions such as riparian zones, deviation in stream flow and timing, significant variance in biodiversity, and toxicity.

Criterion 5 Maintenance of forest contribution to global carbon cycles

Indicators relate to total forest biomass by forest type and age class, and contribution of forests to carbon mass.

Criterion 6 Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies

Indicators relate to the level of timber recycling; value, volume and consumption of wood and wood products, including downstream processing; value of non-wood forest products; tourism, research and development, investment and employment in different areas; social and indigenous values; and other non-financial values.

Criterion 7 Legal, institutional and economic framework for forest conservation and sustainable management

Indicators relate to clarity of different tenures; indigenous traditional usage rights; public participation; management for special environmental, cultural, social and scientific values; law enforcement; policy review and monitoring; non-discriminatory trade; information availability and ability to predict change.

5.6.2 Summary of the Federal Government's Montreal Report

The Summary of the Montreal Report indicates that Australian forestry has a reasonable basis for commencing determination of these criteria but that there is a lot of work to be done before ESFM is able to be fully measured:

"This report raises a number of issues relating to data adequacy and the applicability of indicators. There are deficiencies in the data used for a significant proportion of the indicators.

Notwithstanding these difficulties, there is generally good data available for public wood-production forests and woodlands and for nature conservation reserves. However, not unexpectedly the indicators as they stand and the data provided in this report are not sufficient to allow a definitive conclusion to be reached about the sustainability of forest management in Australia as a whole, particularly for some tenures of forested land.

*There is a clear need to establish the connection between some of the indicators and sustainability."*¹⁶⁸

¹⁶⁸ Commonwealth of Australia (1997), pp.100-101

At the State level, the RFA's IEAG similarly reports that CALM is moving towards the Montreal Process principles but that work remains to be done:

“The collection of more systematic rare flora and fauna data is needed to provide a scientifically sound basis for predicting and mapping the distribution of key species of flora and fauna in the forests. Discussions with agency staff and stakeholders and an inspection of the literature indicates that the vast majority of data are collected for purposes other than modelling distributions. The expert advisory group has heard opinions that this lack of distributional data hinders planning for fire management and timber harvesting.

CALM is moving towards development of a set of indicators of ecologically sustainable forest management consistent with the Montreal Process criteria and indicators. Development of indicators of sustainability of biodiversity is a vital requirement.”¹⁶⁹

5.7 LOGGING PRACTICES/ESFM COMPATIBILITY

The majority of the Committee is concerned whether the practice of clearfelling is compatible with the principles of ESFM. The Committee is aware of the role of the forests as a refuge for flora and fauna which have disappeared from the Swan coastal plain and the agricultural region, so that over time the forest estate has become the last section of the South-West eco-system which is relatively undisturbed. Therefore the state forests play a critical role in conserving the environmental values of the large South-West bio-region. The Committee has found that there is inadequate evidence to demonstrate that clearfelling is compatible with this role. However, as Dr Michael Calver, Senior Lecturer in Biological Sciences at Murdoch University has noted:

“... extinction is an end process; a process that comes at the end of protracted period of population decline and usually a fragmentation of populations. In the 1996 edition of the Royal Society of Western Australia journal, a number of CALM scientists looking at conservation networks within south west forests make the very clear statement that the majority of forest vertebrates have undergone range declines and fragmentations in distribution within that forest area. Range declines and fragmentations of distribution are the precursors - the first step - towards an extinction within the bioregion. Therefore, the process is under way. What causes the process is more contentious and more difficult. However, it is not correct simply to focus on extinction; if we focus only on extinction, we are left with a monitoring standard that leaves us with an irreversible consequence. If the extinction has happened, it is over. It is far more desirable for some

¹⁶⁹ Independent Expert Advisory Group (1997), p.65

sort of monitoring standard to cut in before then and provide an opportunity for recovery."¹⁷⁰

The Committee notes that the silvicultural case for clearfelling is to deal with the deterioration in the quality of timber over successive harvests. However the same objective could be achieved under less intensive selective logging by simply requiring the selection of a greater range of quality specifications, including all grades of sawlogs and residue trees for woodchipping, instead of more traditional selection cutting which focuses on high grade logging only and leaves inferior timber trees behind.

The government endorses the goal of ESFM in principle in the FMP. For the most part it appears accepted that ESFM is practised in the formal reserve system. However, in production forest, including informal reserves within State forest more attention is paid in practice to issues of yield than other indicators of ESFM. The issues involved in determining whether ESFM is being achieved are more difficult than those relating to the sustainable yield paradigm. This may be one reason why, despite widespread acceptance that ESFM principles provide the appropriate measuring stick for whether forests are being successfully managed, the movement identified by the *National Biological Diversity Strategy* away from the sustainable yield model towards the ESFM model of forest management is not proceeding as effectively as it could.

The Committee is of the view that to assist in ESFM principles being put into place as effectively as possible, the *CALM Act* should be amended to require forest management to be carried out in accordance with those principles.

This is not to say that there are no practical applications of ESFM principles taking place. Research projects such as the Kingston project and pest management projects such as Western Shield are welcome contributions to the goal of ESFM. The existence of many stream reserves and some road reserves protects significant areas of production forest from harvesting. It may be questionable whether these can properly be described as "reserves" given their vulnerability to edge effects and other deleterious impacts. Nevertheless recognition by forest managers that these areas require protection indicates a willingness on the part of government to adapt to ESFM principles rather than simply maximise yield. The forestry profession is at the forefront of moves to embrace a more scientific approach to achieving ESFM and is to be commended for this.

The Montreal Process appears to be a valuable exercise in establishing a set of standards which from a professional forestry point of view will serve as benchmarks to measure whether ESFM is being achieved.

¹⁷⁰

Dr Michael Calver, transcript of evidence, 17/09/1997, p.14

Once the indicators under the Montreal Process are in place and it is possible to measure objectively whether ESFM is being achieved, claims as to whether or not such achievement has taken place will have greater force and will be able to be tested by interested parties. It is to be hoped that discussion on all sides about forest management could become better informed, less rhetorical and less combative.

The Committee considers that there is sufficient evidence of the need to revise logging prescriptions to better reflect what used to be called “multiple use” and nowadays is called, ESFM. This review of prescriptions should include reconfiguration of the stream reserve system, advocated by the Waters and Rivers Commission,¹⁷¹ the need for a mosaic of retained older trees and undisturbed areas, and the phasing out of clearfelling. It needs to be accomplished prior to the work of the proposed State Expert Panel review which is to determine the long-term Allowable Cut.

5.8 COMMITTEE FINDINGS

The Committee finds that:

1. the Government of Western Australia endorses ESFM;
2. the Meagher Report and the FMP are silent about maintenance of forest values in production forest other than as a timber resource;
3. ESFM is not achieved unless matters like maintenance of water and soil quality, biodiversity, economics of alternative forest uses and costing for timber extraction are considered;
4. clearfelling produces more chiplogs than selective logging;
5. the practice of large scale clearfelling is not compatible with the principles of ESFM;
6. the silvicultural objectives of clearfelling could be achieved under less intensive selective logging by requiring the selection of a greater range of quality specifications, including all grades of sawlogs and residue trees for woodchipping, instead of more traditional selection cutting which focuses on high grade logging only and leaves inferior timber trees behind;

¹⁷¹ Regional Forest Agreement for the South-West Forest Region of WA, (1999) clause 68

7. members of the forestry profession are aware of the desirability of practising forestry according to ESFM principles;
8. criticisms of the management philosophy of CALM are consistent across environmentalists, scientists and auditors;
9. research projects such as the Kingston project and pest management projects like Western Shield are welcome contributions to the goal of ESFM;
10. the Montreal Process is a valuable exercise in establishing a set of standards which from a professional forestry point of view, will serve as benchmarks to measure whether ESFM is being achieved; and
11. there is a need to revise logging prescriptions to include reconfiguring the stream reserves, the retention of a mosaic of older trees and the phasing out of clearfelling to better reflect ESFM.

Recommendation 12: That the objectives of the model used to determine the long term sustainable yield should incorporate the principles of ecologically sustainable forest management.

Recommendation 13: That management changes be required to implement ecologically sustainable forest management before non declining yields are calculated.

Recommendation 14: That the *Conservation and Land Management Act 1984* (WA) be amended to require forest management to be conducted on ecologically sustainable forest management principles.

Recommendation 15: That a representative range of baseline indicators as set out in the Montreal Process be established and incorporated in the regulation of forest management in Western Australia.

Recommendation 16: That an inquiry be conducted into the economic and social impacts of phasing out clearfelling of native forests, within sufficient time so as to allow for consideration of phasing out clearfelling in the new Forest Management Plan.

Recommendation 17: That the Minister adopt the recommendations of the Environmental Protection Authority in regard to the establishment of an independent Forest Systems Research Advisory Committee.

Recommendation 18: That CALM's scientific literature be publicly available and subject to peer review.

CHAPTER 6

SUSTAINABLE FOREST LOGGING PRACTICES AND THE LAW

6.1 MINISTERIAL CONDITIONS AND THE FMP

In this chapter the Committee considers:

- i. CALM's compliance with 18 Ministerial Conditions of 1992 relating to an earlier proposal which were imposed on to the later FMP;
- ii. a November 1998 report by the EPA, Bulletin 912;
- iii. CALM's response to the EPA's report; and
- iv. a report by Mr Mike Codd of January 1999 to the Minister for the Environment concerning both the above reports.

The Committee's discussion focuses on those matters where the EPA expresses concerns about sustainability of current forest management.

6.2 LEGAL FRAMEWORK OF MINISTERIAL CONDITIONS

- i. Under sub-para 45 (5) (a) (iii) of the *EP Act*, CALM is the proponent for the proposal which attracted 18 Ministerial Conditions. (The legislative structure allowing for Ministerial Conditions to the FMP is set out in para 4.3.1).
- ii. The 18 Ministerial Conditions were issued as a Ministerial Statement under s.45 of the *EP Act* in December 1992.
- iii. An EPA Report, Bulletin 912 was prepared by the EPA pursuant to the monitoring powers of the Department of Environmental Protection ("DEP") to check that Conditions are being adhered. Under the Ministerial Conditions, a five year progress report is required.
- iv. The CALM response, titled *Report to the Hon Minister for the Environment on CALM's Compliance with Ministerial Conditions on the Forest Management Plans 1994-2003* -

A Response to the Environmental Protection Authority Bulletin 912, November 1998 (“**CALM Response**”), to the EPA Report was served on the Minister for the Environment pursuant to consultation by the Minister with CALM (para 48 (4) (a) *EP Act*).

- v. The Codd Report resolving the dispute between CALM and the EPA concerning the Conditions rested on the Minister’s power to appoint a mediator under the Ministerial Conditions.

6.3 EPA BULLETIN 912

CALM’s 1992 proposal to amend the then current 1987 Timber Strategy to increase timber harvesting levels was approved by the Minister for the Environment. The FMP was prepared on the basis of this approval. The Minister’s approval was subject to the 18 Ministerial Conditions set by the Minister, and referred to above. Ministerial Condition No 18 makes the EPA generally responsible for verifying compliance with the conditions. Accordingly, in 1996 the EPA commenced what it described as:

*“...a process for reviewing CALM’s environmental performance with the Forest Management Plans as well as progress towards compliance with the 17 other Environmental Conditions in the Minister’s Statement.”*¹⁷²

As part of the review, the EPA in 1996 established an Advisory Committee on Forest Management Plans (“**ACFMP**”) under section 25 of the *EP Act*. The ACFMP reported to the EPA in October 1998.

The EPA published the findings of its review in November 1998 in the EPA Compliance Report. CALM then published its own CALM Response to the EPA Compliance Report.

The reaction of the Minister for the Environment, the Hon Cheryl Edwardes MLA, to the EPA Compliance Report was to commission Mr Mike Codd “...to facilitate the resolution of a number of important issues arising from the EPA’s mid-term report.”¹⁷³ Mr Codd’s six page report to the Minister was completed on 13 January 1999.

¹⁷² Environmental Protection Authority (1998) Bulletin 912, p.1

¹⁷³ Media Statement, Minister for Environment, 24/1/1999

In the following sections the Committee discusses the EPA's findings in the EPA Compliance Report, the CALM Response and Mr Codd's report, so far as they relate to those Ministerial Conditions affecting sustainable logging practices.

6.4 MINISTERIAL CONDITION 1

Ministerial Condition 1¹⁷⁴ was a general condition requiring CALM to fulfil its commitments made in its FMP proposal. The EPA was unable to conclude whether CALM had done so, for the reason that CALM did not make any listed, specific commitments, essential to the proposal, of the kind usually included in such a Ministerial Statement.

6.4.1 EPA finding and proposal

The EPA found that the lack of commitments on CALM's part needed to be remedied and proposed the following:

- “1) *Commitments should be consolidated by CALM, in consultation with the DEP, and published, to enable effective assessment of monitoring and compliance.*
- 2) *The list of commitments should include:*
 - a. *a commitment to develop and implement the EMS [Environmental Management System] referred to below;*
 - b. *the definition of the Precautionary Principle used in the Intergovernmental Agreement on the Environment;*
 - c. *the adoption of the principles of ecologically sustainable forest management...*
- 3) *An environmental management system should be developed, according to the principles of the ISO 14000 Series Documents and the Montreal Process, within 1 year.*

The EMS should include the following elements:

- a. *an environmental policy incorporating arrangements for community involvement during its development;*

¹⁷⁴ See Appendix E for the wording of this Condition.

- b. *corporate commitment to the environmental policy;*
- c. *environmental performance objectives which are outcome oriented and measurable;*
- d. *an environmental management plan and implementation programme;*
- e. *research and monitoring programmes in relation to forest management which address the commitments;*
- f. *an external audit plan for measuring performance against objectives; and*
- g. *a procedure for regular public reporting.*¹⁷⁵

6.4.2 CALM's objections to the EPA finding and proposal

The CALM Response agreed with the EPA to an extent, stating that:

*"CALM agrees that a consolidated list of commitments, based on the final Forest Management Plan, should be prepared by CALM in consultation with the DEP and be made available for public information."*¹⁷⁶

However, CALM's agreement was extensively qualified. CALM in fact disagreed with all the future commitments proposed by the EPA (as quoted above), presumably on the basis that they were not "*based on the final Forest Management Plan*" although this is not clear. CALM stated that:

*"...it is unreasonable to make CALM comply with commitments that did not exist at the time the project commenced."*¹⁷⁷

CALM did not indicate which commitments it believed might be "*based on the final Forest Management Plan*". Later in the CALM Response, CALM reiterated its objections to the EPA's proposal for an Environmental Management System ("**EMS**"). CALM stated that:

¹⁷⁵ Environmental Protection Authority (1998) Bulletin 912, p.6

¹⁷⁶ Department of Conservation and Land Management (1998b), p.13

¹⁷⁷ Department of Conservation and Land Management (1998b), p.14

“As indicated, CALM does not accept that Condition 1 can be added to in order to require the Department to implement an EMS.”¹⁷⁸

6.4.3 Committee commentary

There are two legitimate avenues available to the Minister to impose additional conditions on CALM’s carrying out of the FMP.

Statutory Procedure

First, s.46 of the *EP Act* provides a statutory procedure for the Minister for the Environment to change Ministerial Conditions applying to a proposal. Section 46 provides specifically for “Amendment of conditions and procedures”, and a proponent for a proposal, such as CALM, may be required to do exactly what CALM objected to, that is, to “*comply with commitments that did not exist at the time the project commenced.*” Section 46 provides a machinery for recommendation by the EPA, which was adhered to in this case.

It may be open to CALM to advise its own Minister that a statutory procedure available to the Minister is “*unreasonable*”, but for CALM to assert that it “*...does not accept that Condition 1 can be added to...*” appears to be a misinterpretation of the law, particularly where, as in this instance, the machinery of the legislation was adhered. Clearly, the Minister can add to Condition 1. CALM advised the Minister otherwise.

Government Policy

Secondly and less formally, the Minister could adopt the EPA’s proposed commitments as a matter of government policy.

If the Minister accepted the EPA’s advice and adopted the EPA proposals as a matter of government policy, the question is whether CALM could object to having to comply with the policy. Given the statutory procedures referred to above, it is fair to say that the Minister could not generate policy contrary to that in published Conditions, but policy supplementary to Conditions, such as that proposed with regard to Condition 1 must be within the Minister’s power. See para 6.8.3 as to the importance of changing (as opposed to supplementing) Conditions by statutory process.

¹⁷⁸

Department of Conservation and Land Management (1998b), p.27

6.4.4 The law surrounding the application of Ministerial Policy

The relationship between Ministers and departments, and the application of policy produced by the former, through the apparatus of the latter, are vexed issues in law, but it is fair to say that in the absence of specific statutory provisions, a department should give considerable weight to government policy in exercising statutory functions: *R v Anderson; ex parte IPEC Air* (1965) 113 CLR 177 and *Ansett Transport Industries v Commonwealth* (1977) 139 CLR 54, to cite two decisions of the High Court.

The terms of a statute are the primary determinant of whether ministerial policy must be adopted by the Head of Department. If, for example, the statute provides a ministerial power of veto over the discretionary actions of the Head of Department, then it would be futile to say that the Department can ignore the Minister: *Bread Manufacturers of NSW v Evans* (1981) 180 CLR 404. However, the relationship between the Minister for Environment, responsible for CALM, and the Executive Director of CALM, is governed by the *CALM Act*, which gives no simple power of ministerial veto over decisions of the Executive Director.

On the other hand, however, Part VIII of the *CALM Act* deals with permits, licences, contracts and leases, and is the basis of the Executive Director's powers to allocate access to forest products on Crown Land, the very activity which the Ministerial Conditions (both generally, and this first condition in particular) purport to regulate. Section 88 of the Act provides power to the Executive Director to deal with forest produce. However, that power is subject to a statutory requirement (sub-s. 88 (2)) that a management plan be in force for the relevant land, and such a plan is subject to approval by the Minister (s.60) and land may be restrictively classified by the Minister (s.62), in such a way that forest produce could not be harvested on the land. The general functions of CALM including the management of land and associated forest produce, are subject to the direction and control of the Minister (para 33(1)(a)). To that extent, the Minister has sufficient residual power to mean that the Executive Director should take account of ministerial policy (such as the Ministerial Conditions) affecting the Executive Director's power to deal commercially with forest products.

A counter argument would note that under s.26C of the *CALM Act*, the Minister is empowered to give directions in writing to the Marine Authority, a more specific power than she or he is given with respect to CALM. Nonetheless, the Committee is of the view that the Executive Director ought generally to apply clearly stated ministerial policy.

6.4.5 The law and applying Management Plans and Conditions

In the recent litigation *Bridgetown-Greenbushes Friends of the Forest Inc & Anor v CALM and the Minister & Ors* (1997) 18 WAR 126 ("*Bridgetown/Greenbushes case*"), Templeman J in

the leading judgment of the Full Court of the Western Australian Supreme Court quoted the Full Federal Court in *Gray's case* (1994) 50 FCR 189 at 208:

"...Ministerial policy is not to be construed and applied with the nicety of a statute. Policies are not statutory instruments. They prescribe guidelines in general, and not always very precise language. To apply them with statutory nicety is to misunderstand their function."

This is relevant to the issue of precision in the promulgation of Ministerial Conditions. Clearly they must be internally consistent and intelligible, but do not require statutory precision. It would seem a fair inference that the application of policy should take place in a non-litigious mind frame, in which good faith adherence to the apparent aims of the government of the day takes the place of linguistic precision looked for by a court. However, the fate of generally worded policy type phrasing in the medium of the courtroom is illustrated below, and also in the *Bridgetown/Greenbushes case*, where Templeman J (at 18 WAR 179) drew a distinction (relieving CALM of liability) between the "Precautionary Approach" required in a Condition, and the legally recognised Precautionary Principle: see para 6.6.3.

In the *Bridgetown/Greenbushes case*, Templeman J said:

*"That approach, I think, is equally relevant to the objectives set out in the Forest Management Plans. The result is that although the defendants [CALM and the Minister] are obliged to take into account the Plans, the way in which they do so, and the weight which they give them are matters for the defendants' discretion."*¹⁷⁹

The "Plans" referred to by his Honour include the Conditions imposed on the Plans (see machinery of s.45 of the *EP Act*). Sub-section 47(1) of the *EP Act* provides:

"A proponent on whom a statement has been served under section 45(5) and who does not ensure that any implementation of the proposal to which the statement relates is carried out in accordance with any conditions and procedures set out in the statement commits an offence."

Pursuant to Schedule 1 of the *EP Act*, breach of the above provision attracts a penalty, for individuals up to \$125,000, and for corporations up to \$250,000.

Given the apparent intended seriousness with which Parliament has clothed Conditions to a Plan, the Committee is surprised to find that the Supreme Court was of the view that Conditions are

¹⁷⁹

18 WAR 176

to be given weight at CALM and the Minister's discretion. It is of course one thing to have that view of CALM as the regulator, but in the litigation in question, CALM was the proponent, a commercial player. It seems to the Committee highly inappropriate that CALM be left to an apparently unfettered discretion in giving effect to Conditions when it is both the regulator and commercially involved.

6.4.6 The Codd Report and Ministerial Condition 1

Mr Codd reported that Ministerial Condition 1 was:

“... being given attention in terms agreed to both by the EPA and by CALM, as follows:

CALM will prepare within 6 months, in consultation with the DEP, a consolidated list of commitments arising from the 1992 proposal assessed by the EPA and the 1994-2003 Forest Management Plan and the action taken in relation to them. The EPA will consult with CALM and the DEP upon the means by which achievement of the commitments can be audited, and the approach to be taken to the required assessment in 2002/2003 of CALM's compliance with the Forest Management Plans 1994-2003.”¹⁸⁰

6.5 MINISTERIAL CONDITION 2

Ministerial Condition 2.2¹⁸¹ provided that the implementation of the proposal **conform in substance** with the material submitted by the proponent to the Minister. As the EPA report observed, changes which were “substantial” required amendment of the proposal pursuant to ss. 38 and 46 of the *EP Act*, not just ministerial approval. As it happened, CALM did not even seek ministerial approval as it did not see its actions as changing the plan of the proposal. See also the discussion at para 4.3.11.3 on this same matter.

6.5.1 EPA finding

The EPA concluded that CALM had not complied with Condition 2.2:

“... significant modifications to the approved proposal have been implemented by CALM. Examples of such changes are the increase in the use of the shelterwood silvicultural prescription and the increase in total area of forest harvested.

¹⁸⁰ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.2

¹⁸¹ See Appendix E for the wording of this Condition.

During the assessment in 1992, CALM advised the EPA, in response to a question about the area to be affected by the changed silvicultural prescriptions, that “the areas cut over in the future are likely to be similar” to those cut over the years 1989/90 to 1991/92, which ranged from 14 500 (1989/90) to 10 900 (1991/92) hectares per annum.

CALM’s annual reports show that application of the jarrah silvicultural prescription over the last 5 years has seen a significant increase in area harvested and an increase in the area cut to shelterwood.”¹⁸²

The EPA raised a legitimate concern. Clearly, areas of native forest harvested have increased substantially since the implementation of the FMP. The “Shelterwood” prescription is a less intensive harvesting method than gap creation/clearfelling. Less timber is obtained per hectare under the shelterwood prescription, so it stands to reason that to obtain a given amount of timber, a larger area has to be cut over if the shelterwood prescription is used than if gap creation/clearfelling is used. This effect is compounded to the extent that contracts are biased towards the supply of first grade saw logs.

6.5.2 CALM’s objection to EPA finding

CALM disagreed with the EPA’s finding that it had breached Ministerial Condition 2. CALM did not deny that it estimated in correspondence with the EPA that figures for area cut over and type of prescription in the Forest Management Plan period were likely to be similar to those of previous years. However, CALM pointed out that its estimate was not integral to the FMP. The key figures in the FMP were those relating to volume of wood, rather than area cut over or harvesting prescription. CALM stated:

“The Forest Management Plan 1994-2003, upon which compliance is being assessed, makes no predictions about the level [sic: presumably “area” is intended] of harvest or the proportion of shelterwood cutting.”¹⁸³

6.5.3 Are CALM’s objections well founded?

It appears reasonable to conclude that while the EPA’s concerns about the increase in areas harvested and alteration of harvesting prescriptions are legitimate, the EPA’s case that CALM

¹⁸² Environmental Protection Authority (1998) Bulletin 912, p.8. Accompanying figures drawn from CALM Annual Reports show that the area harvested increased from 14 000 ha in 1992/93 to a peak of 22 320 in 1996/97, while the proportion cut to shelterwood increased from 8% in 1992/93 to 46% in 1997/98.

¹⁸³ Department of Conservation and Land Management (1998b), p.16

has breached the Ministerial Condition by acting in this way is not strong. CALM is correct in its assertion that the FMP does not set clear parameters on these matters. Nonetheless, CALM must bear responsibility for having created an impression as to likely harvestable areas (see the advice to the EPA in 1992 referred in para 6.5.1). The increase on 1992 areas of harvest was, by 1996, 50%, and the percentage of harvested area treated to shelterwood had risen in that period from 8% to 44%.¹⁸⁴

The lack of precision in the FMP reveals a substantial problem. CALM, on its argument, can substantially increase the area harvested and alter its silvicultural prescriptions as it sees fit without affecting its compliance with the FMP.

The two matters, area of forest harvested and harvesting prescriptions, are matters of fundamental importance to forest management, as well as being of enormous public interest. These two matters are fundamental to conservation issues arising in forest eco-systems, that is to say, regarding issues beyond a particular focus on timber. They are matters on which a soundly drafted Forest Management Plan ought to have set parameters. The question of whether CALM has acted in good faith in respect of this Condition, in the light of advice previously given to the Minister, remains a live issue.

6.5.4 The Codd Report - CALM undertaking

Mr Codd did not make a finding as to whether CALM's changes to area harvested and harvesting prescriptions breached Ministerial Condition 2. Instead, he reported that:

*“... the matter has been identified by the EPA as being of such importance that CALM has agreed to provide a report to the EPA within 12 months - after consulting with the DEP on the scope of the report and progressively on its development - setting out the reasons leading to the change in the balance of use of its prescriptions (IE, regeneration techniques), the research being undertaken in regeneration success, and the implications for forest yield predictions. The EPA will then report to the Minister within 4 months.”*¹⁸⁵

6.6 MINISTERIAL CONDITION 3

Ministerial Condition 3¹⁸⁶ required adoption by CALM of a “Precautionary Approach”.

¹⁸⁴ Environmental Protection Authority (1998) Bulletin 912, p.9

¹⁸⁵ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.2

¹⁸⁶ See Appendix E for the wording of this Condition.

6.6.1 EPA finding

The EPA concluded that it appeared that CALM had not implemented the FMP in accordance with the Precautionary Principle. The EPA suggested that progress towards compliance would be demonstrated by, among other things:

- a. an improved knowledge base through relevant, focused research and monitoring;
- b. redressing the lack of knowledge relating to the jarrah silviculture prescription; and
- c. ensuring implementation and monitoring of post harvest treatments.¹⁸⁷

The Committee notes that under the RFA, CALM was given an extension of time to 2004 in order to demonstrate compliance with a Precautionary Approach. In 2004, a review of CALM's performance against the milestones¹⁸⁸ and commitments contained in the RFA will be undertaken contemporaneously with CALM's own review of the FMP. This will effectively have allowed CALM 12 years to implement a system for pre-logging fauna assessment.

