ZONING

FOR NATIONAL PARKS IN WESTERN AUSTRALIA

DISCUSSION PAPER

Contents

Introduction
Origins and History of National Parks2
Legislation
Defining National Parks4
National Park Management 6
Zoning as a Concept8
The Proposed System 10
Other CALM Act Reserves
Temporary Closures
References
APPENDICES
Appendix 1
Zoning
Appendix 2
Preliminary Land Use Zoning.
Yoho National Park

Introduction

The purpose of this paper is to solicit comment on the concept of zoning for national parks in Western Australia, to suggest a framework of zoning, and to introduce the possibility of zoning being more fully used in other CALM Act reserves.

The concept of zoning, or land classification, within reserves is not new to WA having been introduced by both the National Parks Authority (1977) and the Forests Department (1977) for lands under their control. More recently it has been referred to in the CALM Act (1984) and the three management plans for the Northern, Central and Southern Forest Regions (CALM 1987a, 1987b and 1987c).

The framework which is being proposed for national parks is directly borrowed from a scheme developed by Parks Canada and reproduced in Appendix 1. The Canadians have incorporated it into a policy document after years of testing and revision. In many ways it resembles the scheme put forward by the National Parks Authority (1977), but is proposed for use here because it is slightly more comprehensive and, more importantly, reflects graded use and flexibility within zones. These points will be considered below.

Before addressing these it would be useful to many readers to look at the background to 'national park' as a concept, a form of land use, and a legal entity. The outline of the discussion is: origins and history of national parks; legislation; defining national parks and their relationship to other protected areas; national park management; zoning as a concept; the proposed system. Finally, as mentioned earlier, if zoning can be introduced and used successfully in national parks, there are needs and opportunities for its use on other CALM Act reserves. It has already been proposed for some marine parks, for example. The relationship between the various forms of zoning will be examined.

ORIGINS AND HISTORY OF NATIONAL PARKS

National parks have their origins in the adaption of the royal domains and estates in Europe to the needs of 'all the people' in the United States. The visions are enshrined in the words of the explorer George Catlin: "A <u>nation's</u> park, containing man and beast, in all the wild and freshness of their nature's beauty" (Catlin, 1851).

Although Yellowstone (1872) is regarded as being the first formal national park, many other fine examples of natural areas in the US e.g. Yosemite, declared in 1890, were to follow shortly afterwards. Canada's first national park, at Banff Hot Springs was declared in 1885 but was only about 25km² at that time, and further its purpose was definitely slanted towards recreation. Reservation was as "a public park and pleasure ground for the benefit, advantage and enjoyment of the people of Canada". (Consider a similar tone in the vesting order for Yanchep [1904] for 'the protection and preservation of caves and flora and as a health and pleasure resort').

The dual sentiments of 'preservation in perpetuity' and 'recreation' first were reflected in the charter for Yellowstone and subsequently in the mission statements for the US Parks Service (1916) and later Parks Canada (1930).

The words are:

"The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations, hereinafter specified, by such means and measures as conform to the fundamental purpose of said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlifetherein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

National Parks Act of United States (1916)

"The Parks are hereby dedicated to the people of Canada for their benefit, education and enjoyment, subject to the provisions of this Act and the Regulations, and such Parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations"

National Parks Act of Canada (1930)

The common threads are thus ".... maintained and made use of so as to leave them unimpaired for the enjoyment of future generations." These are reflected in the directions for management plans in the CALM Act of Western Australia.

"To fulfil so much of the demand for recreation by members of the public as is consistent with the proper maintenance and restoration of the natural environment, the protection of indigenous flora and fauna and the preservation of any feature of archaeological, historic or scientific interest;"

DEFINING NATIONAL PARKS

The discussion so far relates to the way in which national parks are to be planned and managed. Before looking at the apparent conflicts which are inherent in these now accepted goals, it would probably be useful to consider the position of national parks in the wider system of reserved land. The best known and generally accepted system is that devised by the International Union for Conservation of Nature and Natural Resources (IUCN, 1975). This system is currently being revised, but for present purposes it is reasonable to use that classification. The 'definition', cited below, is rather more than that since it encompasses selection criteria and management objectives as well.

"A national park is a relatively large area:

- i) where one or several ecosystems are not materially altered by human exploitation and occupation, where plant and animal species, geomorphological sites and habitats are of special scientific, educative and recreative interest or which contains a natural landscape of great beauty; and
- ii) where the highest competent authority of the country has taken steps to prevent or eliminate as soon as possible exploitation or occupation in the whole area and to enforce effectively the respect of ecological, geomorphological or aesthetic features which have led to its establishment; and
- iii) where visitors are allowed to enter, under special conditions, for inspirational, educative, cultural and recreative purposes."

