AUSTRALIAN SENATE

STANDING COMMITTEE

on

SOCIAL ENVIRONMENT

The Impact on the Australian Environment of the Current Wood Chip Industry Programme

Submission from

The Forests Department of Western Australia

October 1975

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APPENDICES

1. Summary - The proposed marri wood chip industry in Western Australia is integrated with the existing sawmill industry to utilise sawmill wastes and residues on areas cut over for sawlog procurement. Removal of logging waste, cull karri trees and some marri trees not acceptable to sawlog operations is essential if the forests are to provide a full range of options for future multiple use management.

Without a wood chip industry it is necessary to remove waste by burning and to kill competing trees by poisoning or falling. This results in the destruction of a resource which is potentially marketable and involves the State in additional expenditure on regeneration treatments. In the past the marri problem has been partly avoided by operating in pure karri stands. The case for a marri wood chip industry is strengthened by the fact that future karri sawlog operations will take place in mixed stands.

The wood chip industry has no adverse environmental effects separate to those associated with the continuance of the existing sawmilling industry. An integrated forest products industry operating within a framework of multiple use of forests satisfies both the economic and environmental needs of the people of the State. The wood chip industry will stabilise the forest products industry and through this strengthen the social and economic structure of the region.

Regulation and control of the industry is provided for by Wood Chipping Industry Agreement Acts of 1969 and 1973 which were thoroughly debated at the time and contain special provisions for environmental protection. The proposal has been well publicised and supported by an Environmental Impact Statement. Approval by both State and Australian Governments was received for the project following study of the Agreement and Impact Statement and on site inspection.

Public reaction has been directed against the chip wood industry. A dialogue between the Department and the main bodies concerned has indicated that their concern is for the forest products industry as a whole, and not merely the chip wood project. The major concern expressed is that if the current agreement is extended beyond the initial fifteen year period, it will be impossible to provide sufficient areas of virgin karri forest.

The Forests Department can see no reason to alter the Impact Statement now that two additional years of intense planning, continued research and pilot environmental monitoring have been completed. Flexibility associated with the project is quite adequate to cover all contingencies. Careful monitoring will ensure the operation remains under control.

2. Scope of Submission - Two forest industry programmes within Western Australia could come within the terms of reference of the Committee:

These are:

(a) A programme utilising plantation grown softwood material for particle board manufacture.

(b) The proposed project to export wood chips from indigenous forests in the vicinity of Manjimup to Japan.

An inquiry into softwood plantations in Australia has been conducted by the House of Representatives Standing Committee on Environment and Conservation and reported in May 1975. Because of this it is not proposed to report on programme (a) further unless the Committee specifically requests such information.

The current submission is hence restricted to the Marri Wood Chip Project, often referred to as the Manjimup Wood Chip Project.

Details of the Marri Wood Chip Project are presented in the Environmental Impact Statement attached as Appendix I.

(a) In particular it is brought to the notice of the Committee that copies of the Wood Chipping Industry Agreement Act No.34 of 1973 and Act 58 of 1969 are contained as attachments within the E.I.S.

(b) Summaries of relevant project details provided for general public distribution are attached as Appendix II - Forest Focus on the Marri Wood Chip Project and Appendix III - a facts sheet on the Manjimup Wood Chip Project.

This material contained in Appendices I, II and III contains the basic submission. Further notes outline information obtained since 1973 and those aspects, arising from public inquiries. The submission deals firstly with the positive aspects of the chip wood industry, such as the opportunity which it provides for the integration and rationalisation of forest product industries in the region. Secondly, it deals with some criticisms raised against the wood chip project, examining their validity.

3. Integration of Industries -

(a) Certain sections of the public have failed to appreciate that the Manjimup Wood Chip Project operates within the same forest area as is cut over by the sawmill industry and is based on residues arising from sawmill operations. The project involves salvage within approx. 4 000 hectares of mixed karri-marri forest which would need to be clear felled and regenerated each year, whether there is a wood chip market or not. Log material will also be obtained from marri felled in conjunction with selective logging for sawmill operations in jarrah-marri mixed stands. Site disturbance associated with wood chip procurement is little greater than that required for efficient regeneration treatment following sawmill logging alone. Disposal of residues on a wood chip market assists regeneration from both physical and financial viewpoints.

