PHASE 1 SUBMISSION PREPARED FOR THE WESTERN AUSTRALIAN GOVERNMENT FUNCTIONAL REVIEW COMMITTEE

MAY 1988

Prepared with the authority of the Executive Director, Department of Conservation and Land Management.

This document must not be quoted from outside the Functional Review process without the prior written approval of the Executive Director.



C O N T E N T S

			Page			
EXE	CUTIV	VE SUMMARY				
INT	RODUC	CTION	1			
1.	ORGANISATION OVERVIEW					
	1.1	LEGISLATION AND LEGAL AUTHORITY	3			
		1.1.1 Principal Legislation	3 3 3 5 5			
		1.1.2 Functions Under the Legislation	3			
		1.1.3 Other Major Legislation	5			
		1.1.4 Associated or Impinging Legislation				
		1.1.5 Ministerial Responsibility	6			
	1.2	1.2 HISTORICAL OVERVIEW OF CALM AND AMALGAMATED AGENCIES				
		1.2.1 Public Land Management Prior to 1985	7 7			
		1.2.2 The Establishment of the Department	·			
		of Conservation and Land Management	7			
		1.2.3 Public Land Management in Western				
		Australia	8			
		1.2.4 Reviews of the Department of	1.1			
		Conservation and Land Management	11			
	1.3	CORPORATE PLAN AND STRATEGIC OBJECTIVES				
	1.4	ORGANISATION STRUCTURE AND STAFFING	15			
		1.4.1 Organisation Structure	15			
		1.4.2 Organisation Staffing	18			
	1.5					
		ORGANISATIONS	19			
		1.5.1 Commonwealth Government 1.5.2 State Government	19 19			
		1.5.3 Local Government	20			
		1.5.4 Industry, Recreational and	2.0			
		Environmental Groups	21			
		1.5.5 Government and Industry Committees	22			
	1.6	1.6 ORGANISATIONAL ASSETS				
		1.6.1 Public Lands	23			
		1.6.2 Buildings and Facilities	24			
		1.6.3 Equipment	24			
	1.7	25				
		1.7.1 Financial Management Processes	25			
		1.7.2 Sources of Funding	25			
		1.7.3 Application of Funds - Expenditure 1.7.4 Sources of Revenue	26			
		1.7.4 Sources of Revenue 1.7.5 Capital Funds Management	26 27			
	1.8	MANAGEMENT PLANNING AND PUBLIC PARTICIPATION	29			
	1.9	MAJOR STRATEGIC ISSUES FACING THE DEPARTMENT	21			
	1.3	1.9.1 Factors Influencing the Strategic Pla	n 31			
		1.9.2 Major Strategic Issues	31			

2.	THE	REVIEW PROCESS	Page 35
	2.1	PHASE 1 REVIEW METHODOLOGY	35
		2.1.1 Data Collection	35
		2.1.2 Submission Preparation	35
3.	DESC	CRIPTION OF FUNCTIONS	37
	3.1	ENVIRONMENTAL PROTECTION	39
	3.2	FIRE MANAGEMENT	48
	3.3	WILDLIFE CONSERVATION	56
	3.4	RECREATION MANAGEMENT	65
	3.5	INDUSTRY CONTROL AND REGULATION (EXCEPT TIMBER PRODUCTION)	74
	3.6	INDUSTRY CONTROL AND REGULATION (TIMBER PRODUCTION)	7 s
	3.7	COMMERCIAL TIMBER OPERATIONS	87
	3.8	EUCALYPT FOREST REGENERATION AND TIMBER GROWING	95
	3.9	PINE FOREST - ESTABLISHMENT AND TENDING	104
	3.10	LIAISON AND PUBLIC PARTICIPATION	114
	3.11	ENVIRONMENTAL EDUCATION	119
		MARINE MANAGEMENT	125
	3.13	PLANNING	132
4.	DESC	RIPTION OF SERVICES	139
		HOUSING AND BUILDINGS	139
		PLANT AND WORKSHOPS	144
		PERSONNEL ADMINISTRATION	149
		TRAINING AND DEVELOPMENT	152
	4.19	OCCUPATIONAL HEALTH, SAFETY, AND WELFARE INDUSTRIAL RELATIONS	157
	4.20	HUMAN RESOURCE PLANNING	161
	4.21	ACCOUNTS AND PAYROLL	164
	4.22		167
	4.23		170
	4.24		174
	4.25		177 180
	4.26	INFORMATION TECHNOLOGY/COMPUTING SERVICES	184
	4.27	LAND INFORMATION SERVICES	188
	4.28	COMMUNICATIONS	193
	4.29	LIBRARY	198
	4.30	INTERNAL AUDIT	201
	4.31	INSURANCE	204
	4.32	· · · · · · · · · · · · · · · · · · ·	207
		PUBLICATIONS	211
		PUBLIC RELATIONS	217
		REVENUE COLLECTION AND PROCESSING	220
		POLICY COMMITTEE SUPPORT	224
		REVENUE RAISING	227
	4.38	INTRA GOVERNMENT LIAISON	230

5.	ALLO	CATION	N OF RESOURCES WITHIN CALM	233
			DDOLOGY RESOURCE ALLOCATION	233 234
6.	SUMMA	ARY		235
7.	APPEI	NDICES	5	
APPI	ENDIX	1	LEGISLATIVE REQUIREMENTS FOR MEMBERSHIP OF STATUTORY CONTROLLING BODIES	THE
APPI	ENDIX	2	FUNDING, REVENUE AND STAFFING LEVELS - AMALGAN AGENCIES	iate d
APPI	ENDIX	3	EXTRACT FROM REPORT OF TASK FORCE ON LAND RESC MANAGEMENT IN WESTERN AUSTRALIA)URCE
APPI	ENDIX	4	VESTING, TENURE AND PURPOSE OF LAND MANAGE CALM (AND PROPOSED ALTERATIONS)	ED BY
APPI	ENDIX	5	RECOMMENDATIONS OF THE HONORARY ROYAL COMMISSINTO THE CONSERVATION AND LAND MANAGEMENT ACT	
APPI	ENDIX	6	STRATEGIC PLAN - LINKS FROM PRIMARY OBJECTIVE BROAD STRATEGIES	ES TO
APPI	ENDIX	7	CALM ORGANISATION STRUCTURE	
APPI	ENDIX	8	STRUCTURAL DISTRIBUTION OF CALM STAFF - APRIL 1	.988
APPI	ENDIX	9	WORK LOCATION OF CALM STAFF - APRIL 1988	
APPI	ENDIX	10	REPRESENTATION ON EXTERNAL COMMITTEES	
APPI	ENDIX	11	PUBLIC LANDS - AREAS MANAGED BY THE DEPART	MENT!
APPI	ENDIX	12	DISTRIBUTION OF PUBLIC LANDS MANAGED BY CALM	
APPI	ENDIX	13	LEASES IN STATE FOREST AND TIMBER RESERVES	
APPI	ENDIX	14	LEASES ON NATIONAL PARKS AND NATURE RESERVES	
APPI	ENDIX	15	WESTERN AUSTRALIAN NATIONAL PARKS AND FORESTECREATION GUIDE	STS -
APPI	ENDIX	16	BUILDINGS - OTHER THAN OFFICE ACCOMMODATION	
APPI	ENDIX	17	BUILDINGS - OFFICE ACCOMMODATION	
APPI	ENDIX	18	INVENTORY OF EQUIPMENT - VEHICLE FLEET EQUIPMENT VALUED AT OVER \$1,000	AND

Page

- APPENDIX 19 1986/87 ANNUAL REPORT RECEIPTS AND PAYMENTS
- APPENDIX 20 1986/87 EXPENDITURE CRF AND CAPITAL FUNDS
- APPENDIX 21 SOURCES OF REVENUE FOR CALM 1985/86 AND 1986/87
- APPENDIX 22 CAPITAL BORROWINGS AND OUTSTANDING LIABILITIES DEPARTMENT OF CALM (JUNE 1987)
- APPENDIX 23 REPAYMENTS ON CAPITAL BORROWINGS DEPARTMENT OF CALM
- APPENDIX 24 PREPARATION OF PUBLIC MANAGEMENT PLANS FOR LAND OR WILDLIFE MANAGED BY CALM
- APPENDIX 25 INTERNAL CIRCULAR FUNCTIONAL REVIEW SURVEY
- APPENDIX 26 SURVEILLANCE AIRCRAFT COSTING COMPARISON
- APPENDIX 27 EXAMPLES OF ECONOMIC BENEFITS OF RECREATION (SPECIFIC TO NATIONAL PARKS)
- APPENDIX 28 ESTABLISHMENT OF EVEN AGED KARRI FOREST REGENERATION
- APPENDIX 29 PINE FOREST ESTABLISHMENT 1976 TO 1986
- APPENDIX 30 METHODS AND TECHNIQUES FOR ENVIRONMENTAL EDUCATION
- APPENDIX 31 TASKS ASSOCIATED WITH MARINE PARK MANAGEMENT
- APPENDIX 32 DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT ACCIDENT PREVENTION RECORD 1960/61 TO 1986/87
- APPENDIX 33 INFORMATION MANAGEMENT WITHIN CALM
- APPENDIX 34 DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT COMPUTING EQUIPMENT INVENTORY
- APPENDIX 35 DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT RADIO COMMUNICATIONS EQUIPMENT
- APPENDIX 36 DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT REVENUE AND EXPENDITURE FOR PUBLICATIONS (1986/87)
- APPENDIX 37 FINAL RECONCILIATIONS CALM FRC DATA
- APPENDIX 38 ALLOCATION OF OVERHEAD COSTS (NOT INCLUDED IN COST CENTRE RETURNS) TO FUNCTIONS AND SERVICES
- APPENDIX 39 MECHANISM FOR ALLOCATING RESOURCES IN SERVICES TO DEFINED FUNCTIONS
- APPENDIX 40 FUNCTIONAL REVIEW SUBMISSION ALLOCATION OF RESOURCES IN "SERVICES" TO "FUNCTIONS"
- APPENDIX 41 ALLOCATION OF HUMAN AND FINANCIAL RESOURCES TO FUNCTIONS
- APPENDIX 42 WORK LOCATION OF CALM RESOURCES DEVOTED TO EACH FUNCTION AND SERVICE

EXECUTIVE SUMMARY

This submission has been prepared for the Western Australian Government Functional Review Committee, and follows the guidelines for preparation established by that Committee.

The Department of Conservation and Land Management was established in 1985 as the result of an amalgamation of the Forests Department, National Parks Authority and the Wildlife Section of the Department of Fisheries and Wildlife. CALM inherited all of the functions of the (then) existing agencies. In addition, a wide range of new responsibilities were placed on the new Department by the CALM Act, or were assumed by staff to deal with serious problems in wildlife conservation or management of public lands.

This submission describes the resources (both human and financial) CALM devoted in 1986/87 to its various functions. The principal activities of the Department then were wildlife conservation, pine forest establishment and tending, fire management, eucalypt forest regeneration and timber growing, recreation management, research and timber industry control and regulation and environmental protection.

While the resources allocated to these functions are to an extent a result of the historical activities of the amalgamating agencies there have been significant shifts in resource allocation since CALM was formed. In particular public participation and liaison, management planning processes, and the development and management of marine reserves are all activities that are receiving a rapidly increasing share of CALM's resources.

The pressures and demands on CALM, which already has a very diverse task as demonstrated by the list of functions, are increasing continually, both as a result of Government direction and community needs. These pressures are leading to a continual review and re-evaluation of CALM's internal priorities to ensure that resources are being devoted to the most appropriate functions.

This process of continual review and reallocation also means that the resource allocation detailed in this submission will not remain valid for any length of time.

CALM believes it has achieved a great deal in the 3 years since it was formed, but also recognises the major challenges in front of it. The process of this Functional Review has been extremely valuable in many areas, and in particular will be a most useful reference point for an assessment of CALM's progress in the years to come.

INTRODUCTION

The Department of Conservation and Land Management (CALM) was established in March 1985, following the gazettal of the Conservation and Land Management Act 1984. This Act also effectively abolished the Forests Department, the National Parks Authority, and the Department of Fisheries and Wildlife (renamed the Department of Fisheries).

The Department has management responsibility for several classes of public land including State forests, marine parks, national parks, nature reserves and marine reserves, and has statutory responsibility for the protection of wildlife (flora and fauna) across the State. These responsibilities are wide ranging in scope, and mean the Department has a management presence in almost every area of Western Australia.

In common with all other State Government agencies CALM is subject to an examination and review of its functions and management processes by the Western Australian Government Functional Review Committee. This review commenced in late 1986, and because of deferrals for various reasons is now being completed in mid 1988.

The review methodology is explained in later Sections of this submission. However in broad terms this document represents a summary of the resources (human and financial) allocated to CALM's functions in a particular year (1986/87). Each function (or supporting service) is explained in detail in regard to its internal and external ramifications. Where appropriate, comments are made in regard to future directions or goals.

This submission provides a basis for a separate report by a Functional review Coordinator to the Functional Review Committee (augmented by additional investigation where necessary), in which recommendations for alterations to CALM's functions or management processes may be made.

Because of its nature this submission is only a static "snapshot" of one year in CALM's operations. Whilst it is accurate for that year the demands on CALM are changing (and increasing) so rapidly that reallocations of internal resources are constantly occurring. Wherever possible this has been detailed in the submission, but the processes of change are such that no document could hope to be relevant for more than 2 or 3 years.

1.1. LEGISLATION AND LEGAL AUTHORITY

1.1.1. Principal Legislation

The Department of Conservation and Land Management and three statutory controlling bodies are established under the Conservation and Land Management Act 1984. The Department commenced operations on 22 March 1985 and the controlling bodies shortly after.

The controlling bodies are the Lands and Forest Commision, the National Parks and Nature Conservation Authority and the Forest Production Council. All are responsible to the Minister for Conservation and Land Management.

The Act is currently under review. A number of amendments are proposed for the spring 1988 parliamentary session.

1.1.2. Functions under the Legislation

The Conservation and Land Management Act specifies a series of functions for the three controlling bodies and the Department. In brief these functions are:

Lands and Forest Commission

- * vesting State forests and timber reserves;
- * developing policies to achieve or promote the multiple use and sustained yield of the forest resource for the satisfaction of long term social and economic needs;
- * processing and monitoring land management plans for forest areas;
- * advising the Minister for Conservation and Land Management on appropriate matters;
- * providing advice to others in the public interest;
- * advising of appropriate research.

National Parks and Nature Conservation Authority

- * vesting National Parks, Nature Reserves, Marine Parks and Marine Nature Reserves;
- * developing policies for the preservation and enjoyment of the natural environment and the promotion of appreciation of flora and fauna, consistent with the essential purposes of parks and reserves;
- * processing and monitoring land management plans for parks and reserves;

- * advising the Minister on the development of policies for the conservation and management of flora and fauna;
- * providing advice to others in the public interest;
- * advising of appropriate research.

Forest Production Council

advises the Minister on:

- * matters relevant to production from State forests and timber reserves;
- * improvement in production consistent with maintenance of other forest values;
- * improvement in use, processing and marketing of forest produce;
- * research to achieve multiple use and sustained yield of the forest resource;
- * contents of proposed management plans.

Membership of these three bodies comprises representatives from diverse community interests (who are in the majority) and departmental officers. The legislative requirements for membership are attached as Appendix 1.

The Department of Conservation and Land Management (CALM)

- * manages State Forests, Timber Reserves, National Parks, Nature Reserves, Marine Parks, Marine Nature Reserves and other designated lands and the associated forest produce, fauna and flora;
- * assists the Commission, Authority and Council described above to carry out their functions;
- * encourages the development of forest production requirements;
- * conserves and protects flora and fauna, and administers the Wildlife Conservation Act;
- * carries out research into land management, and conservation and protection of flora and fauna;
- * advises and cooperates with others in the public interest;
- * advises the Minister on land matters.

1.1.3. Other Major Legislation

In its nature conservation functions the Department administers the Wildlife Conservation Act 1950 and associated regulations. This Act applies to any indigenous or migratory fauna and any flora native to the State, whether found on Crown land, private land or territorial waters of the Commonwealth. The essential purpose is the conservation of flora and fauna in the State.

Although the Forests Act 1918 and the National Parks Authority Act 1976 were repealed to make way for the Conservation and Land Management Act 1984, the Forests regulations and the National Parks regulations remain in force until replaced by new regulations.

Associated with the passage of the Conservation and Land Management Act in 1984 were appropriate amendments to the Wildlife Conservation Act 1950, the Land Act 1933, the Bush Fires Act 1954, the Agriculture and Related Resources Protection Act 1976, the Fisheries Act 1905, and the Public Works Act 1902.

The Department also administers the following acts:

Timber Industry Regulation Act 1926-1969, which empowers it to record, investigate and secure safe working practices in the bush and mill operations of the timber industry.

Sandalwood Act 1929-1934, which gives control over sandalwood gathering via a fixed quota, licensing and limiting collection of sandalwood on private property.

The Minister for Conservation and Land Management has a specific role under the Mining Act 1978. Applications for mining tenements on land managed by the Department, and some associated land, must be referred by the Minister for Mines for the Minister for Conservation and Land Management's concurrence or opinion. The Department becomes involved in drawing up the conditions for mining activity, and these responsibilities will be further defined in Section 3.1 of this submission.

1.1.4. Associated or Impinging Legislation

Other Acts under which the Department has specific responsibilities are:

Alumina Refinery Agreement Act, 1961-1974 Alumina Refinery (Pinjarra) Agreement Act, 1969-1976 Alumina Refinery (Wagerup) Agreement and Acts Amendment Act, 1978 Alumina Refinery (Worsley) Agreement Act Amendment Act, 1978 Bush Fires Act, 1954-1981
Collie Coal (Western Collieries) Agreement Act,
1979
Land Tax Assessment Act, 1976-1980
Wesply (Dardanup) Agreement Authorisation Act,
1975
Wood Chipping Industry Agreement Act, 1969-1973
Wundowie Charcoal Iron Industry Sale Agreement
Act, 1974-1979

In addition, there are several other Acts which affect the Department's land management responsibilities, and must be taken into account in CALM's management activities. These include the following:

Aboriginal Heritage Act, 1972-1980 Aerial Spraying Control Act, 1966-1978 Agriculture and Related Resources Protection Act, 1976-1981 Agriculture Protection Board Act, 1950-1976 Control of Vehicles (Offroad Areas) Act, 1978 Country Areas Water Supply Act, 1947-1981 Environmental Protection Act, 1980 Land Act, 1933-1980 Local Government Act, 1960-1981 Main Roads Act, 1930-1981 Metropolitan Water Supply Sewerage and Drainage Act, 1909-1981 Mineral Sands (Western Titanium) Agreement Act, 1975 Rights in Water and Irrigation Act, 1914-1981 Soil and Land Conservation Act, 1945-1981 State Energy Commission Act, 1979-1981 Cemeteries Act, 1897 (as amended) State Planning Commission Act, 1985 Waterways Conservation Act, 1976 as amended Petroleum Act, 1967 Petroleum (Submerged lands) Act, 1982

Several Commonwealth statutes or Acts are also relevant to the Department's activities:

CITES - Convention on International Trade in Endangered Species
Ramsar Agreement - Convention on Wetlands of International Importance especially as Waterfowl Habitat

JAMBA - Japan Australia Migratory Birds Agreement
World Heritage Properties Conservation Act, 1983
Australian Heritage Commissions Act, 1975
Wildlife Protection (Regulation of Exports and Imports) Act, 1982

1.1.5. Ministerial Responsibility

The Department is responsible to the Minister for Conservation and Land Management.

