

STRATEGIES FOR CONSERVATION AND RECREATION
ON CALM LANDS IN WESTERN AUSTRALIA



*The conservation, environmental protection
and recreation strategies of WA's Department
of Conservation and Land Management*



Department of Conservation and
Land Management, Western Australia

DECEMBER 1987



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PART 1. INTRODUCTION

During 1987 the Department of Conservation and Land Management prepared a series of major planning and policy statements. These are:

management plans for the Northern, Central and Southern Forest Regions.

timber strategy for W.A.

Departmental policy statements and management guidelines.

These documents set out the Department's aims in the areas of wildlife conservation, environmental protection and recreation. These important policies need to be emphasised.

This document therefore re-issues the CALM conservation, environmental protection and recreation policies and management guidelines, along with a description of the fundamental principles upon which they are based.

CALM welcomes comment from the public on all its conservation proposals, policy statements and management guidelines. All of these documents are under constant review and are updated or revised whenever necessary.

PART 2. THE GUIDING PRINCIPLES

In formulating policies and management plans for conservation and recreation management, CALM is guided by the principles set down in a number of key documents. These are:

the State Conservation Strategy, which sets out conservation objectives and strategy for W.A.;

the CALM Act and the Wildlife Conservation Act, which provide the legal framework for management of parks, reserves, forests and wildlife in W.A., and therefore the statutes with which all management plans and operations by CALM must comply;

the Departmental corporate plan, which guides the Department in establishing overall objectives and allocating priorities to works programs;

the timber strategy, which elaborates on the principles in the State Conservation Strategy and applies them to forest management for timber production in W.A.; and

the 'Bailey Report' (still in draft form), which addresses the question of mining on lands set aside for conservation, and, when finalised, will provide the policy CALM will follow in this area.

DEFINITIONS

The definitions of conservation, development and environment adopted by CALM are those set down in the World Conservation Strategy (WCS) and the W.A. Environmental Protection Act:

Conservation is

'The management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. Thus conservation is positive, embracing preservation, maintenance, sustainable utilisation, restoration, and enhancement of the natural environment. Living resource conservation is specifically concerned with plants, animals and microorganisms, and with those non-living elements of the environment on which they depend. Living resources have two important properties the combination of which distinguishes them from non-living resources: they are renewable if conserved; and they are destructible if not'.

(WCS 1980, section 1.4)

Development is

'The modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life. For development to be sustainable it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long term as well as the short term advantages and disadvantages of alternate actions'.

(WCS 1980, section 1.3)

Environment, as defined in the Western Australian Environmental Protection Act 1986, is

'living things, their physical, biological and social surroundings, and interactions between all of these'.

For the purposes of this definition of environment, 'the social surroundings of man are his aesthetic, cultural, economic and social surroundings to the extent that those surroundings directly affect or are affected by his physical or biological surroundings'.

THE OBJECTIVES AND PRINCIPLES IN THE STATE CONSERVATION STRATEGY (SCS)

The SCS for W.A. sets out five key objectives for conservation. These are:

- to maintain essential ecological processes and life-support systems;
- to preserve genetic diversity;
- to ensure the sustainable utilisation of species and ecosystems;
- to maintain and enhance environmental qualities;
- to optimise the quality of life for Western Australians;

The SCS recommends that the following principles be adopted to achieve the objectives:

- integrate conservation and development;
- retain options for future use;
- focus on causes as well as symptoms;
- accumulate knowledge for future application;
- educate the community;
- recognise community aspirations and the need for involvement in the planning process.

CALM is committed to the objectives and principles listed in the SCS and uses them as the basis for all conservation planning and operations.

THE LEGISLATIVE BASE

CALM operates under two legislative acts: the CALM Act and the Wildlife Conservation Act.

These Acts place a number of statutory requirements on the way in which CALM manages land and wildlife. The major requirements are:

- (1) Management must be in accord with a published management plan and all management plans must be made available for public review and comment in the draft phase.
- (2) All lands are vested in two controlling bodies (not the Department). The controlling bodies (National Parks and Nature Conservation Authority and Lands and Forest Commission) are comprised mainly of members of the public representative of conservation and land management interests.
- (3) The Department must perform the following functions:
 - manage land vested in the NPNCA and LFC;
 - provide the NPNCA and LFC with assistance;
 - promote and encourage the forest production requirements of the State;
 - be responsible for conservation of flora and fauna throughout the State;
 - carry out research;
 - provide advice to other bodies;
 - advise the Minister.
- (4) Indigenous State forests must be managed on a sustained yield basis to ensure long-term social and economic benefits from forest resources.

Exotic species forests must be managed for optimum timber yield.

- (5) National parks and marine parks must be managed to provide public recreation, consistent with conservation of flora, fauna, landscape and other features.
- (6) Nature reserves must be managed to ensure the protection, care and study of wildlife.

THE CORPORATE PLAN: THE CALM MISSION AND KEY OBJECTIVES

General Principles and Philosophy

CALM is committed to the principle that it manages public land and natural resources and conserves native wildlife on behalf of the public of W.A. Emphasis is placed, then, on informing the public of the Department's activities and, wherever possible, involving the public in planning and management.

The Department's regional system of management ensures CALM officers are on hand to interact with local communities and solve local problems.

Statement of Mission

In recognising that Western Australia has a beautiful and diverse natural environment which provides material, aesthetic and spiritual benefits and that the natural environment is an essential component of the quality of life for Western Australians, a statement of mission adopted for the Department of CALM is:

TO PROVIDE FOR THE USE OF THE NATURAL ENVIRONMENT WITHOUT DETRACTING FROM POSSIBLE FUTURE USE.

Charter

The scope of the Department's responsibilities is represented by its charter which is:

TO CONSERVE WESTERN AUSTRALIA'S WILDLIFE AND MANAGE PUBLIC LANDS AND WATERS ENTRUSTED TO THE DEPARTMENT FOR THE BENEFIT OF PRESENT AND FUTURE GENERATIONS.

Primary Objectives

Five primary objectives have been established:

Management

To protect, restore and enhance the value of resources entrusted to the Department so as to meet, as far as possible, the diverse expectations of the community.

Conservation

To conserve the indigenous plant and animal species and environmental processes in natural habitats throughout the State.

Production

To provide and regulate the supply of renewable resources on a sustained yield basis for the satisfaction of long-term social and economic needs, and in a manner that minimises impact on other values.

Recreation

To facilitate the public enjoyment of the natural attributes of public lands and reserved waters in a manner that does not compromise conservation and other management objectives.

Knowledge

To seed a better understanding of the natural environment, and to promote awareness and appreciation of its values.

Subsequent sections of the Department's corporate plan elaborate on these objectives, particularly those relating to conservation. The strategies used to meet these objectives are:

ESTABLISH AND MAINTAIN A SYSTEM OF SECURE RESERVES WHICH PROTECT VIABLE REPRESENTATIVE SAMPLES OF ALL THE STATE'S NATURAL ECOSYSTEMS AND SPECIES, BOTH TERRESTRIAL AND AQUATIC, AS WELL AS AREAS SUITABLE FOR RECREATION AND THE PRODUCTION OF RENEWABLE NATURAL RESOURCES.

This will involve:

The development and maintenance, in conjunction with other government instrumentalities and the public, of a comprehensive data base on the occurrence and conservation status of the State's ecosystems and species.

The maintenance of a representative committee to evaluate existing nature conservation reserves and to recommend additions, deletions or exchanges.

Categorising lands and waters entrusted to the Department into priority use zones and applying the principle of multiple use to provide for the needs of nature conservation, recreation and production.

Protecting ecosystems, landscape and the cultural heritage on lands and waters entrusted to the Department from damage by fire, disease, grazing, feral animals and people.

Developing prescriptions for control of disturbance and for rehabilitation of damaged forests, parks and reserves.

Opposing the incompatible use of lands and waters entrusted to the Department and opposing the release of such lands and waters for other purposes.

ENSURE THAT CONSERVATION AND LAND MANAGEMENT IS CARRIED OUT ACCORDING TO SOUND, WELL-RESEARCHED SCIENTIFIC PRINCIPLES.

This will involve:

Carrying out, encouraging, supporting and publishing scientific, economic and social research relevant to the Department's needs.

Establishing long-term monitoring of ecosystems and individual species, and of recreation requirements and effects.

Developing and maintaining inventories of biological resources on lands and waters entrusted to the Department, and where appropriate, Statewide.

Liaising with other research and land management organisations to define, prioritise and co-ordinate research programs and publishing results.

Ensuring the efficient transmission of research findings into operational practice.

PROVIDE PUBLIC EDUCATION AND INFORMATION PROGRAMS DESIGNED TO INCREASE COMMUNITY UNDERSTANDING OF, AND SUPPORT FOR, NATURE CONSERVATION AND NATURAL LAND MANAGEMENT.

This will involve:

Establishment of interpretation centres with appropriate facilities for education and activity programs.

The dissemination of relevant information.

The promotion of direct interaction between staff and the public.

The encouragement and facilitation of publicity for nature conservation and natural resource management.

The establishment of arboreta and trial plots to demonstrate the performance of trees and other plants to rural communities.

The promotion and facilitation of the use of native trees and plants to combat land degradation, create wildlife habitat, conserve water resources and enhance the human environment.

ENCOURAGE AND ASSIST THE PUBLIC TO PARTICIPATE IN THE DEVELOPMENT OF CONSERVATION AND LAND MANAGEMENT POLICIES AND THE IMPLEMENTATION OF MANAGEMENT AND RESEARCH PROGRAMS.

This will involve:

The use of formal processes which involve the:

Lands and Forest Commission;
National Parks and Nature Conservation Authority;
Forest Production Council; and
public submissions to the planning process, as described in the CALM Act, 1984.

The establishment of consultative and advisory committees, when appropriate, to facilitate an exchange of information between organisations and public groups and to provide advice to the Executive Director.

The formation of 'friends' groups and similar associations, and the organisation of voluntary assistance programs.

The training of staff in the objectives and techniques of public participation.

PREPARE AND IMPLEMENT MANAGEMENT PLANS FOR LANDS AND WATERS ENTRUSTED TO THE DEPARTMENT.

This will involve:

The establishment of priorities for management plan preparation according to set criteria.

Restricting procedures to necessary operations to maintain public safety and the status quo of area management where no management plan exists.

PREPARE AND IMPLEMENT WILDLIFE MANAGEMENT PROGRAMS FOR WILDLIFE THROUGHOUT THE STATE.

This will involve:

Providing special protection for declared rare (endangered) flora by regulating land use of their habitat.

Managing rare animal populations to ensure their survival.

PREPARE AND IMPLEMENT TIMBER PRODUCTION STRATEGIES WHICH MEET THE OBJECTIVES OF THE STATE.

This will involve:

Continuous review of supply and demand data for wood products.

The development of cost effective procedures for growing, processing and marketing timber at the level sustainable under sound forest management.

Establishment of pine forests to supplement available hardwood supplies when necessary.

MANAGE EXPLOITATION OF RENEWABLE NATURAL RESOURCES ACCORDING TO THE FOLLOWING PRINCIPLES:

resources are managed to ensure their long-term conservation;

a fair and equitable return is received for the resource;

wherever possible the operation is commercially viable;

the resource is managed to minimise waste.

DEVELOP OPPORTUNITIES FOR THE RECREATIONAL USE OF LANDS AND WATERS ENTRUSTED TO THE DEPARTMENT IN WAYS WHICH:

- are consistent with the purpose of the area;
- provide a return to the State for services and amenities;
- provide an equitable allocation of land and resources where there is competition between user groups;
- allow for commercial operators to provide services where appropriate.