The EPA also urged CALM to adopt the definition of the Precautionary Principle provided in the Australian Federal Intergovernmental Agreement on the Environment in 1992. The EPA believed the terminology used in the Intergovernmental Agreement was appropriate for determining degrees of precaution¹⁸⁹.

6.6.2 CALM objections to the EPA finding

Under the heading "**Ministerial Condition 3**" on pages 4-8 of the CALM Response, CALM argued that it had complied with Condition 3, contrary to the EPA's conclusion. However, apart from the bare assertion that "*CALM believes that it has applied the Precautionary Approach in the implementation of the Forest Management Plan*",¹⁹⁰ CALM's argument substantially

¹⁸⁷ Environmental Protection Authority (1998) Bulletin 912, p.10

¹⁸⁸ Regional Forest Agreement for the South-West Forest Region of WA, (1999) p. 70

¹⁸⁹ See discussion at para 4.4.8. Note that for purposes of litigation, the *Bridgetown/Greenbushes case* drew a distinction between a 'Precautionary Approach' and the 'Precautionary Principle': see para 6.4.5

¹⁹⁰ Department of Conservation and Land Management (1998b), p.22

concerned EPA comments on **Condition 8**, **Condition 9** and the **RFA process**, relating to sustainable yield.

Three other matters are characteristic of the CALM Response to the EPA's findings:

- i That CALM could not be audited at the half way mark of the FMP in respect of the Precautionary Principle, because this Condition was "required to be implemented over the period of the Plan"¹⁹¹;
- ii That "the jarrah forest is not being over-harvested", because less timber is being harvested than is being "produced" (presumably, grown) each year, so that a Precautionary Approach is being adhered to, because there are "no irreversible consequences"; and
- iii CALM attacked the EPA for having "purported to precisely define what is meant by the Precautionary Approach with respect to the level of the jarrah cut".

6.6.3 Committee commentary on CALM objections

As CALM itself frequently stated, maximum timber yield for the FMP was determined by the Minister, not by CALM. CALM's defence of the Minister's determination barely touched on the EPA's concerns that CALM was failing to apply the FMP in accordance with the Precautionary Principle.

As to the three particular matters referred to above:

- i a requirement of a Precautionary Approach is precisely the type of condition which must be applied throughout the entirety of a Plan, and to all aspects of a Plan. Being timely in the establishment of effective monitoring systems is particularly important at the end of the Plan. Without accurate data, there can be no reliable audit;
- ii an incremental surplus of new wood as gross bole volume incrementation over that harvested each year as sawlogs is no guarantee in itself that there will not be 'irreversible consequences' for the eco-system;

¹⁹¹ Department of Conservation and Land Management (1998b), pp.5 and 22; 23-25; 24-25

- iii in the light of the Precautionary Principle this attack on the EPA is extraordinary. At the very heart of the Principle is the acceptance of a possibility that there may be a lack of complete scientific certainty; and
- iv CALM's assertions are a display of, at the least, impatience that the EPA did not accept uncritically CALM's scientist's account as the source of certain knowledge on the subject of sustainable jarrah yield in the light of the Precautionary Principle. This concern with CALM's approach is in respect of its implicit attempt to assert that there is no scientific uncertainty in this matter. The Committee however acknowledges that litigation on Condition 3 leaves no room for expectation that the Western Australian Supreme Court will give any life to the requirement of a Precautionary Approach: see the *Bridgetown/Greenbushes case* at 115 to 121 per Wheeler J at first instance, adopted by Scott J in the Full Court (at 155 to 156).

6.6.4 The Codd Report - CALM acknowledgment

Mr Codd did not address the issue of whether CALM was complying with the Precautionary Principle as required by Ministerial Condition 3. Instead, he reported that CALM and the EPA acknowledged that the RFA process will:

*“...provide a basis for determining the best future approach for ecologically sustainable forest management, including the way in which the Precautionary Principle should be applied.”*¹⁹²

6.7 MINISTERIAL CONDITIONS 5 AND 6

Ministerial Condition 5¹⁹³ required CALM to implement a system of informal reserves (travel route (road) reserves, river and stream reserves) to ensure that such reserves remained unharvested in perpetuity.

Ministerial Condition 6 set out similar requirements to Condition 5, in relation to Diverse Ecotype Conservation areas.

6.7.1 EPA finding

The EPA reported in relation to Condition 5 that the DEP had:

¹⁹² Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.1

¹⁹³ See Appendix E for the wording of Conditions 5 and 6.

“...pointed to the need for CALM to provide further information on how the reserves will “remain unharvested for perpetuity” ... and to allow assessment of the monitoring program to ensure the adequacy of the reserves for nature conservation and water quality protection.”¹⁹⁴

The EPA concluded that CALM had implemented the informal reserve system as required under Condition 5.1 but *“has yet to demonstrate compliance”* with Conditions 5.2 and 5.3. These contain the elements of the Ministerial Condition which related to ensuring that informal reserves remain unharvested and were monitored.¹⁹⁵

In relation to Condition 6.1, the EPA similarly concluded that CALM had identified the zones as required, but with Condition 6.2 had not acted to ensure that they remained unharvested in perpetuity.¹⁹⁶

6.7.2 CALM Response and Committee commentary

The CALM Response did not dispute that CALM had failed to demonstrate compliance with the requirement to ensure that informal reserves remained unharvested. Its substantive comment on this aspect of the EPA’s finding was that:

“CALM has been engaged in considerable discussions with the Commonwealth during the Regional Forest Agreement process regarding the road, river and stream (informal reserve) system...CALM is working towards the certification of its forest management systems and it would be appropriate to examine this issue in that context and in the context of action that will flow from the Regional Forest Agreement when it is completed.”¹⁹⁷

The Commonwealth had concerns about CALM’s informal reserves. As discussed in this Committee’s report on the RFA process, the Commonwealth was reluctant over the course of the RFA process to accept CALM’s claims as to the degree of security offered by informal reserves.

¹⁹⁴ Environmental Protection Authority (1998) Bulletin 912, p.12

¹⁹⁵ Environmental Protection Authority (1998) Bulletin 912, p.13

¹⁹⁶ Environmental Protection Authority (1998) Bulletin 912, p.13

¹⁹⁷ Department of Conservation and Land Management (1998b), p.27

When the RFA was signed in May 1999, chapter 2.1 established strict parameters to ensure that the informal reserves in State forest, totalling 137,886 hectares were protected. Various measures were agreed to including:

- a. stream reserves of a width equal to or greater than 150 metres;
- b. diverse ecotype zones of an area equal to or greater than 40 hectares;
- c. 400 m wide travel route reserves in the area containing Karri /Yellow Tingle eco-system; and
- d. the Bibbulmun Track travel route reserve to be 400 metres wide.

The RFA states that the parties have accredited these informal reserves as CAR informal reserves on the basis that they are set aside specifically for conservation purposes and meet the principles established in the JANIS Criteria. It was also agreed that the informal reserves will be managed according to the principles established in the FMP for “Managing Areas of Special Significance” and “Code of Practice for Timber Harvesting in Western Australia” and timber harvesting will be excluded from all CAR informal reserves.

In relation to Condition 6, the CALM Response asserted that “*CALM considers that it is currently complying with the Condition to the extent that it is practically able to be complied with.*”¹⁹⁸ The response is again inadequate. No detail of compliance measures was given and no basis was proffered for CALM’s view.

6.7.3 Codd Report and CALM undertaking

Mr Codd reported that both these Conditions would be dealt with as part of an EMS:

*“CALM will detail implementation of Conditions 5.2 and 5.3 [and 6.2] through the Environmental Management System that CALM is preparing and that preparation of this part of the EMS will be completed as a priority.”*¹⁹⁹

According to the Codd Report, the EPA and CALM had agreed that an EMS was to be prepared as part of the RFA process:

¹⁹⁸ Department of Conservation and Land Management (1998b), pp.5 and 22

¹⁹⁹ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.3

“...it is acknowledged that the RFA process will ... lead to a proposed Forest Management Plan for the future based on the reserve design and the sustainable yield advised by the expert panel, including a proposed Environmental Management System (EMS), with this proposed plan being assessable by the EPA under Part IV of the Environmental Protection Act 1986.”²⁰⁰

6.7.4 Committee commentary on the Codd Report

Reading these two statements from the Codd Report together, it is not clear whether there are two EMSs under preparation, one by CALM and one for the RFA, or whether CALM is preparing an EMS for incorporation into the RFA.

When the RFA was signed in May 1999 the parties agreed in clause 42, that within five years Western Australia would further improve its forest management system and processes through the development and implementation of EMSs in accordance with certain principles and actions outlined in two Attachments to the RFA. The parties acknowledged that the objective for native forest management under the *CALM Act* is a system certification comparable with the ISO 14000 series²⁰¹. The Parties noted that such a system would include independent auditing of compliance with Codes of Practice and the FMP.

CALM's agreement that an EMS should be prepared, incorporated into the FMP and reviewed by the EPA appears to meet the EPA's concerns in relation to Conditions 5 and 6. However, it appears to the Committee that there has been inadequate compliance to date by CALM with Conditions 5 and 6.

6.8 MINISTERIAL CONDITION 7

Ministerial Condition 7²⁰² required CALM to identify and protect areas of old growth karri up to 3,200 hectares with a high aesthetic, social or environmental value.

6.8.1 EPA finding

The EPA concluded that CALM had yet to comply with the condition but noted that:

²⁰⁰ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.1

²⁰¹ ISO 1400 series means AS/NZS ISD Environmental Management Systems Standards Australia, 1996

²⁰² See Appendix E for the wording of this Condition.

“...the Minister has agreed that the actions required under Condition 7 should be integrated into the RFA process.”²⁰³

6.8.2 CALM's Response

The CALM Response stated that “CALM does not object to the EPA's advice on this matter.”²⁰⁴

6.8.3 Committee commentary

The EPA has accepted a complete change in this Ministerial Condition on the basis that the Minister has produced a new condition which is not merely supplementary. But such an approach completely overlooks the statutory framework under which a Minister promulgates conditions to agreements: see s.45 of the *EP Act*. While such conditions do not have the formal status (“the force of law”) accorded environmental policies under s.33 of the Act, ss.46, 47 and 48 leave no doubt that: amendment of conditions requires proper procedure including a report from the EPA (s.46); the Minister has a duty to police compliance with the conditions, or refer them for amendment (s.48); and proponents who breach Conditions or allow them to be breached by others commit an offence (s.47).

It is apparent that the Minister has purported to alter Condition 7 without reference to the statutory machinery, and the EPA has purported to rubber stamp this change after the fact. It is hardly surprising that CALM has enthusiastically agreed with the EPA in this aspect of the EPA's report. This matter is symptomatic of a poor quality of administration on the part of all three parties: the Minister, the EPA and CALM.

6.8.4 Codd Report

Mr Codd accepts that the Condition will be given attention through the RFA process. This acceptance is no more than a concurrence with the agreement between the EPA and CALM to ignore the relevant statutory provisions.

6.9 MINISTERIAL CONDITION 8

Ministerial Condition 8²⁰⁵ provided that the Minister will determine the annual sustainable timber resource available for allocation.

²⁰³ Environmental Protection Authority (1998) Bulletin 912, p.14

²⁰⁴ Department of Conservation and Land Management (1998b), p.30

²⁰⁵ See Appendix E for the wording of this Condition.

6.9.1 EPA findings

The Minister determined the sustainable yield of jarrah and karri in the process outlined in para 4.3.1 above, thereby fulfilling this Condition.

The Condition did not place any additional obligation on CALM to remain within sustainable yield. The EPA Compliance Report nevertheless made two findings in relation to the issue of sustainable yield.

First, the EPA questioned whether the overall yield estimates on which the Minister's approval of the FMP was based were accurate. It noted that:

*“Since CALM’s 1992 estimations of sustainable jarrah yield were made ... scientific review has highlighted the optimism of the yield forecasts and recommended lower, more conservative levels of sustainable jarrah harvesting. Comments by Turner and in the RFA Public Consultation Paper point to uncertainties related to CALM’s yield predictions.”*²⁰⁶

Secondly, the EPA noted that the sustainable jarrah first and second grade sawlog yield had consistently since 1994 been estimated to be around 300,000m³/yr, while the FMP approved a level of 490,000m³/yr. The EPA's finding was that:

*“The EPA is concerned about the high cut level approved by the Minister as it is not an environmentally sustainable figure.”*²⁰⁷

From these two findings the EPA drew a number of conclusions:

- i. there is an urgent need to get an accurate basis for the estimation of growth rate for jarrah;*
- ii. the EPA is sufficiently concerned about the sustainable yield issue and the narrow focus of the models being used, that it intends to initiate a review of the models;*²⁰⁸

²⁰⁶ Environmental Protection Authority (1998) Bulletin 912, p.15

²⁰⁷ Environmental Protection Authority (1998) Bulletin 912, p.15

²⁰⁸ Environmental Protection Authority (1998) Bulletin 912, p.15

- iii. *given that the sustainable jarrah cut is approximately 300,000 m³/yr (plus or minus 50,000 m³/yr), any shortfall [below the approved figure of 490,000 m³/yr] from that harvested during the approved [1994-2003] period should not be cut;*
- iv. *as industry has already been given 10 years in which to re-structure, it would be untenable for industry to expect any extension of the unsustainable cut level beyond the current 10 year period”;* and
- v. *a Precautionary Approach would be to substantially reduce the cut level as quickly as possible to a level in the order of 250,000 m³/yr in accordance with the Meagher Committee Report findings that CALM’s FORSCHED model predicted that a yield of “somewhere close to 250,000 m³ of [jarrah] sawlogs would be sustainable in perpetuity.”²⁰⁹*

6.9.2 CALM Response

The CALM Response was scathing of the EPA’s conclusions. For example:

“CALM concludes that the comments and conclusions that the EPA has made with respect to sustainable yield estimates are based on selective quotations which ignore the considered findings of expert, independent individuals and organisations.”²¹⁰

In relation to the EPA’s finding that the lower end of the range of mooted jarrah sawlog yields, 250,000m³/yr, should be preferred on the basis of the Precautionary Principle, the CALM Response stated that:

“It is difficult to understand why the EPA has selected this figure when the Meagher Committee concluded that the range of sustainable sawlog yield at current specification would range from 300 000 cubic metres to 450 000 cubic metres with the latter being considered more relevant.”²¹¹

²⁰⁹ Environmental Protection Authority (1998) Bulletin 912, p.15

²¹⁰ Department of Conservation and Land Management (1998b), pp.10 and 33

²¹¹ Department of Conservation and Land Management (1998b), p.33

6.9.3 Committee commentary

CALM's consistent refusal to acknowledge the EPA's views is of concern. The CALM Response is inadequate for two reasons.

First, where there is a range of scientific estimates, the Precautionary Approach requires that the most conservative figure should be adopted until better information is available. The EPA adopted the Precautionary Approach to select the lower end of the range, and has disagreed with the Meagher Committee's failure to do so. As it happens, the figure of 250,000m³/yr was presented by CALM to the Meagher Committee in an "...allowance for low productivity areas and dieback"²¹².

Secondly, CALM appeared to concede that the Meagher Committee's 450,000m³/yr figure (and the Minister's approved 490,000 m³/yr figure) for allowable jarrah sawlog harvest had turned out to be well over sustainable yield:

*"...subsequent to the RFA process and with the benefit of significantly improved data, the Public Consultation Paper concluded that 300 000 cubic metres per annum was the sustained yield at current specification standards."*²¹³

It might be thought that the obvious discrepancy, identified by the EPA, between CALM's acknowledged maximum sustainable figure of **300,000m³/yr** of jarrah sawlog harvest and the Minister's approved figure of **490,000m³/yr** deserved some comment from CALM. The discrepancy is self-evidently a problem if level of harvest is to be kept below sustainable yield in Western Australia. Moreover, CALM originally sought an Allowable Cut of 675,000m³/yr prior to the Minister's final determination of the cut in 1993.

However, the CALM Response ignored the EPA's concerns about the discrepancy. It is extraordinary that in its response to the EPA Compliance Report, CALM did not address what is arguably the most significant finding the EPA made.

Instead CALM focused on the other figure set in the FMP, the annual jarrah total bole increment, estimated by the Meagher Committee to be 1,360,000m³/yr. CALM stated that:

²¹² Environmental Protection Authority (1998), p.14. See discussion above at para 5.3.5

²¹³ Department of Conservation and Land Management (1998b), p.33

*“Current levels of harvest are below the annual total bole increment of jarrah forest and consequently CALM is operating sustainably.”*²¹⁴

It is not possible to assess the accuracy of this claim as CALM did not state what current levels of harvest are, or whether it believed that the annual total bole increment was 1,360,000m³/yr as the Meagher Committee advised. However, this report has already discussed the inadequacies of a gross bole volume approach in implementing ESFM: see para 4.3.11.4.

CALM would appear to have failed to adhere to the terms of this condition. CALM undertook, as set out below, to adhere to a future RFA on sustainable yield. This, as expressed in reference to the Conditions above, is completely inadequate.

6.9.4 Codd Report and CALM undertakings

The Codd Report outcomes on this issue of sustainable jarrah sawlog yield were among its most significant points. The *“agreed outcome of discussions”* between Dr Shea of CALM and Mr Bowen of the EPA set out a number of important steps that would be taken in the course of the RFA process and subsequently, to resolve the key question of what sustainable jarrah sawlog yield is in Western Australia’s forests. The agreed outcome was as follows (emphasis added):

“the RFA process will:

- a. declare a reserve design for the South-West RFA region of WA and a scientifically based provisional sustainable yield figure;*
- b. establish an expert panel to provide independent scientific advice on the provisional sustainable yield figure consistent with the principles of ecologically sustainable forest management, and with appropriate provision for potential improvements in utilisation; with such a panel expected to take some 12 months to report;*
- c. lead to a proposed Forest Management Plan for the future based on the reserve design and sustainable yield advised by the expert panel, including a proposed Environmental Management System (EMS), with this proposed plan being assessable by the EPA under Part IV of the Environmental Protection Act 1986.*

²¹⁴

Department of Conservation and Land Management (1998b), p.32

The assessment undertaken by the EPA under the Environmental Protection Act 1986 of the proposed Forest Management Plan would embrace the usual full consultation process. The assessment would:

- a. lead to the EPA recommending a clearly defined set of conditions and commitments to accompany Ministerial approval of the plan (and associated Ministerial determination of sustainable yield embodied in the plan);*
- b. lead to a set of environmental conditions which would then be audited at appropriate defined intervals, in accordance with normal practice, under the Environmental Protection Act;*²¹⁵

The major innovation in the above proposal was the establishment of a separate taskforce to review the provisional figure to be used in the RFA for sustainable yield. More information on the taskforce was given by the Minister for the Environment's press release accompanying the Codd Report:

*"Mrs Edwardes said an expert taskforce - established by both the State and Federal Government - would scrutinise the calculation of the expected sustainable yield figure developed for the RFA, prior to its signing. The Chairman of the EPA will be invited to participate or nominate a member to this taskforce."*²¹⁶

In addition, the Minister's media statement went on to talk about a second, State-based review panel not mentioned in the Codd Report:

*"Mrs Edwardes said prior to the development of the proposed Forest Management Plan to implement the RFA, the Western Australian Government would appoint an expert panel to externally review the expected sustainable yield figure established from the RFA process."*²¹⁷

The RFA PCP offered some guidance as to what the provisional figure for sustainable jarrah harvest, to be reviewed by these panels, would be:

²¹⁵ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.1

²¹⁶ Minister for Environment, 24/1/1999, media statement

²¹⁷ Minister for Environment, 24/1/1999, media statement

“... under current log specifications, harvesting practices and conversion technologies, the long-term non declining level of first and second grade jarrah sawlogs is approximately 300,000 m³ per annum.”²¹⁸

6.9.5 RFA outcomes

The May 1999 RFA provided as follows regarding proposed sustained yields of jarrah:

“75. *The Parties [the Commonwealth and Western Australian Governments] agree that this Agreement is expected to provide, based on current sawlog specifications, logging and sawmilling technology, royalty structure, market demand and price, sawlog Sustained Yield levels for the period 1999-2003 inclusive of 324,000m³ per annum of Jarrah first and second grade sawlogs averaged over the period ... For the period 2004-2018 inclusive, this Agreement is expected to provide sawlog Sustained Yield levels of 286,000m³ per annum of Jarrah first and second grade sawlogs Environmental, heritage, economic, social and ecologically sustainable forest management issues have been taken into account in providing a land base and management practices that are expected to produce these yields. The quantities in this clause are based on scheduling of timber harvesting so as to produce a non-declining yield of sawlogs. The Sustained Yield of sawlogs for the period 2004 - 2018 makes allowance for a higher level of harvest for jarrah and karri sawlogs for the period 1999 - 2003 and has been confirmed by a Panel of Independent Experts. The Parties acknowledge that sawlog Sustained Yield levels in Western Australia are subject to periodic review under the CALM Act...*

77. *Western Australia expects to change from a system of sawlog sales based on sawlog specifications to a system of sales based on bole log specifications at the time of the next Forest Management Plan. Based on a bole log sales system, it would be expected that the actual level of sawlogs will be more than that obtained from the current specifications for sawlogs through increased utilisation of Gross Bole Volume. At the time of this change a new bole log sustained yield figure would be established.*”²¹⁹

²¹⁸ Joint Commonwealth and Western Australian Regional Forest Agreement (RFA) Steering Committee (1998c), p.16

²¹⁹ Regional Forest Agreement for the South-West Forest Region of WA (1999), p.18

6.10 MINISTERIAL CONDITION 11

Ministerial Condition 11²²⁰ required CALM to implement the jarrah silvicultural prescription so that monitoring of the environmental impacts on a representative range of treated sites and localities in the forest could be carried out.

6.10.1 EPA findings

The EPA was not satisfied with the efforts of CALM to carry out this condition:

“The EPA considers that CALM’s response to the requirements of the Condition has been disappointing, to date. The work on the impact of the jarrah silvicultural trial on other environmental elements in the Kingston, Warrup and Winnejup forest blocks appears to have been of high quality. However, its narrow areal limitation has reduced the overall value, as Condition 11-1 requires work to be carried out on a representative range of treated sites and localities.

...The EPA is also disappointed that given the extensive nature of the field-scale trials, no information has been supplied in the PCR [CALM’s Progress and Compliance Report] on the success or otherwise of regeneration of the forest following the implementation of these techniques on a range of forest types and areas.

...The EPA concludes that CALM has not complied with Condition 11-1 to the extent that the monitoring has only been carried out on one of the trial areas ...”²²¹

6.10.2 CALM Response

CALM’s response to the EPA’s criticism was threefold.

First, CALM disputed that its trial program was too limited:

“It is not correct to state the CALM’s monitoring is restricted to the Kingston Study. CALM also has 50 monitoring sites in the northern forests across a range of forest types and disturbance histories. These sites have been monitored intensively over the last four years.”²²²

²²⁰ See Appendix E for the wording of this Condition.

²²¹ Environmental Protection Authority (1998) Bulletin 912, p.17-18

²²² Department of Conservation and Land Management (1998b), p.39

The EPA appeared unaware of these other sites and CALM does not claim to have reported these other sites in its *1997 Progress and Compliance Report*²²³. The status of the 50 trial sites is unclear. If CALM regarded the trial as supporting its compliance with this Condition, it should have informed the EPA of the trial or reported results from the trial.

Secondly, CALM advised that the Kingston trial was always intended to be only the first stage of a broader trial which would comply with the Condition:

*“When planning the Kingston study (1992-93), it was always intended that a parallel study of the same ecological variables would be undertaken at a broader scale in the jarrah forest. ... Preliminary planning has now commenced with a much-enhanced GIS [Geographic Information System] for the retrospective study of harvesting burning impacts on environmental elements and values in a representative range of sites in jarrah forests. Use of the logging history and vegetation information in a GIS environment will clearly allow a much more comprehensive broadscale approach to be adopted than was possible in 1993.”*²²⁴

Thirdly, CALM agreed with the EPA that it had the period of the FMP, to comply in full with the Condition.

6.10.3 Codd Report and CALM undertaking

Mr Codd reported that further action had been taken by CALM in relation to this Condition than was apparent from the EPA Compliance Report or the CALM Response:

*“CALM has submitted a report to the Minister recommending approval of requirements to be set in relation to the Jarrah Silvicultural trial. The CALM report has been referred to the EPA which will provide advice to the Minister within 3 months.”*²²⁵

6.10.4 Committee commentary

This outcome at least addressed the shortage of information available to the EPA on this Condition.

²²³ This Report was submitted to the EPA in December 1997.

²²⁴ Department of Conservation and Land Management (1998b), p.40

²²⁵ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.3

The Committee looks forward to the publication of the EPA's advice to the Minister on the proposal for the trial and publication of results as the trial progresses. At the time this Report was finalised the EPA advice had not been provided to the Minister, but was expected in the near future.²²⁶

6.11 MINISTERIAL CONDITION 17

Ministerial Condition 17²²⁷ required the Minister for the Environment to establish a committee, referred to as the Forest Monitoring and Research Committee ("FMRC"), to monitor and research the environmental impacts of forestry management. The FMRC was to consist of Heads of Departments and agencies affected by forest matters. The FMRC was to grant funds towards such monitoring and research, appoint scientists to report to it and report to the Minister annually and then in detail in 1997 and 2002.

6.11.1 EPA findings

The EPA referred to its 1992 recommendations, as well as the Condition, and concluded that the FMRC had thus far not succeeded:

"The EPA is of the view that:

- a. the FMRC has not functioned in the manner that was intended nor in a manner which enables it to meet its objectives. The Minister should ensure that the Committee establishes processes which enable it to undertake its responsibilities in accordance with Condition 17 and is supported by CALM.*
- b. There is a need for research and monitoring in the field in the area of forest management to be focused on high priority issues identified by the FMRC, on the advice of expert panels.*
- c. The role and activity of the FMRC needs to be raised significantly ... the allocation of a particular percentage from royalties for research would be an appropriate way to provide the funds."²²⁸*

²²⁶ B Bowen (EPA), letter to the Committee, 12/8/1999

²²⁷ See Appendix E for the wording of this Condition.

²²⁸ Environmental Protection Authority (1998) Bulletin 912, p.21

6.11.2 CALM's response

CALM argued that the proposed committee lacked legislative sanction for its intended activities and was therefore unable to operate effectively. At the same time, CALM noted that the FMRC had appointed a working group of scientists, consisting of two CALM and three external scientists.

CALM made a constructive suggestion as to the future of the FMRC:

*“CALM agrees that the FMRC is not functioning. CALM suggests enhancing the FMRC with a scientific reference group consisting of scientists who have expertise in forest ecology. Given the polarisation of the forest management debate, even within the scientific community, it may be necessary for independent scientists from interstate to be represented on the scientific reference group.”*²²⁹

However, CALM did not believe that forest research should be given undue priority over other areas of environmental research:

*“CALM again reiterates that the forest eco-systems are amongst the most researched in Western Australia. There are many other areas of the State that are subject to greater impacts that are more deserving of priority in terms of available government funding for research.”*²³⁰

6.11.3 Codd Report and EPA referral

The Codd Report accepted that there were problems with the functioning of the Committee and reported the agreed response to these:

*“The Minister has referred environmental condition 17 to the EPA in accordance with s.46(1) of the Environmental Protection Act and has requested a report as soon as possible but no later than 28 February 1999.”*²³¹

The EPA has now issued Bulletin 928, in which this requirement is addressed. In this report the EPA has re-emphasised the significant role of such a Committee, especially its basic element of “*independence and scientific knowledge*”:

²²⁹ Department of Conservation and Land Management (1998b), p.50

²³⁰ Department of Conservation and Land Management (1998b), p.49

²³¹ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.4

“Having considered the current terms of reference of the FMRC and confirmed its strong desire to continue with an independent advisory committee which identifies priorities for forest related research programmes, has a strong influence on the level and allocation of funding to achieve the priority outcomes and agrees upon the related monitoring programme, the EPA considers that new objectives of the reconstituted FMRC should include (but not be limited to):

- a. advice on strategic directions for forest research;*
- b. advice on identifying and prioritising forest research programmes;*
- c. advice on forest monitoring programmes;*
- d. review and advice on forest system research programmes and monitoring programmes;*
- e. encouraging the publication of data and other research information arising from forest system research programmes and monitoring programmes;*
- f. forming special advisory groups to advise it on specific issues; and*
- g. seeking the assistance of other personnel from time to time to fulfill its requirements.*

In achieving these objectives, the EPA considers that the committee will need to comprehend the total forest-related research activity by CALM, by universities, by other government agencies and also relevant research undertaken elsewhere.