1.2 HISTORICAL OVERVIEW OF CALM AND AMALGAMATED AGENCIES

1.2.1. Public Land Management Prior to 1985

Prior to 1985 the State Government carried out its responsibilities in the areas of forest management, national parks and wildlife conservation and management through three agencies. These agencies were:

(i) Forests Department of Western Australia (the principal legislation being the Forests Act 1918).

responsible agency was for managing approximately 2.01 million hectares of State Forest, and timber and other reserves variety of uses including conservation, recreation, timber production, water production, public utilities, fire and mining activities. The total staff at amalgamation was 1081.

(ii) National Parks Authority of Western Australia (the principal legislation being the National Parks Authority Act 1976).

This agency was responsible for managing approximately 4.42 million hectares of National Parks and other reserves, primarily for conservation and recreation.

The total staff at amalgamation was 102.

(iii) The wildlife section of the Department of Fisheries and Wildlife (the principal legislation being the Wildlife Conservation Act 1950).

This section of the agency was responsible for the management of approximately 9.9 million hectares of Nature Reserves and other reserves (both singly and jointly with other Authorities), and the protection and conservation of native flora and fauna (including the regulation of industries harvesting some of these wildlife species). The total staff at amalgamation was 71.

The staffing and management responsibilities of these three agencies over time are shown in Appendix 2.

1.2.2. The Establishment of the Department of Conservation and Land Management

In 1983 the State Government established a Task force on Land Resource Management in Western Australia, which reported in January 1984.

This Task Force made recommendations in several areas of land management policy and practice in Western Australia, amongst which was a recommendation to establish a new land management agency encompassing the Forests Department, National Parks Authority, and the wildlife section of the Department of Fisheries and Wildlife, and administering several smaller Government agencies. Following Government consideration of the Task Force Report the Conservation and Land Management Bill (now the Act) was presented to the State Parliament, with one of its principal features being the establishment of the Department of Conservation and Land Management (as detailed in Section 1.1 of this Submission).

The Department came into being on March 22 1985, and under the Act (Section 5) has management responsibility for the following classes of land:

State forest timber reserves
national parks nature reserves
Marine Parks marine nature reserves
Any other land reserved under the Land Act 1933
and vested by order under that Act in the (Lands and Forest) Commission or the (National Parks and Nature Conservation) Authority.
CALM also manages freehold land held in the name of the Executive Director.

A copy of the relevant sections of the Task Force Report is attached as Appendix 3. The only other land management agency in Australia with these wide ranging responsibilities is the Victorian Department of Conservation, Forests and Lands.

1.2.3. Public Land Management in Western Australia

The Department of CALM is now well established within Western Australia, and is effectively managing the public lands and wildlife entrusted to it. CALM has established a strong Regional management structure throughout the State, which allows local residents to access senior staff directly with all the CALMadvantages this implies, whilst at the same time maintaining a strong network of specialist advice and guidance which supports the Regional and District staff.

The staffing arrangements for CALM are addressed in detail in Section 1.4.

Since its formation, the Department has continued to perform all the major activities and functions of the three amalgamated agencies, as well as being required by the Act to develop a wide new range of functions and These new functions have generally been activities. accommodated within only slightly increased (in real terms) resource levels since amalgamation by a process of internal re-allocation, generally from areas that inherited a strong presence from the (then) Forests However, it is becoming apparent that Department. ability to resource CALM's new tasks, level of activity maintaining an appropriate functions, simply through the process of existing internal re-allocation is now becoming limited.

Some of the additional functions or activities that CALM has become involved with, in response to perceived deficiencies in the management of conservation and public lands, include:

- marine park establishment, planning and management (W.A.'s first two Marine Parks have been established, and the further development of a representative marine reserve system commenced).
- public participation and management plans (The concept of public involvement in land management planning will be further developed in Sections 1.8, 3.10 and 3.13).
- training and upgrading of the National Park Ranger staff
 (This group of staff were, at amalgamation, in urgent need of attention to upgrading their status, qualifications and training. Many initiatives in this process have now been commenced within existing resources).

fire management

(The community expectations for fire management on public land, and the ecological needs of the diverse vegetation associations present on CALM land have combined to increase the complexity and resourcing needs for fire management on public lands. At the same time, much of the obsolete equipment inherited from the National Parks Authority has been upgraded).

mining

(Before the amalgamation, applications for mining tenements on conservation lands were generally deferred. The Government has recently decided that the issue of accessing minerals on CALM land must be dealt with, and this creates two problems for CALM. Firstly, there is a huge backlog of tenements to be evaluated and processed, and secondly, there are a large number of new tenement applications being lodged.

Not only does this require a large effort in research and evaluation, but also will lead to a major new resource need for the monitoring and supervision of these mining operations).

- rare flora conservation

(CALM is required to ensure the protection of rare flora on all lands in Western Australia. The management of rare flora populations and their protection is becoming an increasingly complex ecological and political concern, and is an area where new resources are required if CALM is to be able to meet the expectations of the community).

dieback management in National Parks

(The occurrence of dieback infections in the sensitive ecosystems in the South Coast National Parks is a problem of international significance. The National Parks Authority did not have the resources to adequately address this concern, and CALM has had to re-allocate significant resources for the hygiene management, staff training, public liaison, research, and mapping tasks associated with this issue).

new Estate

(Since the formation of CALM there have been substantial new national parks and nature reserves created, all of which have increased the land area managed and created significant public expectations for management plans, additional operations staff and new activities. These expansions are detailed in Appendix 2.

All of these expectations have had to be met from within existing resources to date).

alterations to land tenure and classification
(The land tenure system inherited from the previous Acts governing the amalgamating agencies did not always allow for clear management objectives to be developed for land because of differences in the arrangement for classification, tenure and security of purpose.

CALM has a major task in developing and recommending alternative land classification systems for public land, and the recently released Regional Management Plans foreshadowed alterations CALM have recommended to the Hon. Minister.

A copy of the relevant pages of the Regional Plan is attached as Appendix 4. The appropriate legislative amendments are now being drafted).

timber strategy

(A new system of managing forest resources for timber production and regulation of the timber industry has been adopted by Government. This has resulted in major new works programs for CALM staff).

Further detail on the major strategic issues facing CALM in the future is contained in Section 1.9, and the function and service descriptions in Sections 3 and 4.

1.2.4. Reviews of the Department of Conservation and Land Management

Since its creation in 1985 the Department has participated in four reviews of its functions and management processes.

- (i) a Ministerial review of the Conservation and Land Management Act 1984, and the effectiveness of the Department of CALM (required by section 144 of the Act).
- (ii) a report of an Honorary Royal Commission into the Act which was presented in 1985. Copies of the relevant pages of this report are attached as Appendix 5.
- (iii) an internal functional review initiated by the Department in 1986, and repeated in 1987.
 - (iv) the Functional Review process itself.

Each of these reviews has generated significant workloads for the Department, but also have generated alterations to either the Act or CALM's management processes.

1.3 CORPORATE PLAN AND STRATEGIC OBJECTIVES

The Department's Corporate Plan was developed through a consultative process during 1986 and 1987. The CALM Corporate Planning process allows the organisation to:

- set its objectives in relation to Government policy priorities and its prevailing external and internal environments
- prepare operational programmes which will achieve the set objectives
- assign priorities to the operational programmes;
- regularly review the process and the resulting objectives, strategies and results.
- provide a framework for the development of the organisation.

The CALM Corporate Plan contains two principal sections, firstly the organisation's strategic plan (the major statements of which are detailed below), and secondly a wide range of operational plans prepared by Regions, Districts and Branches which are used to guide land and widlife management operations, and evaluate progress towards objectives.

The strategic plan establishes a Mission for the department and five primary objectives as follows:

MISSION

Western Australia has a beautiful and diverse natural environment which provides material, aesthetic and spiritual benefits. The natural environment is an essential component of quality of life for Western Australians. The statement of mission for the Department of Conservation and Land Management is therefore:

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

PRIMARY OBJECTIVES

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 those renewable resources that Government decides should be used, 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 seek a better understanding of the natural environment and to promote awareness and appreciation of its values.

These five primary objectives are to be achieved through a number of broad and specific strategies. Because of the complex land and wildlife management issues the Department is charged with managing, many facets of CALM's activities are closely linked with each other, and hence particular strategies clearly contribute to the achievement of more than one objective.

Appendix 6 is a matrix diagram which demonstrates the interaction of the primary objectives with the broad strategies in the achievement of Department goals.

1.4 ORGANISATION STRUCTURE AND STAFFING

1.4.1. Organisation Structure

The organisation structure of the Department is shown Appendix 7. The roles and responsibilities to the controlling bodies are explained in Section 1.1 so they will not be developed further in this Section. following notes summarise the and responsibilities various Directorates ofthe and Divisions within CALM:

(i) Policy Directorate

The Policy Directorate comprises the executive Directorm, General Manager, the three Policy Directors, the five Divisional Managers and the Manager of the Policy Directorate. Directorate generally meets for a half day each fortnight. It is responsible for strategic decisions on Department policies, programmes and resourcing, the maintenance of strategic planning processes, the final Departmental approval management plans before they are forwarded to the bodies, respective controlling and overall coordination of Departmental resource activities.

(ii) Executive Director

Responsible as Permanent Head to the Minister for all Departmental activities, and is accountable for the management of public monies and assets entrusted to the Department. All Policy Directors and the General Manager report to the Executive Director.

(iii) General Manager

Responsible for the day to day management of Departmental activities, the allocation of resources to CALM operations, and the management coordination of those operations. All the Divisional Managers report to the General Manager.

(iv) Director of Forests

Responsible for the development of policies in the areas of forest production and conservation, the formal liaison and negotiation with industry and other external groups in regard to forest matters, and overall coordination of forest policy implementation throughout CALM.

(v) Director of National Parks

Responsible for policy development in the specific area of national parks, and recreation on all CALM lands. Is intensively involved with management planning for national parks, and is responsible for the formal liaison and negotiatins with external groups in regard to national parks and recreation.

(vi) Director of Nature Conservation

Responsible for the development of policies in the areas of nature conservation (wildlife protection and habitat conservation) and marine conservation and management. Is responsible for the formal liaison and negotiations with external groups involved in these areas.

<u>Note:</u> All Policy Directors have an additional corporate responsibility which covers all Departmental interests.

(vii) Divisional Manager, Operations

Responsible for the direction and coordination of the eleven Regions and the Wildlife Protection Branch, including operational policy and strategies, resource allocation and coordination of policy implementation with other Divisions and/or Directorates.

(viii) Divisional Manager, Services

Responsible for the coordination and delivery of service activities to the Operations Division and other sections of the Department. Ensures that technical excellence is maintained in the support Branches, and that this advice and guidance is available to line managers.

(ix) Divisional manager, Forest Resources

Responsible for the organisation and operational policy development of the Department's timber production functions, and necessary support services. Conducts commercial negotiations and formalises contracts with industry, and coordinates the implementation of timber production activities with the Regional Managers.

(x) Divisional Manager, Research

Responsible for the overall coordination, direction and scientific standards of the Department's research activities. In particular this involves continual review of research programme structures to ensure they are relevant, and close coordination with Operations and other Divisions in the development of research programmes and the implementation of results.

(xi) Divisional Manager, Administration and Finance

Responsible for the delivery and standard of central support services to the Department including budget preparation and monitoring, human resource management support, land tenure administration and the Perth based records system. Some of the responsibilities in this Division are not specifically shown (eg. Records, Administrative Support) in Appendix 7 through the constraints of space.

(xii) Regional Managers

Responsible for the management of all CALM lands and waters, and the conservation of flora and fauna within their Regional boundaries. According to the intensity of activity in their area Regions are subdivided into Districts.

The general responsibilities allocated to regions include preparation of financial estimates and management; participation in management budget plan project teams; preparation and supervision of work programmes; supervision and regulation of industry to preserve or restore the natural environment on CALM land; to provide a focal point for research and operations interaction; to liaise with State and Local Government Authorities in the Region; ensuring the conservation of indigenous fauna; assisting and training flora and departmental staff and promoting health, safety and welfare of CALM staff; providing information and advice on land management and conservation to people in the Region; and overall coordination of District programmes to ensure effectiveness of resource use.

A Departmental strategy is the continual devolution of responsibility (and accountability) for resource deployment and programme implementation to Regions. This is to ensure the community is always able to gain access to the Department and become involved in its decision making processes.

(xii) Branch Managers

their own specific areas each is responsible to Divisional Manager for the technical standards a of CALM's policies and programmes, and for consultation and liaison with Regional Managers in programme implementation. The Branches are effectively of excellence in their centres specific areas, and are an information resource Several Branches are the Department. for extensively regionalised.

The organisation structure within CALM is not seen as being totally rigid and unchanging, and will be altered as appropriate to suit future needs. In the three years since the Department was created significant changes to the internal structure have included:

- the abolition of the Directorate of Research and Planning, and the creation of a Division of Research (within the Operations Directorate) and a Planning Branch in a support service role
- the creation of a Division of Forest resources to give prominence and cohesion to the conduct of the timber production functions
- the creation of an Information Resources Branch to better coordinate computing, mapping and geographic information systems
- reorganisation of Division of Technical Services.

Each of these changes has acted to improve internal coordination, and promate a better focus on the management activities of the Department.

1.4.2. Organisation Staffing

The Department employs staff of four main classifications:

- Public Service Act staff (395 FTEs in total)
- CALM Act Field staff (employed within C.S.A. Award) who are Ministerial staff (410 FTEs in total)
- National Park Rangers who are wages staff employed under a separate Award (87 FTEs in total)
- forest workers, overseers, tradespeople and other wages staff employed under various Awards (556 FTEs in total).

Appendix 8 details the distribution of these staff through CALM by organisation unit, whilst Appendix 9 shows the actual work location of all CALM staff by geographic area.

As can be seen in these Appendices CALM is extensively decentralised at both the salaried and wages staff levels.

This will remain a clear organisational objective into the future, both because CALM wants to remain close to its client base in rural areas, and also to support rural infrastructures particularly in the south west of the State which is a Government policy objective.

1.5. GOVERNMENT AGENCIES INTERACTING AND OTHER ORGANISATIONS

common with most State Government agencies that deal extensively with public assets, or the community at large, CALM has developed a wide range of formal and informal contacts with many Commonwealth, State and Local Government organisations, as well as industry, recreational and environmental groups in the community.

Whilst there are too many of these contacts for all of them to be detailed here, the most important and resource consuming of them are summarised below (with an indication of the major areas of liaison):

1.5.1. Commonwealth Government

Australian Heritage Commission - land use issues. Dept. of Aboriginal Affairs - aboriginal involvement in land management.

Australian Customs Service - wildlife exports. Telecom Australia - maintenance of public utilities.

Dept. of Aviation - aircraft operations.

Commonwealth Employment Service - employment programmes Commonwealth Scientific and Industrial Research Organisation - scientific research.

Dept. of Defence - use of CALM land. Dept. of Local Government and Administrative

Services - leases and land use.

Dept. of Primary Industry - timber product exports.

Dept. of Resources Development - timber and other exports.

Dept. of Transport - lighthouses and leases. Australian National Parks and Wildlife Service - national and marine parks.

1.5.2. State Government

Aboriginal Affairs Planning Authority - aboriginal involvement in land management.

Agriculture Protection Board - control of feral plants and animals.

Dept. of Computing and Information Technology - information systems and purchases.

Crown Law Department - offences under the Acts and drafting of legislation.

Ministry of Education - school programmes. Environmental Protection Authority - conservation and land use issues.

Fisheries Department - fisheries access and management.

Office of Industrial Relations - industrial relations. Dept. of Land Administration - management of vacant Crown land and mapping. Main Roads Department - road development operations and supply of materials.

Dept. of Marine and Harbours - marine and waterways management.

Dept. of Mines - mining on CALM land.

Dept. of Occupational Health, Safety and

Welfare - industrial safety issues.

Police Department - offences, search and rescue, communications and disaster coordination.

Public Service Commission - human resource management. Dept. of Regional Development and the North West - land use issues.

Rottnest Island Board - conservation and land use issues.

State Energy Commission - mining and access for public utilities.

Dept. of Services - printing and central supply. State Planning Commission - land use issues. South West Development Authority - land use and development.

Dept. of Treasury - financial management.

Office of the Auditor-General - financial management.

Water Authority of W.A. - catchment management, land rehabilitation and access for public utilities.

Waterways Commission - waterways management.

1.5.3. Local Government

Virtually every Local Government Authority in Western Australia contains some land managed by CALM, and the area of land managed by CALM within the boundaries of Local Government Authorities can vary widely. Shires such as Manjimup, Exmouth and Nannup have at least 60% of the land area managed by CALM, whilst other Authorities such as several of the Perth suburban Local Governments have only a limited involvement with the Department.

Because of CALM's commitment to public management planning and the regionalised nature of the Department's activities, a large amount of time is spent by staff at all levels liaising and negotiating with their counterparts in Local Government Authorities.

The Department believes this time is well spent in ensuring that management plans and activities are accepted by Local Government before implementation is commenced, but it does mean a large effort in consultation and participative management.

In addition to contacts with individual Local Governments, the Department's senior staff have regular consultations with the umbrella groups for Local Government Authorities.

1.5.4. Industry, Recreation and Environmental Groups

Many of the State's primary, and some secondary industries, are located on lands and waters managed by CALM. The major involvements are with the timber, fishing, wildflower, agriculture, tourism, mining (for many different minerals and petroleum products), and wildlife harvesting industries.

Because of the importance of these industries to State and regional infrastructures, the management of CALM lands and wildlife must proceed in a manner that allows the industries to progress, at the same time as the conservation and other values of the total CALM estate are not compromised.

For this reason all of CALM's management plans specifically address in great detail implications for the various industries operating on CALM land in that area, and the environmental requirements to be used in managing that In each case there is a major and industry. ongoing involvement with industry groups representatives to allow consultation on proposed management arrangements and resolution conflicts.

Recreation

Industry

The recreation and leisure activities (not including the more developed tourism industry) on CALM land generally involve individuals, family units or social groupings. Because these activities are a major, and increasing user of CALM lands, but at the same time are managed essentially by volunteers (or family members) it is not usually possible to group them into convenient units for consultation purposes.

For this reason, the consultation and management effort required to ensure protection of the environment, personal safety and the maintenance of suitable recreation opportunities when dealing with family groups and volunteer organisations is much greater per capita than with industry groups. This is currently causing CALM some concern, and is being dealt with through the management planning process.