THE TIMBER STRATEGY

CALM has prepared a timber strategy, a plan for an efficient timber industry based on a sustainable yield from the forest and consistent with the many other values of W.A.'s south-west forests.

The strategy has seven principles which the Department must follow in every aspect of timber production on State forests in W.A. The principles are:

- (1) that a representative system of conservation reserves is designated which is equitable in area allocation and has security of tenure and purpose;
- (2) that all other forest land be designated for multiple use with similar security of tenure and purpose;
- (3) forest areas harvested for timber production will be regenerated, and previously regenerated forests will be silviculturally managed to optimise the management objective;
- (4) the cost of regenerating, establishing, and managing both native forests used for timber production and exotic pine plantations will be recouped from the sale of the harvested logs;
- (5) the harvest from forest areas will be regulated to levels that can be sustained indefinitely;
- (6) the processing of logs from State forests will be managed to maximise the employment and economic benefits for W.A.;
- (7) all forest management operations, including logging, will be controlled by CALM.

MINING IN CONSERVATION AREAS: THE BAILEY REPORT

In December 1986 a major report was presented to Government on mining in national parks and nature reserves. This is known as the Bailey Report.

The report contains 18 recommendations. While these are being considered, Government has adopted a moratorium on new mining proposals in national parks and nature reserves.

CALM will abide by Government policy on this issue when it is finalised.

PART 3. THE ESTATE MANAGED BY CALM

The purposes and areas of land reserved within the Department as at 30 June 1987 were as follows:

State forest	1 822 000 ha
Timber reserves	145 000 ha
Freehold vested in the Executive Director	32 000 ha
National parks	4 647 000 ha
Marine parks	233 000 ha
Conservation of flora and fauna reserves	9 988 000 ha
Conservation/recreation reserves	187 000 ha
TOTAL	17 054 000 ha

There are constant fluctuations in the exact figures, as new areas are acquired or as classifications change.

The recently-released regional management plans propose a major restructuring of the classification system. Refer to those plans for details.

PART 4. DEPARTMENTAL POLICY STATEMENTS

CALM inherited policies from the three agencies (National Parks Authority, Forests Department, Department of Fisheries and Wildlife) amalgamated to form the Department, and is developing new policies on all Departmental management responsibilities.

Policies are published and distributed throughout the Department as policy statements. They are available to anyone who wishes to read them.

At July 1987, policy statements issued or in final stages of drafting are as follows:

No.	Title
1	Planning
2(a)	Basic Raw Materials
3	Dieback and Logging
4	Departmental Advisory Committees
5	Research and Technical Publications
6	Staff Training & Career Development
7	Recreation in Nature Reserves (incorporated into Policy 18)
8	Financial Management
9(a)	Conservation of Endangered Flora in the Wild
10(a)	Rehabilitation of Disturbed Land
11	Protection of Aboriginal Sites
12	Arbor Day
13(a)	Taking of Protected Flora in the Kimberley Region
14	Weeds on CALM Land
15	Public Participation
16	Computer Purchase and Use
17	Housing
18(a)	Recreation (not completed)
19(a)	Fire Management
-	Reporting, Monitoring and Re-evaluation of Ecosystems (under consideration)
-	Management of Conservation Lands (not completed)
-	Communications (not completed)
-	Marine and Estuarine Reserve System (W.A.) (not completed)

Policies are currently being developed for a further 20 issues relevant to CALM activities and responsibilities.

Note (a) These policy statements are presented in this document.

BASIC RAW MATERIALS POLICY STATEMENT NO. 2

The Departments of Conservation and Land Management and Mines have agreed to a strategy concerning the extraction of certain minerals from land under the control of the Department of Conservation and Land Management (CALM).

The particular minerals involved are gravel, shale (not being oil shale), sand, clay, limestone or rock, i.e., those materials which are not minerals when on private land, but are minerals when on Crown Land or reserved land as defined under the Mining Act 1978.

It is proposed that such minerals on CALM land can be used by CALM or its authorised agents for any agricultural pastoral, household, road making, or building purpose on that land if no mining tenement has been granted over the land, e.g., CALM may authorise gravel to be obtained from one part of a State forest, national park or nature reserve in order to effect road works in other parts of that forest, park or reserve [Section 9(2) of the Mining Act 1978].

In the case of gravel, sand etc., being required by various shires, MRD, SEC or other agencies for services adjacent to, on, or servicing CALM lands, it is proposed that they be accommodated by the issue by CALM of a lease. Doubtful cases are to be referred to the general manager.

The creation of such a lease will mean that the land will fall within the Mining Act definition of private land. Accordingly any gravel, shale etc. will no longer be minerals and the provisions of the Mining Act will not apply.

All operations of a commercial nature involving basic materials will be controlled under the Mining Act, and for this purpose a mining tenement will need to be obtained by the operator. These will be subject to approval by our Minister, to conditions and to the payment of appropriate compensation to CALM, and royalties to the Mines Department.

The CALM policy and conditions on rehabilitation, compensation and royalties is presented in the table.

TABLE TO ACCOMPANY POLICY STATEMENT No. 2

AGENCY	TENURE	MINING TENE- MENT	CALM LEASE	REHABILITA- TION PITS	COMPENSATION TO CALM	ROYALTY		APPROVALS	REMARKS
						M.D.	CALM		
1. CALM	Use on CALM lands	No	No	Yes	No	No	N/A	CALM District	Minimal pits on National Parks, Nature Reserves and Flora, Fauna and Landscape priority areas. All pits to be rehabilitated after use.
2. CALM agents authorised works	Use on CALM lands	No	No	Yes	No	No	N/A	CALM District	Minimal pits on National Parks, Nature Reserves and Flora, Fauna and Landscape priority areas. All pits to be rehabilitated after use.
3. Shires, MRD or other authorised agencies	* Roads on or servicing CALM land or within 5km	No	Yes	Yes	No	No	N/A	CALM District	Minimum of new pits on National Parks, Nature Reserves or Flora, Fauna and Landscape priority areas. Existing pits to be phased out and rehabilitated.
4. Shires, MRD or other agencies	* Commercial use or land not adjacent (more than 5km)	Yes	No	Yes	Yes	Yes	No	CALM would oppose mining tenements	No new pits on National Parks, Nature Reserves or Flora, Fauna and Landscape priority areas. Existing pits to be phased out and rehabilitated.
5. Contractors	For use on other tenures or on P.P.	Yes	No	Yes	Yes	Yes	No	CALM would oppose mining tenements	No new pits on National Parks, Nature Reserves or Flora, Fauna and Landscape priority areas. Existing pits to be phased out and rehabilitated.
6. Private Individuals — small lots	For use on P.P.	—	No	—	—	—	—	—	Obtain from contractors.

* Doubtful cases to be referred to General Manager.

CONSERVATION OF ENDANGERED FLORA IN THE WILD POLICY STATEMENT NO. 9

Background

(N.B. Existing legislation uses the term 'rare flora'. It is necessary to continue to use this term when quoting the legislation but the term 'endangered flora' is to be used generally, as it will replace the other term when the Act is amended.)

The Department of Conservation and Land Management has statutory responsibilities for endangered flora conservation. This is a major concern because:

W.A. has a flora that is exceptionally rich in localised and rare endemic plant species. Moreover, areas where rare species are concentrated coincide predominantly with the wheat-belt and other areas where there has been extensive clearing or modification of the native flora.

Section 23F of the Wildlife Conservation Act prohibits the taking (injury or destruction) of declared rare flora by any person on any land throughout the State without the consent in writing of the Minister. A breach of this provision may lead to a fine of up to \$10 000. The flora provisions of the Act are binding on the Crown.

Officers of the Department need to know how to identify declared endangered flora, to know where it occurs, and to know how best to manage it. Moreover, the Act prescribes that endangered flora be protected on all categories of land throughout the State. Hence, the legislation requires officers of the Department to advise and otherwise deal with a broad spectrum of land owners and users. Endangered flora conservation is thus an issue of high public profile, and one where the Department's activities are subject to intense public scrutiny.

Legislation

Rare flora is defined in subsection 23F(1) of the Wildlife Conservation Act as "flora for the time being declared to be rare flora for the purposes of this section". Further clarification is provided in subsection 23F(2):

'Where the Minister is of opinion that any class or description of protected flora is likely to become extinct or is rare or otherwise in need of special protection, he may, by notice published in the *Government Gazette* declare that class or description of flora to be rare flora for the purposes of this section throughout the State'.

The Schedule of Declared Rare Flora

The Schedule of Declared Rare (Endangered) Flora is reviewed annually.

Plants (not including hybrids) which are protected flora declared under the Wildlife Conservation Act *may be recommended* for gazettal as declared rare (endangered) flora if they satisfy the following criteria:

The taxon (species, subspecies, variety) is well-defined, readily identified and represented by a voucher specimen in a State or National Herbarium. It need not necessarily be formally described under conventions in the International Code of Botanical Nomenclature, but such a description is preferred and should be undertaken as soon as possible after listing on the schedule.

Have been searched for thoroughly in the wild by competent botanists during the past five years in most likely habitats, according to guidelines approved by the Executive Director (see Appendix).

Searches have established that the plant in the wild is either:

a) rare;

or

b) in danger of extinction;

or

c) deemed to be threatened and in need of special protection.

(Plants which occur on land reserved for nature conservation may be considered less in need of special protection than those on land designated for other purposes).

The status of an endangered plant in cultivation has no bearing on this matter. The legislation refers only to the status of plants in the wild.

Plants *may be deleted* from the schedule of declared rare (endangered) flora where:

recent botanical survey as defined above has shown that the taxon is not rare, in danger of extinction or otherwise in need of special protection;

the taxon is shown to be a hybrid;

the taxon is presumed to be extinct (has not been collected or reliably observed over the past 50 years, or all known wild populations have been destroyed more recently).

or

the taxon is no longer endangered because it has been adequately protected by reservation of land where it occurs, or because its population numbers have increased beyond the danger point.

'Taking' Endangered Flora

In the Wildlife Conservation Act (subsection 6 (1)) the following definition is given:

“to take’ in relation to any flora includes to gather, pluck, cut, pull up, destroy, dig up, remove or injure the flora or to cause or permit the same to be done by any means;’

Thus, taking declared endangered flora would include not only direct injury or destruction by human hand or machine but such activities as allowing stock to graze on the flora, introducing pathogens that attack it, altering water tables such that the flora is deprived of adequate soil moisture or is inundated, allowing air pollutants to harm foliage, etc.

In the case of endangered plants which need fire for regeneration, burning at an appropriate time may not injure the population and may not constitute ‘taking’ in the spirit of the Act. However, in case of endangered plants sensitive to fire, burning may be detrimental to the long-term survival of the population and to allow fire to burn them would be to ‘take’.

Operational Objective

To conserve endangered flora in the wild in W.A. and to comply with Section 23F of the Wildlife Conservation Act.

Policy

The Department will:

- (1) Identify, locate and seek to conserve endangered flora.
- (2) Undertake research into the taxonomy, population biology, ecology, protection and propagation of endangered flora.
- (3) Implement management practices to conserve endangered flora and its habitat.
- (4) Publicise the need for conservation of endangered flora, and encourage involvement in conservation from all sectors of the community.
- (5) Liaise with other land management and research agencies and private land owners to enhance the study and conservation of endangered flora.
- (6) Develop and manage a geographic data base for endangered flora at its headquarters and at regional and district offices.