The EPA considers that, in view of the ESFM approach to forest management, the title of the committee should be changed from the Forest Monitoring and Research Committee to the Forest Systems Research Advisory Committee (FSRAC). The deletion of the term ‘monitoring’ from its title should not be interpreted as diminishing the requirement for nor importance of monitoring, and the set of issues to be addressed by the FSRAC specifically refer to it. The reference to forest systems promotes the integration of eco-system and forest research and management, as well as recognising that the influence of forests can extend well outside the forest boundary, eg. water catchments.”²³²

²³²

Environmental Protection Authority (1999) Bulletin 928, p.3

6.12 OTHER MINISTERIAL CONDITIONS

For completeness, this section briefly discusses those Ministerial Conditions²³³ which are less critical to the debate about sustainability.

- i. **Condition 4** required CALM to implement proposed amendments to the conservation estate. The EPA concluded that progress had been made towards meeting the Condition and noted that the RFA's reservation criteria were relevant to this Condition, making the following comment on how this should occur:

*"...the JANIS criteria used in the RFA are minimum criteria. The EPA would, as a matter of principle, favour erring on the side of a greater total reservation, favouring a Precautionary Approach which should ensure representation and conservation across all forest types/forest eco-systems/soil/climate/landform types as identified in the most recent mapping."*²³⁴

The Committee notes with concern, proposed arrangements under the RFA which downgrade the conservation estate. Certain areas which were either formerly gazetted or proposed as conservation estate in the current management plans are being transferred to State Forest. The Committee estimates approximately 48,000 hectares of conservation estate will be affected²³⁵.

- ii. **Condition 9** required CALM not to contract to supply in excess of the annual levels of timber approved in the FMP, and to recognise the possibility that wood supply may be reduced after 2002.

The EPA concluded that CALM had complied with the first of these and was unable to determine compliance with the second. In relation to the possibility of reduction of supply, the EPA commented:

*"The EPA is of the view that it would be desirable for the maximum permissible timber harvest to be reduced as a matter of urgency."*²³⁶

- iii. **Condition 10** required CALM to refer to the EPA any proposal to enter into a contract for a substantial portion of "other logs". The EPA reported that no such proposal had

²³³ See Appendix E for the wording of Conditions 4,9,10,12 and 13.

²³⁴ Environmental Protection Authority (1998) Bulletin 912, p.11

²³⁵ Legislative Assembly, Questions on Notice to the Minister for the Environment: 11 August 1999

²³⁶ Environmental Protection Authority (1998) Bulletin 912, p.16

arisen and commented that any such proposals should consider the habitat requirements of small mammals and other fauna.²³⁷

- iv. **Condition 12** required CALM to ensure that in the low and intermediate rainfall zones, at least 30% of each second order catchment had a retained basal area of greater than 15 m²/ha for 15 years after harvesting. The EPA found that CALM had complied or had more time to do so, but commented that CALM “...*should provide advice on the results of monitoring and on any impacts of nature conservation values and water quality to the EPA.*”²³⁸
- v. **Condition 13** required CALM to ensure that habitat tree retention was sufficient, as determined by the Minister, to provide the habitat function. The EPA found that CALM had not complied with the Condition because the Minister had not approved the current Jarrah Silviculture Prescription of retaining four trees per hectare, rather than three as previously. CALM was in the position in respect of this Condition of being unable to comply until terms were set by the Minister.

The matter has been satisfactorily resolved, according to the Codd Report:

*“CALM has submitted a report to the Minister recommending specifications for habitat tree retention in the jarrah forest. On the advice of the EPA, the Minister has approved the recommended specifications.”*²³⁹

6.13 COMMITTEE COMMENTARY ON CALM’S RESPONSE TO THE EPA

The Committee is concerned in this inquiry as to whether current forest management is sustainable. In the Committee’s view, the EPA Compliance Report is a valuable contribution to the debate, raises some genuine concerns and demands a competent response from CALM as the responsible department.

The majority of the Committee is concerned with CALM’s adversarial approach in its responses to key matters. An example is in the CALM Response’s “*Background and Executive Summary*”, where CALM claimed that the EPA’s Expert Advisory Committee:

²³⁷ Environmental Protection Authority (1998) Bulletin 912, p.16

²³⁸ Environmental Protection Authority (1998) Bulletin 912, p.18

²³⁹ Codd, attachment - *Agreed outcome of discussions between Dr Shea and Mr Bowen*, (1999) p.3

“...concluded that there were no Ministerial Conditions which CALM had not complied with.”²⁴⁰

Perusal of the Advisory Committee’s report reveals that CALM’s assertion is untrue. The Advisory Committee did not draw any general conclusion about CALM compliance or otherwise.

CALM’s attitude had a flow-on effect elsewhere in the CALM Response. CALM suggested that where the EPA found that CALM did not comply with some of the Ministerial Conditions, this meant that the EPA was disregarding the conclusions of its own Advisory Committee’s report.²⁴¹

A second issue involves CALM’s apparent misunderstanding of its function. In the CALM Response to the EPA, CALM took on the role of protagonist in a political debate, whereas its chief concern should be objective policy advice to the Minister. It appears that much of the commentary from CALM was of a subjective nature. For example:

“This report points out errors of fact and logic in the advice that the EPA has provided to the Minister. CALM has taken care in this report to objectively clarify issues that CALM believes have been misinterpreted by the EPA...”

CALM is concerned that the EPA, in its report, has ignored many of the conclusions of the expert Advisory Committee. It is also of concern that references in the Advisory Committee’s Report appear to be edited or misquoted.

It is of concern that the EPA appears to have reached many of its conclusions on the basis of selective interpretation... It is also of concern that the EPA report contains errors of fact.”²⁴²

The 18 Conditions have been the subject of considerable disagreement between the two relevant Departments. This use of the placing of Conditions on a proposal (in this case a Forest Management Plan) under the *EP Act* illustrates the need for a clear cut and enforceable system of condition making. As to the problem of ascertaining what the Conditions mean, so they can be enforced, this Chapter concludes by quoting Dr John Bailey, a member of the EPA from 1985 to 1993. In evidence to the Committee he said:

²⁴⁰ Department of Conservation and Land Management (1998b), p.3

²⁴¹ Department of Conservation and Land Management, (1998b), Preface

²⁴² Department of Conservation and Land Management (1998b), Preface

*“In response to the problems to which you referred with the ambiguity of recommendations, ... a lot of those difficulties would not be there if there were greater faith among those involved in doing a good job. The reason that we got into the terminological differences of interpretation is that people do not want to work on the same team.”*²⁴³

6.14 COMMITTEE FINDINGS

The Committee finds that:

1. CALM misinterpreted the law in its advice to the Minister when it said that Ministerial Conditions could not be added to by variation;
2. there are legitimate avenues available to the Minister to impose additional conditions on CALM's implementation of the FMP;
3. the Minister cannot generate policy contrary to that in published Conditions;
4. in the absence of specific statutory provisions, a Department should give considerable weight to government policy in exercising statutory functions;
5. the general functions of CALM including the contractual commitment of forest produce should be subject to the direction and control of the Minister. However the current *CALM Act* is weak in this regard;
6. the Minister has sufficient residual power under the *EP Act* so that the Executive Director of CALM should take account of Ministerial Conditions;
7. the Executive Director of CALM ought generally to apply clearly stated Ministerial Policy;
8. the lack of precision in the FMP and Ministerial Conditions meant CALM could substantially increase the harvest and alter silvicultural prescriptions without affecting compliance with the FMP or Ministerial Conditions;
9. except for the Kingston project, pre-logging fauna assessment has not been implemented;

²⁴³ Dr John Bailey, transcript of evidence, 5/5/1999, p.11

10. the EPA accepted a complete change in Ministerial Condition Number 7 without following proper procedure as required under ss 46, 47 and 48 of the *EP Act*; and
11. CALM consistently refuses to acknowledge the views of the EPA. For example, CALM failed to acknowledge the discrepancy identified by the EPA between CALM's maximum sustainable figure of 300,000m³/yr of jarrah sawlog harvest and the Minister's approved figure of 490,000m³/yr.

Recommendation 19: That the Codd Report recommendations be fully implemented.

Recommendation 20: That the Executive Director of CALM apply Ministerial Conditions and Policy.

Recommendation 21: That the Forest Management Plan and Ministerial Conditions be varied to set clear parameters about areas of harvestable forest and silvicultural prescriptions.

Recommendation 22: That a system of pre-logging fauna assessment be established as a matter of priority.

CHAPTER 7

LOGGING IN SALT RISK ZONES BETWEEN 1988 AND 1992

The majority of the Committee agreed with this Chapter.

7.1 SALINITY

Salinity has become one of Western Australia's most critical environmental problems, threatening the conservation of land, water, biological resources and physical infrastructure assets. Western Australia's unique landforms and climate explain the crisis with the extent and rate of salinity being particularly severe compared to other parts of Australia.²⁴⁴ As well as threatening bio-diversity, increasing salinity has the potential to reduce landholders' capabilities to earn a living from their land. The social and economic consequences that flow from a diminished earning capacity from land have wider ramifications for entire local communities and the rural way of life.

Salinity has become such an enormous environmental issue that in 1996, the State Salinity Council released a *Salinity Action Plan* ("**Plan**") to tackle the problem over a 30 year timeframe.²⁴⁵ The Plan's vision is to bring land and water salinity under control and, where practical, "... *reversed to produce productive, healthy and sustainable landscapes...*"²⁴⁶.

Under the Plan, tree planting has become a major landcare activity.

7.2 LOGGING AND SALT ENCROACHMENT

Increasing salinity of streams and soils in Western Australia was first recognised by railroad engineers more than 75 years ago. Historically, increases in salinity were scientifically linked to the permanent removal of native perennial vegetation and its replacement with annual crops and pastures. Research indicated that this practice led to large and persistent salinity increases in the streams of South-West Australia. Clearing of native vegetation results in a rise in the

²⁴⁴ More than 70% of Australia's reported salt affected land is in Western Australia

²⁴⁵ Western Australian Salinity Action Plan, Draft Update (1998), p. iii

²⁴⁶ Western Australian Salinity Action Plan, Draft Update (1998), p. vii

groundwater table, bringing salt from deep in the soil to the surface. It was unknown if logging in the forest contributed to stream salinity. However it was extrapolated that under certain conditions, logging operations might adversely affect the quality of surface water resources.

7.3 SALT RISK ZONES

The “salt risk zones” are those specifically designated areas of Western Australian forest receiving less than 1,100 mm annual average rainfall. An EPA Map attached at Appendix F shows these areas lie within large parts of the Northern, Central and Southern forest regions. It is the potential for salinisation of streams and rivers within these zones following logging, that is the subject of this Chapter.

7.4 HISTORY OF HARVESTING IN THE SALT RISK ZONES

From the late 1920s to 1940, heavy selection cutting and clearfelling had been practised in the Southern forest with no obvious impact on stream salinity observed. However, it must be remembered that no specific attempt was made to monitor any possible effects. During this period the scientific community was just beginning to appreciate the relationship between increases in stream salinity and clearing for agriculture. At the time, logging was considered a temporary and less severe hydrologic disturbance and therefore not perceived to affect stream salinity.

Clearfelling of forest was discontinued after 1940 because it was costly, wasteful and involved the burning of non-commercial trees. It was re-introduced in the mid 1960s when the commercial use of non saw log quality karri and marri as chipwood for paper pulp was developed.

By the late 1960s, the value of water resources in the South-West forests and the risk of salinity was well established within the scientific community.²⁴⁷ It was thought that under certain conditions, logging operations might adversely affect the quality of surface water resources. Although 80 years of logging and subsequent regeneration of the forest suggested little cause for concern, proposals for more intensive operations involved sufficient uncertainty to warrant research programmes to quantify the effects. A Steering Committee was established in 1972 to undertake some initial research.²⁴⁸ Prior to this, no quantitative information was available on how logging affected stream salinity and sediment concentration.

²⁴⁷ For example, Wood (1924); Burvill (1947) as quoted in A J Peck "Salinization of Non-Irrigated Soils and Associated Streams: A Review, *Australian Journal of Soil Research* 1978 16 pp.157-68

²⁴⁸ Under the Chairmanship of Mr K J Kelsall

During this time, the community was becoming increasingly conscious of the relationship between agricultural clearing and salt but there was also concern that re-introducing clearfelling of karri and more intensive logging in the jarrah forest might affect water quality.

7.5 THE EPA DETERMINATION IN THE NORTHERN AND CENTRAL ZONES

Both CALM and the Water Authority had clearly established by their respective research that there was a relationship between logging and salinity in the forests of the South-West. It was determined that clearfelling of karri and more intensive logging of the jarrah had only minor effects on stream salinity. Therefore, no major changes to management practice were considered necessary. However, transient effects on stream salinity and sediment concentrations were considered locally significant and could be moderated by refinements to management practice. For example, in the intermediate zone, where average annual rainfall is between 900 and 1,100 mm, the potential for an increase in stream salinity resulting from logging was greatest and substantial buffer strips were recommended. In the low rainfall zone, integrated saw log and woodchip logging was not expected to generate salinity as long as care was exercised in identifying salt sensitive spots and buffer strips were retained in those areas.²⁴⁹

When considered from a *regional* water resource, the impact was minor in all the rainfall zone types²⁵⁰ but from a *local* resource point of view, it was a different scenario. Locally, there were impacts on ground water levels, stream salinity and turbidity.

7.6 THE WACAP PROPOSAL

In 1988, WACAP was seeking approval from the State Government to export an increased tonnage of woodchips. At that time, WACAP's activities were restricted to a woodchip licence area and in order to achieve its export objective, WACAP would have to chip outside its licence area and/or intensify harvesting in the salt risk zones of the area. As part of the approval process under Part IV of the *EP Act*, the EPA undertook an assessment, ultimately recommending that the proposal be approved subject to 17 Recommendations.

During the submission phase, the EPA became aware that the Western Australian community was worried about the increased intensity of harvesting in the jarrah-marri forest because of the potential for salinity impacts. For this reason, the EPA concluded that it was:

²⁴⁹ Christensen P (1992), *The Karri Forest*

²⁵⁰ Environmental Protection Authority (1988) *The Western Australian Woodchip Industry: W.A. Chip & Pulp Co Pty Ltd; Report and Recommendations of the Environmental Protection Authority*, Bulletin 329, p.23

“...inappropriate to extend harvesting systems requiring complete overstorey removal into the salt risk parts of the Northern and Central Jarrah-Marri forest prior to formal referral to the EPA.”²⁵¹

The EPA had no objection with the WACAP proposal to increase intensification into the salt risk zones of the jarrah-marri southern region. Even so, WACAP had first to present an environmental management plan for that region. However the EPA insisted upon a different approach in the jarrah-marri of the central and northern zones. Special precautions were necessary because there were major populations and fresh waters dammed for water supply. For these reasons, only continued selection cut harvesting was permitted.²⁵²

The Committee notes the specific concerns the EPA had in 1988, about **any** harvesting system which would lead to complete overstorey removal.²⁵³ The matter was considered so potentially serious by the EPA that it endorsed CALM’s specification for the southern and western jarrah-marri forest, that such harvesting be limited to 10 hectares. In the salt risk zones, further precautions were required. Harvesting proposals that led to complete overstorey removal were considered inappropriate and required formal referral to the EPA for assessment.²⁵⁴

The EPA reported that the major issue for the community arising from over 4,000 responses received in the 10 week review period was the:

“...increased intensity of harvesting in the Jarrah-Marri forest with potential salinity and other impacts.”²⁵⁵

7.7 WACAP AND CALM’S ACTIVITIES IN THE SALT RISK ZONES

WACAP is a subsidiary of Bunnings Forest Products Pty Ltd and the contracts between WACAP and CALM²⁵⁶ for the supply of timber related to a very large portion of the timber being harvested in Western Australia. The WACAP contracts provided for the harvesting of some 88%

²⁵¹ Environmental Protection Authority (1988) Bulletin 329, p.v

²⁵² Selection cut harvesting involves removing trees individually over the whole area, usually in the course of a felling cycle to maintain the stand in an uneven aged condition.

²⁵³ Environmental Protection Authority (1988) Bulletin 329, p.v

²⁵⁴ Environmental Protection Authority (1988) Bulletin 329, p.v

²⁵⁵ Environmental Protection Authority (1988) Bulletin 329, p.v

²⁵⁶ The Executive Director of CALM has power to enter into contracts for the sale of forest produce on Crown land under the *CALM Act 1984* s.88(1)

of the woodchip timber which CALM had contracted to supply in the period 1990-1993. More intensive harvesting would affect not only the marri trees used for woodchip but also the jarrah which grows with the marri. This is because saw logs and chipwood were taken together under an integrated logging prescription.

There appear to have been two consecutive contracts between CALM and WACAP in the relevant period. The first, No 794, ran from 1 January 1989 to 27 July 1990, when it was superseded by No 2050. Clause 4 in each contract provides that CALM will supply WACAP with the produce, in the sense that CALM will be responsible for, and organise the felling and transport of, the produce to WACAP's mills. In other words, CALM was directly and physically involved in the process of forest harvesting for the purpose of fulfilling contractual obligations to WACAP. Importantly, WACAP was subject to Ministerial Conditions regulating logging practices. Condition 5 read:

“Any proposal to harvest wood from the salt risk zones of the Central and Northern Forest Regions by more intensive methods than selection cut harvesting shall be referred to the Authority for assessment.”

On 1 July 1998 this Committee wrote to the Executive Director of CALM about logging practices between 1988 and 1993 in the salt-risk zones. It said:

- “1. *On 28 September 1988 the then Minister for the Environment, Barry Hodge MLA, published a Statement that a Proposal may be Implemented (Pursuant to the Provisions of the Environmental Protection Authority Act): the West Australian Woodchip Industry: WA Chip and Pulp Co Pty Ltd.*
2. *The Statement includes a number of conditions to which the Minister's approval of the proposal is subject. Condition 5 is as follows:*
 - “5. *Any proposal to harvest wood from the salt risk zones of the Central and Northern Forest Regions, by more intensive methods than selection cut harvesting shall be referred to the Authority²⁵⁷ for assessment.”*
3. *A proposal to harvest wood from the salt risk zones of the Central and Northern Jarrah Forest Regions by more intensive methods than selection cut harvesting forms part of CALM's Proposals to amend the 1987 Forest Management Plans*

²⁵⁷

“Authority” means the Environmental Protection Authority.

and Timber Strategy and Proposals to Meet Ministerial Conditions on the Regional Plans and the WACAP ERMP, assessed by the Authority in 1992.

4. *Implementation of any such proposal between the date of the Ministerial condition (1988) and the date of the Authority's assessment (1993) would appear to breach Ministerial condition 5.*
5. *The Bradshaw prescription²⁵⁸ is such a proposal.*
6. *Therefore if the Bradshaw prescription in the Central and Northern Forest Jarrah Regions were implemented by CALM before the Authority's assessment, CALM was in breach of the condition.*
7. *The Bradshaw prescription was in fact implemented in the Central and Northern Forest Jarrah Regions by CALM before the Authority's assessment."*

Dr Shea, the Executive Director, responded:

"I refer to your letter dated 1 July 1998 asserting that CALM breached Ministerial Conditions dated 28 September 1988 entitled The West Australian Woodchip Industry - WA Chip and Pulp Co Pty Ltd (the WACAP Ministerial Conditions). I apologise for delaying my response, however the seriousness of your allegation has required that CALM examine all the information we have on this matter. As the issue dated back to the late 1980s this has taken some time.

I wish your Committee to be in no doubt that I absolutely reject the allegation of any illegal action by CALM and my examination of the historical documents supports my position.

The thrust of your argument turns on one point - was the silvicultural regime applied in the jarrah forest between 1988 and 1993 more intensive than that allowed by Ministerial Condition 5 of the WACAP Ministerial Conditions of 1988?

The complexity of the various documents bearing on forest management that were produced during the late 1980s has caused CALM to seek legal advice on occasions on their interpretation.

²⁵⁸

The "Bradshaw Prescription" is a type of silvicultural practice.

In 1996 when seeking advice on another issue, the Crown Solicitor's Office made relevant comments to CALM on Condition 5 of the WACAP Ministerial Conditions.

“Condition 5 must be translated to mean that WACAP shall not use or obtain wood for woodchipping from the salt risk zones of the Central and Northern Forest Regions other than pursuant to selection cut harvesting (as that term is understood in silviculture practices of CALM) until such time as any proposal for more intensive harvesting has been assessed by the EPA”.

The silvicultural practices relating to CALM's management of the jarrah forest during the relevant period must therefore be considered.

Immediately prior to 1985 silviculture in the jarrah forest was implemented through the application of local prescriptions developed by individual regions and districts. These prescriptions were based on the requirements of the foresters' manual at that time.

In 1983 it was recognised that applied silviculture in the jarrah forest was not entirely consistent and a review was initiated, one goal of which was to standardise silviculture application through the implementation of prescriptions developed centrally by a branch headed by Jack Bradshaw. Jarrah forest silvicultural trials were established in the same year in a number of forest blocks and the first draft silvicultural prescription was prepared and circulated for comment. Formal documentation was initiated with a pamphlet titled Treemarking and Silviculture in the Jarrah Forest, a training brief for operational staff prepared by Mr Bradshaw in 1985. This was approved for application in all areas in December 1985. In the same year (March 1985), Forest Department information sheet number 47 was circulated titled Managing Jarrah Forest for Wood Production, by F J Bradshaw. Both these documents presented the basic silvicultural application that has continued to be applied.

These initial documents were followed by Technical Report No 4 in January 1986 titled “Silvicultural Guidelines for Virgin Southern Jarrah Forest” by F J Bradshaw which was approved for application in March 1986, and by Jarrah Silviculture Specification 1/86 ‘Thinning’ authorised for application in December 1986.

In 1987, the pamphlet “Treemarking and Silviculture in the Jarrah forest”, a training brief for operational staff was reviewed and recirculated for implementation. In this year Silviculture Specification 1/86 was also reviewed and replaced with Silviculture Specification 1/87, ‘Jarrah Thinning and Regeneration’. This remained in place until 1989 when it was superseded by Silviculture Specification 7/89, ‘Treemarking and Silvicultural Treatment in Multiple Use Jarrah Forest’.

It is clearly the case that from Silviculture Specification 1/87 onwards gap sizes in the jarrah forest were limited to 10 hectares. Prior to that Specification, the guidelines only included the minimum size of gaps, the maximum was not limited. Prior to the 10 hectare limitation specified in Silviculture Specification 1/87, some gaps were greater than 10 hectares.

Copies of Silviculture Specifications 1/86, Treemarking and Silviculture in the Jarrah Forest, and Silviculture Specification 1/87 are attached.

Dell B., Havel J.J., Malajczuk N. In their 1989 publication The Jarrah Forest note in Chapter 18:

“Silviculture practices in the jarrah forest tend to fall within five distinct periods. These may be described as:

- (a) Largely uncontrolled exploitation till the early 1920s.*
- (b) Group selection cutting and intensive regeneration treatment from the early 1920s to the 1940s.*
- (c) Relatively light uniform selection cutting of the 1940s to mid 1960s.*
- (d) Heavy selection cutting from the mid 1960s to 1985.*
- (e) Group selection and thinning from 1985”.*

Therefore, the method of selection cutting practised by CALM in the jarrah forest, during the period relevant to your question, was group selection cutting with the size of gaps created being limited to 10 hectares.

CALM did not harvest the jarrah forest by more intensive means during the period and in fact has continued with the same gap size since the introduction of the 1994 Forest Management Plan.

It should be noted that while there may have been discussion with the EPA of limiting gap sizes in some areas of the jarrah forest, it is the Ministerial Conditions that bind proponents.

The Ministerial Conditions were strictly adhered to by CALM, including Condition 5.

A subtlety of this matter that may not have been brought to the attention of your Committee is that the 1988 WACAP Ministerial Conditions had no legal bearing on CALM. The proposal that they referred to was a WACAP proposal, and the forest harvesting to which they refer was at that time undertaken by WACAP.

The rearrangement of forest harvesting whereby CALM took direct responsibility for the carrying out of harvesting by way of direct contracts between CALM and logging operations was implemented in the period following 1988.

It was partly to resolve the unsatisfactory situation of the 1988 WACAP Ministerial Conditions seeking to impose conditions that were no longer within the power of the proponent (WACAP) to fulfil that CALM introduced its 1992 amendment to the Forest Management Plan that your Committee may note was entitled “Proposals to amend the 1987 Forest Management Plans and Timber Strategy and Proposals to Meet Environmental Conditions on the Regional Plans and WACAP ERMP”

*(Signed) Syd Shea
Executive Director*

24 July 1998”

Dr Shea did not define "selection cut harvesting" with precision. He commented that the term was best understood within the context of CALM's silviculture practices at the relevant time. Dr Shea then concluded that CALM practised " ...*group selection cutting with the size of gaps created being limited to 10 hectares*". The EPA Report into the WACAP proposal defines group selection cutting as a silvicultural system in which trees are felled in small groups.²⁵⁹

The Specifications referred to by the Executive Director in his letter require consideration.

7.8 THE 1987 SPECIFICATION

This Specification described three types of silvicultural practice, to be applied to jarrah forest as appropriate. Two of them, referred to as "thinning" and "uniform selective cutting", appeared to satisfy the Ministerial Condition, that is, they are not more intensive than "selection cut harvesting". However, the third practice was referred to in various parts of the 1987 Specification as follows:

*“remove overstorey to release ground coppice ...all marketable stems (including potential crop trees) are removed ...complete removal of the overstorey ...”*²⁶⁰

²⁵⁹ Environmental Protection Authority (1988) Bulletin 329, p.38

²⁶⁰ Department of Conservation and Land Management (1987), pp.5-7

The figures accompanying these descriptions indicate that virtually no trees are retained in an area subject to this third practice. This type of treatment seems to the Committee to be more intensive than “selection cut harvesting” and therefore when practised, placed the forest at further risk.

7.9 THE 1989 SPECIFICATION

This replaced the 1987 Specification. The 1989 Specification described three prescriptions applicable in jarrah forest - shelterwood, gap creation and thinning. Of these, shelterwood and thinning appear to satisfy the Ministerial Condition, as they appear to be no more intensive than selection cut harvesting.

Gap creation is described as follows:

“GAP CREATION: (Release of established regeneration) Jarrah regeneration will be encouraged to develop unimpeded into saplings, poles and mature trees by the removal of competition.”²⁶¹

Comments elsewhere in the 1989 Specification suggest that gaps are up to 10 ha in size. This type of treatment seems to the Committee to be more intensive than "selection cut harvesting".

