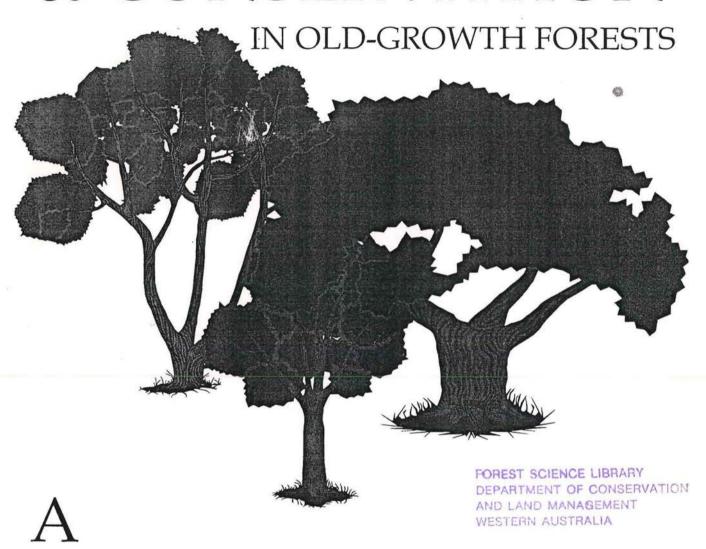
WOODCHIPPING & CONSERVATION



STATE LABOR DISCUSSION PAPER





Executive Summary...

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This document provides a background to some of the contentious issues surrounding the use of our old-growth native forests. The document outlines community perceptions that:

- woodchipping activity is destroying our remaining old-growth native forests;
- good quality logs are being used to meet woodchip contracts; and
- the quantity of timber taken from our native forests is excessive.

State Labor believes that the Court Government is ignoring these concerns and, in its failure to provide leadership on this issue, is exacerbating them.

This document makes recommendations on the following issues:

Old-Growth Forest

- 1. A future Labor Government would abide by the terms of the National Forests Policy Statement (N.F.P.S.) (1992) and insist on an assessment of conservation values prior to any activity that might significantly affect those areas of old-growth forest which are likely to have high conservation value.
- 2. This assessment will be carried out by an independent panel using a methodology established by the Australian Heritage Commission and CALM.
- 3. If the assessment identifies an area as having high conservation value and those values would be adversely affected by logging, that area should immediately be placed in a conservation reserve pursuant to the N.F.P.S. (1992) strategy.

Grading and Pricing of Logs

- 4. The establishment of a rigorous system of assessment and grading of logs which is fully accountable and open to the public,
- 5. The system of pricing of logs be restructured to accurately reflect the market value of the product (as recommended in the McCarrey report);

Yields

In view of the concern about the use of the maximum sustained yield principle to determine the level of harvesting of native forest, State Labor recommends that:

- Consideration be given to the adoption of the 'precautionary principle' of forestry management.
- 7. Road, river and stream reserves be given statutory protection;



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Export Licenses

State Labor will urge the Federal Government:

- 8. To remove the requirement for export licenses from plantation-source woodchips; and
- To develop a system of five year export licensing, replacing the system of annual license renewals.

Employment

Timber industry Workforce

To address some of the issues facing the timber industry workforce it is recommended that:

- 10. Industry be encouraged to work with educational institutions in the South West (TAFE, Edith Cowan University) to develop appropriate courses to multi-skill their workforce so that they can be involved in all aspects of wood production and use.
- 11. Governments, both State and Federal, provide funds for these training initiatives.
- 12. A regional training centre be established in the South West to provide skills training related to integrated forest management. This would include the operation of plantation based forests.
- 13. The Federal Government be approached to provide financial assistance to employees in the industry who are forced to relocate to retain their employment in the timber industry.
- 14. A comprehensive industry plan, including an industry adjustment package to assist timber workers, be developed in collaboration with the Federal Government.

The Tourist Industry

15. It is recommended that significant old-growth forests near south west towns be recognised as important to the tourism industry and consideration be given to reserving such forests for tourist-related activities.



... Executive Summary

Treefarming Plan

The document notes the economic and environmental value of tree farming, and the impediments that this industry faces. To promote the expansion of treefarming in Western Australia, it is proposed that State Labor would take the following steps to ensure a target of 100,000 ha of Eucalyptus globulus plantation timber by the year 2000:

- 15. Introduce forestry rights legislation to State Parliament -(Treefarming Facilitation Bill) during the 1995 Autumn session to provide legislative protection to overcome the current planning approval problems associated with the development of treefarms;
- 16. Approach the Federal Treasurer and seek an examination of the current taxation treatment of plantations with the view to make this form of investment more attractive to investors (and farmers). Special tax treatment should be considered for investors in hardwoods which have a long maturation period.

