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IMPLEMENTATION OF THE
"TIMBER STRATEGY"

PROCEEDINGS OF A SEMINAR
HELD AT THE SEACREST RESTAURANT, BUNBURY
31 MAY AND 1 JUNE, 1988

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT



C O N T E N T S

	Page
1. Preface	(i)
2. Seminar Program.....	1
3. Pre-seminar - Quiz.....	5
4. Pre-seminar - Questions/concerns of participants....	7
5. List of Participants.....	8
6. Introduction by Dr. F. McKinnell.....	10
7. Address by Executive Director, Dr. S. Shea.....	12
8. Demand - Supply Projections - G. Malajczuk....	27
9. Inventory - H. Campbell.....	37
10. Silviculture - J. Bradshaw.....	47
11. Allocation of the Resource - D. Keene.....	61
12. S.F.R. Viewpoint - "J.Sleeper" (A. Walker)	82
13. C.F.R. Viewpoint - D. Spriggins....	90
14. N.F. R. Viewpoint - G. Peet.....	98
15. Timber Utilization Research - G. Siemon.....	106
16. Implementing the Strategy - D. Keene.....	115
17. Salary Allocation - G. Heberle.....	131
18. Further Strategy Questions - D. Keene.....	132
19. Softwood Pricing and Allocation - J. Murch.....	136
20. Legal Aspects to Timber Production - J. Adams.....	139
21. Hardwood Pricing and Allocation - J. Sclater.....	145
22. Minor Forest Produce - J. Clarke.....	150
23. Sharefarming - J. Murch.....	153
24. Contracts & Contractors - J. Sclater.....	160
25. Logging Computer Systems - J. Clarke.....	165
26. Money Matters - A. Hill.....	171
27. Fire Control-Timber Production	
Interface - J. Smart.....	177
28. General Questions.....	182
29. Summary and Conclusions - D. Keene.....	186

PREFACE

A Seminar, organized by the Timber Production Branch, was held at the Seacrest Restaurant, Bunbury, on 31 May and 1 June, 1988. The Seminar was designed to ensure that all Senior CALM Staff from the State Operations Headquarters, the Forest Regions, and the Forest Districts, were made fully aware of the management implications of the "Timber Strategy".

The Seminar was also designed as a launching pad for detailed training of staff on implementation of the Strategy.

These proceedings, which include questions and answers following each talk, have been compiled and edited by John Clarke from audio tapes of the Seminar. The proceedings should be read in conjunction with the "Timber Strategy" document.

PROGRAM

TIMBER STRATEGY IMPLEMENTATION SEMINAR

Tuesday 31 May/Wednesday 1 June 1988

DAY ONE: (PART 1 - complete explanation of the Strategy by those people involved in its development)

- 0830 (15 mins) Arrival at venue. (Seacrest Restaurant and Conference Room)
- 0900 (5 mins) Call to order, outline and advise any domestic arrangements. **J Clarke**
- 0905 (10 mins) Chairperson for the morning session will be **Dr Frank McKinnell**. He will put a theme to the seminar and will conduct question times and sum up after each speaker.
- 0915 (30 mins) Address by Executive Director **Syd Shea**. To give an overview of the strategy (Part 1).

Some points he might like to cover:
 - 1. The Government view
 - 2. How he wants the strategy implemented, together with a time frame
 - 3. What are the priorities
 - 4. The benefits to accrue. Social, economic, environmental
 - 5. Problem areas to look out for
- 0945 (10 mins) Questions from the floor
- 0955 (15 mins) Morning Tea
- 1010 (30 mins) Address by person(s) best able to explain the predicted demand for wood and the supply and demand projections.
Parts 2 and 9 of the strategy.
Speakers P Jones and/or G Malajczuk
- 1040 (10 mins) Question time
- 1050 (30 mins) Forest Resources (Part 3 of strategy)
An explanation of how the numbers fit.
The existing inventory, the new inventory.
Inventory of forest wood products other than sawlogs.
Speakers H Campbell and P Collins
- 1120 (10 mins) Question time

- 1130 Forest Management (Part 5 of strategy).
(40 mins) An explanation of the strategy and the work required to meet it. Thinning - fertiliser - nurseries etc.
Speaker **J Bradshaw**
- 1210 Question time
(10 mins)
- 1220 Lunch (supplied by Department)
(60 mins)
- 1320 **Peter Hewett** Chairperson
(5 mins) Introduction to afternoon session.
- 1325 Allocating the resource (Part 7 of strategy)
(60 mins) An explanation of how this will be done, who will do it for each forest product. What are the controls? How will the allocation be balanced.
Speaker **D Keene**
- 1425 Question time
(10 mins)
- 1435 Afternoon tea
(10 mins)
- 1445 The allowable cut (Part 6 of strategy).
(60 mins) Regional management, allocation, work responsibilities.
- Southern Forest Region **Walker** (20 mins)
Central Forest Region **Spriggins** (20 mins)
Northern Forest Region **Peet** (20 mins)
- 1545 Question time (5 mins each)
(15 mins)
- 1600 Research and development of timber products.
(25 mins) Small log milling - seasoning. Value added products.
Speaker **P Shedley**
- 1625 Question time
(5 mins)
- 1630 **Peter Hewett** wrap up
(15 mins)

DAY TWO: (PART 2 - explanation by senior management and specialists on implications of the Strategy, how it will be implemented and the responsibility and accountability of regional, district and specialist staff)

- 0830
(20 mins) Answer questionnaires on previous days talks
- 0850
(10 mins) Chairperson **Roger Underwood** 10 minute address
- 0900
(60 mins) Timber production strategy
Implementation and Management
Staff structure
Staff responsibilities
Finance
Who does what when
Time frame setting out target dates
Responsibilities of SOHQ
Responsibilities of Regions
Responsibilities of Districts
The role of all other associated staff
The benefits of all this
Social, economic - environmental etc.
Speaker **D Keene**
- 1000
(15 mins) Question time
- 1015
(15 mins) Morning Tea
- 1030
(75 mins) The current position with all of this.
1. Pricing logs from SF (Part 8 of strategy)
2. Log allocation
3. Permits, licences, contracts, agreements and auctions etc
4. Minor forest produce
5. Marketing
6. Other Government Department requirements
7. Exports. Imports.
8. The law
9. Accounts, records, payments, Treasury
10. Responsibility. Accountability
11. Summary of the work done to date
12. Program of the work required to be done
What is required of regions, districts, specialists.
Speakers **J Sclater, J Clarke, J Murch and J Adams**
- 1145
(15 mins) Question time
- 1200
(60 mins) Lunch (provided by Department)

- 1300
(15 mins) Chairman **D Keene**
Sum up the mornings events and final questions,
introduction to afternoon speakers.
- 1315
(20 mins) Softwood and Hardwood tree sharefarming.
The impact on regions, districts
Funding - future annual payments
Tending. The law etc.
Who is responsible?
Who is accountable?
What stage are we at?
Speaker **J Murch**
- 1335
(5 mins) Question time
- 1340
(20 mins) Contracts - Contractors
The responsibility and accountability of District
Manager and Regional Leader.
Identifying forest wood products.
Future training courses for involved staff.
Speaker **J Clarke or J Sclater**
- 1400
(5 mins) Question time
- 1405
(20 mins) Records. Computer section.
What is the current situation.
New initiatives - current problems
Effect on District Managers, Regional Leaders,
Contractors etc
What records are kept, who keeps them, annual
reports etc.
Speaker **J Clarke or J Sclater**
- 1425
(5 mins) Question time
- 1430
(20 mins) Accounts, estimates
Creditors, debtors.
How does the money move
Who is responsible, who is accountable
Internal - External auditors
Treasury
Speaker **A Hill**
- 1450
(5 mins) Question time
- 1455
(15 mins) Afternoon tea
- 1510
(25 mins) Forest Protection and Timber Production interface
Speaker **J Smart**
- 1535
(5 mins) Question time
- 1540
(20 mins) Questionnaire to be completed on this days talks
- 1600
(15 mins) Summary and wrap up
Speaker **D Keene**

TIMBER STRATEGY IMPLEMENTATION SEMINAR

31 MAY - 1 JUNE 1988

PRE-SEMINAR QUIZ

1. For what length of time does the strategy document legally apply?

5 years
10 years
15 years

2. How many major hardwood sawmills does the strategy envisage in the future?

5
7
12
15

3. List 6 of the log product types dealt with in the strategy.

4. Regarding allocation of resource, what do you consider to be the main benefit to the industry in the change from an annual licence system to a system of Contracts of Sale for up to 15 years?

5. What is the area of hardwood forest available for timber production?

540,000ha
1,420,000ha
2,120,000ha

6. What is the current estimated total volume of standing trees available and suitable for hardwood sawlog production?

7,500,000m³
15,600,000m³
23,500,000m³
27,600,000m³

7. What is the current estimated volume of standing material not utilisable for sawlogs (ie "residues") on areas of hardwood forest available for timber production?

- 5,000,000m³
- 23,500,000m³
- 87,000,000m³
- 107,000,000m³

8. What is the approximate current annual cut of pine from Departmental pine plantations (all products)?

- 100,000m³
- 200,000m³
- 300,000m³
- 500,000m³

9. What is the approximate current annual cut of First Grade jarrah and karri sawlogs?

- 380,000m³
- 670,000m³
- 920,000m³
- 1,800,000m³

10. What is the current estimated total annual increment on hardwood forest available for timber production?

- 800,000m³/pa
- 1,600,000m³/pa
- 3,000,000m³/pa
- 5,000,000m³/pa

11. Approximately how many people are employed directly or indirectly in WA forest based industries?

- 5,000
- 10,000
- 20,000
- 40,000

12. What is the approximate annual turnover of WA forest based industries?

- 50 million
- 90 million
- 180 million
- 300 million

13. List the main points you want clarified during this seminar.

See p 121 and onwards,

PRE-SEMINAR QUESTIONS

The following questions/concerns were put forward by the seminar participants via the pre-seminar quiz:-

QUESTION	NUMBER OF TIMES ASKED
. sawlog grades ? can we combine 1st & 2nd grades ?	1
. production from dieback sites ?	1
. role of Timber Production Branch ?	1
. Region/District responsibilities ?	2
. the place of the smaller sawmiller ?	1
. answers to the quiz! ?	5
. allocating the resource ?	5
. staff training requirements ?	1
. District staff roles ?	5
. timetable and progress of Strategy implementation ?	1
. how do we sell "timber production" to the public ?	1
. pine planting program	1
. effects of drought, insects etc. on pine resource and hardwood resource ?	2
. roading ? how ?	5
. road, river and stream reserves ?	1
. use of residues including mill waste ?	3
. future sales of pinaster ?	2
. control of monopolies ?	1
. how can CALM keep up with implementation of the strategy ? staff allocation within CALM ?	2
. how do we plan harvesting ? Inventory section's role versus District's role ?	3
. workings of contract system ?	2
. M.F.P. proposals ? firewood for public ?	2
. how can CALM control logging contractors ?	1
. how do we balance demand with supply from forest e.g. poles ?	5
. future for re-growth hardwoods of small diameter ?	2
. royalties/stumpages ?	1
. main thrust of Strategy ?	4
. progress of implementation of Contracts of Sale with big mills ?	1
. can we check mill recoveries ?	1

PARTICIPANTS

Head Office
and SOHQ:

Dr Syd Shea
Dr Frank McKinnell
Paul Jones
Peter Hewett
Roger Underwood
Jim Edwards
Don Keene
John Sclater
Jack Bradshaw
Jon Murch
Greg Heberle
Hugh Campbell
John Clarke
Jim Adams
Keith Wombell
Pat Collins
Dr Barry Wilson
Chris Haynes
George Malajczuk

Northern Forest
Region:

George Peet
Eric Jenkins
Bruce Harvey
Arther Holland

Central Forest
Region:

Don Spriggins
John Skillen
Frank Vince
Peter Keppel
Des Donnelly

Southern Forest
Region:

Allan Walker
Allan Lush
Ron Kitson
Wayne Keals
Kevin Vear

Districts:

Wanneroo)
Mundaring)
Jarrahdale)
Dwellingup)
Harvey)
Collie) District Manager
Kirup) and Senior field
Nannup) staff member
Busselton) involved in timber
Manjimup) production
Pemberton)
Walpole)
Albany)

Participants - Contd:

Specialists: Narrogin - Steve Gorton
Inventory and Planning

Kelmscott, Bunbury, Manjimup.
Managers plus one Senior field staff
member from each centre.

Research/WURC

Dr Graham Siemon
Lex Mathews
Dr Per Christensen
John Bartle
Gary Brennan
Alan Thompson

Protection

John Smart
Chris Muller

Silviculture

John Kaye
Ray Fremlin
Peter Beatty

Human Resources Branch

Tony Brandis
Alan Scott

Accounts

Ian Frame

Safety

Tom Wood

TIR Act

George Gedling

INTRODUCTION TO SEMINAR BY DR. FRANK McKINNELL

The strategy has been officially adopted by the Government and it is crucial to the future of CALM and of forestry in Western Australia that it be successfully implemented.

Fundamentally, I believe it is a demonstration also of one of the central tenants of our profession that forests in this country can be managed for multiple use. You will see from the programme that I am to put a theme to the Seminar - the theme which I hope that will emerge is "showing how multiple use works".

As you all know forestry has been under fire on this issue for some considerable time and its detractors argue that any of the uses of the forest which involves harvesting of timber are incompatible with conservation and as a consequence of their well publicised arguments there is a public perception out there that timber harvesting in forests in Australia - not just Western Australia but Australia as a whole - is out of control and is leading to the loss of our forests. You all know that is not true, we all know that our forest management is at a high level and there are adequate resources to carry out that management. It is quite possible to run our forests on a multiple use system. We have been doing it in this State for a very long time. However, it is not enough for us to know we are doing the job well, we must be seen to be doing it well. With the timber supply strategy we have laid open our plans and our objectives in a way which has never before been done. Our success or otherwise is now very much in the public eye.

The strategy is a complex document, as I am sure you will all appreciate but it does set out some clear paths for the application of multiple use management in this State and that's where you come in. Doing it well and doing it in such a way that we are seen to be on top of the challenge, is up to all of you. I think it will be clear to all of you that the successful implementation of the strategy would do two things, it would convince the public, which includes our political masters, that we know what we are about, we know what we are talking about. But it will also, perhaps more importantly, cement into place multiple use forestry for the foreseeable future in this country - in the State initially but, because we are right in the forefront, we will be an example to the rest of the country.

Today and tomorrow's programme is intended to clarify all aspects of the strategy and to give you an opportunity to be part of the process of defining how to go about achieving the goals of the strategy, because in a document like this you

can't spell out all the details, you can't dot all the i's and cross all the t's, and I am sure that there are many aspects which you would like to see explained, clarified and let's face it, to be worked out yet.

These two days here are also about commitment, the people of CALM to pursue the strategy and your commitment as foresters to make it work and also because it is such a public process now our professional standing is very much on trial here and it is up to you to give it your best shot. It is very important that any aspects which any individual is concerned about are brought out in the open during the two days so that particular points can be tossed around, looked at from all sides by everyone and sorted out. After all we can't ask you to be committed to something as far reaching as the supply strategy if we all don't have a thorough understanding of what our objectives are and the ways in which we hope to achieve those objectives.

I'd like to re-iterate John Clarke's plea to you all to be open and frank and bring out anything that you think needs to be discussed further.

I would like to hand over to Syd Shea now to give us an overview of the strategy.

TALK BY EXECUTIVE DIRECTOR, DR. SYD SHEA

Thanks very much to the people who set up this Seminar, it's an excellent opportunity to talk to you. What I intended to do was to ignore my instructions completely on the program but talk in a general sense about the industry and about firstly the role of timber in the world and in Western Australia and how it has changed. I will try to give you, as I have been requested some feeling about what I understand the Government's attitude is to the timber strategy. I would like to talk about a few opportunities which I think are very exciting in terms of what we can do in Western Australia about the timber strategy and finally I would like to talk about some critical factors which I believe are going to determine whether we can succeed or not, so I will just waffle on and Frank McKinnell can tell me when I run out of time.

First of all I would like to share with you my general impressions about what is happening around the world in terms of timber. I think it is fair enough to say that 10 or 20 years ago the prognosis and feeling about the timber industry generally in the world scene was that it was a decaying industry and that there would be replacement of wood and the cost of establishing plantations of timber and actually managing native forests was such that timber would be displaced from the market. Now I had the opportunity in the last year or so (believe it or not I don't like doing it) of going to a number of overseas countries and it is really fascinating to see the change, the turnaround and the appreciation of wood fibre throughout the world, whether it be for paper, for re-processed wood into particle board or into structural timber or fuel wood or in particular for high value wood.

Everywhere I have gone I have obviously talked to people, like yourselves, involved directly in the growing of trees, but also to people involved in manufacturing and particularly people involved in investment, and there is a dramatic turnaround from what I remember when I was in Canada some 15 or 20 years ago. Today there was not a 'doom gloom' but an optimistic scenario in terms of wood. The fact is, and it was illustrated when I was in Portugal, that we have an abundance of food in this world. In Portugal they are changing their vineyards to globulus plantations and the guy who took us around explained that the reason is because the European Common Market has got enough cheap wine to fill three large oil tankers i.e. they can't sell it! Whereas in Europe there is a dramatic shortage of wood fibre, and if you go around the world even in those countries where you see those horrific scenes of people dying of starvation, one of the reasons of course why they're dying of starvation is that a hell of a lot of their time is spent walking to get fuel

wood. So an eye lens of the economy from the high quality paper production at one end right down to fuel wood at the other, around the world there is an increased demand for and an increased shortage of wood fibre and that's reflected in the proposals for investment into forestry. I think it is very important to realise because I think we have to put our strategy into the context of the overall scene.

Now coming out of the Australian situation, I think there has been a revolution again in appreciation of how important the forest industries are to the Australian economy. I am sure you have heard and seen adverts and debates, and have probably heard me talk about it before, but the fact is that of the 5 or 6 industries in Australia which have growth potential, forest products is one. I have a little bit of a thing about the Australian economy, I have been criticised quite recently about having a 'mouthless' type view of the economy. I am very optimistic about Australia's capacity to regain its economic position in the world, but I am only optimistic if people realise what a critical situation we are in now. With the deficit over \$110 billion and the current account deficit still running sometimes at a billion dollars a month, we are in big trouble, and the reason why we are in big trouble is that we have not been able to re-structure our economy to take advantage of the things we are best at doing. Instead we prop up industries which have no capacity for competition. Look at Australia: with our population, we have got many advantages, but in fact there are only 5 or 6 industries which will allow us to reverse that situation and one of them is the forest industry, an industry that contributes minus 1.7 billion dollars to our current account deficit. So that gives you some indication of just how important our failure to grow trees is on the economy. That is one of the major contributions to the fact that we are going to be paying higher and higher interest rates until we can turn about that current account deficit.

If there is one area where we can produce and produce efficiently with our climate, soils and technology and history, it's tree growing, and yet here we are - 1987, 1.7 billion dollars down the tube every year in forest products which we could easily not only replace in terms of imports but we could reverse that in exports.

I would now like to talk a little bit about the importance of the timber industry in Western Australia and I think you are all old enough I guess to look in perspective at what has happened over the last 20 years, some of you maybe in 10's some 5, and a few babies 1 or 2, but I am in about the 20 year position of perspective. In that 20 year period I can remember distinctly over the first 10 years of that, again both within the industry and within the Forest Department, the prognosis of a slow and steady and perhaps accelerating decline in this industry, an undervaluation of its contribution at that point in time and certainly an

undervaluation of that industry's importance and potential.

Now the fact is that if we just stop the clock today and look at the industry, we'd see that there are 20,000 people who depend on jobs from this industry, (in fact this is a low figure because it does not take into account a lot of other people who are working on jarrah and other materials and value adding to it) but 20,000 people in Western Australia is a hell of a lot of people and particularly as we are strategically located in the South West. And as all of you who live in the South West know, agriculture is important, but really prognosis for agriculture, because of that great big wine lake, that butter lake, that beef lake in Europe, is not very bright.

Sure we are selling wool at very high prices now but anybody who has looked at the wool market knows that it goes up and down. And although it's a very important industry and will continue to be so, it's not going to carry us through as it did after the war. But if you look at the timber industry in the South West it's essential to the whole fabric of the South West. It is not just the people we employ, it is multiplier effect and it is stability. So in Western Australia at this point in time the industry is very important but I think it is more exciting to look at the potential for the industry because we have the potential in the next two or three years to look at a re-investment in this industry of money exceeding a billion dollars. Now that, in any State, in any country, is very significant. You might think I am exaggerating but the fact is that we have on the table now proposals for over \$200 million investment in sawmilling and other manufacturing, we have very likely the prospect of a pulp mill which will cost \$750 million and if we produce the wood that is necessary to keep that pulp mill supplied with high quality raw materials, another \$200 - \$300 million, so you are talking about over a billion dollars worth of investment in this industry.

A Word About "Comparative Advantage":-

The future of our grand "Advocado" industry will fail without a comparative advantage. But what we do have a comparative advantage in is growing trees, and with a little bit of effort, actually manufacturing them. We have a superb climate for growing trees. We have the terrain which makes our costs of extraction much lower by world standards. We have an existing forest which, although we can criticise it and say all the things we should have done, is still a forest which has a future, we have stability in our political system and most importantly of all, we have the technical expertise to do it.

There are tons of places around the world that will grow trees faster. But one of the problems they have is that a hot

environment also has a bad effect on their political system and it is very very hard to maintain a stable industry in a country which changes its Government every two years and has inflation rates at 100%. I shall talk a little bit about that later on.

I would just like to, in my introductory remarks, try to get to you and I will be very interested to hear from people who don't agree with that view, that there has been a complete turnaround in the whole forest industry sector and its importance in the economy world wide and its importance in Australia and particularly its importance in Western Australia and particularly its potential, because if you go back out and don't think that you're associated with an industry that has a future we might as well forget all the stuff that we are doing. You have to have faith and hope and feel very proud that this industry is going to make a major contribution because in fact this industry can be one of the leading ones in the whole of Australia. Now if we don't take the opportunity it will only be our fault.

A Word About The Government's Attitude To The Timber Industry:-

Key politicians are strongly behind the idea that unless we develop our industrial base in those areas where we have a comparative advantage we are going down the tube, and they believe the forest industry is one of the key areas where we can do it. Of course, in this debate about the forests we have the environmental question, and within the existing Governments, and I expect across all party lines, there is going to be a continual battle to ensure that the resource base on which industry is founded has a secure future because of the environmental vote.

It is not my role to talk you about politics but in Western Australia alone there are five marginal seats in the South West which I believe are dependant on a positive response from those people who depend on the timber industry for any party that is in power. In other words if the policy of the Government is such that those people in the timber industry believe that it is not in their interests to support that policy any Government or any party regardless of political complexion is going to lose 5 marginal seats.

Some of you may have seen the analysis of the New South Wales election (if any one wants it - I can give you a copy or Roger Underwood can). The fact is that the timber industry seats were targeted by those people who depended on the industry for their employment and the swings went from 10 to 16% and if you see some of the shananikans going on in the Federal Parliament and you read cross-factional interchanges, a lot of debate is about consequences of that type of

But I have!

political result as a consequence of a Government which has attempted to court the green vote. But I am not allowed to talk about politics, but in summary I can say that in terms of the environmental question it is going to be a battle, but I believe that Western Australia is very well placed because of the effort we put in last year to our plans and our strategy. The political wings are such that we are going to get a balance between the two - we in the public service have provided that balance and I think that it will be maintained.

New Opportunities:

I would like now to talk about a few opportunities - just briefly in terms of the strategy - first of all I mentioned in the beginning this dramatic change in the demand for wood fibre, I won't go into much detail - people are sick of me talking about the globulus project and you will hear about it later on - but it seems to me that we do have a harmonic convergence in terms of the opportunities to capitalise on that demand for high quality short fibred material for paper.

1. Increase In World Demand For Paper:

What has happened on the world scene is two things; first of all paper making has become a mint. You might read about all this recycling and how we are going to save paper, but anybody who has worked in a CALM office knows that everytime we introduce a FAX machine and a photocopier - the demand for paper just sky rockets and that is happening around the world. And of course a lot of the countries which didn't have even toilet paper, the first thing they do when they get enough money (and you can understand this if you have lived in a single mens camp in the Forest Department) is that they want to buy some decent toilet paper and the next thing they want to do is get some paper for their kids which they can write on and then the next thing that happens is that the electronic office is introduced which in turn introduces FAX machines and they want more and more paper, so there is an overwhelming increase in the demand for paper. But what is more significant in terms of our potential to get into that market is that there is a disproportionate increase in the demand for short fibre eucalypts and that is a cultural thing. What has happened in the paper industry, which is a very traditional conservative industry, despite the fact that in the 1920's, here in Western Australia we showed them how to make good paper out of eucalyptus fibre, it has taken till now for that industry to convert the machines to eucalyptus fibre. But what you are seeing is a snowballing effect. More and more paper pulp mills in Europe are not only expanding but changing from their traditional sources of fibre like spruce and birch to eucalyptus, because eucalyptus makes the best paper. So on top of that overall demand we have this increase over and above that, an increased demand for fibre.

Now we can capitalise on that because as I said we have got all the characteristics that we need to produce the wood which will feed those pulp plants. Now whether we feed them a pulp plant here or overseas doesn't matter. In terms of the need to plant trees - I personally prefer to do it here. I suspect what is going to happen is that we will do it here and we shall also export, but it is a huge increase in demand which we can capitalise on.

In Brazil over the next three years if the plants go in there will be an increase in production of 1.3 Million tons of paper pulp.

2. Our Capacity to Grow Wood:

The second opportunity that I believe we need to take advantage of is the capacity we have now to grow wood. Because of the coming together of the demand for wood, because of the tremendous pressure from the community and the environmental movement in favour of trees (despite the fact that they tell me that climatic change is going to make it ridiculous to grow) plus the pressing need to address some major environmental problems associated with water in Western Australia, we can bring all that together. We can grow the trees for a commercial use but at the same time we can demonstrate clearly, now that research has shown it, that we can reverse salination, we can increase water yield by thinning our forests, and we can make a major contribution to reduce neutrification.

If we integrate the growing of trees which in themselves will make a dollar, with that tremendous capacity to reverse those environmental problems which in themselves are costing the Government a billion dollars or more, then we are obviously on a winner.

Now we have the capacity because we have the technology in the area of pollution control, we certainly have the capacity to grow trees and if we get off our butts and get our costs down and look for markets, we will be able to sell them. Put that together in a package.

3. Value-added Wood Products:

The third opportunity we have is to look at the other end of the produce market and that is the value-added hardwood market. Again we have a combination of factors which gives us a comparative advantage. Where in the world have we got a hardwood forest which produces high quality timber, which has got a future - I can tell you - there ain't none - we are one of the few places in the world that has this sort of timber

and we also have the technology now to convert it properly because of the work that Phil Shedley and his colleagues are doing at Harvey with industry and we also have in Western Australia an embryo of a very significant group of artisans who can produce the goods.

We talked about Jarrah as value-added, I think one of the most exciting things is that we are now starting to crack the technology that can make Karri into beautiful value-added products also.

Of course we are going to have to do that for the hardwood forest because all the industries are going to do it because we are going to increase the price of hardwood so that they won't be able to use a huge proportion of it for low value products because it is not going to be economical. They have to pay their way, that means they have to produce a product which earns a big dollar on the overseas market.

The opportunity we have now is to introduce integrated logging - one stop logging - I mean the crazy situation we have now six is different log trucks going into a coup and pulling out a different product each. By introducing integrated logging we can have one stop logging and at the same time we can do our silviculture and there is also the opportunity for us to reduce some of our costs by training those people not only for silviculture but for fire control. I have already mentioned utilisation but I just want to say to you there has been a revolution in utilisation. Who would have believed four years ago that Bunnings would be now wrapping their sawn timber in glad wrap! and producing videos promoting the use of Karri and Jarrah for value-added products.

4. Equity and Security:

Another opportunity we have which is I guess more a philosophical one - but one which I am very committed to - is that we have the chance to make sure for the first time in the whole history of forestry in Western Australia that there is some equity. We have to live with a partial monopoly but we don't have to put up with the small guys not having security of tenure and one of the most pleasing things that has happened to me in the last twelve months is to see these small guys come in and talk about investing in their mills. We can create a small industry sector which has a future which won't be dominated by one company.

Prior to the timber strategy there was what I call the 'Lazarus' concept. The strategy then was to say that we let the industry die while we screw them to the ground and reduce the cut and in 50 years when the re-growth forests matured

they would rise like Lazarus and we would have a new industry. One of our great challenges is to structure our ability to produce logs in such a way that the industry maintains continuity and security because I tell you, Lazarus won't happen - if the industry dies we have lost the industry, we have lost the opportunity. But the most important thing that we must do in terms of our own activity is to be more commercial. We have got to be more commercial than those in the private sector. We are still not able to accurately identify what we are spending - let alone try to control the costs. Now I just want to make a real plea to you over the next twelve months. I was the one who cancelled the Journals because I thought they were useless; I never filled in one honestly in my life, and I am sure they were never used. But we have re-introduced the Journal, the Time Sheet System, because it's the only way we are actually going to quantify our overhead costs in the timber industry.

Now the stupid thing that is happening - I remember it happening when I was 14 yrs old at the Sommerville Pine Plantation when Peter Hewett was my DFO at Mundaring (he never knew this) but what used to happen was, because the guys at Sommerville had to be employed and kept on for fire control, and were stuck out in the bush to prune pine trees, of which we never did very many because it was hot and we wanted to be prepared for the fire. But what happened was the cost of that was put against pruning pine trees and that's why we have outlandish costs. Now I am sympathetic with the need for the Regional Managers to employ people but for heaven's sake do it in a way that doesn't mess up our commercial sector, there is no reason why - there is an abundance of work out there - there is no reason why we can't put them into National Parks or other areas. Don't put crews on just because they have to fill time in and certainly don't charge it. I was just amazed that we had this stupid constraint because we pay our guys on capital and someone's CRF we can't move them from the forest areas to the National Parks areas. They are the sort of things that you at the region and district have got to get onto because we must be more commercial than the private sector and all of our staff must start looking at two sides of the balance sheet. Roger, Don, Peter and I have to do it and I tell you it's a pretty agonizing experience. I admit I never did it when I was in research, I just put my hand in a bucket and pulled out the money, didn't worry where it was coming from. Well those days are gone; if we are going to survive we must be commercial.

To be able to capitalize we must be competitive, because I tell you what if we are not, the Brazilians will be in there ahead of us.

Some Critical Factors:

There are a few other things I just want to talk about briefly :

1. Inventory.

We cannot sell what is in the shop unless we know what is there and I understand that we are making great progress in the Jarrah inventory and for heaven's sake I hope our pine inventory is right.

2. Silviculture.

I believe that we have been brilliantly successful in the silvicultural treatment of Karri - probably because I had nothing to do with it - and I think we have been moderately successful with our pine plantations. We certainly have the basics but there is a lot more to be done. But the area of course you all know that we have not done very well in is the Jarrah forest. Now partly that is because we didn't believe it had a future. I am telling you it has got a future and we have to manage it as if it has and also we didn't have the residue industries to drive that silviculture. We have that now and I believe one of our great challenges is to convert that Jarrah forest from a state where it had no future into one where it has.

3. Public Relations:

I would like to speak briefly about what is a most important factor and that is public education and public relations.

To a large extent I spend most my life doing that, and I don't know how I go except I get abused every now and again but it is absolutely critical throughout the Department that people are aware of the need for public education and public relations and that is including your own staff. I think one of the things that I have detected over the years is a reversal from the days twenty years ago when everyone worked in timber under Al Harris, to today's scepticism or under valuation of the timber industry sector of our job.

It is important that we point out to our staff that it is an important industry and it is important that we educate the industry itself. And of course we need to go out into the market place to hit the local community to make sure they appreciate the industry. I will be sending out a circular soon to encourage you back to the free wheeling days we had in the beginning of the Department. Then I want you to go out and aggressively get into the local media like Alan Walker does and I am quite prepared to accept the odd mistake like I did the other Friday and there won't be any come back but its

important that everyone in the Department gets out and takes part in that public relations exercise.