Dr Maurice Mulcahy, Member of the EPA in 1988, gave the following in evidence to the Committee:

“HON LJILJANNA RAVLICH: Ministerial condition No 5 states that any proposal to harvest wood from salt-risk zones in the central and northern forest regions by more intensive methods than selection-cut harvesting shall be referred to the authority for assessment. How would you define “more intensive methods”? The matter hinges on that. Are we dealing with volume or the harvesting method?”

DR MULCAHY: I believe we are dealing with the type of harvesting.

HON LJILJANNA RAVLICH: Could somebody legitimately misinterpret [the words “more intensive methods of harvesting]?”

DR MULCAHY: If I recall correctly, the description of the method certainly involved removal of more trees and certainly in patches the complete removal of the over-storey.

²⁶¹

Department of Conservation and Land Management (1989), p.1

Any objective-minded person would say that there was a more drastic treatment than the forest had received in the past.”²⁶²

On April 14 1999, Dr Shea was asked as follows:

“The CHAIRMAN: Would you describe the total removal of canopy in gap creation as an intensification of selective harvesting?

Dr SHEA: That is not relevant. In terms of the legal definition of the selection process and what we had to do, the EPA stated that it was a continuation of selection-cut harvesting which was what it had evaluated. As a forester, selection-cut harvesting has a range of views from one tree to 300 hectares.”²⁶³

and later,

“The CHAIRMAN: Do you agree that the 1987 Specifications were in breach of Condition 5?

Dr SHEA: As I have stated in evidence to your Committee I do not agree that this was the case. If I understand your argument it is that at about 11 years ago or perhaps slightly less, if one completely ignores the fact that CALM had in place a published jarrah prescription that said that the jarrah forest could be harvested in coupes of up to 10 ha, if one selectively reads the EPA’s assessment report of the time and concludes that the EPA was for some reason not aware of this published prescription and if one claims that the applicable Ministerial Condition meant something completely logically different to what it says, an argument could be mounted that a Ministerial Condition was breached. If one then adds the view that CALM was responsible for this Condition despite the fact that it was not the proponent, it might be possible if the rest of the premises could be held together to assert that CALM had breached a Ministerial Condition.

It is important that your Committee bear in mind the fact that CALM has been subjected to an unprecedented level of scrutiny in respect of all of its forest management activities over the last 15 years. In this context given that there has been litigation all the way to the High Court and regular attacks on the Department via the media it beggars belief that a matter such as this, if it had any substance, would not have been aired publicly in the past. In particular, there has been ample opportunities for the EPA to formally

²⁶² Dr Maurice Mulcahy, transcript of evidence, 5/5/1999, pp.4-5

²⁶³ Dr Syd Shea, transcript of evidence, 14/4/1999, p.31

investigate this issue during its assessment of the proposals, the 1994-2003 Management Plan and, most recently, in its assessment of CALM's Compliance Report.

Given that this matter is now very old and that we are bound to rely only on the legal sense that can be given to the relevant legal documents surely the only logical way of viewing this matter is to look at CALM's jarrah prescription since that time. If the Committee concludes, as I have, that the prescription has not changed in respect of the intensity of harvesting in the jarrah forest, including the "salt risk zones" since 1987, then surely the weight of the evidence supports CALM's position. Certainly our legal advice supports CALM's position on this matter."²⁶⁴

The Committee is satisfied that complete overstorey removal of forest did take place through a silvicultural prescription known as gap creation in the salt risk zones between 1988 and 1992. As a result, approximately 16,000 hectares²⁶⁵ of forest was logged more intensively than it would otherwise have been under the selection cut harvesting regime mandated by Ministerial Condition 5.

Advice provided to the Committee suggests that CALM, contrary to Dr Shea's opinion was legally bound by Ministerial Condition 5. Even if it were to be accepted as arguable that CALM was not legally subject to Ministerial Condition 5, the Committee believes that CALM should have complied with its terms reflecting, as it did, government policy.

In 1992, the issue of protecting the salt risk zones was revisited when CALM became the direct manager of timber harvesting rather than as previously, the controller of timber companies.²⁶⁶ Although not critical of CALM's performance, the EPA stated that:

"... in some catchments with high risk salt sites, harvesting could represent a significant threat to water quality. In these areas, the Water Authority has indicated that a different prescription, based on wider protected stream buffers and phased logging should be adopted. It is not expected this prescription would apply to all of the salt sensitive zones, but the high risk sites need to be identified and managed accordingly..."

²⁶⁴ Letter, Dr Shea to the Committee, 30/4/1999

²⁶⁵ Environmental Protection Authority (1992) Bulletin 652, p.38. Note: the Committee suggests that this figure is an underestimate as the Bulletin does not include 1988/9 statistics. Some logging in the Central area is in the high rainfall area and therefore not within the salt risk zone.

²⁶⁶ Environmental Protection Authority (1992) Bulletin 652, p.i

As a result of its review, the EPA made 15 recommendations which led to a new set of 18 Ministerial Conditions being imposed on the Proposal to amend the 1987 Forest Management Plan. Of relevance to the salt risk zones are Conditions 12 and 16.

*" Ministerial Condition No 12
Phased Logging*

12-1 The Proponent shall ensure that in all second order catchments in the intermediate and low rainfall zones of the multiple use jarrah forest subject to logging, at least 30 percent of each second order catchment has a retained basal area of greater than 15m²ha⁻¹ for a period of at least 15 years after harvesting the remainder of the catchment.

12-2 This retained forest shall be selected to enhance wildlife, water resource and visual objects.

12-3 The proponent shall monitor to the requirement of the Minister for the Environment and report by 2002 on the status and effectiveness of these measures to protect nature conservation values and water quality at the time of the next Forest Management Plans and Timber Strategy.

*Ministerial Condition No 16
High salt risk catchments*

16-1 Within three years or such other period as the Minister for the Environment shall nominate, the proponent, on advice from the Water Authority of Western Australia, shall identify second order catchments with a high salt risk.

16-2 Within each catchment identified according to the requirements of condition 16.1, the proponent shall retain additional river and stream buffers and locate areas temporarily reserved during phased logging operations to the requirements of the Water Authority of Western Australia.²⁶⁷

The Committee is pleased to comment that by 1998 when these Conditions were reviewed through a progress report into compliance with the FMP, the EPA Advisory Committee stated CALM had substantially complied with these Conditions.

²⁶⁷

Environmental Protection Authority (1998) Bulletin 912, pp.18 & 20

7.10 CONCLUSION

WACAP in 1988 stated it would:

“...observe all controls and operating conditions imposed on it through the published codes, Acts and licenses...”²⁶⁸

However, because of some logging prescriptions employed, the Committee is not persuaded that between 1988 and 1992 the forest was accorded the protection required by the Minister in approving the WACAP proposal. The community must be assured that companies engaging in logging, and the regulator, will implement fully the standard of compliance required under various Ministerial Conditions.

7.11 COMMITTEE FINDINGS

The majority of the Committee finds that:

1. salinity is Western Australia's most critical environmental problem;
2. complete overstorey removal of forest took place through a silvicultural system known as gap creation in the salt risk zones between 1988 and 1992 contrary to the EPA's advice;
3. WACAP by its actions and CALM as the regulator, risked a fragile eco-system;
4. the Executive Director of CALM's interpretation of Ministerial Condition 5 placed the value of logging contracts over that of his role as conservator of the forest;
5. when the EPA undertook its assessment of the 1987 Forest Management Plans in 1992, precautions about logging practices in the salt risk zones had already been well documented by the EPA in 1988 yet were apparently ignored.
6. when a further set of Ministerial Conditions were published because of the 1992 EPA assessment, special limitations (namely Conditions 12 and 16) were placed on salt risk logging aimed at preventing unacceptable impacts on those zones;

²⁶⁸ Environmental Protection Authority (1988) Bulletin 329, p.87

7. because the assessment of salt risk jarrah forest logging was delayed until 1992, contractual obligations entered into during the period prior to the assessment meant it was difficult to lower logging to sustainable levels at the time when the Allowable Cut for jarrah under the new prescription was finally set following the Meagher Committee recommendations. As a consequence, the level of the jarrah cut has been consistently higher than the sustainable yield since the contracts were set in the late 1980s;
8. approximately 16,000 hectares of forest were logged to gaps during the period the assessment was delayed; and
9. Ministerial Policy concerning harvesting in salt risk zones was important and required implementation by CALM.

Recommendation 23: That in order to restore public confidence in the integrity of forest management, the government should remove CALM's current conflicting interests of conservation and resource utilisation; and bind CALM to Ministerial Conditions and management plans imposed on either it or its subcontractors.

CHAPTER 8

CALM'S VARIOUS ROLES: CALM AND THE LAW

8.1 INTRODUCTION

CALM has a number of functions, responsibilities and interests. Many witnesses claimed that the conflicts of interest in a number of areas between these functions, responsibilities and interests meant that it was extremely difficult for CALM to make optimal decisions about forest management.

The EPA is undertaking a review of the various roles played by CALM, to be presented to the Minister for the Environment as a supplementary report to its EPA Compliance Report. By way of general background to its forthcoming report, in the EPA Compliance Report the EPA described the separation of functions which had occurred in the water industry and noted that:

“Applying this model to CALM it would be easy to propose that the functions of resource manager and allocator and all other conservation functions should be separated from those of timber production, and furthermore, that the resource allocation function should be completely independent of CALM as the resource manager. This approach would remove the conflict of interest that is perceived by some to exist in the present CALM structure.”²⁶⁹

The EPA summarised some of the difficulties facing CALM in seeking to carry out its range of functions:

“Vulnerability of CALM to Perception of Conflict of Interest in CALM's Activities

The current structure and funding of CALM and the controlling bodies [LFC, NPNCA and FPC] leaves CALM in an exposed position in relation to potential criticism and allegations of conflict of interest. A perception of conflict can easily arise from an institutional situation where a natural resource agency is the principal resource user (essentially the commercial operator) as well as the agency responsible for protecting and managing that resource, as well as being a key member of the independent controlling bodies and the service agency to those bodies.

²⁶⁹ Environmental Protection Authority (1998) Bulletin 912, p.34

In addition there is concern that CALM is not legally bound by the provisions of the Wildlife Protection Act with respect to the protection of fauna (for which it is responsible on behalf of Government and people of Western Australia) in relation to its own forestry activities.

*The perception of conflict of interest is enhanced by CALM's high level of dependence on income from timber sold to finance its operations, including the servicing of its non-forest sectors.*²⁷⁰

The Committee notes the views of the Standing Committee on Government Agencies in its 36th Report, recommending against Departments such as CALM possessing both regulatory and operational functions.²⁷¹

However, while theories of good government and the views set out in this section indicate strong sentiment for separating the functions of CALM in some way, there is a wide range of often inconsistent views as to exactly which functions should be kept apart. The arguments on the need for separation fall into four categories:

- i. separation of **forestry** from **conservation** functions;
- ii. separation of **operational** from **advisory** functions;
- iii. separation of **operational** from **regulatory** functions; and
- iv. separation of Ministerial responsibilities.

These proposals are discussed in turn in the following paragraphs, followed in each case by CALM's response. A related matter also discussed in this section is the adequacy of the *Wildlife Conservation Act 1950* (WA) ("**WC Act**"). Whether the State owned timber resource should be dealt with by contract or licence is examined, and finally, the issue of CALM's accountability is taken considered.

8.2 CONSERVATION VERSUS COMMERCIAL FORESTRY FUNCTION

Dr Beth Schultz of the Conservation Council WA saw the combination of conservation responsibility and commercial forestry as a problem:

"The conservation estate and the native flora and fauna will never receive the care they need and deserve while we have an integrated agency. Time and again, and I can give

²⁷⁰ Environmental Protection Authority (1998), p.35

²⁷¹ Standing Committee on Government Agencies, 36th Report (1994), *State Agencies - Their Nature and Function*, pp.11 and 24

the committee countless examples, exploitation wins out over conservation. There must be a restructuring with a separate agency which has a conservation ethic. CALM has an exploitation ethic. If it can make a dollar it does so irrespective of whether it is from selling more logs than the market can bear or commercialising endangered species.”²⁷²

Mr Brian Young, resident of Manjimup, suggested that inadequacies in conservation of habitat are directly traceable to the conflicting roles played by CALM:

“Requirements related to securing the habitats of native plants and animals are inadequately expressed, inadequately detailed and worded, inadequately monitored and inadequately enforced. This is a direct result of allowing a single body to deal with conflicting responsibilities. That one of those is the obligation to fulfil contracts for resources to an unsympathetic industry and, by that, obtain revenue for the government further burdens the case of conservation.”²⁷³

The conservationist call for CALM's forestry and conservation functions to be separated was echoed by the Industry Commission in its detailed review of forestry agencies in 1993. The Commission proposed a straightforward separation of function according to tenure, with production forest to be managed by a commercial entity and conservation forest by a conservation entity. The Commission addressed concerns that the forestry agency would not be able to deal adequately with conservation matters within its jurisdiction as follows:

“Another concern that surfaced at the draft report hearings was that non-wood outputs associated with multiple use native forests (eg the maintenance of recreational areas, watershed values, historical and scenic sites) would be put at risk if such forests were managed by corporatised bodies which are required to meet commercial objectives. The Commission considers that this would not occur for a number of reasons.

- i. governments could specify (and separately fund) non-commercial functions that they require their corporatised bodies to perform;*
- ii. corporatised bodies would be subject to forestry codes to ensure that wood is harvested on a sustainable yield basis, wildlife corridors are preserved, and that environmentally sound forestry practices are employed; and*

²⁷² Dr Beth Schultz, transcript of evidence, 10/9/1997, p.9

²⁷³ Mr Brian Young, Submission No.54

- iii. *corporatised bodies would have an incentive to adopt good management practices and develop their forest resources in order to protect their longer term commercial interests.*

It also needs to be recognised that, under the Commission's proposal, corporatised bodies would not be responsible for the management of conservation and nature reserves, and of other forest areas in which logging is banned (eg certain water catchment areas).²⁷⁴

The Committee notes its dissatisfaction with a separation of management according to tenure that is, production forest to be managed by an “operator”, and conservation forest to be managed by a “conservator.” The role of conservation cannot be fenced out of forest areas on the basis that they are production forests. Such areas are still habitats, requiring that State and national habitat protection laws are adhered. To separate forest tenures into different vested administrative responsibilities appears to be contrary to eco-system management principles.

The RFA's IEAG, however, supported the integration of forestry and conservation functions:

“Most accountabilities and responsibilities for implementation appear to be satisfactory.

The CALM processes of implementation have generally been adequate to achieve the integration across all uses and thus a balanced use of native forests. However the recent introduction of a commercial State Forest Resources Business Unit has blurred previously clear responsibilities for integration in field management of CALM-managed native forests. The expert advisory group believes that integration should be the paramount consideration if Western Australia is to maintain its progress in the pursuit of ecologically sustainable forest management. Thus, if there is to be a separate commercial unit for native forest management, it should embrace all uses and values, with the non-commercial values being funded through community service contracts from the policy department. Alternatively, integration could be achieved through a public service entity which forms an integral part of CALM.²⁷⁵

In addition, not all conservationists objected to the integration of conservation and forestry functions. Mr Geoff Fernie, retired professional engineer, was strongly in favour of independent auditing of forest activities, but also stated that:

²⁷⁴ Industry Commission (1993) *Adding Further Value to Australia's Forest Products*, p.117

²⁷⁵ Independent Expert Advisory Group (1997), p.vi

“I am not suggesting by any means that we should totally reorganise the conservation side of the Department of Conservation and Land Management. It is working well in many district offices throughout the State. In my district of Walpole, the timber operations personnel report to the Manjimup business unit. Thus there is already a separation of production and conservation operations in that office.”²⁷⁶

8.2.1 CALM's response

Dr Shea promoted the integration of commercial forestry and conservation:

“... an integrated agency brings about huge efficiencies and amazing synergisms. One of the most delightful parts of my job is to see people from quite different aspects of conservation and land management, often with completely different cultures and personalities, working together.

... contrary to what people say, I think it is of fundamental benefit to conservation to have a commercial philosophy in an agency like ours. I have a graph which indicates how much money we are spending on conservation compared with what we were spending in the three separate agencies in 1984. Do not tell the Premier because he will try to take it from us! We are spending \$1.5m a year on Western Shield alone. Anybody who knows the history of conservation in this State - you do Madam Chair - would not believe that we could get \$1.5m into one program, just for conservation. So there are huge advantages.”²⁷⁷

8.3 OPERATIONAL VERSUS ADVISORY FUNCTION

Mrs Elaine Michael, resident of Bridgetown, saw problems with several facets of the structure of the agencies under the *CALM Act*. Her first concern was the lack of independence of the bodies advising the Minister:

“The three bodies - the Lands and Forests Commission, the National Parks and Nature Conservation Authority and the Forest Production Council - are all responsible to the Minister for the Environment and they are the controlling bodies of CALM. Therefore, I am amazed that CALM personnel are on those bodies. How does one supervise a management authority when one is part of, and possibly very influential on, those

²⁷⁶ Mr Geoff Fernie, transcript of evidence, 27/10/1997, p.7

²⁷⁷ Dr Syd Shea, transcript of evidence, 26/11/1997, p.7. The “remarkable result of synergisms” was also referred to by Dr Shea in the conclusion to *“The Integrated Approach to Conservation, Public Land and Wildlife Management and Commercial Forestry”*, CALM, April 1997

bodies? I am concerned about that. It is inappropriate for members of CALM to sit on each of the three bodies that are supposed to be controlling CALM. When Hon Peter Foss was Minister for the Environment, he held the same view, but no action was taken to alter the situation. I urge this standing committee to investigate the need for the three controlling bodies to be independent and free from any vested interests. It seems to be very difficult to make CALM accountable.”²⁷⁸

In relation to the Executive Director’s having *ex officio* membership of the other agencies constituted under the *CALM Act*, the IEAG advised a clearer separation of functions:

“To avoid perceptions of conflict of interest, the Executive Director of CALM should not serve on either the Lands and Forests Commission or the National Parks and Nature Conservation Authority. The composition of the Lands and Forest Commission should include an independent Chair, a community representative, and three experts with experience in relevant aspects of forest management including wood production and nature conservation.”²⁷⁹

Dr Ian Crawford, resident of Floreat Park, identified problems with CALM playing the role as the estimator of sustainable yield at the same time as being the party chiefly affected by the estimates:

“ ... there appears to be a lack of credibility in the estimates [of timber yield] because of the conflicting roles played by CALM, ie it both protects forests and exploits them, and it produces the figures for estimates: ideally, the figures should be produced by independent research, the role of forest protector should be delegated to one body and forest exploiter to another, with clear demarcations between the three functions.”²⁸⁰

Mr Ross Young saw lack of transparency resulting from the fact that key information on which decisions were based emanated from the one agency:

“The base impediments to improved forest productivity have not been resolved and are never mentioned in CALM’s more recent timber management strategies... This unsatisfactory advice will continue to exist until the Government removes the current

²⁷⁸ Mrs Elaine Michael, transcript of evidence, 29/10/1997, p.17

²⁷⁹ Independent Expert Advisory Group (1997), p.22

²⁸⁰ Dr Ian Crawford, Submission No.2

senior forest managers from CALM and brings in outside independent experts to develop a new Forestry culture based on transparency and factual information."²⁸¹

8.3.1 CALM's response

Dr Shea agreed that the present situation was not ideal:

"The CHAIRMAN: Would there be any merit in following the suggestion the previous Minister for the Environment made that the Lands and Forest Commission should be strengthened and made more independent of CALM's operations so that it was more of a regulatory body over the department?"

*Dr SHEA: I certainly see merit in getting me off the Commission. It is counterproductive having a position for the executive director on the Lands and Forest Commission. Over the years both the National Parks and Nature Conservation Authority and the Lands and Forest Commission have provided more resources. I think they have done a good job. I have no problems with them as they are now. They have the right to go directly to the Minister. One of the big mistakes that was made was to include ex-officio members and me on the Lands and Forest Commission. I would be delighted to be removed from it."*²⁸²

At the same time, Dr Shea responded to the claim that there was a conflict between its advisory function and its operational function by citing the theory of responsible government, whereby the actions of government departments are the responsibility of a Minister who reports to Parliament and is accountable before Parliament:

"One of the issues constantly brought up is the purported conflict of interest which results from an integrated agency. I will deal with that specifically. One of the things that that ignores is that we operate under a Westminster system. Throughout my 35 years as a public servant, and after serving 13 Ministers, I can honestly tell you that I am fundamentally committed to the principle that my job is management and it is the role of the politicians, who represent the community, to determine policy. There is no denying that we play a role in helping to formulate policy.

If you go to one specific issue about the supposed conflict of interest - that is, CALM conserving trees and cutting them down - the fundamental fact is that we do not determine what area of the forest is or is not logged. We have gone through in this

²⁸¹ Mr Ross Young, Submission No.9

²⁸² Dr Syd Shea, transcript of evidence, 26/11/97, p.13

State, more than any other State - we are currently going through it all over again at great cost to the community - a totally transparent process - I hope you will see how good it is from the submission that Alan and Geoff made - in which the whole community, as best as is possible, determines what area is logged and not logged.

*There is no conflict because we are not policy determinants, and the day we are is the day I quit because I think it is very dangerous.*²⁸³

8.4 REGULATORY FUNCTION VERSUS COMMERCIAL OPERATIONS

A key concern for a number of witnesses was that CALM's responsibility for enforcing the provisions of the *WC Act* and the *CALM Act*. At the same time, it was the body carrying out or responsible for most high impact activities in the forest, such as logging and road construction. It has a responsibility to ensure that operators in the field comply with the rules, while at the same time it is the major operator in the field and has a responsibility or interest in maximising commercial returns from its activities. A number of witnesses identified a conflict between these two separate responsibilities or interests. In contemporary models of good government, the bundling of operational and regulatory functions in one government agency is generally regarded as undesirable.

In industries such as water and telecommunications the operational (supply or commercial) and regulatory functions are now separated as a matter of course. Where formerly there was a single government entity responsible both for operating the industry and regulating the industry, there are now one or more entities, government or private, operating the industry subject to statutory rules. The rules are overseen and enforced by a government regulator reporting to the relevant Minister or to Parliament, not to the operator.

It can be seen from the witness statements below that there are two approaches that could be taken to separating CALM's regulatory function from its commercial operations function:

- i. to leave CALM with the regulatory role, while handing over commercial forestry operations to private enterprise. Effectively, this would amount to the privatisation of forestry operations in the State; or
- ii. to leave CALM with its operational function, while establishing a separate body with responsibility for implementing and overseeing compliance with rules about forestry.

²⁸³ Dr Syd Shea, transcript of evidence, 26/11/97, p.7

These are discussed in turn. In doing so, the Committee notes the obvious clash with the public interest arising from CALM's present dual roles, presented by the *Bridgetown/Greenbushes case* in which the Supreme Court allowed an unfettered discretion to CALM in the application of Ministerial Conditions, despite the fact that CALM was the commercial proponent: see para 6.4.5 above.

8.4.1 Timber production functions

The Committee found considerable support for an increase in contractor responsibility for undertaking timber production, subject to guidelines. This would enable CALM to revert to an arm's length oversight or regulatory function, as opposed to being a self-regulator as happens at present.

Mr Rob Troeth, a professional forester and former CALM employee, supported an increase in contractors taking responsibility for their own operations:

“Initiate a fee paying licence system linked to the level and quality of resource made available. This would add value to the industry and incentive to improve utilisation... An integral part of the license system would be increased contractor responsibility for the maintenance for regrowth forests to ensure greater accountability for the future welfare of our forests.

The licensing system would include a set of definitive standards and penalties for non-compliance by contractors. Standards and penalties need to be accompanied by positive corporate support for foresters giving them the confidence to use their own powers of observation, assessment and if necessary, enforcement. The increase in forester's ability to be effective managers would relieve a significant amount of community pressure and have positive effects on their level of professional pride. Hopefully, it would also help to reverse the trend amongst CALM employees in general to disassociate themselves from logging.”²⁸⁴

8.4.1.1 Criticism of CALM's capacity for self-regulation

Tourism South West expressed misgivings concerning CALM's ability to dominate the markets, such as tourism, in which it competes, because it is in charge of implementing the regulations governing those fields of activity:

²⁸⁴ Mr Rob Troeth, Submission No.56

“There is also a major problem with CALM being a regulator and a competitor. This is a major concern with the tourism industry. There is major concern about the role of CALM and its conflicting responsibilities as a competitor and regulator in our national parks and state forests. Tourism operators utilising national parks have expressed concerns to me about problems they have with CALM competing with them and how they are unable to speak out about those concerns as it is CALM which provides them with licences to use the park.

The motion that I put forward is that CALM should not compete with the private sector in our forest regions, national parks, nor any other region where private enterprise is already servicing the needs of the public. The role of control of our state forests should be separated from that of managing the state national parks. Action needs to be taken immediately and a complete investigation of CALM carried out as soon as possible, particularly in light of the issue of charges and fees to national parks. There is also concern within our industry about planning in national parks and who is ultimately responsible and how it fits in with the total tourism picture.”²⁸⁵

8.4.2 Removing CALM’s regulatory function

The general perception amongst all witnesses, including Dr Shea of CALM, was of CALM as the regulator of forest activities. However, before discussing the merits or otherwise of CALM performing this function, it is important to note that under the *CALM Act* the Lands and Forests Commission (“LFC”) and National Parks and Nature Conservation Authority (“NPNCA”) are created to perform the roles of overseer/regulator of forest management. Section 19(1)(e) of the Act provides that a function of the LFC is to “...monitor the carrying out of management plans by the Department in respect of land vested in the Commission...” (that is, State forest and timber reserves). Similarly, under section 22(1)(e) the NPNCA monitors CALM activities on land vested in it, that is, national parks, conservation reserves and nature reserves.

However, as the EPA notes in its EPA Compliance Report:

“All the controlling bodies are dependent on CALM for support and to carry out their functions. The LFC has very limited capacity to [monitor the carrying out of management plans by CALM] independently of CALM.”²⁸⁶

²⁸⁵ Ms Pauline McLeod, transcript of evidence, 27/10/1997, p.35

²⁸⁶ Environmental Protection Authority (1998) Bulletin 912, p.33

It needs to be borne in mind, therefore, that much of the structure proposed to provide for independent oversight of forest activities is already in place under the *CALM Act*, but does not appear to be (and is not claimed by CALM to be) effective in practice. Implementing the proposed structure would therefore require minimal legislative change but substantial practical change in terms of funding, accountability and administrative arrangements.

That an attitude of genuine, practical change would be required to divest CALM of its regulatory functions in reality is illustrated by the two page press release from the Minister for the Environment, accompanying the release of the RFA on May 4 1999. Mrs Edwardes was quoted as saying:

“The changes effectively mean that the Government has removed any potential for conflict of interest within CALM in its role as a conservation agency and a forest manager.”

These intentions are yet to be enshrined in legislation.