Strategies

To accomplish the Department objective and policies, staff will:

- (1) Undertake training in Departmental obligations to conserve and manage endangered flora.
- (2) Nominate Endangered Flora Officers (additional to District Wildlife Officers) in each region and district who shall be responsible for identifying, locating, mapping, training staff, overseeing management programs and providing liaison and advice on endangered flora.
- (3) Establish and maintain field herbaria, photographic collections, map records and other aids concerning endangered flora at each ranger station and district and regional office.
- (4) Arrange an inspection to establish whether declared endangered flora are present before undertaking any activity on CALM land that involves permanent destruction (i.e. clearing for road-making, building, mining or other purposes) of native flora.
- (5) Ensure that no known declared endangered flora is destroyed, damaged, or otherwise injured by Departmental staff or their contractors without first obtaining a ministerial permit to do so.
- (6) Ensure that any burning program (for fire protection purposes) will not cause irreparable damage to species of endangered flora known to be susceptible to fire.
- (7) Observe other operational guidelines for protection of endangered flora on CALM lands as detailed in Administrative Instruction No. 24 'Protection of Endangered Flora in Departmental Operations'.
- (8) Monitor known populations of endangered flora.

- (9) Maintain a geographic and biological data base on endangered flora.
- (10) Develop management programs for species of endangered flora.
- (11) Collect seed and propagate endangered flora in Departmental nurseries. Replant propagated material in the wild under approved management programmes.
- (12) Undertake research on the distribution, taxonomy, genetic systems, population biology, ecology, protection and propagation of endangered flora.
- (13) Assist private property owners and other land management agencies in the protection and conservation of endangered flora.
- (14) Acquire land through donation, exchange or purchase to protect endangered flora where land and/or funds are available.
- (15) Maintain a system for listing and delisting flora on the declared endangered schedule.
- (16) Establish a consultative committee with the W.A. Herbarium, Kings Park Board, tertiary institutions and other relevant organisations to ensure that research and management of declared endangered flora are co-ordinated.
- (17) Publicise information on endangered flora (without disclosing precise locations) and encourage community involvement in the conservation of endangered flora.
- (18) Maintain, through the Wildlife and Land Administration Branch, central records of all correspondence, discoveries of endangered flora populations, basic information on susceptibility to fire or dependence on fire for regeneration, applications for ministerial permits and other matters to do with declared endangered flora.
- (19) Refer enforcement matters regarding the taking of declared endangered flora to the appropriate District Wildlife Officer.

REHABILITATION OF DISTURBED LAND POLICY STATEMENT NO. 10

Operational Objective

To regenerate, on disturbed land, self-regulating ecosystems, consistent with the purpose for which the land is to be managed.

Background

Disturbance is defined here as any activity or process producing, or likely to produce, long-term degradation of habitats and ecosystems. It may occur before the land is acquired by CALM, as an unavoidable part of CALM management, because of inadequate management in the past, or as a result of activities by other agencies or natural processes.

Disturbance may be *caused* by such things as mining or quarrying, clearing for agriculture, dieback disease, grazing pressure, excessive burning and physical damage by vehicles, machinery and people. It is *expressed* in various ways including changes to natural assemblages of plants and animals (especially the loss of species), soil compaction and/or erosion, salination and reduction in water quality, safety problems or threats to private land or other habitats.

The type, and extent, of rehabilitation required will vary depending upon the type and extent of the disturbance. The aim of regeneration in a particular case, and therefore the procedure used, may also depend upon the priority use of the land in question. For instance, intensive uses, such as the clear-felling/replanting of pines, resulting in an alteration to natural ecosystems would be maintained where that is the designated land-use.

The policies presented below are based upon the following three principles.

Firstly, CALM land should be managed as far as possible to avoid disturbance. Rehabilitation should be the last option in a series of management decisions designed to protect the environmental values of CALM land. (Other policy statements deal with this matter in more detail).

Secondly, rehabilitation should aim to restore original values, including indigenous communities where appropriate, and help to enhance all potential uses provided the priority uses are not adversely affected.

Thirdly, policies on rehabilitation must be consistent with the four primary objectives of the CALM Corporate Plan.

Policy

The Department will:

- (1) Prevent disturbance causing activities on CALM land wherever possible, particularly on nature reserves, national parks, and conservation management priority areas, and in cases where the activity will lead to irreversible degradation of ecosystems or habitats; (this clause does not prevent duly authorised necessary operations, or the implementation of an approved management plan).
- (2) In the event of planned activities on CALM land which will cause disturbance, establish conditions for such activities which minimise the area and degree of disturbance, and define the type of rehabilitation required.
- (3) Ensure that all CALM land which has suffered disturbance, as defined, is rehabilitated as far as practicable, so that it will best meet the needs of the designated land use.

- (4) Prevent or suppress the invasion by weeds of disturbed or rehabilitated areas.
- (5) Ensure that, whenever possible, the cost of rehabilitation is borne by the agency responsible for the disturbance.
- (6) Ensure that rehabilitation provides for as many secondary land uses as possible, consistent with 3 above.
- (7) Apply one of the following four procedures wherever nature conservation is the priority use, as in nature reserves, national parks and flora, fauna and landscape management priority areas.

Natural regeneration of indigenous vegetation is the preferred method of rehabilitation, and where necessary, steps should be taken to encourage it.

Where this is not possible, or needs supplementing, local species, grown from seed or cuttings obtained locally, should be planted, with restoration as far as possible of the original species diversity, composition and spacing.

Where conditions have been changed to such an extent that local species cannot grow (e.g., on areas affected by salinity, dieback disease, or the removal of topsoil), or where a desired purpose, such as providing shade, cannot be met by local species, species suitable to the conditions and purpose should be planted. However, where more than one species are suitable, then that which occurs naturally closest to the rehabilitation-site should be used, with seeds and cuttings collected from the nearest possible source.

The necessity, and feasibility, of reintroducing species, or aggregations of species, of the original fauna will be considered.

- (8) For areas where nature conservation is not the priority use, rehabilitate ecosystems to enhance designated uses, or to maintain them at an appropriate level; however, the steps in 7. above, including consideration of the reintroduction of native fauna, should be followed where they do not interfere with this aim.
- (9) Carry out, or encourage research to provide a sound scientific basis for rehabilitation procedures.
- (10) Maintain detailed operational guidelines based on the best current techniques, and ensure that disturbance-causing activities and subsequent rehabilitation are fully integrated into land use planning and management.
- (11) Establish criteria by which to judge the success of rehabilitation on land for different purposes.
- (12) Monitor regeneration programmes to ensure that the aims are being achieved, and to contribute to the continuing improvement in methods.
- (13) Liaise with mining companies, Government Departments and other land users to ensure an exchange of ideas on the latest techniques and standards in rehabilitation.
- (14) Actively promote, and provide advice and assistance for, the regeneration of native vegetation, and the use of the most fitting rehabilitation methods, on areas of land outside the CALM estate.

TAKING OF PROTECTED FLORA IN THE KIMBERLEY REGION POLICY STATEMENT NO. 13

There have been reports of the illegal taking of certain plants in the Kimberley Region including mature trees like boab, *Adansonia gregorii*, and fan palm, *Livistona eastoni*, and other species of *Livistona*. In order to achieve control over this type of activity the Department will manage these species as 'Protected Flora' under the Wildlife Conservation Act. For the time being, this policy will apply to boab and the several species of *Livistona* palms.

Policy

- (1) That indigenous trees in the Kimberley Region are protected flora, and the taking of whole plants or parts of them, including seed, be subject to a royalty and a management fee for costs incurred in facilitating the taking of that flora.
- (2) That any Kimberley species placed on the list of gazetted rare plants be excluded from picking or taking.
- (3) That a public education programme be instituted to advise the public of our intention to control the taking of any endemic plants in the Kimberley Region.
- (4) That royalties be established to encourage the taking to be from areas remote from dwellings or public roads and only from pastoral properties.
- (5) That trees not be taken from Nature Reserves, National Parks or other reserves for conservation.
- (6) This policy will be reviewed if there is an increase in demand for boab trees.

Strategy

(1) BOABS

Royalty will be based on maximum girth below crown break, to overcome the problem of boab's variable shape.

Whole trees maximum girth	0 to 99cm	\$ 50 per tree
Whole trees maximum girth	100 to 199cm	\$100 per tree
Whole trees maximum girth	200 to 400cm	\$400 per tree

Trees greater than 400cm girth will not be available.

Boab nuts (fruit) \$10/100 nuts.

(2) PALMS

Livistona eastoni from established groves, other species (*L. humilis*, *L. inermis*, etc.) only to be taken where threatened by mining, roading etc.

0 - 2.00 metres height	\$ 30
0 - 5.99 metres	\$ 50
6 metres plus	\$ 70
Seeds	\$ 5/100

Discounts

0 to 49km from any townsite	No discount
50 to 99km from any townsite	10% discount
100 to 199km from any townsite	30% discount
200km + from any townsite	50% discount

Conditions Of Licence

- (1) No tree will be selected within 2km of any dwelling, stockyard, bore, boundary fence or other improvements, or within 500 metres of public or main station access road, or 200 metres from any internal road or internal fence.
- (2) No tree will be selected when in the opinion of a CALM officer its removal is likely to cause erosion.
- (3) No tree will be selected where it is an obvious and frequent camping place for stock.
- (4) Spacing of trees to be selected will be determined in the field but it is intended that only occasional trees will be marked.
- (5) Licence will only be issued on production of a written authority from a station lessee for entry to a specific area of his lease.
- (6) Licences will, for the present, only be issued to agents of:
 - 6.1 Local Government
 - 6.2 Community projects
 - 6.3 Specified private sector business

RECREATION POLICY STATEMENT NO. 18 *

Introduction

There is a substantial and rapidly increasing demand for access to lands and waters entrusted to the Department, for recreation. For the purposes of this policy recreation is defined as those leisure time activities or experiences participated in through choice which bring enjoyment or satisfaction to the participants.

It is recognised that lands and waters entrusted to the Department have the capacity to satisfy an important portion of the public demand for outdoor recreation and in so doing contribute significantly to social, psychological, physical and economic well-being of people of this State. Furthermore the Department can and should use recreation to present the lands (and waters) and their care and management.

The demand for recreation is reflected in the legislation and has been established as a major objective of the Departmental Corporate Plan.

The policies outlined below will apply to all lands and waters entrusted to the Department, including classifications not yet established but which may be introduced.

The policies are based on knowledge and experience at this time and may change as further knowledge and experience is accumulated.

In development and interpretation of policies, it is useful to bear in mind the following general principles:

(i) **Preservation of Land Values**

The values of the land as a whole should be maintained. The natural systems (including landscapes, particular sites, biota) should be able to sustain the form of recreation, or ancillary activity, which is occurring or is proposed.

Consistent with preservation of land values, facilities associated with recreation should be carefully controlled. Facilities for organised sports for example, should generally be minimal on most categories of land (see (ii)).

Also consistent with preservation of land values, the CALM Act (Section 33) circumscribes the ability of the Department to carry out other than 'necessary operations' unless there is an approved management plan in place.

The intensity of recreational activity should be controlled if necessary to insure that it does not destroy the value and *nature* of the activity.

(ii) **Consistency of Recreation with Purpose of Vesting**

Recreational activity should be compatible with the vesting purpose of the land or the established land use priority. This includes the relatively well known categories of land such as State forest, national park and nature reserve, but also includes allowance for new categories which may arise.

(iii) **Equity**

The widest range of activities consistent with the purpose of vesting should be allowed, but uses which impair other forms of use to an unreasonable extent or place the safety of other users in jeopardy, should be controlled or eliminated.

**Note:* This policy is not yet complete. Sections on specific activities are under development.

(iv) **Management**

The Department should be capable of providing any necessary degree of supervision of the activity, particularly where land values may be impaired. If this cannot be done the activity should be restricted, relocated or eliminated.

Policy

Policy statements are needed in two broad categories, first those which can be applied to a number of different activities and categories of reserve (these are completed) and secondly those relevant to specific activities (these are yet to be developed).