Environment

The environmental groups in the community take a very real interest in the management of public lands and wildlife. The type of groups range from umbrella organisations such as the Australian Conservation Foundation Inc. (who have salaried staff) to the many smaller voluntary groups such as Friends of the Parks, Ornithologists, Nature Conservation Societies, and the like.

These groups are now located widely throughout the State, and require a large input of resources to maintain appropriate liaison and consultation processes. This is particularly so because most of the voluntary groups only meet outside normal business hours.

1.5.5. Government and Industry Committees

In addition to liaison with specific agencies or organisations, CALM staff at many levels are involved with public sector, Government/industry or Government/community groups dealing with matters of importance to CALM. These activities in total consume a large amount of senior staff resources and are detailed in Appendix 10.

1.6 ORGANISATIONAL ASSETS

1.6.1. Public Lands

The public lands managed by the Department are defined in the CALM Act as State forest, timber reserve, national park, marine park, marine nature reserve, other land reserved under the Land Act 1933 and vested in the Lands and Forest Commission or the National Parks and Nature Conservation Authority, and freehold land held by the Executive Director as a body corporate.

With the exception of the freehold land a resolution of both Houses of Parliament is required to excise most of this land (the "A" class reserves and State forests) from the public estate, or change its vesting. This land (with the exception of the freehold land) is vested in the National Parks and Nature Conservation Authority or the Lands and Forest Commission, and not the Department.

The areas of land managed by the Department are shown in Appendix 11. Appendix 12 is a map showing distribution of these lands.

There are also a large number of leases and concessions on public lands in Western Australia for a wide variety of purposes. Most leases, particularly on State forest, were inherited by CALM. Many do not provide an appropriate return for the management input involved.

The leases held on State forest are described in Appendix 13, whilst Appendix 14 details the leases and concessions held on national parks and nature reserves.

The leases on national parks are generally for long terms (eg. 21 years), and have only limited review clauses. CALM inherited many leases that were not providing an acceptable return on the land or management investment, and as these leases are reviewed under the lease conditions the lease fees are generally being appraised upwards to more acceptable levels (in most cases using the guidance of the Valuer General). Appendix 14 reflects some of the lease fee increases imposed in the past two years.

It should be noted however that many of these leases required an initial capital contribution from the lessee (ie. for building development), and the lease conditions generally allow the capital to revert to the State at the expiration of the initial lease. Hence in the future the return from these commercial leases should be quite substantial.

CALM has developed a formal recreation policy, which amongst other achievements, will ensure appropriate returns from commercial leases in the future.

A system of annual review of leases on State forests has now been introduced, particularly for the leases for grazing under hardwood canopy, where this is potential for environmental damage and the lease returns do not cover management costs. Each lease is being reviewed within the lease conditions. In future, leases will incur lease fees that cover management costs.

The softwood forest grazing leases are an integral part of CALM's timber production and fire management strategies. Whilst the money return from these leases is low many of them are structured so that lessees supply and construct fencing (which becomes State property, and hence adds to the value of future leases over particular areas).

The remaining hardwood forest leases generally have some degree of public interest attached to them (eg. water supplies, communications sites), but there remains potential to increase the lease fees from some of these sites to at least cover management costs. CALM will pursue this objective as the lease conditions allow it.

There are a large number of developed recreation sites on CALM lands throughout Western Australia. Appendix 15 is a copy of a departmental publication which shows some of these sites.

1.6.2. Buildings and Facilities

The Department manages a large housing and building estate. The management of this asset is described in Section 4.14, and Appendices 16 and 17 define the size and composition of CALM's buildings asset.

As described in Section 4.14 CALM is moving to transfer responsibility for the housing estate to GEHA, and also is making representations to Government for the necessary funding to consolidate all metropolitan based management staff at Como.

1.6.3. Equipment

The Department maintains a plant fleet suited to its management needs. The funding and maintenance of this fleet is described in Section 4.15, and Appendix 18 details the types and numbers of vehicles involved.

There is also an extensive array of support equipment in use by the Department to enable the effective management of its many functions. A summary of the types of equipment (generally confined to individual items with a replacement value of over \$1,000) used by CALM is attached as part of Appendix 18.

1.7 FINANCIAL MANAGEMENT

1.7.1. Financial Management Processes

The systems and procedures used for financial management and budgeting are fully explained in Sections 4.21 and 4.22. In summary line managers are responsible for all non salary expenditure within their cost centres, and are expected to estimate for their necessary activities and then manage within the approved budget. The Finance Branch, through the General Ledger and other computerised accounting systems maintain a range of financial management reports geared to the needs of the various levels of line management.

As explained in Section 4.22 the next significant improvement to the Department's financial management systems will be the introduction of purpose based budgeting in 1989/90. This will entail a major restructuring of the CALM Chart of Accounts.

1.7.2. Sources of Funding

The two major sources of funding for the Department are the Consolidated Revenue Fund, and capital borrowings arranged through the global borrowing authority of the W.A. Treasury Corporation. These funds are paid into the Conservation and Land Management Trust Fund which is the operating account for the Department's financial operations. In addition to these major fund sources there are many less significant sources of funds which are used to supplement both the CRF and capital works operations.

Under the provisions of the Act the Department is obliged to maintain the Nature Conservation and National Parks Accounts within the Conservation and Land Management Trust Fund. Specific funds generated the Department (eg. donations, game and flora by licences and interest from investments) are retained as sources of funding for this account. In addition there are a number of private Trust Funds (detailed on pages 100 to 104 inclusive of the 1986/87 Annual Report) managed internally which provide some limited funds for generally by Departmental activities, way sponsorship or donation. Appendix 19 is an extract the 1986/87 Annual Report which details the from of funding for the Conservation and Land sources Management Trust Fund in both 1985/86 and 1986/87, together with the explanatory notes.

1.7.3. Application of Funds - Expenditure

The expenditure of Departmental funds is managed and controlled through a Chart of Accounts (compatible with the Government Accounting System) which essentially divides expenditure by source of funds into recurrent (Consolidated Revenue Fund) and capital categories.

In terms of direct expenditure on the 13 functions reported on in this submission, the expenditure categories can be segregated as follows:

Consolidated Revenue Fund

Environmental Protection (except road construction) Fire Management (except road construction) Wildlife Conservation (except land purchase) Recreation Management (maintenance and planning) Industry Control and Regulation (except Timber Industry) Commercial Timber Operations Liaison and Public Participation Environmental Education Marine Management Planning

Capital Funds

Eucalypt Forest Regeneration and Timber Growing Pine Forest Establishment and Tending Recreation Management (some capital development works) road and building construction works are charged to capital funds, as are a proportion of Departmental salaries Wildlife Conservation (purchase of land)

Appendix 20 contains several sections of the 1986/87 Annual Report which detail the categories Consolidated Revenue Fund and Capital Works expenditure for the year.

1.7.4. Sources of Revenue

The Department has two major sources of revenue available, most of which is credited to the Consolidated Revenue Fund and directed the to Treasury. The two sources are:

- revenue generated from the use of resources (i) managed by the Department. This is the most significant area and includes timber royalties and log sales, game licences, licences, asset sales, timber wildflower inspection fees, tree seedling sales and lease fees.
- (ii) revenue derived to the Department either by way of donation to Trust Funds, or grants and other revenue from Government and industry bodies. This is a smaller, though still significant and growing area of CALM revenue which includes items M.R.D. as grants, mining compensation, Government employment schemes, National Parks income, publications, and direct grants purposes (eg. Dieback Research Trust specific Fund, Ningaloo Bicentennial Grants).

Appendix 21 details the sources of revenue for the Department in 1985/86 and 1986/87, and compares these to total expenditure. As can be seen from this Appendix total revenue as a proportion of total expenditure has increased from 44.47% in 1985/86 to 52.18% in 1986/87. In 1987/88 it is planned that total revenues will approximate 57.3% of total CALM expenditure.

1987/88 financial projections for CALM can be summarised as follows:

Expenditure		Revenue	
CRF	\$65,886,000	CRF	\$39,383,000
Capital	\$20,102,000	Trust Fund Revenue	\$ 4,343,000
		Capital Revenue	\$ 5,548,506
	\$85,988,000	(Internal Funds	
		and Balances)	
		Total	\$49,274,506
		(Approx. 57.3% of	expenditure)

The current (May, 1988) projections for the 1988/89 financial year are as follows (these figures of course may be subject to significant change in the Budget approval process):

Exp	penditure	Revenue	
CRF	\$74,852,000	CRF	\$51,832,000
(excludes	s most growth items	Trust Fund Revenue	\$ 3,800,000
except (Commercial Ops.)	Capital Revenue	\$ 5,070,000
Capital	\$20,618,000	_	
			\$60,702,000
	\$95,470,000	(Approx. 63.6% of	expenditure)

The large increases in CRF revenue are almost entirely to the effects of royalty increases and commercial due operations revenue deriving from the "Timber Strategy". The Department regards this situation as being of great significance, particularly the large increases in the proportion of self funding it has been able to achieve in the three full years of operation. However it is recognised that the most satisfactory position will only be reached when the Department is totally self funded (ie. revenues exceed expenditure), and it is planned for this to be achieved by 1993/94. The total self funding of CALM's operations will be achieved by a mixture of internal cost reductions through greater efficiencies in existing and new programmes, and the continuing entrepreneurial approach to developing new sources of revenue and enhancing existing sources.

1.7.5. Capital Funds Management

The National Parks Authority and the Wildlife section of the (then) Department of Fisheries and Wildlife funded their activities solely from C.R.F. and Trust Funds. However the Forests Department, principally because of its forest establishment and tending, road construction, land purchase, and building construction activities, was a user of borrowed funds from several sources over a period of many years. The history of capital borrowings within the Forests Department and CALM can be summarised as follows:

- (i) General Loan Fund (G.L.F.): from 1948/49 to 1983/84 (when the General Loan Fund contributions ceased) the Treasury borrowed funds on the State's behalf, some of which were allocated to the Forests Department, mainly for pine forest development.

 Because of the structure of the G.L.F. no capital and the G.L.F. no capital and the structure of the graph of the structure of the graph of the structure of the graph of the graph of the structure of the graph of the graph
 - Because of the structure of the G.L.F. no capital or interest repayments on those loans were debited to the Forests Department.
- (ii) Softwood Forestry Agreement: from 1967/68 to 1982/83 the Commonwealth Government advanced loan funds to the States for the purpose of developing new pine forests to aid rural, industrial and social development.

These loan funds were initially at very favourable interest rates (approximately 4%), but over time the rates increased to the stage where there was no advantage over normal commercial borrowing. The Commonwealth halted the scheme in 1982/83, and the Department now has an established loan repayment schedule until 2017/18 for these loans.

- (iii) Private Borrowings: in 1976/77 the (then) Conservator of Forests commenced borrowing loan funds from trading banks under the direction of the Treasurer. These funds were generally used to augment the hardwood and softwood forest development programmes. No further private borrowings occurred after 1981/82 when the W.A. Treasury Corporation took responsibility for all public sector Department borrowing through the Central Borrowing Authority. The Department has a loan repayment schedule for these loans to 1998/99, although some individual loans have already been amortised.
 - (iv) W.A. Treasury Corporation Global Borrowing: since 1983/84 the W.A. Treasury Corporation has been responsible for raising all Departmental borrowings through the global borrowing programme. The Treasury borrow funds from several sources and allocate them to the Department at an averaged interest rate. The Treasury is responsible for loan repayment policies for these borrowings.

All loan repayments (principal and interest) are met from the Department's CRF allocation.

Appendix 22 details the capital borrowings of the Department over time, and the amounts outstanding at the end of 1986/87. Appendix 23 details the proportion of the Department's C.R.F. budget being devoted to loan repayments of all kinds.

The Department is actively pursuing the objective of being self funded (as detailed in Section 1.7.4), and when this occurs it will, inter alia, remove the Department's need for borrowed funds. However for the present the need to meet loan repayment commitments will continue. However it is important to recognise that a substantial asset base of production forests has been developed through borrowed funds. This asset is worth far more than the debt liability of the Department, and it supports a significant community and industry infrastructure in the rural areas of the State.

With regard to management of loan repayment schedules, the assessing of borrowed funds within the year, and the monitoring of application of funds to expenditure categories the Department has good records of past application of funds. The Finance Branch is developing a computer based loan management programme which will maintain and update the existing data base as required, and ensure that the indirect costs associated with debt servicing can be correctly allocated to Departmental activities. Finally, in liaison with Treasury, CALM staff are continuesly monitoring the loan repayment program so as to maximise financial advantages to the Department.

1.8 MANAGEMENT PLANNING AND PUBLIC PARTICIPATION

The functions of "Liaison and Public Participation" and "Planning" are discussed in detail in Sections 3.10 and 3.13 respectively. However the concepts and objectives of planning and public participation are central to the land management processes of the Department, and hence should be placed in perspective in this overview.

The requirement for management planning for all CALM lands, and public participation in this process is embodied in Sections 53 to 61 inclusive of the Conservation and Land Management Act 1984, which state, inter alia:

Section 54

- "A controlling body shall be responsible -
- (a) for the preparation of proposed management plans; and
- (b) the review of expiring plans and preparation of further management plans

for all land which is vested in it whether solely or jointly with an associated body."

Section 58

"Written submissions on the proposed management plan may be made by any person -"

This commitment to detailed management plans for all lands managed by CALM, and the formal encouragement of public participation in the process has led to a major new workload for the Department. In particular, when CALM was formed there were very few management plans (apart from the Forests Department's General Working Plan) existing for specific land areas, and those that exist were mainly internal Departmental Since 1985 there has been a major effort documents. put into developing the formal planning and public participation processes, and this has resulted in the level of Plan preparation and priority setting detailed in Appendix 24.

However of much wider significance to CALM's internal management has been a strong commitment to public participation in a wide range of CALM's operations, not necessarily just restricted to the management planning process. This has been emphasised by the establishment of a number of advisory and consultative Committees around the State, many of which were initiated to have an involvement in management plans but have since developed a more general advisory role to the Executive Director and the Minister

Apart from these Committees CALM has also made a significant effort to improve the community understanding of the often complex issues involved in land and wildlife management, as well as provide a general education facility for groups and individuals. The resources required for these processes tend to be mid level and senior staff, and this is a significant extra responsibility for these people.

These planning and public participation processes cover all of the Department's functions, and hence are the way in which CALM can provide the necessary information to the community on the integration of all these functions. Within the function descriptions in Section 3 many of the resources devoted to these activities have been allocated directly to the appropriate functions (eg. Fire Management), and hence it is difficult to obtain an accurate and complete picture of the impact public participation is having on the workload of the Department's staff.

CALM believes the public participation and planning processes are essential to the continuing good management of public lands. The processes are the means by which CALM's operations can be placed in context with each other and explained adequately. There is hence a major opportunity for the Department to build a strong base of public support for its functions and activities, which is essential to the achievement of CALM's objectives.

1.9 MAJOR STRATEGIC ISSUES FACING THE DEPARTMENT

1.9.1. Factors Influencing the Strategic Plan

The Department's strategic planning programme, leading to the corporate and planning cycle described in Section 1.3, identified major results or outcomes CALM planned to achieve in the 1987-1991 period.

This process also defined a wide range of strategic issues the Department needed to address, either in that 5 year period or beyond. In the definition of these strategic issues a range of factors from CALM's internal and external environments were considered to be relevant:

External Environment

Factors in the external environment contributed to the establishment of CALM, as well as to the adoption of its charter, objectives and planned outcomes. They include:

- Western Australia's growing population with increasing leisure time, leads to a consequential pressure to use natural areas and degradation of the most popular areas;
- a public perception that successive Governments of Western Australia have not provided sufficient resources to manage national parks and nature reserves;
- the conservation lobby in Australian society directing its protests at activities such as the timber industry, woodchipping, bauxite mining, kangaroo harvesting, and other industrial development on natural areas;
- a more responsible public together with a retracting economy producing the realisation that utilisation of many of the State's natural resources is not providing a just return to the State;
- an expectation amongst the public of Western Australia that the Government, through its agencies, will provide an efficient, well informed response to expressed problems, concerns and requests for information.

Internal Environment

Factors in the internal environment influencing these issues included:

 the need to continue to draw together staff from three separate organisations and make a cohesive Department;

- the presence of new expertise at a senior level and a need to have this expertise permeate the Department;
- difficulty in supplying the human and financial resources to meet a role which has expanded from those previously encompassed by the amalgamating groups;
- the inadequacy of some inherited management systems (especially financial) to meet the needs of the expanded Department;
- the need to have all managers conscious of the need for, and equipped with the ability to manage public participation in the community;
- an industrial situation where several awards are involved, with consequential difficulties in rationalisation;
- a good spirit within the department and an excellent calibre of staff;
- a smoothly functioning organisation of regions and supporting branches;
- a commitment to corporate decision making and devolution of responsibility;
- achievements in staff training and career structure development;
- experience in and a proven system for the preparation of management plans;
- continuing achievement of improved management of the timber industry;
- good relationships with the Lands and Forests Commission, the Forest Production Council and the National Parks and Nature Conservation Authority;
- proven ability to handle emergencies (fire, strandings, etc).

1.9.2. Major Strategic Issues

The major strategic issues emanating from the examination and analysis of all these factors can be summarised as follows:

CONSERVATION

- the development and resourcing of marine parks and nature reserves
- the resolution of conflicts between recreation, production and conservation on many CALM lands
- establishing a system of secure reserves for conservation, recreation and production on public lands
- the maintenance of genetic diveristy and ecosystems in the State's system of nature reserves, and hence enhancement of the State's wildlife. These nature reserves at present are not managed to consistent standards because of resource deficiencies
- funding for conservation projects from non Government sources such as Conservation Foundations and bequests

- implementation of the outstanding EPA Reserves
 Systems Plans once they are approved by Government
 and the Parliament
- the control of feral animals and plants on CALM lands
- maintaining State Government and public involvement in lands subject to listing on the Register of the National Estate, or World Heritage Listing.

PRODUCTION

- maintaining timber supplies to ensure the developed industry infrastructure can continue to prosper, and in turn support the rural areas of the State
- generating additional revenue from CALM's production activities to remove the Department's reliance on borrowed funds
- management of the many mining activities on CALM land to ensure the State's assets are developed, and the environment protected as is required by Government policies
- reducing the real (direct and indirect) costs of CALM's timber production and other functions
- improving the State's management of the wildflower industry that operates on CALM land.

RECREATION

- ensuring recreation and conservation can be managed so as to be compatible on public land, particularly national parks.

KNOWLEDGE

- ensure all of CALM's management activities are underpinned by a sound basis of scientific information
- ensuring the management planning process adds to the community's understanding of the issues involved in land and wildlife management

MANAGEMENT

External

- develop management plans for all CALM lands as required by the ACT, with particular emphasis on Regional Plans and the 25 highest priority specific land areas in the next 5 years
- resourcing the information and service demands from the community that are implicit in the public management planning process
- building and maintaining public and political support for CALM's management activities
- consolidation of the CALM estate by boundary rationalisation and purchase of enclaves.