In conclusion I want to say it is important to have confidence and a perspective of what we have achieved.

It is important to look forward, but it is also important to look back and see what is being done and I can tell you that we can take a lot of credit for a revolution that is occurring in the timber industry. From an industry that was going down the drain to a modern industry with great capacity to employ far more people in stable long term employment, with great capacity to earn at least half a billion dollars in export income and we can take a lot of credit for that because what we did with the timber strategy was to break that nexus. The problem with the timber industry was that they wouldn't invest until they got security, we couldn't give them security because people looked at their mills and said "who would give security to that crappy outfit". What we have done is to take the bull by the horns and say "right here is the security" and you have to give them credit for how they responded. In the next year or so we will be signing softwood contracts which are worth in terms of royalties to the State, \$300 million. Within the next hopefully couple of weeks we will see the beginning of a new softwood mill at Mundijong and we have a commitment for one at Greenbushes, and in the hardwood sector, we are looking at over \$150 million in new mills or refurbished mills. \$10 million dollars is being spent just on one mill at Greenbushes. If you look at the timber strategy and I have had very little to do with implementation, but I want to say you should take great pride in what's been achieved already. If you look at the 41 areas that have been identified which we needed to work on to implement, over three quarters of them are well on the way to being done, so you should take great credit for what is happening.

Finally, I would like to give you a little anecdote to make my final point which is I think probably the most important one for the next two days. While it's important that we feel proud and feel confident about what we can achieve, it is also very important that you take the opportunity to tell us, tell everybody, where you think we are going wrong. I had the unfortunate experience - and I don't say this with any bitterness of inheriting a situation where we had overcommitted ourselves to supply pine trees and we sat (Peter and I) around a table for 5 or 6 months and I had cold sweats about it because the contracts had been signed, and what people who came in and tried to help us sort that out said to us invariably was "ten years ago we told the Department that this was going to happen" and that went right up to the top - what I am saying is, it is very important that if you think we are doing things wrong and sure we are going to do things wrong, it is up to you and to

encourage your staff to be critical.

Now I know it's very hard, but I will tell just one little anecdote about poor old Alan Sands down at Manjimup. I remember about 20 years ago when I was a young and vigorous research worker at Dwellingup, going around with the standing committee for Forestry with Bruce Beggs and Bruce was really giving it to them about how we were going to solve this die-back problem by that wonderful technique called "hygiene". Peter Kimber was my boss and he gave a little speel on it and he said "I think Syd Shea wants to say something about this" and I said it was "utter bullshit" and Bruce Beggs pirouetted around but to his great credit, that was all he did. And the other day I was down looking at the stream and road reserves and Alan Sands (and Alan Walker will tell you this), made a similar comment to me about landscape values, I felt my face flush and I said to Alan, "Mundrabilla" but at the end of the day after I had a couple of beers I remembered the similiar situation that I had been in. The great strength of our Department is, and I can assure you despite my jokes about Mundrabilla and despite the fact that Don Spriggins knows that I shout down the phone occasionally, the most important thing we can have is a free exchange of information even if it means criticising me, Don Keene, Peter or Roger because I don't want the situation 10 years down the track where you can say "we told you so". Now is your chance to say it - I wish you well for the next two days, I hope to be here for most of it and I hope that we will have a very useful interchange.

THANK YOU

QUESTIONS AND ANSWERS

(DR. SYD SHEA)

Question:

JOHN BARTLE:

The focus on timber is a bit narrow and contrary to the multiple use concepts. What about other forms of production in forest areas e.g. water and products of mining, shouldn't we also feel confidence and determination to improve those commodities ?

Answer:

SYD SHEA:

If Mr Bartle had been listening he would have known that I had referred to water, both in the sense of increasing water yield from thinning and in the huge dollar to be made there. I think we calculated at one stage, (John and I were at Dwellingup), that if we got 20 cents a cubic metre for the extra water produced it would mean the value of the thinning programme would be \$300 per hectare per annum or similar. So there is potential there, and of course on the other side, if we can reverse salination we will save a huge amount of money.

Now one of the problems we have in that exercise is to intersect that dollar, because what happens when you talk to Joe Berinson about the benefits you get as a consequence of your activities, he says "that's lovely, Syd" but it doesn't put hard cash in my hand. The thing we have to do also is to intersect the tourist dollar because again we provide a tremendous amount of service to the tourist industry and get very little back.

Now as far as mining goes! One of the things about the book 'Pursuit of Excellence' was that although its very good and we are very talented and have a wide range of skills, there is a limit to how far you can stretch yourself, and in mining I don't think it's our responsibility in terms of production. I think the way you deal with mining is through your role in the community John, the way you vote and it is really a Mines Department role rather than ours. However, when mining does occur or particularly when tourist developments do occur we want to make sure we get a piece of the action. For example we will charge, in terms of tourist development, 10% of gross at the Matilda Bay Restaurant, giving us an increase from approximately \$750 per year to \$80,000. And we are talking about looking at hotel complexes

next to our National Parks in the North (maybe three). Again we want 10% of the action!

In the Grand Canyon National Park, the concession there turns over \$50 million per year and what the National Park services in the United States are recognizing, unless they get a piece of that action, the service will go down the drain and that's exactly the same thing we have to do.

Question:

MICK ZWART:

It seems that the public and the politicians want CALM to concentrate on Conservation, not the Timber Industry. What are your thoughts on that ?

Answer:

SYD SHEA:

My thoughts are - It's our job to get a balance, but that exercise last year which so many people put so much effort into, has gone a long way to achieving that balance. There is no question that there is a demand in the community for conservation but there is also no question that there is a demand in the community for jobs and I have to tell you my "Yesterday's Men" story; one of the things that I say consistently when I talk to ANZUS and to all those people that sit in Subiaco, who say we are going to have National Parks right across the Karri Forest, is "OK, you go right ahead and do it because my job doesn't matter - I will still be earning my wacking great salary". I recall one of my favourite songs that "Furies" sung at school "Yesterday's Men" - a lilting tune about the decay of Mills in Ireland and the key phrase in it is 'we gave them the best years of lives and they made us yesterday's men' and I say, give them that little story and I don't mind if you want to shut down the Mill, but you be at the gate at Pemberton and do it. I feel the politicians are starting to get the message that it is very well to go to one extreme and chase the 2% in the marginal seats in the city, but look at New South Wales and look at what is happening in other parts of Australia and ordinary people are saying: "we have gone too far".

Now our job is not to be involved in politics - our job is to provide the information as we did last year, but of course you all are private citizens and you have every right to lobby your own politicians. But our most important job is public education - trying to get that balance and let's not deny it - it's extremely hard to sell cutting down trees. That is the reasons why we want to push the Globulus Project, because that way we get a dollar each way. It is the reason I

made such a fuss about saving the whales. Because we cross-subsidise them and it allows us to cut down a few more trees, they can't think that we are such bad fellows. That is the way it is won and it is a hard battle - but we will win!

Question:

ALAN WALKER:

Does the industry have the capacity to pay higher royalties for timber ?

Answer:

SYD SHEA:

One of the best ways to establish what is the real market price is to use the market system and of course we are in this strange business where we have a monopoly on both sides. It is very hard to introduce the market into it, but we have done it to a certain extent and Don rang me yesterday and the tender for the 2nd grade logs was won by a guy who bid \$35 per cubic metre.

Now I agree with you that we have to increase the price, but if you look again at our record, it has gone up from \$11 per cubic metre for 1st grade Karri and Jarrah logs - we have made huge progress. We have increased our wood-chip royalties 300%. There is a long way to go and I say to people for their own survival, they have to do it. But also I think we have to be very careful that it is done in such a way that doesn't disrupt the industry. We have to edge it up as we go along but in fact, I believe, once we start signing these big contracts will go to target royalties straight away; for example, Whittakers has already agreed that once that contract is signed and their new mill is built that they will go to target royalties. And we will have the other companies because one of the conditions of dishing out the first 50% of their quota is that they go to target royalties. And we will, with George Malajczuk's help with the model, get a more accurate assessment of what we have to get to allow it to pay. In the end what we must realise is that there is a limit to how far we go while we are still selling a product at an undervalued price in the market place.

Now if we get proportionally more and more Jarrah and Karri in the high value products then obviously the opportunity is there to increase revenue or to increase royalties. But then again I think we can sit back and feel very satisfied at what's happened in three years. We have tripled our revenue for the Department and a large proportion of that is because for the first time, since the industry started (and Pat McNamara was gracious enough to give us the compliment),

there has ever been a comprehensive review of royalties.

Comment:

FRANK MCKINNEL:

It is significant to note that for perhaps the first time ever there is a constructive partnership between the industry and the Department. This is a very big step forward.

Question:

PETER BEATTY:

Regarding your comment that "The Department must become more commercial than the industry", is that likely to be saleable to the public ?

Answer:

SYD SHEA:

There is absolutely no question that it is saleable. The general community it is saying to us, "it wants more services but it doesn't want to pay more taxes". What we have chosen to do is not to ask for more money, but to become more commercial and that is why we are going to earn \$51 million opposed to \$19. I feel it is very sellable in the community. It is very important that we sell it to our own staff. One of the incentives is that if we are not commercial then we will have a significant proportion of the timber function ripped off us.

PREDICTING THE DEMAND AND SUPPLY FOR TIMBER PRODUCTS

GEORGE MALAJCZUK

I would like to start by giving you some background on Timber Production Planning before talking about domestic demands and supplies.

In our planning of future timber production we first have to look at future world timber demands and supplies and see whether we can import enough timber cheaply rather than producing timber ourselves, and if you look at world timber demands and supplies, the main point that emerges is that there is no guarantee that W.A. and Australia as a whole could import large quantities of wood at the right times and at economic prices from other countries in the future.

Some of the specific points to note about this are as follows:

- . Firstly, world demands are increasing rapidly because of increasing world population. Forecasts of world industrial demands of wood for the year 2000 range from 1800 million cubic metres to 4000 million cubic metres of logs.
- . Secondly, world supplies are not increasing at any significant rate, in fact they could be decreasing because of de-forestation and over-cutting in many parts of the world and because of the slow growth rate of trees.
- . Thirdly, it's generally agreed that world supplies will be tight in the future and prices are expected to increase steeply perhaps by as much as 70% by the year 2000.
- . Fourthly, Australia cannot rely on Chile and New Zealand and many other countries for wood supplies, partly because there is competition for timber around the world. Japan, for example, has potential to absorb much of the Pacific region's exportable surplus. It has been predicted, for example, that Japan's requirements in the year 1996 will be some 80 million cubic metres and its requirements in the year 2005 will be some 116 million cubic metres compared to the exportable surplus from Australia, New Zealand, Fiji and Chile of some 40 million cubic metres. So Japan's requirements are expected to be twice as much as the exportable surplus from the Pacific region countries. Another point is that imports are likely to be very expensive in the future, adversely affecting local consumers.

Imports have become very expensive over the last several years because of the devaluation of the Australian dollar.

Another question we have to answer when we do our timber production planning is whether W.A. could rely on the Eastern States for timber. The answer to this is probably no! It is unlikely that W.A. could import significant quantities of timber at economic prices from the Eastern States in the future. This is because there is no mainland State planning for large exportable surplus in the future. In fact, it has been predicted that Australia's long term demands in the future will exceed its long term domestic supplies (and that is for both chip logs and for saw logs). Even if W.A. could obtain timber from the Eastern States there is a cost of over \$100 per cubic metre to import the timber into W.A. and this cost could be passed on to W.A. consumers thereby adversely affecting them.

So the upshot of all this appears to be that W.A. should largely rely on itself for timber supplies, and where possible, take advantage of export opportunities that would benefit the State socially and economically. W.A. can produce timber economically and efficiently and W.A. timbers are expected to remain competitive in the future, partly because of the high costs of freighting timber to W.A. and because of many other factors.

Some of the benefits of W.A. largely relying on its own timber supplies are listed here, for example, supplies to industries are reasonably certain, consumers potentially benefit as no high importation costs are involved and there are many social benefits i.e. employment and decentralisation effects.

I would like to now focus on predictions made of future W.A. wood demands and supplies and I will start with the predictions made of future W.A. demands for sawlogs (as shown in the overlay).

Sawlog predictions for W.A. have been made by the Bureau of Agricultural Economics, by Biz Schrapnel, which is a consulting firm in Sydney, and by CALM. I shall only have time to deal with the CALM predictions and we have to recognise that demands are very difficult to predict for the very long term and the true demands could lie anywhere within this band of uncertainty and demands. CALM's predictions are the most conservative and based on the most up to date data.

CALM has predicted for example, the domestic demand for the year 2020 could be somewhere between 1.1 and 1.36 million cubic metres, whereas the Bureau of Agricultural Economics in 1982 predicted that the demand for that year could be twice as much, so therefore there is a lot of uncertainty about demand and our demand predictions are conservative.

I shall indicate how we predicted sawlog demands. At first we had to indentify the products made out of sawlogs i.e. sawn timber, plywood, veneer, railway sleepers, mining timber, poles, bridge timber and then predict the demands for each of those particular products. We then had to convert the product demands to round logs equivalents, using appropriate recovery factors and finally sum the individual round logs demands to get the total saw log demand.

This particular overlay shows we have predicted the demand for sawn timber, plywood and veneer (I haven't mentioned plywood and veneer, that being part of sawn timber). We predicted that the demand for those products will increase slightly over time, which is mainly due to population growth. (Incidentally we have predicted the per capita demand will fall, but because of the population growth, the total demands will increase slightly).

Concerning other products, we predicted that the demand for railway sleepers will fall mainly due to substitution, i.e. concrete and steel being used and replacing wood and railway sleepers. In regard to mining timber we have also predicted a slight decrease to 2010 and an increase beyond approximately 2020. These estimates are based on the Mines Department's predictions and Western Collieries prediction, and with poles and bridge timber, we have predicted the demand will slightly increase and overall, adding all those products, the demands will increase from some .9 million to 1.5 million in 2050.

Focussing now on sawn timber, plywood and veneer because they make up most of the demand. The demands for sawn timber, plywood and veneer were predicted by developing an econometric model and this overlay shows the model that was developed. There are three equations in this model and to predict the demand for sawn timber, plywood and veneer in any particular year we went to equation one and plugged in predictions of future population growth, GDP growth and the ratio of interest rates to inflation rates to get the value of all building commencements and alterations and also the value of wood and furniture produced.

From there we went to equation 2 and plugged in the per capita value of this as predicted, then we plugged in predictions of the future timber usage per dwelling and predictions of the number of houses plus flats to predict the per capita demand for timber and went on to equations 3 and multiplied the per capita demand we predicted at time T times the predicted population of that time to work out the total demand for sawn timber, plywood and veneer at this particular point in time and then to convert it to the round, we converted the prediction by the recovery factor.

Much of the data for the independent variables of this model were predicted by other authorities, for example, Treasury predicted the future population figures for W.A. The Bureau of Agricultural Economics predicted future growth of domestic products for Australia and so on. The model is statistically significant, it is defensible, we can defend it.

You will note that we made two predictions of domestic demands (that is in the strategy paper). The two predictions are so-called average demands and the high demands. The average demands were predicted by using conservative estimates of future G.D.P and population growth. The high demands were derived by using slightly higher estimates of G.D.P. and population growth but the so-called high demands are still realistic as they are based on G.D.P. and population figures which are in line with what has happened in W.A. over the last 25 years. Also we would like to bring to your attention that we made predictions of future demands with an export component. The export component is meant to mainly represent high value products. We believe that W.A. could benefit from production and export of high value goods. The assumption made was the value of high value goods exported would be some 10% of hardwood production in 1990 which reflects the present situation as regards production of high value goods and then it would be 30% of hardwood production in the year 2000. That is a target that we should aim for.

Because of the time factor I won't be able to go through the demands made for the residue, therefore I will now switch over to supplies. I shall talk briefly about supplies, other people will talk in detail about saw log supplies.

With respect to saw log supplies we looked at the supplies of hardwood and softwood sawlog that could be obtained on a sustained yield basis from existing Government and private forests and these supplies are shown on the overlay.

Once we had determined supplies from the existing resource in W.A. we then compared these particular supplies to the demand predictions that were made and then calculated the softwood plantation requirements for W.A.

When looking at the overlay, shown is the supply curve and if we only focussed on the supplies from the existing forests it was found that those supplies didn't quite fall within the band of demands for W.A., so therefore we calculated the plantation requirements that would make supplies fall within this band of demands. We then calculated that 2000 hectares of new *Pinus Radiata* plantations per year is needed to give rise to that saw log demand curve that falls within the band

of demands we predicted, and the proposed plantation programme is shown in this particular overlay. We assumed that private planters would continue planting 450 hectares of plantations per annum and 2000 hectares per annum is needed to get that supply curve made up of 1000 hectares per annum for the South Coast Region, 500 for the Central Region and 500 for the Southern Region.

QUESTIONS AND ANSWERS

(GEORGE MALAJCZUK):

Question:

ROGER ARMSTRONG:

Is it wise to base our plans for supplying timber on conservative predictions of demand?

Answer:

GEORGE MALAJCZUK:

The point I was trying to make is that we are considering the band of demands. We have considered all the demands that have been predicted for W.A. and our supplies fall within that band of demands. We considered the B.A.E. demands, the Bis Schrapnel demands and considered our CALM demands. We are not just considering our own CALM demands, we have also considered the other demands.

Question:

KEITH SLATER:

How do you plan ahead when there is such a large variation in the different timber demand projections ?

Answer:

GEORGE MALAJCZUK:

The fact that there is a difference of 100 which goes up to 400 is due to the GDP and the population variables and we subjectively looked at those two demand curves and the other demand curves and we felt comfortable with 2000 hectares per year giving us that supply curve that seems to sit between the very high BAE demands and our conservative demands. You can't be more precise than that, there is too much uncertainty, you can only take a punt, be subjective and say well look, this seems to be the best policy.

Comment:

FRANK McKINNELL:

I think it has to be appreciated with these estimates that you can be reasonably precise over the next five years, less precise over 10 years and getting worse and worse as time

goes on. When you're talking about 60 or 70 years ahead, you can be a long way out but also by the same token we have plenty of time to adjust the programme as things go along. The other point we should be emphasizing is that these plans aren't set in concrete so far as actual levels of plantation areas are concerned, they are kept under review every five years and adjustments will be made constantly.

Comment:

GEORGE MALAJCZUK:

In five years time if we think we are over planting we will just reduce our planting rate.

Question:

JOHN BARTLE:

How do we account for possible massive subsidations in other parts of the work that might disturb the demand projections, as has happened in the E.E.C. ?

Answer:

GEORGE MALAJCZUK:

I can't really see the situation changing too much. World demands are increasing rapidly and supplies are not increasing that much and it takes a lot of time to produce forests. Syd Shea might have an answer to that one.

Comment:

FRANK McKINNELL:

Also on the economic scene around the world, the tide is running against subsidisation. The E.E.C. can see that the terrible fix that it has got itself into with these subsidisation policies in agriculture. I don't think we have sympathy for extending that sort of subsidy to forestry, especially because in forestry you are committed over a much longer period and let's face it Governments seem to be sailing close to the wind around the world so far as their Treasuries are concerned.

Question:

ROGER ARMSTRONG:

Have we done anything about predicting changes in expected supplies of timber in light of recent thoughts regarding the greenhouse effect and depletion of the ozone layer ?

Answer:

GEORGE MALAJCZUK:

You're possibly alluding to the fact that supplies could be less than we predicted, is that correct ? We have allowed for 5% loss in hardwood supplies in the future and 10% loss in softwood saw log supplies but we haven't really very much information to go by. In a couple of years time we will review the situation again - review our supplies again and our demands again.

Comment:

FRANK McKINNELL:

Roger has raised a very good point there, perhaps I can answer on a broader brush than George is able to do. This is a matter of concern to the Directorate and we are taking steps to set up a number of study groups which will evaluate the effect of the climatic change on the assumption that if you don't take reasonable steps now, if it turns out to be as bad as some think it might be, we could be in big trouble further down the road, so the conservative responsible approach is to look at it and take steps now. If the whole issue fizzles out - well it's no great loss. But if it turns out serious, well we will have acted in time. You will see those study groups put in place over the next few months.

Question:

JOHN KAYE:

What proportion of sawn timber used in W.A. is currently imported ?

Answer:

GEORGE MALAJCZUK:

It's always been a very small proportion, which indicates that we are very isolated and we are fairly efficient, it has always been around 1 or 2%. Over the last couple of years it has climbed up to about 7 or 8% - but it is still a very small component when you look at other States. In New South Wales the percentage is up to about 20 or 30% sometimes.

Question:

DON KEENE:

Can you comment on possibilities of substituting what is currently residue timber into a higher grade timber ?

Answer:

GEORGE MALAJCZUK:

What I was going to talk about is how we predicted these particular demands of residue materials, sawlog residues and other minor forest products.

The figures on demands for wood chips are based on WACAP's estimates of its future demands for chip material and incidentally should a pulp mill be built in W.A., these wood chips will be processed locally, probably supplemented by chips from the hardwood share-farming programme. These fuel wood figures represent the possible export to S.E.Asia of wood briquettes. The mining timber figures represent the goldfields and coalfields demands for small size material. These figures are the Jarrah figures, that is the expected demand for Jarrah logs, for Silicon production. These figures here on softwoods were predicted by Wesfi, we predicted these fence-post demands using GDP and population growth. Firewood demands were predicted by S.E.C. and solid fuel merchants and these pulp and paper demands were based on facts & figures on future demands for pulp wood in Australia.

The figures are rather academic because we have no pulp mill, but they are the demand figures on residue material.

I think it is true to say that with those supply predictions that we made, there will be enough by-products produced to satisfy much of this demand, generally with the hardwood share-farming programme that can be geared to feeding pulp into the pulp mill, if we get one.

Comment:

DON KEENE:

The point I was going to make or I hoped George might make is that on the left hand column there is something that I overlooked - about 2 million cubic metres and I think I am correct in saying to you if that is the demand thing that I thought I just heard you say - that it can be matched with the timber we have available, so it doesn't really take much. If we did happen to be a bit short on the saw logs, just by a slight change in utilisation, we have a vast store of cellulose or fibre that we should be able to use into a higher grade of log to feed the sawmills.

Comment:

FRANK MCKINNELL:

The other comment there that might be made is that we are very optimistic as to the outcome of the research on utilisation of small hardwood logs which would in effect increase the re-source available.

INVENTORY

(HUGH CAMPBELL)

The timber strategy paper puts a very great deal of emphasis on the utilisation of classes of wood that have not been utilised in the past. Because it hasn't been utilised in the past it is the component of the yield of the forest which has been least accurately measured, so that points us back to a remark by Syd Shea, in which he questioned the adequacy of our current resource data and it is in that particular context where the weaknesses of our existing data are most apparent.

It is my brief today to talk about where those weaknesses are and even more to tell you what we are going to do about it and in fact doing about it right now.

The first question that arises is; where the data comes from? Most people here today will have heard about two major categories of inventory that we have carried out in the past. The first one being called the Resource Level Inventory which was carried out from 1966 to 1973. It was one of the data categories used for the strategy paper and because it is so old it had to be adjusted a little, especially to account for areas lost to conservation and updated to account for extractions from the forest during that considerable period from 1973.

The second category of inventory used was Management Level Inventory and most people are more familiar with this than they are with Resource Level Inventory. Management Level Inventory was drawn upon, in particular, for the chipwood license area in Karri forests resource, also for isolated areas in the north and central regions. As far as the southern region Karri data was concerned, the data was also adjusted to account for rather dramatic changes in utilisation standards that have been taking place over the last few years and which Syd Shea also referred to.

Resource Level Inventory (R.L.I).

I shall now give some details of the Resource Level Inventory and to do it I borrowed from the terminology in the corporate plan, this "Mission or Goal". Now the Goal or Mission of Resource Level Inventory is to provide the information needed to regulate the cut of the native forests and to plan for the overall supply to the sawmilling industry and to plan for the development of wood based inventories. In other words, the information RLI inventory was to provide was information at the very level we are talking about - the timber strategy level and not at the logging plan level.

The objectives of the inventory in those days, was to provide a snapshot of the wood resource standing in the forest at that time. It was a fairly extended point in time since it stretched from 1966 to 1973, but it was really just a snapshot, and it obviously doesn't take into account dynamics of forest growth or what is happening in the forest.

This particular objective implies in particular, that adaptability of the resource information was not a designed feature in the sample. It was not designed to be updated by the direct measurement in the forest.

The sole objective was to measure the volume of wood of sawlog quality according to current standards then. This included the available sawlogs in marketable size of the major species and also the measurement of potential sawlogs that are in the amount of sawlog quality material in trees which were undersized, i.e. not big enough to supply the sawlog.

Thirdly, because at that date the possibility of a marri chipwood industry was speculation rather than fact, the inventory did not measure the marri chipwood resource because the industry did not exist. There are no strict or well defined specifications for that type of product and so the measurements of marri chip inside the Jarrah forest, resulting from RLI, are not what you would call very accurate.

The gross bole volume of dead and unmarketable trees of the major species was also measured in those days.

For some of the reasons for which I have already indicated there is a certain amount of uncertainty involved in using RLI data for these purposes. The first one being that the latest data is dated from 1973 and the implications of that are, for example, that there has been a considerable growth, we hope, since then which is not accounted for in the figures presented in the strategy paper. The other implication is that there have been, as we very well know, considerable changes in standards of utilisation since those days, so that we hope that we actually have rather more sawlog in the forest than would be indicated by RLI data.

The other uncertainty is that as I mentioned previously, we measured something called gross bole volume of major species. Gross bole volume being what is contained in between the ground, the crown break of the tree. RLI measured the gross bole volume of major species of un-marketable trees, it did not measure the gross bole volume of marketable trees, it only measured the sawlog component of marketable trees and so there is probably a considerable volume of wood in the forest in what were then called marketable trees which RLI did not even measure.

That class of wood is bound to be of great importance in the charcoal/silicon project. It is industrial waste generated by sawmilling operations (what is left lying on the ground after a sawmill logging operation).

As an overall general comment on RLI, it is not really adequate for what we want in the context of today's plans on the strategy paper. In its day, in 1973 and before, it was in fact, an extremely well designed and a very competently implemented inventory and I believe it met all objectives that were set for it.

It is a great shame this RLI inventory fell into considerable disrepute in the early 70's and one of the major reasons for that happening was the completion of the inventory which coincided with a massive downturn in the sawmilling industry, which led to a very drastic drop in utilisation standards amounting to about 40% and it was a sad thing, but it has lessons for us who are now faced with designing new inventories, and the lesson is that we had better design a kind of inventory that can be modified and updated to account for changes in the industry such as that.

The second reason for the inventory data falling into disrepute is maybe a little technical, but after George Malajczuk I make no excuses for all that.

The RLI data was very badly misapplied. RLI resource level inventory is an extensive inventory, which means it gives you information about your whole forest. In spite of that there was a need in those days for logging plan information, especially down in the Southern region. Because it was the only data around, that data was used. If this is a forest block and these are the strata, on which the inventory was based and designed around, then what you can say is what RLI gives you is very good, legitimate and valid estimate of what is in here, what is in there, and what is in the forest block. What it doesn't give you is good information of about what is in there - a cutting coupe! That is what the data was used for, it was totally inadequate for that purpose and it fell into disrepute. That is another lesson for us. There is no way I would allow any new extensive inventory data to be used for that purpose.

In the early 70's, as I have said previously, there was a need, especially in the Southern region, for the kind of inventory information that allows the preparation of detailed logging plans. The answer to that, as everyone knows, was Management Level Inventory. If you think back to the mission and objectives of Resource Level Inventory, these are totally different. The mission for Management Level Inventory was to provide the information needed to develop detailed logging plans, which is a requirement to be able to give a valid estimate of what is on small units of land and particular cutting coupes.

The objectives were to provide estimates/resources on units as small as cutting coupes, to within plus or minus 10 or 20% or thereabouts. MLI data is, of course, essentially shortlived because it is out of date as soon as you have mounted the operation it is designed to assist in. Therefore, there is no point in MLI looking ahead to speculate about what products and what classes of material that are in the forest which might be used in the future. We are only interested in the current set of operations. Therefore, MLI tended to concentrate on the products that were currently utilisable of set specifications.

By the way, those comments about MLI and small units is not quite true in the Southern region. It is not at all true in the Southern region where that MLI was developed, because MLI in the Southern region was in fact applied extensively over the whole of the chip wood license area. Nevertheless the design of it still allows valid information about small units of land on the cutting coupe scale.

If I can recapitulate some of the material I have covered so far, especially in terms of sources and uncertainty in the data or information that we used in the preparation of the strategy paper. We can say that the resource in the areas of assessment are not precisely known, after all there have been very many different prescriptions applied since 1973. Precisely what prescriptions were used is not really very well known and so it is very hard to get even a good guess at what is left in these areas. Certainly there is a considerable resource left in the areas cut over in the middle 70's. We tried to take those into account but obviously not with precision, that is in Jarrah selection cut forest, I suppose you could say the same for the Karri regrowth forest. As yet we haven't got a very precise idea of what is in the Karri forest.

I mentioned before that there was a lot of wood in the forest that neither RLI nor MLI actually measured. There is the uncertainty about growth - the forest has certainly grown a lot since RLI, and we do not as yet have a proper handle on the implications of what has been over the last few years a substantially and continuing and upward trends in utilisation patterns. However, the overall impression as far I am concerned is that there is - if you analyse those statements - likely to be more wood in the forest than we accounted for in this strategy paper rather than less.

New Jarrah Inventory:

In view of the weakness in the data we used in the strategy paper (I have said "recognised weaknesses") you will notice that one provision in the strategy paper is for a new inventory with the data coming up by 1991 and I have five minutes apparently to cover all of that.

The experience with RLI and MLI that I talk about, suggests rather strongly that this new inventory has to take into account a range of log products not previously measured in the other inventories. It has to take into account the probability of rapidly changing utilisation standards, and also to the fact that it has to be updateable and even take into account that even ground wood and branch wood are likely to be utilisable product in the future.

We turn to objectives and missions and you can see that the mission is more or less precisely the same as it was for RLI. We are looking at the kind of information that is used for strategic planning rather than operational or logging planning. What we have to be able to do with the kind of information is to get a much more precise calculation of what is the sustainable yield of the Jarrah forest. We have to provide the kind of information that tells us what the potential is for the development of new kinds of industry such as the silicon industry or the pulping industries. tripled industries based in the general forest.

The objectives are going to be or are to measure the gross bole volume of the Jarrah forest to within 2 to 3% over the whole forest which is more or less equivalent to about plus or minus 20% for land units about the size of a forest block, and we plan to measure the gross bole volume of the major species and some of the minor species too. Because this class of inventory is strategic, it has to be anticipatory. It needs to anticipate that there might be utilisation of material which is currently not used.

We are not going to be stuck with a situation where there are components of that forest that we haven't measured because it is not used. We intend to measure the lot, all the gross bole volume that is.

The second objective is to be able to break down that gross bole volume into utilisable and potentially utilisable log products. So we are going to measure all of the wood and then break it down into estimates of the volumes of specific products including sawlogs, chipwoods, firewood etc.

Now to follow up a comment I made before, we have to collect that product information in a form that allows us to adjust for changes in utilisation standards that we anticipate. The whole thrust of the strategy paper is to force continuing improvements on utilisation standards, this must be taken into account. Also it is our objective to measure additional components of wood which are not included in the gross bole volume and those are; what is left lying on the ground (groundwood), and what is in the branches.

How do we measure gross bole volume ? Gross bole volume will be measured in the first stage of an inventory which is now in progress and it is measured by the interpretation of

aerial photographs. (Aerial photographs captured by helicopters and I am sure all of you have heard of it and some of you have seen the helicopters flying around your districts, especially in those districts in the Central region of course).

The photographs are of points in the forest which are on a rectangular grid of half of kilometre by one kilometre. At each of those points we put a 20 metre radius circular plot - now if you work out your arithmetic you will see that what we have is one plot per 50 hectares of forest and the size of the plot implies that we are carrying out a 0.25% sample of the forest - now to put that in context; RLI actually used around about a 0.5% sample, so apparently we are not going to get such good data as RLI, but in fact in compensation for all that we are not really using very small plots (20 metre radius), which I think is about .12 or so of a hectare area, whereas RLI used .8 hectare plots usually and so you see we are getting a lot of small plots as opposed to a few larger ones and so the dispersion around the forest is much greater and really in that sense we are getting much better information.