It is also recommended:

- 17. that the cost of hardwood seedlings to private farmers be subsidised and that CALM provides advice and assistance to those farmers wishing to embark on this form of agriculture.
- 18. that further research into agroforestry and its benefits be undertaken.

This discussion paper is produced to invite public input into the development of Labor Party policy.

Should you have any comments on this discussion paper or suggestions concerning conservation, forest management or the timber industry in Western Australia then write to the Shadow Minister for the Environment, Judy Edwards MLA, care of Parliament House, Perth WA 6000, or phone her office on 370 3550



Introduction

1 Our Native Forests

Native forests of Western Australia are a community resource which should be managed to provide in perpetuity for timber, biodiversity, fresh water, recreation and tourism, heritage values and other products such as honey and wildflowers.

Our forests contain trees which may take over a hundred years to reach maturity and because of this length of time they must be managed with the long term view in mind and not be subject to short term, expedient decision making.

The logging cycle, silviculture practices, corporate investment and the enjoyment of our forests by future generations, all require a long term vision. This must be translated into a practical long term strategy of forest management.

The community must be confident that all these values of the native forest are preserved and that an acceptable balance is maintained between these values. This document addresses the question of woodchipping and some of the consequential issues that may be affecting this balance in our forests.

The total area of native forest and public lands in the South West managed by the Department of Conservation and Land Management is 2.45 million hectares.

This area comprises:

1,613,000 hectares of State forest,

including 370,000 hectares of road, river and stream reserves;

387,300 hectares of national parks,

these include the D'Entrecasteaux, Fitzgerald River, Leeuwin-Naturaliste, Stirling Range, Shannon, Warren, Beedelup, Walpole-Nornalup, Brockman, Mt Frankland, Gloucester and Sir James Mitchell National Parks;

176,200 hectares of nature reserves,

these are areas set aside for wildlife and landscape conservation, scientific study and preservation of features of archaeological, historic or scientific interest; and

275,100 hectares of other reserves,

areas declared under the CALM Act, or managed by the National Parks and Nature Conservation Authority, which are not national parks, but which may be evaluated for inclusion into this system.



Summary of Native Forest Areas in Western Australia	Jarrah (hectares)	Karri (hectares)
Total Area	1,564,000	174,000
Total in Conservation Reserve (excluding road, river and stream reserves)	384,000	53,000
Total Virgin Forest in Reserve	135,000	40,000
Estimated Total Virgin Forest NOT in Reserve	174,000	40,000

(Source: CALM documents)

CALM estimates that currently 33% of the remaining jarrah forests and 46% of remaining karri forests, in public ownership, are in conservation reserves (this includes road, river and stream reserves).

Apart from public land, there are more than 500,000 hectares of native forest on private land.

2 Management of Our Native Forest

In 1987 a **Timber Strategy** was adopted by the then Labor Government and three **Forest Region Management Plans** were put in place. The three management regions were known as the Northern Forest (or Swan Region), the Central Forest and the Southern Forest.

(See Appendix 1)

The Timber Strategy was scheduled for review in 1997, however, as a result of a report by the Environmental Protection Authority and the completion of a comprehensive inventory of the jarrah forest, this review was brought forward to 1992.

In 1994 a revised Forest Management Plan was released and a further review is scheduled for the year 2003. Under the Forest Management Plan, State forests and timber reserves are reserved for the purposes of conservation, recreation, timber production on a sustained basis and water protection.

CALM's overall forest management objective is:

"To manage the native forests of the South West of Western Australia, in consultation with the community, so that they provide the values required by society while sustaining indefinitely their biological and social diversity."



3 The National View - The National Forest Policy Statement

In 1992, the Federal Government and State and Territory Governments were joint signatories to a National Forest Policy Statement which committed all governments to develop sustainable management strategies for Australia's forests.

The National Forest Policy Statement outlines a vision for an ecologically sustainable national forest. The vision includes the following characteristics:

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

4 The role of the Australian Heritage Commission

The Australian Heritage Commission (AHC) was set up in 1976 to identify and provide advice on Australia's National Estate, that is:

"...those places of the natural environment or the cultural environment of Australia, having aesthetic, historic, scientific or social significance or other special value for future generations as well as for the present community."