Internal

- resourcing the non Forest Regions (people, vehicles, finance, buildings) where the greatest growth in CALM's responsibilities lies
- the development of integrated information systems and information flows throughout CALM
- maintaining and resourcing staff development and training plans, and hence ensuring CALM has the necessary skills available to meets its management needs.

The Department has addressed these issues in the past two years, and in many areas (eg. security of tenure for land use, increasing revenue, management of the timber industry, establishing and resourcing marine parks, resourcing non Forest Regions) has made substantial progress.

This progress has been made possible by supportive community and industry groups, and facilitated by a substantial internal reallocation of CALM resources, in the light of a rigorous internal functional review. However the strategic issues identified by the Department are of such significance to the State that CALM's ability to improve its land management performance within existing resources is severely limited.

In particular the management of mining on national parks and nature reserves, the management and enhancement of nature reserves and large new National Parks (eg. the Bungle Bungle), and the provision of education and information on land management issues to the community are tasks that will require significant new levels of resourcing.

Nevertheless CALM believes it has made very significant progress towards achieving its objectives in the past three years, and looks forward with confidence to the strategic challenges ahead.

2.1 PHASE 1 REVIEW METHODOLOGY

2.1.1. Data Collection

The procedures for collecting the data needed for this submission were designed to be complementary to the Review procedures described in the booklet "Guidelines for Reviews" published by the Western Australian Government Functional Review Committee.

CALM believed it was important that Managers and staff at all levels were involved with, and had the opportunity to contribute to this Functional Review process. To this end data collection was centred on returns from 51 cost centres within the Department. These included Districts, Regions, Branches, Directorates and Research Division. Within these 51 cost centres were included the Operations Directorate, 5 Research Centres, and 3 Inventory sections (the total number of managers contributing basic data was 60).

Data collection was commenced in December 1987 with a circular to all Managers from the Executive Director. This explained relevant parts of the Functional Review process, the functions and services defined for CALM, and a detailed description of how the data was to be collected. A copy of this circular is attached as Appendix 25, together with a copy of the distribution list within the Department.

The list of functions and services totalled 41. Whilst it was recognised that this was too many for the purposes of the Functional Review, the need was seen for more specific data for CALM's internal management purposes. The functions reflect the wide range of CALM's legislative and land management requirements, and throughout this submission will be linked to the Department's Corporate Planning process.

All data was based on the 1986/87 financial year, as this was the latest year for which full financial records were available.

2.1.2. Submission Preparation

Once all the data had been received a small project team of two officers (Level 6 and Level 4) with secretarial support, reporting direct to the General Manager, was established.

This group summarised the data into the format required for the Functional Review process, and in many cases provided additional information for internal management purposes.

For ease of analysis all data was entered into a sub-programme on the Department's Concurrent computer. This enables the FTE and financial data to be analysed either by cost centre, or function and service. This will also allow the data to be maintained and updated for management requirements in the future.

In addition to data on financial and human resource allocation, there were also many specific CALM activities for which detailed resource data was collected and analysed using specific sections of the Department. This information is reflected in the function and service descriptions contained in Sections 3 and 4.

This submission then summarises all of this data, together with qualitative descriptions of CALM's current functions and responsibilities. It was prepared in close consultation with the Functional Review Coordinator, and also where appropriate discusses the future directions for certain CALM activities.

3. DESCRIPTION OF FUNCTIONS

Sections 3 and 4 contain descriptions of the functions and services defined by CALM. These were prepared in accord with the booklet "Guidelines for Reviews".

The format of each description follows the 14 paragraph headings outlined in that booklet, with the exception that human and financial resources have been combined in one paragraph (\mathbf{x}) .

When discussing the human and financial resource allocations to these functions or services the following process is used:

- all information is presented in tables (part (x) of each description), and separates the five CALM Divisions (Operation, Services, Admin. and Finance, Forest Resources, Research), Policy Services (an amalgam of Policy and Operations Directorate, Economics Branch and the Minister's Office), and Overheads (these are detailed separately in Appendix 38, but largely involve non wage and salary costs not allocated to any cost centre during the survey).
- human resources are split into three sections; Level 1-4 Broadband (including Park Rangers); Level 5+ Broadband; and Wages staff of all Awards.
- financial resources are shown as salaries and wages, and a total inclusive of all costs (Section 5 includes more detailed financial summaries for CALM).
- in the function descriptions there are two sets of figures presented. The first is the direct allocation to these functions from the survey, and the second is the allocation to functions after resources in services were distributed in accord with Appendix 39. Each Manager who contributed data to the survey was involved in determining the process for allocating services.
- the human resources allocated to services are not all included within the non-Operations sections of the Department, but rather include many Operations staff who perform part or all of their duties undertaking service activities.
- Section 5 contains a description of the allocation mechanism, and also more detailed summaries of the resource data available.

In compiling the paragraphs on comparisons between Western Australia and other States in Sections 3 and 4, the following similar organisations to CALM were consulted:

Australia/Northern Territory: Australian National Parks and

Wildlife Service.

Contact: Mr M. Greep (062 46 6211)

<u>Victoria</u>: Department of Conservation,

Forests and Lands.

Contact: Mr L. Foster

(Director-General)

(03 651 4364)

New South Wales: Forestry Commission of N.S.W.

Contact: Mr L.S. Mors (02 234 1631)

Queensland: Department of Forestry.

Contact: Mr T.N.Johnston (07 224 2111)

Queensland National Parks and

Wildlife Service.

Contact: Mr M. Stapleton (07 227 5259)

Northern Territory: Conservation Commission of

the Northern Territory.

Contact: M.A. Elliott (089 50 8211)

(1)

<u>Tasmania</u>: Forestry Commission of

Tasmania.

Contact: Mr D. Wilson (002 30 8179)

South Australia: Department of Environment and

Planning.

Contact: Mr N. Newland (08 216 7867)

Woods and Forests Department.

<u>Contact</u>: Mr Millard (08 216 7211)

Australian Capital Territory: ACT Parks and Conservation

Service.

Contact: N. Hermes (062 46 2211)

(1) unsuccessful attempts were made to obtain relevant information from the (Tasmanian) National Parks and Wildlife Service.

3.1 ENVIRONMENTAL PROTECTION

(i) Statement of Function

A wide range of activities are conducted under the function of environmental protection. It encompasses:

- control of feral animals and noxious weeds
- habitat protection and regeneration
- pest and disease control (eg. leaf miner insects, dieback disease)
- protection and management of water catchments
- the planning and policy coordination of mining operations on CALM lands
- soil conservation.

These activities are closely related to fire management and wildlife conservation, and are all related to protecting or enhancing the natural environment in the face of human influences. The planning and coordination of mining is closely allied to the industry regulation (other than timber) function.

The Environmental Protection Branch acts as a support service for this function, but the large bulk of the work is done by the Operations Division who develop the necessary operational strategies and coordinate resources. There is also a considerable support for these activities from the Research Division.

(ii) Contribution Towards Objectives

The environmental protection function essentially contributes to the corporate objectives of CONSERVATION and KNOWLEDGE.

These objectives oblige CALM to conserve both the State's wildlife and natural environment, and also to expand the community's knowledge base on these aspects. The environmental protection function is essentially the wide range of management and operational techniques which are implemented to reduce and reverse habitat degradation, ensure the protection of natural ecosystems, and preserve water quality from forested catchments.

Without the emphasis CALM places on this function, and the resources devoted to it the conservation of the State's natural environment would decline.

(iii) Relevance to Government Policies

The Government places a strong emphasis on the conservation of the natural environment and wildlife.

In particular where industries are established on public land they should operate without a deleterious effect on the environment outside the immediate impact area.

In addition Government policy supports the elimination or reduction of feral animals, noxious weeds, pests and diseases from all Western Australian forests and reserves. In both of these policy areas the activities within the environmental protection function are directly relevant to the implementation of Government policies.

(iv) Background

Environmental protection has been part of the work of the three amalgamated agencies for many years. However, none had the resources or the scientific and technical support to adequately manage this function.

This meant that CALM inherited a land and wildlife management task made more difficult by the existence of extensive infestations of feral animals, noxious weeds, pests and several diseases, the most notable of these being dieback. The major activity within this function prior to the amalgamation, and where the most progress had been made, was in the areas of dieback disease management and catchment protection in forests by the Forests Department. This had involved intensive research and operational resources. This expertise has subsequently been used to improve environmental management in national parks and nature reserves, particularly along the South Coast.

The level of resources devoted to this function since the formation of CALM has expanded considerably. The major areas in which this expansion has occurred include dieback management in national parks, policy development and coordination for mining activities on conservation lands, the control of feral animals in remote pastoral areas and on nature reserves, and the regeneration of habitats after mining operations.

The CALM workload in environmental protection (particularly with feral animals and noxious weeds) far surpasses resources available for effective control measures. However in the vitally important areas of catchment protection and dieback disease, management strategies and operations are now in place that ensure acceptable standards of protection and conservation on Departmental lands in the South West of the State.

The function is one that CALM believes must expand in the future, particularly for the control of feral animals where the current situation is disastrous in many areas of the State.

(v) Methods and Procedures

A wide range of methods and procedures are used by CALM to carry out this function. These are:

(a) Feral Animals

Across CALM lands the major feral animal species include donkeys, camels, goats, cattle, foxes, pigs, cats and introduced rats. All of these animals are widely distributed and pose difficult problems for the management of CALM lands. In terms of impact on endemic species the fox and the feral cat are the most important. In terms of soil and wetland degradation, the major problems are with cattle, donkeys and goats.

The control measures for these species generally confined to hunting, baiting and trapping, all of which are very expensive and low yield operations because of the vast areas, and generally poor access involved. The Agriculture Protection Board (APB) has a mandate to control several of these feral animals as well, but its operations are confined to agricultural and pastoral areas. The interests of the two agencies only coincide in certain specific cases control of pigs in the South West), and sometimes control of dingos which are an endemic species) the agencies' goals are in conflict the APB's control techniques have because unintended side effects on non-target endemic species.

Little research has yet been directed to suitable and cost effective control measures for most of these species. This is an area CALM will seek to enhance in the future, as a necessary support for management operations

(b) <u>Noxious Weeds</u>

As with feral animals noxious weeds are spread widely throughout CALM land. The most important of these is the blackberry which dominates riverine ecosystems in some forest areas. However there are many other species which also have major impact on ecosystems or wildlife.

The control measures are generally spraying or manual cultivation, but neither are particularly effective against widespread weeds, and they are also very expensive. The APB and CALM have some common objectives in this area, and work closely together in the forest areas, although CALM's other requirements for environmental protection (eg. protection of streams from chemical pollution or erosion) often dictate modifications to the control techniques that would otherwise be used.

A major problem with weed control is the huge cost and manpower requirement. Neither are available at the moment in CALM's budget or Approved Average Staffing Level.

In common with feral animal control there has only been limited research conducted into control methods for noxious weeds. This is an area where CALM foresees the need for major expansion of work. The ultimate objective is to eliminate weeds from CALM land, although medium term programmes will centre on the overall reduction of weed infestations with specific programmes to eliminate weeds from sensitive areas.

(c) Mining

The mechanisms used to manage this industry are described in Section 3.5. At present CALM does not have the resources to properly manage mining on all areas. In addition, following a recent Cabinet decision to allow mining in conservation reserves under certain conditions, with the approval of Parliament, the CALM workload in this area will increase significantly. There will be a much greater involvement of CALM staff in assessing mining applications, supervising operations and ensuring rehabilitation procedures are adequate, and conditions are met.

In particular CALM places great emphasis on the management of the area surrounding the mine site to ensure that noise and dust pollution, water pollution, vehicle access, visual amenity and disease do not emanate from the operation.

(d) Water Catchments

Much of CALM's land is also water catchment (harnessed or unharnessed) and a prime objective of all CALM operations is to protect water quality and quantity from vegetated areas. The most important of these areas is the central and northern jarrah forest where all of the surface water catchments for Perth and the Goldfields are located, and much of the catchment for the Wheatbelt.

Protection of water quality, particularly from increased salination, is the overriding management objective in these areas and influences every operation on CALM land. Water quality is protected by relocating operations from catchments wherever possible, preventing permanent clearing of forest vegetation in the low rainfall areas where the soil has high salt concentrations, appropriate siting of facilities away from watercourses and retaining buffers on stream lines during logging and mining operations.

Water quantity can be positively affected by the removal of some forest canopy (ie. logging), and CALM and WAWA have extensive research trials in progress at present to determine the efficacy of forest thinning to produce water.

CALM also cooperate with the WA Water Water Authority in the reforestation of cleared land on some harnessed catchments subject to high levels of salt in the water run-off. This is a process which will eventually increase the quantity of potable water from these catchments.

(e) <u>Diseases and Pests</u>

The principal disease dealt with is the fungal disease dieback, which is particularly severe in jarrah forest ecosystems. However a wide range of insects and other fungi affect the health and vigour of the State's forests, parks and reserves.

The management of dieback disease is based very heavily upon a 20 year continuing research programme by the Department and CSIRO. The major elements of operational activity are the declaration and maintenance of large Disease Risk Areas in the jarrah forest where vehicle traffic is limited, advanced aerial photography mapping techniques to map disease impact areas, hygiene arrangements to prevent the spread of infected soil, and a major effort to classify site types in the forest by their degree of susceptibility to the disease.

All of these factors are reducing the extension of infected areas (the loss of tree cover is particularly relevant to protecting water catchments), but there still remains a large area of forests forests with varying impacts of infection.

The management of dieback disease affects all forest and park users, and more particularly industry groups such as mining companies, the timber industry and SECWA (transmission lines). There is a constant effort to liaise with all land users regarding the latest information on the disease, and in the development of prescriptions for operations on CALM lands.

(vi) Contribution by Other Organisations

Many government and private organisations contribute to the management of this function by virtue of the fact that it is part of every CALM operation. However organisations with particularly intensive involvements in this function include:

WAWA in regard to catchment and vegetation management

- Alcoa, Worsley Alumina and Bunning Bros., who are all heavily involved with forest operations in Disease Risk Areas, and contribute to the Dieback Research Trust Fund
- APB in regard to the cooperative treatment of noxious weeds, and feral animal control
- Department of Agriculture in regard to soil conservation.

Many other organisations contribute expertise, or finance and resources by way of their operations on CALM land to this function

(vii) Performance of Similar Functions

No other government agency performs the full range of activities within this function, or has the expertise to do so.

(viii) Comparison with Other States

The many facets of CALM's environmental protection function are mirrored by like agencies in other States. The range of problems facing land managers is similar across Australia, with feral animals, noxious weeds, water pollution and mining all being major concerns in the management of public land.

Generally all like agencies are in the same position as CALM with a task in this area that far outweighs the resources available. CALM's approach to these problems is similar to many other organisations, although its management of mining operations and water catchment areas appears to be the best developed processes in Australia.

Of particular interest is CALM's approach to the management of the dieback disease. This disease, or others similar, affect eucalypt forests in other States but CALM has devoted more resources to developing and implementing management strategies to deal with it. Consequently CALM has had greater success in developing successful management regimes for the disease, and hence in protecting native vegetation.

(ix) Service to Other Government Organisations

The cooperation with WAWA in regard to catchment management operations is intensive and ongoing. Both agencies generally fund their own operations in this area, and there is very little transfer of funds.

In some areas the APB are retained on contract by CALM to perform noxious weed control work.

(x) Human and Financial Resources

(a) Direct Allocation by Cost Centres.

	Human (FTE)			Financial (\$)		
CALM DIVISION	Level 1-4	Level 5+	Wages	Total	Sals/Wages	Total
Operations	22.23	2.65	19.32	44.2	977,668	1,679,929
Services	7.73	3.37	0	11.1	300,620	398,867
Admin. and Finance	e 0.5	0.1	0	0.6	16,800	16,800
Forest Resources	2.13	0.1	0	2.23	53,100	74,100
Policy Services	0	1.81	0	1.81	93,000	98,644
Research	21.75	8.3	4.8	34.85	702,331	880,331
Overheads	0	0	0	0	0	81,456
CALM Total	54.34	16.33	24.12	94.79	2,143,519	3,230,127

The resources allocated to this function represent 3.96% of total direct CALM expenditure and 6.58% of total FTEs (before distribution of resources in services).

(b)	Following	Allocation	of	Resources	in	Services.
-----	-----------	------------	----	-----------	----	-----------

	.	Human	Financial		
	FTE	<pre>% of total in org. unit</pre>	Total	<pre>% of total in org. unit</pre>	
Operations	58.11	6.4	2,167,971	6.1	
Services	15.39	13.2	586,504	10.2	
Admin. and Finance	11.22	9.0	851,665	14.1	
Forest Resources	4.69	5.1	183,314	1.5	
Policy Services	5.18	10.6	259,752	13.5	
Research	43.55	28.9	1,112,905	21.2	
Overheads	0	0	646,283	4.3	
CALM Total	138.14	9.6	5,808,394	7.1	

The major allocations of resources from services came from general pro rata distribution of certain services from specific cost centres.

(xi) Revenue

Significant revenue accrues as a result of this function, and this is detailed in paragraph (xi) of Section 3.5.

(xii) Justification

The many activities undertaken within this function are central to the conservation of the State's natural environment and the protection of its natural resources, particularly when they are associated with industrial activity such as timber harvesting or mining.

The protection and enhancement of water quality and quantity from the State's forested catchments is of paramount importance to the community. CALM and WAWA each contribute resources and expertise in significant qualities to the research and management programmes that underpin catchment protection.

The protection of the State's forest and heathland ecosystems from the dieback disease is also an area of utmost importance, both from the viewpoint of catchment protection and the protection and enhancement of unique and fragile ecosystems occupying sensitive coastal landscapes. CALM has made significant management gains in regard to this disease but further progress in this area is vital for conservation and protection purposes.

The threats from feral animals and noxious weeds to the CALM estate, and the agricultural industries is very well known.

This is clearly an area where the knowledge upon which to base management and control operations is insufficient. CALM have recognised this and will gradually be placing a greater emphasis on relevant research programmes by reallocation of internal resources. There may also be further potential to reallocate resources in Operations Division to areas of greater need in more remote areas of the State, but the data upon which this would be based need further development.

The management of the mining industry on public lands has recently been recognised by Government as being a continuing high priority. This is an essential activity for preserving the conservation values of areas surrounding mining operations, and is going to require major additional resources in the future.

Each facet of the environmental protection function is vital for the conservation and protection of the natural environment and the State's resources. This in turn has enormous benefits for Western Australia.

CALM is the only government agency with the full range of expertise, and the research and Regional support potentially to undertake these activities, while at the same time drawing on the expertise of other agencies.

This area will need to be one of enormous growth in the future because of the enormity of the workload and the critical importance to the State. There will certainly be a need for additional resources (which cannot be accurately specified at present) to carry out these tasks. Only some of these resources may be available from internal reallocation.