What we actually measure on these aerial photographs are the heights of trees within the 20 metre circular plot and by using appropriate volume equations, (single trees volume equations), we can then calculate the gross bole volume of the individual trees on the plot and by aggregating them the gross bole volume of the forest.

That is how we measure gross bole volume! We plan to measure log products in the second stage of the sample. Now 1/10th of the photo plots are going to be visited on the ground by assessment crews and the trees on those visited plots will be measured very precisely by the ground crews using dendrometers and sophisticated measuring equipment. What we are not going to try to do is measure products. Because we cannot adjust the data to account for changes in standards and new products that we don't know about yet. What we plan to do instead is to measure the position and demension of the defects on the tree and then to correlate those external defects with internal wood defects and use computer software and then make those correlations and to sort the gross bole volume into log products.

If you think about it, that is exactly what an assessor does who is doing a normal sort of assessment, he looks at a tree and he processes a lot of information he observed about the bole of that tree and comes up with the answer, If we get this as raw data, the defect information, we then can re-sort and re-process our inventory data as many times as we like as utilisation standards change and as new products come into use.

So even the massive change in utilisation standards that we suffered in 1973 can be accommodated, hopefully, using this kind of system.

Measurement of an other wood volume, which I mentioned before, is ground wood. Ground wood will be measured on all of the plots that we visit on the ground, which you will recall is 1/10th of the total number of plots established on aerial photographs. Branch wood, we don't know how we are going to measure yet. Obviously it is very labour intensive and there are a lot of branches with not very much wood in them, so you have to do a lot of measurement to measure a very little quantity of wood, so we have to get some rather efficient ways of doing that, maybe a third stage sample, or maybe using the hardwood logging system. We can do it by feedback once branchwood comes into general use.

I said we were doing it already, this is not just a plan, we have actually started this inventory. What we have done so far during late December, January and February of this year (1988) is; we have photographed 400,000 hectares of forest and if you do your arithmetic you will see that about 8000 photo plots and 1/10th of that is 800 ground plots. We hope by the end of June to have measured about 500 or 600 of those ground plots.

Well, unfortunately we are having technical problems with the photo interpretation. These problems are not unsurmountable but it will take us rather longer than we thought to solve the problem and get the data out. The problem is mainly related to use of these Vinton cameras which the older people will remember, were the cameras we used for the die-back photography. They are not really the best kind of cameras to use for this purpose, so next year we will undoubtedly be getting new camera systems.

QUESTIONS AND ANSWERS

(HUGH CAMPBELL)

Question:

JOHN KAYE:

I think that the staff input into pine inventory is inadequate, especially considering the importance of the commitments CALM has made regarding sale of pine. Can you comment ?

Answer:

HUGH CAMPBELL:

- (i) I am not very happy with the techniques we use for pine inventory, but,
- (ii) those techniques can still come up with reasonably good figures,
- (iii) the biggest problem is predicting pine growth considering uncertainties in future silviculture/fertilizer input etc.
- (iv) I am not happy with the cost effectiveness of our pine inventory; but we will soon be designing better and cheaper inventory systems.

Question:

ALAN LUSH

Regarding the new jarrah inventory, what monitoring steps will be taken to take into account changes in utilization standards ?

Answer:

HUGH CAMPBELL:

I am not going to rely on monitoring to adjust the Jarrah inventory in quite the way you are suggesting. I am going to rely on re-measurement to keep the inventory up to date, areas that have been treated either silviculturally or by logging. We plan to re-measure and update our inventory data base. Also in order to keep a better handle through time to accommodate growth, to measure all of it on a cycle. What

that cycle should be, I don't know, perhaps every 5 or 6 years. But what you are talking about is something perhaps slightly different. How are we going to check on the results of the inventory? Are we making correct predictions with the information and monitoring or updating in that sense ?

ALAN LUSH:

To monitor whether the products that you try to estimate are in fact still the same specifications.

HUGH CAMPBELL:

Basically we plan to use the hardwood logging system. Now the information output from that in comparison with our predictions will give us the feedback we need. But in fact, that kind of monitoring would not be done against this Jarrah inventory project data, because this data is to be applied extensively and we don't hope to get from this class of data reliable estimates of what is on a cutting coup. It is not for that purpose, so it is not its objective. What he hope to do to replace MLI is to intensify this system I have described, by putting in more plots over areas that are intended for operations and it is that class of intensified data that would be used to compare against the hardwood logging system outputs.

Question:

RAY FREMLIN:

What are we doing to record and measure the effects of drought, insects and wind on our pine resource ?

Answer:

HUGH CAMPBELL:

On the mapping front and as far as drought and insects are concerned, it would seem that drought is putting some of the pine plantations under stress and the insects are taking advantage of that and killing them. Hopefully in the forest we can see two effects; a drought effect which may have fairly subtle symptoms and the deaths, which are pretty gross symptoms and can easily be met by aerial photography. At the end of this month we have planned to photograph the areas where these deaths are occurring. (I think we may be now doing it next week instead, as it is now the end of the month). Of course, I think there is a possibility of using remote sensing - multispectral scanning - so we can map the

more subtle symptoms of stress of just the drought itself - the maps of deaths are not particularly helpful.

Question:

TONY RAVEN:

Is there an opportunity to integrate the new Jarrah inventory system with die-back mapping ?

Answer:

HUGH CAMPBELL:

No ! Die-back mapping is on a 1:4,500 thousand scale, high precision - and I need scales of approximately 1/1000.

Question:

JOHN CLARKE:

Regarding replacement of MLI with the new system of using high intensity photo-plot measurements on our planned logging areas, the problem I see is that we need the detailed resource information before we draw up logging plans, not after. Can you comment ?

Answer:

HUGH CAMPBELL:

Planners need to use whatever information is available (e.g. RLI) to draw up logging plans. The planned areas hopefully have the right mix of products. The intensive measurement then tells us more exactly what is in those areas.

Comment:

JOHN CLARKE:

The problem remains. Because logging plans, in the Jarrah forest especially, are largely "set in concrete" because of the lead time required to do die-back mapping etc. any "MLI" doesn't help much because we are technically stuck with what products are in the planned areas! The current problems re supply of SEC poles is an example of this.

SILVICULTURE

(NOTES FOR THE TIMBER STRATEGY MEETING)

JACK BRADSHAW, MANAGER
SILVICULTURE BRANCH.

The main thing that strikes me about the strategy is the pressure to produce all the products that a forest can produce but at a very high level. This is brought about by increasing reserves with a reluctance to reduce the cut in proportion. This results in increased pressure for production from the areas left. And there is still continuing pressure for more reserves.

Not only is there increasing pressure for greater productivity but because of that, and because of increasing attention to other values we must achieve a greater productivity of not only wood but all other values. We don't have the luxury of indulging in single use management without a concern for other values.

This is nothing new except that it is at a much increased level.

Under these sorts of pressure there is a need to do everything that much better with less room for the "she'll be right" approach. We have to show that multiple use does work. If we don't we'll finish up with only two forest-reserves and plantations.

Two other major changes have occurred or are likely to occur in the near future.

1. We are starting to get a significant proportion of our timber resource from regrowth forests instead of the God given variety - and there are some surprises.
2. There is a growing demand for residue material.

We will soon have the capacity to remove the thing which we've always said is the main impediment to good management. We need to be ready to put it to good use and don't let it become a liability - which it can if we're not prepared.

Specific Areas Of Management:

I now want to concentrate on those things which have or will change rather than talk generally.

JARRAH

The only explicit statement in the strategy dealing with jarrah under the heading of Future Forest Management Proposals is the thinning of 4,000 ha/annum of jarrah forest. Let's deal with that first. Why thin? Without thinning it will take a 30cm tree about 80 years to reach a good sawlog size of 50cm. By that time we will have run out of old growth. If we thin, that time can be reduced to 50 years, and provide an opportunity for continuity. Thinning is more than a nice idea - it is essential if there is to be a prospect of continuity of jarrah production.

However, there are a number of other implicit changes that will need to be undertaken. Perhaps the best place to start is to review where we are at now - this comes from the report on the status of jarrah silviculture prepared from information provided recently by all districts. They show that at the present time:

1. About 18,000ha of jarrah are cut each year (1.4% of the available area) of which 11,000ha received relatively intensive management where specific silvicultural goals are sought in treemarking. The remainder is extensively managed, primarily by single tree selection of sawlogs. This applies to the eastern fringe and Busselton district.
2. Of the more intensively managed forest, 50% is thinned at least to the level possible by commercial operations. 44% has had all marketable sawlogs and poles removed to allow regeneration to develop. 6% is cut as a Shelterwood (i.e. partially cut) to retain a mature component while regeneration becomes established. This percentage varies considerably between districts. I believe it should be higher in some areas.
3. Most of the intensively managed forest is integrated with SEC pole extraction and there is little or no separate pole operations as such.
4. Only 42% of these areas are integrated with chipwood operations. Extension of chipping operations to Harvey, Collie, Kirup and the remainder to Nannup is essential to sound silviculture.
5. Salvage logging occurs concurrently with 67% of the intensively managed areas and is progressively being extended. There are additional areas of 'backlog' which also require salvage to allow completion of silvicultural treatment. Only 23% of the remaining (extensive) area is salvaged. Full salvage would be a pre-requisite to further silviculture work here.

6. Minor forest products are removed from only 7% of the intensively managed area and there is little likelihood that this will change significantly in the foreseeable future so far as small sizes are concerned, even with the introduction of the Silica operation. Non-commercial removal of much of this material is therefore likely to continue for some time.
7. 50% of the intensively managed areas are now being given intensive follow-up silvicultural treatment in the form of culling, follow up non-commercial thinning and appropriate burning regimes. This is a major advance over the situation of 5 years ago and is the highest level of silvicultural input since the 1930's. Three districts have reached the stage where 100% of their intensive areas are now treated following logging.
8. The percentage of area cut as a shelterwood is lower than I would expect should be the case. This is partly because such areas are often by-passed at present or may be recorded as thinning (individual release). There is still uncertainty about the regeneration technique appropriate to such areas and an efficient means of achieving it.

KARRI

1st Thinning

The commitment and the opportunity exists to carry out a commercial thinning of young regrowth for chip. The first opportunity for this appears to be when the stand reaches 20m codom ht. (this could be anywhere between 12 and 30 years old depending on site). At the present time it appears that at the minimum height the operation is economically borderline and a little larger would be preferable. The operation has several benefits - it increases yield by using material which would otherwise die, it increases growth rate of the crop trees and appears to reduce the fire hazard in these stands. It could have major effect on our protection strategy. However, if it is not very carefully carried out (to produce even spacing) it could have a deleterious effect on development and shed of branches and reduce future yield. 300 spha leaves little selection over the next 80 years. If it goes wrong at this stage it will be difficult to salvage.

Because of the very wide range of height for age, perhaps the most urgent task at this stage is the site mapping of karri regrowth to enable logging plans to be prepared. Techniques exist but so far no staff have been allocated to it.

Later Thinning

The establishment of the new Pemberton mill to take small sawlogs has stretched the resources of small sawlogs. To meet these requirements it will probably be necessary to:

- . re-thin Big Brook and Treen Brook when the first thinning is complete. The reduction of increment that this will result in, can be minimized if the lightest thinnings which are economically possible are carried out.
- . a clear felling of those two tiered stands previously identified as being thinnable.

Utilisation

Although not specifically mentioned in the Strategy, some trials of utilisation of tops for chips has the potential to make significant changes to silvicultural practice.

By removing this material it removes at least one of the reasons for regeneration burning.

i.e. removal of debris. It may even make it difficult to get the traditional hot regeneration burn. However, it also makes it possible to consider regeneration with disturbance, not burning. If this can be done successfully, it removes the biggest impediment to reduced coupe size. It is a question which needs a good deal more consideration.

FUTURE DEVELOPMENT

Despite the apparently better status of silviculture in the intensively managed areas, priority for attention still remains with these areas. Not only do they have the greatest productive potential, but the impact of the logging operation in these areas is also greater. This produces not only the obligation to do it properly but also the opportunity to achieve more. In the less intensive (eastern) areas the removal of sawlogs only, is usually insufficient to allow effective regeneration development. Non-commercial removal here would be difficult to justify either economically or environmentally and further silvicultural advances require a commercial outlet for lower grade products. Salvage sawlogs is the most important of these. In the interim the most important change would be towards the deliberate creation of ashbed in a seed year to establish regeneration where possible and where necessary in this zone. There are, however, some areas which can be identified in Busselton district in particular, which justify more intensive treatment.

THE ROLE OF COMMERCIAL OPERATIONS

Increasing integration of commercial operations has been the single most important commercial step towards better silviculture. This has not only concentrated the operational effort but also created more areas which have had all commercial products removed and therefore in a position for final silvicultural treatment. Continuing extension of this is expected to make further improvements. The most pressing need is the extension of chipping to areas in Harvey, Collie, Kirup and the remainder to Nannup. There are presently areas of lower priority being chipped inside the licence area.

Further more improvements will result from the change of standard of a Grade 1 log from 50% to 40% sound end face. This will not only reduce the area cut over for Grade 1 logs but also reduce the amount (or the standard) of salvage logs which are available. This will either enhance the prospects of salvage integration or remove more material commercially.

There is also a priority for some backlog removal of salvage (and chip) in areas of particularly high productive potential.

SILVICULTURAL PRACTICES

There are a number of areas which require improvement and continued input by Silvicultural Branch:

1. Treemarking

The silvicultural requirements of the wide range of jarrah stands encountered is still not fully understood by all staff and application is therefore variable. Training and monitoring of operations still remains a major priority of the branch to achieve uniformity of approach. A training package consisting of audiovisual lecture series, sample treemarking plots and regular monitoring is programmed for this year.

There is a disturbing trend towards the use of wages personnel for treemarking because of other priorities for officers. It is disturbing because despite the difficulty of uniform application by officers, wages staff with virtually no training should be expected to be able to do it satisfactorily. Although they assist treemarkers at present, changes of staff will inevitably mean that eventually the wages employee will become the lead treemarkers, not the junior officer, i.e. the equivalent of the foreman treemarkers in other States. I am not particularly concerned who does the treemarking provided they are adequately trained. If forest officers do not have the time to carry out treemarking for silviculture, then we will need to set about training

other people to the same or higher standard to do the job.

2. Poisoning

Roundup is the present chemical used for follow-up treatment to notching but this has proved disappointing with a high percentage of recovery, particularly in some seasons mortality of Marri is uniformly poor. Trials with 'TCH' have been promising and it is expected to be introduced shortly. Further research is needed to improve its effectiveness against Marri.

More complete utilisation of lower grade material will see a shift from standing tree poisoning to coppice control. This will be more so in any areas managed for water production where low basal areas need to be maintained. Given the cost of this work there is a need for research to determine the competitive effect of coppice on crop tree increment and water useage.

3. Application of Shelterwood

There are substantial areas in most districts where established regeneration does not occur and the use of shelterwood is indicated. Further research and field trials are needed to establish the most suitable techniques to achieve results. Cost effective methods of doing the work (generally understorey removal and disturbance) must then be developed and included in routine programs.

4. Burning Regimes

Burning regimes associated with cutting for thinning and regeneration in the one area are complex because of the conflicting needs of each stage. The tops burn in many areas which consists of inclusion in a routine aerial burn when it comes on cycle. This is not necessarily the best for silvicultural purposes. Examination of alternative burning regimes and identification of resources needed to do the job needs to be developed.

5. Silviculture for Water

Modifications to silvicultural practice need to be fully developed and routinely implemented for water management particularly for salinity and sediment control. Water production is also likely to become a routine requirement.

6. Silviculture for Wildlife

Fauna requirements in the jarrah forest are not well known. Relevant data needs to be assembled and translated into silvicultural practice. Intensification of operations (particularly silica) have the potential to affect fauna to a greater degree than previous practice and needs to be addressed.

7. Dieback Impact

The possible effect of silvicultural practice on dieback impact must be considered and research findings need to be implemented when they are available.

The above themes will form the basis of the work in jarrah silviculture by the branch over the next two years.

FIELD APPLICATION OF JARRAH SILVICULTURE - 1987

	INTENSIVELY MANAGED										EXTENSIVELY MANAGED				TOTAL			
	HANDLING	JARRAHDALE WEST	DAELL WEST	HARVEY	COLLIE WEST	KURUP	MANUP INTER. RAIN	MANUP INTER. RAIN	PERMERTON	WALPOLE	TOTAL	JARRAHDALE EAST	DAELL EAST	COLLIE EAST		MANUP LOW RAIN	PERMERTON	TOTAL
Area Cut Over (ha) 1986	285	950	892	1259	1474	1159	1260	1130	1241	635	790	11077	1061	619	555	905	4004	7140
Thinning	60	25	90	65	75	67	54	40	40	0	0	50	0	0	0	0	0	0
Complete Removal (Gap)	30	55	7	35	25	33	46	57	60	100	43	44	0	0	0	0	0	0
Shelterwood	10	20	3	0	0	0	0	1	0	0	57	6	0	0	0	0	0	0
Single Tree Selection	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	100
Integrated with poles	0 ^a	100	100	100	100	100	100	100	100	100	100	97	0 ^a	0 ^a	0 ^a	0 ^a	0	0
Integrated with chip	0 ^b	0	0	0	0	4	68	100	100	100	100	42	0 ^b	0 ^b	0 ^b	8	0	0
Salvage removed	41 ^b	100	100	100	50	40d	0	100	100	47	40	67	0 ^b	100	0 ^b	0 ^b	25	23
MFP removed	16 ^b	7	30	0	0	0	0	20	15	0	0	7	0 ^b	25	0 ^b	10	25	17
With follow up silvicultural treatment	100	22	100	14	41	21	24	100	100	63	43	50	0 ^d	0 ^d	0 ^c	0 ^d	0	0

Reasons for incomplete operation

- (a) Not necessary
- (b) Insufficient market
- (c) Insufficient funds
- (d) Unsure of method required
- (e) Technical difficulty in doing it
- (f) Lack of suitable machinery
- (g) Can be done but management systems not yet in place.

Fertilizer

The strategy commits us to a routine fertilisation of both jarrah and karri. At present we know little of fertilizer response in karri but some very important site typing work in karri has just been completed by Gary Inions.

It suggests that there will be different responses on different sites, depending on how limiting is nutrition compared to other factors. Trials are to be established in a range of these sites to determine response. Routine mapping will be necessary to enable it to be applied. Without this it could be a waste of money on some site.

Joining CALM - CSIRO research involving fertilizer has already begun in jarrah regrowth.

Karri Growth Model

The production of a growth model to help determine thinning schedules is a commitment of the Strategy. This is being done by Martin Rayner as a Ph.D. The major shortage of data is for thinning response (2 sizes of plots being re-measured this year and new ones are to be established). The other area of considerable importance for which little data exists is branch development. We are hopeful of getting some leads from the much more exclusive data base for Ash forest. While revised "unmanaged" yield taken may be possible by the end of 1988, the model won't be available till 1990.

PINE

Self sufficiency is no longer a goal of the Government. Therefore we are not growing pine to meet a self sufficient gap but maintain industry in the State and to do it at a profit. We must be able to grow it more profitably than our competitors. Though we have nominal goal of 2,000 ha/annum this is the minimum required to maintaining industry at the present. There is no real reason why it could not be larger if we can do it economically enough.

There are several issues which have a bearing on the Strategy:

- . Plantation money is borrowed money - the interest payments come out of CRF. It is essential that we grow it at a rate of return which is better than real interest otherwise we'll eventually finish up without a CRF budget.

- Our present cost structure does not allow that to happen so the pressure is on to reduce those costs. But the real goal is not lower cost but higher rate of return.

e.g. reduced initial cost which results in expensive fix ups doesn't achieve anything; neither do cheap jobs which result in lower yield. While compounding dollars is relatively straight forward, calculating the yield effects of various activities is more complicated. I think the challenge we have now is producing not just cost targets but complementary cost/result targets. We need to stand status monitoring which is equal to our cost accounting systems.

Having said that there is still need to look closely at all plantation costs to see if these have a sufficient benefit attached to them.

Pine plantations are under yield pressure as well as cost pressure and they won't produce those yields unless every operation produces the results that they are supposed to. That is one of the reasons for the recent emphasis on good establishment - without it the yields won't be there. The next stage to be emphasized is burning and thinning.

The emphasis must be that having decided a job is necessary, it must be done properly.

- Drought. This year has shown the problem won't just go away and in the Blackwood Valley, at least it is capable of wiping out entire sections of some plantations. The problem is a lot more evident than the solution but given its potential severity there is clearly no point in spending money in establishing plantations on these high risk areas unless we can overcome it. Some steps we might consider:

- a more ruthless approach to not planning known severe drought sites especially if not thinnable.
- more appropriate site preparation.
- in existing plantations, if it's not thinnable, how much can we afford to spend on cutting to save it from drought.

Because of the association of disease and insect attack with stressed trees our goal must be drought death, not just acceptable loss.

Nurseries

A recent review of nurseries emphasized the importance of economics of scale in nursery costs and it was considered that amalgamation of nurseries could save up to \$250,000/annum. For this reason in order to be able to make best use of the skills available in nursery management it was decided to try to amalgamate most Departmental nursery production. Although a site has not yet been finalised we are negotiating for one near Manjimup which will eventually be capable of producing all our requirements of:

- Pine seedlings
- Pine cuttings
- Karri seedlings
- Globulus seedlings (or cuttings in future)
- Other potted stock (up to 15 million trees/annum).

It would also house the Seed Store and all the major seed extraction and cleaning operations as well as the pine seed orchards.

The Narrogin nursery would remain to serve most of the inland needs.

QUESTIONS AND ANSWERS

(JACK BRADSHAW)

Question:

JOHN CLARKE:

How effective have we been up date in actually killing hardwood trees by notching ?

Answer:

JACK BRADSHAW:

We haven't been very successful in killing trees. We have achieved approximately a 50% ultimate kill. It was a very good kill initially but they came alive again. So we have now changed from Round-Up, which was the accepted herbicide, and are now using TCH, and according to the research results it will be more effective, even though Marri is still extremely difficult to kill. If we could sell Marri it would be a bonus. TCH may have some resistance from employees simply because of its name. Although it is a different chemical altogether, it has the same name as another chemical which contains 24-D.

Question:

JOHN CLARKE:

Do you see any potential in the training up and use of CALM-employed logging contractors to tree mark or do their own tree selection, especially considering;

- (i) the large staff input into tree marking and
- (ii) the pressures on staff to do other work, and F.T.E. ceilings.

Answer:

JACK BRADSHAW:

In regard to tree marking, whoever does the tree marking needs to be well trained to produce the results we would like to see. Apart from training, then there comes motivation and I suppose the biggest motivation to performing a particular job, depends on whose paying you. If you are seen to be paid by the Department for that particular job then presumably one does as best he can. If the pressure is on from some other

direction, then you may be inclined towards that one.

When it comes at looking at or considering a staff input into tasks such as tree marking, I always wonder at what we have foresters for, if it is not to indulge in things such as silviculture and many of the things we use our forest trained staff to do. And when we are looking at using other people for tree marking and putting our trained tree markers in areas that they are not really trained for, it seems peculiar to me sometimes. Maybe we should be putting our staff into the areas that they are trained for, which at this stage is that type of work.

Recently, I was in Tasmania and observed they are now using a silvicultural system for Alpine Ash which is almost identical to what we are proposing for Jarrah. The difference is that they don't tree mark and that is being done by the contractor and I feel at this stage, it would not be recommended.

You can get anyone able to do anything with training, I think the question is; are they going to be motivated to do what is wanted ?

Question:

ALAN WALKER:

Are there any instances in Australia where wet sclerophyl forest is regenerated after logging without burning ?

Answer:

JACK BRADSHAW:

Yes! The Ash forests have been re-generated without burning quite commonly. I believe they in fact get better germination at least off ashbed than they do on ashbed and in the current trial that is being done, which is a very large one, they are not burning in the small gaps (under about 50 metre diameter gaps that they are producing) and that is being done by manual disturbance. There seems to be some disagreement about Regnans in Tasmania. One story is that they don't have Lyre birds there, so the ground is in fact not constantly stirred up and not so receptive. Whether that can be overcome by mechanical means I don't know. At this stage it is not really known whether it is going to be any cheaper not to burn because there maybe extensive disturbance with machines, at least it would give us much more flexibility for the same costs.

Comment:

PETER KEPPEL:

In Queensland, Euc. pilularis and Euc. saligna has been regenerated without burning. The practice is simply to enrichment plant.

Comment:

JACK BRADSHAW:

In Victoria, assessment of regeneration on versus off ash beds showed little difference.

Question:

JIM EDWARDS:

I am not an advocate of pine pruning, and I doubt the economic value of doing it. Can you comment ?

Answer:

JACK BRADSHAW:

Certainly, pruning is the biggest single cost at the end of the rotation which causes our high costs. As I understand, only reason we prune is to keep knots to a size which will allow material to be sold as F5 grade material, it is not to produce clears at all. The reason that the branches are getting that big is because we thin partly to overcome the drought problem and because of this we have got into a system which commences to open up the stand which then produces branches which commits us to pruning. We have already changed some prescriptions in the sunlands where the drought was not going to be a problem, so we didn't open it up and consequently will not have to prune it. Unfortunately it came too late and there is only 2 years left anyway.

In both the Manjimup and the Albany area we will be maintaining wide spaces anyway because of the lack of market for the other products, so that again is going to cause a necessity for pruning, but certainly John Kaye has been an advocate for a long time for leaving the stands closed up so that we don't have to prune, but then it becomes a trade-off then with the drought particularly, and also with the market in other areas.

ALLOCATION OF THE RESOURCE

(DON KEENE)

Good afternoon! The whole purpose of these two days is to make sure that everybody recognises that we all have a part to play in the implementation of the Timber Strategy.

What I would like to do is to paint the picture as far as I see it or tell you the story on the Macro scale, but in both the long and short terms, it is going to be each of you Regional and District Managers who are the ones responsible.

Some people say that you shouldn't go back into history and to always look forward, but I am sure that you will agree with me, the valuable lessons for the future are learned by looking at what has happened in the past.

HARDWOOD RESOURCE

Previous Systems.

So if we are talking about the hardwood resource first, how have we in the past allocated the cut, how has the volume of timber from crown land been made available to this timber industry that we have.

1. Freehold Land Grants To Timber Companies.

In the early days, back in the 1800's, we had the colonial system where large timber holdings were actually granted to timber companies and in some cases even freehold title, for example, with Millers Timber & Trading in the old days, they actually fell heir to large areas of tracts of land under freehold title. Some of them in the Margaret River area have only just been disposed of in the last 10 years.

2. Permits.

So when the Forest Act of 1918 came into being, that went out the door and the system of permits came into vogue. Now a timber permit gave the holder the exclusive right to the timber from a particular area. There were permissible intakes over the years which came into vogue but the whole thing about a timber permit was that they had the exclusive right to the timber from a particular area.

Theoretically, when the area was cut out, the Mill should be closed. Although you may think that is a long time ago, the last permits have only just finished since CALM came into vogue, (only in the last few years). Although we think it is a very historical system, it was only last year or the year before when the Adelaide Timber Co. lost its exclusive right to a particular area.

3. Licenses.

In the 60's and the 70's, the idea of this exclusivity didn't really appeal to people because they wanted more freedom of action and the senior officers of the Department and the Government at that time, decided it would be better if we had a Licence system. This Licence was granted to companies that specified an annual volume of timber, but it didn't give the licence holder the exclusive right to the complete harvesting of logs in a particular area.

Unfortunately, it was great in theory and it would have been if it had been put into practice completely, but what really happened was that the idea of a licence area or permit area, tended to continue on, so that there were firms like Worsley and Bunnings who had licenses here and there and if you think about it, we didn't get the total benefit that we should have done. We also had the situation in the working plan when the officers said "which areas are these people going to be working on, where are we going to do the planning, how do we work out this cut?" and we found that the easiest way was to actually start allocating these areas and that's how it was done.

However, we didn't wish to tell everyone about that, so we had the famous part 2 of the working plan or the confidential sections of our working plans. What progressively happened was that these 'not-under-permit-areas' as they were called, were progressively allocated to companies who were holding licences. What made it very difficult was that some Mills had licences and some didn't. Licences were bought and sold, or more correctly, the Mills holding the licences were bought and sold and although they didn't have to go with the Mill, that is in fact what happened, and so you did see the ridiculous situation of people paying 1/2 million Dollars for an old Timber Mill that might have been worth only 10 or 20,000 Dollars, but with it went this licence.

That is where we come to today. Fewer and fewer companies ended up with all the licences. The more efficient ones purchased the less efficient ones. Everytime there was a recession in the industry or a major change of shareholding, these licences became aggregated until we have now the position that CALM inherited. Bunnings being the efficient Mill or Milling Company, ended up with most of the licences. How they climbed to their pre-emptive state was: the State Sawmills were sold to Hawker Siddley's who in turn sold them to Bunnings. Douglas Jones Co. sold out to Millers who then sold out to Bunnings. Bunnings ended up with 5 different major sawmilling companies and we ended up with one.

It can be read in the Timber Strategy Paper, we have this equity-security cunundrum, and if I can go back to what we inherited, and most of you will have seen this graph. This is a graph from the old working plan, 1982 version, and the orange line is the reduction plan in the hardwood cut, and by

the year 2030, from 1975 to 2030, we will have virtually no hardwoods left. On the other side of the coin, we have the softwood cut which was to have taken its place and if you add them together, this is where we are going to be and that was the demand band which George Malaczuk was talking about this morning.

That was the theory and there was nothing wrong with it. It was great in principle, but unfortunately in practice it didn't turn out like this at all, i.e. 100,000 in 1985 and in 1990, were almost up to 250,000 virtually next year. We are still having drought so we can't make that. The other sad part about it was, that each one of these step reductions here meant the closure of a Mill or at the very least, a closure of a bench in the Mill. So as you can see there are big drops and they meant a closure of the Mill. I happened to live in a town where the Mill closed down, it was the Shannon Mill and the town died with the Mill. It wasn't a very happy thought at that time for us (my family), where people all had to leave and get new jobs. As part of this story we were looking into the new organisation for some rationale to get out of that system which we had heard of and believed in before.

As Syd Shea mentioned in his talk this morning, the other thing was, that if there is no security of tenure, there are no people who are going to put any money into any of the new mills, so it was a self defeating exercise in the long run, no security of tenure, no money going in, old mills, pure recovery, closure, death.

This is where Bunnings did show the way again. Any new investment was an act of faith and although there were, behind closed doors I guess, commitments of a nature given, it really was an act of faith if anybody put in new investments, because these licences are and were an annual occurrence. As a matter of fact the licences that we have now, (we decided this year because we hope to be on the new system by the end of June), we only renewed some of the licences for six months and that created quite a bit of consternation, I might add, but that is according to the rules.

Another thing that is very difficult is for new people to enter the industry. Once you have the licence system, the only way that anybody new can get in there is to go and buy and old Mill.

I told you previously about part 2 of the working plan. One of the other great advantages of the Timber Strategy is at least it is out in the open, although you may not all understand all of it as yet. (And I am told on good authority that nobody got 12 out of 12 in the questions this morning - even me, I got one wrong.

There was always, in the old days, part of the working plan that was dead secret, it's not allowed to go past these four walls, and that was reasonable wasn't it, because if everybody knew that the Mill down the road only had a year or two to go on its area, nobody would want to go and work there and our self-fulfilling prophecy would actually come true.

The other thing that then turned up, was that Syd had read the working plan, it was No. 87 of 1982, and he said, "by gee, the five years are up, what are we going to do" and so, it was time for a new working plan and that is where the Regional Management Plans and the Timber Strategy were born. It was a very opportune time to consider a new direction.

