

## REVIEW OF ROAD, RIVER AND STREAM ZONES IN SOUTH-WEST FORESTS

*Introduction to a workshop at Manjimup, July 1991*

by Roger Underwood

I am very pleased to have the opportunity to provide the introductory notes at this seminar today. I was involved in the development of the concept of special management zones on roads, rivers and streams in the karri forest back in the early 1970s; and I have since been involved in the implementation of the system and the assessment of its merits. It is very satisfying now to also be involved in the review of the system, and I hope, its further development.

In this introduction I wish to discuss three issues:

*Firstly, the philosophy of management which we attempt to apply in CALM, and the framework into which this seminar fits;*

*Secondly, the land use classification system which applies to forests in WA, and the framework into which the road, river and stream zone system fits; and*

*Thirdly, the special values which are ascribed to road, river and stream zones which must be provided for.*

Before I start, however, I would like to make a brief personal observation. I am well aware, as are we all in CALM, of the sensitivity of this issue. I expect that most of you in the hall today are passionately concerned with the overall issue of forest conservation and management in WA, or with some aspect of it such as the protection of roadside or riparian zones. I know that each one of you would like to be able to influence the outcome, when issues like this are being reviewed.

I therefore would like to emphasise CALM's two principal aims today: *firstly*, we are here to try to share with you the most up-to-date information we have on the subject, and *secondly* that we are here to listen to what people have to say.

However, it is important to consider the decision-making processes in which we are involved. CALM's statutory role is to prepare draft management plans for its controlling bodies (the Lands and Forests Commission and the National Parks and Nature Conservation Authority). These bodies may, and frequently do amend draft plans prepared by CALM before submitting them to the Minister for the Environment. He, in turn, may also amend them if he feels he must do so. In the case of the 1987 forest region management plans, the endorsement of the EPA and of Cabinet was also required. In the special case of the road, river and stream zones in the Southern Forest Region, the approval of the EPA is required before any changes can be made, because the original system was approved by them as part of the original Environmental Impact Statement for the woodchipping industry, and because of Ministerial conditions imposed when the licence was recently reviewed.

So it is a complicated business, and many people will have their finger in the pie. As I see it, CALM's job is to try to provide the best technical information available, upon which decisions will be based, and to try to ensure that there are proper opportunities and avenues for the views of the concerned public to be heard and incorporated. CALM will be making recommendations on this issue, but not final decisions.

## CALM'S MANAGEMENT PHILOSOPHY

Those personal observations lead nicely into the first general introductory point I wish to make: CALM's management philosophy.

Under the legislation which established CALM, and in our approved mission statement and key objectives, the department has both a direction and a goal to manage lands and wildlife for the benefit of present and future generations. This is not as easy as it sounds. Many members of the present generation don't agree about how this should be done, and we don't know exactly what the future generations want. The best we can all do in these situations is to use the most up-to-date scientific information, make the best social and political judgements we can at the time, and then make adjustments as we go along and we learn from our mistakes, or recognise our successes and try to build upon them.

This philosophy is turned into action by the preparation and publication of management plans, which are then periodically reviewed and updated. The management plans specify what is to be done, and where, over a specified time period. At the same time, research is ongoing to try to improve the scientific data base upon which the management plan is based. A variety of means are used to find out the public's views, and to incorporate these into the plans. For example, we identify and meet with special interest groups, we hold open workshops and seminars, we publish plans in draft form so that people can clearly see what is intended. In addition, there are several layers of approval and endorsement required, including the controlling bodies, EPA, Shire Councils and Minister, all of which allow for public input.

In some cases our management plans have specifically **not** dealt with some issue or other in a particular area. A case in point is the system of road, river and stream zones in the Southern Forest Region. In our 1987 plan for this region we made it clear that we thought the system could be improved, but that the subject was too complex to be dealt with in a regional plan. At the time we foreshadowed the review process in which we are now involved.

In a nutshell then, our management approach is to make our intentions explicit in published management plans, to try to incorporate the best scientific information as well as community opinion, and to review the results and update the plans on a regular basis.

## THE LAND USE CLASSIFICATION SYSTEM APPLYING IN FORESTS IN WA

Public forests in the south-west of WA fall into one of four major land use categories:

*Nature Reserves*, where the primary purpose of management is nature conservation and scientific study;

*National Parks*, where the dual principal purposes of management are nature conservation and recreation;

*Conservation Parks*, which are similar to national parks, but generally smaller and less pristine (Note: this category has only recently been created and no areas have yet been designated, but numerous areas have been managed for some years as if they were conservation parks); and

*State forests*, which are managed for a variety of purposes, including nature conservation, recreation, the production of water, timber, minerals and other minor products, as well as for their amenity and landscape value.