(xiii) Previous Reviews

Internal management reviews of activities within this function have been carried out from time to time, and have led to operational efficiencies of varying degrees and to the gradual building up of resources.

3.2 FIRE MANAGEMENT

(i) Statement of Function

Bushfire management is required on nearly all CALM lands, regardless of land tenure or vegetation. At present fire management resources are largely confined to the south west of the State where the concentration of people and high economic value resources are to be found. However as CALM expands its activities further into the northern and eastern parts of the State the importance of fire management as a conservation strategy in these areas is increasing.

The Department is solely responsible for all fire management on CALM lands, and in addition has some responsibilities on vacant Crown Land and other public lands. Whilst the Department has no formal responsibilities on private land it always tries to lend assistance (generally for fire suppression) to private landowners where there is a mutual benefit, or on a "good-neighbour" basis.

In undertaking this function the wide range of activities required include:

- participation in land management planning
- a well resourced research effort into fire behaviour, control and effects, with a strong interaction with Operations staff
- integrated planning of fire protection needs with other land users (eg. timber harvesting)
- manual and aerial fuel reduction burning
- other fuel reduction techniques such as fuel reduction by canopy grazing
- equipment development and maintenance
- the maintenance and resourcing of an effective fire suppression organisation
- an effective aerial and tower fire detection system over the forested areas of the State, with the potential for the system to be used in emergencies in other areas
- a major effort in fire prevention through public education, enforcement of regulations, and liaison with many groups and land owners in the community.

This range of activities involves virtually all of the Department's Operations Division staff at some time, and is a major year-round function, with a concentration of resource use in the dry southern summer.

The use of fire as a management strategy to achieve various conservation objectives, such as habitat management, has been a minor part of the Department's fire management function for many years. However with the expanding range and diversity of ecosystems, this facet of fire management is receiving much more attention, and consequently consuming greater resources.

(ii) Contribution Towards Objectives

The protection of people and resources from bushfires, and the use of fire as a management strategy contributes to the achievement of all of CALM's corporate objectives. Essentially this is because fire can have a major impact on the use of the natural environment, its aesthetic appearance, on people living and working in or near CALM lands. Hence fire is an integral part of all terrestrial management plans.

Apart from contributing to achieving each of the five corporate objectives, the proper management of fire is also a legal and moral responsibility for CALM. Particularly in regard to fire suppression CALM has a clear accountability for the control of fires on its land, and preventing fires from escaping onto adjacent lands. It is hence essential that the organisation be appropriately equipped at all times with the knowledge, skilled human resources, appropriate equipment and integrated management plans to adequately discharge these responsibilities.

(iii) Relevance to Government Policies

CALM and its staff have specific responsibilities under the Bush Fires Act in regard to fire control which are directly relevant to Government policy.

The Government also has a firm commitment to conservation and the appropriate use of the natural environment. Because fire is such a major influence in many Western Australian ecosystems, CALM has a clear responsibility for resourcing fire management and integrating with land use proposals in management plans.

(iv) Background

Protection of the State's forests from damage by fire was a function of the Forests Department since its inception in 1918. Similar responsibilities for other public lands were held by the National Parks Authority and the Department of Fisheries and Wildlife.

Until the mid 1950s a general policy of fire exclusion (apart from edge buffers) was practised, but disastrous 1961 prompted a Royal Commission to recommend fires in introduction of a system of broad area The technology for large scale reduction strategies. forest prescribed burning using an aircraft was quickly developed, and when combined with a system of small burns around high value areas provided an prescribed excellent level of fire protection for the South West. The value of this system was well demonstrated in 1978 when Cyclone Alby led to many bushfires in the South West, but the fires were relatively easily controlled in State forests where fuel reduction burning had been done.

With greater emphasis on conservation of ecosystems, and the promotion of the need for a wider diversity of fire regimes to suit the needs of habitat management since the late 1970s the broad area fuel reduction system has been substantially modified. Because of the existence of areas requiring special management, and the increasing spread of operations such as forest regeneration, recreation facilities and bauxite mining throughout the forests the Department's fuel reduction operations are now generally more expensive, cover smaller unit areas and have a higher risk of fire escape from prescribed burns because of large edge/area ratios.

The State's national parks and nature reserves have generally been managed on a fire exclusion or fuel reduction buffer policy, in part because the management agencies did not have the resources for a more intensive programme.

This policy, and the general lack of resources in the two smaller amalgamated agencies, led to some undesirable consequences. Isolated reserves in agricultural areas in particular have a long history of uncontrolled fires, which has impacted adversely upon their ability to maintain and enhance particular habitats or species of wildlife.

The Department has always maintained mobile, well equipped and well trained staff for fire management operations, and with advances in technology (eg. communications, vehicles) the standard of this resourcing is increasing. To supplement the ground based fire management staff there has been, since the early 1970s, an aerial detection service operating in forest areas. This detection service has provided an effective and rapid fire surveillance service and an excellent intelligence platform during fire control operations for about the same cost as the static towers it largely replaced.

(v) Methods and Procedures

There are a large range of methods and procedures used to support this complex function:

- (a) <u>Planning:</u> fire is an integral part of most management operations and land use plans. At the operational level every fire management operation is prescribed, and appropriate reviews done at the conclusion of the operation.
- (b) Pre-Suppression: has several major components; Fuel reduction: fuel reduction is conducted using a variety of techniques in many vegetation types. The most important is the use of prescribed fire (250,000 ha approximately was treated in this way 1986/87), but grazing in pine forests, and the preparation of mineral earth and chemically treated firebreaks are all widely used fuel reduction techniques.

The bulk of the prescribed burning is done by aerial ignition using twin engined aircraft under contract to the Department. Fire is also used extensively for eucalypt forest regeneration operations after logging.

Training and equipment: all the Department's staff involved in fire management use modern and well maintained equipment, derived from a continuing equipment development and acquisition programme. There is a well developed fire training programme which emphasises the safety, environmental protection, conservation and technical aspects of fire management.

Liaison and coordination: the Department maintains an active and effective liaison with the Bush Fires Board, Bush Fire Brigades, Local Government Authorities and rural landowners to ensure coordination of efforts and a free exchange of information.

Detection: the Department operates a fleet of 9 provide aircraft spotter to continuous surveillance over the forest areas during times of high fire risk. These aircraft have replaced a network of about 25 fire towers, most of which are still maintained for emergency use, although several towers are still in permanent use for various reasons (eg. near Pearce RAAF base). The Department owns these planes, and employs a mixture of permanent and temporary pilots. is run by a contracted aircraft manager, service uses contract maintenance facilities, and has an all up cost (including capital replacement) of about \$620,000 per annum (based on 7,600 hours flying).

This cost compares favourably with the cost of a totally contract aircraft operation (estimated at \$800,000 per annum) or the recurrent costs of tower operations which would be about \$510,000 per annum. In addition the Departmental operation offers much greater flexibility and responsiveness to line managers' requirements than would a contract operation.

The additional cost for the aerial detection operation over the towers is easily accounted for by the better quality of information received, and the greater flexibility the aerial system allows in the deployment of ground based staff.

Appendix 26 details the costs of the Departmental aerial surveillance operation, and an estimate of private contract comparisons.

(C) Suppression: fire suppression operations generally assume the highest priority for CALM whilst required. The Department has developed a effective systematic and organisation system (outside the normal organisation structure) to manage the suppression of large fires, and this is supported by well equipped and trained staff, technical excellent support such communications, and resource information such as fuel ages and distribution.

In 1986/87 there were 341 wild fires attended on CALM land (40% deliberately lit) which affected 235,000 hectares.

(d) <u>Habitat Management</u>: fire is a valuable strategy in habitat management in natural environments. The use of prescribed burning to conserve or modify habitats is now well established, and the fire behaviour and effects research is a central feature in the ongoing development of this management strategy.

(vi) Contribution by Other Organisations

Assistance in prescribed burning and fire suppression operations on CALM land is given by the Bush Fires Board, Bush Fire Brigades, Local Government Authorities and private companies as appropriate. Fees for service are charged only rarely in these cases as CALM reciprocates on other lands when there is a mutual benefit.

(vii) Performance of Similar Functions

The Western Australian Fire Brigades Board maintains a similar fire suppression organisation for urban areas, but no other government agency has CALM's wide ranging fire management activities in natural environments.

The Bush Fires Board assists with the maintenance and enhancement of the volunteer Bush Fire Brigade network, which generally operates on private property in rural areas.

(viii) Comparison with Other States

The structural arrangements for fire management are essentially the same as CALM's in every interstate agency (ie. the work is completed by field operations staff, with the assistance and coordination of a central support Branch).

Each of the agencies appear to have direct responsibility only for the State lands under its control (with the exception of the Northern Territory Conservation Commission), although they cooperate closely with the fire protection organisations operating on private property. This is directly analogous to CALM's close working relationship with the Bush Fires Board in Western Australia. All of the agencies have the same social responsibilities as CALM in ensuring that fire escapes from land managed by them do not cause personal injury or damage to the community, and this is seen as a cost to the State through the provision of CRF funding.

The methods and techniques used by all agencies are similar, although the larger agencies in other States, with greater access to resources, make much more use of aircraft (both fixed wing and rotary) than does CALM.

All agencies maintain their own well-trained and equipped fire management resources, and support this with a research effort directed at the particular needs of the forest ecosystems they manage.

In many cases the agencies' radio communication facilities developed initially to aid fire were management operations (as was CALM's). All of the interstate agencies appear to have retained this activity largely in-house, presumably for the same technical and system development reasons as CALM.

(ix) Service to Other Government Organisations

There is a free exchange of advice and information between CALM and the Bush Fires Board on fire management matters.

Some fuel reduction and fire suppression operations are carried out by CALM for a number of government agencies (eg. WAWA, MRD, DOLA for vacant Crown land) who control land near or adjacent to CALM land. An Inter Agency Agreement is generally prepared to cater for these instances, which allocates both costs and responsibilities between agencies.

(x) Human and Financial Resources

Direct Allocation by Cost Centres. Human (FTE) Financial (\$) CALM DIVISION Level 1-4 Level 5+ Wages Total Sals/Wages Total 33.08 3.9 Operations 79.39 116.37 2,328,009 4,945,754 566,839 1,986,005 Services 8.3 3.8 12.0 24.1 Admin. and Finance 0 0 0 0 0 0 Forest Resources 0 3,200 0.1 0 0.1 3,350 Policy Services 0 0.17 0 0.17 5,240 5,240 Research 9.05 3.95 0 13.0 368,650 498,650 Overheads 0 0 0 0 0 58,922 CALM Total 50.53 11.82 91.39 153.74 3,316,938 7,497,921

the non staff costs in this function relate to large vehicle costs for fire management, approximately \$350,000 in non wages costs for surveillance, the \$600,000 fire equipment cost, and large contract payments for machinery used in fire suppression.

The resources in this function represent 9.20% of total direct CALM expenditure and 10.67% of total FTEs.

(b)	After	Allocation	of	Resources	in	Services.
-----	-------	------------	----	-----------	----	-----------

	Human		Financial		
	FTE i	% of total in org. unit	Total	<pre>% of total in org. unit</pre>	
Operations Services Admin. and Finance Forest Resources Policy Services Research Overheads	159.15 40.72 17.15 3.2 6.5 16.25	17.6 34.8 13.7 3.5 13.3 10.8	6,686,045 2,679,021 754,690 84,467 231,994 637,938 571,545	18.9 46.8 12.5 0.7 12.0 12.1 3.8	
CALM Total	242.98	16.9	11,645,700	14.3	

The major proportion of the service resources allocated to this function came from communications and information technology, with the majority of the reallocation resulting from the pro rata distribution of some services across CALM functions.

(xi) Revenue

No significant revenue accrues directly to CALM as a result of this function. The function is however a vital part of the protection of forest resources, which are in turn a major CALM revenue source.

(xii) Justification

The fire management function is a vital and integral part of nearly all CALM's land and wildlife management activities. The Western Australian environment is seasonally very hot and dry, which leads to some of the worst fire weather conditions experienced anywhere in the world.

CALM has significant legal and moral responsibilities both to protect the CALM estate, and also to prevent fires entering from, or leaving to adjacent lands.

These responsibilities imply at least the maintenance of the existing level of resources for fire management. However, existing resources are unable to meet all of the requests made of CALM for fire management work. As well as this CALM is steadily expanding its research and operational expertise to cover lands outside the forest zones. Until now this has been done through an internal reallocation of resources but as a result, the ability to meet existing commitments is being weakened.

In addition to the responsibilities for fire safety and protection CALM also has major responsibilities for the management and enhancement of natural ecosystems. The use of fire is central to this management, and CALM has been undertaking for some time an intensive research effort into fire behaviour in different ecosystems.

This research is closely allied and interactive with technical and operations staff and the results are implmented rapidly to improve CALM's management of the environment and its ability to undertake its legal charter for conservation.

The process of internal reallocation to meet the new fire management needs will continue, but with constrained resources CALM does not have the ability to continue this indefinitely. This is particularly so because the more recent trends in fire management outlined in paragraph (v) are also more expensive to implement.

CALM believes this function should be retained, and where necessary enhanced, as no other government agency has the capacity or the legislative ambit for this work.

(xiii) Previous Reviews

Apart from the 1961 Royal Commission, which radically altered fire management policies, the following reviews of at least part of this function have occurred:

- a 1971 review of the functions and responsibilities of the Bush Fires Board
- Select Committee inquiry into Bush Fires in Western Australia (Bateman report)
- Emergency Services Review 1985
- Task Force on Land Management (1983)
- State of the Art of Forest Fire Control in Western Australia Standing Committee 1983
- the 1986 CALM "internal functional review".

None of these reviews altered the fire management operations to any extent, although they have led to a greater policy and strategic coordination for emergencies between affected government agencies.

3.3 WILDLIFE CONSERVATION

(i) Statement of Function

This function is a primary responsibility of CALM within the specific provisions of the Wildlife Conservation ACT 1950, and the more general land management provisions of the CALM Act.

There are two principal activities within this function:

- (a) Wildlife Protection
 the conservation and protection of wildlife in all
 areas of land in Western Australia and adjoining
 waters (Wildlife Conservation Act 1950, which in
 general terms defines wildlife as flora and fauna
 native to Western Australia).
- (b) Wildlife and Habitat Management the preservation and control of wildlife on CALM lands, which also involves habitat management.

The wildlife conservation function is common to all regions within CALM, and has major support from the Wildlife Protection Branch and Research Division. It is hence closely related to the "Environmental Protection", "Fire management" and "Industry Control and Regulation - Except Timber" functions, and there are many staff whose specific work involves at least two of these functions.

(ii) Contribution Towards Objectives

The wildlife conservation function is central to the preservation and enhancement of the State's wildlife and the control of relatively small industries dependent on this wildlife. As such the function contributes towards the CONSERVATION and KNOWLEDGE objectives, and in a minor way towards the PRODUCTION objective.

Wildlife conservation is a statutory requirement for CALM under both the CALM Act and The Wildlife Conservation Act. It is therefore a central function that many CALM staff became involved with, and the needs of wildlife conservation are carefully considered in the planning and implementation of all CALM operations.

(iii) Relevance to Government Policies

The Government has a strong commitment to the conservation and protection of the State's endemic flora and fauna. The wildlife conservation function is a central element in CALM's ability to implement the Government's policies and commitments in this area.

Proposed amendments to the CALM Act to incorporate the provisions of the Wildlife Conservation Act within it are being considered by the Government in 1988. If they are approved by the Parliament this will lead to a further consolidation of CALM's role in this function.

(iv) Background

As detailed in paragraph (i) there are two distinct activities contained within this function. Each of these has a different background as summarised below:

(a) Wildlife Protection
This activity had its origin in legislation which was promulgated in 1912 (the Game Act). The legislation evolved through the years to the

current day where statutory protection of flora and fauna throughout Western Australia is provided by the Wildlife Conservation Act.

by the Wildlife Conservation Act.

Implicit in that Act is the primary duty of all CALM Wildlife Officers to ensure that the provisions of the Act are complied with. This responsibility is fulfilled by the Wildlife Protection Branch through "wildlife protection" and "wildlife management" activities which are detailed in paragraph (v).

These activities have developed in response to changing community attitudes, and the perceived jeopardy faced by some species as a result of over collecting, habitat destruction and predation by For example, in the feral animals. crocodiles were brought to the brink of extinction over-hunting. Tens, and in some cases hundreds thousands of finches and kangaroos were being commercially exploited. Apart from the community concern at the loss of such species, the ethics of taking species from the wild, particularly for commercial purposes, began to be questioned.

This concern led to the introduction of controls. It brought to a stop crocodile hunting and later, finch trapping, and gave rise to management plans for some species. The consequence is a complex matrix of controls, programmes, licensing, and management which continues to change and evolve. The general public, and many organised groups monitor Departmental activity in this area and the status of species in the wild, and there is a vital exchange of information between CALM and these groups.

The last significant change in wildlife conservation was the inclusion of flora provisions in the Wildlife Conservation Act in 1980. This now requires the monitoring, control, licensing and management of protected flora, commercially exploited flora and declared rare flora in a similar manner to endemic flora.

In concert with the enforcement activities described above there has also been a significant resource devoted to community and land owner education about wildlife conservation, the identification and mapping of rare and endangered flora species, and research into the appropriate methods for managing flora and fauna populations and habitats.

This activity commenced within the Department of Fisheries and Wildlife, and has been expanded by CALM to the point where there is now a widespread acceptance of the need to conserve wildlife species and properly manage their habitat on all lands in Western Australia.

The majority of these activities are carried out by Wildlife Protection Branch, and staff of the Research Division. Some assistance is given by other staff from Operations Division.

(b) Wildlife and Habitat Management

The protection and enhancement of the natural environment is CALM's principal management objective.

Each of the amalgamated agencies, to varying degrees, had this responsibility for the lands they managed. However due to a lack of sufficient resources for proper management, and the limited geographic scope of the Forests Department as the largest former agency, the habitat management activities of the agencies were neither comprehensive in scope nor totally effective. In particular the management activities directed towards the conservation of flora (particularly rare and endangered flora) were insufficient, and not intensive enough to address the large problem areas that existed (eg. management of flora in rural road reserves).

With the formation of CALM one of the principal strategic issues to be addressed was the conservation of all flora, but particularly the rare and endangered species. This has principally been undertaken by the provision of information and training to all operational staff, and ensuring that flora and habitat management is considered in all operations.

Most of the resources devoted to this activity are within the Operations Division, with support from the Services and Research Divisions.