(1) **Statements Which May Apply Across All Activities or Several Categories of Reserves**

- 1.1 Recoupment - Fees & Charges.
- 1.2 Commercial Concessions (tour operators, outdoor recreation programmes, guided activities, facility operators, etc.).
- 1.3 Leases for Associations and Clubs.
- 1.4 Overnight Stays (accommodation, camping).
- 1.5 Visitor Safety.
- 1.6 Special Groups/Events.
- 1.7 Filming/Photography.
- 1.8 Public Access.
- 1.9 Facilities/Buildings.
- 1.10 Protection of Recreation Site Values.
- 1.11 Visitor Information.
- 1.12 Domestic Animals.
- 1.13 Visitor Interaction Skills.
- 1.14 Research Monitoring (surveys).
- 1.15 Liaison with other Agencies (i.e. outdoor recreation groups, tourism groups, etc.).

(2) **Activity Specific** (Policies not yet written and not included in this paper).

- 2.1 Vehicular:
 - 2.1.1 Cycling;
 - 2.1.2 Off Road Vehicles;
 - 2.1.3 Rally Driving (social);
 - 2.1.4 Scenic Driving;
 - 2.1.5 Competitive Car Rallying.
- 2.2 Canoeing and other paddle craft.
- 2.3 Boating/Sailing.
- 2.4 Fishing/Marroning/Spearfishing, etc.
- 2.5 Swimming/Diving/Snorkelling.
- 2.6 Barbecuing/Picnicking.
- 2.7 Nature Study/Appreciation (bird watching, nature study, photography, painting, etc.).
- 2.8 Day Hiking and overnight backpacking.

- 2.9 Equestrian.
- 2.10 Hunting/Gathering/Collecting.
- 2.11 Aircraft (fixed wing, helicopter).
- 2.12 Rockclimbing/Abseiling/Roping.
- 2.13 Orienteering/Rogaining.
- 2.14 Caving.
- 2.15 Shooting (pistol, rifle, archery).
- 2.16 Cross Country Running.
- 2.17 Model Aircraft.
- 2.18 Hang Gliding.
- 2.19 Speleology.

1.1 Recoupment - Fees & Charges

Introduction

- 1.1.1 The recouping of fees from users can offset the costs of management and raise funds for the provision of facilities and services for users. The charging of a fee also provides a management tool for redirecting a particular use or discouraging overuse. The charging of a fee can also add value to a place, or experience for the user.

Policy

- 1.1.2 Whenever possible and appropriate fees will be collected from users when a service or opportunity is provided as long as the benefit to the Department exceeds the cost of collection.
- 1.1.3 A variety of alternative recoupment methods will be used including lease fees (see 1.2); permit fees (see 1.7); visitor entry fees, vehicle entry fees; program or service fees and voluntary donations.
- 1.1.4 The level of fees will be set from time to time by the Minister according to a number of factors including management costs, comparable fees for equivalent facilities and services, and the intention of encouraging or discouraging particular uses.
- 1.1.5 Opportunities should be taken wherever possible (through signs, brochures and verbal communication) to explain that fees are going towards management and facilities.
- 1.1.6 Waiver of fees is the prerogative of the Minister (or delegate). Fees will not normally be waived. Guidelines on waiver will be prepared for information of staff, and advice to the public.

1.2 Commercial Concessions

Definition

- 1.2.1 A commercial concession is a 'right granted by way of lease, licence, or permit for occupation or use of part of an area of land or water entrusted to the Department, for the purposes of provision of appropriate facilities and services for visitors' use and enjoyment'. (CONCOM Working Group Paper on Concession Management in National Parks and other Protected Areas, 1985). Although it is most commonly applied throughout the world in National Parks, the definition is appropriate for general use on all lands and waters entrusted to the Department.

Policy

- 1.2.2 Each proposal for a concession by way of lease or licence will be considered by the Policy Directorate and will require approval of the National Parks and Nature Conservation Authority and/or the Lands and Forest Commission and the Minister. It is necessary for the concession to conform to the management plan for the land or water in question.
- 1.2.3 Wherever development of opportunities for commercial activities is proposed on lands and waters entrusted to the Department, the Department will decide whether the activity will be managed by the Department itself or by commercial concession. The Department itself is likely to undertake those commercial activities which (i) are environmentally or socially sensitive, or (ii) are of important educative or interpretative value to visitors, or (iii) are likely to cause an overall financial loss to the Government if conducted by concession.
- 1.2.4 Concessions will be allowed only if they are consistent with the purpose of the Reserve and consistent with the preservation of values of the land, e.g. they do not impinge upon rare or fragile ecosystems or impair key features of the landscape, or increase visitor pressure on the land to an unacceptable level and do not detract from the reasonable enjoyment of the land by the public.
- 1.2.5 If adequate facilities or services exist or can be developed outside of lands and waters entrusted to the Department in a way which adequately meets visitors' needs, such facilities and services should not be provided as concessions on land or water under the control of the Department.
- 1.2.6 The use of the facility or service provided by the concession should enhance the appropriate use and enjoyment of lands and waters entrusted to the Department and should desirably ameliorate the impact of visitors.
- 1.2.7 All concession rights will be subject to conditions which may include specification of the requirements and standards of services and goods to be provided (e.g. aesthetic standards, safety standards, hours of operation, restrictions on litter generating products, etc.).
- 1.2.8 All concession rights will be monitored. Failure of concession holders to comply with conditions may be subject to penalty or cancellation of the concession.
- 1.2.9 Maximum rates to be charged by concession holders may be imposed. Such rates will be subject to periodic review.
- 1.2.10 Advertising or promotion of the concession will be in harmony with the values of the land concerned and by approval of the Department.
- 1.2.11 Concessions will comply with all statutory and industrial requirements relevant to the operation, including regulations applying to the land under the CALM Act.
- 1.2.12 A register of concessions will be maintained by the Manager, Land and Wildlife Administration Branch.
- 1.2.13 Concessions may be sold outright with the approval of the Department, but may not be subleased or otherwise assigned.
- 1.2.14 Concessions will be classified in the following way:

Category 1 Major facilities and services;

Category 2 Minor facilities and services;

Category 3 Guided leisure and instruction

There is some overlap in activity within this classification but distinctions can be developed as illustrated in Appendices 1 and 2. (Extracted from CONCOM Working Group Paper on Concession Management in National Parks and other Protected Areas, 1985.)

The operation of concessions within each classification should follow the guidelines shown in Appendix 2, but note that fees are specifically covered in 1.2.16. Attention is drawn to the duration of the concession in Appendix 2.

- 1.2.15 In principle, the concession will be for as short a term as possible concomitant with the amortisation of the invested capital.
- 1.2.16 Fees charged for concessions will be set from time to time by the Minister, in consultation with the Valuer General or the Treasury, as appropriate.

In most circumstances fees will at least recoup management and administration costs incurred by the Department. Lesser fees may be charged where the Department is materially assisted by the concession holder, e.g. by educational benefits, or by amenities provided for public use as a by-product of the concession.
- 1.2.17 All concession holders will be required to indemnify the Executive Director, NPNC or LFC from any claims which may arise through their activities.
- 1.2.18 All concession holders will be required to carry public liability insurance. Rates will be set by the Department from time to time.

1.3 Leases For Associations And Clubs

Introduction

- 1.3.1 Several leases for clubs occur on National Parks, Reserves and State Forests. These are mostly long standing and are often highly capitalised. Membership is often hard to obtain, and may be expensive. Whereas most leases do not preclude public access, several are located in ways which use up public space adjacent to scarce resources, e.g. waterfront.

Policy

- 1.3.2 New leases will be provided to clubs only where (i) the applicant can demonstrate that it is not able to conduct these activities elsewhere; (ii) impact on landscape and environment generally is negligible; (iii) impact on public amenity and use of the area is negligible; (iv) the use is consistent with the purpose of vesting; (v) or the provision of the lease will benefit the land and water entrusted to the Department.
- 1.3.3 Existing leases will be reviewed according to the principles in 1.3.2 when they are about to expire or where the lessee requests renegotiation.
- 1.3.4 Fees for leases will be set by the Valuer General and will be reviewed at least every three years.
- 1.3.5 In the event that a new lease is issued it will be subject to conditions applying to concessionaires 1.2.
- 1.3.6 Where possible preference for leases in this section will be made to State organisations rather than local clubs.

1.4 Overnight Stays

Introduction

- 1.4.1 There are increasing demands by the public for opportunities to stay overnight in the attractive surrounding of lands and waters entrusted to the Department. Overnight accommodation is often a prerequisite for the enjoyment of the visit or for pursuit of other activities. Overnight stays can be catered for in two ways, in built accommodation or through camping. Policy on construction of facilities and buildings is discussed in 1.9.

Policy

1.4.2 Built Accommodation

- (i) Built accommodation on lands and waters entrusted to the Department should generally be provided by way of a concession (see 1.2). In this area attention will be given to co-operating with private enterprise in the provision of 'low cost' accommodation. There may be, however, instances where remoteness, seasonality or other factors necessitate the Department itself providing the built accommodation.
- (ii) Accommodation such as motels, hotels and formal caravan parks would generally be provided off lands and waters entrusted to the Department but nearby. There are some circumstances where such accommodation is not available or appropriate. In this event, visitor accommodation may be built on a concessional basis within an area of lands and waters entrusted to the Department (see 1.2.3). An example of such circumstances would be in large and remote national parks.
- (iii) Houses, cabins or huts or other forms of low cost accommodation where provided, whether by concession or otherwise should be available to the general public and not given over to any organisation for exclusive use.
- (iv) Where for various reasons the Department has inherited privately used built accommodation, e.g. 'squatters' shacks', their continued presence will be reviewed in the course of management planning, with the view to eventual elimination of this use. There will be no built accommodation for public use provided in Nature Reserves.

1.4.3 Camping Accommodation

- (i) Camping will be permitted in approved areas on lands and waters entrusted to the Department. Camping will be permitted on Nature Reserves only in special circumstances where there are no other options. This will not be revised except through the management planning process.
- (ii) Camping takes place in several forms, which can be broadly categorised into designated site camping and that associated with back packing.
- (iii) Back packing may be permitted across a total reserve or limited to a specific space or time zone according to the management plan. Where necessary an area on which to camp and a length of tenure may be specified by the Regional Manager consistent with the plan, but camping should not normally be allowed within 2km of designated sites or major roads.

(iv) Designated Sites

Facilities will be established at selected sites in order to encourage campers to use sites acceptable to maintenance of land values. These sites may have limited development of facilities such as basic toilets, water supply and rubbish removal.

All such facilities will be well sited and designed to minimise user impact.

A variety of designated sites may be developed including those catering for vehicle based or pedestrian based camping.

Some designated sites may remain undeveloped until such time as facilities are necessary.

It should be noted that the Health Act specifically states that it does not bind the Crown. This allows for facilities to be provided on land entrusted to CALM which would not otherwise have been possible. It enables CALM to provide and manage camping facilities of a less sophisticated type.

Regardless, it is expected that close liaison will continue with the Public Health Department and local authorities as health surveyors have and should continue to contribute through comments on location and design of facilities as well as by inspection of works after installation.

Guidelines for development and maintenance of sites will be issued in due course.

- (v) Designated campsites will not normally be developed in lands entrusted to the Department of less than 1000 hectares in area unless the land is specifically entrusted to the Department for camping or recreation.
- (vi) Caravans and campervan sites may be permitted at sites which have suitable access and/or turn arounds. Formal caravan parks with full facilities will normally be developed off lands entrusted to the Department and operated privately.