We had a number of options;

- 1) We could continue the existing system, and for the reasons that I have already outlined, we decided to give that away. We could have had the same licence system but given longer term licences. That would have given the security for the existing licence holders, but would have disadvantaged all the small Mills who didn't actually have a licence or new players.
- 2) The second option we had was that we could start afresh. We could say OK, we are a new organisation, this is a whole new ball game and we can have a totally free market system. We can start again - let the market decide. This would have been the fairest method and it would have been chosen if it was a new industry, and it is still being chosen where there is a new resource. So each time we have new resource, it is being tendered and the small Karri logs are an example of that and as soon as we have satisfied the Government's commitments, I am sure that it is the system that will be employed in the future.

After carefully evaluating all the 4000 odd submissions to the Strategy, Government decided on the course of action that we are taking today which is a combination of both the above.

Advantages

We see that option 3 has the advantages of;

- 1) Establishing a fair market price for the resource. Up till now we have had at least 50 auctions and tenders. When we first started off they were greeted with horror and dismay by everybody. They implied that they would never work. When they did start to work and we were getting very surprising and good results from them, then people said they were only a small sample which doesn't really represent the total value of the industry. At the same time there was a review of the hardwood royalty system and it was decided to use the

cost of growing principle and I assume you are all aware of the target royalties. (I shall speak more about that later).

This free market approach did give us a very good measure against whether our target royalties were within the ball park or a long way out, and so far it is very good to see that we have, in nearly all cases, achieved more than the target royalties whenever we have put a parcel.

- 2) The next advantage of not going completely into the market system was, that it does maintain the medium term stability of communities dependent on the industry and gives everybody a chance to adjust to the new system. As Syd said this morning, we have been overwhelmed by the large amount of new investment that people are promising. Now that by itself will mean some big changes to the industry. I think the days have gone when we have large scale capital equipment only being operated for 8 or 9 hours per day. If people put capital into Mills or new logging equipment, at very least, there will be two shifts operating in these places. What that means is for a lot of the existing Mills, although the resource may still be going, the Mills won't be there, as new Mills are built, the operators will want to operate them for at least twice as long, so there will be less Mills.
- 3) The next big advantage we saw is that it allows all the smaller millers, who did not have a licence, to be able to share in the resource. This was one of the overwhelming things that came through in the public submission period, the idea that we had a whole heap of small Mills out there who were scratching around. They now have a definite place in the industry. The previous system really did not allow them to come to fruition. Each milling company who is a big one now, did start off in humble beginnings. What we want to do is to make sure that there are many more Mills there, who are at the humble stage now, and if they are any good, it will give them the opportunity to become the Bunnings of the future.
- 4) It gives opportunity to mills to top up their allocation.
- 5) Finally as I have said before, there is a free market system now to apply significant volumes of new resource.

Disadvantages.

The disadvantages of course, and this is where the balancing

act comes, is in a period where we are saying there is going to have to be an overall reduction in the cut to enable the situation to be freed up, we must have greater cuts to those who already have licences, than would otherwise be the case.

The only other way to do it is to find new or additional resource. Under the regional management plans as far as areas go, you all know there has been a reduction in areas available for timber production, so there has been quite a significant reduction in potential resource available. But if Hugh's inventory is right, and a few other things that I shall talk about now, we expect and trust that we won't have that bad situation that was shown before.

1) Use of Alternative Species:

The previous working plans envisaged the use of pine trees to overcome the deficit of mature hardwood logs. The new strategy endorses and enhances this strategy.

2) Increased Utilization:

While we are reducing this cut of mature logs, to some degree we are replacing these by increased utilisation of lower class of logs. Further integration of residue-using industries is another hope for the future or should I say a hope for the present because we have actually proved now that we can improve the utilisation and for that I thank you -all you people out there, because you are the ones who have really made it work. Again for a start when we started to count up and all of a sudden we were getting increases in the volume per hectare, reductions in the area cut over, people tended to say, "oh well, you just have to be in a good patch of bush", but the results are consistent. We have gone down from cutting over 28,000 hectares 2 years ago in the hardwoods, down to 18,000 hectares per year. That is a tremendous reduction and it is because of you people out there, making sure that that every tree that we cut down is being utilised properly.

3) Produce Timber From Younger Trees:

The next thing we can do is produce timber from younger trees. In the previous strategies that were adopted we would be cutting young Karri trees in the next century. We have already had two tenders for that and the first one has started. Now I don't pretend that is easy for anybody, and we are having pretty substantial difficulties to make it and we haven't made it. I will be the first one to agree that we haven't made it yet. However, the industry has taken its chances and it's prepared to accept and it has put its money where its mouth is. We now have a new Mill built, and we are going to have another one built within 12 months and I am

quite sure that these younger trees will be utilised. Again the Government's commitment to this has been to foster the public interest project at Harvey, 'The Wood Utilisation Research Centre'. Seeing that we have two representatives from the Commonwealth here, I would like to thank them very much. I don't know whether they were responsible, but we greatly accepted their \$1.6 million to enable us to encourage the industry to put in their \$1.6 million and through skilfull accounting, we put in our \$1.6 million to enable Phil Shedley's project and dreams to come to reality.

Already, although the project has only been going for nearly 2 years, we have found out a lot about our new hardwoods and how to look after them. Monier Redlands), have already changed their whole approach to sawing young Karri because of the results which have come out of the Harvey centre.

They have come to us and they want to stockpile a whole year's supply of logs on their landing, as they know that stockpiling under water does relieve the growth stresses and reduces the degrade in these young logs. The only problem is that as yet we have not been able to give them all the logs they want.

4) Produce Timber From Shorter Logs:

The other thing that we can do is to look at the resource that hasn't been used before. We have talked about the improvements in utilisation but we can also produce logs from shorter material or smaller material and we have it in the Timber Strategy, and I am not going to put up all those graphs, you should have read that, and you will notice that there are significant volumes there. People are already asking how they can use it and it is a question of once people come up with the ideas then that material will be made available as well.

That is where we are up to today, and perhaps I might stop there and then later I will get onto the new system of allocation.

QUESTIONS AND ANSWERS

(DON KEENE)

Question:

MICK ZWARTZ:

When are Whittakers going to start building their new Mill at Greenbushes ?

Answer:

DON KEENE:

The contract to purchase the young logs has been signed, and so they are committed to purchase the logs at the royalty rate of \$29.00. The company is undergoing a few management changes at the moment, as you are probably aware. Their Chief Executive has resigned and is finishing in a month or two. However, his major job before he leaves is to finalise all the contracts. The idea is that they intend to build much the same as Bunnings have done at Pemberton. To integrate all the logs they have in the Kirup/Greenbushes area into one Mill. As far as I am aware, and we do ask them at fairly frequent intervals, they are well on to the design phase of their Mill and are committed to start in June 30, 1989, so I presume they will start on that date.

However, I am being completely honest here, that we have had some difficulties with the Mill that is already operating and supplying the right amount of logs to the grades and so on, down in Pemberton, and I am not hurrying until we have one going properly before we start the next one. So what we thought was that the Monier's Mill in Busselton did take logs of relatively average standard and we thought it would be easy. It hasn't turned out to be that way and I am not pressing them to have the thing going on the exact date. But as far as I know they are on track with their overall plans for the re-development of their Greenbushes site.

The other thing that I will talk a little bit more about when we get to the softwood area is that Whittakers are one of the partners in a firm called Western Pine Associates, (as Syd mentioned earlier this morning), who will be signing in the next week or two, a Pine contract as well and the idea is, at least in the initial stages, until there is sufficient Pine resource to enable them to build a stand-alone Pine Mill, that the cutting of the Pine will be integrated with their new hardwood small line as well. So that has taken slightly more time than I would have hoped.

Question:

BARNEY QUICKE:

What about the sale of re-growth Jarrah ?

Answer:

DON KEENE:

As far as small Jarrah is concerned, we are waiting a while to see how many small Jarrah we have. In the previous working plan it did say that there would be 30,000 cubic metres of small hardwood (Jarrah) available. I would not like to say at this stage that we could sustain a particular amount. We have people coming to us all the time wanting to use these small Jarrah and of course they have been down and seen what Phil Shedley and Graham Siemon and his mates are doing at Harvey, where they are cutting up small Jarrah and making some tremendous high class timber. Of course everybody says "come on, why can't we start". Again I don't make any apology and we have to do this as planned and one thing at a time, so we have small Jarrah in there on the graph and it commences in 1991 or 1992, and if Hugh comes good with his inventory and we are confident we have them all, then we start earlier.

Question:

PETER HANLEY:

What proportion of the resource will be auctioned in future?

Answer:

DON KEENE:

We have said that there will be 50-90% of the previous cut of the Mills being allocated to that particular Mill for a period of up to 15 years. At the end of 15 years the inference is that we shall start again. It is fairly unlikely that I will be anywhere around here in 15 years and so it will be a decision for the people who are managing the resource at the time or Government of the time. But at this stage what we are saying is that there will be a far greater amount of resource being put up to tender than there has been in the past. If I was still here in 15 years time, there is nothing I would like to do more than to put up a large amount of timber and just see what it is really worth on the open market.

Question:

KEITH SCLATER:

Regarding contracts of sale, how flexible are the log specification schedules in those contracts ?

Answer:

DON KEENE:

That brings up a very important question over all. Once these contracts are signed, they are legally binding contracts and we are legally bound and can be sued for non-performance. This is why we are ensuring that to the best of our ability the contracts are as fair and as water-tight as we make them. So we are unlikely to be sued and hopefully never sued. The log specification area is possibly the greatest variable that we can look at. Whereas in the old days we talked about average quality logs, now we are saying that we are putting them into a particular specification which is in John Clarke's Manual of Specifications. We have log grades in there and we are going to be delivering these logs to a certain specification and if they are not up to standard they can be rejected at the Mill and already we have sent some in that are below specification which can be rejected and have been rejected when our officer and the Mill representative agree that they are below the specification.

I recognise in the small Karri area in particular, we haven't had a great deal of experience and neither has the industry in recognising what is a good log and what isn't and when is a surface imperfection really bad and when it isn't and it harks back to Mick's question as to why I haven't really been all that keen about cranking up the next one until we have the log specification right, as you would be well aware and some people probably aren't, but we haven't got the log specifications exactly right yet.

Question:

MICK ZWARTZ:

Do the specifications in any particular Contract of Sale have to tie in exactly with specifications in the Manual of Hardwood Logging Specifications ?

Answer:

DON KEENE:

The manual is due to be updated annually. The Contracts say that any clause may be varied or amended or cancelled if both parties agree with it. So to that extent it can, but we would need to agree with whoever the contractors are, if we suddenly wanted to change the specifications markedly.

Question:

PHIL DURELL:

What is going to happen to the unallocated chip resource ?

Answer:

DON KEENE:

It really depends on what the intake of the Chip Mill is going to be, and if and when we get a Pulp Mill developed in this State there will be no problem. However, in the interim period there is a reduction in the Karri cut. We are getting far more logs into sawmills, which previously used to go into the Chip Mill. For example, we are now down to about 50,000M³ of Karri logs going into the Chip Mill whereas two years ago it was 100,000. So we have reduced the amount of chip material going into the Mill that can be sawn up. There is also a hierarchy of areas that will be chipped, and one of the highest priorities is to keep our re-growth forest thinned. If the worst came to the worst, we would carry out our thinning operations before going up into the Central Region as we are not chipping in the Central Region to any great degree, even though everybody in that region wants to. There are a few reasons why we are not doing it yet, but basically if we had a surplus of chipping material, we would leave it standing.

PART 2 OF TALK BY DON KEENE ON ALLOCATION OF THE RESOURCE

The Main Features of the New System of Allocation:

What we are trying to do as I have already said, is that it the new system attempts to minimise disruption to the industry by providing security of access to the resource in an equitable way while providing an element of free market competition. Firstly, we have set up a new system of log grading. The cynics can say that they are the same old tired grades as we had before and they have just been dressed up with new names.

We now have premium logs that were peeler logs, first grade logs that used to be general purpose logs, second grade logs that were formally salvage logs, new resource logs, industrial quality logs and the minor forest products. They are different and the questions that came out are that we will be held accountable for these log grades. We can't just load them on a truck and expect the industry is going to take it. They have to be inspected so that if need be they can be condemned on a mill landing. It is going to be up to us to make sure that logs to the specification are maintained.

1. First grade logs:

We are going to have long term contracts up to 15 years. They are at present being negotiated with 12 different companies for logs which have been allocated to them. These are the companies that under the the old working plan, had an annual licence. So were are accepting the fact there was a prior commitment in the previous working plan even though it was only implied and we intend to make allocations to them. We are at various stages in negotiations with them. I can't say that we have actually signed up any of these yet, but we have an agreement in principle with them and it is at this stage that such things as log specification and from our point of view more importantly, the royalty is determined. Now I think without exception, people have accepted the target royalties as they are and are on the verge of signing their contracts.

Your are probably aware that the Forest Products Association and the Department and also George Malaczuk led the fight on behalf of the Department on how the target royalties should be implemented.

I feel the dispute was not in the basic question that we should recover our cost of growing and cost of production, but is was how and when it was implemented and this God-given bit of timber, whether they should have to pay the target royalty for that.

I am quite confident that everyone over a period and it maybe six months, maybe a year or might even be three years, will have these new contracts and they will be paying the target value of the wood.

We are using some of the first grade logs, equivalent to 10% of the second grade logs, to blend in with the 2nd Grade logs to make the latter an economic milling proposition.

People say to us that if 1st Grade logs are in such short supply, why should you hand them over to these people who won't utilise them properly. We dispute that, in fact if we give people security of tenure the logs will be used properly. Another project at the Wood Utilisation Research Centre is that smaller type kilns are being developed and as a matter of fact Denis Cullity was down there the other day and he said, "by gee, this little kiln would be a lot better to put my veneer logs in than those various tanks that we have lying around at the various hardwood mills at the moment".

So, if we can organise the smaller mills to have equipment that can deal with these, there is no reason why they can't be just as efficient in looking after these valuable 1st Grade logs. The very fact of the price makes it almost paramount that they have to, otherwise they won't be able to make a profit.

Another proportion of the 1st Grade logs has been ear-marked for high quality uses and in the Timber Strategy it says, up to an amount of 30,000 cubic metres will be made available for this purpose. Of course, we immediately received a rush of applications from all and sundry saying, we want to whack up a new Mill to process these 30,000 beaut logs. But we have been selling peeler logs for many years and that is some of them. There are logs going into veneer, although the precise method by which the total of these has not yet been finalised. In my opinion it is most likely that they will be used in smaller parcels rather than providing a big single resource for a new operation.

2. Second Grade Logs:

The 2nd Grade logs or what we used to call the salvage logs, is where we have been finalising things first. What we did is, an initial allocation was made to more than 25 sawmillers, approximately equivalent to 50% of their assessed intake. We sent out a Questionnaire last year asking people how much they had been cutting for the last 3 years, we checked that with our records and 50% of that was allocated to them. I think we have just about made Contracts Of Sale with all of those and nearly all have been finalised.

We have had more than 30 Auctions and Tenders which have enabled some millers to achieve their target intakes already. For example, Geoge Saunders in Collie and Ken Allan from South West Sawmills, they didn't even bid in the last auction because they already have sufficient logs out of their 50% allocation plus the tenders that they have already won to get 100% of their allocation. So the Timber Strategy is working.

Last week a tender closed for 20% of the total estimated 2nd Grade logs, this was for 5 years. We received 17 tenders and in all cases we achieved the target royalty or better. If we add up what everybody wanted to purchase versus what we think we have available, by a marvellous coincidence they just about balance. So we are now going to have another Auction, (Tender) which is going to be advertised in Saturday's paper for another 20% of the 2nd Grade logs for a 3 year period. (This tender was subsequently recalled, to be recalled later in year - JDC).

So we have allocated 50%, we have had a tender for 20% for 5 years and are now going to have another for 20% for 3 years and the other 10% or whatever turns up. Then we are going to continue with our Auction system. In each of these cases the successful bidder gets 10% of 1st Grade logs to go with it.

I think this is a tremendous response, and it means to me that the timber industry has actually embraced the Timber Strategy.

3. New Resource Logs:

When we are talking about the new resource logs or the small logs or the short logs, we now have to wait until Hugh Campbell's Inventory is complete or well on the way to completion, to make sure how much we have. I must admit that I have had a bet on a racehorse from time to time, but I would say that we can't afford to bet on the total resource that we have available, even though Hugh tells us that it is conservative, the indications out in the bush are that we have more there than we thought, but we really do have to wait until the Inventory is completed before we get into other slightly more speculative areas.

As soon as the resource is confirmed we will be having further tenders on that for approximately 15 years or 10 and 5 probably.

4. Industrial Logs:

As far as the industrial logs are concerned our existing commitments will be honoured under the woodchip agreement and the one that we have recently signed with the silicon-charcoal people (we haven't actually signed it - just trying, now that they have the site organised maybe we will be able

to). That plant will be starting and under the rules we are supposed to commence delivering logs about next March and I think John has already started practising or is about to, so that we don't all of a sudden get hit with a 60 or 100,000 m3 requirement.

There are several additional proposals at present being evaluated regarding excess of forest residues. As I said this morning when George had his Table set-up, there is over a 100 Million cubic metres thought to be out there and there is probably more than even that. It doesn't really take much effort to convert a little of that resource in something a lot better than firewood, and that is another challenge that we have over the next 5 year period.

5. Minor Forest Produce:

The Minor forest produce has been quite a problem to some people, particularly the Northern Region, so we put in a special little thing for them. It's straight out the Timber Strategy and it says that over the next few years we will have these various mounds of firewood and minor forest produce put up for tenders. I must admit that the Timber Production Branch has been fairly busy on these areas and it hasn't really been taking the running on the minor forest produce. We are quite happy to go along with the Northern Region's timetable on this. Basically we are saying that there will be 5 year licences again for these firewood operators. We have had already a couple of forays into providing longer term contracts, at least for a year now, and that is working reasonably well, but I can't say that is working particularly well as yet.

System of Allocation to Individual Companies:

All companies which were considered eligible for a direct allocation of logs have been requested to provide detailed information as set out in the Strategy. The companies were asked questions such as:

- . significance to the community?
- . future investment proposals?
- . ability to cut softwood as well as hardwood?
- . ability to cut small diameter logs?

The medium-sized mills were each asked nine specific questions, which they all had to answer, and some of them replied in great chapter and verse saying what they can do and can't do.

The Strategy anticipates that there will be seven large mills, based upon rationalization of existing large mills. This corresponds to the seven nominated "Supply Areas" (I'll talk more about this tomorrow).

Softwood Resource:

Now if I can just briefly finish on the softwood resource. This is where we have our greatest single problem. If you remember that Graph I showed before, where we were going up on this line, so by the year 2000 we had 350,000 cubic metres of logs. By the year 2000 we might have about 300,000 or something like that, but where the problem is in the this area where we are at the moment. But unfortunately we were not able to meet what had been previously committed by the previous Government.

If I can know go back to Roger's question; what we again decided was the best thing to do is to make every post a winner. Dennis Cullity's Westralian Forest Industries Group won the tender originally, which was called in 1977, to build the first new softwood Mill. It was originally due to be built by 1980 and it was finally built in 1985 at Dardanup and has an intake of around 50 to 55,000 cubic metres. It has a design capacity of 100,000 cubic metres and we intended to reach that capacity or at least its minimum economic capacity, which is more than 50,000, (probably 70-80,000 cubic metres).

The second commitment that was made by the Government at the time was that another substantive tender was received in '77, by a group called Softwood Products, of which Bunnings subsequently turned out to be the major shareholder. They weren't originally the major shareholder but through company amalgamations they became entitled to 62% of the softwood products company, and the Government three or four years ago said OK you're entitled to 62% of the resource and the minor shareholders who wish to withdraw from Softwood Products are entitled to the other 38% of the resource. The original commitment was that Softwood Products were entitled to build the second Mill when the resource was available, and according to the literature that was due to be in 1987 to 50,000, and in 1989 was to be 100,000. Of course we know now that is not possible and there have been very detailed negotiations over all the time that CALM's been formed, of how to get us out of this commitment or how to honour it in such a way and at the same time having the resource when it is available.

So Bunnings Softwood Products is still in existence but probably not for too much longer and they have said, "we have a Mill at Mundijong, how about giving us some of our resource up there", which takes the pressure of the resource in the Central Region and enables; (a) Wesfi and (b) Whittakers (Western Pine Associates) to get their Mills going.

The Pinaster resource in the Northern Region is going to satisfy the Government's commitments to the major shareholders of Softwood Products and they intend, as soon as

their contract is signed, to re-furbish or re-construct their Mundijong Mill and they intend to utilise their own resource as well as the State resource. In return for that they are agreeing to let the Western Pine Associates Mill become the second Mill in the Central Region. Therefore, that is how it is not an uncommitted resource.

In the future it is not all doom and gloom. By 1995 we hope to have all Mills going and by the year 2000 we may actually be on that Graph, providing we don't have too many more droughts.

As far as allocation of softwood resource is concerned, it is all sown up and I can't really see that there is going to be any further ventures for 10 years, except maybe again in the smaller size classes. For instance, if you go out to the particle board heap and if somebody can see something that can be utilised there for a use greater than conversion into particle board, then we would look at that. The tenders are likely in the future for small logs in the Central Forest Region and I think it says the Timber Strategy that is about 1995, and of course in the long term we will have our new resource in the South Coast Region.

Although the pine strategy was quite reasonable and still is, providing the volumes were correct. The difficulty with it was that the majority of the Pines were grown in the Central Region, and therefore the majority of the Mills were in the Central Region, whereas the big reduction in the hardwood cut were going to come from areas further south, and this would create a massive dislocation of jobs. So that was part of the reason for planting pine trees further south, i.e. to maximise or optimise the amount of timber that would be available in the traditional milling areas.

QUESTIONS AND ANSWERS - PART 2

(DON KEENE)

Question:

PETER BEATTY:

What about the sale of small round softwood logs?

Answer:

DON KEENE:

In most of these residue-using industries the scale of the operation is really paramount. The Government's agreement with Wesfi is for 330,000 and the Dardanup Mill is up to about 220,000 from all sources, maybe 230,000 counting sawmill residues. There is planned to be another residue-using plant built in the Northern Region which is due to start soon. Again it is in the design phase.

I don't believe in Father Xmas either until he has actually filled the stocking but the chances are good if we have the stocking out. The people were talking this morning about thinning our pines on time and that is one of our greatest difficulties with drought. We have thinned 10 year old pines over the last summer period and that is the earliest that thinning has been carried out anywhere in Australia on a commercial basis.

We have a slight difficulty on the steep country versus the flat country and the costs are a lot more on the steep country which we don't recognise in our royalty payments - we use the same costs on both steep and flat country. The harvesting costs are actually additional and that is approximately \$6.00 per m³ at the moment and that is the same as our royalty. If we wanted to get all that without penalising the industry, the royalty would be almost nil. Therefore we have agreed that we can supply 45,000m³ per year from steep country. I understand that we are about 120,000 cubic metres behind on the ideal thinning which is only 6 months supply to that factory. So in the micro scene we are right there.

In the micro scene when you go to the particular area that you may be concerned about, it looks terrible. Even areas that we thinned last year are still dying from drought this summer. I know we can say that our thinning is behind but in a macro sense it is very well up to date, in fact the best we have ever been.

If we talk about other round products, we will satisfy the current market. The per capita consumption of treated rounds in W.A. is the least of anywhere in Australia. I think that Koppers and the other treatment plants need to have better salesmen to go out and sell. I suppose that a lot of farmers still think that the old split jarrah post is king.

Question:

ALAN LUSH:

What do we do if we have difficulty in meeting, or are unable to meet, commitments to 15 year Contracts of Sale? (For example, if current areas set aside for timber production are excluded from timber production)..

Answer:

DON KEENE:

That is a dilemma that everybody faces. We could go back to the old system and be able get out of anything as the licences finished at the end of a year. Now that just doesn't work anymore, so we have to make a commitment. I am the first one to realise and to say here today that it is quite possible that further areas which at the moment are shown in our Regional Management Plans as multiple use areas and maybe used for some other land use not involving timber production.

If we can't make the tenders, we are going to be liable for them. However, I don't think that is the way we should approach this at all. What we should do is to take the positive view and say "we will go and grow some more or we will make what we have grow better". We will find out how to thin and fertilise our Karri forests so it can be grown at 30 metres per hectare per annum rather than 20. That's the approach that we should take and I agree 100% with what Jack said this morning - "do what you do, do well boys", and I think that we should accept the possibility that maybe it is not the road, river and streams, maybe it is the Hawke block or maybe some other block that they don't know about yet.

I am a realist, I know that is going to happen and if the crunch came we would be liable and we can't get out of them. They are legally binding contracts and one of the major areas apart from making the tree grow faster and being able to utilise younger trees and all the various other things that I said, is to improve our standards of utilisation. We can't say to the Mills that if you are less than 40% recovery we won't give you any more logs. Rather we get the price to the stage so that if they don't have 40% recovery, they go broke

and hand their contract back and then we might get some more money for it or we could re-negotiate it on a different basis if the logs weren't there at the time.

Question:

STEVE GORTON:

If we are able to grow and harvest logs cheaper in future, would be likely to reduce the price to the customer, enabling the public to have cheaper wood ?

Answer:

DON KEENE:

There is a dispute on at the moment whether or not the target royalties do in fact cover our cost of growing or not, and in my talk tomorrow I would like to cover all that costing data, so I will take that on notice, but if you think about it, people say if the royalty goes up and the production costs go up, the selling price goes up and that is what has been happening for a long time. There is another thing which is called the market price and we are just about getting to that ceiling now. What is keeping it down are these short term imports coming in at the rate of 3000 metres cubed every six weeks, which is equivalent to 3 of McLeans Mills on an annual basis.

Prior to those hardwoods coming in from the islands, we did have ACI who was coming in with its Pine and so our strategy again is working because the Pine price is again on this line. So that is more of a commodity price than the hardwood industry has been, because Pine can be brought in from the East relatively easily. That tends to keep this price here fixed. Up until now we have been operating down in this area, so whenever we put the royalty up, Bunnings' price list goes up also. At the moment you can sell anything out there, the only problem is that you can only sell it for this much, so some of the Mills are actually feeling the squeeze at the moment.

Question:

TERRY COURT:

In a Contract of Sale, is there provision to increase royalties over and above indexation ?

Answer:

DON KEENE:

Yes! The clause in the Contract of Sale gives the Executive Director the power to have a general revue at any stage that he feels is appropriate. It's one of the areas of course, that the companies don't like. If the Government changes or they have a change of mind, they may wish to have a general revue.

The companies say "can we fix the time that the general revues are carried out"? We have said at the moment that we are going to have them at 3 yearly intervals. We had the last one 18 months ago.

THE TIMBER STRATEGY IN THE SOUTHERN FOREST REGION

"JACK SLEEPER" ALIAS "ALAN WALKER"

Thank you Mr. Chairman.

G'day, Jack Sleeper's the name.

Mr Walker is crook this afternoon, apparently met up with some bloke by the name of Terry Maher last night !

Anyway, he has asked me to come along and speak for him from the point of view of small sawmillers.

Dr Shea! nice to see you. I liked your little joke this morning - "some of us are as thick as the products we sell" - thanks mate!

G'day Mr. Keene - nice to see you too. Pleased to hear that you think we have embraced the new strategy. Not exactly a tender loving embrace - more like a little squeeze!

However I don't want to get off on the wrong foot - basically I have come here to thank you for what you've given us in the timber strategy.

Thanks for the allocation of second grade logs (about 1/2 my requirement), and thanks for the 10% of the first grade. I've sawn the first trip and got 60% (structural grade). It's good to have a signed Contract of Sale for my logs, even if you did put up my royalty by \$2/m3 in the process.

Me and my mates in the sawmilling industry are pretty pleased about all that, but we've still got a few questions in our minds and maybe you will have the answers for us today.

The relativity between first grade and second grade log royalty is still not enough.

You have been telling us for years about this target royalty.

Second grade logs have reached target.

First grade logs are only a couple of dollars above second grade price. Even when they reach target the first grade customers still have an almighty advantage.

Let me explain;

The advantage comes about because of your "imposed costs". Not just royalty, but also:

- Logging costs charge
- Roading charge
- In forest costs
- Administration charge

Now our recovery rates for second grade logs are about 30% (we used to get 40% but the big mills are improving log utilisation). Apply that percentage over imposed costs and it comes out at \$140/m³ in the square (to get logs onto the mill landing).

Our friends down the road who cut the first grade logs get 40% recovery (the same logs in our mills would get 60%, but more on that later). At 40% the imposed costs come out to \$105/m³ in the square.

CORRECT ME IF ME SUMS ARE WRONG!

This is an inequitable situation.

You say in your Strategy that the first grade resource of the big mills will be tendered in the future. We reckon it will still be pretty hard to close the Pemby Mill and disrupt the industry when the time comes. (10 little mills could cut that 80,000m³ too!). Back to the recovery argument. Your Timber Strategy says that you aim to supply the State's needs in sawn timber, if prices are competitive.

Just take the karri resource. 153,000m³ first grade logs at 40% = 60,000m³ sawn timber.

In our mills you would only need 100,000m³ first grade logs at 60% recovery to get the same volume of sawn timber onto the market.

Now I don't want to tell you blokes how to do your job we reckon that might help to solve your problems with the "greenies".

You could probably double the width of your Road, River and Stream Reserves, reserve Hawke Block, Jane Block and the Deep River too, and still satisfy the State's need for sawn timber!

Unless you put the first grade log royalty up to about \$60/m³ there will be no incentive for big sawmillers to improve recovery. They are pretty comfortable with the design of their mills (constructed in the days when the supply of big perfect logs seemed endless). They achieved what seems to be

reasonable recovery (40% structural grades) and chipped the waste. High tech for throughput not high tech for recovery.

It seems logical to us that future distribution of the first grade resource by tender should take into account the recovery rates of competing sawmills. If average recovery can be increased from 40% to 60%, it means that 1 tree in 5, 1 hectare in 5, or 1 forest block in 5 could be left uncut. Or spun out over more years to blend in with the regrowth. Or if the Government prefers, that extra volume of wood could be exported!

2. My next suggestion is in regard to the method of distribution of the remaining second grade logs.

It seems to us that the auctions and tenders are happening piecemeal. A bit like throwing scraps to the wolves! When will the next auction or tender be held? When will the first auction of first grade logs be held?

If you do have a programme of intention would you please make it public so we can plan the procurement of our resource. (After all we only have about half our resource by allocation). There is a lot of uncertainty and mistrust of CALM amongst the small sawmilling fraternity!

3. Next I have a suggestion about Jarrah salvage logs. It is proven that it is hard to sell second grade Jarrah south of the Blackwood River (at current royalty and imposed costs).

Why not lower the royalty?

If necessary, to say \$5/m³ if these logs can then become sawlogs.

Even if we only get 20% recovery. If you sell 20,000m³ of logs, that means 10,000m³ less first grade logs to find. Therefore there is less pressure on the forest to supply the State's needs.

4. Now what about small diameter logs.

I've been down the road and look a look at Bunnings fancy new mill. A "you beaut" system and a great breakthrough for forest management. But my only comment on that is: "Don't make the same mistake with this resource and allow one or two large companies to 'high grade' the logs and by so doing - squeezing out the competitors!".

5. Management of the Logging Industry.

If you blokes take over all the logging you will need Supervisors. Logging Managers - managing bush production and

supply rates to customers.

You will need Road Engineers and Roading Supervisors.

You also need to develop control systems that work. Segregation of logs is vital! You can't afford to allow one first grade log to be downgraded to a second grade log or one second grade log to be downgraded to a residue log.

Once you convert Bunnings logging operations to a CALM Contractor, the incentive for proper log segregation will disappear. They will want to get logs into trucks as quickly as possible and keep trucks rolling on the longest haul distance possible!

Attaining good utilisation in the bush is relatively easy. Getting the logs in the right heaps that is the hard bit!

So when you call tenders for Contracts of Supply you must get the control systems written in, with strong incentives or financial (disincentives) for poor performance.

You should also make the Contract volumes big enough to make it viable for Contractors to employ sufficient logging managers, bush supervisors etc. to run the operation, also trucking supervisors, administrative people to handle the paperwork etc.