Places determined by the AHC to be significant are listed in the Register of the National Estate after rigorous analysis and consideration of any objections. There are now significant areas of Western Australia's native forests listed in the Register of the National Estate.



The AHC does not, however, control or protect these places. There is no legal obligation under the listing, apart from Section 30 of the Australian Heritage Commission Act 1975, which requires each Federal Minister to ensure that the Department under his or her administration:

"...does not take any action that adversely affects, as part of the national estate, a place that is on the Register unless he is satisfied that there is no feasible and prudent alternative to the taking of that action and that all measures that can reasonably be taken to minimise the adverse effect will be taken..."

The issuing of woodchip export licences by the Federal Government requires the Federal Minister for Resources to consider AHC advice on the impact of logging, including areas on the Register of the National Estate. This is the major Federal input into the management of our forests on the Register and in every other respect it is the duty of the State Government to protect the areas subject to woodchipping.

Decisions on the management of Western Australia's public forests are the responsibility of CALM, the Western Australian Government, and ultimately, through the political process, the Western Australian community.

5 Sustainable forests

The annual yields from our jarrah and karri forests and the levels at which these forests can be sustainably logged has been a major issue in the community.

In February 1992, a revised inventory and a proposed annual sustainable yield was presented by CALM to the Minister for the Environment. While there was little change in the proposed harvest levels for karri and marri it was recommended there be a significant increase (50%) in the amount of jarrah sawlogs to be harvested.

This new proposal was a complete turnaround from the 1987 Timber Strategy which had called for a continuing **decline** in the availability of jarrah sawlogs after 1993.

In October 1992, The Environmental Protection Authority (EPA) assessed these proposals and suggested they were acceptable but urged caution in adhering to the new yields.

"The EPA has noted that CALM's silvicultural prescriptions for the jarrah forest have been developed with incomplete knowledge of their long term consequences; and therefore concludes that the proposals to amend the 1987 Timber strategy should be implemented cautiously. The Authority recommends that the annual sustainable yield estimates in the Timber Strategy should only be applied for the life of the Strategy (ie until 2002)."

(EPA Bulletin 652, Recommendation 6)



An Appeals Committee was established to hear appeals against the EPA recommendations in Bulletin 652. The Committee was chaired by Mr Justice Tos Barnett.

At the conclusion of the appeals process, Mr Barnett recommended that there be caution in the implementation of the proposals for harvesting and regeneration of the jarrah-marri forests and that there be no increase in the level of cut beyond the rate approved in the 1987 strategy.

As a result of the uncertainty about the ability of the jarrah forest to sustain increased logging the Minister gave an interim approval for the implementation of CALM's 1992 proposal. This interim approval was given in December 1992 for a period up to June 1993.

The Minister wanted further investigation on the ability of the forest to sustain the new yield levels before granting full approval to the new strategy. In a 'Ministerial Statement of Conditions' he called for the setting up of a Forest Monitoring and Research Committee. This committee did not progress in its investigation and in February 1993 there was a change in Government.

The new Minister appointed a new committee, the Scientific and Administrative Committee, to investigate the issue of sustained yields. This Committee was chaired by Dr Tim Meagher.

The Scientific and Administrative Committee had further data available to it, in particular, a report from Dr Brian Turner and Dr Geoff Wood - "Review of the New Jarrah Inventory System and Associated Timber Estimation Procedures."

Following their investigation the Scientific and Administrative Committee recommended a reduction in the 1992 CALM jarrah sawlog harvest from 675,000m³ to 490,000m³. They accepted the CALM proposals for karri and marri yields.

Current Timber Yields Allowed by CALM	Karri (cubic metres annually)	Marri (cubic metres annually	Jarrah (cubic metres annually
Gross Bole Volume	417,000	559,000	1,360,000
Harvest not to Exceed ¹ (excluding road, river & stream reserves)	214,000²	559,0004	490,0005
	203,000³		870,0006

average over a 10 year period

2 first grade sawlogs

3 other logs

sawlogs and other logs

5 first grade and second grade sawlogs

Note:

The Gross Bole Volume is the estimated increase in the volume of wood in the forest

other logs, to be obtained from the same harvest area required to produce the first and second grade sawlogs



As can be seen in the table above, the productive native forests in Western Australia are currently managed by CALM on a Maximum Sustained Yield basis. This means they attempt to maximise the annual yield while keeping within some sustainable limit.