Where appropriate, sites may be developed in conjunction with private enterprise on a concessional basis. This would be on the same general guideline as indicated in (ii) above.
- (vii) Portable generators or battery charging plants will be limited to specified sites and times of operation within designated sites.
- (viii) Fees will be collected for all camping at designated sites wherever practicable (see policy 1.1).
- (ix) No charges (beyond normal entry charges, where applicable) will be levied against back packers.
- (x) Information on the location of designated camping sites, facilities available and fees and charges will be made readily available in publications and through information services, sign posting, etc.
- (xi) Overnight accommodation on boats will be permitted subject to conditions appropriate to the water(s) concerned.

1.5 Visitor Safety

Introduction

- 1.5.1 There is always an element of risk in all outdoor recreation activities and so it is not possible to guarantee visitor safety absolutely. Nevertheless all efforts need to be taken to ensure that risks are minimised.
- 1.5.2 Safety is recognised in the CALM Act as an area where 'necessary operations' may be carried out in the absence of a management plan.
- 1.5.3 Departmental staff are generally trained to ensure that appropriate safety standards are met. This includes advice to the general public about safety in a variety of ways.
- 1.5.4 From a legal point of view, Departmental staff have a responsibility to uphold the common law principle of 'duty of care'. This basically means that any structure, facility, operation or activity which the Department has caused or allowed to happen should be safe.

'Safe' will vary according to circumstances. For example, there may be a footpath leading to a cave which the Department had no practical means of keeping people away from. In most such

circumstances an appropriate warning sign would be adequate. It is the responsibility of visitors to heed such advice.

Policy

- 1.5.5 Departmental officers will observe the principle of 'duty of care'. Where there are doubts about a particular activity, structure, etc., Departmental staff will refer the issue to the District Manager, or Branch Manager as appropriate, who may refer it to more senior staff.
- 1.5.6 Concession holders will indemnify the Department against their activities and will carry appropriate insurance cover (see 1.2.17 and 1.2.18).
- 1.5.7 Visitor safety will be promoted by means of education, information and signs about potential problems and dangers as well as by design (i.e. provision of facilities such as safety barriers, shelters, bridging where necessary and the removal of pathways to dangerous areas).
- 1.5.8 Structures other than buildings, but including bridges, will be subject to periodic inspection and check. Inspections will include checking for the presence of heavy flammable fuels around and close to structures, buildings and recreation sites. Checks for hazards such as overhanging trees, dead limbs, potholes, etc., will be made periodically in heavily used areas. Any faults will be promptly rectified. Where this is impracticable, facilities may be temporarily closed for repair.
- 1.5.9 In the interests of public health, care will be taken to protect water supplies and catchments from pollution and to provide adequate means of sewerage and garbage disposal.
- 1.5.10 Concessionaires operating programmes or tours on lands and waters entrusted to the Department will be expected to have adequate first aid care available to deal with minor accidents.
- 1.5.11 Pre-planned and signposted access will be at recreation sites to enable access in the case of fire and for use as evacuation routes for visitors and firefighters.

1.6 Special Groups/Events

Introduction

- 1.6.1 The Department receives periodic requests to accommodate diverse activities. Most special requests relate to commercial filming (dealt with in 1.7 below), but a wide range of others are also received.

Policy

- 1.6.2 The Department will attempt to accommodate special interest groups subject to Section 33 of the CALM Act (management plans, 'necessary operations') and the general principles listed at the beginning of this document. The assessment of requests should give particular attention to maintenance of values of land and waters and to interference with other forms of recreation as well as the cost to management.
- 1.6.3 Approval of activities is generally the responsibility of Regional Managers. In the case of major events such as car rallies and festivals, however, Regional Managers should refer to the General Manager for consultation with the Policy Directorate of the Department.

Guidelines for the conduct of car rallies are attached.

1.7 Photography And Filming For Private Purposes

Introduction

- 1.7.1 Photography is recognised as being an important activity on all CALM Act lands and an important part of recreation.

Policy

- 1.7.2 Photography for private purposes (including video taping and movie filming) will be encouraged except where unusually sensitive issues are involved, e.g. close to private residences or where modification of the environment is required.
- 1.7.3 Where photography is for commercial or documentary purposes, reference should be made to the separately issued policy on this subject.

1.8 Public Access

Introduction

- 1.8.1 Lands and waters entrusted to the Department are generally open to public use. There are some areas restricted to the public for reasons of safety, disease control, water quality, protection of species, maintenance, etc.
- 1.8.2 Whereas access may be generally open in principle, in reality the public uses only a very small proportion of available land for recreation. This is generally close to features of interest, e.g. water bodies, scenery. Access is generally determined by roads or pathways.

Policy

- 1.8.3 Access to all areas of lands and waters entrusted to the Department will be open to public use, except where this contravenes the general principles discussed at the beginning of this document. In practice this allows access on foot to most areas and access by vehicle to many parts of reserves (1.8.5).
- 1.8.4 Subject to Section 33 of the CALM Act, access on foot will be encouraged by construction of walking trails in areas where features of interest justify their construction. Where appropriate, interpretative trails will be constructed according to the principles laid down in 1.11. Construction standards will be determined from time to time by the Manager, Recreation and Landscape Branch. Construction will accord with policy on visitor safety (see 1.5) and will where possible allow for disabled people.
- 1.8.5 Vehicle access will be generally determined within the constraints of Section 33 of the CALM Act. In most areas a system of roads and/or tracks exists before a management plan is prepared. Generally access along such roads/tracks will be permitted until a management plan is prepared, but in circumstances where the values of the land are under threat (e.g. for disease control) it may be necessary to close or restrict vehicle access. In general vehicular access to nature reserves will be discouraged.
- 1.8.6 In some circumstances vehicles use beaches within National Parks. Existing use of beaches will be allowed to continue until disallowed by a management plan, or as a necessary operation (for example on the grounds of safety). New access along beaches would be allowed only to holders of special licences (e.g. disabled persons, or for commercial fishermen transporting equipment and produce to market), or by means of a management plan.
- 1.8.7 Subject to financial limitations, and subject also to urgency as 'necessary operations' tracks will be upgraded, realigned or closed through the management plan process.

- 1.8.8 Design standards will be determined from time to time by the Manager, Recreation and Landscape Branch, in conjunction with the Main Roads Department.
- 1.8.9 Access by vehicles off roads and tracks will be limited to designated areas.
- 1.8.10 Use of unregistered vehicles will not be permitted except in compliance with the *Off Road Vehicles Act*. Where a permit is provided under that Act by the Minister for Local Government, Departmental approval is required for use on lands managed by this Department. Such approval will be issued by Regional Managers. Guidelines for approval will be issued separately.
- 1.8.11 Access by aircraft is subject to regulation by the Commonwealth Department of Transport. The Department may impose additional conditions for access. At other than established airstrips, access by aircraft, including helicopters, will be by permit from Regional Managers.
- 1.8.12 Airstrips will be constructed only in accordance with an approved management plan.
- 1.8.13 Power boats will not be permitted in areas where their use is not already established, e.g. Lake Unicup, Lake Preston. Permission will not be withdrawn except through the Management Plan process. Management Plans may seek to vary existing use where such use is not in accord with the principles discussed at the beginning of this document.
- 1.8.14 Generally sailing boats, canoes and small rafts may be permitted in closed waters. However some areas, e.g. Lake Clifton, water supply dams, are restricted to water craft for reasons of preservation of the resource, health, etc. Before new activities are established, Regional Managers should check these with the appropriate Policy Director. In general, boating is discouraged on nature reserves.

1.9 Facilities/Buildings

Introduction

- 1.9.1 The Department provides a wide range of facilities and buildings for the assistance of the public. These vary in cost from several dollars (e.g. very simple signs) to hundreds of thousands of dollars in the case of large buildings. Construction of new facilities, and maintenance of existing facilities is subject to financial constraints, and to Section 33 of the CALM Act.

Policy

- 1.9.2 Buildings and other facilities will be maintained at as high a standard as possible with available finance. Where proper maintenance is not possible the removal of the facility or its replacement should be considered.
- 1.9.3 Subject to Section 33 of the CALM Act, new facilities will be considered where (a) replacement is considered to be a better alternative than maintenance of an old facility; (b) a new facility is justified in terms of levels of use, protection of the land values, or is necessary for the management of recreational use. In general a minimum of man made structures will be developed in nature reserves.
- 1.9.4 All new facilities funded through the Department are subject to available finance which will be generally sought in Regional Estimates programs. Decisions on priorities will be made according to (a) Ministerial direction; (b) Departmental finance policy; (c) advice from the Lands and Forest Commission or the National Parks and Nature Conservation Authority; (d) approved management plan commitments; (e) factors mentioned in 1.9.3 (b) above.
- 1.9.5 Location and design of facilities will conform with standards, which include consideration of the needs of disabled, as advised from time to time by the Manager, Recreation and Landscape Branch. Guidelines will conform with the general prin-

ciples discussed at the beginning of this document, and in particular conform with landscape values of the area concerned.

- 1.9.6 Consistent with the general principles discussed at the beginning of this document, facilities for intensive sporting activities are not appropriate for Nature Reserves and are not generally appropriate for National Parks and State Forests. Whilst it is recognised that some such facilities are present in some instances, consideration will be given in management plans for elimination of the facilities or the reclassification of the land concerned. However, such facilities may well be accepted as being appropriate to some foreshadowed classifications of land.

1.10 Protection Of Recreation Site Values

Introduction

- 1.10.1 Visitor use of lands and waters entrusted to the Department is often concentrated upon specific recreation sites. These sites are selected and developed according to various criteria including their attractiveness as well as their ability to withstand high levels of use without environmental degradation.

These recreation sites, according to their presentation and maintenance, are the most obvious focus by which the public evaluates the Department's achievements in land management.

Therefore the selection, presentation and maintenance of recreation site values is of great importance to the Department.

Policy

- 1.10.2 Recreation sites will be selected and developed according to the criteria and procedures laid down in the 'Recreation Operations Manual' of the Department.
- 1.10.3 All recreation sites will be continually monitored to assess usage which may result in deterioration.
- 1.10.4 Where there is evidence of recreation site deterioration or it is anticipated, visitor use will be directed to another site, (i.e. rotation of use) and/or there will be temporary closure and rehabilitation of the site.
- 1.10.5 Recreation sites and facilities will be protected from wildfires by the development of fuel reduced zones, prescribed burning or mechanical means.

1.11 Visitor Information And Interpretation

Introduction

- 1.11.1 Dissemination of information is an integral part of management of the natural estate. It informs the public of opportunities for recreation and services available. As such, it is important to the marketing of recreation areas. Also, it is a most important tool for their management - selective dissemination can modify the demand on particular areas; and specific messages can foster appropriate behaviour. There is often a 'fine line' between promotion which places additional visitor pressure on the finite resources of the Department, and information which assists management and improves understanding of nature conservation.
- 1.11.2 The principles of communicating information about parks and forests are well developed and are embodied in the concepts 'visitor information', 'interpretation' and "community education". Definitions of each are useful. 'Visitor information' constitutes the basic data about recreation areas; for instance, location and distances, facilities, code of practice, costs, attractions and what to do. Before the visit it offers choice, on-site it orients the visitor. 'Interpretation' is the explanation of systems and processes in the natural environment and includes presentation of less

obvious features of the area, such as cultural, historical and scientific information. 'Community education' is more clearly teaching about the area in a more formal and comprehensive way, often involving considerable resource materials, presentations by experts, and field activities. There is a great deal of overlap between the three concepts but the thrust of each should be recognised.

- 1.11.3 Many communication channels are available for visitor information, interpretation and community education. They can be loosely divided into pre-visit, on-site and post-visit. While staff contact on-site is a most effective means of communicating to individuals and groups, it is labour intensive and must be augmented by pre-visit brochures, publicity and advice; on-site signage and displays and souvenir publications.