(b) Basically the wood chip industry utilises wood, both living and dead, which needs to be removed for efficient regeneration of the forest following the sawlog cut. Whether this material is exported or processed internally has no relevance to the economics and efficiency of regeneration procedures.

(c) Requirements in the Impact Statement for coupe size, coupe dispersal, road and stream reserves, special reserves etc. apply whether an integrated industry exists or whether sawmill operations alone continue. Early requirements for sawmilling alone are outlined in Appendix IV.

4. Economics -

(a) An independent study of the Manjimup Project is available to the Committee through the Report of a Working Group set up by the Australian Minister for the Environment and Conservation and Agriculture, dated April 1975. From the viewpoints of economics and security of resource base this Department considers that this report supports the evaluation expressed in the E.I.S.

The Committee should be able to obtain copies of the detailed reports put forward by the Working Group covering their various areas of expertise, but these reports have not been made available to the Department.

(b) An economic study of the wood chip project which considers external values no covered in the above Federal report is to be submitted separately to the Committee by the State Department of Industrial Development.

(c) The Committee should note that the royalties received by the Forests Department from sale of wood for chips are additional to those received for sawlogs from the same area. The total amount received is relevant as an input to forest management within the license area and the return from forest operations. From the management aspects of planning, supervision, regeneration, research and environmental monitoring, wood chipping royalties are a welcome financial supplement to carry out the work required to manage the sawmilling industry alone. The wood chipping industry also covers costs of preparation for regeneration which would otherwise have to be financed from the lesser amount of sawlog royalty.

5. Salinity - It has been suggested by members of local C.S.I.R.O. group specialising in soil and stream salinity, that the departmental Environmental Impact Statement gave excessive emphasis to the question of stream salinity in the wood chip license area. The reason for the emphasis given to the problem is that the region is likely to become an important source of water for south western Australia, and that local land use as a whole, especially agriculture in the lower rainfall areas, does pose a potential salinity problem.

(a) The Forests Department has carried out extensive sampling of streams in the license area to determine the location of salt sensitive areas. The early work commenced in September 1973 and sampled 151 stream locations in forest management areas and 123 locations related to agricultural activities. This data is sum-

marised in maps and overlays contained in Appendix V. Data contained relates to the maximum seasonal salinities (base flows) measured. In no instance, even in the north eastern "salt sensitive" zone, as designated in the Impact Statement, can past forest logging with regeneration be related to increases in stream salinity. For the major part of the high rainfall forest within the license area, even permanent removal of forest cover for agricultural pursuits would not present a salinity problem. (Tech. Paper No.27). Sampling of forest streams continued through 1974 and 1975.

(b) From Appendix VI, which shows the environmental planning for cutting coupe location, it is most improbable that continued logging operations will have a significant impact on stream salinity. The likely salt-sensitive area defined in the Impact Statement has been reserved from wood chip cutting for the 15 year license period.

(c) Details of an interdepartmental Steering Committee set up by the Department of Environment and Conservation to advise the Forests Department in matters concerning salinity in the wood chip license area are contained as Appendix VII. An initial publication of this Committee which supports the views expressed in the Impact Statement is attached as Appendix VIII.

(d) The key data required to confirm this evaluation of the salinity problem is the factual definition of the degree and duration of disturbance of groundwater hydrology resulting from the various logging and regeneration treatments. Independent findings by the C.S.I.R.O.

supports departmental observations and suggests that the period of salt release following cutting should not exceed five years. Monitored coupes were installed in 1975 to study this problem, and conclusive results should be available by 1982.

All further examination of the salinity problem carried out since the Impact Statement was compiled, indicates that no foreseeable problem is related to forest logging operations within the prescriptions provided for management and monitoring.

6. Erosion and Stream Turbidity - As mentioned in the E.I.S., the wood chip operation could give rise to increased possibilities of soil erosion and stream turbidity. Road construction and snigging are the most likely sources of danger in this regard. Because of the gentle topography and stability of the soils encountered in most of the area, anticipated problems are likely to be minimal, and can be minimised by the continued implementation of sound engineering and operational practices.