The IEAG reporting on *ESFM* as part of the RFA process had concerns about the complexity of the regulatory regime and the multiple roles played by CALM. It advocated removing the regulatory function from CALM to enable **compliance** with forest rules to be subject to independent audit and review:

“... the tangled web of processes associated with the Conservation and Land Management Act, Environmental Protection Act, and the determination of Ministerial conditions on the outcomes of respective reviews required under those Acts, creates overlap and confusion to the detriment of integrated planning and the pursuit of principles underpinning ecologically sustainable forest management... Provision also needs to be made for joint reviews to satisfy the two principal Acts, and therefore address the strategic issues of balancing and integrating forest uses, including social, economic and environmental implications. Similarly, both Acts need to be reviewed to enable periodic independent and transparent audits of compliance with forest management processes and subsequent joint review of processes and codes.”²⁸⁷

The IEAG took a similar line in regard to CALM's **monitoring** of its own activities, specifically in compliance with the FMP:

“While reporting of the outcomes of operations is generally adequate, periodic reporting on compliance with all provisions of relevant management plans, including

²⁸⁷ Independent Expert Advisory Group (1997), p.v

progress with the structural goals prescribed within the Forest Management Plan, needs to be introduced. CALM has an internal audit unit which operates effectively. However, an independent evaluation of a sample of CALM operational practices should be carried out on an annual basis and reported in the annual report."²⁸⁸

The common thread in these and other comments of the IEAG is that, without reflecting on CALM's performance, the structure under which CALM operates would be better if it provided for a greater degree of independent auditing. It might be said that IEAG on the whole endorsed Dr Shea's assertions that CALM operated effectively, but rejected the conclusion he drew from this, that independent oversight of its operations was unnecessary.

Mrs Elaine Michael, resident of Bridgetown, made the point that the Minister for the Environment has the function of regulating environmental impacts of the activities of other entities. The witness was of the view that it should never be the case that the Minister, through a Department, is expected to regulate its own activities. However, this is what happens in the area of forest management, wherein the Department (CALM) overseen by the Minister, is the operator, meaning that in effect there is no regulator.

*"It is also most unsatisfactory that the Minister for the Environment should be the Minister for the Department of Conservation and Land Management. This presents a conflict of interest. Environmental concerns are not properly addressed while this situation continues."*²⁸⁹

Mr Geoff Fernie, retired professional engineer discussed the merits of the Tasmanian legislative model whereby the forest activities of the operational agency are overseen by a strong independent auditor:

"The key to the [Tasmanian] Forestry Practices Act is the Forest Practices Board. Another board you may say, but it is a very necessary one as the current arrangement in Western Australia is not functioning. The Forest Practices Board develops the forestry code of practice and the timber harvest plans, which are transferred across to the operations arm and become the guidelines for the operation. That group carries through the operation plan to the harvesting operations and the regeneration operation.

Most importantly, the Forest Practices Board has an audit process with teeth. It has not an adversarial role, but is designed to encourage best practice. However, the

²⁸⁸ Independent Expert Advisory Group (1997), p.vii

²⁸⁹ Mrs Elaine Michael, transcript of evidence, 29/10/1997, p.17

Tasmanian experience, and the aspect emphasised to me by the expert advisory committee, was that without some teeth, it will not work.

In the audit process they audited 15 to 18 per cent of all the log coupes in any year. They have the power to prosecute or to remove the warrants from forestry officers. In addition, the public has the right to introduce concerns into the audit process. Last year, if I recall correctly, 140 public submissions were made. As one would expect - I must be careful here - many of them were trivial and vexatious, but 30 of them required action and six of them resulted in prosecutions.

The Tasmanians were so impressed by these changes that they are introducing a separate Act to ensure that the Forest Practices Board is independent; that is, it will report to the Minister but not be responsible to the Minister - it will be an autonomous board. Obviously, the quality of personnel involved is imperative. I commend that arrangement, or a similar one, which has an independent audit process.”²⁹⁰

8.4.3 CALM's response

Dr Shea saw no difficulty in the lack of an independent watchdog or auditor for the forest industry, suggesting that it was appropriate for CALM to be responsible for its own activities without accountability to any external party:

“The CHAIRMAN: Someone from the Manjimup Shire Council said he had seen logging down to a stream and that the stream reserve was not respected; however, he did not have anyone to complain to. Who do you suggest the person complain to in the transparent process for accountability?”

Dr SHEA: If he had any problems with the local people, I suggest he telephone me. If he were worried about that, he could go directly to the Minister. Usually before we know anything about it, a Channel 10 helicopter is hovering overhead taking pictures. I find it ludicrous that a shire councillor cannot complain.

The CHAIRMAN: We all would agree that it is not a good process to have helicopters flying overhead ...

²⁹⁰

Mr Geoff Fernie, transcript of evidence, 27/10/1997, p.7

*Dr SHEA: He is very welcome to come to me personally or to go to the regional officer. An independent audit system in the department is run by a very senior forester who reports directly to me.*²⁹¹

That Dr Shea has consistently advocated an integrated regime in which CALM has responsibility for both regulatory and operational functions is evidenced by the references in the RAC's *Forest and Timber Inquiry Final Report* of 1992, which cited evidence from CALM to the effect that:

*...“the integration of forest management with broader functions of land management and conservation management helps to achieve greater efficiency by spreading overheads and broadening the range of expertise to support decisions.”*²⁹²

The RAC was full of praise for the integrated approach to forest management,²⁹³ but in the course of a 511 page report the RAC did not reflect on the impact of financial inducements which would themselves create a conflict of interest. The RAC never seemed to notice that an operational forest manager empowered to sell off the resource (and retain the funds resulting), would have an inherent conflict with the role of conservationist-regulator.

8.5 SUPPORT FOR THE STATUS QUO

The FPS did not see any difficulty in CALM being both conservator and vendor of forest produce:

*“Mr RICHARDSON: The department was set up by the Labor Government but it has continued through all governments. From a small sawmill's perspective, we are going to have heaps of blues with CALM - we always think its logs are crap and it charges us too much; it thinks it is wonderful and does not charge us enough. That argument would occur with whomever is the supplier. It is normal business buyer/seller relationship. I am not qualified to comment on its management of the forest. As a third grade log buyer, I spend a lot of time in the forest looking at logs and I do not see a problem.”*²⁹⁴

Mr Cam Kneen, formerly of the Forest Industries Federation also accepted the convergence of functions carried out by CALM, on the basis that the key document governing forest

²⁹¹ Dr Syd Shea, transcript of evidence, 26/11/97, p.12

²⁹² Parliamentary Papers (Commonwealth) 1992, Vol.10, para 17.47, p.445

²⁹³ Parliamentary Papers (Commonwealth) 1992, Vol.10, paras 17.48, 18.158, pp.446, 508

²⁹⁴ Mr Trevor Richardson, transcript of evidence, 22/10/1997, p.13

management, the FMP, was subject to independent review by the EPA and to Ministerial approval:

“Mr KNEEN: We must recognise we will always have that conflict of interest - if that is what it is - because it is part of the government. The Government is the dominant supplier of logs to the industry and the Government is the regulator. The conflict of interest is inherent. It is just a question of where it is put. The Department of Conservation and Land Management is just the Government's agency. That is where the conflict, if it is a conflict, resides. The Government will always have that conflict.

Hon LJILJANNA RAVLICH: Let us say, hypothetically, another body is established. You do not see that would improve the situation, because the Government would still be giving the directive any way.

Mr KNEEN: That is right. We have the FMP which has been through a public review process and an EPA review process. A lot of the principles of it are based on the results of the resource assessment commission inquiry and the ecologically sustainable development forest working group. We feel we have a sound system.”²⁹⁵

CALM's support for an integrated model in which it is both conservator (or in advisory function) and vendor of forest produce (or operational manager) has been noted in para 8.2.1.

8.6 CALM AND THE WC ACT

The Conservation Council WA was concerned about the fact that CALM is not bound by one of the key Acts it administers, the WC Act:

“Mr ROBERTSON: Part of [the solution] is upgrading legislation such as the Wildlife Conservation Act which CALM is supposed to administer, though it has successfully argued in court that it is not bound by that Act. That legislation dates from the 1950s and is so far behind current world standards it is laughable. That would have to be part and parcel of changes to CALM.

Dr SCHULTZ: One recommendation from this committee could be that the Department of Conservation and Land Management be bound by the Acts it is supposed to administer. CALM is arguing in court that it is not bound by the EP, CALM, or the Wildlife Conservation Acts. What is this department that no-one can bring to heel?”²⁹⁶

²⁹⁵ Mr Cam Kneen, transcript of evidence, 19/11/1997, p.8

²⁹⁶ Mr Peter Robertson and Dr Beth Schultz, transcript of evidence, 10/9/1997, p.10

CALM representatives, in discussions concerning the current regime protecting wildlife in the State, indicated to the Committee that they favoured the introduction of a new wildlife conservation Act. As to whether CALM should be bound to comply with such an Act, the Committee did not receive unequivocal replies. The IEAG to the RFA process also sought a new wildlife conservation Act. Dr Shea concurred:

“The CHAIRMAN: With wildlife conservation, does CALM consider it is bound with regard to fauna?”

Dr SHEA: Legally we are not bound under the [WC Act] but that does not mean to say we are not conscious of our responsibilities.

The CHAIRMAN: Would you like to see the Act amended?

Dr SHEA: I would like to see the Act completely rewritten. If you want to do something for me, start lobbying to get this Act up. It is archaic and desperately needs a complete overhaul. We have been in the queue for about two or three years.”²⁹⁷

8.6.1 Legislative intent

The common law has contained a presumption (which has fluctuated widely in its intensity) since the fourteenth century that statutes are presumed not to bind the King (and later, the Crown).

The Australian High Court reversed the trend in 1990 in *Bropho’s case*²⁹⁸ in a unanimous decision which determined that, in general terms, one should look to the overall legislative intent (determined in part by the content of the legislation) to determine whether it was intended by Parliament that the Crown was to be bound. The High Court also noted in that case, concerning Aboriginal legislation and Crown land, that 93% of Western Australia was Crown land, and that if the Crown did not adhere to its terms, the legislation would be rendered meaningless.

Despite subsequent clear admonitions from the High Court, the Western Australian Supreme Court has been visibly reluctant to follow the High Court directive to look broadly for legislative intent, instead opting for adherence to mechanistic formulae to find the Crown not bound. Even the High Court admonition about the administration of the 93% of Western Australia which was Crown land, presumably relevant to this conservation legislation, was ignored. The Committee notes that the 36th Report of the Standing Committee on Government Agencies recommended

²⁹⁷ Dr Syd Shea, transcript of evidence, 26/11/1997, p.18

²⁹⁸ *Bropho v WA* (1990) 171 CLR 1

in 1994 that the presumption of Crown immunity from the effect of statutes be abolished as regards operational agencies.²⁹⁹

8.6.2 CALM's approach to not being bound by legislation

Dr Shea response to the Committee that "*legally we are not bound under the [Wildlife Conservation Act 1950 (WA)] but that does not mean to say we are not conscious of our responsibilities*" (8.6 above). That evidence was given in November 1997. but Dr Shea, as the Executive Director of CALM, had had counsel arguing for him in March 1997 in the Full Court of the State Supreme Court, where he was the first respondent to the appeal in the *Bridgetown/Greenbushes case*. The decision which was handed down in June 1997. Counsel had plainly argued that CALM was not bound.³⁰⁰

When another CALM officer was subsequently asked about the relationship of CALM to the *WC Act*, he replied that: "*My understanding is that the Bropho decision states that the Crown is bound.*"³⁰¹ When asked about the "Kerr and Hester action" in the Supreme Court, (*the Bridgetown/Greenbushes case*), Mr McNamara explained that the *WC Act* had been amended in 1976 to make provisions regarding flora specifically binding on the Crown. The Court inferred that the Crown was not bound by the remainder of the Act passed in 1950 (regarding fauna), in accordance with a legal doctrine of statutory interpretation, where the expression of one thing infers the exclusion of another.³⁰²

8.6.3 Possibilities for change

Dr Shea may claim to be "*conscious of [CALM's] responsibilities*" under the *WC Act*, but while CALM remains free of legal obligation to the terms of that legislation regarding fauna, the extent of the "*consciousness*" of CALM's officers is a matter of unsupervised and unsupervisable

²⁹⁹ Standing Committee on Government Agencies, 36th Report (1994), *State Agencies - Their Nature and Function*, p.12

³⁰⁰ CALM's Annual Report 1997-1998, carries (at p.51) "*Statement of Compliance with Written Law*" specially highlighted and bearing the facsimile signature of the Executive Director. The Annual Report notes (at p.52) amendments made to the *WC Act*, but none of these amendments bound the Crown (or CALM) to adhere to the statutory provisions for the protection of fauna. The previous year's Annual Report was to the same effect (at pp.49-50). The claimed "*attempt to comply with the requirements of relevant written law*" did not prevent the Executive Director successfully arguing in the *Bridgetown/Greenbushes case* that CALM did not have to comply with the fauna provisions of the *WC Act*.

³⁰¹ Mr Keiran McNamara, transcript of evidence, 24/3/1999, pp.9-10.

³⁰² The "*expressio unius rule*"

paternalism, lacking in accountability to legal process and the restraints which apply to the rest of the community.

Concern that CALM employees may be sued as the result of their actions under other legislation (e.g. the *CALM Act*) if CALM is bound to adhere to conservation legislation should be alleviated by s.132 of the *CALM Act*. This provides that CALM employees cannot be sued in respect of actions under either the *CALM Act* or *WC Act* if performed in good faith. Actions which are the result of unintentional statutory breach, or inevitable consequence of action lawful under the *CALM Act* would be immunised from most liability in tort, although liability might still lie for negligent actions, or criminal breaches of strict liability provisions (that is, where intent is not an issue).

Such immunising of CALM employees raises the issue of the Department's liability. Legal theory is that the immunising of the employees' actions leaves no liability to be passed to the employer. Legislative change could leave CALM amenable to control by the law, with both damages and injunctions being awarded against it, while preserving individual officers from legal proceedings.³⁰³

8.6.4 CALM the sole prosecutor under the WC Act

The *WC Act* provides in s.26 that the Executive Director of CALM has exclusive power to prosecute offences under the Act. This is not to say that it should be assumed that CALM employees and contractors can ignore the portion of the Act which presently specifies that it binds the Crown (sub-s.9(1) regarding flora). The Supreme Court might still issue declarations and injunctions requiring adherence to the Act in instances where its terms were not being adhered to by CALM operatives, who were in turn not being prosecuted. The terms of the Bill for a new *WC Act*, referred to by the Executive Director above (8.4) (the *Wildlife Conservation Bill 1992*) provide (cl 125) for the prosecution function to remain with the Executive Director or his delegate. The *Bridgetown/Greenbushes case* was a clear illustration of the difficulties faced by community groups in attempting to litigate in the Supreme Court in respect of CALM's failure to adhere to the provisions of the *WC Act*. To vest the prosecution function in respect of conservation in the body which is charged with the responsibility for selling forest produce seems to the Committee to be a clear conflict of interest.

³⁰³ For example *Law Reform (Vicarious Liability) Act 1989* (NSW) and *Statutory Authorities (Protection from Liability of Members) Act 1993* (Tas)

8.6.5 CALM and the operation of law

The *WC Act* is replete with licensing provisions which allow for the responsible Minister to issue licences dispensing with the operation of some of the prohibitions in that Act from application to named persons. Sections 15 to 17A provide for exempting licences in respect of the offence provisions concerning fauna, while ss.23A to 23F similarly provide for licences concerning flora.

While such extensive dispensing powers exist, the question of whether or not the Crown is bound by the Act is immaterial, as was made abundantly clear in the *Bridgetown/Greenbushes case*. In the Full Court of the State Supreme Court, Templeman J found that there was no triable issue as to whether CALM had to comply with the flora provisions of the *WC Act*, as the appellants had not even pleaded that there was no written ministerial consent to the taking of rare flora, such a consent being provided for in s.23F of the Act. The majority of the High Court were of a similar view in refusing special leave to appeal: whether or not CALM was bound by the terms of the Act was a hypothetical point while the possibility of exempting licences existed, and had not been determined.³⁰⁴

It should be noted that not only is CALM in a position to receive dispensations from having to adhere to the terms of the conservation legislation, but CALM is fully armed to license itself or any other person or body with exemptions from statutory prohibitions pursuant to the sweeping powers of delegation vested in the Minister to delegate all her/his powers to the Executive Director of CALM provided in s.133 of the *CALM Act*. Needless to say, the draft *Wildlife Conservation Bill 1992* provides for a full range of dispensing licence powers (c11 86 to 90): the *CALM Act* delegation powers would of course apply to this new legislation.

8.6.6 Dispensations from complying with a statute

Statute law exists, on its face, for the entire community. To allow one member, or some parts of the community the advantage of operating in the time warp prior to the passing of a new Act, skews the law for the entire community, and critically undermines the community's belief that the law is applied even handedly. That is the fundamental reason that the presumption that the Crown is not bound by statutes is at odds with basic tenets of fairness. By parity of reasoning, if the Executive arm of government can authorise members of the community to ignore the legal restraints otherwise generally applying, fairness is fractured in the eyes of the community, and the legislative objectives of the Parliament may be damaged.

³⁰⁴ *Greenbushes Friends of the Forest v Department of Conservation and Land Management* (1998) 154 ALR 405 at 406

The abuse of the sense of legal parity involved in dispensations led to the Bill of Rights in 1689 which provided “*that the pretended Power of dispensing or suspending of laws, by Regal Authority, without consent of Parliament, is illegal.*” The Bill of Rights is part of received British law in this State, and it is thus apparent that the Parliament may authorise dispensations from the law. Conservation is an area in which it may well be appropriate to allow for flexibility in the application of the law, in that justifiable intrusion into the protective scheme must be arguable for the purposes of scientific research. However, if the Parliament does provide for licensing to allow for such flexibility, stringent safeguards must be put in place to ensure that the capacity for departure from law applicable to the whole community is not abused.

A primary safeguard, and one which should exist in respect of any purported dispensation from statute law, is a requirement that any such licence of exemption be tabled in the Parliament for scrutiny, and be open to refusal by the Parliament. It follows that such a licence would have to be supported by reasons. A second and obvious machinery safeguard would consist of ensuring that an arm of Executive Government empowered to grant itself exemption from the law was in no conflict of interest as to the reason the exemption was being granted. It is plainly unsatisfactory for CALM to be empowered in this fashion when it is vested with both conservation powers, which might legitimately attract a dispensation, and also power to dispose of the Crown’s forest produce commercially. In this function the power to dispense with law might prove of enormous benefit, but such a use of the exempting power in that situation could not be justified as proper.

It would seem appropriate in the present position to deal with CALM’s inherent conflict of interests by removing the regulatory aspects of conservation from CALM and vesting them elsewhere. Such removal would be made good by ensuring that the Minister responsible for the conservation function was not the Minister responsible for CALM’s corporate activities. It follows, for example, that the Minister responsible for exemptions from conservation law would never delegate that function to the Executive Director, or any other official within CALM, or a successor body responsible for commercial utilisation of the State’s timber resources.

8.6.6.1 Further existing and proposed protections for contractors with CALM from the regulatory terms of Wildlife Conservation legislation

CALM has confirmed that licences of exemption have not been issued under the *WC Act*, because they are not needed. The provisions of that Act regarding fauna are not expressed to bind the Crown, so that contractors with CALM, as agents of the Crown, receive the Crown’s immunity.³⁰⁵ The provisions regarding flora are expressed to bind the Crown, but contractors are

³⁰⁵ CALM, (Jim Sharp, Acting Executive Director) letter to Committee, 6/7/99. It is ironic that a majority of the High Court refused special leave to the *Bridgetown case* because they said they could not determine whether the *WC Act* should bind CALM when the question of whether

protected from liability for injury or damage to protected species by the provisions of sub-section 23B(2)³⁰⁶ which allows a defence to a “taking” which occurred “*in the performance of any right ... conferred upon the person by any agreement to which the State is a party.*”

The draft 1992 Wildlife Bill has simpler terminology (the course of a lawful activity) to the same effect covering the taking of both protected flora and fauna (cll. 31 and 39). Those provisions, as interpreted by CALM, make a mockery of the provision in the Bill (cl. 7) for the legislation to bind the Crown. Both CALM and its contractors could be expected to see themselves as protected from the legislative requirements (and associated sanctions) intended to protect rare animals and plants and their habitats.

When new legislation is contemplated in the field of wildlife conservation, the potential for environmental impact of modern logging techniques needs to be borne in mind, compared with those of a half century past. One operator in charge of a modern tree harvester will inevitably, “*in the course of lawful activity*” in his or her endeavours, in one day destroy more habitat, and do so more absolutely, than a team of men armed with cross cut saws could destroy in weeks 50 years ago.

8.6.7 Competitive neutrality

The Hilmer Report on National Competition Policy (1993) (“**Hilmer Report**”) referred throughout (see in particular pp.129 and 342) to the need for government business enterprises to relinquish the immunities which they have previously enjoyed as emanations of the Crown, such immunities including the presumption of immunity from the operation of general statutes. While such enterprises, of which CALM is one, are able to avoid aspects of the law which apply to their commercial rivals, there is no fairness in the marketplace.

The Western Australian Commission on Government Report No. 3 (1996) was in agreement with the views of the Hilmer Report. The 36th Report of the Standing Committee on Government Agencies was to the same effect.³⁰⁷

licences of exemption existed had not even been pleaded. The Committee now knows that no licences have been issued, precisely because CALM is assured that its immunity extends to its contractors: 154 ALR 405 at 406. The extension of CALM’s immunity to those with whom it contracts is explained at para 8.7.2.

³⁰⁶ CALM, letter to Committee, 6/7/1999

³⁰⁷ Standing Committee on Government Agencies, 36th Report (1994), *State Agencies - Their Nature and Function* (1994), p.12

8.6.8 Recommendations for revision of the WC Act

The IEAG identified certain areas of the *WC Act* as requiring particular attention, recommending as follows:

“The Government of Western Australia should revise the Wildlife Conservation Act to:

- i. include explicit requirements to conserve genetic, species and eco-system diversity;*
- ii. include a requirement to prepare and regularly review a state-wide strategy for conservation of biodiversity;*
- iii. establish an explicit system of categorising threatened species, and communities, threatening processes and critical habitats; and*
- iv. formalise the responsibility of CALM for the protection and maintenance of both flora and fauna on all tenures, including the preparation of recovery plans for rare and endangered species.”*³⁰⁸

8.6.9 CALM’S advantages at law

CALM is, at the present time, able to treat Ministerial Conditions to Forest Management Plans with a flexibility not available to any other proponent for such a plan, on the basis that CALM is the regulator. This flexibility available to CALM renders the structure of the *EP Act* regulation meaningless, and the most potent of proponents (in terms of resources available for development) is outside the bounds of effective legal regulation.

CALM is not bound to adhere to the terms of the *WC Act* regarding fauna, and that immunity is available to CALM’s logging contractors, and bodies that contract with CALM for sale of timber produce. CALM is empowered to dispense with the regulatory aspects of the *WC Act*, in so far as that Act provides for protection of rare flora and fauna, and such dispensations could extend from CALM to any other body.

Prosecutions for infringements of the *EP Act* or the *WC Act* may only be launched, in the case of the *EP Act*, by the Minister, and in respect of the *WC Act*, effectively only by the Executive Director of CALM. Even attempts by members of the public to obtain declarations as to illegal behaviour by CALM and its associates under the *EP Act* will fail for want of the necessary

³⁰⁸ Independent Expert Advisory Group (1997), p.10

determination by the Minister as to breach of the statutory requirements. The public have no role available to them for policing this legislation, and CALM has effective complete control of the prosecution process, which appears to be an unsatisfactory role for a body which is, by far, the major proponent for physical impact on Western Australia's forest resources.

8.6.10 CALM's self-funding

The Committee finds that CALM should not be self funding. A return to ordinary constitutional custom and usage whereby CALM places all of its income (licensing fees and royalties) into the Consolidated Revenue Fund, and is dependent on Parliament allocating a budget to it is an appropriate step towards transparency and accountability.

The Committee cannot but note that the present position not only has the inevitable consequence of making CALM less accountable and responsible for its actions, but it leads to confusion as to responsibility for actions taken by CALM: are they the actions of CALM, an agent of the State Government, acting independently of responsible Ministerial control; or are they actions for which the State Government is directly responsible and which the responsible Minister has authorised? By way of example the Committee refers to the Executive Director of CALM's evidence in November 1997 when he spoke of the utility of an "integrated approach" to commerce and regulation:

*"I have a graph which indicates how much money we are spending on conservation compared with what we were spending in the three separate agencies in 1984 [prior to CALM's creation]. Do not tell the Premier because he will try to take it from us! We are spending \$1.5m a year on Western Shield alone. Anybody who knows the history of conservation in this State would not believe that we could get \$1.5m into one program, just for conservation".*³⁰⁹

Later in the same hearing the Executive Director said of Western Shield:

*"We have been able to convince the Government in a time of quite high constraint to spend \$1.5m."*³¹⁰

8.6.10.1 CALM's capacity for self-funding

The basic doctrine in the Westminster system is that the Crown may only spend money following appropriation by Parliament, a doctrine applied in Western Australia in sections 64 and 72 of the

³⁰⁹ Dr Syd Shea, transcript of evidence, 26/11/1997 pp.8-9.

³¹⁰ Dr Syd Shea, transcript of evidence, 26/11/1997 p.22

Constitution Act 1889 (WA) and see paragraph 64(1)(a) of the *CALM Act*. However, paragraph 64(1)(d) of the *CALM Act* allows CALM to retain funds which it generates from land management. Although this legislation is within Parliamentary power, allowing CALM to raise and retain its own revenue creates an anomaly. The result is inevitably a government agency less open to scrutiny by Parliament because it is, at least in part, self-funding.

The Committee notes that since the formation of the Department in 1985 the percentage of the total budget covered by self funded revenue has increased from 46% to 80% in 1997.³¹¹

8.7 CONTRACTS OR LICENCES AS THE MODE OF RESOURCE EXTRACTION

Pursuant to sub-section 88(1) of the *CALM Act* the Executive Director of CALM has power to grant permits and licences to take forest produce from Crown land, and also to contract on such terms and conditions as he or she thinks fit.

Latterly, the mode of CALM's operations has followed a contractual process. This approach is in contrast to the standard method in the past of Australian State Governments dealing with resource extraction (most obviously minerals), which method was licensing on conditions. When asked for comparison of CALM's activities with those in the mining sector, the Executive Director of CALM said:

*"We are different from the mining industry. With great respect to our many good friends in the mining industry, we are regrowing the forests. People do not regrow the minerals."*³¹²

The process of mineral extraction is, in general terms, one in which private venture capital is expended on a particular site which is allocated to the venturer by a licensing or grant process. The licence is awarded by a department of a State Government, and is capable of supporting conditions imposed by the government, most obviously in the field of royalties to be paid to the government, and conditions as to extraction process, pollution control, and end of use landscaping. The State Government is in a powerful position to regulate an extractive industry based in licensing.

On the other hand, the present CALM process of contracting with timber companies for the sale of forest produce means that CALM is directly involved in frontline commercial activity. An obvious consequence of becoming a commercial player is a desire to maximise profit, and

³¹¹ Shea, SR, *The Integrated Approach to Conservation, Public Land & Wildlife Management and Commercial Forestry - Case study Western Australia* (1997), p.10

³¹² Dr Syd Shea, transcript of evidence, 26/11/1997 p.18

minimise the controlling or conciliatory conditions imposed on the commercial activity by Government. This will be so whether the same body or two separate entities are selling and regulating the activity. If, however, the one body is responsible for both sales and regulation, effective regulation is difficult, given the commercial imperative to make a profit.

This effect will be heightened when, as is the case with CALM, a Department's head legislation provides for that Department to be, at least in part, self funding from the sale of produce within its control: *CALM Act* paragraph 64(1)(d).