Policy

- 1.11.4 Visitor information and interpretation is the responsibility of all Departmental staff backed by the expertise of specialist staff.
- 1.11.5 Co-ordination of visitor information and interpretation and community education is the responsibility of the Manager, Information Branch, who acts in consultation with the appropriate Regional Manager, the Manager, Recreation and Landscape Branch, the Directors of National Parks and Recreation, and Nature Conservation, and other senior officers.
- 1.11.6 The Department will disseminate information for the purposes discussed earlier and will avoid 'promotion' which places additional pressure on available resources without assisting management.
- 1.11.7 There will be a hierarchy of pre-visit brochures from 'statewide' cover to site specific. Resources for publication will be generally allocated on the basis of demand for recreational use of the area concerned, but other factors such as the need to protect specific areas will need to be taken into account.
- 1.11.8 Brochures and other forms of information obtained at CALM offices and on-site will generally be available at no charge. More extensive publications and maps will be priced at 'what the market will bear'. The costs of disseminating materials via mail or via other outlets (e.g. tourist information centres) will be recovered.
- 1.11.9 Specialised visitor information centres may be developed on-site but only where the demand is sufficient, and resources allow.
- 1.11.10 Information dissemination, interpretation and community education carried out by staff is to be a high priority. Other media should support and complement personal contact with visitors. Staff will be trained in appropriate communication skills (see 1.13).
- 1.11.11 Interpretative displays will be designed and prepared according to standards laid down by staff of the Information Branch. Normally Branch staff will be involved in production, in consultation with Regional and District staff.
- 1.11.12 Location and erection of interpretative displays should be in consultation with Recreation and Landscape Branch staff.
- 1.11.13 Signs and static displays should be worded to ensure a message of welcome to the area.
- 1.11.14 The guidelines on locations and maintenance of signs described in the 'Recreation Operations Manual' will be followed. Signs should be kept to the minimum necessary to convey information. In some locations careful thought will need to be given to eliminating less important messages.
- 1.11.15 Sign text, layout, construction, location and size will conform with directions in the 'Sign Manual' of the Department.
- 1.11.16 The Department will promote a 'code of conduct' for visitors.

1.12 Domestic Animals

Introduction

- 1.12.1 This policy deals with presence of domestic animals as an adjunct to recreation and includes exercising of animals, horseriding, etc.

There are opposing and often strongly held views in the community about the presence of domestic animals on public lands. Many people believe it is fair for them to be accompanied by (or ride) a domestic animal as part of their recreation. Many other people resent the nuisance which is presented by other people's animals (by noise, personal injury, fouling, etc.).

Domestic animals can also have an impact on wildlife. For example, the smell and general activity of dogs and cats impedes activity of wildlife in areas which otherwise present ideal wildlife viewing opportunities for the public.

Policy

- 1.12.2 Dogs, cats and other domestic animals are prohibited from national parks and nature reserves, with the following exceptions:

- (i) use of dogs in those nature reserves defined as game reserves;
- (ii) seeing eye dogs for blind persons in national parks;
- (iii) where specified zones are established in national parks.

- 1.12.3 Dogs and other domestic animals may be allowed on other types of reserves or specified zones in other reserves according to the management plan for that reserve.

- 1.12.4 Specially trained dogs for management (i.e. feral animal control), search and rescue, or security purposes may be permitted to be used on all classes of land.

- 1.12.5 Departmental staff resident on reserves may keep family pets (including watchdogs) with the approval of the Regional Manager, provided the animals are confined at all times to the area rented by the staff member.

- 1.12.6 Residents adjacent to reserve entrances where domestic animals are not permitted should be encouraged to provide boarding facilities on a commercial basis for visitors who inadvertently arrive with a domestic animal.

- 1.12.7 Horses, for the purposes of this policy statement, are deemed to be domestic animals and as such may be allowed on reserves or specified zones in reserves (including National Parks) according to the management plan. They are generally prohibited in Nature Reserves (see specific policy on horseriding) and quarantine areas within State forest.

1.13 Visitor Interaction Skills

Introduction

- 1.13.1 It is recognised that Departmental staff play a key role in visitor recreation. Staff in some areas have substantial experience in this field but others do not. Skills required for positive visitor contact are partly derived from personality and interest in this subject, but much can be done to improve involvement and enjoyment through training and personal development.

Policy

- 1.13.2 The Department will develop programs within the Departmental policy (Staff Training and Career Development - No.6) to improve visitor interaction skills of

staff. This will include both formal training and other forms of personal development.

- 1.13.3 The Department will produce materials and information to assist and support staff in their interaction with the public.

1.14 Research Monitoring/Surveys

Introduction

- 1.14.1 Visitation and use of Departmental lands for recreation is increasing in many areas and in many ways. To assist in the planning and development of recreational opportunities there is a need to have measures of overall demand for outdoor recreation.

As well as predictive studies there is a need for information on current visitation levels, type of use, and frequency and duration of use. This information is essential in the ongoing management and should lead to improved allocation of resources as well as to the identification of revenue opportunities.

Information on recreation is important to the establishment of the recreational value of the resources managed by the Department and therefore in demonstrating the contribution of recreation to the economy of the State as a whole.

Research is also required to establish the attitudes and preferences of users so that management can be responsive to user needs.

There is a requirement for the monitoring of the capacity of various environments to cater for various recreational activities and the impact of activities themselves.

Policy

- 1.14.2 Recognising the expense involved in this kind of activity and the need to allocate priorities in a systematic way, a review of data gathering will be completed before the end of 1987.
- 1.14.3 Until completion of the review, as much data as possible on the level of visitation and use of recreational resources will be collected.
- 1.14.4 At the district and regional level all collections of information, i.e. ticket sales, traffic counts, registrations of visits from tour operators, etc. will be recorded and forwarded to Recreation and Landscape Branch.
- 1.14.5 Where possible specific case study or site specific studies will be undertaken as the basis for estimating visitor use for management plans.

1.15 Liaison With Other Bodies

Introduction

- 1.15.1 Many other agencies are equally involved in the planning and provision of outdoor recreation opportunities in this State. It is recognised that there is a need to plan with local authorities and State Government Departments to ensure that recreational developments are complementary to those planned by other agencies and that management objectives are not compromised by lack of co-operation.

Similarly consultation is required with groups having commercial interests to ensure that recreation developments and information services are compatible with management objectives.

User groups such as local clubs, State associations and community interest groups should have their aspirations represented in the planning and management of recreation resources. A considerable contribution to the ongoing planning and

management of recreation on Departmental land can be achieved through effective liaison with such bodies.

Policy

- 1.15.2 In the development of area management plans opportunity for extensive input will be sought from other bodies; State instrumentalities such as the Department of Sport and Recreation, the WA Tourism Commission and the WA Water Authority; Local Government; and commercial and voluntary groups (clubs and associations). Such groups will be actively consulted. In development of such plans, other public lands will be considered so that recreation within regions is integrated to the greatest extent possible.
- 1.15.3 Where possible involvement in the ongoing management of Departmental resources will be encouraged by interested and affected bodies. (See also policy on advisory committees.)
- 1.15.4 Where proposed changes and or developments are to be implemented in recreation opportunities, active consultation will take place with those agencies and individuals likely to be affected.

FIRE MANAGEMENT POLICY STATEMENT NO. 19

This policy is based upon the following premises.

- (1) Fire has occurred naturally from time to time in practically all lands managed by CALM. Fire has therefore played some part in determining present vegetation structures and composition.
- (2) Under natural conditions, practically all ecosystems are made up of a mosaic of vegetation associations and structural stages according to their fire histories. The scale of the mosaic varies in different ecosystems.
- (3) Fires from natural causes (e.g., lightning) will inevitably occur. Fires resulting from human activities, either deliberate or accidental will also occur, but may be minimised by effective public education and awareness, and by legislation.
- (4) In W.A. weather conditions occur every year under which fires can be so intense as to be impossible to contain with currently available technologies and resources. Such fires can threaten human lives, and resources valued by the community, and their control involves considerable public expenditure and risks to fire-fighters.
- (5) The speed and intensity at which fire burns is related to the quantity of accumulated dry litter or other fine plant material. In some ecosystems, or in some high risk/high value situations, accumulated fuel loads can be reduced by prescribed burning. This reduces the likelihood of intense fires even under extreme conditions, and improves the capacity for fire-fighters to safely control a fire.

Within each major fuel type there is a recognised weight of dry fuel above which fire-fighting forces are not likely to be able to contain wildfires burning under normal hot summer conditions.

- (6) Much of departmental land, particularly in the south west, has a common boundary with well developed private assets such as towns and farms, the protection of which reduces the flexibility for fire management.
- (7) Information about the long term effects of different fire regimes, including fire exclusion, on many ecosystems is limited, and any management policy must be under constant review and accompanied by research and monitoring programmes.
- (8) CALM has a moral and legal obligation to comply with those provisions of the Bush Fires Act, and CALM Act relating to fire prevention and control of wildfires on or near CALM lands.

Objectives

The fire management goal of CALM is:

To protect community and environmental values on lands managed by the Department from damage or destruction from wildfires.

To use fire as a management tool to achieve land management objectives, in accordance with designated land use priorities.

Policy

(1) Fire Suppression

The Department will meet its legal obligations under the Bush Fires Act and CALM Act by responding to fires occurring on or near CALM land to a degree that is appropriate to the values at risk.

CALM will assess its response to a fire in the light of potential damage to the following values in order of priority:

human life;
community assets, property or special values (including environmental values); and
cost of suppression in relation to values threatened.

Where values dictate the Department will:

provide a detection system which will give timely warning of the presence of a fire threatening community or environmental values;

provide a well trained and equipped suppression organisation capable of containing several simultaneous unplanned fires under extreme weather conditions in conjunction with other fire fighting organisations.

(2) Use of Fire

The Department will:

Use planned fire only where this use is in accordance with an approved management plan, or, where such a plan does not exist, to protect and maintain the designated priority land use.

Prepare written prescriptions in advance, for approval by senior designated officers, before any planned fires are undertaken.

For areas where primary land use is wildlife conservation, use fire in such a way as to promote the greatest possible diversity and variety of habitats within prevailing physical or financial constraints.

In small conservation reserves and where information on the impact of fire is limited, fire will be used conservatively. In such areas the use of fire will be restricted to:

protection of neighbouring community assets; and
as far as is achievable and within safe limits, ensuring that different seral stages following fire are represented.

Use prescribed fire or other methods to reduce fuels on appropriate areas of CALM lands, where it can be demonstrated that this is the most effective means of wildfire control, and where undesirable ecological effects do not result.

The frequency of fuel reduction measures will be governed by the rate of build-up of fuels; the degree of risk to human lives, the value of the assets to be protected; the known sensitivity to fire, or dependence on fire, of the kinds of plants and animals present; and the resources available to carry out the work.

(3) Liaison

The Department will:

Ensure effective liaison with neighbours, Bush Fires Brigades, shires, Bush Fires Board and other fire control organisations.

Support the concept of Shire District Fire Plans and promote mutual aid interagency agreements for fire control on lands of mixed tenure with common fire problems.

(4) Public Awareness

The Department will provide for public education in relation to the prevention of fire, and the role and use of fire in ecosystem management, and hazard and risk reduction.

(5) Research

The Department will undertake research into fire prevention and control, fire ecology and fire behaviour on CALM lands to improve the scientific basis for, and effectiveness of fire management programmes.

Strategies

(1) Fire Suppression

Suppression of unplanned fires on or threatening departmental land will be given priority over normal activities, except for those involved with safeguarding human life.