DEFINING NATIONAL PARKS

Nevertheless this sets some general guidelines for judgements to be made about the suitability of certain areas in WA as national parks. Clearly some currently styled "national parks" are too small to be such, whilst others, whether already reserved (e.g. Prince Regent Nature Reserve) or not, should be incorporated into the State's national park system. A start has been made to this reallocation in proposals contained in the three management plans for the Northern, Central and Southern Forest Regions (CALM 1987a, 1987b, 1987c), and in the draft plan for the South Coast Region (CALM 1989).

In summary, national parks are distinguished from other classifications or proposed classifications (see CALM 1987a, 1987b, 1987c) by being relatively large areas (c.f. conservation parks) of predominantly natural systems which generally are free from exploitation of natural resources within them¹ (in common with nature reserves) and in which qualified recreation is an objective (c.f. nature reserves).

¹ Mining in National parks is prohibited unless parliamentary approval has been obtained.

NATIONAL PARK MANAGEMENT

Management in national parks in its broadest sense is about simultaneously fulfilling the recreation demands of the current generation and protecting the area for the benefit of future generations. Obviously the absolute fulfilment of both desiderata is impossible: any use impairs the 'natural' qualities of an area (for further discussion see Stankey, 1988). The corollary is that keeping the area unimpaired for future generations prohibits use. Furthermore, natural areas change by themselves over time, whether managed or unmanaged, used or unused. Hence we make judgements and 'trade-offs' in an attempt to get a reasonable best of both objectives. Indeed the skill of park management lies in doing just that.

Managers who are often single resident rangers or visiting officers, have to make unenviable judgements as they go. In the absence of management plans, they are guided by restriction of all activities to those deemed "necessary" for park protection. However, when more complex difficulties arise, often because of the level and diversity of use, the traditional approach, readily adopted in WA, is to prepare a management plan. This is a great improvement. First, policies, programs and strategies are set down in a considered and logical way. Second, problem solving is shared by a much larger group, including departmental staff and the National Parks and Nature Conservation Authority. Third, the planning process includes the public.

It can also be said that the difficulties in management of conflict are simply being transferred to a bigger, more lengthy and more expensive process. The noble objectives of park management, simple as they are, still have to be translated into workable systems of action, as manifested by rules, structures, tracks, roadways, picnic sites, interpretive programs and so on.

National park management

Is it possible to assist planners and managers in this process? The answer is yes, but it is hard to know how helpful each measure might be. Some have been used or been in place for some time, e.g. policy statements, seminars on planning processes and outcomes.

Another useful form of assistance could be the articulation, in regional plans or other documentation, of the <u>kind</u> of national park being considered. Whilst all national parks have to satisfy the same general objectives, they show great diversity in scenery, climate, vegetation, history of use and so on. Hence some, such as Yanchep, Leeuwin-Naturaliste and Torndirrup are oriented towards high visitor use relative to their size: others such as Hamersley Range, Stirling Ranges and Fitzgerald River are large, relatively remote and more clearly oriented towards the 'wilderness' end of the spectrum, in which natural values are more likely to prevail. If this variation could be articulated and settled with public endorsement the work of planners would be simplified.

Finally the concept of zoning within individual national parks has to be put forward. It is suggested that this would work together with categorisation of 'kind of national park' just discussed. Indeed this categorisation could be made in terms of the zones which are likely to be represented, and the proportion of the Park covered by each zone.

ZONING AS A CONCEPT

The concept has been considered extensively in the literature (see Walther, 1986 for a recent review). Aside from the use, implied above, as a means of articulating the orientation of a national park, zoning is a means of communicating management intentions and moving at least some distance to achieving a 'compact' between the managing authorities and the public.

Parks Canada expresses the reasons for adopting a zoning policy as follows:

"Zoning is one of the most important tools for the planning, development and management of national parks. The national parks zoning system is a resource-based approach by which land and water areas of a national park are classified according to their need for protection and their capability to accommodate visitors. It provides a guide for the activities of both visitors and managers within a national park. It assists in managing the tension between use and preservation."

Parks Canada Policy, (1983) p.30

There is an important additional reason for considering zoning in WA. The CALM Act provides for the establishment of "wilderness areas", special areas in which the influence of man is reduced to a minimum and in which the expression of nature can be readily seen. Only a small number of national parks are considered to have areas within them of the wilderness quality. Management plans for two such national parks, Fitzgerald River and Hamersley Range, are currently subject to public review. Further, one wilderness area has been designated in Walpole Nornalup National Park and a management plan for this area is

ZONING AS A CONCEPT

nearing the draft stage. If wilderness areas should be declared, they should be seen for what they are, selected parts of a few national parks. In this sense it seems appropriate to set down a framework of reference, including other zones which allow for more intensive use. It is anticipated that a Wilderness Policy will be put in place within the foreseeable future.