8.7.1 The law on government contracts or licences

The distinction between contracts and licences is an important legal one for government. The common law is untidy and uncertain as to the extent to which a government can walk away from contractual obligations because of a change in policy. This is because government, unlike a private party, has always the public interest to consider. It follows that the principle of "government effectiveness" will serve as the basis for governments avoiding their contracts. This doctrine has been put, in Australian law, on the footing that government cannot inhibit itself from exercising important discretionary functions by entering contracts which fetter such discretions.³¹³

It might seem to CALM's advantage to have such a lever available for the destruction of its contractual obligations. However, the law is extremely unclear on whether or not a government (or government department or authority) which succeeds in having a contract declared invalid could be subject to equitable remedies such as specific performance, or be liable in damages. The answer would appear to be "no", but that is the greater inducement to courts not to invalidate contracts with government, leaving private parties uncompensated. For example, relevant to CALM's position is the suggestion that a contract with specific statutory authority (such as CALM has) could not be invalidated under this doctrine.³¹⁴

The upshot of the above analysis is that CALM, by entering into 10 year logging contracts, which is its standard procedure, is "fettering the discretion" of the State Government to change policy on logging in a way which is contrary to the terms of the contracts. Such a fettering most obviously inhibits the government's and/or (Minister for the Environment's) capacity to reset

³¹³ *The Ansett Transport case* (1977) 139 CLR 54 at pp.74-75 per Mason J. The concept of government avoiding contractual liabilities under this doctrine has been trenchantly attacked by Professor P W Hogg *Liability of the Crown* (1989) 2nd ed., p.172, making CALM's capacity to resist changes in policy all the stronger.

³¹⁴ *Ansett Transport* at p.77

sustainable yield estimates, maximum harvest quantities per annum, regions to be harvested, and harvesting techniques.

On the other hand, if timber resources were extracted under licence, the legal procedure involved in a dispute between the State, as owner, and a timber harvester, would be administrative, rather than commercial and contractual.³¹⁵ The liability of government in the event of a change of policy would be limited. In simple terms, the measure of damages would not be the possible full extent of contractual liability, but rather the quantum expended by the licensed party in engaging in the venture (equipment, survey reports etc).³¹⁶ Importantly, under a licensing regime, the equitable remedies of injunctive relief, and in particular specific performance, would not be available, providing procedural fairness was attended.

8.7.2 CALM's use of contracts

While acknowledging that there may be occasions when CALM might need contractual capacity, the Committee is of the view that CALM should move to a system of licensing the extraction of forest produce under its control. In addition to those general views, which support the utility of conditions attaching to licences, the Committee finds that the State Government would be much better positioned to protect the public interest if it set a general policy for CALM of licensing rather than contracting for forest products. The Committee also notes the unsatisfactory potential for contracting, as opposed to licensing, to allow private parties to indulge in the Crown's (CALM's) immunity from the operation of statutes.³¹⁷

Such a general policy requiring licencing would have to be clear and mandatory in its terms, but its utility in the field of forest management, when the factors involved in sound management lack certainty (see the Precautionary Principle as an example), is obvious. The State Government must be in the best possible position to vary policy in the public interest as the body of knowledge regarding forest conservation and exploitation enlarges. Licensing rather than contracting advances that aim.

A move to licensing and away from contracting would also provide a machinery solution to the question of whether CALM's forestry and operational functions should be split from its conservation, advisory and regulatory functions. If the extraction of resources under CALM's

³¹⁵ See *Cudgen Rutile (No 2) v Chalk* [1975] AC 520 (Privy Council, from Australia)

³¹⁶ Aronson and Whitmore *Public Torts and Contracts* (1983), suggest (at p.201) that damages in negligence might be available, but such would not seem to be appropriate to a *bone fide* change in government policy, subsequent to a contract.

³¹⁷ *Bradken v BHP* (1979) 145 CLR 107; *Australian Conservation Foundation v SA and Ophix Finance Pty Ltd* (1989) 52 SASR 288; *Bass v Permanent Trustee* (1999) 73 ALJR 522

control were licensed, CALM would fall away from operational involvement in commercial forestry, and would, as a consequence, concentrate on its conservation, advisory and regulatory functions. That this would be consequential follows from the elimination of the conflict between commercial imperatives and non-financial factors, lucidly expressed in the evidence of Dr Beth Schultz of the Conservation Council of WA and Mr Brian Young, resident of Manjimup (at 8.2 above), and the litigation example at 6.4.5 above.

8.8 INDEPENDENT FOREST INDUSTRY AUDITOR

The Committee is of the view that an independent auditor of forestry practice partially based on the Tasmanian model would be appropriate. Such a body should be as independent as possible of political control, and that aim would best be advanced by having the body report directly to Parliament, rather than a Minister.

If such a body were vested with power along the lines of the Tasmanian model to develop a code of practice and plans for timber harvesting, CALM's involvement in the regulatory side of the State's forests would be redundant, and could be terminated, leaving CALM dealing with the operational side only, which in the Committee's view should consist of licensing private venturers to extract the forest produce.

8.9 COMMENTARY ON CALM'S ROLES

The Committee has previously dealt with matters going to CALM's apparent failure to adhere to Ministerial policy directives and made recommendations in respect of the relevant legislation with a view to ensuring that CALM adheres to policy directives and Ministerial Conditions, which are to be drafted with unequivocal (that is, Court recognisable) clarity.

8.9.1 Statutes, the Crown and legislative protections

The Committee finds that CALM is both willing to act outside the terms of statutes which do not specifically bind the Crown, and to argue aggressively for the retention of its immunity. The Committee finds that the use of the immunity flies in the face of community expectations that government will behave in conformity with the laws, most obviously when government is engaged in commercial activity. That expectation is reinforced by the Hilmer Report requirement, that in commerce, government be put back on a level playing field with the whole community. If wildlife protection is to have any realistic meaning in statutes, the protections provided for CALM and its contractors will have to be removed, so that at the very least, the public are alerted to the environmental impact of logging (perhaps by application tabled in Parliament for exemption) rather than the present process of silent and automatic immunity to

the body which with its contractual accomplices, as an inevitable result of its work practices, is by far the greatest destroyer of habitat in the State.

8.10 THE FAILURE OF ACCOUNTABILITY OF CALM

In the course of the last decade two principles have emerged in the analysis of the public sector of this country which had not previously been the subject of any substantial recognition. The first of these is that government constitutes a public trust, of which the whole public are the beneficiaries. Secondly, in order to make that trust workable, the officials who constitute the machinery of government must be accountable to the people, and in practical terms, the last line of that accountability must be to the Parliament.

Professor (now Judge of the Federal Court) Paul Finn has written two essays on the first of these principles. In the first of these essays, appearing as the epigraph, is a quotation from the Pennsylvania Declaration of Rights, 1776:

“All power being...derived from the people: therefore all officers of government, whether legislative or executive, are their trustees and servants, and at all times accountable to them.”

These two hundred year old sentiments sum up the confluence of government as a public trust, and the consequent need for accountability. It is accountability which is particularly relevant at this stage of this report, and it is accountability which has been the subject of considerable official review and commentary in this State in the course of the last decade.

8.10.1 Two significant Reports

The 1992 Report of the Royal Commission into the Commercial Activities of Government Part II ("**1992 Report**") set three factors as an acceptable foundation for public trust in government (para 1.2.8). The first and third were open government and integrity of the conduct of officials, but the second required that "*public officials and agencies must be made accountable for their actions*". In the context of enhancing the process of informing the public, the 1992 Report went on to state (at para 2.1.7):

“...the practice of open government requires the good faith commitment of the officials who are at the heart of the action... To be a reality, open government must be a habit, a cast of mind. It is an attitude which must be encouraged at all times. Importantly, it requires a willingness to expose miscalculation and failure as well as to publicise innovation and achievement.”

Of particular relevance to the work of this Committee, the 1992 Report stated at (para 2.4.11):

“The Commission believes that it is of the first importance that a more realistic approach be taken to the obligation of the various arms of government to satisfy Parliament’s information needs. Parliamentary committees in particular must be entitled as of right to exact, from responsible officers of government, information falling within their spheres of actual responsibility.”

As to the actual content and nature of information to be provided by a public official to a Parliamentary committee to enable an accounting to be made of the trust of which the public are the beneficiary, the 1995 Commission on Government Report No. 1, 1995, referred to the work of Mr Les Scott MHR, then Chairman of the Commonwealth Parliament Joint Committee of Public Accounts. It was said of this work (at p. 211, enumeration added) that Mr Scott had:

“...delineated what information he believed parliamentarians require. In his view they want information that is (1) easily and quickly grasped; (2) that presents the bottom line; (3) that focuses on performance rather than administrative details; and (4) that highlights exceptions.”

8.10.2 CALM’s lack of accountability to Parliament

The Committee has twice taken oral evidence from Dr Shea, the Executive Director of CALM, and also requested information in writing. The responses from Dr Shea have raised general concerns with the Committee.

In respect of complaints from Manjimup about logging the Committee asked:

“Who do you suggest the person complain to in the transparent process for accountability?”

To which Dr Shea replied:

“If he had any problems with the local people, I suggest he telephone me. If he were worried about that, he could go directly to the Minister. Usually before we know anything about it, a Channel 10 helicopter is hovering overhead taking pictures. I find it ludicrous that a shire councillor cannot complain.”

This reply seems to rely on a belief that complaint to the body charged with dereliction will rectify the situation. Dr Shea’s answer reflected an unwillingness to consider the last decade’s developments concerning independent regulators guarding the public’s interest in such diverse commercialised public sector areas as water supply and telecommunications. On a subsequent occasion Dr Shea did refer to the Ombudsman, but adhered to *“complaint to the Minister”* as a

prime complaint remedy. There was again no reflection on modern paradigms of independent regulation of public sector commercial activity.³¹⁸

Ministerial Conditions are meant to support a workable administrative structure, and breach of them carries penalties up to \$250,000 under the *EP Act*. Ministerial Condition 5 to the 1988 WACAP Conditions was as follows:

“Any proposal to harvest wood from the salt risk zones of the Central and Northern Forest Regions, by more intensive methods than selection cut harvesting shall be referred to the Authority for assessment.”

Dr Shea was asked, in respect of a harvesting method employed by CALM in areas governed by Condition 5:

“Would you describe the total removal of canopy in gap creation as an intensification of selective harvesting?”³¹⁹

His reply was:

“That is not relevant. In terms of the legal definition of the selection process and what we had to do, the EPA stated that it was a continuation of selection-cut harvesting which was what it had evaluated. As a forester, selection-cut harvesting has a range of views from one tree to 300 hectares.”

With the last sentence Dr Shea rendered Condition 5 devoid of any content. What followed was even more insidious in terms of the realities of the relationship between a Minister and his or her head of department:

“HON NORM KELLY: When the minister made this condition, what was the minister’s understanding about the more intensive methods to which he referred and against which he may have wanted to protect?”

Dr SHEA: That is not a jocular comment. I have many tasks and responsibilities in my difficult job as CEO of the department: One of them is to not read my minister's mind. I would not know.

³¹⁸ Dr Syd Shea, transcript of evidence, 14/4/1999, p.35

³¹⁹ Dr Syd Shea, transcript of evidence, 14/4/1999, p.30.

The CHAIRMAN: You are legally required to do that if you have a contractual commitment to deliver a supply of timber.

Dr SHEA: I cannot read his mind.

The CHAIRMAN: You have a legal requirement to understand the meaning of the ministerial conditions under which you are operating.

Dr SHEA: At the time my minister was Hon Bob Pearce who, as every member will acknowledge, is no slouch in terms of his intelligence, articulateness, considerable power and ability to grasp considerable detail. I assure members that if the minister had something in his mind and we were not doing it, I am certain he would have been on to me quickly to correct it.

The CHAIRMAN: When the minister wrote this condition, did he have in his mind that there could be something more intensive than selection-cut harvesting?

Dr SHEA: I can go on only the written word, but I assume that he read carefully the prescription, that he understood what that prescription did and that is what he endorsed.”

There has also been a smothering of the analysis of accountability by reference to “the Westminster system”. Dr Shea first testified in that manner in November 1997 in a passage set out at 8.3.1 above. That portion of testimony went to Dr Shea’s assertion that Ministers made policy, in the making of which he had no definitive role. These views were expressed more recently, when Dr Shea went on from policy determination to the real nexus between Minister and Department in the Westminster system, the application of policy by the Department at the behest of the Minister, who is in turn responsible to the Parliament for the administration entrusted to her or him. Dr Shea said:

“In terms of the legality of what we can do and the application of the Precautionary Principle to the cut, I have a department which is responsible to a Minister. One of the things that I fundamentally believe in our system of government is that in the Westminster system, I am responsible to the minister. I do not form policy. I advise on policy, but when the minister or the Government sets a policy I have no legal right - in fact I would flout my position, even in the current environment, if I went against a ministerial decision. There have been many occasions during my 15 years with 12

*ministers when I have disagreed with government policy, but there has not been one occasion when I have not implemented it to the best of my ability”.*³²⁰

This reference to CALM’s application of the Precautionary Principle in the context of responsibility to the Minister was subsequent to seven pages of transcript regarding the Precautionary Principle commencing with the question:

*“Do you agree that Condition No 3 [of the Ministerial Conditions to the FMP] required you to use a Precautionary Approach - yes or no?”*³²¹

Dr Shea refused to answer this question even though the requirements of the Precautionary Approach were set out in Condition 3.

This approach to dealing with the Committee inevitably means that Dr Shea fails to measure up to the general requirements set by Mr Scott MHR (see para 8.10.1 above) for the provision of information to a Committee.

8.10.3 The political process as the basis of accountability

In the face of mounting public pressure regarding the level of tree harvest, a pressure which Dr Shea reflected in his answers to the Committee, the ultimate fall back position adopted by the Executive Director of CALM was to say, *“In fact, the vast majority of people do not even see cut over areas.”*³²² This philosophy was expanded shortly thereafter:

*“From my experience over 13 years I have discovered that the best way to get the story across is to have our officers take people, such as politicians, to the area and say, “There it is”. Seeing is believing. I have yet to take a group down ... where the people concerned have not come away, perhaps disagreeing about policy, but having been convinced about the logic of what we are doing.”*³²³

Guided tours around sites selected by CALM to create a particular impression is, of course, an inadequate approach to accountability. A “visual accounting” in the context of a huge land area is meaningless and all the more so when the Department concerned is responsible for reflecting

³²⁰ Dr Syd Shea, transcript of evidence, 14/4/1999, pp.17-18.

³²¹ Dr Syd Shea, transcript of evidence, 14/4/1999, p.6. Also see Appendix E for the actual wording of Ministerial Condition 3.

³²² Dr Syd Shea, transcript of evidence, 26/11/97, p.6

³²³ Dr Syd Shea, transcript of evidence, 26/11/97, p.11

non-financially measurable conservation concerns such as the community's leisure, aesthetic and heritage requirements, and the whole challenge of ESD. It must be conceded that Dr Shea is not alone in the visual approach: Mrs Pearce, spokesperson for the FPS, said when commending CALM:

*"I have lived in the south west for over 50 years and I do not see any great change."*³²⁴

Dr Shea stated:

"The difficulty is that it has become a political issue. I am not saying that should not be the case. However, when one has a counter argument that confuses the general public, it is very hard to gain a clear understanding of what is going on ..."

The CHAIRMAN: Why is there such a high level of mistrust?

*Dr SHEA: A significant amount of that mistrust has developed because, rather than being a community issue by itself, it has become a political issue ... once one brings politics into it - quite rancorous politics - it is very difficult to get a rational understanding and compromises. That is the tragedy."*³²⁵

CALM has failed to accept that the management of a huge public resource, the jarrah and karri-marri forests of Western Australia, is a matter on which views in the community will differ and that the State's political process and system of government is to allow those views to come into contest and find resolution. By driving its own agenda of corporatism, CALM has effectively made the hard task of resolving forest policy conflicts virtually impossible.

8.11 COMMITTEE FINDINGS

The Committee finds that:

1. the conflicts of interest between CALM's functions and responsibilities make it extremely difficult for CALM to make optimal decisions about Forest Management;
2. the Industry Commission's proposal for a separation of CALM's forestry and conservation functions according to land tenure with production forest to be managed by a commercial entity and conservation forest by a conservation entity is an unsatisfactory model from an ecological perspective;

³²⁴ Mrs Margaret Pearce, transcript of evidence, 22/10/1997, p.13

³²⁵ Dr Syd Shea, transcript of evidence, 26/11/97, p.11

3. contemporary models of excellence in government advise against the combination of operational and regulatory functions in the one agency;
4. there is resistance from the Executive Director of CALM to relinquish either regulatory or operational functions;
5. controlling bodies like the Lands and Forest Commission and the National Parks and Nature Conservation Authority have limited capacity to monitor the implementation of management plans by CALM;
6. existing structures under the *CALM Act* which provide for independent oversight of forest activities are ineffective;
7. the structure under which CALM currently operates requires a greater degree of independent auditing;
8. there is support from both the FPS and the Forest Industries Federation for CALM to continue its integrated functions;
9. CALM not being bound by the *WC Act* with respect to fauna, leaves its officers and its contractors in an unsupervised and unaccountable position;
10. the *Bridgetown/Greenbushes case* illustrates the difficulties community groups encounter when attempting to litigate against CALM in the Supreme Court. Vesting a prosecution function in CALM when it is both the conservator of forest and charged with the responsibility for selling forest produce is a conflict of interest;
11. removing the regulatory aspects of conservation from CALM and vesting them elsewhere would solve CALM's inherent conflict of interests. Such removal would be reinforced by ensuring that the Minister responsible for the conservation function was not the Minister responsible for CALM's corporate activities;
12. when new legislation about wildlife conservation is being prepared, it will need to consider the potential for environmental impact of modern logging techniques;
13. CALM, under the Law, is able to treat Ministerial Conditions concerning Forest Management Plans with a flexibility not available to any other proponent of a plan because CALM is the regulator;

14. the flexibility CALM enjoys under the Law, renders the structure of Environmental Protection Act regulations meaningless, with CALM effectively beyond the bounds of legal regulation;
15. prosecutions for infringements of the *EPA* or the *WC Act* may only be launched, in the case of the former, by the Minister, and in respect of the latter, effectively only by the Executive Director of CALM;
16. CALM's forest operations have followed a contractual process and this approach is in contrast to the standard method of Australian State Governments dealing with resource extraction, through licensing with conditions;
17. the State Government is in a more powerful position to regulate an extractive forest industry based on a system of licensing;
18. CALM's contracting with timber companies for the sale of forest produce means it is a commercial player, aiming to maximise profit and minimise the controlling conditions imposed on its commercial activity by government. CALM is responsible for both sales and regulation, yet effective regulation is difficult, given the commercial imperative to make a profit; and
19. it is unsatisfactory for the Minister of the Environment to be the Minister for CALM whilst CALM retains its current responsibilities under the present structure.

Recommendation 24: That CALM's regulatory functions be separated from its operational function.

Recommendation 25: That CALM's officers be excluded from membership positions on the National Parks and Nature Conservation Authority and the Lands and Forest Commission.

Recommendation 26: That an independent auditor for the forest industry be established and effectively resourced.

Recommendation 27: That the government adopt a licensing system for the extraction of forest resources.

Recommendation 28: That the *Wildlife Conservation Act 1950* (WA) be amended or replaced with legislation which binds CALM in respect of fauna.

Recommendation 29: That such legislation provide for reasonable exemptions to allow for the extraction of forest resources.

Recommendation 30: That any system of exemption from having to adhere to the *Wildlife Conservation Act 1950* (WA) be tabled in Parliament for the purposes of scrutiny.

Recommendation 31: That the government urgently review the *Conservation and Land Management Act 1984* (WA) to provide regulation of forest management under the control of the responsible Minister, and that the process of forest management be independent of involvement in the sale of forest products.

Recommendation 32: That there be a separate Minister for Conservation from the Minister responsible for the extraction of forest resources.

CHAPTER 9

COMMUNITY CONSULTATION AND PARTICIPATION

9.1 THE BARNETT REPORT

The Barnett Committee reviewing appeals concerning CALM's FMP found that there was a high degree of mistrust between CALM and members of the public. The Barnett Committee recommended "...that there be an inquiry into CALM's public accountability to see what can be done to make CALM's vast reservoir of knowledge more open to the public."³²⁶

9.2 CRITICISM FROM INDIGENOUS AUSTRALIANS

Other witnesses criticised CALM's perceived lack of consultation with community groups. Dr Ian Crawford, resident of Floreat Park, referred to "*Aboriginal criticisms over the Department's refusal to allow Aboriginal people to visit sites and areas of spiritual or sentimental significance, or to continue hunting practices: there is a special need for Aboriginal representation in the decision-making processes over forests and CALM managed reserves, but also more emphasis on the community's access and role in the forests.*"³²⁷

The ability of CALM scientists to offer independent advice concerning their employer was also questioned, for example by Mr Brian Young, resident of Manjimup:

*"It is a fact that scientific opinion within CALM appears publicly in support of that organisation's management. Given outside criticism, an independent body should in the interim (before CALM is separated from conservation) be appointed to oversee the application of conservation legislation in the spirit of the intention of those laws."*³²⁸

9.3 THE CULTURE OF MISTRUST

The same witness commented on the difficulty of obtaining information from CALM, attributing this to CALM's culture of mistrust:

³²⁶ Barnett (1992), p.33

³²⁷ Dr Ian Crawford, Submission No.2

³²⁸ Mr Brian Young, Submission No.54

“Since taking an interest in forest ecology in the late 1970’s, I am disappointed that in most of my formal dealings with the responsible authority, I have been frustrated in sourcing information and have met with obfuscation, suspicion and misrepresentation at senior levels of management. A separate body, to which the public can bring claims without going to CALM is necessary - an environmental ombudsman similar to the Freedom of Information head, or the Public Advocate is a provision in the public good.”³²⁹

Mr Stephen Ayling, a craft wood producer, had this to say about his dealings with CALM:

“Many times I have witnessed the poor and incompetent handling of matters from things as simple as issuing a licence to the reporting of potentially illegal activity in the forest. In all these cases, getting any action or resolution from CALM has required unnecessary time and much frustration on my behalf. In all fairness, I have dealt also with some very capable and committed forest officers in CALM. However, my experience is that these rare examples also suffer from the frustration of working in an inadequate and dysfunctional system.”³³⁰

Witnesses recounted incidents where CALM had informed the media that it had engaged or would engage in consultation over a particular matter, usually a decision to log an area. Ms Wendy Goodall of Northcliffe told the Committee of an incident where CALM claimed to have held workshops with identified local participants about plans for road construction in Crowea Block. On investigation, the meetings turned out to be ordinary local shire workers’ and tourist offices’ meetings with little or no CALM involvement.³³¹

9.4 CALM’s OBLIGATION TO CONSULT

Part of the frustration evident in these submissions flowed from the perception that CALM was not fulfilling an obligations to consult. This, strictly speaking, is a mistaken perception. CALM has no statutory obligation to consult with any community sectors on an ongoing basis. Once the Forest Management Plan has been approved in accordance with the *CALM Act* and *EP Act* there is no further impediment to CALM (specifically the Executive Director) engaging in such timber harvesting, and entering into such contracts to sell forest products, as it sees fit. CALM is not required to enter into consultation about, for example, logging plans or informal reserves. Any consultation it engages in is voluntary.

³²⁹ Mr Brian Young, Submission No.54

³³⁰ Mr Stephen Ayling, transcript of evidence, 27/10/1997, p.8

³³¹ Ms Wendy Goodall, transcript of evidence, 27/10/1997, p.19

It must be said that some witnesses tended to muddy the waters by overstating the paucity of information. The Conservation Council, for instance, told the Committee that because of CALM's desire for secrecy it was not possible to find out which sawmills bought timber, and the price and volume of such timber. However, as CALM pointed out, Regulation 148 of the *Forest Management Regulations 1993* obliges the Executive Director to provide such information at a fee of \$1.00 per page. The Committee is not aware of any failure of the Executive Director to comply with this regulation.

Dr Shea defended the degree of consultation engaged in by CALM, suggesting that, while other consultation is welcome, the fact that the government's statutory obligations to consult have been met is the key point:

"The CHAIRMAN: On a more positive note, would you like to see more public participation in CALM management?"

Dr SHEA: We already receive a significant contribution from people involved in public participation.

The CHAIRMAN: I know you have in national parks, but what about in state forests?"

Dr SHEA: We certainly have in state forests. If you look at our record on the two management plans that we have put out and the current process, you will see that over a 10 year period there have been smaller ongoing exercises, but we have had three major processes. These public processes involved with forest management were the first ever in Australia.

The CHAIRMAN: To which processes are you referring?"

Dr SHEA: I refer to the 1987 and 1994 processes, and to the current RFA process.

The CHAIRMAN: That is the two EPA processes and the RFA process?"

Dr SHEA: There was a combination of an EPA process and a CALM process in 1994 and 1987."³³²

Similarly, CALM responded to the proposal by Dr Pierre Horwitz that forests should be managed at a local level, with input from local communities, with the following:

³³² Dr Syd Shea, transcript of evidence, 26/11/1997, p.13

“Local communities are asked for their comments on how land should be managed during the preparation of management plans. CALM is proud of its commitment to public participation.”³³³

Mr Rob Troeth, a professional forester and former CALM employee, pointed to the fact that forest management decisions were being made by business units which are accountable only for their promotion of timber harvesting revenues, not for the performance of CALM’s conservation and other functions:

“The reason why there is so much professional and public preoccupation with problems in forestry is I believe related to the question of accountability of forest resource business units. They provide the management structure which oversees the performance of the logging and milling contractors. The focus and operation of business units is mostly strategic as they carry the financial responsibility for ensuring that revenue from logging is maintained. In a conservative financial sense, yes, business units are accountable and are often applauded for being so. But they have never been applauded for their environmental record, as in practice they have displayed a very low level of initiative in attempting to change the way in which forests are managed. Basically forest resource business units are still managing a highly valuable, fast disappearing natural resource for the short term benefit of industry and in the same way it was managed when it was perceived to be “endless and unchanging”.”³³⁴

Dr Shea disagreed, stating that the forest resource business units consulted with local management before determining logging plans:

“The CHAIRMAN: Concern was expressed to the committee by people in the south west about the operation of business units and how they are made accountable. For example, I believe they are responsible for the implementation of ministerial conditions with regard to salinity, to which I referred earlier. How is the business unit made accountable for wider environmental and long term sustainability principles?”

Dr SHEA: The business unit is subject to the internal audit process which is constant and ongoing, just like that of the internal affairs unit in the Police Department. If its staff did not subscribe to the management plan, I would be very doubtful that they would deliberately break it. Even if they did so unintentionally, we have processes.

³³³ CALM, letter to the Committee 10/3/1998: Responses to evidence by Dr Michael Calver and Dr Pierre Horwitz, 17/9/1997, p.6

³³⁴ Mr Rob Troeth, Submission No.56

The CHAIRMAN: Given that the logging agenda is set by the business unit, comprising relatively few people, how does that integrate into the wider operations of the department?

*Dr SHEA: That group is certainly responsible for drawing up the logging plan but there is extensive consultation, particularly at the regional level, with those involved in all of the other CALM programs. There are constant changes, particularly to the fire and recreation programs. We have set up an internal audit process to which they are also subject. That internal audit process does not operate through any director; it operates directly to me.*³³⁵

Finally on the issue of consultation, there is some room for doubt as to whether Western Australia's statutory framework for forest management meets the requirement set out in the National Biological Diversity Strategy, to which Western Australia is a party, to:

*“Ensure that policies and controls are developed and implemented by the Commonwealth, State and Territory governments for the management and conservation of native vegetation on private and public lands, in consultation with landholders and community groups, and for controlling broad-scale clearances... [and] review legislation relating to clearing and ensure that criteria for assessing land clearance applications take account of biological diversity, conservation, land protection, water management, and landscape values.”*³³⁶

The requirement to manage and conserve “...in consultation with landholders and community groups” is arguably not met in this State, whose laws provide for community input only in the once-a-decade formulation of a Forest Management Plan, not in the implementation of it over intervening years.