A detection system based on aircraft, lookout towers or ground patrol, will be used in designated areas where early warning of a fire occurrence is essential to enable rapid control measures.

In other areas, CALM will rely on neighbours, staff presence, the public, or commercial aircraft for reports of fire outbreaks.

When a fire is detected an appreciation will be made to estimate its likely spread and potential to cause damage to life, property or environmental value.

Unplanned fires will be contained to the smallest possible area by the most appropriate means available taking into consideration the values at risk and the impact of the suppression activity on the environment.

(2) Use of Fire

Prescribed fires will be used to achieve a range of management objectives, including fuel reduction, habitat management, forest regeneration and the management of scenic values.

According to management objectives, appropriate prescriptions will be developed, and staff will be trained in their application.

Monitoring of the effects of fires will be undertaken wherever effective systems have been developed and resources are available.

(3) Liaison

The Department will participate in the preparation and implementation of Shire District Fire Plans and interagency agreements.

Departmental staff will attend Bush Fire Advisory Committees and Brigade meetings where appropriate, to foster and encourage good working relationships with other fire fighting organisations.

Where practical, departmental staff will assist with fire control activities on a neighbour to neighbour basis with local Bush Fire Brigades and other fire control organisations.

(4) Public Awareness

Education of the public on the prevention of wildfire and on the use and role of planned fires will be promoted through the provision of literature, films and talks. Special attention will be directed towards school groups.

(5) Research

The Department will undertake research and will encourage research by other agencies and institutions into the fields of:

- fire behaviour in major vegetation types;
- fire ecology;
- fire equipment development;
- the application of information technology to fire management;
- fire detection, prevention and suppression systems;
- remote sensing for fire mapping and detection purposes;
- alternative methods of fuel reduction;
- social aspects of fire prevention and arson.

(6) Operations-Research Interface

The Department will ensure that there is rapid transmission of research results into policy and operations. Research and specialist staff will help to develop and update operational prescriptions and monitoring systems.

The Department will sponsor relationships between its staff and other agencies or organisations concerned about fire by the publication of research findings, holding workshops and seminars, and public participation in management plans.

PART 5. DEPARTMENTAL MANAGEMENT GUIDELINES

Where a specific policy statement is not available, management guidelines are used for Departmental operations. They are based upon interim CALM policies, or policies inherited by CALM from the former agencies.

Management guidelines are reviewed periodically and may change during the period of this plan, particularly as new CALM policies are developed.

Each management guideline comprises:

Broad objective - a general statement of what the Department expects to achieve.

Specific objectives - the courses of action to achieve the broad objective.

Strategy - explains how the objectives will be achieved.

DEDICATION OF LAND

Objective

To reserve natural ecosystems and other significant land areas of the State within appropriate definition of purpose and security of tenure to meet conservation needs and public demands for use.

Specifically, the aim is to:

- assess the potential of land within the State to meet the requirements of the CALM Act;
- advise Government on the value of vacant Crown land for forestry, national parks and nature reserves;
- pursue dedication of vacant Crown land suitable for Departmental management;
- purchase suitable areas of private property as they become available and ensure suitable vesting, or make agreements for joint management as appropriate;
- oppose alienation of State forests, national parks, nature reserves and marine reserves;
- consolidate existing reserves by negotiation to ensure that boundaries are manageable with respect to adjacent land uses.

Strategies

Continue survey of all non-dedicated land (and waters) which could be of value to the public estate.

Exchange land where the Department's assets will benefit from the transaction.

Issue leases for activities not opposed to the purpose of the land, where this will assist management objectives.

Continue biogeographical studies and research to identify further areas or ecosystems for inclusion in the reserve system.

WILDLIFE CONSERVATION

Objectives

To manage forest, parks and reserves for conservation of native wildlife (flora and fauna); to ensure long-term maintenance of species' diversity and genetic resources; and provide for the persistence of those habitats, species and ecological processes which comprise natural ecosystems.

To protect and manage wildlife populations throughout the State, and provide special protection for species declared to be rare and endangered.

Specifically, the aim is to:

Develop a reserve system

Establish and manage a system of parks and reserves dedicated to a primary purpose of wildlife conservation which:

is broadly representative of the region's natural habitats and contains viable populations of plants and animals representative of the indigenous flora and fauna; and is sufficiently and appropriately spaced to provide refuge for migratory and nomadic species as well as habitat for sedentary species.

Manage parks and reserves whose primary function is wildlife conservation to:

maximise diversity and species-richness, *or* provide habitat for particular species or communities;

manage those State forests and other reserves whose primary function is not wildlife conservation to meet wildlife conservation objectives to the maximum extent possible without compromising the area's primary purposes;

maintain habitat for those species of indigenous plants and animals which are rare or endangered;

undertake ecological research and monitor change in reserve environments and species populations to develop a knowledge base appropriate to reserve management objectives.

Strategies

Protect Wildlife

Ensure that wildlife protection regulations are adhered to throughout the State.

Ensure that protected flora and fauna are taken for private or commercial purposes only in accordance with regulations and permits, and that the numbers taken do not endanger long-term sustainability of populations in the wild.

Ensure that any native species taken for private or commercial purposes are treated as humanely as possible.

Provide assistance to other landholders for protection of populations of rare and endangered species, where appropriate.

Maintain an information system pertaining to the location, condition and management needs of populations of rare and endangered plants and animals.

Maintain an effective enforcement unit and inspectoral programs.

Monitor the status of wild populations, habitat and seasonal conditions and ensure that permits to take are consistent with the long-term maintenance of population numbers.

Monitor the take of wildlife subject to permit and ensure that conditions are adhered to.

Establish a representative reserve system.

Assess and characterise the qualities of existing conservation reserves to determine conservation values and particular management problems in each one.

Evaluate the extent to which conservation reserves act as a system, both internally and in the extent to which they need to be integrated with other land whose primary function is not wildlife conservation.

Assess the extent to which the existing conservation reserves are representative of the biota of W.A. and develop a strategy for acquisition of additional land for reservation where the existing reserve system is shown to be deficient.

Develop a set of priorities for each region for the allocation of resources to research, planning, and management of conservation reserves.

Management of conservation reserves

Develop and maintain an inventory of conservation reserves containing information on vesting and management history, location, size and shape, landscape, biotic diversity, environmental condition, and the presence of species in need of special protection.

Prepare management plans for individual conservation reserves or groups of similar reserves, with clearly defined objectives for protection and, where necessary, restoration of identified conservation values, and with special emphasis as appropriate on:

- maintenance of species-richness and continuance of natural ecological processes;
- protection of rare or endangered species;
- protection of unique habitats or communities;
- maintenance of habitat for migratory species.

Exclude from conservation reserves as far as possible species of plant and animal not native to the area. Where exotic organisms have been introduced, take measures to eradicate them from the reserve or, where that is not possible, to control their populations to levels where they do not damage the conservation values of the reserves.

Provide facilities to service those recreational or educational activities in the reserve which are prescribed in an approved management plan.

LANDSCAPE MANAGEMENT

Objective

To ensure that all land uses and activities on CALM land are planned and carried out to complement the inherent visual qualities of the natural environment.

Specifically, the aim is to:

- employ staff trained in landscape architecture and related design disciplines to promote sound landscape management practices within CALM planning and operations;
- develop a landscape classification system which will assist in the identification, evaluation and amelioration of visual impacts, and which is applicable to and compatible with both broad scale and detailed project planning;

prepare a comprehensive manual and set of landscape management guidelines covering all operations that have an effect on the landscape;

conduct training courses on visual resource and landscape management and planning concepts for Departmental staff and other interested groups who work on CALM lands.

Strategies

Harvest State forest designated for timber production in ways that are sympathetic to existing landscape patterns and within the limits imposed by sound silvicultural and management techniques.

Establish pine forests in accordance with accepted landscape design principles so that possible intrusive effects on the landscape are minimised.

Plan and design facilities for recreation that are in harmony with the natural environment.

Locate and design roads and utility corridors to minimise both environmental and social impacts on the areas they traverse.

Ensure that major disturbances imposed on CALM lands (dams, mines) are planned and implemented to minimise the impact on existing landscape values.

Locate and design all new buildings and structures using materials and colours compatible with the surrounding landscape.

Develop and implement a standard system of signs to cater for the various sign requirements of the Department.

Evaluate land use proposals on adjacent lands in terms of their potential impact on landscape and recommend how these can be mitigated.

CULTURAL AREAS

Objective

To ensure the preservation and enhancement of significant cultural areas (modified landscape, historic sites, Aboriginal sites, caves) on land controlled by the Department.

Specifically, the aim is to:

locate and record the presence of significant sites;

liaise with the W.A. Museum, universities, historic societies, the National Trust and other relevant bodies to ensure suitable classification, registration, protection and management of sites;

manage the sites as appropriate;

encourage further research where required;

liaise with industry, local government and public utilities to ensure the protection of these sites.

Strategies

Where necessary, ensure protection by suitable tenure and provision within management plans for the area or region concerned.

Employ regional committees to assist in site location and evaluation.

Facilitate site location and classification by concentrating on areas in which potentially damaging operations are to be carried out.

Maintain the necessary degree of confidentiality where required to protect values.

Record as required in Departmental information systems to prevent inadvertent damage by Departmental operations.

ENVIRONMENTAL PROTECTION

Objective

To protect CALM lands from environmental degradation caused by natural agencies (e.g., insects, fungi, dieback), exotic agencies (e.g., weeds, feral animals) and human activities (e.g., mining, pollution, litter, roading).

Specifically, the aim is to:

- manage land, wherever possible, to avoid disturbance that degrades natural ecosystems;
- develop appropriate environmental controls for all CALM activities;
- monitor the extent and severity of physical disturbances and infestations on CALM lands;
- classify CALM land on the basis of sensitivity to disturbances and pollution;
- develop appropriate environmental and legal controls to minimise environmental damage by other agencies and private individuals;
- encourage research into harmful natural and exotic agencies.

Strategies

Include environmental guidelines and controls in all management proposals and prescriptions.

Ensure that landscape management and rehabilitation procedures are considered in planning all operations that can cause disturbance.

Ensure that all staff are informed and trained in aspects of environmental management.

Disseminate information about environmental factors to other agencies and members of the public.

Allocate appropriate resources (staff, money, training) to ensure that the policies can be implemented.

DISEASES

Objective

To minimise the damage caused by plant and animal diseases on Departmental lands.

Specifically, the aim is to:

- maintain a record of all plant and animal diseases of significance to management of CALM lands;
- classify land and populations according to disease presence, susceptibility of habitats and resistance to disease;
- investigate the cause and effect of diseases and prescribe effective control measures, where warranted;
- ensure that all management practices for an area are in accord with effective disease control;

inform the public of the nature and significance of disease on CALM land and request their co-operation in prevention and control;

rehabilitate infected areas or populations where appropriate.

Strategies

Maintain effective expertise on pathogens within the Department.

Ensure that disease effects are considered in all ecological studies.

Use quarantine and hygiene methods for control, as necessary.

Provide for staff training in disease detection and control.

WEEDS AND PESTS (INCORPORATING POLICY ON WEEDS)

Objective

To achieve a safe and systematic management of weeds and pests of ecological significance on CALM lands.

Specifically, the aim is to:

direct management to eradication, control or containment depending on land management objectives, and the nature of the weed or pest;

monitor the extent or severity of infestations on Departmental lands;

control declared weeds and animal pests on Departmental land where it is economically feasible to do so;

ensure conservation values are not prejudiced in control work;

carry out research to determine the most effective method of control to meet priority use objectives;

liaise with other departments, authorities, shires, industry and neighbours involved in weed and pest control and related matters.