7. Jarrah Dieback Disease - The karri-marri forest is not susceptible to damage from Phytophthora cinnamomi and the clear felling necessary to regenerate this forest type is essential whether there is a wood chip salvage operation or not. The project hence offers no special disease problems in this type.

Susceptibility to dieback of the major proportion of the jarrah-marri forests in the license area is regarded as relatively low because of the prevailing land forms.

However, the jarrah-marri forests primarily in the lower rainfall northern and eastern sectors of the area are susceptible to damage from the disease. Logging of sawlogs alone will certainly increase the risk of introducing the fungus to such areas even with maximum attention to hygiene. Increased activity involved in removing marri for wood chips could increase the risk. In facing this dieback risk, wood chipping is considered to be acceptable on the following grounds:

(a) To most areas the threat of introducing the fungus under strict hygiene control is virtually the same if logging for both jarrah and marri is co-ordinated as planned.

(b) The most favourable method of operating on these high risk sites is to make a heavier cut and reduce the frequency of visitations for selective logging.

(c) Removal of mature and overmature marri, as well as the jarrah removed for sawlogs, will favour vigorous marri regrowth capable of forming a stand if dieback does influence the jarrah complement.

There is no simple answer to problems confronting forest management in the presence of jarrah dieback. This problem is common to the whole jarrah forest. The disease is, however, discontinuous in the license area and the application of hygiene measures should minimise the problem.

8. Fauna Protection - Basically there has been little reaction from the public with respect to wildlife management. There was, however, a strong concern about the reduction of virgin forest, which will be dealt

with subsequently. Coupe dispersal, provision for road, stream and special reserves (Appendices VI and IX) based on well documented fauna and flora research is considered an adequate safeguard. Detailed fauna and flora monitoring is being continued and some recent information is contained in Appendix X.

No species are known to be endangered by forest operations in the license area, despite thorough investigations. All evidence indicates that the local fauna and flora is well adapted to successional changes, whether induced by natural wildfires or by regeneration burns. Each successional stage has its own set of species, which rise and fall in numbers in line with suitability of the environment for their existence. This dynamic balance is considered to be more robust and better suited to current conditions than the static balance of an old forest, so much sought by the conservation bodies in the past.

9. Virgin Forest Preserves - Publicity given to the wood chip industry has focussed public attention on the need for uncut (virgin) preserves. These are considered necessary as scientific reference areas against which human impact can be measured, and as basis for specialised "wilderness" type recreation. The Forests Department has made provision for a large number of management priority areas to accommodate, either singly or in conjunction, the need for research, flora and fauna conservation, recreatio . education and water supply. These are shown in Appendix IX.

(a) The Department considers that it has provided adequately for all requirements, taking into account that a preserve is but one form of forest management. From the viewpoint of multiple use management, the first requirement is to recognise that all uses cannot be provided at luxury level. Past development and the extent and location of the natural resource has precluded this option in Western Australia.

Within the limits of current knowledge and forward planning it is considered that the system of reserves and priority areas provided is the best compromise for multiple use management of the State Forest. It is adequate to meet any special need while retaining flexibility for future change. Within the license area alone, over 40,000 hectares of uncut forest is retained as road reserves. This is considered to cater better for tourism, recreation and aesthetics than an alternative, single large reserve. Separate to the road reserves which have a basic function in tourism and aesthetics a series of management priority areas has been delineated to cover the whole range of the southern forest types.

Dispersion is essential to cover the variation and is desirable to safeguard protection in the light of catastrophic fires and unknown future pressures on the forest.

Such undisturbed areas are enclaves within a buffer of disturbed forest of similar type. Huge areas are therefore not essential. Though the need for large areas is often correctly argued for reserves situated on islands or within highly altered agricultural landscape, within the forest the surround is an integral part of the reserve.

(b) These scientific reference areas can also be seen as simple phases of an ecological continuum which ranges from newly regenerated forest to the climax. They are hence selected and allocated with this in view.

There is a strong indication that what the public values in forest is the diversity of landscape and of recreational opportunity. The reference areas reserved from logging contribute to this diversity, but large areas of undisturbed forest are not essential for this purpose. There is in fact a degree of conflict between conservation of undisturbed scientific reference areas and recreational use, which can be at least partially resolved by zoning public use of the forest.