There is concern that this approach leaves little margin for error and may place the forest in a vulnerable position as slight disturbances or miscalculations could upset the natural ecosystem.

A more cautionary approach on forestry management has been urged by the Resource Assessment Commission and the EPA. They have suggested that a Precautionary Principle should be adopted as the basis of forestry management.

The Precautionary Principle means that targeted yields are below the estimated maximum yield and a safety buffer is built into the equation.

To ensure the integrity of the native forest is sustained extreme caution should be used with the Maximum Sustained Yield approach. Consideration should be given to implementing the Precautionary Principle approach to forest management.

Woodchipping - a Confused Picture

The recent issue of woodchipping licences and old-growth forests has stimulated a debate in the community which has received much attention in the media.

The Western Australian community is at present confused about the state of the native forests and the manner in which they are being used. There is confusion because the information the public is receiving from the various players involved in the debate is often contradictory.

Oversimplification, use of cliches and emotionally charged events such as demonstrations and blockades, have led to a distortion of the real picture. As a result, the community is growing increasingly sceptical about the reliability of the information it is receiving.

During the 1980's the State Labor Government made decisions about the management of our forests which were welcomed by both industry and conservationists.

There was a significant increase in the conservation reserve system and the timber industry was, for the first time in history, given the resource security it needed to encourage future investment.

The effect on the timber industry was immediate and timber companies invested heavily in expensive capital equipment which produced value added timber



products. An example of this investment can be seen in the pre-dryers introduced by Bunnings into their Deanmill operations.

The Timber Strategy released in 1987 was the first such strategy in Australia and was held up as a model for future forest management in Australia.

Over the last two years the community has again grown anxious about the use of our forest. An unfortunate aspect of this concern is the deep divisions the issue is causing in rural communities located in the forest areas. In some cases we are seeing open hostility between neighbours and friends.

State Labor shares the community's concern and outlines in this document its views on ways of dealing with contentious issues in our native forests.

The State Liberal Government has made no attempt to resolve these contentious issues and has, on occasions, acted provocatively and inflamed the situation. This is not a time for political grandstanding, it is a time to resolve the issues that are now splitting the community.

Old-Growth Forests

The most contentious issue being debated in the community, and which requires resolution, is the cutting of timber for woodchipping in the old-growth forests.

The National Forest Policy Statement defines 'old-growth' forest as:

"...forest that is ecologically mature and has been subjected to negligible unnatural disturbance such as logging, roading and clearing. The definition focuses on forest in which the upper stratum or overstorey is in the late mature or over mature growth phases."

This definition has gained acceptance amongst conservationists and those associated with the timber industry.

To assist in the identification of old-growth forest for conservation, the Australian Heritage Commission and CALM also developed a methodology for a systematic assessment of regional areas for national estate values.

Using this methodology AHC/CALM carried out an assessment of 134 separate national estate values in the Southern Forest Region.

The national estate values identified and assessed by AHC/CALM included: landform diversity; vegetation types; rare flora and fauna; granite outcrops; coastal landforms; wetland; wilderness; undisturbed forest and woodland in the Southern Forest Region.



Following the assessment, 44 places were identified as having extensive National Estate values and were listed for inclusion on the interim register of the National Estate.

Application of this model led to recommendation that an additional area of 124,000 ha should be added to the reserve system, however, a number of values were not assessed in the Southern Forest Region. The Northern Forest Region and the Central Forest Region were not included in this assessment.

The National Forest Policy Statement clearly spelt out the need for all States to carry out comprehensive assessments of the native forests and devised a strategy to conserve and manage areas of old-growth forest and forested wilderness. The strategy has five elements:

"First, agreed criteria for old-growth forests and wilderness will be determined through a working group process."

"Second, using those criteria, the relevant State agencies will, as a matter of high priority, undertake assessments of forests for conservation values, including old-growth values and forested land for wilderness values."

"Third, until the assessments are completed, forest management agencies will avoid activities that may significantly affect those areas of old-growth forest or wilderness that are likely to have high conservation value."

"Fourth, forested wilderness areas will be protected by means of reserves developed in the broader context of protecting the wilderness values of all lands. For old-growth forest, the nature conservation reserve systems will be the primary means of protection, supported by complementary management outside reserves. The Governments agree that, conditional on satisfactory agreement on criteria by the Federal and the States, comprehensive, adequate and representative reservation system to protect old-growth forest and wilderness values will be in place by the end of 1995.."

"Fifth, the relevant management agencies will develop management plans to appropriately protect old-growth forest and wilderness values."