Strategies

Ensure that all artificial control programs are carried out with safety of the operator and public a priority.

All chemical controls must conform with prescribed techniques and have the approval of the district or regional manager.

Wherever possible expert control teams will be employed for hazardous control procedures.

Biological control of exotic weeds or pests must be approved by the Director of Nature Conservation.

COMMUNITY EDUCATION AND INTERPRETATION

Objective

To promote community awareness and understanding of the natural environment and encourage public attitudes and behaviour compatible with, and supportive of, conservation of flora and fauna and the management of forests, parks and reserves.

Specifically, the aim is to:

encourage people to learn about State forests, parks, reserves and wildlife;

foster the desire in people to experience the natural environment and its management;

interpret the environment in forests, parks and reserves for visitors;

co-ordinate and assist public participation in management planning and implementation through advisory committees and 'friends' groups;

research and evaluate methods and techniques available for achieving effective community education and interpretation;

liaise with associated agencies, organisations and interest groups to integrate education and interpretation programs.

Strategies

Provide an education/interpretation section within the Information Branch.

Provide facilities such as self-guided walk trails, visitor centres, displays and brochures.

Train regional and district staff in interpretation and effective communication with the public.

Provide the Education Department and private school system with appropriate advice and assistance in curriculum development, and assist with in-service training of teachers, teacher-trainers and relevant community group leaders.

Produce and market educational films, videos, slides, sound tapes, pamphlets, brochures and other audiovisual material and publications.

Promote the use of planned tours, seminars, workshops, field days and lectures to explain conservation and land management, at the regional level.

Ensure public inquiry into CALM's activities is satisfied.

MINING

Objective

To ensure that approved exploration and mining operations proceed according to conditions specified, to minimise environmental damage and to rehabilitate in conformance with the purpose of vesting.

Specifically, the aim is to:

abide by the Mining Act, which allows for proposals to be rejected or approved subject to conditions by the Hon Minister for Conservation and Land Management on national parks, State forest and A class reserves;

ensure that when any proposal for exploration or mining is submitted involving land and waters under CALM management that the land values affected by the proposal are fully considered;

where conditions applying to exploration and mining are being considered by Government, ensure the development of the most appropriate conditions to preserve the values for which the land was reserved;

liaise with the Mines Department, the Department of Resources Development and the Environmental Protection Authority to ensure that the most appropriate conditions for exploration and/or mining on parks, reserves and forests, are developed;

ensure that conditions applied to exploration and mining are complied with;

continue research into techniques aimed at minimising environmental damage and land use conflict;

liaise with exploration companies to ensure they are aware of the effects of mining on the environment and other land uses, and of rehabilitation techniques;

liaise with authorities responsible for administering mining agreements and with other organisations authorised to study mining effects and rehabilitation techniques;

rehabilitate areas affected by mining to suit the designated land use, and in accordance with conditions imposed by State Government under the various special agreement Acts and Mining Act.

Strategies

Seek the inclusion of appropriate conditions governing environmental protection into the mineral leases issued under the Mining Act.

Ensure that exploration on CALM land is conducted in strict adherence to conditions stipulated by the relevant departments.

Seek to direct mining operations into areas where there will be least conflict with other land uses.

Where possible obtain realistic compensation from companies mining on CALM land to cover loss of conservation values, land purchase and the continuing cost of rehabilitation and management of areas affected by mining.

WILDFLOWER PICKING

Objective

To control the commercial harvesting of flora on Crown land and private property within sustainable levels, to minimise detrimental effects on conservation values on Crown land, and to maintain a supply of seed from native flora.

Specifically, the aim is to:

permit picking and seed collection on State forest and Crown land other than nature reserves, conservation parks and national parks, subject to land use priorities and management conditions;

ensure royalties or collecting fees are paid to reimburse service charges and control collection, wherever it is practicable to collect them;

license picking on private property;

collect data on the range of occurrence of species in commercial demand and investigate their management requirements;

identify, protect and manage species of rare flora that occur on both Crown land and private land;

encourage commercial interests to meet the demand for blossom and plants from private nurseries and orchards;

provide suitable seedlings and seed from Departmental nurseries and seed stores for rural conservation projects where these materials are not satisfactorily available from private sources.

Strategies

Monitor distribution and management of protected flora and those species declared as rare flora.

Ensure pickers are licensed in accordance with the provision of the Wildlife Conservation Act, and are familiar with the conditions and endorsements applicable to their licences.

Establish and maintain seed orchards for species that are of limited supply or are difficult to collect.

APICULTURE

Objective

To facilitate beekeeping subject to the need to minimise conflict with other land use objectives. Specifically, to:

ensure apiary sites are sited to optimise the use of available areas, consistent with the primary land-use requirements;

control apiculture on the Department's land, other reserves and Crown land by the issuing of permits and allocation of apiary sites;

advise registered beekeepers of proposed CALM activity that could conflict with the location of their hives or honey production from a site;

investigate the allocation and use of apiary sites with respect to nectar and honey production.

Strategies

Locate apiary sites at acceptable intervals, taking account of constraints such as:

existence of suitable vehicular access to the apiary site;

need to avoid transference of disease, including dieback;

effects of European honey bees on high conservation value ecosystems and rare flora and fauna which are strongly dependent on nectar and pollen;

proximity of current or proposed activity by CALM and other authorised users;

risk of water pollution caused by beekeepers' activities;

requirements of other authorities controlling Crown land or Government reserves;

location in relation to private property;

relevant acts and regulations.

Notify the Government Apiculturist of the Department's prescribed burning program each year.

Continue liaison with other authorities that control Crown land on which apiary sites are located.

Gather data on resource use and honey production by a system of annual returns.

Support research into the effect of European bees on native flora and fauna.

PUBLIC UTILITIES

Objective

To limit development of public utilities that result in loss of reserve area and conservation values on CALM land to those considered essential by Government and for which there is no reasonable alternative location.

Specifically, the aim is to:

retain as much as possible of the land managed by the Department free of public utilities.

guide the location of public utilities on CALM land into areas where land use conflict and environmental damage are minimised;

rehabilitate redundant sites to suit the designated land use;

liaise with, and advise, service authorities to ensure their operations are in sympathy with the environment and other land uses.

Strategies

Liaise with shires to avoid the use of CALM land for access to new subdivisions.

Obtain compensation, where appropriate, to offset loss of departmental land and associated values.

Guide public utilities into areas where risk of dieback disease spread, salinity, and aesthetic impact are minimised. Encourage the use of landscaping.

Encourage the use of the same sites for more than one utility.

Ensure management practices do not endanger public utilities.

Develop procedures for rehabilitation of redundant sites in conjunction with and, where appropriate, at the expense of, the agency responsible.

Ensure that proposals for public utilities are provided for in management plans for CALM lands.

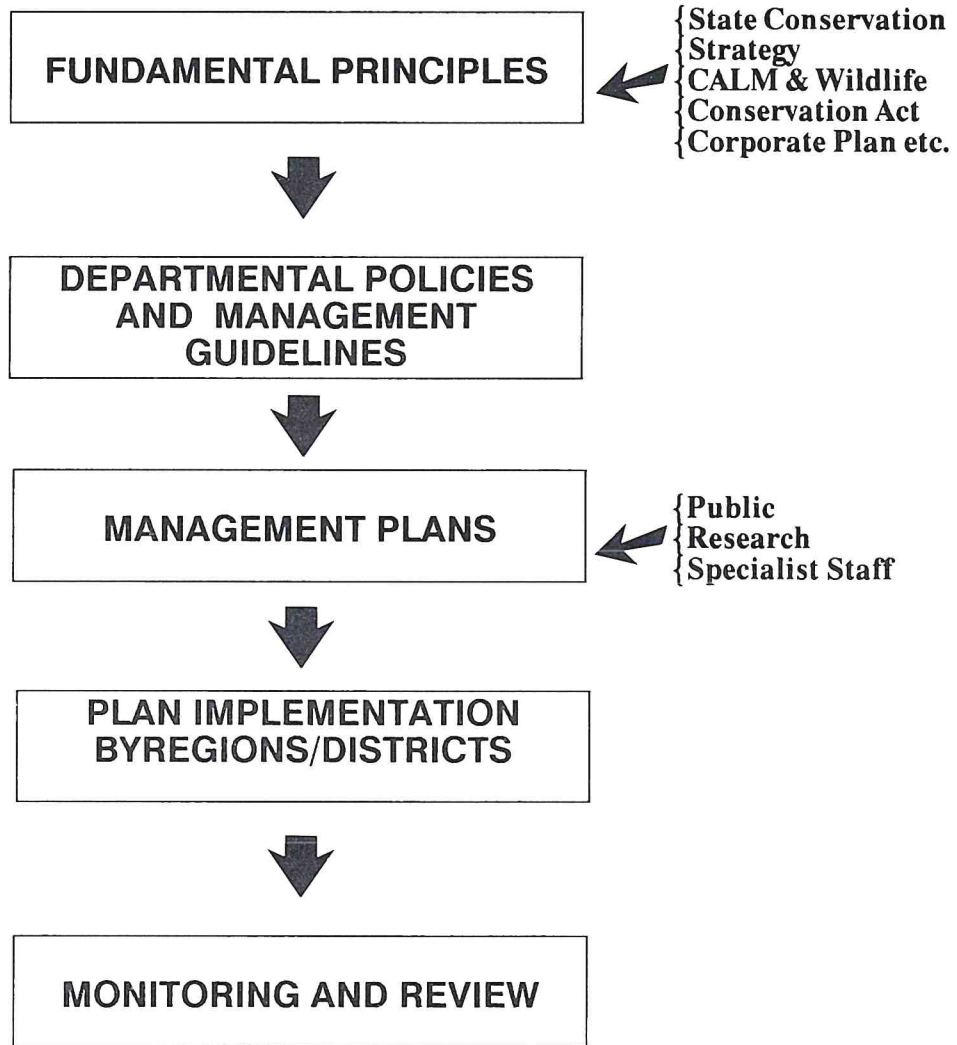
PART 6. IMPLEMENTATION OF POLICIES AND STRATEGIES

CALM has developed the following organisational system to implement policies and strategies for conservation, recreation and environmental protection.

- (1) The State is subdivided into a network of regions and districts, each with resident professional, technical and wages personnel, who prepare and implement annual works programs based on:
 - the objectives and priorities in the Department's corporate plan;
 - regional, area or issue management plans drawn up for the area concerned.
- (2) Management plans are being prepared for each region, and progressively for each major conservation reserve.
- (3) A research division studies the State's wildlife and ecosystems, and refines the techniques used in wildlife protection, recreation and sustained production.
- (4) A range of specialist sections develop specific products (e.g., maps, communication systems), set and check standards of field operations (e.g., Environmental Protection, Fire Protection, Recreation and Landscape, Branches) or provide services (e.g., Personnel, Training, Finance, Safety and Occupational Health).
- (5) A Policy Directorate of senior officers constantly reviews and updates policies, establishes new policies or guidelines, monitors work in the field and works closely with the controlling bodies.
- (6) Public education and participation and volunteer programs are promoted at every level of management.

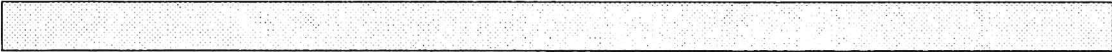
The management plan is the fundamental instrument used to translate policies into action. It is also the instrument by which both the Department and the public may be brought to account for what is done in conservation and land management in W.A.

When the reserve system is operational, the system of land management in CALM is depicted as follows:



The two essential components of this system are the requirement to manage according to a plan (about which the public is informed) and the controls to ensure it is being properly implemented, or changed as necessary.

PART 7. REFERENCES

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