(c) At present, a proposal for a large wilderness in the Shannon Basin is under review by the State Department of Conservation and Environment. This incorporates a provision to cease wood chipping in the Basin on the grounds that this operation would destroy the environmental integrity of the forest.

(i) However, the area has been subject to sawmill log-

ging since 1951, contains some agricultural clearings, is traversed by a highway and in the past has contained a township and a railway. Thus the past disturbance exceeds any likely future disturbance due to wood chip extraction.

(ii) The Department has provided what is considered to be an adequate system of scientific reference areas in the wet sclerophyll forest. This is outlined in Appendix IX and is based on multiple use planning for the public of Western Australia.

Criteria of size imported from United States or Canada are not applicable under local conditions. Dispersion sampling efficiency, protectability, and integration with total land use are considered to be factors more relevant than sheer size.

(iii) The disturbances that occurred in the Shannon Basin in the past would make any conclusions about siltation and delta formation unrepresentative of an undisturbed estuarine system. The Association of Marine Biologists considers the Shannon estuary (Brooke Inlet) inferior to the estuary of the Frankland River (Nornalup Inlet) in terms of biological diversity, and recommended the study of the latter as first priority.

(iv) The research proposed for the basin is being carried out in smaller, manageable catchments where it can be carried out more effectively, (Section 5).

(v) Waivure of wood chipping in the basin would involve excessive cutting in other areas and is regarded as environmentally irresponsible. The problem is to relocate the sawmill cut and not just the wood chip cut. Other areas which would have to be cut to excess such as the Donnelly and Warren River basins are far more important environmentally than the Shannon Basin.

(vi) If the Shannon Basin is required as a wilderness, the only acceptable compromise is for the Government to reduce both the sawlog and wood chip quotas contained in existing agreements. This would involve compensation payments and some re-employment offers, but is the only responsible procedure.

(vii) The interim decision to review the situation after the first five years of operation (Appendix XII) is a reasonable compromise. Currently the Forests Department is reviewing the situation to elucidate all options for altered cutting patterns and reserve requirements. Such a review must consider the State Forest as a whole and not just one specific basin.

10. Recreation and Tourism -

(a) It has been suggested that the planning for the wood chipping project has not paid sufficient attention to forest management for recreation and tourism. This ignores the fact that t › Forests Department has already made basic provisions for these pursuits (an

efficient access system, communications, picnic facilities, signposting, guide pamphlets and safety from fire) in a more than adequate form and partly at the expense of the forest industries. Careful planning will ensure maintenance of road and stream reserves, retention of aesthetic areas and the development of new high interest areas resulting from operations of the forest industries. Some of the highest interest areas in the region are associated with regenerated stands (The Rainbow Trail) and management facilities (The Gloucester Tree Fire Lookout). The Department's planning for recreation and tourism in fact attempts to meet the needs of the whole community. The difficulty is to meet unrealistic demands from a very small percentage of the population who desire unlimited "wilderness" areas (see 8 (b) above). This extreme demand is as unacceptable as the concept that all areas should be subject to operations of the forest industries.

(b) Recreation and tourism are already major forest uses within the license area and co-exist satisfactorily with the forest industry, which continues to contribute to economic and social stability of the region. The main aim of forest management in the area is to ensure that the areas cut over for sawlogs are fully regenerated. The wood chip industry will greatly assist in this process, thus providing a wider range of options for future populations.

11. Honey Production - The honey industry in Western Australia is partly dependent on nectar and pollen from forests of the license area. Apiarists have expressed concern that the marri removed by wood chipping will decrease the potential honey yield from the area.

Again, it is pointed out that the marri removal is required for regeneration purposes following sawlog cutting. Therefore it can only be beneficial. Improved location of apiary sites and better management of sites is expected to offset any significant adverse impacts to apiarists. Provision is being made, within the multiple purpose managemant plan to accommodate an efficient and stabilised honey industry.

It has been necessary to point out to apiarists that their whole industry is heavily subsidised by the sawmilling industry through provision of road access. Sawlog revenues are used to regenerate and protect the forest. Apiary site rentals are only token payments which do not even cover the cost of processing applications and supervision of sites at district level. Within a multiple use management system honey production from State Forest has a real place, but is not free from complications due to size of resource and conflicts with other demands on the forest.