The main argument which has been used against zoning is it brings about rigid and inflexible prescriptions for use. In other words its existence implies the very regimentation and control which users are wishing to avoid in 'getting away from it all' in a natural setting. Further, the strict application of zoning inevitably leads to the discovery of 'wrong' boundaries and new impetus to change the zoning scheme relatively soon after its introduction. These are problems often seen in town planning exercises.

These problems will always be in the background where a zoning system has been adopted. As will be discussed further in the next section, however, Parks Canada has minimised them by using zones as general guides rather than rigid prescriptions.

THE PROPOSED SYSTEM

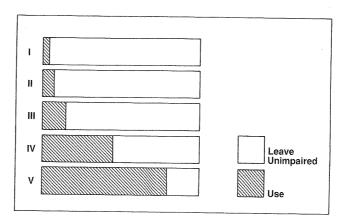
The proposed system of 5 zones is set out in Appendix 1. Comments:

- 1. It may be necessary to modify the system slightly for our conditions. For example, rules for motorised access may need to be modified for management purposes. Motorised access is prohibited in Zones I and II, but it may be necessary for management to use vehicles in these zones e.g. for fire suppression in rare and endangered species habitat, or for the rescue of injured people.
- 2. The system is likely to be much better understood by examples of its application. Appendix 2 shows the proposed zoning for Yoho National Park, a park of about 130,000ha, adjacent to Banff National Park in the Rocky Mountains (Yoho Core Concept, 1986). This park contains areas of all 5 zones, made necessary by the inclusion of the Trans Canada Highway within it, the presence of some areas of very special significance (the Burgess Shales), and some of the finest examples of mountain scenery in the world. Thus the park has very diverse degrees of use, ranging from a zone used by about 12 million people per year to one which has only a few hundred special invitees per year. This diversity is unusual and most parks are likely to have three or less zones represented within them.
- 3. Although certain parameters such as use by vehicles are prescribed, the general notions of 'use by the current generation' and 'leaving unimpaired' are relatively flexible. This is illustrated by the following diagram adapted from a Parks Canada teaching aid.

ERRATUM

Page 11, Point 4, reads "each year about 95% remain within Zones I, II and III". This should read "each year about 95% remain within Zones III, IV and V".

THE PROPOSED SYSTEM



A wider understanding of this concept is probably the means by which the tension between use and preservation can be best managed.

4. Parks Canada has not integrated actual visitor use into these models. It is clear from experience in Canada, WA and everywhere else, however, that most use occurs in a very small proportion of a national park. In Yoho National Park for example, Zone IV and V account for <2% of the park area but about 92% visitors remain within these zones. Of the 1 million or so people who spend more time in the 'park proper' each year about 95% remain within Zones I, II and III (12% of the park area). This is generally how the system works itself out in practice. Most use occurs in very small proportions of the parks, leaving most of the area substantially unimpaired, in various states of naturalness, for future generations.

A system of zoning should assist in the wider understanding and articulation of the position, and promote the reality that parks are both 'for the people' and 'for conservation of natural systems'. This is a 'graded' system, working from least use to most use in a logical progression, whilst supporting the principles devised earlier by the National Parks Authority (1977).

OTHER CALM ACT RESERVES

The categories of land tenure put forward in the management plans for the Northern, Central and Southern Forest Regions (CALM 1987a, 1987b and 1987c) invoke use of zoning in categories of land other than national parks. This is illustrated in discussion of compatibility of land use priorities (see Tables 1 and 2 of each document).

Certain tenures such as marine parks and State forest allow for commercial production for example, but not in all areas. A zoning scheme which depicts this has already been put forward for Ningaloo Marine Park Draft Management Plan (CALM, 1988). Three zones were proposed: one allows for commercial and recreational uses consistent with conservation of natural resources; a second allows for recreation consistent with conservation of natural resources; and a third allows for more strict recreational use. It is not intended to elaborate further on a zoning scheme for areas which allow some commercial use here, but such schemes are already well established in forest management in WA.

Another tenure of land in which zoning may be used is the proposed conservation park. These areas will be similar in security, tenure and purpose to national park, but be used where significance, size or conditions do not warrant national park status. Zoning based on the scheme outlined above for national parks may be the most appropriate for these areas, except that not all zones would be used. For example, it would not be appropriate to include wilderness zones within a conservation park.

TEMPORARY CLOSURES

As a coda to this paper it should be pointed out that there may be the need to close certain areas temporarily within parks and reserves, regardless of zoning status. This has been necessary for protection against the spread of dieback disease, for example. Whilst needs to close areas for management purposes are likely to arise less often in future, the provision of these needs should be made clear.