National Forest Policy Statement, 1992,p 11



A future Labor Government would abide by the terms of the National Forest Policy Statement and insist on an assessment of conservation values prior to any activity that might significantly affect those areas of old-growth forest or wilderness which are likely to have high conservation value.

To overcome the shortcomings of the initial assessment carried out by AHC/CALM, there is a need to go back to the process and apply a similar methodology, assessing all values, to every forest region.

This assessment and future assessments should be carried out by an independent panel and involve wide consultation with the community.

When an area meets the criteria for inclusion into the Register of the National Estate because of its high conservation value, and the values would be adversely affected by logging, it should immediately be placed into the system of conservation reserves.

This process of assessment and identification of old-growth forest should be built into the planning cycle used by CALM to manage the productive forest.

The 1994 Woodchip Licence Process

The Federal Government has little power to control forest management in Western Australia - it being overwhelmingly a State responsibility. Exports of woodchips are subject to licensing by the Federal Government pursuant to its powers under the Federal Constitution and as stated previously, the AHC has input where areas of the national estate may be affected. The annual process of issuing export woodchip renewal licenses has become unwieldy. State Labor will work with the Federal Government to develop a system of five year licences which will give greater security to both forests and industry.

As part of the woodchip export licence assessment process, the WA Conservation Council submitted to the Federal Government a list of 29 forest blocks (61 coupes) which it considered had high conservation value and therefore should not be used for logging and woodchipping.

These blocks were all scheduled for logging in 1995-97 and the Conservation Council sought their protection; they included:

- Hawke, Peake, Sharpe, Jane, Rocky, Giblett, Kingston, Ordnance, Dawson, Lochart, Crowea, and Murtin blocks in the Southern Forest Region; and
- Hester, Kerr, Preston, Black Point, Cambray, Gayndah, Telerah, Bottlebrush,
 St John and Rosa blocks in the Central Forest Region.

When the Federal Resources Minister announced the areas which could be logged for woodchips he indicated that only five coupes in two of the blocks were worthy of protection from logging activities.



The two blocks offered protection were Hawke and Telerah.

There was an immediate backlash from the community and from within the ALP Federal Caucus against the Resources Minister's decision and the Prime Minister announced in February this year that 66 coupes in 12 blocks would be reassessed.

The intense community debate which was stimulated by this series of events shows that the community perceived that:

- woodchipping activity is destroying our remaining old-growth forests;
- good quality logs are being used to meet woodchip contracts; and
- the quantity of timber taken from our native forests is excessive.

The timber industry is a major component of Western Australia's economy with a total production worth over \$600 million each year and woodchipping contributing approximately \$70 million of export earnings.

Last year Western Australian companies were granted licences to export 860,000 tonnes of woodchip from our native forests (Bunnings 750,000 tonnes, Whittakers 110,000 tonnes). Bunnings also has a licence to export 70,000 tonnes from Eucalyptus globulus (blue gum) plantations.

Statements from organisations representing the forest industry constantly claim that woodchips are the by-product (or the residue) of sawlogging:

"No WA State forest is logged for woodchipping. Woodchipping is only the waste product from sawlogging"

(Source: Advertisement by Forest Industries Federation (WA) Inc, West Australian, February 4, 1995.)

These type of statements give rise to the perception that the only source of woodchips is waste. They hide the fact that the main source of woodchip are 'thinnings' and whole logs from mature jarrah and karri forests.

The CALM Annual Report 1993-94 indicated the following sources for woodchip production from Crown land in 1994 were:

Residue (sawmill and forest)

88,374 tonnes

Logs from thinning and regrowth forest

117,121 (m³)

Logs from mature jarrah and karri forests

452,939 (m³)

* 1 cubic metre of karri weighs about 1.2 tonnes (Source: CALM Annual Report 1993-94, Appendix 6, p70)



Woodchipping is an important aspect of the silvicultural practices used in the management of our native forests as well as being an important by-product of saw milling of the native timber.

Silviculture is the management technique which designates the trees that are to be cut in a forest stand, the size of the area harvested and the procedures necessary to ensure regeneration.

In karri/marri forest, a clearfelling technique is used to ensure the best regeneration environment while in the jarrah/marri forest a selective logging/"gap creation" program is used.

In both representative forests the marri logs are cut to preserve the overall integrity of the forest. These marri logs often have little sawn timber value and are used predominantly for woodchipping. Karri logs are also used for woodchipping, however, jarrah logs are unsuitable for woodchip production.