We just can't envisage CALM having either the staff number or the expertise to run a logging operation totalling 1 million m³. The Government is reducing staff numbers and you blokes have lots of other things on your plate.

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IN SUMMARY

- * You have made a good start with this Timber Strategy
BUT
- * Keep working at providing incentive for
 - better recovery
 - higher value-added production
 through appropriate royalty differentials, to take the pressure off the forest by maximising sawn recovery.
- * Consider the impact of your total imposed costs on equity for log customers.

- * Write your logging contracts to include expert logging managers and supervisors to take the pressure off your own staff.
- * Use "ability to achieve high recovery rates" as a criterion for deciding who should get the first grade logs in the future.
- * Finally tell us your intentions. Don't keep us guessing. Don't keep your own staff guessing about how the resource will be distributed. Allow us to "read the play". How much, how often, will there be tenders or auctions ? etc.

If you want us around in 2 or 3 years time to show everyone how best to achieve recovery from good logs and how to get viable recovery from poorer logs, you will need to address these points?

Thanks for allowing me to talk to you today.

"JACK SLEEPER"

QUESTIONS AND ANSWERS

"JACK SLEEPER" (ALIAS ALAN WALKER)

Question:

BARNEY QUICKE:

As a small sawmiller, how would you react if we dealt with just one class of sawlog, at one weighted royalty, rather than the current two grades of sawlog?

Answer:

ALAN WALKER:

I think the blend of logs is probably the most difficult thing to try to balance correctly. The answer is not easy but we do have worries concerning social disruption and if we increase the royalties too highly, too soon or we force the first grade sawmillers to rougher quality logs - too many, too soon - it could have an adverse impact. I am not implying that is what the Forest Products Association has been putting forward, is entirely wrong, it has to be steady.

The system does work better, having your grades identified with specifications, by sample parcel if necessary, everyone knows what they are buying. It was probably quite a lot of guess work previously. We were progressively lowering the grade at the bottom end without telling anyone of our movements and raising the royalty at the same time. People want to buy exactly what they ask for and when purchasing a log, a specification and a royalty to go with it, they then know what they are buying and I would rather have it that way. I feel we should have some flexibility with the second grade logs to reduce the royalty if necessary to continue to make them sawlogs rather than sell them off as chip logs.

If we can't sell them for the royalty we think is appropriate, then we should be prepared to back off and sell them at a lower royalty to keep them as sawlogs. It will take the pressure off the bush rather than have them disposed off as a residue product.

Question:

JOHN SMART:

Regarding your (small mills) percentage recovery figure of 60%, what proportion of that recovery was high quality, large dimension material and what proportion was low grade material such a garden sleepers, gluts, etc., that some mills don't even count as recovery?

Answer:

ALAN WALKER:

Tony Drake has milled a parcel of first grade logs (the first truck load he received), and he did get 60% but of course, he can't cut those big sections and long lengths that the traditional large sawmill of the Pemberton type can. But the accuracy of sawing and the quality of the sawn timber from portable mills is good or even superior to the traditional type of sawmill. There is a percentage of that material that would need to be received from the larger outfit, but most of the structural green sawn materials could be supplied from a larger number of small mills.

Question:

CHARLIE BROADBENT:

Do the small sawmills in the South have a buoyant market for their products ?

Answer:

ALAN WALKER:

Yes! The same sawmiller that I am talking about has not been affected by the importing. He is managing to sell all of the output to his traditional markets for the same price. He has not been affected by the cost cutting and price squeezing that has been going on as a result of imported timbers and discounting by the major companies. They are seeing out this trouble reasonably well.

Not all of them are in that position, some of them are feeling the pinch from those forces. They are also able to achieve good value-adding, because they feed their sawn material if it is good enough to have value-added. They can feed it into Bunnings processing works and are able to feed into that system and still get the value-adding that we are looking for as part of the strategy.

The small sawmillers do have a very important part to play in the future of the industry.

Comment:

DON KEENE:

Regarding recovery percentages the form 182, for those who don't know, is a form that every sawmiller has to fill in every month. He records his recovery figures and products

cut out of the logs. We are revising the form (we are on Mark 10 at the moment still trying to change it), and we trialled it on a number of small sawmillers, but they didn't want to actually fill in all this additional detail that we want. Ultimately we get back to accepting what the sawmillers are telling us is their recovery and with all due respects to Tony, he could book down bits and pieces of anything, which other millers quite often don't do, i.e. include their gluts and their dunnage etc. Although it's appealing on the surface and I know why it has been brought up, you are now getting back to trusting what the sawmiller tells you is recovery and it's in his interest to boost it up.

THE TIMBER STRATEGY IN THE CENTRAL FOREST REGION

(DON SPRIGGINS)

After Mr Sleeper! That is a very hard act to follow.

My talk will be a little different!

The function review going on in the Department at the moment (refer to list) there are 25 functions or services which are carried out by the Department and in just about all the regions most of these activities are going on. Timber production is very important in our region, but it is only one of those 25 on the list.

To keep this going up the line, we have a fairly powerful organisational chart, it is not important that you read the names on it. Its the principle that we are talking about! You will see at the top of the tree of course, is the Executive Director, the General Manager below and then the large variety of people who look after those various 25 functions.

This came out of the last annual report, the regions are not on this list, they are on the page over the corner.

That is the traditional view of an organisational chart, the pyramid type, and sometimes it's the men down the bottom of the ladder. It sometimes looks a bit like this with oneself being down the end of the tree and to illustrate, that sometimes this is how it comes across.

What can we do overcome this ?

Fortunately we have the regions here to put some sense and order into things.

I would now like to give you a demonstration!

This red liquid represents the combined knowledge of all those organisations, the 25 specialists and activities in the Department. That is contained in the bottle - very clear and pure. Unfortunately what happens when they all start talking together and the message comes down the line etc. we have what we call the 'noise factor' and that often gets mixed in with others and you can see the result, now the liquid is cloudy and represents the confusion.. This is the region - it is wide at the top because that is where the huge volume of information comes from - at the top!

The most important thing about the region is the filter! Of course the filter here represents the region - all confused messages come in and when filtered by the region a beautiful clear product comes out the bottom. That gentlemen is the role of the region.

As far as timber production goes, what are the important things which we do?

Planning:

This is a key point, it's an integrated plan, it's one that involves fire protection, landscape management, environmental protection and timber production. It's not just a single person's plan; it's due recognition has to be given to the fact that the guys who live on the ground, the Regional and District guys must have an input into that plan otherwise it won't work. Of course, it's a five year plan and updated every year with a 2 yearly horizon.

Inventory:

This is vital of course. There has to be die-back assessment resource assessment, silviculture, landscape management etc. and all those ingredients have to get in. With silviculture we are looking to the silviculture branch to come up with their very best treatments and prescriptions that we can apply and then it has to be fitted into the plans for the individual district's 2-year plan. Die-back demarcation has to go ahead and fitted into prescribed burning and logging. It is not a simple task and we all realise that.

The system that I am promoting in our Region as far as getting all these various tasks done by the 25 activities that we do get involved in, is to move away from functional management right down to the bottom line. I have been convinced by talking to Chris Muller that it is not a good system. What we are working towards is having a functional person in the district who looks after softwood, and one looks after hardwood and in addition he will have other duties, but he is the person that is going to be the reference point for that particular function in the district and may even carry also 2 or 3 other functions, he may even carry environmental protection as well.

The men down the bottom of the line, the forest rangers, the ones who are out on the job doing tree marking and so on, we are opposed to the idea of them being solely on that job day in day out, we want to give them a bit of variety.

It's working reasonably well in Busselton so far and it is one that we would like to extend.

The Types of Operations in the Region:

They are largely integrated; poles, sawlogs, 1st and 2nd grade are working reasonably well.

Don Keene did a great job here about a year ago, rounding the Collie miners up and now they no longer operate independently in the forest and that was a major breakthrough.

Minor Forest Produce, firewood etc. are still not integrated but certainly the thrust is to get as much as possible of that integrated in the next year or two.

Where do we see the relationship between region and timber production ?

We can see that we shall have to spend a lot more staff time on supervision in the field. That's very evident where it is working well in the region, and where the districts are putting a lot of time into supervision of landings etc. the system is working well. Generally the bush boss level of knowledge is not up to scratch in most cases and commitment is not very good either.

Staff Duties:

We don't see a major change and as the first grade logs in our region decline in importance, they will be taken up by second grade logs. If projects such as the silicon project come on stream as has been foreshadowed, we certainly will need more staff, we can't see any way out of that, I would say an absolute minimum of 2 extra people. But the silicon project varies so much from day to day, therefore we are not quite sure just what is happening there.

In the Role of Timber Production:

We see their role in training of staff and contractors. On the training side, the silvicultural people ran excellent courses recently for Pine planting etc. We would see the same type of project for our staff that are out in the field supervising logging and so on. Training should cover: Looking after contracts, reviewing and setting and monitoring standards with the hardwood code of logging practise, softwood code of logging etc. Customer relations re-supply and of course communicating regularly with ourselves and the districts. Timber production is very busy and it is not always possible to get out, but somehow we will have to make the means available to keep us and yourselves get that interchange of what is going on. We want to make it work well because the Timber Strategy is a major project and I can see if that part of it is not firing well we could have a lot of hitches.

Some of the Problems Facing the District Manager:

Some of the districts do have a staff level problem, the level is down and the positions are being advertised and staff are being transferred. People have come back into the district that haven't had a great deal of timber production experience in the past, that is certainly a problem. Hopefully training and a lot more attention to the transfer of people will overcome this. If the district has a key timber production role then we have to make sure that the person we replace has adequate experience and background so that he knows what he is doing.

Increased Workloads:

It has affected some districts greater than others. Delivery notes and landing management, increased volumes and products has come as quite a shock to some people, but by and large people have responded well to this. I feel we do need extra training and with increased volumes I think we are facing the situation where we need perhaps another two staff at least (in the order of 1/2 a man a district is our estimate) for the supervision of contractor's. Possibly in a few years time when the whole system has settled down that may decrease, but as things stand at the moment 1/2 a man a district would not be too far astray.

Options for the Future:

I suppose we could go to a very centralised planning system. We would oppose that, our feeling is that it would not work. The districts and the regions have to be very closely involved because there are so many other side issues that happen and not just connected timber production that the district staff must have an input into and also play a part with. It's not to say that timber production shouldn't provide a service with planning, we are certainly very keen to see that, but we must have an input into it.

Contractors:

There was some talk before about contractors being trained and allowing them to do their self-regulation. We think we are a long way off letting that happen. The contractors we have seen and the ability that they have shown, we feel there is a large gap there.

Staff:

We have talked about functionalisation or flexibility. Our view is not to go too big along the functional route. We would lose a lot of staff moral and interest on that.

Training:

Region, District or timber production. I think it has to be a joint effort, neither one can do it, but certainly I would be looking to timber production to supply the standards and do a lot of the organising etc. for that just as the silvicultural people did for pine planting, that style of set up would be excellent.

In Summary:

We suggest that changes should come in gradually and responsibly. If we have some overnight revolution it will lead disaster. Change must come gradually rather than be forced upon us.

We need good communication, I see that as a key point. Good team work and of course as Mikhail Gorbachov would say "we want more "glasnost" not more "peristroika".

QUESTIONS AND ANSWERS

(DON SPRIGGINS)

Question:

MICK ZWARTZ:

Regarding your support for multi-function roles for District staff, and your comment about lack of skills of District Staff, I believe the field staff in districts need to be specialized in order to have the skills that are necessary. Can you comment ?

Answer:

DON SPRIGGINS:

I think there are horses for courses and some districts will be different and in some of them it could well be, that in your case, virtually you spend the bulk of your time on hardwood timber production, and there would be someone else spending the bulk of his time on softwood production. He might also have one other small function that he is responsible for over the whole district, and would have forest rangers doing the bulk of the work, but he would be the source of knowledge and expertise in the district on that particular function.

MICK ZWARTZ:

How can you have him being multi-functional and still have the skills. In my district I am a hardwood forester and I have 4 staff there. They are working on what we call a working term, they have a quarter of the district and they look after all the functions in that quarter district and I see that when we get a bit higher up the line, he has to be a single function. I share in fire control, and also a couple of other small functions but my main emphasis is in hardwood forest production and that is where you have to have the skills.

DON SPRIGGINS:

I think we are talking about one and the same thing really, because a bit further up the line you are going to perhaps have at the most two functions i.e. one large one and perhaps one small one and the guys down below have that area system, but you will still be the expert in the district to handle that right across the board.

Comment:

JOHN MURCH:

I am not in favour of the area management system in their Districts. The softwood logging program for example does not consider the traditional geographical district boundaries. At the moment, as the major logging operations shift from one plantation to another during the season, the contractors have to learn to work under different groups of CALM supervisors. This often causes problems which are likely to increase as the operations get bigger. In the hardwood area, if we end with the 6 or 7 main "supply areas", then it is important that the staff supervising those major logging operations are fairly specialized.

Comment:

DON SPRIGGINS:

I think it can still be handled with a little bit of organisation, If six mills are to be combined into one, then it could possibly be handled by one person from one district or two from one district etc. I used to be a great fan of functionalisation myself, I have gone off that slightly, I think one person can do a lot of traveling, he can go by a lot of things that he doesn't feel committed or responsible to, when instread ;he could be putting his view into the system and getting things fixed up.

Comment:

CHARLIE BROADBENT:

I think that, in order to give the younger staff a career structure, they need experience in a wide range of jobs, therefore I support the area management system.

Answer:

DON SPRIGGINS:

That is a good point which is important and it is true! A lot of people applying for jobs up the line have been asked what experience they have had and often it is in just one narrow little field and therefore they were not eligile for the position. I feel that we can accommodate both the needs of

the specialist branch whether it be timber production, environmental protection or fire or whatever by the area system and it has a lot going for it.

Comment:

KEITH SLATER:

I see no alternative to specialization in some functions at District level, simply because of the complexities of the work these days, such as timber production. I think specialization will happen whether we like it not.

Comment:

DON SPRIGGINS:

I agree that there is a need for key staff in Districts in areas such as timber production and fire control, but there needs to be an overall balance between 100% specialization on the one hand and all staff doing all jobs on the other hand.

TIMBER PRODUCTION IN NORTHERN FOREST REGION

May 1988

G.B. PEET

BACKGROUND

There are 1.97 million ha of land within the boundary of the Northern Forest Region of which 0.65 million ha in CALM land. The State forest area, available for timber production covers 0.566 million ha or the majority of CALM land.

The State forest area provides sawlogs for three large sawmills and four medium or small mills. The total annual cut approximates 110,000m³ of hardwood. In addition pine plantations, covering 26,000ha of State forest produce about 38,000m³ of case and sawlog for four metropolitan mills. CALM timber strategy envisages a major increase in sales from these plantations increasing, by 1996, to 45,000m³ of sawlog and 60,000m³ annually of chiplog.

TIMBER PRODUCTION

(a) Pine Plantations

Table 1 shows the current annual cut and proposed increases to 1996. The commissioning of a new chipwood plant in the metropolitan area is essential to the success of this forecast. A means of thinning intermediate stands commercially on the Gngangara water mound is vital for defusing conflicts about appropriate land use. It is being stated overstocked plantations are seriously depleting water supplies for other purposes and degrading wetlands.

(b) Hardwood Forests

Table 2 shows current annual cut for hardwood mills in the Region and expected life based on old permit areas. While life spans can be rationalised under the current license system, problems are perceived for Jarrahdale mill: high quality forest in reasonable vicinity has been heavily cut and this mill is drawing an increasing percentage of its supply from lower quality eastern forest. Lower volumes are creating problems in achieving an adequate stockpile for winter. Stockpiling is essential because much of this forest is high impact dieback and important water catchment for Perth.

Significant advances in stockpiling have been achieved at all hardwood mills. The 1988 performance to the end of April is:

2.

Mill	Stockpile m ³	% of Target
Bunnings Dwp	15,000	90
Bunnings Jdale	13,000	81
Whittakers	11,000	100
Pickering Brook	1,700	100
Ardwick	Nil	No stockpile target
Dale	Nil	" "
Colli	2,200	100

IMPLEMENTATION OF CALM TIMBER STRATEGY

Hardwood

- New system of allocation (p58 of Timber Strategy). Significant progress in producing both first and second grade sawlog through integrated logging for Bunnings. Smaller mills are taking a very low grade log hence production of second grade sawlog was not successful, ie. unsaleable due to short length. On the other hand production at Dwellingup and Jarrahdale was sought after with sales of 3,000m³ and prices from \$35 to \$46/m³. In addition the volume of sawlog removed per ha has increased significantly and Inventory estimates of total volume available were well exceeded.
- Minor Forest Products, p59. Long term MFP operations still remain on monthly license, ie. these allocations have not been tendered as indicated in the Strategy. A number of areas mainly clearing for bauxite mining, were put out to tender for MFP removal. The standard of utilisation was high and supervision requirements were minimal, both clear advantages for the new system.

The majority of firewood sold is dry log material. There is a considerable volume of green logs available through silviculture and a few sales have been achieved. The problem lies in small operators having sufficient capital to store and dry large volumes of green wood until it is saleable.

Half-tonne lots of firewood for personal use have been available at no cost to the public. Resource outside DRA is fast diminishing as logging moved into this area several years ago. Trials were initiated this year to provide more controlled access for firewood, ie.

3.

- Public were able to collect firewood from DRA under controlled hygiene requirements. A cost of \$5 per trailer load was levied.
- Firewood logs have been collected at a dump for winter supplies. A cost of \$10 per trailer load is levied.

In both cases the charge covers administration costs plus part of production costs. The material is debris from thinning (JS1). These initiatives were introduced at Mundaring who also sold posts and rails direct to public as products from thinning. The purpose of these trials is testing public reaction to payment for firewood and to obtain a return on JS1 wherever possible. Attached report from Dwellingup is indicative of proposals by Districts for management of MFP under the new strategy.

- Future Supplies: Silviculture follows logging for jarrah sawmill operations, to ensure return of a productive forest. The level of silviculture varies with stand quality and not yet fully effective for poor quality stands with dense understorey of banksia, casuarina etc. There is a programme of JS1 thinning in high quality stands which has covered 4,714ha since 1984.

Softwood

Current contracts of sale for pine in NFR are:

Peelers	2,000m ³ /annum
1st and 2nd grade sawlog	10,500 " "
Small sawlog (case)	20,500 " "
Rounds	4,000 " "

There are proposals to increase sawlog sales and introduce sales of chipwood when a new MDF plant is built (see Table 1).

MANAGEMENT OF TIMBER INDUSTRY

Regional Responsibility

Management of timber industry is part of R/L Operation's portfolio. Considerable input to supervision of standards, negotiations with logging companies etc is provided by D/F Holland, a Regional member of Production Branch. This appointment resulted in considerable improvement in management of logging operations.

Four year logging plans for hardwood and pines (in process) are compiled by Manager, Inventory Section. These include MCI ^{ML} dieback and dieback hazard information for compilation of detailed logging plan by Districts.

4.

Each District allocates an experienced field staff officer to supervise logging operations. These are detailed, one to two year plans showing roading, coupes, landings etc and hygiene precautions (7-Way test). There is a timber industry team under the supervising officer, each managing particular operations, eg. Bunnings logging or MFP operations etc. The timber industry officer is, in turn, responsible to the D/F (usually) depending on allocation of portfolios in District Manager's corporate plan.

Table 4 shows the FTE officer requirements for timber industry in the Region. In addition, assistance is provided by AWU employees treemarking for silviculture. FTE is high due to considerable and increasing complexity in planning and managing logging in presence of dieback and other land use objectives.

TABLE 1
PINE LOG SUPPLY NFR

Current 87/88	Sawmill	Case	m ³ /annum mill	chips
	McLeans Western Case Colli & Son Bunnings Mundijong	17,500 2,000	2,500 2,000 14,000	
	TOTAL	19,500	18,500	
	Peelers since August 1987		2,000	
Proposed				
1990	Bunnings Mundijong Medium Density Fibre Plant		16,500	45,000
1992	Bunnings MDF		36,000	60,000
1996	Bunnings MDF		45,000	60,000

5.

TABLE 2

HARDWOOD LOG SUPPLY NFR

1988	Sawmill	m ³ /annum	Estimated Life Years
	Bunnings Jdale	34,000	10
	Bunnings Dwp	38,000	47
	Whittakers	22,000	13
	Pickering Brook	3,600	36
	Ardwick	4,500	10
	Dale	4,500	10
	Colli	3,600	36
		<hr/>	
	TOTAL	110,200	

NB. Timber Strategy proposed reduction to one large sawmill covering Dwellingup, Jarrahdale and Metro.

6.

TABLE 3

SALE OF MINOR FOREST PRODUCE MAY 1987 TO APRIL 1988 INCLUSIVE

District	2nd grade sawlog m	Posts No.	Rails No.	Strainers No.	Poles No.	Craftwood	Other (chopping logs)	Firewood
Mundaring	53.55	1671	2384	190	307	1m ³	57m ³	382
Jarrahdale	891.68	19110	4257	1602	218	134 t	1030 pieces	6817
Dwellingup	6362	1759m ³ of MFP						4603
Wanneroo	700	Pine Needles 3 trailers	Reject Rounds 1 tonne					

7.

TABLE 4

1988 REQUIREMENT (FTE) FOR TIMBER INDUSTRY CONTROL

Source	FTE	Comment
Region	0.26	(plus 1.0 Forest Resources)
Wanneroo	3.68	Pine logging only
Mundaring	1.87	2 small mills + seasonal pine
Jarrahdale	3.85	2 large mills, 1 small mill
Dwellingup	2.44	1 large mill

QUESTIONS AND ANSWERS

GEORGE PEET

Question:

MICK ZWART:

Assuming money received for sale of Minor Forest Products goes straight into Treasury, how can you say that such sales offset the costs of the Jarrah Stand Improvement?

Answer:

GEORGE PEET:

It is true that the revenue earned doesn't appear on the District's budget, however, any revenue earned helps the Department in its arguments with Treasury for funds.

TIMBER UTILIZATION RESEARCH

(GRAHAM SIEMON)

Fortunately, the two hand-outs that are left on your chairs tell most of the story.

First of all the Wood Utilization Research Centre was set up in November 1985 and we have had four major programmes which are looking at re-growth hardwoods, mature hardwoods, softwoods and commercial aspects. The major aspect that we are looking at is the public interest project or a small Eucalypt processing study which is looking specifically at sawmilling and seasoning of re-growth hardwoods.

The advantages of this research are shown in the hand-out. Although it was widely referred to as the "public interest project", there was a need to refer to something different, a "Small Eucalypt Processing Study" describes it fairly well because that way we don't have conflict with the CSIRO's Victoria and Tasmania project called the 'Young Eucalypt Programme' which is working along similar lines. However, we have close liaison with them and so we avoid duplication.

The main aim of this project is to establish techniques and develop equipment to process small Eucalypt re-growth logs in a commercially viable manner, particularly with a view to use in high quality furniture.

The Objectives:

Sawmilling, seasoning, product development and marketing and the use of residues.

These particular points are expanded in the next page of the hand-out and if we just go through some of these points:

Sawmilling:

Interfaced with tree growers. The advantage of this project is that it's the first time that we have had vertical integration. We are combining with the forest growers, the forest producers (sawmillers) and associated with the manufacturers and the users so that way we are getting this integrated approach which does lead to more efficient utilization.

Some of the more interesting projects that we are doing. An objective log-grading system. Cecil Scott is quantifying the defect on the external appearance of the logs by taking slabs sawn through and through. These are being computerised and developed into a model.

Optimum techniques for protecting wood quality:

The stock-piling trials that Gary Brennan is involved with for instance, we have started showing that while there is a need to stock-pile, the advantages include:

Reduced end splitting, reduced growth stresses and reduced insect attack.

Looking at various schedules we are trying schedules as low as 15 minutes on and 2 and 3/4 hours off, which gives you a 92% saving in water and power and still not affecting the quality of the logs.

Log conversion:

Again one is aware of the problems with growth stresses, they have to be sawn in a particular way to get the best results. We are researching that.

Wood destroying organisms:

Which are of commercial significance and the particular interest here is brown wood in karri, which according to Elaine Davison's work is the precursor of wood destroying fungi attack.

Seasoning:

This along with sawmilling is where you can get the most benefit from research. If you want added value it is essential that you saw and season properly. Timber has to be looked after from the time that it comes off the saw. A few hours out in the sun would be enough to just get minor checks forming and afterwards there would be nothing we could do with it. But we have shown that you have to dry the timber from green to fibre saturation point, which takes a fairly long time and has to be done very carefully. Then you can hit it hard and from fibre saturation to final moisture content you can use high temperature methods with no problems at all.

We are looking at a range of kiln drying equipment. We are in the process of developing a commercial kiln which will be useful to the small sawmiller who has only 200m³ a year which he could put into furniture grade timber.

Product development and marketing:

The reference is to G.U.M.T.R.E.E. General Utilization Model of Timber Resource Economic Evaluation. Describing timber markets in volume and value terms, Diane Gibson is working on this.

Identifying target markets:

Developing processes to meet the needs of the target markets;

We are in the process of developing furniture blanks. (Description will be seen and heard on Video). Co-operating with processes and manufacturers, Phil Shedley and Don Challis have regular liaison with the Furniture Guild. We have close liaison with industry in general.

Quantifying physical properties of re-growth Eucalypts;

We all know from the wood quality of timber that not all of it can make this high-value timber. What is done with the rest of it is to look at things such as structural timber and it is essential to do tests on the strength and durability. We have a joint trial going with CSIRO on durability, comparing re-growth versus mature of a range of species.

Strength tests;

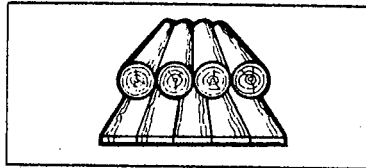
We have shown that the strength of re-growth is the same as that of the mature wood. The difference in Jarrah is found that re-growth Jarrah could be 50-100 kilograms lighter, which is explained by difference in the extractives content (paler colour and means less durable in-ground service).

I shall leave these two publications for you all to look at your leisure. There is a page on research and development programmes explaining just who is responsible for each of the individual projects. Now look at the interim report it gives you a summary of research that we have done to date. More information can be obtained from the video which we are about to show.

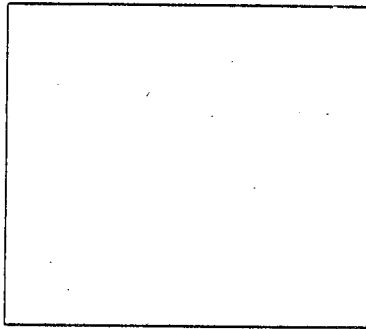


Department of Conservation and Land Management, W.A.

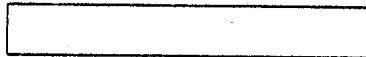
SMALL EUCALYPT PROCESSING STUDY



A Public Interest Project



Manager: Phil Shedley



AIM

Establish techniques and develop equipment to process small eucalypt regrowth logs in a commercially viable manner, particularly with a view to use in high quality furniture.

OBJECTIVES

1. Sawmilling

Establish techniques for avoiding loss of wood quality and for the recovery of maximum volume and value of timber.

2. Seasoning

Establish techniques for drying timber with a minimum of degrade and develop commercially viable equipment to operate those techniques.

3. Product Development and Marketing

Target suitable markets for regrowth eucalypt wood and develop processes for meeting the needs of those markets.

4. Use of Residues

Improve the use of the residues which result from wood processing.

STRATEGIES

1. Sawmilling

- 1.1 Interface with tree growers to keep them in touch with consumers' needs.
- 1.2 Develop an objective log grading system.
- 1.3 Establish optimum techniques for protecting wood quality of the log resource prior to processing.
- 1.4 Study techniques of log conversion best suited to converting regrowth eucalypts to high value timber.
- 1.5 Study the wood destroying organisms which are of commercial significance in reducing the value of timber from regrowth eucalypts.

2. Seasoning

- 2.1 Assist in the validation of the Australian Timber Research Institute's models by collecting relevant data on W.A. species.
- 2.2 Develop efficient initial curing schedules and commercial equipment which will allow subsequent defect-free drying to be carried out.
- 2.3 Establish efficient schedules and develop commercial equipment for drying timber from regrowth eucalypts.

3. Product Development and Marketing

- 3.1 Develop a computer model, depicting all sectors of the forest products industry, which will facilitate efficient management of the forest resource.
- 3.2 Describe timber markets in volume and value terms.
- 3.3 Identify target markets with needs which could be supplied by timber from regrowth eucalypt.
- 3.4 Develop processes to meet the needs of the target markets.
- 3.5 Co-operate with processors and manufacturers to expand potentially valuable markets.
- 3.6 Quantify the physical properties of regrowth eucalypt wood.

4. Residues

- 4.1 Identify the residue types and quantities.
- 4.2 Analyse established and potential markets.
- 4.3 Test the suitability of regrowth eucalypt residues for potential markets.

RESEARCH AND DEVELOPMENT PROGRAMS

	Principal Researcher	Estimated Completion
1. Sawmilling		
Harvesting trial	Gary Brennan	Complete
Debarking review	Amalgamated Mining	Complete
Stockpile trials	Gary Brennan	1989
Sawing patterns	Kevin White	1989
Saw technology	Kevin White	1989
Wood corrosion	W.T. & F.R.D.	1988
Objective log grading	Cecil Scott	1989
Brownwood in karri	Elaine Davison	1990 +
Lycetus	Gary Brennan	1989
Veneer slicing	Graeme Siemon	1989
2. Seasoning		
Protection and curing	Gary Brennan	1989
Drying green to fibre saturation point (f.s.p)		
Tunnel kilns	Trevor McDonald	Deferred
Batch kiln	Gary Brennan	1990 +
Development of prototype dryer	Trevor McDonald	1988
Dry f.s.p. to equilibrium moisture content (e.m.c.)		
Collapse recovery	Allan Thomson	1989
High temperature	Allan Thomson	1989
Monitoring moisture content during drying		
Ultrasonics	U.W.A.	1989
Drying round timber		
Kerfing karri poles	Des Donnelly	1988
Presurfacing		Deferred
Hot water pre-drying treatment		Deferred
3. Product Development and Marketing		
GUMTREE model	Diane Gibson	1989
Furniture market survey	Don Challis	1988
General timber market survey	Don Challis	1988
Edge jointed panel processing	Peter Newby	1989
Strength testing - sawn and round	Graeme Siemon	1988
Durability testing	C.S.I.R.O.	1990 +
In-line moisture testing device (Sirograder)	C.S.I.R.O.	1989
Hand held moisture meter for furniture	Aranda & Assoc.	1989
Permeability testing	Graeme Siemon	1988
4. Use of Residues		
Firewood drying trials	Allan Thomson	1988
Pulping properties	C.S.I.R.O.	1988
Market surveys and analysis	Don Challis	1988

QUESTIONS AND ANSWERS

(GRAHAM SIEMON)

Question:

ROGER ARMSTRONG:

The questionnaire this morning told us that the approximate annual turnover of W.A. forest based industries is \$300 million. What proportion is spent on Research & Development?

Answer:

GRAHAM SIEMON:

From memory it is something like .4% and it is only the large firms that are likely to look at doing any R & D anyway. What we are trying to do is research which will benefit the whole industry and that is why we like to get a wide representation from industry in any of the projects that we are involved with. We don't just have representatives of Bunnings or Whittakers, we go across the spectrum.

Question:

CHRIS MULLER:

Are there any plans to research the potential for increasing recovery of sawn timber from Marri ?

Answer:

GRAHAM SIEMON:

Marri is one of the species that we have listed to test, Looking at seasoning and sawmilling, at this stage it looks like it could be a long project. If you want to promote Marri, tree-breeding effects have to be looked into and seeing that the kino veins are the major problems associated with its use, it is possible in short lengths to be used for furniture because the furniture manufacturers like to get the pale coloured timber that they can stain to a standard colour or Jarrah colour. There is not much point in giving them something that is dark and they are really keen on re-growth Jarrah and Karri. From the strength point of view Karri of the same dimension seasoned condition would be 50% stronger than Jarrah and there is not all that much difference in the grain.

Question:

PETER BEATTY:

Will the research at W.U.R.C. apply to plantation-grown Eucalypts on farmland ?