(v) Methods and Procedures

(a) Wildlife Protection

- Wildlife offence detection 1. Detection (the objective being to determine occurring) an offence is establishing and maintaining a network of contacts, conducting patrols (night, weekend, boat, aerial or general), and making general involves enquiries. Ιt also inspections of bird dealers, kangaroo processors and aviculturists.
- Wildlife offence investigation When an offence has been committed, it is necessary to establish the nature of the offence and decide whether prosecution is necessary. The investigation may involve searching vehicles or premises, executing search warrants on dwellings, seizing flora, fauna and equipment, including firearms, and requires interviews of suspects and witnesses and the taking of statements.
- 3. Wildlife offence deterrence
 This generally involves a visible presence by
 CALM staff in areas where offences may occur.
- 4. Patrols on land and water are conducted Patrols throughout the whole State. They take the form of aerial patrols (search for duck traps, parrot nest robbers or offences on nature reserves), vehicle patrols (search for illegal hunters or shooters, flora pickers or bird or reptile trappers) and boat patrols to prevent camping, fires or disturbance to island habitat, sea bird rookeries or fauna including sea-lions. Road check points may also be established.
- 5. Licence application investigations (for keeping or taking fauna and flora) Applicants are interviewed as to their suitability or expertise in certain fields. Cages, equipment and methods are assessed and modified as appropriate.
- 6. Licence compliance
 Licensees' activities in the field are
 checked to ensure compliance with the licence
 and its conditions. Licence returns are
 followed-up and scrutinised upon submission.
 Licensed establishments and premises
 (kangaroo processors, private aviculturists,
 bird dealers) are visited and inspected.

- 7. Legal proceedings
 Breach (offence) reports are assessed and a
 determination made to issue a letter of
 warning or initiate prosecution. Briefs are
 prepared, complaints are sworn and all the
 necessary papers, evidence, certified maps,
 etc., are presented to Crown Law. CALM staff
 attend Court and give evidence.
- 8. Information on wildlife protection
 A wide range of information is disseminated to other agencies, groups or the public. Intelligence may be passed to various law enforcement agencies. Information on identification, habitat, distribution and handling of wildlife is frequently disseminated to organisations, groups and the general public.
- 9. Illegal import/export prevention
 Wildlife Officers enforce the Wildlife
 Conservation Act and the declared Animals
 Regulations of the Agriculture and related
 Resources Protection Act by monitoring
 imports and exports. A 24 hour, seven day a
 week roster is maintained for inspections at
 Perth airport. Other transport services
 (rail, road, etc.,) are inspected randomly.
- 10. Wildlife management programmes
 There are approximately 18 separate
 management programmes for exploited flora and
 fauna. Two examples are (i) commercial flora
 exploitation which requires the monitoring of
 pickers, wholesalers and exporters; (ii)
 kangaroo management programs are controlled
 through the issue of tags, scrutinising
 returns, licensing and inspection of
 processing establishments.
- 11. Open season regulation
 Open seasons (certain species can be taken,
 ie. killed or captured, under certain
 circumstances and conditions) exist for a
 range of protected fauna. Twelve open season
 notices covering 39 species of fauna are
 currently in force.
- 12. Fauna rescue coordination
 Volunteers are licensed, overseen and coordinated in the rescue and rehabilitation of sick, derelict or injured fauna. CALM provides advice and where possible equipment and resources, and on occasion participates in and control rescue activities.

(b) Wildlife and habitat management

The mechanisms used for managing wildlife and habitat on CALM land are well documented in sections dealing with other functions. The principal strategies available for this include fire, siting of timber production activities, and the tasks defined within environmental protection, all of which are integrated through the planning matrix.

Underpinning all of this activity is an active research program into the conservation and management of specific wildlife species, control of weeds and feral animals, and the much wider and generally more complex field of habitat management to enhance wildlife conservation. There have been many examples of the value of this research to CALM (and the previous agencies), but perhaps the most important is the large amount of research work done by CALM (and other agencies) in the Kimberley since 1971.

research resulted in the identification of many new species of plants and animals, and a reasonable overview of the region's biota. bank of information gained is now vital to supporting CALM's work in the region, particularly of the assessment mining ventures conservation lands (a major new Government initiative), and the Kimberley Region Planning Study now underway.

(vi) Contribution by Other Organisations

The wildlife protection operations of CALM are conducted in close liaison with the APB, Australian Customs and the Federal Airports Authority. In addition all police and fisheries officers in Western Australia are ex officio Wildlife Inspectors, but their role in this area is only minor.

The habitat management and conservation activities are not supported directly by any other organisation, although there is cooperative research with the W.A. Museum, and the W.A. Herbarium (soon to become part of CALM).

(vii) Performance of Similar Functions

Various other government agencies have a law enforcement activity, but none are so involved with wildlife law enforcement. CALM's habitat and wildlife management activities are not performed by any other agency.

(viii) Comparison with Other States

The legislative arrangements for wildlife protection are generally similar throughout Australia, with the same range of management techniques such as licences, tags, monetary penalties, hunting seasons and "bag limits" being generally in evidence.

However because CALM has very diverse and wide-ranging responsibilities for land and wildlife management across Western Australia, it able to more is satisfactorily manage ecosystems for wildlife conservation than can an agency of more limited scope (such as a National Parks and Wildlife Service). Hence in the area of wildlife conservation CALM believes it able to provide the most effective mix of both conservation and protection measures to enhance the State's native wildlife.

This is particularly so because of the strong regionalisation of CALM, and the consequent ability of staff to manage activities for a range of purposes including wildlife conservation.

(ix) Service to Other Government Organisations

A service is provided to the APB in that declared (exotic) birds are licensed and controlled by CALM under legislation administered by the APB. There is no charge levied for this as the work is of some benefit to CALM and is generally done in the line of CALM's usual business.

(x) Human and Financial Resources

Direct Allocation from Cost Centres. Human (FTE) Financial (\$) CALM DIVISION Level 1-4 Level 5+ Wages Total Sals/Wages Total Operations 23.5 1.68 1.46 26.64 666,853 1,059,827 Services 0 0 0 0 0 O Admin. and Finance 7.4 0.7 0 8.1 186,000 186,000 Forest Resources 0 0 0 0 0 0 Policy Services 0 2.22 0 2.22 82,452 89,978 (1)Research 14.07 13.73 2.7 30.5 902,628 1,317,178 **Overheads** 0 0 0 0 336,300 CALM Total 44.97 18.33 4.16 67.46 1,837,933 2,989,283

> (1) the Research Division FTEs include approximately 11 FTEs from the W.A. Herbarium which is not yet (May 1988) formally part of CALM.

The resources allocated to this function represent 3.67% of total direct CALM expenditure, and 4.68% of total FTEs (before allocation of resources in services).

(b) Following Allocation of Services.

	Human		Financial		
	FTE	% of total in org. unit	Total	<pre>% of total in org. unit</pre>	
Operations	36.45	4.0	1,383,121	3.9	
Services	1.2	1.0	86,640	1.5	
Admin. and Finance	19.54	15.7	608,647	10.1	
Forest Resources	1.33	1.4	36,886	0.3	
Policy Services	4.98	10.2	172,645	9.0	
-	(1)		•		
Research	42.66	28.3	1,878,066	35.7	
Overheads	0	0	571,315	3.8	
CALM Total	106.16	7.4	4,737,320	5.8	

(1) includes 11 FTEs (approx.) from the W.A. Herbarium.

The resources distributed to this function from the services were largely composed of pro rata allocation of some services from specific cost centres, publications, public relations, training and development (Wildlife Protection Branch) and revenue collection and processing.

(xi) Revenue

Significant revenue accrues to CALM from the wildlife protection activities, and this is detailed in Section 3.5 and Appendix 21.

(xii) Justification

The protection and conservation of the State's wildlife is of central importance to CALM's wider objectives in conservation and land management. The resources devoted to this function are in response to clearly expressed legislative requirements, which give a high priority to wildlife and habitat protection.

The conservation and management of this State's many unique species of flora and fauna is of vital importance in preserving the State's heritage. No other agency has the resources or technical and research expertise (which will be complemented by the addition of the W.A. Herbarium to CALM) to carry out this function. CALM will continue to devote significant resources to it.

There are however certain operational aspects of the function, such as licensing and control of the wildflower harvesting industry on public land, and the emergence of specific new research needs which are in need of review or require a reallocation of resources to undertake them. CALM will continue to address these issues as they arise.

(xiii) Previous Reviews

The 1986 CALM "internal functional review" identified control of the wildflower harvesting industry as an area of concern. Improved licensing procedures, and the enhancement of revenue from this activity are being considered at present.

3.4 RECREATION MANAGEMENT

(i) Statement of Function

The Department's recreation management function involves two main responsibilities:

- (a) facilitating the public's use and enjoyment of public lands and waters entrusted to CALM
- (b) ensuring that such use does not compromise the conservation values or other management objectives.

The recreation management function is one of the most geographically dispersed of all CALM's functions. Recreation developments occur in most parts of the State except the eastern deserts, and recreational activities are spread virtually over all CALM lands and waters.

Most recreation management is undertaken by Operations Division staff in Regions, but a small Recreation and Landscape Branch offers a support service for policy development, specialist training, site planning and design, and landscape prescriptions.

Operations within this function are closely related to the environmental protection, wildlife conservation and liaison and public participation functions.

(ii) Contribution Towards Objectives

CALM's charter 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". The public's use and enjoyment of the State's National and Marine Parks and State forests for recreation represents one such benefit.

Departmental involvement in recreation management ensures that the public are given access to and use of natural environments for recreational activities which are compatible with the vested purpose of the land or the established land use priority.

The recreation management function is therefore vital in conserving natural values as well as facilitating public use. The function hence contributes significantly to the achievement of the RECREATION and MANAGEMENT objectives.

(iii) Relevance to Government Policies

Departmental lands have the capacity to satisfy a major portion of the public demand for outdoor recreation and tourism, thereby contributing significantly to the social, psychological, physical and economic well-being of West Australians.

The importance of recreation (and by inference the function of recreation management) is reflected in the Department's enabling legislation and corporate plan. Further Government support for the provision and management of outdoor recreation opportunities is evidenced by:

- Cabinet endorsement of the Department's Regional Management plans and the accompanying strategies for conservation and recreation
- expansion of the State's system of National Parks
- recent funding of various recreation development projects through C.E.P. and Main Roads Department grants.

(iv) Background

Recreation management has been recognised as one of the key functions of the Department since its formation in 1985. Two of the three organisations (Forests Department and National Parks Authority) which were amalgamated to form CALM recognised recreation management as being an integral part of their overall management role.

The State's forest areas and extensive coastal attractions have a long established history of public use for recreation dating back to the 19th century. However past recreation management by Government authorities has been generally low key and largely reactive. The provision of opportunities has often lagged behind public demands. With the formation of CALM, several significant changes have occurred in the planning and management of recreational opportunities. These include:

- the preparation of land use management plans which seek to identify future public recreation needs and opportunities as well as address existing management problems and land capability for recreation
- the incorporation of public input into the identification and planning of recreation opportunities
- the involvement of community or special interest groups in recreation development and maintenance
- the provision of additional resources (staff and financial) to develop educational and interpretive services to promote public awareness and appreciation of the natural environment
- increased funding for recreation development projects
- the initiation of a Department wide training programme on recreation management.

Equally important, CALM's Corporate Plan and recreation Policy clearly set out the importance which the Department assigns to the function of recreation management.

(v) Methods and Procedures

Recreation management encompasses a range of interrelated activities as follows:

Broadscale Planning - preparation of regional and area management plans which provide guidelines and prescriptions for the use and protection of Departmental lands waters; and Responsibility Branch in consultation with Regional and Planning District staff with input by Specialist Branches as required; contract planning staff employed on occasion.

Detailed Site Planning - preparation of detailed plans and specifications for the development of recreation areas and facilities; Responsibility - regional parks and reserves officers, District recreation officers and Ranger staff in consultation with Recreation and Landscape Branch; contract staff and private landscape architects have been engaged to assist with this work.

Da<u>ta</u> Collection - collection of baseline information on visitor use levels, patterns of use and preferences for use in recreation planning and management; Responsibility - Regional, District park staff in consultation with Recreation Landscape Branch; tertiary students have been engaged to assist in some surveys.

Information and Interpretive Planning - preparation of displays, publications and other material for use in visitor information and education programmes; Responsibility - Information Branch staff in consultation with Regions, Districts and park staff.

Visitor Information, Education and Enforcement personalised contact and interaction with the public
for the purpose of disseminating information on
recreational opportunities, interpreting natural
features and processes, explaining and enforcing rules
and regulations, etc. (eg. people management);
responsibility - District and park staff.

Recreation Site Construction - construction of recreation areas and facilities in accordance with approved site development plans and specifications; Responsibility - District and park staff; private contractors occasionally engaged in the construction of structures such as information centres, toilets, etc.

Site Maintenance and Protection - periodic maintenance of developed areas and facilities including picnic and camping areas, walking tracks, toilets, etc; Responsibility - District and park staff; contract maintenance staff have been used in certain areas.

Sign and Facility Construction - construction of routed timber signs and recreation site furniture for use in Departmental recreation areas; Responsibility District and with park staff standards Recreation and Landscape Branch; contractors and private firms are used on occasions to supply signs.

(vi) Contribution by Other Organisations

The Department's recreation management function is supported both directly and indirectly by the following organisations:

Public Sector

Department for Sport and Recreation of dissemination information on recreational opportunities on CALM lands; provision equipment such as canoes; management of family camps on or near Departmental lands; collection analysis of data on recreational use and natural environments. State Planning Commission <u>state Planning Commission</u> - preparation of regional and coastal management plans involving recreational resources; provision of administrative support for the Heritage programme. W.A. Water Authority - involvement in recreational planning and management in forest catchments with CALM staff; provision and maintenance recreational facilities at numerous damsites in the Southwest; dissemination of information on recreation opportunities and management regulations for forested catchments. <u>Waterways Commission</u> - organisation of visitor surveys on the recreational use of navigable waters; preparation of recreation management plans and guidelines for rivers and estuaries. Tourist Commission - provision of information on recreation/tourist facilities and marketing of opportunities; funding of development projects. Local Authorities - development and management of recreation areas and facilities on Shire reserves; promotion of tourist attractions and facilities at local and regional level in close association with CALM.

Private Sector

There are numerous private organisations and individuals who assist or are involved with the promotion, development, management and maintenance of outdoor recreation opportunities. These include:

- commercial tour operators and guides
- concessionaires on CALM lands
- recreation equipment manufacturers/suppliers

- service clubs
- recreational groups such as bushwalking and 4WD clubs
- special interest organisations such as the Hotham Valley Scenic Railway Inc.
- Mining and timber companies
- volunteer groups throughout the State who relate to specific areas of CALM land.

(vii) Performance of Similar Functions

There is no one organisation which performs the entire range of recreational management activities that CALM does. However there are several instances where other State Government agencies are involved in outdoor recreation management over limited areas. These include:

Planning Commission SPC the are responsible for the acquisition, planning and management of regional open space in They Metropolitan Region. are currently overseeing the management of Whiteman Park, a major regional park, and are involved with CALM in several other planning projects. W.A. Water Authority - the Water Authority have developed and are currently managing a number of day use sites within State forest. The Authority have also initiated several recreation land use planning studies in recent times (eg. Canning and Wellington Catchments).

(viii) Comparison with Other States

Recreation usage of public lands, both by formal and informal groups, is increasing rapidly around Australia. Most of this is focussed on terrestrial national parks, but increasingly State Forests and marine reserves are attracting significant recreation usage.

From the information available CALM appears to be in the forefront of managing recreation use of public lands within Australia. CALM not only has well developed recreation and landscape planning procedures for the management of recreation, but also a published recreation policy which details the necessary strategies for this purpose, and well trained staff in regions to carry out the work. In addition CALM's efforts in generating revenue from facilities on public land (and the management of concessions) appear to be further advanced than other agencies in Australia.

Each of the agencies appears to have a similar structure for dealing with recreation management (ie. field operations staff supported by a service branch). However in many cases the link between line managers and the support service does not appear to be as well developed as is CALM's which may have some ramifications for project development.

(ix) Service to Other Government Organisations

The Department's Metropolitan region is involved in several cooperative recreation management programmes with the following Government organisations:

State Planning Commission - joint funding of an inter-departmental management plan for Herdsman Lake (on a matching dollar basis); preliminary work on initiation of a planning study for Beeliar Regional Park. Future arrangements for the management of regional parks are currently being considered by CALM, SPC, and the EPA.

Department for Sport and Recreation - joint development and management of the Woodman Point area for public recreation, interpretation and conservation.

Outside the Metropolitan region CALM has jointly undertaken various recreation management activities with other organisations. These include:

- development of recreation areas and facilities and the rehabilitation of mined areas for public recreation with Alcoa; work undertaken by CALM on a recoup basis and paid for out of the Forest Improvement and Rehabilitation Scheme budget.
- preparation of regional land use studies and plans with the SPC (eg. Shark Bay, Busselton-Margaret River area), and catchment management plans with the W.A. Water Authority.
- manufacturing of routed timber signs and recreation furniture for other organisations or individuals in some Districts; where such work has been undertaken, the normal practice is to levy a charge to cover the cost of materials, labour and overheads.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

CALM DIVISION	Level 1-4	Human (F Level 5+		Total	Financia Sals/Wage	
Operations Services Admin. and Finance Forest Resources Policy Services Research (2) Overheads	54.1 6.5 0 0 0 0	4.07 2.0 0 0 2.14 0	45.81 0 0 0 0 0 0	103.98 8.5 0 0 2.14 0	2,110,147 198,516 0 0 112,787 0	4,085,308 207,216 0 0 118,431 0 593,423
CALM Total	(1) 60.6	8.21	45.81	114.62	2,421,450	5,004,378

- (1) the National Park Rangers devoted to recreation are included in this figure.
- (2) in 1987/88 one person has been working full time on research into recreation usage patterns on CALM land.

The resources allocated to this function represent 6.14% of total direct CALM expenditure and 7.96% of total FTEs (before allocation of resources in services).

(b) Follo	lowing Allocation of Resources in Services. Human Financial				
	FTE	% of total	Total	% of total	
		in org. unit		in org. unit	
Operations	148.73	16.4	5,702,763	16.1	
Services	12.29	10.5	428,376	7.5	
Admin. and Finance	13.33	10.7	517,372	8.6	
Forest Resources	2.30	2.5	53,914	0.4	
Policy Services	6.86	14.0	242,111	12.6	
Research	0	0	Ó	0	
Overheads	0	0	936,428	6.3	
CALM Total	183.51	12.7	7,880,964	9.7	

The resources in services allocated to this function were largely pro rata allocations from within District cost centres, but major specific distributions were made from publications, materials management and purchasing, revenue collection and processing, and public relations.

(xi) Revenue

The direct revenue accruing from the recreation management function in 1986/87 included \$779,505 (income from national parks) and \$511,325 from C.E.P. Grants that was expended largely on recreation works. There were also small amounts of revenue accruing from recreation development on State forests, and some commercial licence fees.

CALM expects the revenue raised from recreation to expand greatly in the future years as the management planning and site development processes provide a wider range of high standard facilities, and access to natural areas is improved. However of continuing concern in this function is the cost of collecting revenue, which in many remote sites that have high annual usage but only moderate day usage can easily exceed the revenue collected.

At present this means that there are many CALM recreation developments where user fees are not charged (despite the large maintenance costs involved), and this loss of potential revenue is of continuing concern to CALM.