To reaffirm the community's confidence in the primary function of logging in native forests, strict regulations controlling the end use of logs must be put in place.

A starting point for this increased scrutiny is the development of a more accurate system of grading logs in the native forest.

The intention of this system will be to give the community absolute confidence that the timber logged from native forests is being utilised in the way which brings maximum benefits to the whole community and guarantees the future health of the forest.

The grading system must be clear and understandable to the community which should be able to see it in operation at all stages of the logging process.

Pricing of Logs

A royalty is applied to timber harvested in our native forests. These royalties are designed to recover the costs associated with growing the forests and provide the Government with a return on the capital invested in growing the forests. The royalty rates are reviewed every three years.

There is a belief that the royalties CALM charges for hardwood logs are too low. This claim was made in the Report of the Independent Commission to Review Public Sector Finances (McCarrey Report):

"CALM hardwood royalties seem to have been too low, leading to a need to place quotas on native timber harvesting. Low hardwood royalties also reduce the viability of the commercial softwood industry"

(p.301).

McCarrey recommended that:



"Hardwood royalties should be set at levels such that market demand equates to production levels consistent with conservation objectives of the government."

(p. 301)

McCarrey said that if prices truly reflected market demand for the product there would be no need for quotas on harvesting in native forests.

Current Log Royalty Rates - (set in January 1995)	Jarrah \$ per m³	Karri \$ per m³	
Premium	82.02	81.76	
First Grade	29.69	36.28	
Second Grade	20.48	27.16	
Third Grade	13.45	13.45	
Chiplogs (Karri and Marri)	13.75	13.75 (\$ per tonne)	

The Scientific and Administrative Committee also raised the issue of revenue received from the sale of logs from native forests. It urged further exploration of a pricing structure which (amongst other things):

- encouraged the use of first grade logs for sawn and dressed timber rather than green-sawn, structural timber.
- provided an incentive to obtain the maximum amount of sawn timber from second and 'other' grade logs.
- encouraged greater use of marri as a sawlog.

(Scientific and Administrative Committee Report, p 35)

The price of hardwood logs taken from the native forest should be structured to ensure all costs associated with forest management are covered and that industry is encouraged to maximise the return it obtains from this resource.

Recognition needs also to be given to the effect these prices have on the price of plantation timber - both softwood and hardwood.

Deflated prices on logs from native forests makes this source more attractive than plantation-sourced logs. This is a disincentive for industry to move into plantation production of hardwood.

Logs taken from native forest must be sold at a price that truly reflects their market value.



Woodchipping - Conclusion

Woodchipping should continue in areas of the native forest not located in conservation reserves. The source of the woodchip should be the residue from the sawmills, regrowth thinnings and marri logs cut to maintain the integrity of our forests.

To ensure the integrity of productive native forests is maintained it is recommended that:

- An assessment of conservation values is carried out prior to any activity that might significantly affect those areas of old-growth forest or wilderness which are likely to have high conservation value.
- This assessment uses the methodology developed by AHC/CALM.
- The assessment is carried out by an independent panel and seeks wide community consultation.
- If this assessment identifies an area as having high conservation value and the values would be adversely affected by logging, it be immediately placed in a conservation reserve pursuant to the N.F.P.S. (1992) strategy.
- A rigorous system of assessment and grading of logs which is fully accountable and open to the public be established.
- The system of pricing of logs be restructured to accurately reflect the market value of the product.
- Consideration be given to the adoption of the 'precautionary principle' of forestry management.
- The Federal Government remove export controls on plantation-sourced woodchips.
- The Federal Government introduce a system of five year export licenses which would give greater security to both forests and industry.



Employment

1. Timber Industry

Over the past two decades there has been a significant change in the nature of employment in the timber industry.

There has been a decline in the number of workers involved in logging and sawmilling and the production of woodchips appears to have made little impact on employment in the industry.

The decline in employment in logging and sawmilling has occurred at the same time as there has been an increase in employment in associated wood product activities (wood craft, furniture, particle board).

While it is difficult to obtain an accurate picture of the level of direct employment in the timber industry it is worth noting that:

- In 1987 there were an estimated 2550 workers involved in logging, transporting and sawmilling and a further 5079 involved in wood and wood products. (1987 Timber Strategy Document)
- The Australian Census of 1991 indicated that 1104 employees were engaged in logging and sawmilling (transport not categorised) and 6910 workers engaged in wood, wood production and furniture. (Australian Bureau of Statistics).