Answer:

GRAHAM SIEMON:

As part of the small Eucalypt processing study we are obliged to look at a range of Eastern States Eucalypts. In fact, we are in the process of organising a truck-load of globulus for sawmilling and seasoning studies. We have a lot of work to do in the next 2 years because the public interest project finishes in June 1990 and no more finance is available after that from the Commonwealth, but we do have some excess time to get the writing up of publications completed.

We have a wide range of projects that we have to cover - they are explained in the hand-outs, but I would like to point out to Mr Peet and Mr Spriggins that at this stage we don't have any plans to look at the effect of raspberry cordial on germs!!

IMPLEMENTING THE TIMBER STRATEGY

D. J. KEENE

(MANAGER, FOREST RESOURCES DIVISION)

INTRODUCTION

What I did yesterday was to try to outline the method of selling of the logs and today the subject is how we are going to obtain the.

Hugh Campbell spoke earlier regarding the Inventory, He wasn't asked a lot of embarrassing questions about whether the allowable cut that is shown in the Timber Strategy is matched up with the Inventory. What we did stress was that the strategy is based on conservative estimates of volume. Hugh mentioned many areas where the resource had not been counted in previous estimates and the figures being turned up in the summary of volumes per hectare removed in the cutting areas definitely bears that out.

I do wish to compliment all the field officers who have taken the in-forest treatment of logs concept. For example, particularly in the more northerly areas where we have good markets in place that has made very significant difference.

The in-forest treatment system has been changed once to make it easier and more effective by changing the length requirements. More people are looking for longer logs and they are likely to take rougher logs if they are a little longer. We are quite happy to change it again either this year or next and the Manual of Log Specifications, John Clarke's orange document with the log truck on the front, we do intend to change that every year and will look forward to your input. It is hoped to be ready about November, so prior to that time, if you feel any changes or up-grading is needed, please let us know.

There was a very good question asked by Mick Zwartz, "could we change the log specification once the contract had been signed?" and I answered "not unless we had an agreement with the person with whom we had signed the contract". And that is why we have tended even to this day, of being a little hazy in the log specification area to allow us us freedom of movement.

When the Jarrah Inventory is complete according to the Timber Strategy the volumes will be revised in 5 years time and adjustments will be made to the allowable cut where required. It also says elsewhere that it will be completed in 3 years and if we have the technical problems corrected, it's likely to be less than 3 years.

The Strategy is going to be criticised when the Annual Report comes out I know, and it will be seen if they compare the Table with what is in the Report that we have been over cutting.

The volumes that are shown in the Strategy were worked out in early 1987 and were put in the Draft Timber Strategy that was for public comment. It was decided in the final document not to change the volumes because it would be said they couldn't make up our minds as to how much timber they have.

The reductions in the cut are very substantial and in one hit and in the Strategy it can be read "these reductions in the cut will be carried out progressively over the five year period". We are having a lot of negotiations with Bunnings at present and they are using that to say "let's at a higher level for the 5 years and take the reductions at the end of the 5 years", but we are saying, "depending on the results of the Inventory the allowable cut will be decided".

Today I wish to concentrate on how we intend to produce the logs.

The legal documentation is covered by Contracts of Sale in the first case, and Contracts to Supply in the second.

As explained, there have been major differences to the sale arrangement. It is also proposed for a massive change in the production arrangements for hardwoods.

Since 1975, almost 100% of softwood logs have been produced by the Department, using independent logging contractors. In the past almost 100% of hardwood logs were produced by the millers themselves.

It is proposed to progressively convert the hardwood system to the system used in the softwood area. This will involve the Department assuming the responsibility as the primary contractor. Once contracts are signed, the Department will have a legal responsibility to provide the logs contracted for. It will be able to be sued for non-performance.

The logging contractors employed will in fact be Departmental employees, just as our wages and salary staff are Departmental employees. The Department will have the ultimate responsibility (and liability) for actions by its contractors, just as it does at present for its wages staff and employees.

Inventory

Volumes Available

Strategy based on conservative estimates.

When the jarrah inventory is complete the volumes will be revised and adjustments made to the allowable cut when required. The Timber Strategy says in five years, however, we will probably do it within the next three years.

Concept of Supply Areas

Present system based on individual annual cutting areas for each mill.

In the future, more than one mill will be supplied from one cutting area.

e.g. all the mills operating in the sunklands will be able to obtain logs from one cutting area.

Tentative Supply Areas Recognised:

1. Northern Forest supply area
2. Kemerton supply area (now known as the Mornington supply area).
3. Kirup/Greenbushes supply area
4. Sunklands supply area
5. Nannup supply area
6. Southern Forest Region

Apart from Southern Forest Region, it is hoped over time only one major logging operation will be occurring in each supply area at any one time.

Advantages of the System Proposed:

1. Reduction in amount of planning required
2. Reduced dieback photography and mapping

3. Fewer roads to be built
4. Ease of Supervision
 - 4.1 Permit Control
 - 4.2 Log grading
 - 4.3 Maximum highest grade logs - get more with fewer operating areas - scattered, not picked up.
5. Reduction in Fire control problem with respect to protection of re-growth.

Arrangements for Logging Contractors

1. Contracts already in place with former salvage operators.
2. Ministerial approval received to negotiate with existing mill logging contractors for them to commence working for CALM.
3. Two year transitional period - They will need to have competitive rates for all products.
4. Calling of tenders will be on the basis of with or without the provision of roads.
5. Tenders received will form the basis of negotiations with contractors hired directly.
6. Full implementation of integred logging systems.
7. It will be done progressively, starting with operators who are in favour.

Provision of Logging Roads

Traditionally, contractors have built and maintained logging roads which become the property of the Department when logging has been completed.

The Timber Strategy indicates that logging roads will henceforth be built and maintained by the Department. This is quite a task, as for example, over 100km of roads are constructed annually in the Southern Forest Region alone.

The Department needs to re-think its whole roading policy. Perhaps integrating road construction and maintenance as a single task, whether the roads be for protection, general access, logging or whatever.

Minister's guarantee that existing manpower and equipment will be used.

Staff Structure

1. Recognition that the organisation of the contracting system will require additional staff initially. In the longer term it may mean less staff.
2. Propose to use a similar staff system which has been operating successfully in the pine areas:
 - 2.1 District responsible for day to day management in the bush, including bush supervision, adherence to log grades, monthly targets.
 - 2.2 Region responsible for planning processes, annual logging programs and quarterly control of production targets.
 - 2.3 Timber Production Branch responsible for co-ordination between regions, setting and maintenance of standards and problem solving.
3. Additional staff resources to be provided:
 - 3.1 Two regional logging supervisors.

A submission has been prepared to increase the Department's approval FTE level to provide for employment (perhaps by contract) of two experienced people to assist the regions to meet the program. They will be based in the field and liaise directly with the senior contractors' representatives.

Assume targets are met.

3.2 Roothing Engineer.

It is recognised that we need a Roothing Engineer or someone with extensive road construction and maintenance background and we have made an approach to have an additional F.T.E. which has been sent to the Minister, to cover a qualified person to set standards of road construction, co-ordinate the calling of tenders in accordance with the specifications and ensure that the works are carried out to the required standards. He would be based in the field, either here or in Manjimup - probably Manjimup as that is where the majority of the roads are built.

With the Silicon project coming on stream and other residue-using industries in the wind, we do need 2 more regional logging supervisors at the level of some of our present staff. They may not actually come from existing Departmental staff and we may attempt recruit at least one person from the industry to act as a liaison person between them and us. They will be based in the field both here and at Manjimup and liaise directly with the contractor's representatives. Those are 3 people that we are going to need on a long term basis.

Another thing I would like you to think about in the staff area is, at the moment we have bush bosses operating for contractors and the forest officers supervising what they are doing. If we were one company we wouldn't have those two people, we would only have one. As they are our employees, why don't we consider using those people under the new system. We will be paying them, not each individual one directly, but overall their cheques will come from the District offices every fortnight.

When we are talking about self regulation of the industry, we are the industry and I would say that there are a lot of bush bosses with more training on what is needed and are able to do the jobs better than a lot of us.

Training Staff:

I would hope that we need fewer people to supervise logging. However if people are going to be involved in logging for approximately a year, give them the hard cell, so they will all know what they are doing. The greatest difficulties have been when they don't know what they are doing. More importantly if there are fewer people, then they are more responsible. We want each person in a logging area to be responsible and have a sense of ownership of the area. It has worked in our area in the pole inspection section. This concept has worked magnificently where the Central Region nominated Ian Scott to work on the globulus project and although he has had help we know we are going to get our 2000 hectares of globulus planted. So if we have fewer people who

are trained, dedicated and responsible, it is just what we need to overcome the obvious staff shortages that everybody mentions.

Finance:

The timber production operations must pay for themselves. I have been told that 3000 New Zealand Department employees have lost their jobs over the last 12 months and one of the major reasons was that their financial arrangements were not under control. I don't want that to happen here, particularly in the area that I am responsible for.

1. Royalty.

We talked about royalty and the target royalties yesterday and how they are designed to cover the anticipated costs of growing timber, but I would like to stress that the royalty, or the stumpage in the area of pines, is the value of timber itself. We can't use this money to subsidise logging operations. The other thing is that it is not an infinite increasing situation and we must keep our costs of growing within what the target royalties are.

George Malaczuk has done a lot of work to determine what the cost of growing should be. We have just had the functional review and it's interesting to see that although originally they looked as if they were poles apart, the information that has come to us from two different sources show that they are close to each other.

2. Roading.

We do charge for roading, but not when the customers provide their own roads. At present the figures are \$1.10 in the Northern and Central Regions, \$1.41 in the Southern and 45c in the pine. Once the Department is providing all the roads and everyone is paying, there is going to be over \$1 million revenue generated per annum to provide roads for logging purposes. Hopefully we could even make a profit or alternatively maintain the road costs that exist.

3. Administration.

An administrative charge which is equivalent to 7.5% of the log production charge and it covers admin. charges in raising accounts etc.

4. In-forest costs.

Another charge is what is known as in-forest costs. At the moment it is \$1.26 and is charged to companies who are obtaining their logs under Contracts of Sale and this covers the wages of the people who are supervising.

John Murch did a study a year ago, and was ably assisted by John Skillen and he found that there are big variations in the actual cost and again \$1.26 per metre is over 1 Million dollars per annum for saw logs. We are charging the silicon people half because they point out to us that it is not hard to pick up what is left.

5. Safety Allocations.

A record will be kept through the Journal Allocations, to see that our Officers' wages or salaries are being covered by the charges. If they are not and we can't increase the price, we will have to do it more efficiently.

Planning:

Greg Heberle, is the Planning Officer, Forest Resources Division and last year he was basically working on the Regional Management Plans full-time; his on-going role is that we would like to see more integrated planning processes in the regions. Not just to see a logging plan, a fire control plan and a silviculture plan or where we are going to do our J.S.I. work - we want these to be integrated into one plan.

We have spoken to Don Spriggins and he is happy for us to try this approach in the Silicon project area. Greg is based in Bunbury but is an overall Co-ordination Planning Officer and I want to make sure the needs of Operations Division and Forest Resources Division are married up in one plan which is agreed to by both.

Assistance from Computer:

The other new idea that I offer is for all of you to take some of the burden away is our new computer system; we are now 6 months through a 18 month period where we are completely re-writing the logging computer system. It won't be the hardwood system and the pine system - it will be the logging system because the pine system is to be integrated with the hardwood system.

As from the 1st July, all the pricing arrangements are going to automatically updated by the computer. In the districts you will have access to all that, and the information will be available via the computer. We will have these contractor's reports that I mentioned before.

THE BENEFITS OF ALL THIS:

I hope these are some positive happenings that your directorate is doing for you to make it easier and I would really urge you to think about what you have been doing and maybe doing it a little differently in the future. Use all the supplementary man-power that will be available and I just stress that the contractors are our employees.

What are the benefits? Why are we doing all this and putting us through this hassle? The timber industry doesn't like it very much, they think they can regulate themselves. The opposing view is that the forest owner should be directly responsible for what goes on in the forest.

One of the saddest stories I have ever heard was one day in Dwellingup when one of our Officers said, "What do you want to take over the logging for, you won't be able to blame them anymore". To me that is not what our purpose is, we own this forest on behalf of the people of W.A., they are our shareholders and we have to do what they want. If they want a timber industry and at the moment the majority do, as their agents we are expected to do a good job. The best way we can do it is to be responsible for it directly and not to say we are going to do it directly. We are using the same people. We are then responsible for our own activities and are good financial managers.

It is amazing when people work in an area where they have to meet targets and financial budgets every week and fortnight, how they improve. They do become more dedicated when they are responsible.

I see we are going to have a far closer control over environmental damage and we should. Another advantage is that it fully implements the user pay principle. No longer will people be able to say that the timber industry is being subsidized by the State. If our figures aren't right we will amend them and we need to know in greater detail whether they are right or wrong. We will have targets to aim for and will give our officers a greater sense of ownership and pride and at the same time be responsible for their actions.

Fully integrated logging becomes possible. At the moment we have a system where Bunnings Logging Division is mainly interested in the fact that their Mill gets their logs. They don't mind making more money supplying logs to other people, but it must be a second priority. We want to segregate the

logging from the milling so that every one gets a fair go, so the small sawmillers do get their logs on time. We have a contract and now can ensure that we can meet our obligations by open contracts, open timber strategies, open tenders and there is no secrecy, everyone knows what is going on.

Also we hope to improve the value of each tree to us. Syd Shea is always talking about value-added products. He is talking about, in general, the value he gets out of each log once it is seasoned, sawn and machined and then sold as furniture.

With time, the Strategy should overcome many of the problems associated with the preparation of ERMP's and separate the timber industry from the forest controversy in this State.

If we are responsible it is not that voracious timber industry, it is CALM who is responsible and if we don't get it right we then deserve criticism. If we do get it right we then deserve praise.

Let's hope that we can make the point that it is the owner of the forest that should decide what goes on in it and is responsible for it. CALM is the agent for the owners of the forest and therefore, must listen to what the owners want. An analogy is that the Executive Director of CALM is the Managing Director of the Company and the shareholders are the public of W.A.

QUESTIONS AND ANSWERS
IMPLEMENTING THE TIMBER STRATEGY

(DON KEENE)

Question:

ROGER HEARNE:

Do the Contract to Supply documents contain clauses that enforce our logging contractors to cut trees into the log products that we require not to the log products that are easiest for the contractor to prepare ? (Example is veneer log versus case logs in Wanneroo).

Answer:

DON KEENE:

Not directly at this stage! However I think it is a very valid point. Maybe what we should be recognising that there is a cost of log segregation that we haven't had before. Actually it came up in discussion last night with Mayne Coverley and he suggested that perhaps what we should be doing is to pay people an amount for actually segregating logs. The difficulty of work in cutting some logs is more than others i.e. perfect 1st grade logs need less work, there is more work involved in cutting a 2nd grade log. If you work on just a direct system, fallers would be paid more to cut 2nd grade logs, which would be counter-productive. They would tend to cut 2nd grade logs, but if we paid them more for 1st grade logs they wouldn't cut any 2nd grade logs at all. It's a very fair question and I think the Manager of the Timber Production Branch will come up with a brilliant suggestion!

Comment:

ROGER UNDERWOOD:

I turn it around the other way, there is a lot of collective intelligence in this room. This is an issue, like many other issues, where we are open to suggestions and if anyone, either as an individual or in a group situation have an opportunity to get together and wrangle out that particular problem and you can come up with ideas, write it out and send it in straight away because if we put all the ideas together it amounts to a 100 times more than Don's and mine together.

DON KEENE:

As a matter of fact, if your District Officers saw that a particular faller wasn't producing any peeler logs, as an employee he can be dismissed.

ROGER UNDERWOOD:

That gets into the areas of penalty rather than incentives but one works and the other doesn't.

Question:

PETER HANLEY:

Will we be setting production targets for our logging contractors ?

Answer:

DON KEENE:

Yes! There will be targets, annual, quarterly, monthly or weekly ones. Our new computer system will enable people in the districts to monitor that very closely. (It is to be discussed by another person later), but it will be a new tool available to everyone to closely monitor the production of contractors and also deliveries to Mills.

Comment:

KEITH SLATER:

- i) I think we need a "get out" clause that allows us to get rid of poor-performing contractors, otherwise we will fail in our commitments to our customers.
- ii) We need to keep formal records of our contractors' performances, especially if we need to defend ourselves in courts for failure to supply a customer.

Comment:

DON KEENE:

I couldn't agree with you more, and I hope that every other District Manager will take your words on board and just keep those records. As far as dismissing contractors' for non-performance, there are so many words in there that give reason for dismissal, it is not amusing. However, in many

cases they might just barely meet the contract, whereas others you find, do other things, e.g. in your area there maybe a contractor who says that unless it is written in the contract he won't do it, whereas over a period of time there may be some more things you would like him to do. And you may have another contractor who is more amenable, and is prepared to change his work methods to meet something that's not in the contract is more to what I am talking about. There are many clauses by which a contractor can be "dismissed" for non-performance. It isn't a legal problem.

Comment:

ROGER UNDERWOOD:

On small point which refers to a comment made last night about contractors in general and whether we always have to accept the lowest contract and the lowest tender. From time to time in dealing with contractors, people put up for tenders and there are often situations where they are uneasy about contractors or tenderers but have no specific information to put forward, which is another very good reason why you all in your districts should keep very good records of contractor performance, because that is your defence next time when you think that you don't want to have a particular person accepted for a contract even though he may give a tender which is lower than any of the others.

Comment:

DON KEENE:

Since CALM has been formed there have been at least two occasions to my knowledge where we haven't accepted the lowest tender for logging operations, and we have to have reasonable grounds for doing so. For instance, if we think the price is too low and we have interviewed the tenderer and discussed his figures with him and in one instance it was found that he had made a mistake and thanked us for pointing this out to him. It is a good point.

Question:

BOB HAGAN:

There is some apprehension in the S.F.R, among both CALM and customers, about CALM taking on roading. It has been mentioned that the take-over date is 1 January 1989. Can you clarify this ?

Answer:

DON KEENE:

That was the next point of my talk and I shall just read out what I have written:

Traditionally contractors have built and maintained logging roads which become the property of the Department when logging is complete. The Timber Strategy indicates that logging roads will henceforth be built and maintained by the Department. This is a massive task as, for example, over 100 kilometres of roads are constructed annually in the Southern Forest Region alone. The Department needs to re-think its whole roading policy. Perhaps integrading road construction and maintenance is a single task, whether the roads be for protection, general access, logging or whatever, we should think about that!

We already have the Minister's guarantee which was made to the major contractors, particularly those in the Southern Region, that existing manpower and equipment will be used at least in a transitional period. If the people you speak to down there say that they shall be out of a job from 1 January 1989, that is not the case. How we are actually going to meet that commitment? The Minister is very keen that we call open tenders for all these things, and is cautious, and likes to see everything out in the open, which is a good. It makes it easier when it's out in the open.

It is going to be a transitional period and we can't put the logging industry at risk and we are not good enough to take over all the roads in January 1989. I have never said that, maybe someone else has. It will be a gradual progression from the Karri thinning roads and as we are getting more roads needed for Karri thinning away from traditional areas. It would be good to start on those and then pace ourselves.

Comment:

ROGER UNDERWOOD:

From my point of view we are not going to rush into a new large job which is going to involve a large re-direction of politics in this Department at this stage.

Question:

IAN FRAME:

What review or procedures will be used by CALM to ensure that our Contractors' Workers Compensation policies are in place and up to date ?

Answer:

JOHN SLATER:

A system is in place . It involves the physical siting and checking of such policies by one of the procurement officers who work for the Timber Production Branch. Records are kept in a folder in the Timber Production Manager's Office.

Question:

TOM WOOD

With the introduction of the new Occupational Health, Safety and Welfare Act, will CALM be responsible for:

- i) training of CALM-employed logging contractors,
- ii) having such contractors represented on CALM health and safety committees?

Answer:

DON KEENE:

They are very fair questions! I am pleased to say that in this State there is a W.A. Timber Industry Training Committee. We are represented on it. Our representative is John Clarke. They have taken it upon themselves to organise a logging training sub-committee, of which Doug Parrish, of Palmers in Bunbury is the President (Chairman). They had a meeting of approximately 30 people in Bunbury last week at which I was present. It was agreed to implement a voluntary levee on themselves, equivalent to 4 cents per cubic metre of logs that they harvest. They have employed a training officer, Fred Lindberg, formerly of CALM. Pressure is being put on us only to employ people as contractors who do undertake the training programme. Licenses will have to be obtained (tickets of competency) that they will issue. They want CALM to include it in the registration of Timber Workers. At present registration of timber workers is really only a bookkeeping exercise and can't be used as it has been in the past as a weapon against poor performance in the bush.

We are attempting to have the regulations's act changed to allow that to occur and as yet we haven't been successful. It hasn't been agreed that we will only employ contractors who do that, because it wasn't until last week that I was sure they meant it.

Question:

CHARLIE BROADBENT:

If the Sunklands is going to be one "logging supply area", how will CALM handle the fact that the 5 mills in the Busselton area are currently supplied by about 5 different, independent logging operators?

Answer:

DON KEENE:

When I said we were going to have 6 supply areas, it doesn't mean that we are going to have just 6 contractors. We want to have as many contractors as possible, a mixture of large contractors and small contractors, just the same as it is needed to have small and large Mills.

A supply area is how I envisaged it to be. It will be a forest block or a series of contiguous forest blocks. Different people could work in different sections of the supply area. Maybe reasons could be found as to why that won't work, because you may say contractors and logging trucks could be colliding head-on on a logging road.

Over the 2 year transitional period it will be found which contractors out of the 5 will be suitable and maybe we will reduce them back to the ones you think, as the District person responsible, are worthy of being CALM employees.

SALARY ALLOCATION
(G. HEBERLE)

As Syd and other speakers have already told us, we have to have a better handle on just what our costs are. This is not possible in the current set-up where a quarter of CALM's expenditure which are salaries (\$22 Million currently), are not allocated in of any sort of detail by the accounts system. This is going to change and we are going into salary allocation and your Manager's have been asked to work out which of their staff do a range of jobs and therefore need further timesheets and which of you work on one job for an extended period and so would not need to fill in a timesheet. This is all happening at the present time and once it has been decided who is doing it, it will be introduced with the coming financial year which starts on the 23rd June. We have the computer system ready and it is intended that the timesheet information will be input at district level and also at head office level. We will commence as soon as the financial year starts, and people who do have to fill out timesheets will have to record the information, so it will be input as a training exercise possibly in the second pay period. There will be training and an explanation to everyone what is involved.

In the next week or so we will be distributing a new list of accounts for this system. As you will be aware there will be quite a few staff positions that require additional account numbers etc. and you will be hearing more on this project.

FURTHER QUESTIONS AND ANSWERS
(DON KEENE)

Question:

JACK BRADSHAW:

What has been set up to handle production and segregation and sale of the many different products we intend to harvest from integrated operations in the Jarrah forest ?

Answer:

DON KEENE:

In the pine area of course, we segregate far more than two products and I don't see that it is really all that much more complex than what we are doing at the moment. One of my greatest problems is to get the Inventory Section to let me know in technicolour how our utilisation is improving. I know it on a macro-scale and on an individual coupe basis. I have had a lot of difficulty and people who have asked about it have also had difficulty and that is why we haven't known or haven't been told what it is on a coupe by coupe basis, comparing the actual against the predicted.

This is another advantage of our new logging computer system that was alluded to yesterday, that we will have a better idea on a twice-monthly basis on what is coming off each coupe and reports will be generated. I am told that the computer people have spoken with the Inventory staff in the regions and these reports will give the answers we want. This will give us factual data as to how big an area needs to be put into the planning process.

In the past we have always had a 50% safety margin which makes extra work for everyone.

Comment:

ALAN WALKER:

Thanks Roger, perhaps I can also just add to that. We have a living working demonstration of the question that Jack asked about in relation the Jarrah & Marri forests in the Southern Forest Region. I can think of integrated Jarrah operations where there are at least six log products segregated on bush landings, first grade Jarrah logs, second grade Jarrah logs, SEC poles both Marri and Jarrah, bridge timbers, chip logs and Marri saw logs, so that is happening already in the South in forest not dissimilar to the type of forest that would be logged further North.

I have a comment in regard to salaries and their allocations and a plea more than anything else; It is important that salaries become part of regional and district budgets, because until the accountability for the spending of that salaries money comes to the people who are allocating the work, then we won't get our priorities right for our people and I firmly believe that the decisions between whether we going to put our staff onto burning, or logging control or any other jobs that we do, won't be sorted out properly until the budget belongs with the managers who are supervising and implementing that work.

Comment:

ROGER UNDERWOOD:

I agree completely with that, and it is definitely in my mind as something that will happen right across the board so people will know just what they are spending, what ever it is, i.e. environmental protection, wildlife conservation, national park management and will be controlled by the managers, by the people with their salaries attached to them.

Comment:

DON KEENE:

As from the first pay period after these salary allocations go in, they will appear on your own 097 reports, there is a spare column in the report which can be used at the moment. But progressively after a month, you will have a month's salary allocation on your own 097 report. You already have a 001 report which is our major management report that goes to the Treasury. Also we are going to generate an internal 002 report or some other number which will enable us to see all this from a Departmental wide basis and if your superiors want to know what is happening in a month's time we will have the month's salary allocations right there.

It won't be a complete annual statement of course for a year, it may be too slow, but in 3 months we will have quite a good idea.

Of course, when you have a multiple series of objectives you are not likely to get 100% in any of them. If you have one objective you have a better change of getting 100%, and I think that's a balance. The industry tends to say to me, "we are going to pay for all these other desirable things that we were just talking about" and of course my opinion is that it is just part of the game and it will have to be a balance.

Question:

BILL ADAMS:

Just a query regarding the integration of the Government sector with the private sector. What are your comments or ideas on guidelines for staff when you consider the fact that we start at 8 am and the industry doesn't? Staff R.D.O's, leave, training rosters, etc. in regard to supervision of operations ?

Answer:

DON KEENE:

That opens up a whole new Pandora's box and I don't think today is the forum to talk about flexible working hours for staff.

Comment:

ROGER UNDERWOOD:

The last question touched on some of the subjects that you do run into if you do have too few people dedicated to one function. We find people do go on RDO's and get sick etc. and if you are relying on a very narrow stretch within your district then the place really falls into a hole and I strongly urge that we don't concentrate all this knowledge to one or two people in the district and this is one reason that the districts have to get together and agree on the structure that helps make it operate.

Comment:

DON KEENE:

I agree! It is not "timber production's" men or the "district's" men, the district has to look at intergrating those a little better. I am not stipulating that we should have one person for one district and he is the be all and end all. What I am looking for is someone to be responsible, who can be nailed down if it doesn't work or praised if it does. The functional review probably frightened a lot of us, not from a functional review point but looking at what the FTE's are, and I have 100 FTE's that were booked down to me and when I counted up I didn't get anywhere near a 100 and when you put on all the timber functions, it ended up that the Timber Production function was booked down with 400 FTE's out of a total strength of 1424. I scratched my head and if each of the other Divisional Managers took the trouble to look it all up, they would wonder where all these people were.

Comment:

SYD SHEA:

I want to emphasize the point about the timesheets that are going out and as I said yesterday I was the worst offender in the old days, in not filling them in properly. But it is absolutely critical that we do identify costs and I also hinted yesterday at some of the consequences if we don't. Because we are getting quite a lot of pressure in terms of why our show is not to be privatised and there is an argument for and against. If you are keen for us to move into the interaction between the private and public sector, which in my opinion is the way we should go, it is most important that we can allocate the \$22 Million dollars. It is horrifying when you are trying to put up a prospectus form which we are doing and looking at the possibility of getting public money, not through the tax system, but out of the community activities. We can't pin that cost when you start talking percentages, so it was just a point to emphasize. Those tasks are time consuming I know, but they will be used.

SOFTWOOD PRICING AND ALLOCATION

(JON MURCH)

We have inherited, from the days when the softwood sawlog resource was tendered, basically three grades of saw logs, and a case log, which goes back further than that. And there was a system of pricing with regard to stumpage based on thinning or clear felling. That was a simple and fairly logical system in theory, but in practice has proved not practical because our expectations of size and quality of log from thinnings and clear fellings weren't met and therefore when we sold logs from a clear felling operation at a fairly high stumpage, what the sawmiller was getting was not of value to him. We then had to look at what was of value to a sawmiller and also to us, put them together and come up with a specific set of criteria and specifications for log grades that satisfied the processor and ourselves. Basically, when you look at what is used for log specifications in New Zealand and the Eastern States you come back to three basic parameters:- age, log diameter and log length.

The system had to be relatively simple and also practical to implement and had to impose no additional measuring or segregation costs and also to be relevant to the resource we already had. We found it wasn't suitable to have a log grade that was vastly superior to what we have in the bush or plantations. It is necessary to deliver our logs at least cost and efficiently, we can't impose a complicated system that is going to cost a lot more than is necessary.

The grades had to reflect a differential value to both us, as the grower, and also the processor. It is possible to have a system of many grades, and at times we have been pressed by other people to implement a system that was complicated. We chose a simple system and I believe the simple system is most likely to work.

We decided to have three grades of pine sawlogs, i.e. first class, second class and small pine logs. I have figures here related to value and size; the first class is approximately \$50, the second class \$32, and the small is \$16, which means it is 3 to 1 for first, 2 to 1 for second, 1 is your base value. I am not sure as to whether it will be maintained in the future but at the moment it is a logical step.

What we have to do is to relate that back. George Malaczuk has to use that money and it has to be related back to what we can actually produce from our various operations and to pay for the vast growing cost that we accumulate over the period of the rotation.

Although it is very simple to produce a dollar figure, they have to be worked back and George has to produce a revenue that will balance the cost of growing plus an accepted rate of return to the Government's investment in the pine plantations.

We have talked on the value side and now we go to the basics of what is of value to the processor and what he can get out of the logs, his costs of processing and of what value are the products that he is trying to produce. It depends on size; he is prepared to pay more for a larger log. So that is where you get your first class logs. You have a minimum of small end diameter of 30cm and 4.8 metres in length to 6 metres and you have small saw logs which are basically caselogs. Caselogs are a grade that is irrelevant now because, although as they were very important in the past, The small pine saw logs now are being used to cut structural timber and not just case logs. So case material is a product to cut from small pine saw logs - it is not a log product on its own.

Referring to age timber, older saw logs have less juvenile wood so that is why we have the 25 years plus for your first class and start at 18 for 2nd class and younger for our small pine saw logs because they tend to produce a lower class of product. Age is important and reflects on values.

Another point is the cost; one suggestion from the industry was that we have a single price, regardless of where the wood comes from. That's totally against our system that we have implemented over the last 12 years in the softwood and is being implemented in the hardwood. There has to be a true cost of delivery of those logs. It is very hard to average the costs and have one single delivered price - as it didn't make sense it wasn't pursued. So it will be based on a production to roadside, as is done with hardwood, and a price for cartage.

We have now covered the three grades of pine saw logs we have. It was introduced in January and it's working reasonably well. There are a few problems that we have but they can be overcome. Our biggest problem is in the first class pine sawlogs that start at 30cm, the second class that start at 20cm and for the lengths of 4.8 metres and over and the logs between 20 and 30 - we don't want to segregate them - they are mixed and so the Mills are having a few problems as to how we actually account for those.

QUESTIONS AND ANSWERS

(JON MURCH)

Question:

PAUL JONES:

What about residue logs, and their relative value to sawlogs?

Answer:

DON KEENE:

Ratio is about \$7/m³ for pine residue logs to about \$16/m³ for sawlogs. And stumpage levels for existing pine residue industries are set by Act of Parliament, and reflect ability of those industries to compete on world market.

SOME LEGAL ASPECTS TO TIMBER PRODUCTION

(JIM ADAMS)

The topics they I have been asked to comment on are:

- . The law relating to permits and licences,
- . contract agreements
- . exports and imports

Firstly, we all consider that we have knowledge of the law, but it can be rather complex at times and that is why we need the Law Courts i.e. Court of Petty Session, Magistrate's Court, Supreme Court and then the High Court of Australia.