9.5 COMMITTEE COMMENTARY

The Committee accepts that the level of community interest in forest management is in itself a good argument for requiring regular, meaningful consultation by forest managers with communities and organisations affected by forest management. Not only is community involvement likely to lead to better decision making if done well, it is also likely to go a long way towards satisfying community groups that their views are being listened to and that forest management is being conducted at least in part on their behalf.

³³⁵ Dr Syd Shea, transcript of evidence, 26/11/1997, p.14

³³⁶ National Biological Diversity Strategy, p.25

A striking feature of the Committee's public hearings in the South-West was that conservation concerns are by no means limited to what is often called the conservation movement. Local councils, farmers, "lifestyle settlers" such as retired professionals, and tourism groups all showed keen interest in having input into forest management. This level of enthusiasm at local level is laudable and should be encouraged.

It may even provide CALM with valuable volunteer input into the labour intensive requirements of monitoring sustainability indicators, just as the Waters and Rivers Commission's "Ribbons of Blue" program 1996 - 1999 has been successfully backed by community input.

Looking at publication of information, it would be costly, impractical and undesirable to require CALM to publish all information prepared by it which might affect decision making about forests. The *Forestry Regulations 1993* and Freedom of Information laws promote the availability of much information and to attempt to draft and introduce more detailed laws of general application requiring disclosure is probably inappropriate.

Nonetheless, public confidence in decision making is clearly advanced by the knowledge that key information is publicly available for review by members of the public and interested groups. Key documents, such as formal advice to the Minister from advisory bodies under the *CALM Act*, should be in the public domain.

This should lead to a more open and informed debate about forest issues and hopefully lessen the present degree of mistrust and confrontation about forest management, evident in the course of the inquiry.

There is scope for improvement in the government's recognition in forest planning of Aboriginal sites of significance. Other measures, such as a positive employment policy, could be taken to improve the capacity of Aborigines to have input into forest management.

9.6 COMMITTEE FINDINGS

The Committee finds that:

1. Western Australia needs regular, meaningful consultation by forest managers with local communities;
2. there is a high degree of mistrust between CALM and the general public;
3. there is a perceived lack of consultation with community groups;

4. it is doubtful that CALM scientists can offer independent advice about their employer;
5. it is difficult to obtain and source information from CALM;
6. many Submissions reflect a frustration that CALM is not fulfilling its obligation to consult;
7. CALM has no statutory obligation to consult with the community on an on going basis;
8. community consultation with CALM is voluntary on CALM's part;
9. once a Forest Management Plan is approved, there is no impediment to CALM engaging in such timber harvesting and contracts to sell forest produce as it sees fit;
10. CALM is not required to consult about logging plans for informal reserves; and
11. the requirement to manage and conserve in consultation with landholders and community groups under the National Biological Diversity Strategy is not being met by CALM.

Recommendation 33: That advisory documents prepared by statutory bodies under the *Conservation and Land Management Act 1984* (WA) for the purpose of advising the Minister be subject to a general requirement of publication.

Recommendation 34: That ways should be investigated to improve local consultation and participation in forest management in forthcoming amendments to the *Conservation and Land Management Act 1984* (WA).

Recommendation 35: That forest management and planning take into account Aboriginal sites of significance, and enhance Aboriginal employment opportunities by considering Aboriginal conservation and land management skills and knowledge.

Hon Christine Sharp MLC

Date:

APPENDIX A
PUBLIC HEARINGS IN THE SOUTH-WEST REGION
27- 30 October 1997 at Denmark, Pemberton, Bridgetown, Manjimup and Collie.

Date	Location	Witness
27/10/97	Denmark	<p>Mr James Gill Denmark Environment Centre</p> <p>Mr Geoffrey Fernie Walpole Nornalup National Parks Association</p> <p>Mr Stephen Ayling Proprietor Djarilmari Timber Products</p> <p>Mr Basil Schur Assistant Coordinator APACE Green Skills</p> <p>Mr Paul Llewellyn Solar Stream Design</p> <p>Mr Alexander Syme</p> <p>Mr Anthony Smith Treasurer, Forest Rescue</p> <p>Mrs Donna Selby Secretary South Coast Environment Group</p> <p>Ms Pauline McLeod Vice-President Tourism South West</p> <p>Mr Ross Young</p>

27/10/97	Pemberton	<p>Mr Murray Johnson Industry Representative South West Regional Tourism Association</p> <p>Mr Roger Cheeseman President Greater Beedelup National Park Society</p> <p>Mrs Helen Nixon Councillor</p> <p>Mr John Taylor President Friends of Jane</p> <p>Ms Wendy Goodall</p> <p>Mrs Helen Duval</p> <p>Mr Andrew Russell</p>
28/10/97	Manjimup	<p>Dr Jean-Paul Orsini Spokesperson for the Friends of the Greater Kingston Forest</p> <p>Mr Ewald Valom Manager Bunnings Forest Products</p> <p>Mr Robert Hagan President and Mr Lachlan McCaw Secretary Southern Branch of the Institute of Foresters of Australia</p> <p>Ms Casssandra Menard Secretary Friends of the Chuditch Inc</p>

29/10/97	Bridgetown	<p><i>Shire of Bridgetown-Greenbushes:</i></p> <p>Mr Ian Bodill (Chief Executive Officer)</p> <p>Mr Ronald Stewart (Manager, Works and Services)</p> <p>Mr Tim Clynch (Manager, Planning)</p> <p>Mr Brian Kavanagh (Councillor)</p> <p>Mr Hugh Browne (Councillor)</p> <p>Ms Laurie Bullied (Councillor)</p> <p>Ms Barbarara Della-Patrona (Councillor)</p> <p>Mr Neil Giblett (Councillor)</p> <p>Mr Rob Wardell-Johnson (Councillor)</p> <p>Mr Peter Nichols (Councillor)</p> <p>Mr Jim Taylor (Councillor)</p> <p>Mr Tony Robinson (Councillor)</p> <p>Ms Judy Wheatley (Councillor)</p> <p>Mr Jim Frith President Bridgetown-Greenbushes Friends of the Forest</p> <p>Mr Peter Lane Geologist</p> <p>Mr Robert Jenkins Site Manager Whittakers Ltd</p>
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27/10/99	Bridgetown (<i>continued</i>)	Mrs Elaine Michael Mr Hugh Browne Councillor Mrs Melva Browne President Bridgetown-Greenbushes Tourist Committee Ms Laurie Bullied Tourism Operator, Councillor, Conservationist Mr Nicholas Oaks Committee person Bridgetown Shire Council Mr Neil Guazzeilli Ms Cornelia Lowndes
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30/10/97	Collie	<p>Mr William Atherden Director, Quarter Sawn Timbers</p> <p>Mr Peter Murphy</p> <p>Ms Sally Coulson</p> <p>Mr Rodney Lee</p> <p>Mr Don Spriggins Chairman, Institute of Foresters Of Australia (WA Division)</p> <p>Mr Martin Bottega</p> <p>Mr Ashley Davidson</p> <p>Mr John Vukovich</p> <p>Mr John Sherwood</p> <p><i>Open Forum:</i></p> <p>Mr Ken Waterhouse</p> <p>Mr Ashley Davidson</p> <p>Mr Don Spriggins</p> <p>Ms Sallie Coulson</p> <p>Mr John Vukovich</p> <p>Mr Peter Murphy</p> <p>Ms Judith Davidson</p> <p>Ms Allison Heinritz</p> <p>Dr Hilda Turnbull MLA</p> <p>Ms Susan Lee</p> <p>Mr Rodney Barber</p> <p>Mr Ian Miffling</p>
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APPENDIX B
HEARINGS IN PERTH

Date	Witness
27/8/97	<p>Mr Alan Walker Manager Regional Forest Agreement Department of Conservation and Land Management</p>
27/8/97	<p>Dr Bryan Jenkins Chief Executive Officer Department of Environmental Protection</p> <p>Mr Rob Sippe Director Policy Co-ordination Department of Environmental Protection</p> <p>Dr Ray Wallace Assistant Director Policy Co-ordination Department of Environmental Protection</p>
10/9/97	<p>Dr Beth Schultz Executive Member Conservation Council of Western Australia</p> <p>Mr Peter Robertson Convenor Western Australian Forest Alliance</p>
17/9/97	<p>Dr Pierre Horwitz Senior Lecturer in Environmental Management Edith Cowen University</p> <p>Dr Michael Calver Senior Lecturer in Biological Sciences Murdoch University</p>

Date	Witness
15/10/97	<p>Mr Ron Adams Managing Director Bunnings Forest Products Pty Ltd</p> <p>Mr Ian Telfer Manager Diamond Mill Bunnings Forest Products Pty Ltd</p> <p>Mr Keith Kessell Manager Corporate Affairs Wesfarmers Ltd and Bunnings Forest Products Pty Ltd</p> <p>Mr Max Evans Manager Timber Operations Bunnings Forest Products Pty Ltd</p> <p>Mr Peter Jolob Timber Marketing and Sales Manager Bunnings Forest Products Pty Ltd</p> <p>Mr Geoff McArthur General Manager Bunnings Treefarm Operations Bunnings Forest Products Pty Ltd</p>
22/10/97	<p>Mrs Margaret Pearce Community Co-ordinator Forest Protection Society</p> <p>Mr Trevor Richardson Board Chairman Forest Protection Society</p>

Date	Witness
22/10/97	<p>Mr Tim Daly Secretary Australian Workers Union and Forest Products Union</p> <p>Mr Nicholas Oaks South West Organiser Australian Workers Union and Forest Products Union</p>
19/11/97	<p>Mr Cam Kneen Executive Director Forest Industries Federation Western Australia</p> <p>Mr Geoff Bertolini Company Director Hamilton Sawmills Pty Ltd</p>
19/11/97	<p>Mr Rob Troeth Forester and former CALM employee</p>
24/11/97	<p>Mr Alan Walker Manager Regional Forest Agreement Department of Conservation and Land Management</p> <p>Dr Geoffrey Stoneman Projects Coordinator Regional Forest Agreement Department of Conservation and Land Management</p>
26/11/97	<p>Dr Syd Shea Executive Director Department of Conservation and Land Management</p> <p>Mr Alan Walker Manager Regional Forest Agreement Department of Conservation and Land Management</p>

Date	Witness
11/2/98	Mrs Virginia Young National Lobbyist Wilderness Society
26/2/98	Ms Jacqui Katona Executive Officer Gundjehmi Aboriginal Corporation
11/3/98	Mr Wayne Merritt Managing Director Timber Supplies Pty Ltd Mr Richard Price State Manager Auspine Timbersales WA
21/4/98	Dr Bryan Jenkins Chief Executive Officer Department of Environmental Protection
21/4/98	Mr Laurie Marquet Clerk to the Legislative Council Parliament House
29/4/98	Dr Leonie van der Maeson Research Associate Geomorphologist University of Utrecht, Holland
24/6/98	Mr Nicholas Oaks South West Organiser Australian Workers Union and Forest Products Union

Date	Witness
24/6/98	<p>Mrs Margaret Pearce Community Co-ordinator Forest Protection Society</p> <p>Mr Trevor Richardson Board Chairman Forest Protection Society</p> <p>Mr Cam Kneen Executive Director Forest Industries Federation Western Australia</p> <p>Mr Ron Adams Managing Director Bunnings Forest Products Pty Ltd</p>
24/6/98	<p>Dr Beth Schultz Executive Member Conservation Council of Western Australia</p> <p>Mr Peter Robertson Convenor Western Australian Forest Alliance</p>
3/8/98	<p>Mr Alan Walker Manager Regional Forest Agreement Department of Conservation and Land Management</p> <p>Mrs Pat Collins Senior Forester Department of Conservation and Land Management</p> <p>Dr Geoffrey Stoneman Projects Coordinator Regional Forest Agreement Department of Conservation and Land Management</p>

Date	Witness
23/3/99	<p>Mr Keiran McNamara Director of Nature Conservation Department of Conservation and Land Management</p> <p>Mr Simon Hancocks Senior Policy Officer Nature Conservation Division Department of Conservation and Land Management</p>
14/4/99	<p>Dr Syd Shea Executive Director Department of Conservation and Land Management</p> <p>Dr John Byrne Director Corporate Services Department of Conservation and Land Management</p> <p>Mr Murray Vitlich General Manager Pulpwood Operations for Bunnings Forest Products</p>
5/5/99	<p>Dr John Bailey Senior Lecturer School of Environmental Science</p> <p>Dr Maurice Mulcahy Former member of the Environmental Protection Authority</p> <p>Mr Kenneth Bowen Chairman Environmental Protection Authority</p>
18/8/99	<p>Mr Nicholas Oaks South West Organiser Australian Workers Union and Forest Products Union</p> <p>Mr Trevor Richardson Board Chairman Forest Protection Society</p>

APPENDIX C
PUBLIC SUBMISSIONS

No	Date Received	From
1	1/9/97	Dr Wayne C Packer Senior Lecturer in Zoology (Retired)
2	8/9/97	Dr Ian Crawford
3	30/9/97	AA Lewis
4	3/10/97	Mr Roger Underwood
5	6/10/97	Mrs S Edwards
6	8/10/97	Dr Jean-Paul Orsini
7	8/10/97	Mr Phil Shedley Forestry & Wood Use Consultant
8	9/10/97	Mr T Daly and Mr Nicholas Oaks Australian Workers' Union
9	13/10/97 12/11/97	Mr Ross D Young Addition to Submission received
10	13/10/97	DPJ Milligan
11	13/10/97	Mr Stephen John Quain
12	13/10/97	Ms Joyce O'Farrell
13	13/10/97	Mrs Margaret Pearce Community Coordinator Forest Protection Society

No	Date Received	From
14	13/10/97	Dr Elaine Davison Senior Research Associate Curtin University
15	13/10/97	Ms Donna Selby Secretary South Coast Environment Group
16	13/10/97	Mr Cam Kneen Forest Industry Federation WA Inc
17	13/10/97	Mr PT Gunson Vice President Forest Protection Society Warren Branch
18	13/10/97	Ms Jacki Henry
19	14/10/97 30/10/97	Mr John Vukovich Addition to submission
20	14/10/97	Ms June Spurge
21	14/10/97	Ms Kathleen A Chindarsi
22	14/10/97	Mr Henry P Schapper Hon Research Fellow University of Western Australia
23	14/10/97	Mr Peter Murphy
24	14/10/97	Mr Noel Ashcroft Director South West Division Department of Resources Development

No	Date Received	From
25	15/10/97	Mr Bob Hagan Chairman CALM Regional Office
26	15/10/97 12/11/97	Ms Sallie Coulson Secretary Preston Environment Group Addition to Submission received
27	15/10/97	Mr Don Spriggins Institute of Foresters (WA Division)
28	16/10/97	Mr Colin Mann Executive Officer Western Australia Farmers Federation (Inc.), Beekeeper Section
29	17/10/97	Mr Terry O'Brien Principal of O'Brien Communications Simcoa Operations Pty Ltd
30	20/10/97 20/2/98	Mr Peter Lane Addition to Submission
31	22/10/97	Mrs Rita Jurd
32	29/10/97	Ms Cornelia Lowndes
33	31/10/97	Ms Hana Chvojka
34	27/10/97	Mr John Duval
35	27/10/97	Mr Geoff Fernie
36	27/10/97	Mr Stephen Ayling

No	Date Received	From
37	27/10/97	Mr Roger Cheeseman President Greater Beedelup National Park Society Inc
38	27/10/97	Mr Murray Johnson SW Regional Tourism Ass Fine Woodcraft Gallery
39	31/10/97	Mr Adrian Price LCDC Committee Office Coordinator Blackwood Regional Centre
40	28/10/97	Mr GWG Smith
41	28/10/97	Ms Cassandra Menard Friends of the Chuditch Inc
42	29/10/97	Ms Jean Wheatley
43	29/10/97	Mr Hugh Browne
44	29/10/97	Mr Jim Frith President Bridgetown-Greenbushes Friends of the Forest
45	29/10/97	Mrs Mary Frith
46	29/10/97	Ms Laurie Bullied
47	3/11/97	Mr Bill Franssen
48	31/10/97	Mr Des Grose

No	Date Received	From
49	10/11/97	Mr James Gill Convenor Denmark Environment Centre
50	6/11/97	Mr Keith Liddelow Shire President Shire of Manjimup
51	6/11/97	Hon Colin Barnett MLA Minister for Resources Development
52	12/11/97	Mr Leith Maddock and Ms Lynn Atkinson Friends of Giblett Fremantle
53	19/11/97	Mr Brian Young
54	21/11/97	Mrs Bev deRusett
55	19/11/97	Mr Rob Troeth
56	19/11/97	Ms Lucia Ravi
57	13/1/98	Mr John N Hutchinson

APPENDIX D
CALM Contracts

LEGISLATIVE COUNCIL COMMITTEE OFFICE
Parliament House
PERTH WA 6000
Tel (08) 9222 7300
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TO:	Dr S Shea Executive Director	FROM: The Chairman of the Ecologically Sustainable Development Committee
OF:	CALM 9386 7112	DATE: 10/11/99
		No. OF PAGES: 5 (including this one)

Dear Dr Shea,

Inquiry into the Management of and Planning for the Use of State Forests in Western Australia- *The Sustainability of Current Logging Practices*

The Committee intends to include information on Jarrah sawlog contracts in its Report.

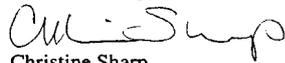
I enclose a schedule of Contracts which were current as at May 1994. The Committee notes that the total of these contractual commitments is as follows:

(1)	Premium and First Grade Jarrah Sawlogs	434, 382.23m3; and
(2)	Second Grade Jarrah Sawlogs	106, 608.93m3
	TOTAL	540, 991.16m3

Given that the Allowable Cut at the time was set at 490,000m3, can you kindly provide an explanation of this anomaly?

The Committee would appreciate your response within seven days as it intends to report to Parliament during the current sitting.

Yours sincerely,



Christine Sharp
(Chairman)

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**CALM CONTRACTS CURRENT AT MAY 1994
BETWEEN CALM AND BUYERS
BEING FOR
PREMIUM, FIRST AND SECOND GRADE JARRAH SAWLOGS**

CONTRACT NO.	DATE OF CONTRACT	BUYER	CONTRACT DESCRIPTION
2322	01.01.94 - 31.12.03	J & K SAWMILLERS	Annual average of 70m3 of 1st grade jarrah sawlog/annum Annual average of 850m3 of 2nd grade jarrah sawlog/annum
2302	01.01.94 - 31.12.03	BEDFORD BROS	Annual average of 60m3 1st grade jarrah sawlog Annual average of 300m3 2nd grade jarrah sawlog
2303	31.03.94 - 31.12.03	HESMAT PTY LTD	Annual average of 100m3 1st grade jarrah sawlog Annual average of 500m3 2nd grade jarrah sawlog
2349	01.01.94 - 31.12.03	WHITTAKERS LTD	Annual average of 59 175 tonnes 1st grade jarrah sawlog/annum
2320	01.01.94 - 31.12.03	JA HOUSE SAWMILLING AND GRAZING PTY LTD	Annual average of 60m3 of 1st grade jarrah sawlog/annum Annual average of 300m3 of 2nd grade jarrah sawlog/annum
2332	01.01.94 - 31.12.03	P MULLER & CO	Annual average of 440m3 of 1st grade jarrah sawlog/annum Annual average of 2200m3 of 2nd grade jarrah sawlog/annum
2352	01.01.94 - 31.12.03	YARNUP MILLS PTY LTD	Annual average of 1560m3 of 1st grade jarrah sawlog/annum Annual average of 2100m3 of 2nd grade jarrah sawlog/annum
2346	01.01.94 - 31.12.03	TT & MB WAUGH	Annual average of 200m3 of 1st grade jarrah sawlog/annum Annual average of 1000m3 of 2nd grade jarrah sawlog/annum

2327	01.01.94 - 31.12.03	MIDDLESEX SAWMILLS	Annual average of 40m3 of 1st grade jarrah sawlog/annum Annual average of 200m3 of 2nd grade jarrah sawlog/annum Annual average of 1800m3 premium jarrah sawlog/annum
2319	01.01.94 - 31.12.03	GREYSTOKE HOLDINGS PTY LTD & WESTLEAF HOLDINGS PTY LTD	annual average of 706m3 of 1st grade jarrah sawlog/annum annual average of 2000m3 of premium grade jarrah sawlog/annum annual average of 3530m3 of 2nd grade jarrah sawlog/annum
2334	01.01.94 - 31.12.03	PICKERING BROOK SAWMILLS	Annual average of 2904m3 of 1st grade jarrah sawlog/annum Annual average of 1728m3 of 2nd grade jarrah sawlog/annum
2323	01.01.94 - 31.12.03	JARRAH CASE FACTORY	Annual average of 1054m3 of 1st grade jarrah sawlog/annum Annual average of 2570m3 of 2nd grade jarrah sawlog/annum
2333	01.01.94 - 31.12.03	PANELLI SAWMILLS	Annual average of 3150m3 of 1st grade jarrah sawlog/annum Annual average of 350m3 of 2nd grade jarrah sawlog/annum
2300	01.01.94 - 31.12.03	THE ADELAIDE TIMBER CO PTY LTD	Annual average of 14 000m3 1st grade jarrah sawlog Annual average of 3000m 2nd grade jarrah sawlog
2304	01.01.94 - 31.12.03	BUNNINGS FOREST PRODUCTS PTY LTD	Annual average of 184 100 tonnes of 1st grade jarrah sawlog
2305	01.01.94 - 31.12.03	BUNNINGS FOREST PRODUCTS PTY LTD	Annual average of 150 295 tonnes of 1st grade jarrah sawlog
2326	01.01.94 - 31.12.03	MANGEE MILLING (WA) PTY LTD	Annual average of 800m3 of 1st grade jarrah sawlog/annum Annual average of 3800m3 of 2nd grade jarrah sawlog/annum

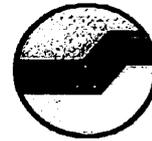
2321	01.01.94 - 31.12.03	IPE PACKAGING PTY LTD	annual average of 657.5 tonnes of 1st grade jarrah sawlog annual average of 3287.5 tonnes of 2nd grade jarrah sawlog
2329	01.01.94 - 31.12.03	MOBILITY MILLING	Annual average of 300m3 of 2nd grade jarrah sawlog/annum
2342	01.01.94 - 31.12.03	SOUTH WEST TIMBER SUPPLIES PTY LTD	Annual average of 190m3 of 1st grade jarrah sawlog/annum Annual average of 950m3 of 2nd grade jarrah sawlog/annum
2343	01.01.94 - 31.12.03	SOUTH WEST SAWMILLS CO LTD	Annual average of 700m3 of 1st grade jarrah sawlog/annum Annual average of 4500m3 of 2nd grade jarrah sawlog/annum
2348	01.01.94 - 31.12.03	HEXAN HOLDINGS PTY LTD	263 Tonnes of 1st grade jarrah sawlog/annum 5260 Tonnes of 2nd grade jarrah sawlog/annum
2316	01.01.94 - 31.12.03	GANDY TIMBERS PTY LTD	Annual average of 2000m 1st grade jarrah sawlog
2310	01.01.94 - 31.12.03	COLI TIMBER PRODUCTS PTY LTD	Annual average of 14 518m3 1st grade jarrah sawlog Annual average of 19787m3 2nd grade jarrah sawlog
2136	24.12.92 - 31.12.06	COLLI & SONS	PART A: 6575 tonnes 1st grade jarrah sawlog/annum PART B: 6575 tonnes 2nd grade jarrah sawlog/annum
2048	01.07.90 - 30.06.95	WJ & K TIMBER CO PTY LTD	up to 25 000m3 1st grade jarrah sawlog, being an average of 5000m3/annum
2126	01.11.91 - 30.11.93 Renewed 19.01.94 to 31.04.94	FRANEY & THOMSON	up to a total of 1000m3 of 1st grade jarrah sawlogs

2315	01.01.94 - 31.12.03	HYSNEX PTY LTD	Annual average of 1230m3 1st grade jarrah sawlog Annual average of 1000m3 1st grade jarrah sawlog
2301	01.01.94 - 31.12.03	CARDOSO PTY LTD	Annual average of 706m3 1st grade jarrah sawlog Annual average of 3530m3 2nd grade jarrah sawlog
2338	01.01.94 - 31.12.03	GW & NL SAUNDERS	1972 Tonnes of 1st grade jarrah sawlog/annum 3945 Tonnes of 2nd grade jarrah sawlog/annum
2345	01.01.94 - 31.12.03	TM & PJ TILBROOK	Annual average of 500m3 of 1st grade jarrah sawlogs/annum
2309	01.01.94 - 31.12.03	TIMBER TRADERS COCKBURN	Annual average of 1250m3 1st grade jarrah sawlog Annual average of 1000m3 premium grade jarrah sawlog Annual average of 500m3 2nd grade jarrah sawlog
2318	01.01.94 - 31.12.03	BL & KA GISBORNE	annual average of 500m3 of 1st grade jarrah sawlogs
2307	01.01.94 - 31.12.03	CARDOSO PTY LTD	Annual average of 28 640.7m3 1st grade jarrah sawlog Annual average of 1315m3 premium grade jarrah sawlog Annual average of 20 514 2nd grade jarrah sawlog Annual average of 657.5 tonnes 1st grade jarrah sawlog Annual average of 3 287.5 tonnes 2nd grade jarrah sawlog
2341	01.01.94 - 31.12.03	STEFANELLI SAWMILLS	Annual average of 800m3 of 1st grade jarrah sawlogs/annum Annual average of 3200m2 of 2nd grade jarrah sawlogs/annum
2313	01.01.94 - 31.12.03	DENBARKER SAWMILL	Annual average of 2000m3 of 2nd grade jarrah sawlog/annum

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Your Ref:
 Our Ref:
 Enquiries:
 Phone:

┌ Hon Dr Christine Sharp MLC ┐
 Chairman
 Legislative Council Ecologically Sustainable Development Committee
 Parliament House
 └ PERTH WA 6000 ┘

Dear Dr Sharp

**INQUIRY INTO THE MANAGEMENT OF AND PLANNING FOR THE USE OF
 STATE FORESTS IN WESTERN AUSTRALIA – THE SUSTAINABILITY OF
 CURRENT LOGGING PRACTICES**

Thank you for your facsimile request dated 10 November 1999 concerning the level of jarrah sawlog under contract in 1994 and drawing attention to an alleged anomaly.

Your Committee noted that total contractual commitment, as set in a schedule of Contracts attached with your facsimile, amounted to 540,991.16 cubic metres, whereas the allowable cut at the time was set at 490,000 cubic metres.

My comments are:

The figure of 540,991 is incorrect because -

- (i) Figures listed in tonnes have been converted by an incorrect conversion factor. A note prepared on behalf of your Committee at the end of the Appendix document listing contracts states "to convert tonnes to cubic metres, multiply tonnes by 0.835". This can also be expressed as dividing tonnes by 1.198. The correct Jarrah first and second grade conversion factor used by CALM is 1.315, for all areas other than the southern supply area, where it is 1.24.