Restructuring and changes in demand have led to changes in the timber industry; these changes will continue.

One would expect employment in the particle board, furniture and wood craft sectors to increase and more emphasis placed on employment associated with managing and harvesting treefarms. This may result in relocation of sections of the workforce and the need for workers to develop different skills.

To assist workers affected by changes in the industry emphasis should be placed on providing them with skills to adjust to these changes.



It is recommended that:

- Industry be encouraged to work with educational institutions in the South West (South West College and Manjimup TAFE, Edith Cowan University) to develop appropriate courses to multiskill their workforce so that they can be involved in all aspects of wood production and use.
- Governments, both State and Federal, provide funds for these training initiatives.
- A regional training centre be established in the South West to provide skills training related to integrated forest management. This would include the operation of plantation based forests.
- The Federal Government be approached to provide financial assistance to employees in the industry who are forced to relocate.
- A comprehensive industry plan, including an industry adjustment package to assist timber workers, be developed in collaboration with the Federal Government.

Tourist Industry

Nature based tourism (or Eco-tourism) is a major growth area in the tourist industry and the global trend to this form of tourism is also being witnessed in Australia.

It is estimated that the South West Region of Western Australia now receives over three million visitors per year (CALM Annual Report 1994). This has had a dramatic effect on tourism related industries in the region.

Direct employment in the tourism industry in the major centres in the South West has increased significantly over the past decade.

In the town of Pemberton this growth has been recorded by the Pemberton Tourist Operators Association, who claim that in the period 1986 - 1994 direct employment in tourism in the Pemberton area rose by over 600%.

The capital investment in Pemberton in tourism is now estimated at \$46 million. (PTOA)

The issue of resource security for the timber industry was addressed in the 1987 Timber Strategy and, as mentioned above, this enabled the timber industry to take long term decisions on the future of their industry.

The tourism industry believes that the 1987 Timber Strategy, and subsequent CALM management plans, do not address the needs of the tourism industry which also must have resource security.



Pemberton:	Employmen	1986-92	
Year	Full Time Jobs	Part-Time or Casual Jobs	Total Jobs
1986	33	40	73
1987	59	66	125
1988	91	127	153
1989	117	151	268
1992	181	265	446

(Pemberton Tourist Operators Association, 1994)

The tourist industry's 'resource' is also the native forests of the south west, in particular, the old-growth forests. Resource security for the tourism industry is the ability of our native forests to attract tourists to the area.

To enable this important sector of the south west economy to make long term investment decisions, the tourist industry must have confidence in the security of their resource.

CALM must take into account resource security for the tourism industry when developing forest management plans.

It is recommended that significant old-growth forests near south west towns be recognised as important to the tourism industry and consideration be given to reserving such forests for tourist-related activity.



Treefarms - Woodchips for the Future.

The Current Situation

Eucalyptus globulus (Blue Gum) is considered the most feasible plantation hardwood resource for the production of woodchip. The qualities of the chip make it a desirable raw material for paper manufacturers.

Eucalyptus globulus reaches commercial maturity in a relatively short period (8 -12 years) and has the ability to be cropped at least twice (coppicing).

A new variety of blue gum, Western Blue Gum, has recently been developed by CALM which may give an even better yield.

Currently there are 33,000 hectares of Eucalyptus globulus plantations in Western Australia. Of this, 20,000 hectares is controlled by Bunnings (owned, managed or contracted). The remainder is owned or managed by CALM.

Bunnings is planning to add 4,500 ha per year to its stock to achieve a target of around 45,000 ha by the turn of the century.

CALM has just entered into agreements with two major paper companies (located in Japan and Korea) to grow 30,000 ha of globulus to provide woodchips for processing in their plants.

Given moderate growth in other private schemes, about 100,000 ha of the South West could be under Globulus by the year 2000.

Future Needs

Future demand for woodchip production will be greatly affected by a decision on whether to proceed with a local pulp mill plant.

The previous Labor Government began the process to determine whether a pulp mill to process woodchips was viable in the South West. Bunnings is currently conducting a feasibility study to see if such a plant is viable.

Two types of pulp mill have been proposed - a BEKP (bleached eucalypt kraft pulp) mill and a CTMP (chemi thermo mechanical pulp) mill. In the BEKP process fibres are separated by heating the woodchips to high temperatures in a solution of chemicals which dissolves the lignin, the 'glue' holding the fibres together, leaving the fibres intact.