The simple definition that I have from Websters Dictionary is that it is the customary rules recognised by the community. Another definition from the Law Dictionary is that it is an obligatory rule of conduct.

I certainly don't profess to be an expert on this topic. If I was, I would be working for the Crown Solicitors' Office and not with the Forest's Department come CALM for the last 40 years. I believe that is about two light sentences!

CALM has its own legal advisers in the Crown Law Department who are readily available by personal contact and correspondence to give specific legal opinions, but we can't be running to them constantly. Generally, most of the statutory requirements we work out for ourselves and these are binding on the Crown and therefore CALM. Of course, there are a few exceptions which includes the Bushfires Act and possibly a few others.

In passing on from the introduction to the law, we come to the topic of permits, licences, contracts and agreements. Yesterday Don Keene spoke on the demise of sawmilling permits which has, as we know, given territorial rights to the holders of those permits. He also mentioned the phasing out of sawmilling licences in favour of Contracts of Sale and so the permits have gone.

The Act still provides for the issue of permits which include sawmill site permits. However, these permits, as the regulations provide, are tied to the sawmilling permit itself, so therefore there is no authority to issue sawmill site permits any longer. Pat MacNamara is currently reviewing forest regulations and his proposal is to recommend that these sawmill sites on CALM land will in future be covered by a type of lease over CALM land and sawmill sights will naturally be sawmill leases.

I would like to touch on the share-farming agreements. Since we have entered into this new phase of forestry, we have to look at our security and in that respect the agreement that we reach with the property owner. It is registered at the Titles Office. To be registered at the Titles Office it must be perfectly in order, otherwise the Registrar would not accept it.

That now brings me to the drafting of these so-called legally binding contracts:

Firstly, we must know who the contractor is. One of the speakers yesterday in referring to 2 mills in the Northern Region, spoke about Coli's mill. In fact he was referring to Coli and Son's mill at Mundijong. So therefore the first thing we have to know is, who is the Contractor or who are we dealing with. If it is a company, we issue the contract in the name of the company or if it is a partnership such as Jones and Smith, an actual company operating the Seacrest Sawmill, we wouldn't know who Jones and Smith are. We have access to the Department of Corporate Affairs records and we find out who they are; they happen to be John James Jones and Shirley Smith trading as Seacrest Sawmillers and the contract is then issued in that name and they both must sign as partners to that business. That is the most important start.

It was always my understanding that one partner could undertake commitments on behalf of the partnership. Crown Law seem to indicate that there is some doubt. However, we should put both partners names on the contract, even though one signs on behalf of the partnership. That is one of the fundamentals of writing a contract which is legally binding.

The next point is auctions;

Under the provisions of the act any person employed in the Department can hold a public auction for forest produce only. The Act states that royalties payable shall be established. The auctions that were recently held did just that, even though it was for a Contract of Sale of logs either at bush landing or delivered to the mill by our contractor. The in-forest costs, production and roading and administration charge was known at the time of the auction and therefore bidders were only bidding for a royalty which complies with the Act.

The third topic is exports and imports;

Firstly, you may be aware that under the CALM Act, the Executive Director through the Governor in Council can place an embargo on any exporter, certain species of timber. Many years ago, an embargo was placed on the export of Wandoo, mainly sleepers. The reason given was that because they were a better class of sleeper they were reserved for the W.A.G.R.

To my knowledge that has never been discharged and I have confirmed with Des Donnolly that there is no Wandoo being shipped at the present time for overseas markets.

The Act provides also that all Karri being exported must be branded with the letter K. During the review of the regulations I spoke with Pat McNamara and he considered this is still a good stipulation and he intends to recommend that it remain in the re-draft of the regulations.

There are some statutory requirements for export of timber which don't concern the State, but rather the importing company. First of all, for timber exports, CALM operates an inspection service and it is for the buyer, either overseas or interstate, for his benefit. CALM will inspect to buyer's specification but usually the timber is purchased with the standard specification applying. We all know the inspection and branding system and the fees payable for that. There is Commonwealth legislation to control the export of unprocessed wood requiring an export licence. But generally the export of sawn timber doesn't require any export licence.

The Certification of Authorised Officers under the Export Contract Act was introduced in recent times and the Department has nominated 3 or 4 officers including Des Donnolly and Kevin White, and their function is to sign certain documents which are required by the Consignee.

We complete a Government Inspection Certificate certifying that the timber being shipped has been inspected by the authorised officers of the Department and branded accordingly.

At times the importing company has certain quarantine requirements and rather than the consignee having to arrange fumigation etc, at the port of destination, the officers under the Export Control Act have authorised a bona fide Sanitary Certificate and they certify that the products or representative samples of them were thoroughly examined by an authorised officer of the Department and were found to the best of his knowledge to be substantially free from injurious diseases and pests. I don't think we could be legally bound for that document.

For shipments to New Zealand there are some regulations requiring that all timber being exported to N.Z. is certified as being free from injurious insects and that comes under the Customs Prohibited Export regulations.

In regard to imports, the Customs Department are concerned mainly with duty. But the authority here for quarantine regulations is the Department of Agriculture and they operate an inspection service but only at the ports of Fremantle and Geraldton and if inspection is required at any other ports, it is by arrangement and at the buyer's cost. They inspect

for insect infestation and any soil that maybe attached to the timber. There is documentation available for all that, and the buyer makes application to the Department.

Once is is inspected, any material that is rejected is then taken away and fumigated at the cost of the consignee. Inspection must be carried out within 21 days of arrival in Western Australia. I understand that at times when the timber is coming in container loads that the fumigation is carried out in transit by placing a bomb in the container and that complies with the quarantine regulations.

QUESTIONS AND ANSWERS

(JIM ADAMS)

Question:

MICK ZWART:

Do we have a corporate lawyer working in CALM? I think we need one in view of the contracts we handle these days.

Answer:

JIM ADAMS:

The share-farming agreement was initially produced and drafted by private solicitors, Robinson & Cox. We have then consulted with the Crown Law Department and they have improved on the draft and we know have an acceptable contract which can be registered at the Titles Office.

Other Contracts, i.e. Contracts of Sale & Contracts to Supply, have all been examined by the Crown Law Department, (the Conveying Section) and they assure us they are in order.

Comment:

ROGER UNDERWOOD:

We have a lot of dealings with Crown Law over many matters in the Department. Almost every day people like myself, Chris Haynes, Barry Wilson, Peter Hewitt and Don Keene deal with people in Crown Law who are giving us legal advice on how to proceed. The Government's view is that it is the function of the Crown Law to provide legal advise to Government Departments.

Question:

CHARLIE BROADBENT:

Do we have the authority under the CALM Act to conduct auctions on Forest Leases?

Answer:

JIM ADAMS:

In that case we are selling grass which is forest produce.

Question:

JIM EDWARDS:

Are there any special provisions to allow us to inspect timber imported from the Eastern States so as to avoid the Sirex problem?

Answer:

JIM ADAMS:

I believe that this still comes under the Agricultural Department's quarantine regulations. When we did have the Sirex problem years ago with the pine coming from Holland, there was quite a team of foresters down at the wharf but the inspection was carried out in conjunction with the Agricultural Department quarantine inspectors.

Comment:

PAUL JONES:

I spoke to the quarantine people on this topic a few weeks ago. They said they won't inspect timber especially unless we specifically ask and pay for the service.

Comment:

PETER KEPPEL:

I was in South Australia recently where I was told that South Australia exports treated pine to Esperance, and that in samples of the core of that timber live Sirex larvae had been found! I think we need to be very concerned about this.

HARDWOOD PRICING AND ALLOCATION

(JOHN SCLATER)

Good morning!

The pricing of logs from State Forests:

Officially, at this stage we are committed beyond redemption to the idea of getting the cost of growing returned in the log royalties.

The question of course is; Do we actually know what the cost of growing is ?

I see that as someone else's problem in that respect. The point of course is that George Malaczuk will produce these figures but his estimates of whether that is the actual cost are only as good as the data that are fed to him and we have covered that point.

The second point is that in returning that cost of growing we have to get a handle on (a) the log quality differentials in the logs themselves and (b) decide on the split of the volume in the forest and the price.

We alluded yesterday to what had happened to the last tender where the Jarrah second grade log royalty at \$17.31 only drew bids of tenders greater by \$1. Whereas the Karri second grade log tenders virtually went from \$20 - \$35 in one leap.

You may assume from that the buyer McLean is in a privileged position if he gets his Mill organised and his export licence for Albany etc. Maybe he his flying for a fall. On the other hand maybe we are getting a true expression of the worth of second grade Karri logs in that way.

What I want to point out is that we have done the best we can with the data that is available and the knowledge that we have in setting the prices as they are and these will have to refined as we go on. They are not hopefully cast in concrete. As has ready been mentioned, we have in every individual Contract of Sale two statements;

- (1) We will upgrade the royalty every year on the 1st October to allow for inflation and the rules for doing that are laid down.
- (2) In every contract again there is a review clause, which basically allows the State or the Executive Director to do what it likes with the royalty.

Hopefully that will be done responsibly and will take due account of all the other points we have been talking about, i.e. social responsibilities etc.

How we are going to get the target royalties?

Essentially for second grade logs, in fact all products except the first grade logs, we have achieved target royalty. Virtually as of now there will be no sales for these particular log products at anything other than target royalties.

The first grade saw log deal is complicated! All the sales that have been made on the current basis to go with the second grade salvage logs have also been at target royalty. We have achieved a substantial lift in the overall royalty recovery for the Department and for the State. It will take time to bring everybody else round but the idea is; as and when these Contracts of Sale are finalised with the larger companies, we will have achieved target royalties for all the first grade logs.

On the Business of the Log Allocation:

Basically, as far as we are concerned, it's straight down the line as is written in the Strategy. There has not been one significant deviation from that as yet. We have accepted the criticisms that come from hard line approach and not on the basis that as soon as you start conceding to one, you run the risk of having to concede to all and completely upset the balance.

It has obviously helped some and hindered others and the interesting point is that there has been an absolute minimum of political interference. So having made the statements in the Strategy and then decided that we were going to do it, in fact the implementation of it has been that much easier.

The hard decision was made when the Strategy was written and the follow-through has been comparatively easy.

The question of how we get the wood and how we decide what the allocation is?:

We went into that yesterday and again from our point of view it is basically the hard-line approach despite Hugh's opinion based on an increasing amount of knowledge.

It says in the Strategy, in terms of total log availability, what we are going to allocate. There will be no allocations in excess of what it says in the Strategy until such times as we are certain that more logs are there. Hopefully that will

come before we get too far along the track. Again it is the hard-line approach. The decision was made when the Strategy paper was written for right or wrong. And it is right until proven otherwise.

The question of who gets what;

Once you move from the 50% allocation deal for second grade logs as per the Strategy, we could go to tender, auction or any combination of the two. We could have flown on a individual coupe basis, there are many ways of going at it and we finally decided that 50% allocation under the Strategy would hold, that left us with 50% and it was decided to fly it in 3 sections.

Firstly, a tender for 20% of the available resource, and that closed last Friday. Decision has been made on the Karri bit which went to McLeans in one lump which was 3,600m³. There was 12,600 offered of second grade Jarrah and we actually received tenders totalling 31,000m³. So again we will have no difficulty selling it although as I mentioned the price differential that we received was not nearly as favourable. The interest is definitely there and as a matter of interest, we did not get a bidder from outside the current industry. There is no reason why anybody outside the current industry couldn't put in for any of these logs and stood a chance of getting them. Nobody bid on that basis!

On the other hand we will sell a substantial part of that to a miller who didn't get an allocation under the Strategy. That was also part of the intent of the Strategy, to feed these people who under the old working plan appeared to be inevitably driven out of the industry. So if the volume is still fixed somebody else is going to be deprived, that is the application of the free enterprise system. If you have a fixed resource and a number of people bidding for it, if they have that freedom of choice then somebody else has so-called freedom of going to the wall. We have to live with that, because what it really means is that when that person picks up his allocation, someone else is not going to get his 100%.

Again there has been a substantial shift in the interest in buying their extra 50%. It is quite clear that some people are vitally interested in preserving their total log allocation under the old system and therefore bidding for it, others don't seem to be so worried. Whether that indicates that they are prepared to settle for less or whether they are not reading the play, or they think that at the end of it they are somehow going to be able to ^{put} pressure on us that produces the logs, I don't know! Somebody maybe able to make some suggestions on that point.

Contracts to Supply:

We have these Contracts to Supply organised and at this stage we are proceeding with the first stage which was to get the salvage loggers converted to working for CALM. That has been done and more of them are ^{now} working on their own account.

The second stage was to get hold of the millers who were supplying themselves in the Strategy definition of the medium sawmill i.e. Pickering Brook, Panelli, KD Power etc.

Ministerial approval has been given for us to negotiate 2 year Contracts to Supply with these people and in fact we have made the first offer. In ~~this~~ case we hope this person will come back and put his objections or suggestions and depending on the response we will know whether we are in fact doing it in what turns out to be a reasonably equitable manner.

The point of course is that at this stage we still don't know what his allocation is under the Strategy, because these mills have not yet signed up. There is no medium mill signed up for the 50-90% deal, so these negotiations must go forward together and in the sawmiller's mind they are clearly related, even though we might like to separate them. But in his mind they are related because in a way he is offering to produce his own logs and if he doesn't know that volume he doesn't know what he is up for.

The other side of that is, if he is producing these logs and we go to integrated logging operations, where does his production of second grade logs go? We are not going to allow him to high-grade the bush and then sell his junk to himself at a reduced price.

If we sell it to anybody, we will sell it to the person we think is in direct opposition to him. So if he feels like manipulating the logs to his satisfaction, then we will keep the pressure on him by selling his selectively produced second grade logs to his opposition. Self-regulation you might call it.

The other point about it is in a way it creates more problems, because if we are going to integrated logging in the bush we have to tie that back to such things as, the changing role in the silvicultural-production link, and we are going to tie it back to chip log deliveries to the large plant in Manjimup and that is going to be different from what has been done up to date. So far these mills had no attachment whatsoever to the chip ~~production~~ and that is still to be resolved.

Don Keene mentioned also how we hope to bring over the big logging companies in the Contract to Supply situation and we are disappointed in a way that 120,000³ for the charcoal

plant is not going to stay at that level as it would have given us a very very useful tool to get a major logging contract called as an open tender. Cutting it back to 60,000^m and then having to do 50-50 on the basis of 30,000^m approximately of firewood and 30,000^m of sawlogs really doesn't call for a big tender. As I said it is disappointing but we shall have to live with it.

Comment:

DON KEENE:

The reason why we haven't started drawing chip logs out of the Central Region to date is simply to preserve the negotiating position that we have. We didn't want to start a chip logging operation in the Central Region while the contractor was not contracted to CALM. That will be the position until such time as we do get a sufficient number of contractors in the Central Region contracted to CALM.

Contracts of Sale:

Basically we see ourselves having an average of one per week for this year to get it into place. We started at No. 788 and the tender which will be in the newspaper on Saturday will be 825 so basically we are negotiating one per week.

MINOR FOREST PRODUCE

J. D. CLARKE
(HARDWOOD PROCUREMENT OFFICER)

Page 59 of the strategy document explains how we intend to manage the allocations of minor forest produce.

This half page has been a little difficult to interpret, but some meetings have been held and I think the intention is now fairly clear. Some key points:

1. Minor Forest Produce includes a host of generally small sized articles that are usually required in small quantities. Some of the more common articles are domestic firewood (which makes up over 90% of the total volume of MFP extracted from S.F.) split fence posts, rails, strainers and small poles.
2. In the past, allocation of MFP was entirely up to Districts; the customer had to pay in advance; and the customer did his own harvesting.
3. Problems with this have been many, for example:
 - * arbitrary allocation of licences has caused some argument and jealousy amongst those who miss out
 - * paying in advance often means that the quantity of produce in a specific patch of forest must be "guestimated" in advance.
 - * MFP customers harvesting their own products are each in effect a small logging operation. There are 100 MFP operators on the SOHQ mailing list. We are trying to reduce the number of logging operations on S.F. in favour of integrated operations.
 - * We are spending money poisoning trees that many MFP operators are crying out to obtain (but ref. p. 45 of strategy which says the supply of M.F.P. exceeds demand!)
4. The principle of the strategy is to have fewer M.F.P. customers/operators, operating under relatively long term licences (Contracts of Sale). The strategy refers to a 5 year phase-in period in the N.F.R. only. If the principle of a Contract of Sale is mutually acceptable the new system can be introduced over a shorter period, and in other regions as well.

5. The intention of the strategy as a whole is to put ourselves (CALM) between the customer and the logging contractor. However it would be difficult for CALM to become efficient MFP salespersons overnight, therefore in many cases we will still allow the MFP customer to do his own harvesting for the time being at least.
6. The traditional right of the public to obtain firewood for their own use from S.F. will continue. The practice of nominating public firewood areas as a means of keeping the public in confined areas is to continue. However unless the CALM regulations are written to make this practice law, I don't think CALM staff can enforce people to stay within a public firewood area.

Our knowledge of quantities of firewood extracted from the forest is almost nil.

Estimates vary from less than 100,000t p.a. to over 400,000t p.a. (Compare figures in the draft strategy with figures in final document).

I have proposed a "duck licence" system which should help us in this regard.

WHAT MUST WE DO NOW RE COMMERCIAL OPERATIONS?

1. Districts must:-

- * Identify areas and quantities of MFP (including firewood) which can be harvested each year for the next 5 years. Criteria for this "5 year plan" to be the same as those currently applying to a 5 year saw logging plan. (Greg Heberle to co-ordinate). This plan must also be achievable by the available staff in the District.
- * Nominate names of existing MFP operators who should be offered a Contract of Sale.

(If number of operators is greater than the number that can be sustained, auctions or tenders to be conducted).

* For each Contract of Sale, nominate details including:

- name of customer (if possible)
- annual quantity by product type. 3 product types recognised: (a) firewood, (b) round or split material for fencing or construction (i.e. sold under Part 5 of Schedule of Royalties) (c) Other
- Period of contract (max 5 years)
- Whether produce to be harvested by the customer himself or by existing CALM logging contractor which can include CALM wages personnel provided their cost is competitive, (or combination of the two).
- Source of wood

2. REGIONS must:

- * collate, check and endorse recommendations from Districts.

3. SOHQ must:

- * approve the submissions from Districts/Regions
- * prepare contract documentation
- * initiate auctions or tenders if required

RECORDING AND MEASUREMENT OF MFP SOLD BY CONTRACT OF SALE

It is intended that all MFP will be recorded on a Delivery Note; one D/Note per truck load.

It is intended that wherever possible, MFP will be sold by weight.

TIMBER STRATEGY SEMINAR

SOFTWOOD AND HARDWOOD SHAREFARMING

J. MURCH
SOFTWOOD PROCUREMENT OFFICER

The Timber Strategy commits CALM to be involved in both softwood and hardwood CALM/Landowner joint venture sharefarming schemes.

In either case, the main principle behind sharefarming is to afforest cleared farmland. The thrust is to improve degraded farmland, especially where salinity or phosphate pollution affects water quality. In addition, the scheme must be economically viable to the joint venturers, providing an adequate level of monetary return or employment to the landowner/investor and the Government.

Sharefarming, as opposed to land purchase, removes the high initial capital cost of land purchase, but most importantly, the scheme allows landowners to be involved in tree growing and the wood production industry. They, in effect, have a vested interest in wood production and thereby build a broad base of support as opposed to the traditional "them and us" syndrome which is often the reason behind criticism of any Government action.

The softwood and hardwood schemes differ somewhat in approach and level of activity due to the planned marketing of the log products which will be produced.

Softwood

The Timber Production Strategy plans for an annual softwood radiata afforestation of 2,000ha per annum, made up of 1,000ha in the South Coast Region and 500ha each in the Central and Southern Forest Regions. It is proposed that sharefarming should aim to account for 80% or 1,600ha/annum of the annual 2,000ha target. The remaining area will be obtained by purchasing private property.

Areas of second rotation plantings are additional to the new plantings to ensure the forest resource base is maintained.

The objective is to develop a major softwood processing centre in the Albany/Plantagenet area and consolidate the areas already established in the Central and Southern Forest Regions.

The first softwood sharefarming plantings occurred in 1987.

Hardwood

The Hardwood Sharefarming Scheme has to date concentrated on globulus to provide the raw material for short fibred pulp.

The marketing of this resource is still not resolved. The option is to process into chip only and export the chip, or further process locally the material into pulp. Both the Federal and State Government strategies are to promote the production of value added products.

The scale of future globulus plantings have still to be resolved. However, the order of 2,000ha to 10,000ha per annum to achieve an area of 50,000 to 100,000ha is being considered. It is apparent that the greatest area of cleared land available in an area requiring improvement is the Peel/Harvey area. Other areas would cover the Wellington Dam Catchment Area and sensitive catchments such as the Kent and Denmark.

The future location of a pulp mill would also influence the thrust of the sharefarming area.

Existing contracts have been for short rotations of 7-13 years. However, it is still planned to develop some contracts for long rotation sawlogs for species such as karri and maybe globulus.

2,000ha will be planted in 1988.

1. Funding

To date the funding for both schemes has been from within the CALM capital budget. The responsibility for ensuring funding lies with the Managers of Operations Division and Forest Resources Division.

Possible future funding using private capital has not been resolved.

2. Impact on Regions and Districts

2.1 Responsibilities

The responsibility for co-ordinating the implementation of both the schemes and the contracts currently lies with the Manager Forest Resources Division.

The responsibility for carrying out the work, protection and liaison with the local authorities lies with the Regions and Districts.

For the purpose of the Bush Fires Act, CALM is responsible for the fire protection of the sharefarming contracts as if it was CALM land.

The responsibilities of CALM and the landowner are spelt out in legally binding contracts. CALM is responsible for all establishment, tending, protection and harvesting unless stipulated in the contract. There are a large number of options available and each District will need to know the responsibilities for each contract.

2.2 Workload

Softwood

The work load for softwood has in effect shifted from the Central Forest Region to the South Coast Region whilst maintaining the previous effort in the Southern Forest Region.

The fire protection problems are not new to the forest regions. However, the South Coast Region has had to develop a system using local brigades.

Hardwood

The hardwood scheme is having the greatest effect on increased work effort. The support required is still being resolved and will depend on the size of the annual program.

The fire protection of globulus is a new factor for WA and requirements are still being considered. However, sharefarming does result in a mosaic of plantation surrounded by pasture.

3. **Future developments**

It is important to maintain the thrust of both softwood and hardwood and not one at the expense of the other.

Properties suitable for softwood are to be 67% softwood and 33% hardwood (for globulus). The thrust of globulus should be to areas not suitable for pine.

Indications are that landowners are interested in sharefarming, in particular globulus. This will be necessary if a large globulus program is to be achieved. The globulus should also attract further properties which will be suitable for pine.

The sharefarming project has some ongoing administration and funding problems (which can be resolved). However, my conclusion is that the principle will prove extremely successful as means of afforestation.

QUESTIONS AND ANSWERS

(JOHN MURCH)

Question:

MICK ZWART:

Do you see a role for globulus plantations on die-back rehabilitation areas or bauxite mine rehabilitation areas ?

Answer:

JOHN MURCH:

Yes! Provided globulus fits our management objectives/land use priorities for those areas.

Question:

BARNEY QUICKE:

How is the landowner paid, and how is the area measured ?

Answer:

JON MURCH:

The contract is relatively accurately surveyed at first, and then the basis of reconciliation would be by aerial photograph, maybe anything from 1-3 years afterwards. We will adjust what we paid on the basis of that.

In answer to the first part of the question it will be the net area that we plant. The contract is actually worked out on net areas, not gross. He gets paid by so many dollars per hectare of the net area on an annual basis mostly. The landowner's 95% share either on an annual annuity, 5 yearly lump sum, or 10 yearly lump sum, or some other arrangement. These payments are indexed by C.P.I. The other 5% he takes at the final clear fell.

Question:

JOHN SMART:

My question follows on that of Barney Quicke's. We seem to have a few elements in the equation. We have the cost of establishment, the cost of annuity which we have heard is

tied to C.P.I., but surely the crunch of the bottom line comes when the price of the timber must increase each year by C.P.I. otherwise we would finish up way behind. I would find this fairly hard to swallow in terms of the article in today's paper where the Premier has said that State charges will remain below C.P.I. I would say we are building a wall to jump over in 10 to 13 years time.

Answer:

JON MURCH:

One of the basic principles of share-farming is that the Government takes and the risk which is one of the selling points behind share-farming. The landowner has no risk, he has an assured level of income which is indexed, so therefore it is a good system. George Malaczuk drives the economics behind it and has a reasonable amount of buffer in the system.

If you look at the long term trends of log prices, and wood prices, it has either exceeded or kept pace with the rate of inflation. Syd Shea was very careful to be sure that there was more than a reasonable expectation that there would be a demand for pulp and for short-fibred eucalypt pulp. As long as the expectations are there for us to sell, we expect to get more than we actually are allowing for globulus and should be able to sell it at higher price than we have put into the equation.

There is a more than a reasonable expectation in regard to Pine, that it will maintain its level of increase, which the indexation is based on. Of course there is a risk, but there are enough positive signs for us to be confident.

CONTRACTS AND CONTRACTORS

(JOHN SCLATER)

One of points that comes from John's comment (see last question) is that in a way we don't give a damn what is written in the newspaper.

One of the happenings in moving from permits and licences is that at least there is removed a arbitrary measure from the decisions. There are now signed contracts for these various things. As Don Keene said this morning, "the Crown can be sued if they don't perform". But equally the Crown in the form of the Government, as opposed to us as the Contract owner, is also in a very strong position to maintain that we have legal commitment to continue with what is written in the Contract for better or worse, and therefore we can go ahead with reasonable confidence and can enforce the indexation conditions that are written into the Contract.

Sometimes they will operate for us and sometimes against us, but the fact remains that they are there and it is no longer an arbitrary decision in that sense. The Minister will have to justify to himself and to every other body involved if he decides that the indexation conditions written into each one of these Contracts applies. It can be taken for granted that if he refuses to pass the indexation on in a Contract of Sale, & there is a Contract of Supply that is driving that Contract of Sale, he is not going to be happy with that decision, and that is where the double barrel approach will apply.

The person that has the Contract to Supply has exactly the same indexation provisions in his Contract as we have written into the Contract of Sale. We are not operating a plus system. This is a part of us moving from an arbitrary conservative type approach to a much more commercially sensitive, commercially driven type of operation and it impinges directly on the subject of contractors, contracts, responsibilities and accountability, because that is precisely what it is all about.

Price Lists and Contractor Rate Lists:

Here we have what is part of a new presentation of a Price List and it will be output from the Computer in the near future and there will no longer be any printed price lists supplied to you. If you want to know the price of anything or in this case, the details of a Contract, you will call it up on the Computer and you will get a Statement.

It also tells you all you need to know about paying and gives the various descriptions of the work. Further down is the production loaded on transport or whatever, conditions again

and the amount that has to be paid and at the bottom the delivery rates involved. Right at the bottom are the list of work codes. It is fairly straight forward and an exact replica of what you will get.

Does anyone have any questions ?

Question:

KEITH SCLATER:

What about log specifications (Schedule 3) from the Contracts. Will they be in the Computer ?

Answer:

JOHN SCLATER:

No! Copy of Schedule 3 must be sent to Districts by Timber Production Branch for each Contract.

TALK CONTINUED BY JOHN SCLATER

Hopefully, after the 1st July this presentation will be available to all of you for all the Contracts of Sale that you are interested in, and all the Contracts of Supply, at the press of your Computer request key. We shall have removed a whole area of conflict which has existed to date.

We are trying to standardise every one of these items in the price and rate schedules.

Production, administration and delivery:

At the same time we have identified the production cost and the admin. charge. The delivery rates are a straight take off of what is on the applicable Contract to Supply (no loadings). Down the bottom there is a choice of either stumpage or royalty. We have made an executive decision !

Royalty and Stumpage:

Old growth is "royalty" and all re-growth is "stumpage" from now on. There will be an amount written in and an indication if it is the target royalty presentation. If there is no indication, that indicates it is below the target.

Target is written and that stands. If it is greater than target there is a double entry i.e. target and premium and

that is expressed over and above this, for example, the Mclean deal when the target was \$20.76, he bid \$35, both figures will be entered in.

That has implications for pricing later because the indexation provisions of the Contract apply to target only. The reason for that is that we want to encourage people to buy and make a commitment, but not to penalise them as it goes along.

In Forest costs:

Each one of these will also include the applicable in-forest cost amount. On this form it is 58c. The trick there is that we are still negotiating in terms of both the Contracts we have signed and the contracts we have yet to sign and how we are to get the total in-forest cost applied. We have some commitments as to *what we are now getting* - in this *particular* case we have 58c; we really want \$1.26 and so we have some negotiating to do.

Roading:

In the re-growth operations it is under the full control of CALM and therefore we charge \$1.41 because that is the Southern Forest Region roading cost assessed amount.

Managing Contractors:

Some points concerning the managing of contractors: The first one is; *after looking for* him, & having signed him up etc, the problem of high grading the logs to the buyer's benefit and not ours. *We have* made the point that the biggest single factor is that you as District Managers or *Forest Representatives* or whatever, is to get out and make sure that the right log ends up in the right heap. To get the highest value-added that we can achieve from the forest product as it comes away from the bush, and the place to do that is the bush-landing. At the opposite end because we now make that decision *unilaterally* the buyer has no input to it and if we send him material which is not up to standard, then we have to face up to writing it off. It changes the onus of proof of logs on the mill landing completely.

Up until now, if he was silly enough to take them in, then that was his problem. Now we have that responsibility and you fellows are going to have to deal with that decision. You will have to wise-up the contractor and get to him to sort it out to our advantage without breaking the specifications and allowing the person buying to claim against us. If he has a justifiable claim then we just have to stand up and be counted, there can't be any backing off.

Another problem is the increase of product types being handled over the landing. Do we need bigger landings? Don Keene suggested that we need some kind of close-coupled operation to drive all of it. There will probably be horses for courses ~~or~~ a series of preferred options in certain places and not in others.

Again because you are the fellows on the ground and we say to you here is this guy, here is this operation, you get to grips with the problem. The region and the district essentially have to solve those problems.

We must accept that the contractors are working for us, relying on us and performing for us and therefore have to be trained by us and be supervised by us. There is no escaping that from now on.

We had a fairly substantial problem at the operations in the Jarrahdale district, where we suddenly turned over to a CALM contractor *production of* second grade logs. He was the Bunnings logging contractor for 1st grade logs and we really forgot that his fallers had never produced a salvage log in their life deliberately. When we asked them to continue to present salvage logs as an on-going order, they were not able to do it! We had forgotten to train them! We had forgotten to tell them what we wanted! This is important.

Another thing that Greg Heberle is going to have to do is to get together in all of the plan the balancing of log demand, i.e. what is actually coming out of the individual coupes at any given time. There is going to be a real big job in tying them altogether. Coupled with that, we have certain undertakings, not necessarily completely explicit orders, but we have given certain undertakings about ensuring minimum haulage distance for the maximum benefit - there is no value in hauling logs around the country side for no reason. It doesn't improve the logs one bit and it doesn't give us any more money, because we have opted out of the admin. charge on delivery. If we had decided to stay with it, maybe we could have organised that the mills in Perth would always be supplied from Walpole and vice versa.

So now we have a commitment to minimise the haulage distance to all our customers to the best advantage and we have promised in the contract to get the best possible price, the best possible contract and maintain all these things as far as reasonable and it is important that you realise that we have undertaken this on your behalf. You people have to *put* it into effect.

Another thing about this relationship between the contractors and us is that up to now we have had a problem because the production of salvage log material (2nd class sawlogs) has preceded the sale negotiations and as a result it has then

been left on the landings for too long a period. What we have to realise is that 2nd grade logs by their very nature degrade more rapidly than 1st grade logs and we cannot afford to have them sitting around. That has been a very legitimate criticism of our branch because we found that ~~contractor~~ grabbed it and then when we didn't perform, we then didn't know who to sell it to because we hadn't organised a sale.