12. Future of the Industry - Most people concerned with adverse effects of the Agreement accept the 15 year proposal but point out that its continuation could ultimately remove all old trees in the license area. Again, this logic is misjudged in that it is logging in general and not salvage for wood chipping which could pose this threat.

This area of concern largely arises from Attachment 5 (a) in the Impact Statement which shows that one third to one quarter of the mature to overmature karri resource in the license area would be affected by the initial agreement. This was intended to show that an adequate safety factor for flexibility in planning exists within the Agreement.

13. Public Reaction - Vigorous opposition to the wood chip project was raised by a concerned public group in Western Australia. The Forests Department liaised actively with members of this group who have made a genuine attempt to understand the planning details and overall concept. The press statements attached as Appendix XIII demonstrate rather clearly that better knowledge of the specific project has led to its acceptance. Genuine concern still exists as to the extent of the forest area associated with production forestry but this centres on the need for "wilderness areas" and not on environmental degrade resulting from wood chipping operations. Major objections received from the public result from ignorance of the forest resource, forest management and what the local project involves.

Doubts about the projects were raised using overseas data, often irrelevant or inappropriate to local conditions. Visits to the license area generally dispelled these doubts.

A statement has been made by the anti wood chip group that Japan does not exploit its native forest. In fact, Japan has a very efficient timber industry and produced over 22 000 000 cubic metres of pulp material from domestic forests in 1973 alone.

Public interest promoted by wood chip agitators has proved most beneficial to forestry in this State as many people have developed a reasonable knowledge of forestry practices and better appreciation of the management needs for the State Forest resource. This is essential for an effective understanding of multiple use management.

In summing up, no valid argument has been levelled against the wood chip project as proposed in Western Australia. If the State Forest is to be managed within a multiple use framework to provide hardwoods for state housing, furniture, port facilities, poles, sleepers, bridges etc. it must be regenerated to provide the widest range of options in future. Effective regeneration requires the removal of waste material left from logging and treatment of unutilised tree and shrub species which are favoured by selective cutting. To achieve this through a wood chip market designed for fine writing and printing papers, (not disposable carton material as has been stated by preservationists) instead of burning or poisoning the "waste" or "residues" can only be considered beneficial. The fact that this regeneration process is partially subsidised by wood chip sales can also only be seen as advantageous.

It should be noted that the local wood chip project was planned within the General Working Plan provisions which specify that the State's sawlog cut from hardwood forest must be reduced by fifty percent within a period of ten to twenty years. This period is intended to allow the rural sector to free itself from the present strong dependence on the hardwood sawmilling industry. It is hoped that an efficient fully integrated (sawlog and chip) forest industry operating at a lower level, supplemented by pine-based industry close to the license area, and increased recreation and tourist industry will enable the region to achieve a new economic and social balance.

The wood chip project is but part of this restructuring but it is also the only practical means available at this current time.

14. Conclusion - Following careful consideration of the extensive public feedback which resulted from compilation of the Impact Statement and from a deliberate programme to ensure public information, the Department can see no major problems with the Manjimup Wood Chip Project.

A serious problem does exist in that the public is extremely poorly informed concerning the principles of conservation generally and in forestry management specifically. So called "conservation" pressure groups have apparently deliberately set out to agitate the public to believe that conservation is purely preservation of the pre-colonial values. As a managing

conservation body, responsible for a resource which has reached the scarcity margin, the department welcomes even one-sided public reaction provided it leads to an enlightened interest in the forest and its management and conservation.

An aspect of public feedback which most disturbs officers of this Department is the claim that the Manjimup project was hasty, secretive and inadequately planned. The extensive documentation accompanying this submission is tendered to the Committee to enable it to evaluate these points independently.

It is hoped that the Committee will appreciate that, as professional conservationists, departmental officers do understand the concern for virgin preserves. This does not necessarily imply blind acceptance of overseas doctrines on conservation. Due to differences in conditions, it is essential to consider alternative options and to arrive at a compromise which meets public needs.

A basic problem with the appreciation of the planning and management of forest resources is that one must attempt to think in terms of 100 year time spans. This is abnormal to the common life style of the public.