The Department is addressing this problem in many ways, generally through the use of pilot trials of particular revenue collection techniques in different parts of the State. CALM has only a few recreation sites where day levels are high enough to allow a permanent staff use presence for revenue collection. Instead the Department has to rely on indirect methods, and included among the many being trialled are the sale of annual camping licences to the public; licence fees being charged to commercial tour and bus operators rather than their individual clients; automatic ticket vending machines; "honour boxes"; and "pay for use" gas barbecues.

Each of these techniques will be evaluated in the next 12 months, and combinations of the most successful put into practice as appropriate.

Apart from the direct revenue flowing to CALM from recreation management there are large and growing benefits to local communities and the State as a whole from the economic flow-on effects of recreation and tourism based on CALM lands. These indirect benefits are difficult to quantify because there are so many variables involved, but this will be one area for consistent investigation and evaluation by CALM's Economics Branch in the future.

There have been some preliminary cost benefit and socio economic analyses regarding the flow-on benefits of recreation development within Australia. One of these relates specifically to a roading project in Nambung National Park, and is attached as Appendix 27.

It is recognised that economic analyses of this form are complex and subject to some interpretation. However CALM is convinced that recreation use of CALM lands contributes significantly to the State's economy, and will be devoting resources to quantify this contribution. This will eventually enable all CALM recreation developments to be costed and justified on the basis of revenue projections.

(xii) Justification

The recreation management function is a vital element in ensuring the community's enjoyment of public lands and waters. The management activities and planning within this function also contribute significantly to the achievement of CALM's environmental protection kand wildlife conservation goals.

There is a large and increasing demand from the community for a wide diversity of recreation opportunities on public lands. This demand in the past has led to a degree of unplanned and inappropriate activity and development in many areas of the State, which has impacted severely upon conservation and amenity values of the landscape. The resources used for recreation management are vital to ensuring the public can enjoy their use of the natural environment, whilst at the same time enhancing and maintaining the inherent values of the environment.

There is no other government agency with the resources or ability to undertake this work. The function is certainly revenue positive in the sense of the State's economy, and CALM are making intensive efforts to ensure the direct revenue from these activities more closely approximates the direct costs.

(xiii) Previous Reviews

No comprehensive review of this function has been undertaken previously, apart from the 1986 CALM "internal functional review" which identified revenue increases from recreation as a major objective for this function.

3.5 INDUSTRY CONTROL AND REGULATION (EXCEPT TIMBER PRODUCTION)

(i) Statement of Function

Apart from the timber and recreation industries (detailed elsewhere in this Section) there are several other industries which operate on CALM lands or waters, and require management by CALM. These include:

- wildflower harvesting
- mining of basic raw materials, eg. sand and gravel (generally by other State and Local Government agencies)
- kangaroo and other fauna harvesting
- capture of marine fauna for scientific and commercial use
- mining of bauxite, mineral sands, coal, tin, and other commercial minerals or ores
- apiculture industry

Most of these activities return royalty or other payments to CALM. The principal regulatory interests CALM has in this area include the protection of the environment during the operations, rehabilitation and regeneration where appropriate, fire protection and management and control of the numbers of operators.

Each of these industries contributes in some way to the economic and social infrasctructure of the State, and hence must be properly managed for the community good. Where possible CALM ensures that the operations are directed away from public lands, and that the revenue generated at least covers the costs of management (which are generally only salary and vehicle costs).

(ii) Contribution Towards Objectives

None of these industries is essential to the proper management of public lands or wildlife. However the Government and the community for a wide variety of reasons have established and maintained these industries, and CALM must ensure to the extent possible that conservation of the natural environment is maintained around these operations.

Hence the function directly contributes to the MANAGEMENT, CONSERVATION and PRODUCTION objectives detailed in Section 1.3. The financial return from these industries is also being progressively upgraded to assist in meeting the CALM goal of being self funding.

(iii) Relevance to Government Policies

Government has determined that industries of this nature will be able to operate on CALM land, and contribute particularly to rural infrastructures.

However the Government also requires that industries using natural resources do so with minimal effect on the environment, and that natural resources where possible are sustained indefinitely.

To balance these sometimes conflicting objectives is a difficult task, and one that requires substantial resource input often without a direct benefit to CALM.

(iv) Background

This industry regulation function was originally the responsibility of the Forests Department (mining, apiculture and wildflowers), and the Department of Fisheries and Wildlife (fauna, apiculture and wildflowers). There was some duplication between the Departments in management of the wildflower industry on State forest where there existed (since 1981) a dual licensing system.

The impact of this function on Departmental resources grew rapidly in the 1970s and 1980s through an expansion of the bauxite mining industry on State forest. Because of the disaggregated nature of the mining it affects an area of CALM land much larger than the mine areas themselves, and this is further complicated by a large area of bauxite mining being undertaken within gazetted catchments.

These factors have combined to involve the Department's staff to a large extent in all phases of the bauxite mining process (from planning to rehabilitation). Whilst there is salary compensation for this from the mining companies this process does limit the availability of these staff for other duties.

The wildflower and kangaroo industries are both difficult to manage, both because of the geographically diverse locations for the industries and the fact that the industries tend to attract individuals and small groups rather than large companies (hence expanding the number of management contacts that have to be made).

The wildflower industry in particular is growing rapidly at present, and this is presenting management difficulties for the Department. The revenue return from this industry to CALM does not cover management costs, and a Departmental priority is to expand the revenue base for this industry whilst ensuring its continual viability when operating on public land.

(v) Methods and Procedures

The industry regulation methods vary dependent upon the type of industry. They can be summarised as follows:

(a) Bauxite Mining

This is an integrated process with the two large companies currently mining on State Forest. CALM staff are involved at every stage from mine planning to rehabilitation at either a consultative and liaison level, or for the formal approval of specific mining operations

(b) <u>Basic Raw Materials</u>

CALM's policy is to divert as much of the demand for these materials as possible away from CALM land to other sources. However where this is not possible CALM staff are again involved at every stage from planning to rehabilitation, with particular emphasis upon dieback disease management, access and landscaping provisions.

(c) Other Mining Operations

Essentially as described in (a) and (b), although some specific operations (such as tin mining at Greenbushes) have particular authorities of their own by virtue of enabling legislation gazetted before the Forests Act 1918.

(d) <u>Kangaroo Industry</u>

The industry is controlled at a policy level by the annual establishment of culling quotas (in association with various groups including industry) which CALM facilitates. At the operational level CALM maintain control through the issuing of kangaroo tags for which a fee is paid, and regular patrols and contact with wildlife officers.

(e) <u>Wildflower Industry and Apiculture</u>

The industry is controlled by the issue of specific permits to collect various species for particular purposes. A small fee is paid for these licences which is currently inadequate to cover management costs and is under review.

At an operational level the industry is controlled by the allocation of harvesting areas (outside conservation lands) to licence holders, and then regular contact by CALM staff in the field. The apiculture industry is essentially managed through a series of renewable leases, because the industry's site impact on the land and most ecosystems is low.

(vi) Contribution by Other Organisations

There is some contribution by other organisations at the policy level for this function (particularly for bauxite and other large commercial mining ventures from the companies involved, the Mines Department, WAWA, Department of Resources Development and other government agencies).

At the operational level in controlling these activities there is no appreciable contribution by any other organisation, apart from internal controls within the management structures of interacting organisations.

(vii) Performance of Similar Functions

Apart from input at the policy level no other government agency performs the wide range of industry regulation activities contained within this function.

(viii) Comparison with Other States

The range of industries (other than timber) operating on public lands throughout Australia, and under the direct control of land management agencies, is consistent between States.

To CALM's knowledge the management techniques in use for these industries are consistent throughout Australia, although it appears CALM are as well advanced as any other agency in developing procedures to enhance revenue derived from these sources (to at least cover management costs).

(ix) Service to Other Government Organisations

Several government agencies (particularly WAWA and MRD) benefit from the supply of basic raw materials from CALM land (generally free of charge to the user). Several Local Government Authorities also have leases for the extraction of these materials from CALM lands.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

CALM DIVISION	Level 1-4	Human (Fi	-	Total	Financial Sals/Wages	
Operations	8.14	1.61	4.97	14.72	385,019	537,110
Services	0.3	0	0	0.3	8,570	8,570
Admin. and Finance	1.5	0	0	1.5	26,500	26,500
Forest Resources	1.25	0	0	1.25	21,200	29,000
Policy Services	0	0.06	0	0.06	3,969	3,969
Research	0.1	0.25	0	0.35	12,202	13,202
Overheads	0	0	0	0	Ò	Ó
				(1)		
CALM Total	11.29	1.92	4.97	18.18	457,460	618,351

(1) some of the resources devoted to management of mining operations have been allocated to the environmental protection function.

The resources devoted to this function represent 0.76% of total direct CALM expenditure and 1.26% of total FTEs before the allocation of the resources in services to this function.

(b)	Following	Allocation	of	Resources	in	Services.
-----	-----------	------------	----	-----------	----	-----------

	Human		Financial (\$)		
CALM DIVISION	FTE	<pre>% of total in org. unit</pre>	Total	% of total in org. unit	
Operations	19.91	2.2	713,112	2.0	
Services	1.05	0.9	60,175	1.0	
Admin. and Finance	6.30	5.0	135,720	2.3	
Forest Resources	1.88	2.0	40,537	0.3	
Policy Services	0.82	1.7	19,722	1.0	
Research	0.43	0.3	16,941	0.3	
Overheads	0	0	41,462	0.3	
CALM Total	30.37	2.1	1,027,669	1.3	

The major services from which resources were reallocated to this function were information technology, revenue collection and processing and administrative support (mainly Land and Wildlife There was also a general Administration Branch). distribution of services from several cost centres across Departmental functions pro rata.

(xi) Revenue

The major sources of revenue accruing to the Department from this function in 1986/87 were mining compensation (\$1,496,986), income to Nature Conservation and National Park Trust Fund (\$126,612), Wildlife licences (\$108,094), basic raw materials (\$21,222), some leases and apiary sites (portion of \$105,036), and part of the Wildlife special recoup (\$295,643).

Total revenue from this function in 1986/87 was approximately \$1,973,000 and action is being taken to upgrade revenue from leases and wildflower activities.

(xii) Justification

Many of the industries managed within this function have the potential to be most destructive to the natural environment. The existence of these industries is approved by government, but CALM has a responsibility to ensure they are managed in such a way as to maximise protection of the environment, and the effective use of resources.

This requires an extensive input of salaried staff, and no other agency has the necessary geographic spread of staff or expertise to manage these activities properly. The use of self regulation by industry is encouraged (particularly with apiculture and wildflowers), but this cannot be extended to encompass all CALM activities because of the nature of these industries.

(xiii) Previous Reviews

The management of these activities is subject to ongoing internal review, particularly with regard to resource utilisation levels and revenue raising.

3.6 INDUSTRY CONTROL AND REGULATION (TIMBER PRODUCTION)

(i) Statement of Function

There are two significant elements contained within this function:

- (a) the control and regulation of timber harvesting on State forest, where industry is paying a royalty to the State, but conducts its own logging operations (as opposed to operating within a CALM contract).
- (b) the control and regulation of timber industry safety standards, both in the forest operations and the sawmills and processing centres. This is done by 3 people working within the provisions of the Timber Industry Regulation Act 1926-1969 (T.I.R. Act).

Control of the timber industry described in part (a) is generally confined to the eucalypt forests (because at the moment most pine logging is done under contract; see Section 3.7). The function involves regulation of cutting areas, enforcing log utilisation standards, and the environmental protection requirements for logging operations. It is one of the oldest functions of the amalgamated agencies.

Most of the resources used for this function are in the Operations Division, although Forest Resources Division makes a significant contribution in the planning stages, through the production of operating manuals and conducting training to ensure consistency throughout the Department.

(ii) Contribution Towards Objectives

This function exists to ensure that the timber industry operates on State forest in a regulated and planned manner. The resources devoted to this function ensure that the planned areas are cut, the appropriate log volumes are removed from the forest, and that the soils and waters in logging areas are protected and left in a suitable condition for satisfactory regeneration.

Hence the function makes a considerable contribution to the achievement of CALM's MANAGEMENT and PRODUCTION objectives.

The staff operating within the T.I.R. Act are fulfilling a legislative occupational health responsibility for the Government, and in this sense are contributing to the PRODUCTION objective.

(iii) Relevance to Government Policies

The Government has directed that a viable timber industry will exist on CALM land. However the industry must be regulated to provide a sustainable timber yield, and hence allow for the industry in the future. At the same time the environment within the logging area and adjacent to it must be protected, particularly the soil and water resources.

While there has been increasing use of "self regulation" by industry in the past few years (in part to reduce CALM staff costs) the planning, and much of the forest operations control work must be done by CALM staff. These staff have the necessary skills for this wide range of work, and can effectively manage the multiplicity of factors that impact upon a timber harvesting operation.

(iv) Background

The control and regulation of the timber industry on State forests is one of the original functions the Forests Department was set up to perform at its inception in 1918. The initial emphasis for this work was on ensuring the security of tenure for State forests (to protect them against clearing for agriculture), and regulating the total timber harvest from State forests to achieve sustainable yield.

Apart from the broad perspective of protecting the forest estate there was little emphasis on environmental protection in the early stages of development of this function (for example the dieback disease was unknown at that time).

The sawmills operating on State forest in these early years were all controlled by a system of permits which allocated a specific area of State forest to them, and a maximum volume of timber they could remove from the forest each year. This was supported by a low intensity inventory and planning service, to assist in planning the logging and assessing potential log volumes.

The Department's staff were principally involved with the processes of tree marking and permit control. Tree marking ensures that no tree can be felled unless branded by a forest officer, and this allowed the silvicultural aspects of forest regeneration and growth to be catered for (in other words most logging operations were thinnings, with the old and mature trees being removed to allow the young vigorous trees to prosper). Following felling operations the forest officer then ensured utilisation standards were acceptable in terms of tree stump heights (ie. not too high), and that timber from felled trees was not wasted.

Because of the authority and power of the forest officers in regard to both the trees which could be fallen and utilisation standards the relationship with industry was often adversarial.

Up until the 1970s this function changed little, except for the advent of clearfelling in the karri forest to assist with forest regeneration. This also meant that marking trees for removal was no longer required. Instead "seed trees" were marked for retention.

Over the last 30 years more has become known about the impact of dieback disease, salinity, soil erosion and water turbidity, and this has caused a radical reallocation of resources within this function. There was also a movement towards the issuing of licences rather than permits to sawmills. Licences guaranteed the mills an amount of timber, but did not give exclusive rights to a forest area. Licences, in turn, are now being replaced by contracts of sale.

The activities within this function are now mainly dedicated to logging coupe demarcation (to prevent the expansion of dieback disease through logging), the selection and maintenance of stream and road reserves (to protect water and amenity values), the marking of trees (or groups of trees) for retention to ensure the forest's growth is enhanced after logging, the control of utilisation standards, and ensuring that logs are allocated to the highest value (and royalty) products possible.

There has been a dramatic improvement in utilisation standards since the 1920s, especially in the past 10 years. This has occurred through the concept of integrated logging operations which ensure that all useable wood felled is removed from the forest, and then allocated to its most effective use (eg. veneer, poles, first or second grade sawlog, chipwood, etc). Prior to the implementation of this concept the different products were generally harvested by successive, but separate logging operations that did not promote maximum efficiency of resource use.

In summary this oldest of Departmental functions is still a most important activity of CALM. The emphasis has swung from the planning of cutting areas and the time consuming marking of trees for removal, to a greater concentration on the environmental aspects associated with logging, and a much more intensive system of log utilisation standards.

The Government's "Timber Strategy" document commits CALM to eventually controlling all timber harvesting operations on State forests using contractors. This function will be vital to the success of that strategy, although in the terminology of this submission most of these resources will then be devoted to Commercial Timber Operations.

(v) Methods and Procedures

The methods and procedures used for the two major elements of this function can be summarised as follows:

(a) Control and regulation of timber industry operations.

The field operations are undertaken by CALM salaried staff, and include:

- demarcation of logging coupe boundaries and dieback disease boundaries from maps and aerial photographs
- demarcation of road and stream reserves to remain unlogged
- selection of road access locations with industry
- marking of landings near roads for log extraction to road trucks, and ensuring the necessary dieback hygiene requirements are adhered to
- monitoring of disease hygiene measures
 prescribed for industry (eg. vehicle
 washdowns, etc)
- marking of seed trees to be retained (in the karri forest - done after seed sampling to ensure there is a seed crop), and marking of trees or groups of trees for retention and protection during jarrah thinning operations
- control of utilisation standards, and marking of fallen logs which have been left by industry (this is the activity where industry "self regulation" could reduce CALM's workload, and allow staff to spend more time on environmental management)
- spot checks of log measuring books on sawmill landings (which are the basis of royalty payments) to ensure all logs being brought to the mill are being accounted for.

These operations are all carefully prescribed for each logging coupe, and are supported by a series of operational manuals to provide Departmental consistency in disease hygiene, log utilisation, environmental management and silviculture (forest stand management) procedures.

They are also supported by an inventory service (described in Section 4.27). This provides forest resource information at various levels for planning of operations, and the necessary maps for proper identification and separate management of forest areas free of, and infected with, the dieback disease.

(b) Control and regulation of timber industry safety standards.

These activities are undertaken by 3 T.I.R. Act Inspectors whose responsibility is to ensure safety standards are maintained throughout the industry, and to investigate serious accidents or alleged breaches of the Act.

The timber industry is generally very supportive of improved safety standards, and has made large gains in this area in the past 20 years. The Inspectors operate mainly through a system of on-site inspections of sawmills and field operations.

(vi) Contribution by Other Organisations

Apart from the contribution by the timber industry through the internal management processes controlling their own activities, there are no significant contributions to this function from outside CALM.

(vii) Performance of Similar Functions

Several government agencies have an industry control and regulatory function. These include the Fisheries Department which regulates commercial fishing, and the Mines Department which regulates the mining industry.

Each of these functions has many similarities to CALM's control of the timber industry, including a large degree of cooperation and internal control by the private companies involved. However no other government agency has any direct role with the timber industry, and there are many activities within this function that relate either to environmental or silvicultural management where only CALM has the expertise to undertake the activity.

(viii) Comparison with Other States

The agencies within Australia that are responsible for forest management all have a similar function for regulation and control of the timber industry operating on native forests. The management techniques are all very similar, and the general trends described earlier for Western Australia (ie. increasing utilisation standards, etc) are in evidence Australia-wide.

In respect of the long term planning for the timber industry in native forests the Government's Timber Strategy document is a major initiative. This initiative has a parallel only in Victoria, and in both cases the same major issues of licences rather than permits, guarantees of supply and improving revenue returns to the Government are addressed.

In all cases the management of this function in the forest appears to be similar to CALM in that the timber harvesting operations affect many vegetation and land values, which means that the management activities must be capable of integrating many land management functions.