Because we have these Contracts of Sale lined up, come the 1st November we should have in fact committed every available 2nd grade log and therefore there is no excuse for them to be left on the landings and having them deteriorate after log preparation. So one of your jobs is to make sure that they keep pushing out the balance of product that we require from every landing that has been operated. If then we begin to get back to a unbalanced situation then we are going to have to start talking to Greg and see what adjustments we can make either in coupes or alternatively in longer hauls to some people who will just have to wear the longer haul to balance it all up. Basically that is all in terms of our responsibilities and our contractors as it's a CALM deal from top to bottom, not just Timber Production or District, it includes all of us.

FURTHER QUESTION TO JOHN SCLATER:

Question:

PAUL JONES:

What happens if there is a down turn in the Sawmilling Industry as far as Contracts of Sale are concerned, and in turn the Contracts to Supply ?

Answer:

JOHN SCLATER:

Hopefully the big Contacts of Sale will have some sort of "take or pay" clause. There is nothing in the Contract to Supply as yet. We need to address this point.

LOGGING COMPUTER SYSTEMS

J. D. CLARKE
(HARDWOOD PROCUREMENT OFFICER)

1. Why the Computer?

The task of:

- (i) keeping track of the movement of log products,
- (ii) the paying of logging contractors, and
- (iii) the invoicing of customers, is huge.

I would confidently say the task would in fact be impossible without a computer as a tool to help us.

Why? Simply think about the implications of the timber strategy, i.e.

- (i) CALM, not the customer, is in charge of paying the logging contractors,
- (ii) CALM then invoices the customers for not just royalty or stumpage, but production costs, and
- (iii) increased numbers of log product types, each with their own royalty or stumpage.

And consider also:-

- * 20 contractors working for CALM, each with their own particular schedules of rates for falling, extraction, loading, measurement and delivery for a variety of log products.
- * 60 customers at a range of haulage distances from the different logging operation sites.
- * 10 species
- * 30 log product types
- * 4 different methods of measuring logs.
- * Numerous different royalties, stumpages, roading charges, in-forest charges etc.

* 50 different logging operations working at any one time over 11 CALM districts.

* Collections of 2 different types of log levies.

Put all the above together for one year on top of a volume of over 1.5 million cubic metres of wood with a revenue of over \$40 million, and we have a very large, complicated and important barrel of facts and figures that must add up to the nearest 0.01 of a cubic metre and the nearest cent.

2. New initiatives

A computer has been used to record movement of logs, pay contractors and invoice customers for pine since 1977. The hardwood system commenced on 1 April 1986. Both systems have basically worked very well, but they aren't completely finished. What's happening now is a combination of the two systems into one. I think we could call it the Commercial Logging System (but any suggestions for a good name will be welcomed). The new system will cope with all log products (including poles, bridge timbers, MFP) and will provide information on paper (reports) or by direct enquiry through a terminal. The new system will contain rates and prices relevant to all products under all contracts to supply and contracts of sale, and the task of indexation will be done by the computer, saving Don Challis a horrendous task. Indexation of prices takes place on 1 January, 1 June and 1 October and any other time if required.

3. How do these systems actually work?

Very briefly, for those who aren't familiar, the two logging systems we use at present are based on information provided by a document called a Delivery Note (there are several types). The Delivery Note is a piece of paper carried by log truck drivers upon which all the information we get out of the computer is based. These Delivery Notes are entered into the system by Districts. SOHQ and Regional staff provide and enter background information into the computer so that it is ready to process these D/Notes.

At the end of each half month, the computer produces a series of reports, the main ones of which are:

(i) for districts (to pay contractors)

- (ii) for regions (to monitor contractors' performances, rates of delivery to customers, and volumes from operations), and
- (iii) SOHQ (to invoice customers, to monitor expenditure and income and to produce information for annual reports and parliamentary questions).

4. How big is the task of district, regional and SOHQ staff in these systems?

In one word, it is big. For the system to work accurately (and it must because we are dealing with large sums of money) many CALM staff must:

- (i) know what they must do, and
- (ii) do it accurately and on time.

Districts:

The biggest group of people involved are district staff, in particular the field officers who supervise the logging operations and must ensure the Delivery Notes are completed accurately, and the clerical staff who enter the D/Notes into the system via the district's terminals.

How many D/Notes each year? 1.5 million cubic metres at say 30m³ per truck load equals 50,000 D/Notes per year. (One customer, WACAP, help out here but Alan Hill might comment on that).

Regions:

At regional level, there are usually one or two people in each inventory section that play a key role in entering base information into the computer system.

SOHQ:

At SOHQ, there are two extremely important people who really keep the whole show on the road. They are called System Support Officers and their names are Alison Mason and Merrilyn Kearney. They are level one officers who spend a lot of their time telling level 3, 4, 5 & 6 officers what to do!

5. How do we ensure all the CALM people involved in the system know what to do?
- (i) Informal training by Timber Production Branch on an ad hoc basis. We plan for this to be expanded into annual training schools on all aspects of timber production. This seminar is partly a one-off start to that program.
 - (ii) The user manuals (show the two existing manuals).
 - (iii) Written guides to the systems for particular groups (show draft of guide for field officers).

Conclusions:

1. The logging computer systems are all about money, production data and accuracy, and they require a team effort by many people to make them work. If one link in the chain fails, big problems occur.
2. Regional and district managers must give due recognition to the importance of the task of staff involved in using the systems. Gone are the days when staff simply tree marked, did permit control and mill landing inspections - the task of controlling the financial and production aspects of logging puts much greater responsibility on field staff involved in logging.
3. Because of the importance of those responsibilities, Timber Production Branch is keen to see at least two officers in each district at any one time with a complete understanding and knowledge of the commercial aspects of logging. This seminar and the proposed annual training schools for District staff are designed to help ensure this happens.

WE NEED A COMPUTER BECAUSE THERE ARE APPROXIMATELY

...

- * 20 CONTRACTORS WORKING FOR CALM, EACH WITH THEIR OWN PARTICULAR SCHEDULES OF RATES FOR A VARIETY OF LOG PRODUCTS.

- * 60 CUSTOMERS AT A RANGE OF HAULAGE DISTANCES FROM THE DIFFERENT LOGGING OPERATION SITES.

- * 10 SPECIES

- * 30 LOG PRODUCT TYPES

- * 4 DIFFERENT METHODS OF MEASURING LOGS

- * NUMEROUS DIFFERENT ROYALITES, STUMPAGES, ROADING CHARGES, IN-FOREST CHARGES ETC.

- * 50 DIFFERENT LOGGING OPERATIONS WORKING AT ANY ONE TIME OVER 11 CALM DISTRICTS.

- * 2 DIFFERENT TYPES OF LOG LEVIES WE COLLECT ON BEHALF OF OTHERS.

QUESTIONS AND ANSWERS

(JOHN CLARKE)

Question:

MICK ZWART:

At the end of each half month we currently get an AGP 060 Report (Volumes delivered to Mills Report). Will we be able to get this information on demand to enable us to more easily monitor mill intakes?

Answer:

JOHN CLARKE:

Yes! This facility will become available. The computer will be able to produce information in any format we require, provided the source information is covered on the D/Note.

Comment:

DON KEENE:

The quality of information we get from the computer is entirely dependent on the quality of data input via D/Notes. And this means also that D/Notes must be processed regularly.

"MONEY MATTERS"

(ALAN HILL)

The subject I have is finance and how it effects the Timber Production Branch. We have to go back to first principles and say that finance is very important. When the Executive Director said yesterday that when he was a researcher, he used to have a big bucket of money and put his hand in it and when it ran dry it was a nuisance and I am quite sure that we have been in that predicament over the years. We have all given it that little bit of attention from time to time - those days are now gone and I would expect everyone to thoroughly understand where the finance comes from. Because it goes through your hand in spending and I want you know how to account for it and how to know what you have done with it.

We have heard the story from Roger saying, in New Zealand, the Forest Service went down the tube because they couldn't account for their money properly and it is a well known fact that of all small businesses, 50% fail inside 3 years because they cannot account for their money and I think we could put a lot of you in that predicament too.

When I refer to Syd Shea, he is just one of them and I am quite sure there are some of you here that take it a little too lightly and some that do it extremely well. We all have to be prepared and aware that we must worry about finance - it is important and it what makes the world go around and we shouldn't overlook that fact.

The other day Mick Zwart was worrying about Treasury and where they become involved in it. Treasury is very staid sort of a body. They operated originally under the Audit Act of 1901 and you can picture them using Quill Pens in those days and how they got their act together. In more recent times, in 1984, they decided to change the Act and now they operate under the Financial, Administration and Audit Act.

That Act has come out in the form of a Red Book and although we have other Red Books in the Department, and unfortunately Treasury also put a red cover on theirs and called it the Red Book of the Financial, Administration and Audit Act.

There is a copy of this in every District & Regional Office. Some of you are not aware of it, even Senior Officers. I have brought it along today and show it to you as it governs all the operations that you do in the finance area. It is a little like John Clarke's Manual. It is not recommended to be read as a novel but to be aware of it and it is held by your Forest Administration Officer. He has more access to it

than perhaps you as it governs all the financial transactions that occur in the Department.

Treasury are trying to delegate the control of finances away from their Department. There is a big move in the Government to make financial matters more equivalent to those in private enterprise and therefore want to pass it down to the Departmental Head. The book quotes; "the responsibility of the finance has been passed to the Departmental Head". Obviously he cannot handle it all - so in turn it is delegated down the line to you people and that is why you are receiving a barrage of literature stating what has to be signed and who signs on what, etc.

Once you have signed any of the forms it means that you then accept responsibility and for anything that goes with it.

All the rules are in this Red Book for your information.

At the same time, although Treasury are staid, I am sure that they are open to suggestions in ways to manage our money in a better way and the encouragement is suggested by the actions of giving us the responsibility. In this particular regard there is a move a foot to change all of our accounting system to get an improved one. i.e. Salaries are not accounted for. The cost of running pine or hardwood silviculture and when 1/3 of the money goes in salaries and it is not costed, the data you receive is quite meaningless.

You may not be very interested in pine or hardwood silviculture, but when Don Keene did the exercise of working out new royalty rates and contacting sawmillers and advising them of an increase in royalty rates, they questioned why? As there was no data for him to refer to, he was on shaky ground. When checking figures in the review he finds he has about 1/3 approximately of staff in the Department - he can't imagine it to be true! It's part and parcel of putting the royalties together that we consider all your time that is costed against producing the timber products that you do.

He is one person who is very interested and concerned about getting the costs correct and looking to a new accounting system. It has been talked about for a number of years and now it's starting to come to fruition with many irons in the fire and you are all familiar with a wages payroll coming on line which has been slow in finalising, but after all it is quite a big project. Also plant costing is coming into effect and the storeman will no longer have to fill in each fortnight the 466 form to be sent to Perth. The input document will be the Plant Running Sheet. We are going to get accurate running sheets from those two sources and finally modify the wages payroll system into a salary payroll system and we shall then now exactly what everyone is doing and how to allocate the costs. He will get better figures on what salary costs are.

In the scheme of things, we are looking at costing and the basic areas that we are going to worry about are; the forest costs, parks and reserves, then timber production. They are the main areas that we will put the costs into so that if for example Research say "we don't want to know what the expenditure is necessarily because, it is going to be broken up and passed into various areas where they fit", and by that method a total cost is obtained for running parks. It is in the pipeline, it is coming along well and going to be aided and abetted by the ability to allocate salaries and all that goes with it.

How can you all help? Everyone is familiar with the 097 report and up at the top are listed wages, materials, contracts, plant and further over on the page salaries and administration. The far column has never been used as yet and now we are in a position to use it when we do know the salary allocation. When your estimates are put together the first line is "salary", 2nd line "salary other" and so on - everything must be entered so that we can allocate them into these jobs entered. We will end up with a very good system of knowing where our money goes.

Input Documents:

The input document will only be written once, and the Wages sheet is as its name implies. Wages Sheet data must be correct and accurate and it must be checked by the Officer to make sure the numbers are right etc.

The Executive Director told us of the pruning gang he was in and how they didn't prune and were just waiting for the fire that may come, so the pruning component lumbered the cost. You all as front line managers must know whether it is to be costed out to stand-by or to pruning. If it is costed out to pruning it will be enormous and you are into the capital scene and you may not get your money back over the years. It is in your hands to make sure that the Wages Sheet data is correct.

Material comes from the requisition that you fill in. They are paid on a Form 10 through Head Office. And you value on a daily basis your Plant Operations. You must cost those out to the correct projects and then you will end up with the total cost concept of the operations you have going.

So to improve everyone's financial efficiency we have to know what reports you have. They have to be understood but some of you avoid them like the plague! You are not the only ones. And I have found out that they haven't got the time to learn! You are all familiar with the 097 report - a district report - also there is a 098 which we call a regional report, and finally a 001, which is a Departmental report.

Unfortunately they were put together some time ago and they may not tell you precisely what you want to know. Some of them are lengthy and your project may not cross the lot so you may want a special report to cover your section. That is possible too! If we can possibly put together a report that will help you to manage your area correctly, that's what it is all about, to get you up to speed and know what's happening with your money.

Apart from those input documents, there are the categories in which they have to be put and that is called the classification of accounts. Everyone is familiar with the headings when the estimates are put together. Again some may suit you and others may not - feel free to discuss it with us at any time. We have the Budget Officer in Perth who will help you should you want to change any of them to give them a more meaningful connotation.

The last thing I can offer you is a graphic presentation of your report. Some of you don't like reading reems of figures and columns of data but if we can give it to you in a graphic - you can see which way your expenditure is going. Therefore you will know on a daily, weekly, fortnightly basis etc., the critical areas in the graph. We can give you a graphical presentation which will help to manage your money a little better.

Ian Frame is our Accountant and is going to make regular visits to the field and therefore there are going to be opportunities for you to speak with him personally and see what can be done. Aubrey Fretz, the sub-Accountant will be along to help him, so please contact these people to get them on side to suit you problems.

Timber Production:

Another concept that I would like to get into all of our operations is the revenue side. I would like to see revenue and expenditure match up and once that is done - you then become part of the team. It must be realised that we need the expenditure entered and have the revenue coming in and the more coming in means that there is every chance you may have more expenditure.

Someone questioned Syd Shea on this point and was told that when we go to Treasury, if we have a lot of revenue coming in it carries a lot of clout and that is important, for if it diminishes we then have a problem getting the expenditure that you're asking for and if it is going well there is every chance we will get it.

The total revenue is \$51.03 Million and 95% comes from our timber operations, the other is rents and leases etc. and some from National Parks and so forth, but only a small portion.

Salaries:

There is \$27 Million approximately put aside for the coming year. That was put together as a balance sheet. I hope we get that concept going right through your estimates, all the projects that you do and we hope to get a balance sheet. The Parks will not bring in much revenue but at least by doing your estimates you will know what revenue you are getting from the Parks and as it will be small to start with, you will be able to watch it grow over the years and take steps accordingly.

Loan Money and C.R.F. Money.

You will realise that C.R.F. money comes out of our taxes, and none of us feel inclined to pay any more taxes. The money you can have plenty of is loan money and the problem with that is when it has to be paid back you then have to take some of your C.R.F. money to pay the interest on the amount of loans you have outlaid. Once we only used to pay a small amount to repay the loans but it is getting more all the time. Now there is a limit to the capital that you can borrow.

It is one thing I want you to understand very clearly and as I said before Ian will be able to explain it to you. Others are constantly saying, "why can't we spend money on parks"? My answer is, "you have seen all the money that we are earning from the trees and your impression is the more trees you plant and the better you fertilise them, the more volume you get and then you will increase your dollars every day. Whereas in the park, if you want to put in \$1 Million dollars into your parks and feel free you have to pay the interest bill on it and if you spend it, make sure you get the revenue back to pay the interest on the money you want to put in there - I wouldn't recommend it this stage and I wouldn't be party to any proposition such as that.

In trees you have a cash flow and you can pay it off, in parks you haven't got a cash flow yet - you may possibly get it - at this stage I don't know as it is a very hard case.

In conclusion:

I wish to end on the note that Finance Branch is here as a service organisation which is open to suggestions and help

in finance operations at any time. Please don't hesitate to call the people involved and establish some rapport to help you with your estimates and expenditure into an order that is meaningful to you and consequently you will be able to manage it much better than you have in the past.

FIRE PROTECTION & FOREST RESOURCES INTERFACE.
(JOHN SMART)

1. Introduction.

Three main themes will be discussed in relation to the fire protection and forest resources interface. They are Planning, the role of the District and provision of supplementary manpower resources.

2. Planning.

It is essential that the future needs for fire protection are considered at the initial stages of any planning process involving timber production. Fire protection is not generally an "add an option" which can be put in place at a later date. Perhaps the best West Australian example of insufficient integrated management planning took place in the Karri forest in the post war period when group selection cutting and regeneration was practised. This operation had three major objectives

- * to supply the mill with wood
- * to regenerate the cut-over forest
- * to open the forest up with roads

to ease fire control problems.

Although sufficient log material was produced to keep the mills going, silvicultural problems rapidly became evident and the ongoing problem of large unbroken tracts of protecting successfully regenerated Karri was never fully addressed. This led to a big roading programme in the 50's and 60's when many hundreds of kilometres of separation tracks were built to enable the Jarrah forest to be burned to protect the fire sensitive Karri regeneration. Large areas of this regeneration had already been burned in wildfires. Few traces of these tracks remain today. It is very easy to say now that had a system of strategic uncut burning buffers been left, many thousands of dollars could have been saved.

This was a classic situation where three objectives were being pursued but not in an integrated fashion.

Throughout Australia there are numerous examples of huge losses caused by fire which could have been minimised with the inclusion of buffers. These include the South Australian Caroline fire, and the Ash Wednesday fires in the Mount Gambier area.

3. A Planning Model for the Hardwood Forests.

In recent times the integration of Fire and Forest Resources operations is best illustrated in the Strategic Buffer Plan concept adopted in the Southern Forest Region for the Wood Chip Licence Area. The plan clearly identifies several key land management units.

Briefly they are:

1. Areas in which cutting and regeneration of the forest will take place within a defined time span.

2. Road, river and stream reserves.
3. Areas of production forest which are not yet available for cutting but which may be rotationally burned to provide protection for regeneration.

As regeneration reaches a condition which will enable regular burning to take place then cutting can commence in the previous burning buffers.

Whilst the Southern Forest Region strategic plan has undergone several revisions over the past twelve years the basic principles and intent remain intact. Districts and the Region are committed to the plan not just involved. Any significant changes to the Strategic Buffer Plan must be endorsed by the Region and approved by Fire Protection Branch.

The impacts of mining rehabilitation and more intensive Jarrah silvicultural operations which are establishing regeneration, has made it necessary to introduce the Strategic Buffer Plan to other Forest Regions. Work has already commenced on this project. It could be argued that it will be a more difficult task to produce a Strategic Plan for the other Regions in view of past operations which have taken place over wide areas, but this is not so. Regeneration from past operations has generally proven to be inadequate or so badly damaged that it can be disregarded.

These strategic plans should not concentrate solely on cutting proposals but should also consider other operations such as the creation of regeneration by JSI works and the impact of mining operations.

Similarly it would be incorrect to view burning as the only means of providing fuel reduced buffers when there are acceptable alternatives available. These include natural low fuel zones such as water supply dams, well grazed pasture on CALM land and private property. Modified fuel zones following thinning of very young Karri regeneration prior to the first burn can provide a useful addition to the fire safety of an area.

4. The Plantation Interface.

Since plantations are invariably of high value, early joint planning of operations is critical from both the Forest Resources and Fire Protection points of view. Ongoing consultation is vital to maximise opportunities and minimise costs. A good example is the need to co-ordinate timing of fuel reduction measures along side a plantation with thinning operations within the plantation.

With respect to Share Farming the need for joint planning is equally important. Whilst it is difficult to draw up Strategic Plans without full knowledge of what land may be offered to the Department in the next 10 or 20 years, certain principles may be adopted and applied. These principles include basic premises such as the maximum size of a grouping of plantation units of the same age, requirements for town site protection, etc. In particular cases it may be of advantage to the Department to sign up a landowner to the scheme and not plant the land for several years to allow a difference in age classes to develop. Any annuity paid to the owner would, of course, be modified to the conditions placed on land use in the intervening period.

5. Integration For Profit.

At present both Fire Protection and Forest Resources independantly approach District Managers and their nominated contacts. Both Specialist branches have requirements for District staff time to ensure that laid down and accepted standards are met. It is very easy for a Specialist branch to adopt a blinkered or single objective approach to a problem and simply ignore the needs of others.

This approach may satisfy Branch goals but can detract from the overall Corporate Goal. It must be remembered that District Managers have many Branches competing for their and their staff's time and it is usually easier for the specialist to talk to the D/M's contact person Eg., the Fire Officer, the Hardwood logging OIC, the Safety Officer etc. However it is a prime responsibility of the D/M to co-ordinate all field operations in the District and this of course means co-ordinating all the work and plans of District Specialists into a programme which will achieve the Corporate Goal whilst satisfying many single objectives.

I don't believe we are doing this well enough at present. Substantial and long lasting benefits can be achieved when such a system is fully operational Eg., logging contracts to remove stags can be let on permanent aerial burn boundaries with the provision that non merchantable logs are pulled in at least 20m from the edge. The permanent savings on mop-up costs would be significant.

Profit in the complete sense of the word is not necessarily dependant on just minimising the costs for a simple operation. Profit must be defined as the difference between returns and total costs taken over the entire operation. For example there is little point in introducing a new system which reduces logging costs by \$100/ha if it creates a fire or environmental problem which will cost \$120 extra to fix up. This line of reasoning should not be confined to contractual operations alone but be widened to include road locations and the like which may benefit future operations with respect to fire, landscape and other environmental factors.

6. Checklists.

In common with most management systems a checklist or test is required. A suggested test would comprise consideration of any operation to see how it would affect fuel modification measures.

If the answer is "No" then the operation may proceed. If "Yes" then it must fit in with the long term strategic plan. For example while it would not be possible to clear fell a regenerate Karri in a burning buffer, it would be quite acceptable to proceed with JSI work in buffers provided the operation was for thinning and not regeneration. It is felt that Forest Resources and other Specialists should work on a system similar to the Preburn Checklist which has been used successfully in Fire Control for many years.

A means of resolving conflicts is in place where Districts or Regions and Specialists disagree. This is clearly a matter for the Policy Directorate to act as umpire and give policy directions for the future. With close consultation and co-operation by all parties concerned these referrals should be minimised.

7. Supplementary Manpower.

The pine logging contract has always contained provisions with respect to fire training for the manpower used in the discharge of the contractual duty. At best, this provision has been low key and with continue erosion of Departmental manpower numbers, it is essential that these men are used. In the recent Nannup pine fire the logging contractors formed a valuable additional manpower resource. A concentrated effort will be made to upgrade this training before next fire season and consideration will be given to placing the logging crews on standby when conditions are so hot and dry that logging operations are stopped.

In addition there is a large resource of people in the Hardwood logging and milling areas which, if trained, would provide an invaluable source of labour widely dispersed throughout the South West. There are a number of legal and industrial hurdles to cross before the scheme can operate but work is proceeding along these lines.

8. Conclusion.

The District Managers job is to manage the resources and lands entrusted to their care. They will have competing pressures placed on them by Specialist Branches each pursuing their individual goal. Integration of goals in a co-operative atmosphere will do much to reduce these pressures and I look forward to a commitment by all towards more integrated planning in future.

QUESTIONS AND ANSWERS

(JOHN SMART)

Question:

TERRY COURT:

Regarding use of our logging contractors for fire control purposes, what about our and their commitments to supply logs to customers ?

Answer:

JOHN SMART:

Good point Terry! The problem is because the demand on the logging contractors will be entirely in the dry months for both logging/stockpiling and fire control. Perhaps we should be looking at the manpower resource in the sawmills, especially considering the average age and fitness of mill employees is more suited to fire control type work. We are looking at this now.

Comment:

DON KEENE:

With pine logging contractors, where we often send them home on hot days, perhaps we can use those contractors on fire control work.

Comment:

JOHN SMART:

Some interesting figures from the recent Nannup fire. On the hot Saturday morning we picked up about 20 men from logging contractors, 20 from the sawmill and 30 from Bush Fire Brigades. That is a significant number of men for a town like Nannup!

GENERAL QUESTIONS

Comment:

BOB HAGAN:

From what I've heard over the last couple of days it seems there is little we can "shed" to the industry as part of our aim of "self regulation". For example, I have heard that silviculture and tree marking is very important and we must spend a lot of time ourselves doing that. And then I have heard that log segregation is very important and we must spend a lot of time doing that our ourselves.

Reply:

JOHN CLARKE:

If we accept that the logging contractors are our employees, and if we carry out sufficient training, I think we will be able to pass some of these responsibilities to our contractors. The first couple of years will be the toughest while we (CALM and our contractors) learn how to do all those things best.

Question:

JACK BRADSHAW:

Multiple use in our Jarrah forest must often result in increased costs of timber for the industry. Is there any flexibility in the way royalties are calculated to take this into account?

Answer:

DON KEENE:

If we wanted to use our forest for timber production only, we probably wouldn't have a jarrah forest, but some other sort of forest that is more productive! However, George Malajczuk does take this into account.

Comment:

BILL ADAMS:

John Clarke has talked of minor forest produce plans, training contractors, increased computer use, training

contractors staff up to act as fire control or forest suppression and said it is going to be tough for the first year. I fail to see how we can achieve all we want to do without either some consideration to an increase in district staff or at least some clear guidelines as to what we drop off at the bottom end to make room for the top end.

Reply:

DON KEENE:

Overall we are not going to get any more F.T.E's, apart from those few I have mentioned and I am hoping we will get, and the chance is we may get a few more if we put in a plod and knock off some other parts of the Department's organisation. The Policy Directorate every so often meets and consider lists of vacant positions or positions that people want created from the various Directorates and each Director has to get up and fight for additional people. Sure it is going to be hard! What I think we need to do is to be concentrated in our activities and I am sorry Roger is no longer here and although we don't necessarily agree on how we should go in this area, I believe more in concentration of effort and training up some people properly so that it is their job for a specified period of time.

I know we talk about how our junior officers who need to get experience and sample a wide range of Departmental activities for their own career development and I support that. But that doesn't mean to say that if there are five basic functions of the Department - they don't have to do all five every month - if they do one for each 1 year, after 5 years they will still get 5 years of experience of all the major functions and so I don't necessarily agree with the line that Don Spriggins put up yesterday when he said he had all his junior officers all tearing around doing a variety of functions and having more specialisation in the higher realms of the field staff.

I tend to think that we should be doing it the other way around, that we have the junior officers concentrated on one area of activity for a specified time (1 year) for their first five years, and then have more specialist officers in the higher ranks in the district.

Although I have been giving Mick a hard time, he is obviously in charge of the hardwood area in the Kirup district and he knows about it - I can see that - and maybe that is what we want more of.

On the other side, I was complimenting Jon Murch, he is still the Softwood Procurement Officer and was able to oversee a new 2000 hectare globulus planting programme on top of co-ordinating a new share-farming scheme. We can't expect

those type of men to do that all the time, but if the challenge is there I don't see why people can't be more effective in their time. We are trying to give you the tools to enable you to be more effective, to actually find out what you are actually doing.

I hope this new salary allocation will show how your how your officers are spending their time, and whether it is being spent effectively or not. From the surveys that we have done, there is considerable differences in the amount of time that is spent in various districts on timber production matters and quite frankly we can't really tell the difference in standards from one to the other in many respects. For example, the ones that are spending a greater amount per unit of volume, don't necessarily have a better standard of utilisation.

I can't be definitive about it Bill, we are not going to get a heap more staff, if the district staff can't do it, my fall back position will be looking at the contractors' supervisors to help us.

Comment:

ALAN LUSH:

I would like to add a comment along that line as well. We are charged in the Operation's wing at Regions to do all these things and what I would like to say is that I wouldn't like to hear people saying "Mr Timber Production Man, don't tell us to do that, as we can't manage it". What I would like them to say is, "please all of you branches, tell us what you want". So everybody is telling us precisely what we need to do. Then I would say to the districts, "have some body that knows what all the branches want" and then sit down and integrate your district's works programme. To my mind that means that the districts need to have experts in all those fields and they have to sit down probably once per fortnight and determine how to put all those things together for a monthly programme and keep it going after you have done 1 year's programming.

At the same time you have to be allocating the work and that requires a weekly works meeting, where you can sit down and work out how to put it altogether. If you are not doing that programming and works allocations on a regular basis with rolling plans over a reasonably short time period, then all you are doing is responding to the squeaky wheel and all that gives you is continued pressure, because everyone is ringing up and wanting their bit done.

When you are doing the programming properly, then you can recognise at a start of a period that you haven't got the capacity to do all that is expected in the next month and

that is when you have an opportunity to refer to help elsewhere and identify the priorities for you.

Comment:

KEITH SCLATER:

I have three comments:

1. I think Timber production and Forest Resources have done a lot to get to where we are now. However, I think we need to have very accurate specifications for work, and I hope T.P.B. strive for this.
2. I agree with the idea that our contractors are part of CALM and that we take them on as if they were our employees. It's a pity this concept wasn't taken on board earlier. For example, we need a clear specification on the role of the "Bush Boss".
3. Don Keene has given us many advantages of integrated logging. I think these advantages will come provided Timber Production Branch give Districts some forbearance and a fair go.

Reply:

DON KEENE:

Regarding job specifications for Bush Bosses, can you go and write one and send it around to everyone for comment.

Comment:

PETER HANLY:

The whole idea of the Timber Strategy is a positive thing that we all have to work towards. However, I am concerned at the extra workload on Districts, for example in the area of training of contractors and brigades. Everyone needs to be aware that the extra workload pressure is going to be great.

Reply:

DON KEENE:

Spoken from the heart Peter! Timber Production Branch should be responsible for training. John Clarke is the person responsible for setting up training.

SUMMARY AND CONCLUSION

DON KEENE

(MANAGER, FOREST RESOURCES DIVISION)

I would just like to say a few 'thank you's'. Firstly, to thank the people who organised this Seminar, in particular Des Donnelly and John Clarke, and their technical people behind. The microphones worked most of the time and I hope that we have all of your comments on tape and we can all read the comments at a later date if we wish to.

Secondly, I would like to thank the speakers. You have seen the Forest Resources Division on display all over the last two days and it was our intention to inform you as to what was really meant in the Timber Strategy. If you want to you can read the document several different ways and I can assure you it has been read in many different ways and probably that is its greatest attribute, that it can be read in a number of different ways.

I would also like to thank the other speakers that came and put their point of view from other specialist areas that have a great input to make into the successful implementation strategy. I would also like to thank the other Chairmen, Peter, Frank and Roger and also to Syd Shea, for his very inspiring address yesterday morning. I am not so sure that I thank him quite so much for the address last night, but that's the way it goes doesn't it!

I wish you well in the implementation of the strategy.

I used to live in Bunbury and I love the back beach and I was looking at it yesterday and it was quite rough and I thought to myself "it is quite a stormy sea, and I wouldn't like to be out there". We have definitely cast off; so far our ship is sailing across the sea and is almost out of sight of land, and there are a few sharks! We are all committed I can assure you of that.

Lastly and most importantly, I really would like to thank everybody for the calibre of the questions. I think the questions in some cases might have been a little better than the answers and particularly from the younger blokes, I really appreciated it.

Thanks very much for coming.

ANSWERS TO PRE-SEMINAR QUIZ

1. 10 years
2. 7 (p.60 of strategy document)
3. 1st grade sawlogs, 2nd grade sawlogs, chiplogs, premium grade sawlogs, firewood, poles, regrowth sawlogs, veneer logs, bridge timbers, short sawlogs etc....
That's not an acceptable answer!
4. Security of resource for companies giving them the confidence to invest in new sawmilling, seasoning and processing equipment
5. 1,420,000 ha (pp xi & 13 & 17)
6. 27,600,000 m³ (pp xi & 17)
7. 107,000,000 m³ (pp xi & 17)
8. 300,000 m³ (pp 52-65)
9. 670,000 m³ (pp 39, 42 & 45)
10. 1,600,000 m³ pa (pp xi & 17)
11. 20,000 (pp xi)
12. \$300 million (pp xi)