The reason for tonnes and cubic metres being interchanged is that the Minister's determination of the quantity of sawlogs available for allocation following the approval of the Forest Management Plan 1994-2003 are specified in cubic metres, while the quantity of sawlogs sold to sawmillers is determined by weight over approved weighbridges. This method of measurement developed during the early 1990's from a system of individual log measurements and the use of log volume tables to estimate the cubic contents of individual logs. This practice was extremely difficult to administer and inherently dangerous to the people measuring logs under hazardous working conditions.

Extensive work to measure logs under both systems was undertaken which resulted in a conversion factor of 1.315 tonnes per cubic metre for areas other than the southern forest region where the factor was determined as 1.24 tonnes per cubic metre. Over time, contracts, both harvesting and sale, have been negotiated in tonnes.

In 1994, Bunnings contract 2305 was written in tonnes based on 53,000 cubic metres from the Nannup Supply Area converted to tonnes at a factor of 1.315 and 68,000 cubic metres from the Southern Supply Area converted to tonnes at a factor of 1.24. CALM is unaware of the origin of the conversion factor of 0.835 used in your calculation.

The current system has been put in place to regulate in a commercially responsible and industrially safe manner the sale of log timber obtained from different areas, the timber being found to have various densities per unit of volume.

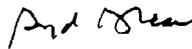
- (ii) Contract 2307, Cardoso Pty Ltd; contract amounts have been shown as cubic metres whilst amounts are actually correct per tonne figures.
- (iii) Contract 2048 was cancelled in 1991. Two contracts, 2126 and 2136 were substituted by new 10year contracts, 2315 and 2307 respectively. As a result, amounts for these contracts have been double counted.
- (iv) Under contract 2307; 657.5 tonnes first grade and 3,287.5 tonnes second grade are ex. IPE's Contract 2321. These amounts are also listed under IPE and therefore double counted.
- (v) Second grade under Contract 2309 is listed as 500 cubic metres. The correct amount under contract is 550 cubic metres.

In summary, Contractual Commitments as at May 1994 were as follows:

Premium and First Grade Jarrah Sawlogs	388,988 cubic metres; and
Second Grade Jarrah Sawlogs	92,022 cubic metres
TOTAL	481,010 cubic metres

Furthermore, CALM's sale contracts provide for each buyer to vary each year the annual log timber commitment for the following year. During 1994 the Department was advised by one of its buyers, in accordance with the contract of sale terms, that log delivery requirements for the forthcoming year were to be below contract levels.

Yours sincerely



Syd Shea
EXECUTIVE DIRECTOR

18 November 1999

**CONVERSION FIGURES
for converting
tonnes to cubic metres**

1. CALM's conversion figures:

Pre September 1988 using Huber's Volume Table is 0.826
Post September 1988 is 0.806
Post May 1992 for the Northern and central forest is 0.760
2. Millars *Metric Pocket Notes for Building Industry* (1973). The conversion figure is 0.8130. This figure is for green sawn jarrah rather than green sawn logs. It is the closest to CALM's conversion figure and applies to actual sawnwood recovered rather than the whole log. Arguably it represents a theoretical maximum.
3. The Committee used a conversion factor of 0.835 as a mid range figure.
4. Bootle, Keith (1983): *Wood in Australia, Types, Properties and Uses*: The conversion figure is 0.8547.
5. Western Australia Forests Department *Forestry in Western Australia* (1957): Bulletin No 63. The conversion figure is 0.8561.

APPENDIX E
THE 1992 MINISTERIAL CONDITIONS

WESTERN AUSTRALIA
MINISTER FOR THE ENVIRONMENT
STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF THE
ENVIRONMENTAL PROTECTION ACT 1986)

AMENDMENTS TO THE 1987 FOREST MANAGEMENT PLANS AND TIMBER STRATEGY AND PROPOSALS TO MEET ENVIRONMENTAL CONDITIONS ON THE REGIONAL PLANS AND THE WACAP ERMP

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT (CALM)

This proposal may be implemented subject to the following conditions:

1. **Proponent commitments**

The proponent has made a number of environmental management commitments in order to protect the environment.

- 1.1 In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the proposal and in response to issues raised following submissions.

2. **Implementation**

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2.1 An expert scientific and administrative committee will be established by the Minister for the Environment to review and report on the implementation of this proposal by 30 June 1993. The terms of reference of the committee will be to consider:

- reserve recommendations within multiple use forest involving those proposals related to temporary exclusion from timber production and potential reserves to act as wildlife corridors;
- the environmental, economic and social implications of such proposals for:

- nature conservation within WA's native forests,
 - the maximum sustainable timber supply, and
 - the existing and future timber industry;
- the potential to increase the plantation estate on cleared agricultural land to contribute to the production of timber products.

2.2 Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the EPA with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the EPA, is not substantial, those changes may be effected.

Published on
24 December 1992

3. **Precautionary Approach and adaptive management**

3.1 The proponent shall manage karri and karri-marri forest in accordance with a Precautionary Approach. This approach requires that where there is a significant risk that a particular forest management measure could lead to an irreversible consequence appropriate monitoring and subsequent adjustments to management within an acceptable timeframe be carried out.

3.2 The proponent shall manage the jarrah forest in accordance with the following general principles:

- (1) a Precautionary Approach;
- (2) adaptive and flexible management practices based on research and monitoring of environmental monitoring of operations (see condition 17);
- (3) implementation as a trial, with a reassessment by the EPA after ten years - the period of the Management Plans and the Timber Strategy (see condition 11);
and

- (4) no commitment of all of the wood resource in the long term (see conditions 9 and 10).

4. **Amendments to conservation estate**

- 4.1 The proponent shall initiate the government processes required to implement the proposed amendments to the conservation reserve estate as agreed to by the Minister for the Environment and defined in the approved forest management plans.

5. **Revised travel route, river and stream reserves**

- 5.1 The proponent shall implement the revised system of travel route (road), river and stream reserves consistent with condition 15. It is noted that the minimum combined width (both sides of a first, second or third order stream) of the proposed zones is 60 metres.
- 5.2 The proponent shall ensure that the travel route (road), river and stream reserves remain unharvested in perpetuity, except for those portions of regrowth forest within road zones where thinning can be undertaken in a manner inconsistent with, and so as to enhance in the longer term, the defined visual quality objectives.
- 5.3 The proponent shall monitor the effectiveness of the travel route (road) river and stream reserves for nature conservation and protection of water quality to the requirements of the Minister for the Environment.

6. **Diverse ecotype conservation areas**

- 6.1 Diverse Ecotype Conservation areas shall be identified by the proponent and those greater than five hectares shall be identified on publicly available maps.
- 6.2 The proponent shall ensure that the Diverse Ecotype Conservation areas remain protected from timber harvesting and associated activities in perpetuity.

7. **Old growth karri areas of high social or environmental value**

- 7.1 The proponent shall identify and protect areas of old growth karri (up to 3200 hectares) with a high aesthetic, social or environmental value. This is to be implemented on a regional basis and with the benefit of public involvement. These areas shall:

- (1) include those trees in Beavis, Carey and Giblett forest blocks protected from clearfelling by environmental conditions related to the Manjimup-Beenup power line proposal (EPA Bulletin 603);
- (2) be identified publicly and progressively from the adoption of the Management Plans, with the proponent reporting to the Minister on progress towards implementation within three years; and
- (3) shall not be harvested, and shall be managed to retain their values (other than timber production).

7.2 The proponent shall report on the implementation and management of these special areas at the next Forest Management Review.

8. **Sustainable yield estimates**

8.1 The allocated timber resource for the period ending 30 June 1993, prior to the consideration by the Minister for the Environment of the report of the committee referred to in condition 1 will not exceed the 1993 level described in the 1987 Timber Strategy together with an additional amount of the timber resource that was approved in the 1987 Timber Strategy but remained uncut. This additional amount may be allocated by the proponent with the approval of the Minister for the Environment on a needs basis up to a total level not exceeding that proposed by the proponent in its 1992 proposals.

8.2 Following consideration of the report of the committee referred to in condition 2, the Minister for the Environment shall determine the annual sustainable timber resource available for allocation.

9. **Commitment of wood**

9.1 Subject to condition 8, in the letting of contracts for wood supply from the jarrah forest, the proponent shall:

- (1) not exceed the annual levels of timber supply defined in condition 8 above; and
- (2) recognise the possibility of the necessity to reduce wood supply beyond 2000 as a result of monitoring and adaptive management following the trial implementation of the jarrah forest silvicultural prescription.

10. Commitment of new resource to be referred

10.1 Notwithstanding Section 38 of the Environmental Protection Act, the proponent shall refer to the EPA any proposal to enter into a contract for a substantial portion (as determined by the Minister for the Environment) of forest produce identified as other logs (jarrah) or forest residue (marri) in the revised Timber Strategy (table 13 of the proposals document).

11. Jarrah silviculture trial

11.1 The proponent shall implement the jarrah silvicultural prescription so that monitoring of the environmental impacts on a representative range of treated sites and localities in the forest can be carried out to the requirements of the Minister for the Environment. This shall include long term monitoring which quantifies the impacts of silvicultural practices on environmental elements and values in the forest and provides bases to adjust management.

11.2 The proponent shall give all necessary assistance to the Monitoring and Research Committee (condition 16) to enable it to have an active and fully informed role in the planning and oversight of the scientific monitoring of this trial period.

11.3 The proponent shall report to the Minister for the Environment on outcomes of this implementation and monitoring and on any modifications to the prescriptions by 2002 as part of the next review of the forest management plans and Timber Strategy.

12. Phased logging

12.1 The proponent shall ensure that, in all second order catchments in the intermediate and low rainfall zones of the multiple use jarrah forest subject to logging, at least 30 per cent of each second order catchment has a retained basal area of greater than 15m²/ha for a period of at least 15 years after harvesting of the remainder of the catchment.

12.2 This retained forest shall be selected to enhance wildlife, water resource and visual objectives.

12.3 The proponent shall monitor, to the requirements of the Minister for the Environment, and report by 2002 on the status and effectiveness of these measures to protect nature conservation values and water quality at the time of the next review of the forest management plans and Timber Strategy.

13. Habitat trees

- 13.1 The proponent shall ensure that the number, condition and age of trees retained on sites subject to gap treatment is sufficient, as determined by the Minister for the Environment, to adequately provide the habitat function through the cutting cycle of the forest.

14. *Banksia grandis* reduction

- 14.1 The proponent shall concentrate the proposed reduction of the population of *Banksia grandis* in specific areas where the environmental circumstances suggest that treatment will have the greatest impact on reducing the spread and intensification of *Phytophthora cinnamomi* in the jarrah forest and where required to establish jarrah and marri regeneration.
- 14.2 The proponent shall establish a programme, to the requirements of the Minister for the Environment, to identify and evaluate the environmental implications of the proposed reduction and that the results of that evaluation shall be reported on, at or before the time of the next review of the forest management plans by 2002.

15. Fire management

- 15.1 The proponent shall ensure that the fire management objectives related to the jarrah forest silvicultural prescription include the minimisation of air pollution in urban areas, to the requirements of the Minister for the Environment.
- 15.2 The proponent shall inform the public about its fire management on a regional basis each year in its annual report. This shall include but not be limited to the following:
- (1) occurrences and causes of wildfires;
 - (2) purpose of burns;
 - (3) areas burnt under different regimes of season and periodicity;
 - (4) escapes; and
 - (5) the contribution of prescribed burning to reducing wildfire hazard.
- 15.3 Within 12 months of this proposal being given authority to be implemented the proponent shall initiate a public review of its prescribed burning policy and practices and

the wildfire threat analysis. This should be done with the close involvement of the Research and Monitoring Committee. If possible it should be linked with a review of the provisions of the Bush Fires Act.

16. High salt risk catchments

16.1 Within three years, or such other period as the Minister for the Environment shall nominate, the proponent, on advice from the Water Authority of Western Australia, shall identify second order catchments with a high salt risk.

16.2 Within each catchment identified according to the requirements of condition 16.1, the proponent shall retain additional river and stream buffers and locate areas temporarily reserved during phased logging operations to the requirements of the Water Authority of Western Australia.

17. Forest Monitoring and Research Committee

17.1 The Minister for the Environment will set up a committee having objectives which include:

- (1) identification, prioritisation and approval of monitoring and research programmes and projects on environmental impacts of forestry management;
- (2) the granting of funds towards such monitoring and research;
- (3) receipt of progress reports;
- (4) reporting to the Minister for the Environment and
- (5) publication of results.

17.2 The Committee shall include the heads (or nominees) of the CALM, the EPA, the Western Australian Forest Industries Federation, the Conservation Council and the Water Authority of Western Australia, and the Chairpersons of the Lands and Forest Commission and the National Parks and Nature Conservation Authority.

17.3 The Committee shall appoint working groups of scientists to recommend and report to the Committee on the design and funding of research projects, the identification, prioritisation and review of monitoring and research programmes and projects relating to the environmental impacts of forest management.

17.4 The Committee shall provide brief annual progress reports to the Minister for the Environment, with major reports in 1997 and 2002, at the time of the next review of the forest management plans and Timber Strategy.

18. **Reporting on compliance**

18.1 The proponent shall prepare "Progress and Compliance Reports", to verify the environmental performance of this project, in consultation with the EPA. These shall include brief annual progress reports to the EPA, and major public reports in 1997 and 2002.

Note

Wherever the term "jarrah forest" is used in this statement it includes both the jarrah and the jarrah-marri forests.

Procedure

Compliance

The EPA is responsible for verifying compliance with the conditions contained in this statement with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.

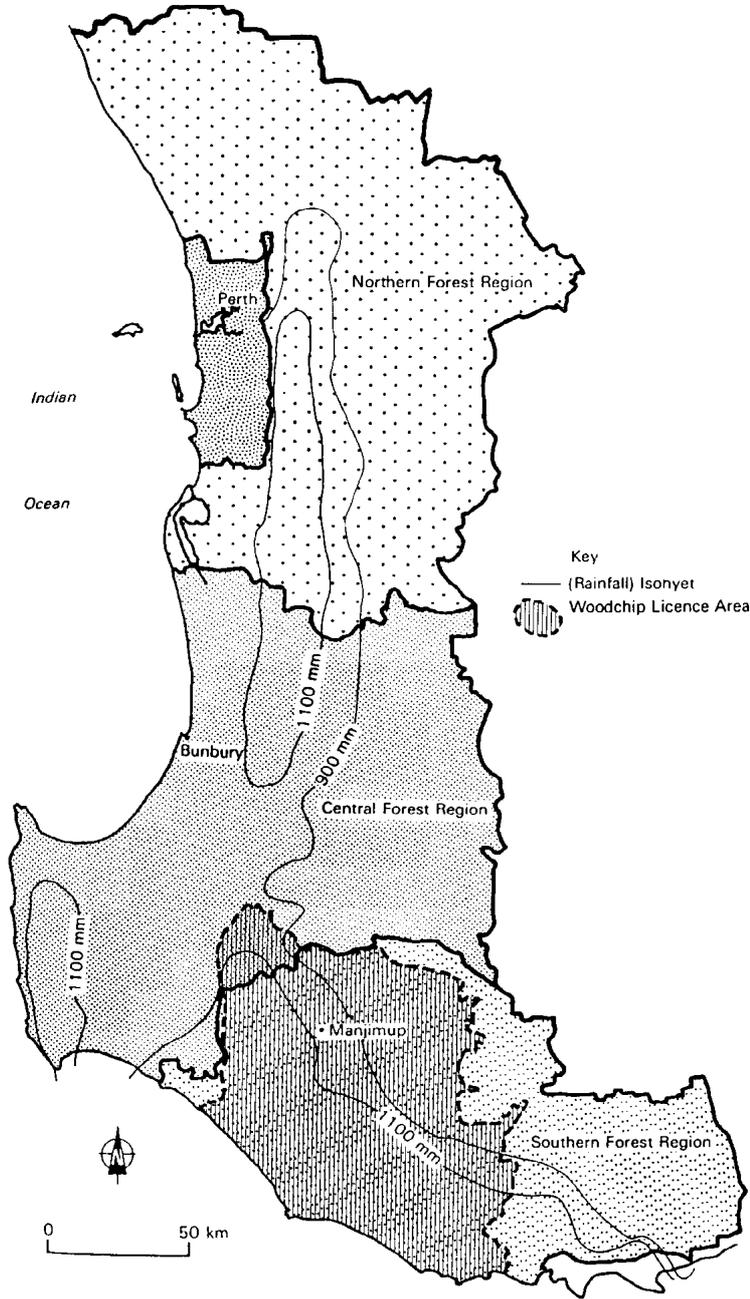
If the EPA, other government agency or proponents is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

Prior to making determinations as provided for in these conditions the Minister for the Environment may seek advice from the Forest Monitoring and Research Committee.

Jim McGinty, MLA
MINISTER FOR THE ENVIRONMENT

24 December 1992

APPENDIX F
1988 MAP OF THE EPA SALT RISK ZONES: AREAS BELOW 1100mm rainfall



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**MINORITY REPORT OF HON
GREG SMITH MLC**

**STANDING COMMITTEE ON ECOLOGICALLY
SUSTAINABLE DEVELOPMENT**

IN RELATION TO

**LOGGING PRACTICES
MANAGEMENT OF AND PLANNING
FOR THE USE OF STATE FORESTS IN WESTERN
AUSTRALIA - THE SUSTAINABILITY OF CURRENT**

Report 4

MINORITY REPORT OF HON GREG SMITH MLC**STANDING COMMITTEE ON ECOLOGICALLY SUSTAINABLE DEVELOPMENT****IN RELATION TO****MANAGEMENT OF AND PLANNING FOR THE USE OF STATE FORESTS IN WESTERN AUSTRALIA - THE SUSTAINABILITY OF CURRENT LOGGING PRACTICES**

- 1 In view of the evidence given and the submissions received I will comment on some of the text within the report.
- 2 Although the recommendations are non-prescriptive and to a large extent reflect what the Government is currently doing, I consider it necessary to comment on the way in which much of the report has been presented.
- 3 For example in the first paragraph of the Executive Summary it states; "*...there was a commitment on the part of the Western Australian Parliament to protect old growth and wilderness forest values on public land*". This statement is only partially true. The Western Australian Government entered into the RFA with a commitment to protect certain percentages of representative forest types. These have all been met and exceeded in many cases through the RFA process.
- 4 Paragraph 4 of the Executive Summary claims that over cutting has created problems within the forest. Much of the evidence received indicated that in fact early harvesting methods such as selective cut harvesting created part of the problem now being experienced through turning karri forests into predominantly marri forests and the creation of pole stands within some of the jarrah forests. Modern silvicultural practices are designed to prevent this from happening.
- 5 Paragraph 5 of the Executive Summary refers to the Precautionary Principle. Much use is made of the term 'Precautionary Principle' within the report, but in reality it cannot be used as the environmental groups argue it. For example, will future rainfall be higher or lower? Experts at various times in the last decade have predicted both. In its purest form as used by some, anything that might happen, whether hypothetical or theoretical, must be proven factually untrue. Therefore, one argument requires no more than suggestions, but the other is expected to produce fact. For this reason opponents to logging will always be able to claim that silviculturists are not abiding by the Precautionary Principle.

- 6 The term 'ecological sustainable forest management' (ESFM) is used with regular monotony yet no one can quantify what it really is. In its purest form, as promoted by the conservation movement, a very good argument could be presented that all of the south west forest estate should be harvested with no areas in reserves, as harvesting would be so low impact, have a nil effect on the environment, and be virtually unnoticeable.
- 7 The Executive Summary refers to community attitudes and public interest. It should be noted that the environmental movement for political reasons rather than conservation has, due to misinformation and false statements, perpetrated much of the perception that has been created about the forests. This is demonstrated in paragraph 11 where it is claimed, "*...extensive areas of jarrah are cut, yet large quantities of cut logs are left on site and burnt*". This is just not true. The amount of good timber left in the forest, or sitting on landings amounts to a very small proportion of the timber harvest. This is confirmed by evidence given by Mr Rodney Lee, a firewood contractor in paragraph 4.3.11.2 where he complains about the timber he receives and says "*...some of it is full of white ants, some is rotten, some has charcoal on it and some is double hearted...*".
- 8 Paragraphs 12 and 13 of the Executive Summary examine the splitting up of CALM. The splitting of CALM will be viewed as a major victory for the opponents of the timber industry, but only to the extent that it in some way legitimises their claims that CALM were incapable of performing dual functions. It should be noted that much of the tourist infrastructure and environmental work done by CALM might not have been possible if it had relied on accessing funds from consolidated revenue. It should also be noted that contrary to the last sentence in paragraph 12, the methods of harvesting used within the salt risk zones have caused negligible environmental degradation.
- 9 Paragraph 14 of the Executive Summary refers to a culture of mistrust between CALM and the general public. It would be fair to say this mistrust exists between the conservation movement and CALM, but to say the general public is drawing a very long bow.
- 10 Chapter 3: The Reasons for This Enquiry, is worth reading, in that it explains the polarisation that exists in the forest debate. The World Commission on Environment and Development provides a definition of ESD which is quoted in paragraph 4 of section 3.1.3 "*...is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*", and probably best describes sustainability in this debate and to that end our forests are being managed in a sustainable way. Much of the disagreement is over what is sustainability?

Environmental groups expand it to the most minute detail within the forest and even use terms such as localised extinction, and the effects timber harvesting has on micro-organisms.

- 11 Paragraph 2 of section 3.3 sums up why it is almost impossible to resolve some of the conflict in the forest debate as it actually confirms that the science of forest management and therefore the facts will not be accepted by the conservation movement.
- 12 Chapter 4: The Sustainability of Current Logging Practices, uses some very selective quotes and after all the evidence that was received is very hard pressed to identify that CALM has been irresponsible in relation of forest management. The last quote in section 4.1.2 is an example of selective quotes where it says; "*...logging old growth forests potentially violates the precautionary principles of sustainable developments in that an irreplaceable resource is being destroyed*". The quote itself is untrue, as even an area cleared for agriculture today, left untouched, would be an old growth forest area 150 years from now. Most of the witnesses denigrating current logging practices had no expertise in forest management and were merely providing an opinion. Some members of the committee treated this opinion as fact and it was disappointing to see the evidence provided by scientists and experts in forest management treated with contempt.
- 13 In the EPA review examined in paragraph 4.3.3 there was no mention made concerning harvest levels in the five dot points noted and the EPA, of which the Chairman of this Committee was a member of at the time, signed off on an approved logging level of 523 000 cubic metres per year. The Minister later lowered this to 490 000 cubic metres per year.
- 14 It should be also noted that the Barnett Report examined all of the appeals against the Forest Management Plan 1992 and was therefore, to some extent, less subjective.
- 15 Paragraph 4.3.12 which states that there has been mismanagement of the resource is true but from evidence given and submissions received, the forest estate was mismanaged in the first half of the century due to a lack of understanding of the ecology of eucalypt forests. Modern silvicultural practices such as clear felling gap creation and prescription burning have all been developed to ensure a sustainable resource.
- 16 Chapter 5: Ecologically Sustainable Forest Management, refers more to habitat and conservation and to some extent views timber production as a secondary use of our production forest areas. It is very disappointing to see in paragraph 5.2.1 that the Western Shield project even receives criticism. The Executive Director of CALM, Dr Syd Shea probably best sums up the Western Shield project and what it has done when

he says "...This would have to be one of the most outstanding conservation coupes ever undertaken in the world. I wish I had done it. I am desperately trying to claim credit for it but I cannot. We are bringing back animals literally from the brink of extinction. We have been able to convince the Government in a time of quite high constraint to spend \$1.5m. I have mining companies lining up to give us money to do it. We are talking about five million hectares and bringing back these animals from the brink of extinction, but we have had constant criticism and constant negativity...". Now surely one does not have to be a scientist to realise that introduced predators have accounted for the disappearance of many of our indigenous animals and the fact that native species numbers have increased dramatically since the initiation of the Western Shield project clearly demonstrates this.

- 17 Work done at Kingston Block has demonstrated a sevenfold increase in the number of medium sized mammals since baiting of feral animals began in 1992 and this happened whilst timber harvest was still taking place. The criticisms levelled at CALM for its lack of studies in relation to forest mammals is unfair as this was not an issue until recently and if, as the conservation movement suggests, it had been an issue for some time why haven't independent studies been done previously as theses. I would suggest this issue is one that the conservation movement have recently added as another string to their bow and, as with the Precautionary Principle, one side of the argument only has to claim logging may be having an effect on forest mammals, yet the other side of the argument is expected to produce facts.
- 18 Section 5.7 which criticises clear felling, says that the Committee is concerned whether the practice of clear felling is compatible with the principles of ESFM is a statement I can not agree with. All the evidence presented to the Committee by experts in silvicultural practices within karri forests confirmed that the most sustainable method of harvesting karri is by clear felling and a move away from clear felling to selective log harvesting in karri forests would be unsustainable.
- 19 Section 6.13 of the report refers to the Committee's concern about CALM's adversarial approach in its response to the EPA compliance report. CALM's approach is understandable due to the fact that much of the EPA's report and criticism was incorrect and was due to the EPA not seeking the information from CALM in respect to some of the issues dealt with. One of the most obvious problems that exist with the ministerial conditions at present is that they are so vague and open to interpretation that compliance with them is almost subjective.

- 20 Chapter 7: Logging in Salt Risk Zones Between 1988 and 1992 is a chapter that I have not agreed with being placed within the report. It is no more than a witch hunt instigated by the Chairman of the Committee using information obtained during her membership of the EPA at that time and an attempt to incriminate the Executive Director of CALM, Dr Syd Shea. Dr Shea best summed up the scenario one would have to use to suggest a breach of the Ministerial Condition in his statement in section 7.9:

"If I understand your argument it is that about 11 years ago or perhaps slightly less, if one completely ignores the fact that CALM had in place a published jarrah prescription that said that the jarrah forest could be harvested in coupes of up to 10 ha, if one selectively reads the EPA's assessment report of the time and concludes that the EPA was for some reason not aware of this published prescription and if one claims that the applicable Ministerial Condition meant something completely logically different to what it says, an argument could be mounted that a Ministerial Condition was breached. If one then adds the view that CALM was responsible for this Condition despite the fact that it was not the proponent, it might be possible if the rest of the premises could be held together to assert that CALM had breached a Ministerial Condition.

It is important that your Committee bear in mind the fact that CALM has been subjected to an unprecedented level of scrutiny in respect of all of its forest management activities over the last 15 years. In this context given that there has been litigation all the way to the High Court and regular attacks on the Department via the media it beggars belief that a matter such as this, if it had any substance, would not have been aired publicly in the past..."

- 21 In the second paragraph of section 8.10, which refers to the failure of accountability of CALM, it seems to neglect the fact that the Government and Parliament are accountable to the people at the ballot box every election. In section 8.10.3 criticism is levelled at CALM-provided tours of the forests. Exactly the same criticism could well be expressed concerning tours conducted by the Conservation Council and other environmental groups. The Committee commentary in paragraph 2 of section 9.5 which refers to the concern shown by 'lifestyle settlers' such as retired professionals, and tourism groups fails to mention that the timber industry was operating long before these groups took an interest in the area. Many witnesses agreed that we needed a sustainable timber industry as long as it wasn't in the forest near them.

- 22 In conclusion the South West forests have undergone numerous inquiries and have been subject to meticulous scrutiny over the last decade and it is time that the timber industry were given some surety as to the availability of resources and it should not be forgotten that the timber industry itself has a larger vested interest in having a sustainable supply of resource than any other single group.

Hon Greg Smith MLC

Date: December 9 1999