Only 50% of fibres are converted to pulp although the end product is of a higher quality than that produced with the CTMP process. This process requires about 80 tonnes of water per tonne of pulp.



The cost to establish such a mill is around \$1 billion and it needs to produce 450,000 tonnes per annum to be internationally competitive.

The CTMP process relies on pre-treatment with sulphur based chemicals, steam to soften the lignin and mechanical pulping to break some of the fibres. The end product is not of the same quality as from the BEKP process but it is still suitable for writing and tissue paper. A newer Canadian version of this process converts 80% of the fibre to pulp and uses 1 tonne of water per tonne of pulp - half of the water coming from the wood itself. It costs around \$400 million to establish such a mill.

If woodchips are to be processed in Western Australia, Bunnings estimates that about 77,000 ha would be needed on a sustainable basis to meet the demands of the pulp mill.

The pulp mill requires 2.3 million tonnes of timber per annum which requires 7,700 ha to produce. This translates to 77,000 ha for a sustainable resource.

To maintain an export licence of woodchip of 750,000 tonnes (current level) it is estimated that 3,250 ha per annum of globulus plantation is required, or 32,500 ha on a sustainable basis.

The State Government must show leadership in this area to develop a resource which will, initially, take pressure off the natural forest resource and, ultimately, replace native forests as the main source of timber.

Impediments to Treefarming

A State Planning Legislation

One of the main problems facing private companies wishing to enter a leasing arrangement with farmers is the need to obtain approval for the lease from the State Planning Commission.

Under the Town Planning and Development Act leases longer than 10 years, which 'divide' a farm, require the approval of the SPC.

As most of the treefarms only occupy a portion of the farm, and the lease arrangements are usually around 20 years, nearly all treefarm developments have to go through the approval process which can take 9 - 12 months.

This long approval process has, in the past, acted as a disincentive for the farmer to become involved in treefarming.

To assist in the further development of treefarms this type of activity must be made exempt from the Town Planning and Development Act.



B Local Government

A number of local shires in the South West have also made it difficult for those wishing to engage in treefarming.

Local Governments' have in some instances restricted the planting of treefarms to particular areas of the shire through the introduction of special zones for plantation forestry.

It has also become common for shires to impose a number of development conditions on treefarming but not on other forms of agricultural activity. These conditions might include:

- meeting the cost of maintenance on shire roads;
- restrictions on the method/timing of spraying;
- payment of special fire insurance levies; and
- cutting of extraordinarily wide firebreaks.

If, as a State, we want to encourage this form of activity we need to take measures to overcome these impediments.

Local Shires must be consistent in their approach to this issue. Treefarming is a legitimate form of agriculture and should be treated no differently to other agricultural activity.

The planting of trees, particularly as part of a integrated farming plan, which occurs with agroforestry, where less productive land may be utilised, will have a number of benefits apart from economic return.

The water table will be lowered, salt incursion may be slowed and surplus nutrients will be absorbed thus decreasing the flow of nutrients to our streams and rivers. Shelter can also be provided to stock when the trees are more mature.

Treefarming is a form of activity which must be actively encouraged in Western Australia. It allows us to maintain a strong timber industry while at the same time offering an opportunity to conserve the native forests.

The development of a sustainable supply of woodchips for treefarming will also enable the gradual phasing out of woodchipping as a major use of timber in native forests.



Treefarming - Labor's Initiatives

To promote the expansion of treefarming in Western Australia, State Labor will:

- Liaise with local government to assist in developing a consistent approach to this form of agriculture.
- Introduce forestry rights legislation to State Parliament -(Treefarming Facilitation Bill) - during the 1995 Autumn session to provide legislative protection to overcome the current planning approval problems associated with the development of treefarms.
- Urge the Federal Government to remove export controls on plantationsourced woodchips.
- Approach the Federal Treasurer and seek an examination of the current taxation treatment of plantations with the view to make this form of investment more attractive to investors (and farmers). Special tax treatment should be considered for investors in hardwoods which have a long maturation period.
- It is also recommended:
- that the cost of hardwood seedlings to private farmers be subsidised and that CALM provides advice and assistance to those farmers wishing to embark on this form of agriculture; and
- further research be conducted into agroforestry and its benefits.



Labor wants to hear from you!

Should you have any comments on this discussion paper or suggestions concerning conservation, forest management or the timber industry in Western Australia then write to the Shadow Minister for the Environment, Judy Edwards MLA, care of Parliament House, Perth WA 6000, or phone her office on 370 3550

Appendix One

The forest regions (below).



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