Within each of these areas, a further definition of special management zones can occur. For example there may be parts of a national park in which some forms of recreation are not permitted and this is spelled out in the management plan for the park.

The identification of special zones or places in the forest is particularly important in the multi-use State forests. This is because not all the outputs for which we are managing State forests are able to be provided for simultaneously from the same hectare of forest.

## **THE SPECIAL CASE OF THE ROAD AND STREAM ZONES IN THE SOUTHERN FORESTS**

The designation of special zones along roads, streams and rivers in the Southern Forest Region is a case in point. Although these areas still have the official tenure of State forest, they are managed differently from surrounding State forests so as to ensure certain values are maintained in the forest as a whole.

The special values which must be provided from State forest as a whole are fourfold:

- (i) *Wildlife*. It is important that we provide for the full range of wildlife habitats throughout the forest;
- (ii) *Timber*. The southern forests are the major hardwood timber producing areas in the State;
- (iii) *Fresh Water*. Most of the rivers and streams arising in the southern forests are still fresh and unpolluted. They are also the habitat for aquatic fauna and flora. The physical and ecological integrity of major watercourses needs to be maintained;
- (iv) *Landscape*. The southern forests are very beautiful and vistas of mature forest along roadsides is a special attraction of the region, and form part of the backdrop for many recreational pursuits.

In order to provide for timber, and at the same time protect the other special values, the system of road, river and stream zones was developed and implemented over 15 years ago. These zones support the permanent reserve system which occurs throughout the forest.

They were originally called "Road River and Stream Reserves" in the days before CALM. The use of the word "reserves" was discontinued by CALM because it implies that the areas had a special tenure, like nature reserve. At the time they were designated, the road and stream zones were never regarded as being permanent; they were there to provide mature undisturbed forest values while adjoining forests were being harvested and regenerated.

The system comprises a network of forests of varying widths along major roads, rivers and streams. Along selected streams 100 m either side is protected, this width is increased to 200 m either side of rivers; and along selected roads 400 m either side is protected. (The original EIS for the Marri Woodchip project required only 200 m either side of roads, but this was voluntarily increased to 400 m.) A total of 76,000 ha of forest is included in the network which averages about 20 per cent of each forest block.

In these areas no clearfelling for sawlogs and chipwood logs occurs or is planned. The network was carefully designed, on the basis of the best information available in the early 1970s. The aims were, in the forest blocks in which timber production was planned to occur, to provide special protection for fresh water resources, to inter-connect conservation reserves, provide mature tree habitat at a local level, and preserve the special attractiveness of the roadside vistas along the major tourist roads of the region.

The system adds to, and often links, the mature forest within the system of major conservation reserves (nature reserve, national park and conservation park) which occur throughout the forest. When the system of road, river and stream zones was developed in the early 1970s, we used the best information available at that time. However, at the very time it was being first implemented research programs were also set up to see whether the system could be improved. Specifically, we wanted to study the questions of optimising the protection of water resources, conserving fauna at the local level and managing forested landscapes.

Fifteen years later this research has suggested to us that the original system can be improved. Furthermore, we now have computer technology for mapping and comparing options which was simply unavailable years ago.

## IN CONCLUSION ....

The designation of special road, river and stream zones in the multiple use forest was one of the most popular moves forest managers have ever taken. The value of these areas for nature conservation at the local level, water resource protection and regional tourism is widely recognised. Indeed they have become so highly regarded that when we first proposed that the system be modified a couple of years ago, there was a major outcry. As one of those who helped design the original system, but now one of those who believes the system can be improved, I'm not sure whether to feel proud or mortified by this!

I am a firm believer in the need to move, amend and adjust as new information and changing values come to light. I believe responsible managers need constantly to be looking at research results, at new techniques, new concepts and new approaches. We would be very arrogant managers if we thought the *status quo* could never be improved upon.

As Mr Hodge said in his opening remarks, this is one in a series of workshops on this, and related forest management issues. After the general review of options here today, further more detailed consideration of the issue will follow.

Finally, thank you for participating in this review. I hope that the outcome is a superior system of protecting the special values of the multi-use forest in the southern region than we have at present; most of all I hope that if a new system is developed and adopted, that people will understand the basis and genesis of the changes, and that they will support CALM in its implementation in the field.

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# **PROCEEDINGS OF A SEMINAR**

## **A REVIEW OF ROAD, RIVER AND STREAM ZONES IN SOUTH WEST FORESTS**

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