APPENDIX 1

(from Parks Canada Policy, 1983, p 30)

Zone I - Special Preservation

Specific areas or features which deserve special preservation because they contain or support unique, rare or endangered features or the best examples of natural features. Access and use will be strictly controlled or may be prohibated altogether. No motorized access or man-made facilities will be permitted.

Zone II - Wilderness

Extensive areas which are good representations of each of the natural history themes of the park and which will be maintained in a wilderness state. Only certain activities requiring limited primitive visitor facilities appropriate to a wilderness experience will be allowed. Limits will be placed on numbers of users. No motorized access will be permitted. Managment actions will ensure that visitors are dispersed.

Zone III - Natural Environment

Areas that are maintained as natural environments and which can sustain, with a minimum of impairment, a selected range of low-density outdoor activities with a minimum of related facilities. Non-motorized access will be preferred. Access by public transport will be permitted. Controlled access by private vehicles will only be permitted where it has traditionally been allowed in the past.

Zone IV- Outdoor Recreation

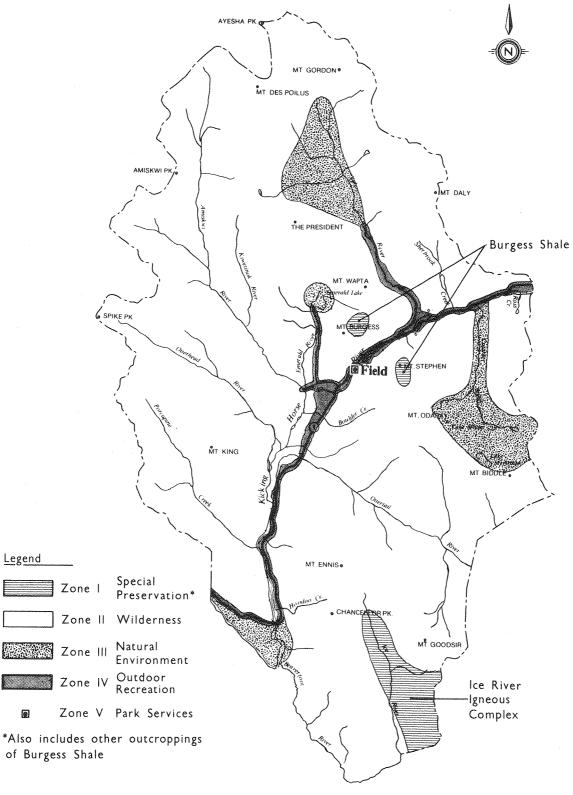
Limited areas that can accommodate a broad range of education, outdoor recreation opportunities and related facilities in ways that repect the natural landscape and that are safe and convenient. Motorized access will be permitted and may be separated from non-motorized access.

Zone V - Park Services

Towns and visitor centres in certain existing national parks which contain a concentration of visitor services and support facilities as well as park administration functions. Motorized access will be permitted.

APPENDIX 2

Preliminary Land Use Zoning, Yoho National Park



Copied from: Environment Canada, Parks. 1986. Yoho Core Concept: Yoho National Park Management Planning Program. Western Region: Environment Canada.

REFERENCES

- CALM. 1987a. Northern Forest Region: Regional Management Plan 1987-1997. Department of Conservation and Land Management. Perth.
- CALM. 1987b. Central Forest Region: Regional Management Plan 1987-1997. Department of Conservation and Land Management. Perth.
- CALM. 1987c. Southern Forest Region: Regional Management Plan 1987-1997. Department of Conservation and Land Management. Perth.
- CALM. 1988. *Ningaloo Marine Park: Draft Management Plan.*Department of Conservation and Land Managment. Perth.
- CALM. 1989. South Coast Region: Draft Management Plan. Department of Conservation and Land Management. Perth.
- Catlin, G. 1851. *Illustrations of the manners, customs and conditions of the North American Indians.* 2 Volumes. London: H. G. Bohn.
- Environment Canada, Parks. 1986. Yoho Core Concept: Yoho National Park Management Planning Program. Western Region: Environment Canada.
- Forests Department. 1977. General Working Plan for State Forest in Western Australia: Working Plan No. 86. Part 1.
- IUCN. 1975. World Directory of national parks and other protected areas. International Union for the Conservation of Nature and National Resources. Gland, Switzerland.
- National Parks Authority (Western Australia). 1977. *Management Policies*. Perth: National Parks Authority.
- Parks Canada. 1983. *Parks Canada Policy*. Minister of Supply and Services Canada.
- Stankey, G.H. 1988. Issues and approaches in the management of recreational use in natural areas. *Recreation Australia* 8:1-6.
- Walther, P. 1986. The Meaning of Zoning in the Management of Natural Resource Lands. *J. Env. Manag.* 22:331-43.

0732-0989-500