(ix) Service to Other Government Organisations

There are no significant services to other Government organisations provided through this function.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

		Human (F	TE)		Financia]	l (\$)
CALM DIVISION	Level 1-4	Level 5+	Wages	Total		
Operations	37.13	3.23	4.57	44.93	1,006,141	1,989,482
Services	9.25	2.0	0	11.25	221,616	221,616
Admin. and Finance	e 0	0	0	0	0	0
Forest Resources	17.0	3.5	0	20.5	509,600	670,300
Policy Services	0	0.79	0	0.79	46,504	48,385
Research	0	0	0	0	0	0
Overheads	0	0	0	0	0	Ö

CALM Total 63.38 9.52 4.57 77.47 1,783,861 2,929,783
The resources allocated to this function represent
3.59% of total direct CALM expenditure and 5.38% of total FTEs.

(b) Following Allocation of Resources in Services.

		· · · · · · · · · · · · · · · · · · ·			
	Human		Fina	ncial	
	FTE	% of total	Total	<pre>% of total</pre>	
		in org. unit		in org. unit	
Operations	64.68	7.1	2,714,468	7.7	
Services	13.45	11.5	329,714	5.8	
Admin. and Finance	11.09	8.86	523,538	8.7	
Forest Resources	32.23	34.86	1,134,647	9.0	
Policy Services	4.0	8.16	158,700	8.2	
Research	0	0	0	0	
Overheads	0	0	348,927	2.3	
CALM Total	125.45	8.7	5,209,994	6.4	

The resources in services allocated to this function came largely from pro rata allocation of services across functions within District cost centres, and the costs of revenue collection allocated by Finance Branch.

(xi) Revenue

Substantial revenue accrued to the Department in 1986/87 as a result of this function:

Sawlog Royalties	\$11,929,097
Chip Log Royalties	4,491,547
Sandalwood	2,853,553
Other Timber Royalty	506,330
Total	\$19,780,527

The Government's "Timber Strategy" document has developed a mechanism for establishing target royalties for the various sawlog species and products. This mechanism gives a clear indication to industry of both the target royalty adopted for various species, and also the path that will be taken to achieve these royalties. It will also allow the Department to accrue much larger revenues from timber production in the future, and is a key feature in CALM's goal of becoming self funding in the 1990s.

In addition to the direct expenditure on this function, bulk of the expenditure on eucalypt forest regeneration and timber growing is also a cost against timber production (with the exception of reforestation of water catchment areas for WAWA). The expenditures for forest establishment and tending in 1986/87 will not provide a direct cash flow for many years (in the case of karri the first thinning for small chipwood will be at about age 15 years), but they are of vital importance to the future viability of the timber industry.

The estimated net present value of the eucalypt forest zoned for timber production is approximately \$1.3 BILLION (from CALM Economics Branch), and the eucalypt forest regeneration and timber growing activities described in Section 3.8 contribute significantly to the maintenance of this asset.

(xii) Justification

The Government has a complex strategy for the operation of a viable timber industry on State forests. Part of this strategy relates to the economic returns from timber harvesting, and ensuring that the returns cover the State's costs for both growing and managing the forests. The data in paragraph (xi) shows there is a substantial direct return to the State from this operation, before the indirect benefits of employment and economic multiplier factors are accounted for (in the timber industry the employment multiplier is 2.22 indirect jobs for each direct job which effectively means that about 5,000 jobs rely on the hardwood timber industry before accounting for the 5,000 people involved in wood products processing, ie. furniture, etc).

However another important part of the timber production strategy from State forests is the protection of the environmental values of the forests (eg. soils, water, wildlife, amenity, etc) at all appropriate stages of the logging and post-logging phases.

If CALM did not carry out this Industry Control function, and the timber industry were to continue, the result would be a severe degradation of forest and environmental values. There would in all probability also be a decline in log utilisation standards, and the log yield from the forests could not be planned or regulated properly.

CALM is the only government agency technically skilled to manage this function, and is committed to improving standards, and financial returns even further in the future.

(xiii) Previous Reviews

The Government's strategy document "Timber Production in Western Australia" published in 1987 was the result of a far reaching review of all aspects of this function. In particular the strategy now in place will improve financial returns to the State from timber harvesting on public land, and will lead to a more secure resource base for industry who will from 1988 operate on a mixture of long term log supply contracts, and supplies obtained from auctions of logs from State lands.

The 1986 CALM "internal functional review" addressed this function and led to an increase in the use of self regulation for the timber industry.

3.7 COMMERCIAL TIMBER OPERATIONS

(i) Statement of Function

In addition to the control and regulation of the timber industry (Section 3.6), and the establishment and tending of eucalypt and pine forests (Sections 3.8 and 3.9), CALM has a separate function of commercial timber operations. This function involves CALM contracting to supply customers with pine and eucalypt logs for various products from forests on public land, in return for contract payments which cover costs plus provide a small profit margin on the actual operation.

The commercial timber operations are unlike any other CALM function in that they are effectively a cash flow business, which is run with a separate accounting system within CALM.

The bulk of the in-forest work (eg. harvesting operations, log haulage, road construction and maintenance) is in turn done by contractors to CALM who are employed through public tender. The major direct CALM input is to the supervision and management of the operations.

Whilst the logging and timber sales contracts are run as commercial operations there are other benefits to CALM besides the generation of income. Formal written contracts for each specific facet of the work allow CALM extremely tight control of the environmental protection, fire management and utilisation aspects of timber harvesting. None of these facets contributes revenue, but allows for high standards of forest and land management to be associated with the operations.

The activities in this function will increase markedly in the next 12 months or so as more sawlog clients enter into contracts for log supply with CALM.

(ii) Contribution Towards Objectives

Commercial timber operations are undertaken to maximise the utilisation of timber and financial returns to the Government, and to ensure adequate control over harvesting operations. Hence they make a substantial contribution to the PRODUCTION and MANAGEMENT objectives.

This function will also contribute significantly to CALM's goal of self funding by 1993/94, particularly in the light of the increase in this activity foreshadowed by the document "Timber Production in Western Australia".

(iii) Relevance to Government Policies

Government has directed that there will be a viable timber industry on public forested lands in Western Australia. However the Government also wishes all resource harvesting operations on public land to proceed without deleterious effects on the forest environment.

The commercial timber operations function, because of its reliance on the use of contracts (through public tender) is an excellent mechanism for achieving control of forest harvesting operations. It also has the potential to generate large revenues, and allows direction of the timber resource into high value end-products. This last point is particularly important because where CALM is the log supplier it is not tied to one particular client. Hence logs can be sold to any client under contract where the highest price can be obtained for the particular product.

Hence this function not only acts to ensure protection of the environment, but also produces revenue for the State and ensures the maximum utilisation of each log to its highest value product. Each of these aspects of the function is complementary to the Government objectives defined in the "Timber Production in Western Australia" document.

(iv) Background

Commercial operations, in several forms have existed in CALM and the Forests Department for many years.

Until the late 1970s the Forests Department had several commercial activities, including logging operations in pine and eucalypt forests using Departmental staff, a large hardwood sawmill, and several small pine sawmills. Each of these activities at some stage was commenced in order to support a new industry initiative. By the late 1970s the initial need had been superceded and the operations were generally sold off by tender, or simply closed and the resources reallocated.

The early attempts in the 1970s to establish a comprehensive pine harvesting system (using much different machinery and techniques to the eucalypt harvesting systems) for the large areas of pine forests soon to become available for logging were not overly successful. The private companies involved were generally small and by themselves could not supply the wide range of products required by clients in the future.

If the transfer of emphasis in the timber industry from eucalypt to pine forests was to be successful then harvesting techniques and product availability had to be appropriate to market demands, and cost effective. This situation led to the Forests Department undertaking to supply logs from public pine forests to all clients at prices set by public tender. This has now become the Department's principal commercial operation.

The Department in taking on this responsibility then advertised a large tender for most pine logging activities in State forests. This led to private companies having the confidence to invest in the pine industry, and hence equipping the operations with modern harvesting machinery able to produce high log volumes cost effectively. The Department maintained some small logging operations of its own to harvest areas too small for the large contract.

At the same time the Department tendered for the sale of the pine logs resulting from these logging operations, and many existing and new clients won tenders through this process. This had the effect of allowing logs in the forest to be directed to clients who had the immediate demand, and also to the product where highest value would be gained for a particular log.

Logging contracts are written so that the price of logs sold by public tender includes all harvesting, roading, supervision and planning costs for the Department, plus a small profit margin on the operation.

In the late 1970s the thinning of even aged karri regrowth also became a commercial possibility, and the Department established a commercial harvesting and consequent log sales operation in these stands. In more recent years other eucalypt logging operations have been placed on a commercial footing (where they do not interact with existing permit or licence areas), and in 1986/87 revenue from eucalypt commercial logging was approximately the same as for the pine operations.

At the time of the formation of CALM in early 1985 the Government also created a Timber Bureau (attached to the Department of Premier and Cabinet) which amongst other activities was given responsibility for the coordination of, and policy development for the State's commercial timber operations. This arrangement lasted until late 1986, when the function was transferred back to CALM.

One aspect of this situation that has created some concern for CALM is that until recently sawlog royalties (accounted for in Section 3.8) have been assumed to include some of the costs of management planning and supervision for timber harvesting operations.

The "Timber Strategy" document has foreshadowed a move away from this situation. All sawlog clients will eventually purchase logs under contract of sale, included in which is an "in-forest" cost component to account for these charges.

However in the interim significant revenues for cost recoupment on timber harvesting operations are included in timber royalties (and cannot be separated). As more log sales contracts are signed the revenues generated from CALM's commercial timber operations will more accurately reflect the level of resources required for its management.

In future years the eucalypt commercial logging operations will become even more important as the Government (in the "Timber Strategy") has committed CALM to eventually undertaking all logging operations through contracts. This will ensure the most appropriate use is made of all logs, and that environmental protection requirements for harvesting operations are to the standards required.

(v) Methods and Procedures

(a) Forest Operations.

The forest operations are conducted in a very similar fashion to the industry control function described in section 3.6.

However there is a greater emphasis on CALM determining the destination of log products, because the log buyers are purchasing from CALM. In addition all of the constraints and conditions are in a contract document which generally makes dispute resolution easier.

(b) Contract Preparation and Awarding.

The Forest Resources Division prepare and advertise all logging contracts (and contracts of sale for logs) after consultation with the Operations Division staff involved. The contracts follow a standard pro forma (developed by the Crown Law Department), and are all tendered publicly in accord with Government tender policies.

Many of the contracts foreshadowed in the "Timber Strategy" for the eucalypt timber industry recognise the current distribution of sawmills and the structure of the industry. To avoid potentially massive social dislocation existing sawmill operators have been guaranteed a certain proportion of their current log intake for several years, and the remaining log supplies will be publicly tendered. In this situation CALM, through the Forest Resource Division, is negotiating with millers and logging contractors on the Government's behalf, within the constraints of the "Timber Strategy".

The contracts all carry an overhead component for CALM management costs, and a small profit margin. This is calculated from time to time (and specified in contracts) by Forest Resources Division and Economics Branch.

(vi) Contribution by Other Organisations

There are no significant contributions by other organisations to this function.

(vii) Performance of Similar Functions

Many State Government agencies have similar commercial operations, ranging from the major commercial operations such as SECWA and WAWA, to much smaller agencies such as the Herd Improvement Service. However there are few agencies funded mainly from CRF that have major commercial activities, and of these none has a function similar to the commercial timber operations of CALM.

CALM is the only agency with the range of technical skills and expertise, and the wide geographic spread of resources that are required to undertake this function.

(viii) Comparison with Other States

Most forest agencies in Australia operate some commercial operations, principally in softwood forests. The greatest complexity of commercial operations is found in the South Australian Woods and Forests Department who not only operate harvesting operations (through contracts similar to CALM), but also are intensively involved with timber processing and marketing to a much larger degree than any other agency. This situation arises because South Australia has very few remaining native timber production forests, and have since the early 1900s been developing a pine forest resource on which to base an industry.

Agencies in other States all maintain commercial logging operations, although the scale of these operations varies widely. Once the Government's Timber Strategy is fully implemented CALM will be involved with commercial operations (logging by contractors in pine and native forests) to a large extent than most like agencies, and is currently developing accounting and financial systems, and management procedures to deal with this expansion.

(ix) Service to Other Government Organisations

Some government agencies are supplied indirectly with log products from CALM's commercial operations. These include the MRD (bridge timbers), SECWA (transmission poles), and WAWA (large section timbers for several purposes), who all pay commercial rates for this timber.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

		Human (F	TE)		Financia:	1 (\$)
CALM DIVISION	Level 1-4	Level 5+	Wages	Total	Sals/Wages	Total
Operations	7.68	1.15	7.85	16.68	340,594	1,322,911
Services	1.0	0	0	1.0	26,000	26,000
Admin. and Finance	e 0	0	0	0	0	0
Forest Resources	6.5	3.5	0	10.0	294,400	7,308,754
Policy Services	0	0.84	0	0.84	43,387	45,268
Research	0	0	0	0	0	0
Overheads	0	0	0	0	0	0
CALM Total	15.18	5.49	7.85	28.52	704,381	(1) 8,702,933

(1) includes gross expenditure on contractor payments which is returned through revenue (see paragraph xi).

The resources allocated to this function represent 10.68% of total direct CALM expenditure, and 1.98% of total FTEs.

(b) Following Allocation of Resources in Services.

	_	Human	Financial		
	FTE	% of total	Total	<pre>% of total</pre>	
		in org. unit		in org. unit	
Operations	24.45	2.7	1,515,681	4.28	
Services	3.16	2.7	196,200	3.42	
Admin. and Finance	5.71	4.6	227,754	3.77	
Forest Resources	10.70	11.6	7,237,664	59.22	
Policy Services	2.01	4.1	122,916	6.4	
Research	0	0	Ó	0	
Overheads	0	0	311,234	2.09	
CALM Total	46.03	3.2	9,574,034	11.74	

There were few major contributions from the services to this function because most of the expenditure involved was directly allocated to the function in the first instance. However mapping was a significant support service, as were insurance overheads.

(xi) Revenue

The commercial timber operations raised the following revenue in 1986/87:

Hardwood Logging Softwood Logging Timber Inspection	Fees	\$3,438,108 \$3,767,249 \$ 156,335
	Total	\$7,361,692

This was the first full year of the operation of this function within CALM, and also does not account for the future impact of the "Timber Strategy" which will have a major impact on CALM's operations in the future. In 1987/88 the projected revenues and direct expenditures on CALM's commercial operations are expected to be as follows:

Hardwood Softwood		Revenue \$4,990,914 \$3,558,893	Expenditure \$5,047,502 \$3,379,124
	Total	\$8,549,807	\$8,426,626

The projections for 1987/88 show a small direct profit margin on these operations, although this will again show a deficit when the salary and other supervision costs are accounted for. However, as explained in paragraph (iv), the revenue gained to cover these costs previously been built into the royalties component of timber harvesting operations, and cannot be easily The "Timber Strategy" separated. commits CALM to remedying this problem, and 1988/89 should dramatic improvement in revenues as further log sales contracts are signed. This is explained in more detail in paragraph (xii).

(xii) Justification

The commercial timber operations function has developed for two reasons. Firstly there was in the past a need to assist the development of new industries (which has now largely passed), and secondly there is a need for CALM to control of the in-forest operations in both pine and eucalypt forests to ensure environmental benefits.

The first full year of commercial timber operations within CALM was 1986/87, and the lack of an appropriate accounting base for the commercial operations (particularly to include all of the indirect costs such as salaries and support staff) was identified as a major concern. As mentioned previously this had several ramifications, perhaps the most important of which was the inclusion in timber royalties of a significant salary recoup for supervision.

Strategy" approved by Government has The "Timber committed CALM to a much wider role in commercial timber operations, both through contracts of sale for logs to sawmills, and also the management of loggting operations on public land (through contractors). This will have major benefits to the management of the forest environment (because the logging contracts can specify exactly the logging procedures to be followed), and also the proportion of timber put to high value end uses will increase because CALM is able to decide which client will receive a particular log product. direct contrast to the previously existing eucalypt forest logging system, where most logging was done by sawmill company staff, and generally the logs generated (regardless of quality or suitability) all had to be processed by that company.

When the "Timber Strategy" is fully operational (in 1989/90) the two types of contracts in existence, and their revenue and other implications will be as follows:

Logging Contracts:

Advertised and awarded through public tender.

Generally specific to a Forest region (except for pine logging).

Allow for a mixture of log products to be harvested, and contain a range of cartage rates for different distances.

Arranged so that log sales clients will know the logging contract through which they will be supplied, and its costs.

Will carry an administration fee (percentage basis) to pay for contract management.

Log Sales Contracts:

In accordance with the "Timber Strategy" some will be negotiated with existing companies, and others will be advertised publicly.

Will contain the following cost components royalty (for native forests) or stumpage (the cost
of growing pine or regrowth forests); the logging
and cartage prices referred to above; an in-forest
cost component to cover CALM's management and
supervision costs (this is the cost that is in
part presently covered by royalty, and hence leads
to the current apparent deficit in this function);
and a roading cost to cover road construction and
maintenance by CALM (generally again through
contractors).

Will contain a small profit margin on these cost components (except royalty or stumpage which already include a "profit" for the State).

CALM believes that the timber supply and environmental management system foreshadowed by the "Timber Strategy" will become a very effective mechanism for protecting the forest environment, and supporting a vigorous timber industry whilst earning appropriate revenues to Western Australia. The shortcomings of the existing accounting procedures have been recognised (for example CALM now has an internal salary allocation system), and addressed in the "Timber Strategy".

When fully operational in 1989/90 the operation will return a net revenue gain to Government, and ensure that log products are used for the highest value end-products possible. CALM also recognises the need to keep internal costs to a minimum so that log sales contracts overheads remain efficient.

(xiii) Previous Reviews

After this function was returned to CALM in 1986 a major review of the entire timber harvesting and processing industry operating on CALM land resulted in the Government's "Timber Production in Western Australia" document. This review will have major impact on many of CALM's functions as detailed in this submission. As a result of it many internal reviews of accounting procedures and systems, salary allocation and the costs of support services are being undertaken with a view to reducing the resources (and hence costs) devoted to this function.

3.8 EUCALYPT FOREST REGENERATION AND TIMBER GROWING

(i) Statement of Function

This function has two principal activities within it, both of which occur principally in forests zoned for timber production:

(a) forest regeneration
this activity relates to reforestation activities
after logging in the karri and jarrah forests to
ensure the establishment of new forests. The
Department also operates two large nurseries to
provide the necessary seedlings for this activity
(at Manjimup and Narrogin).

Also included within this activity are many smaller areas of forest regeneration (both native and exotic eucalypt species) established for the rehabilitation of mined areas and other problem sites. The Department also reforests cleared areas on harnessed water catchments for WAWA, but resources involved listed are under Environmental Protection.

In 1987 the Department launched a sharefarming scheme based on growing <u>E. globulus</u> (blue gums) on private land for woodchip production, and this will be an expanding activity.

(b) forest tending
most of the forest tending is in the jarrah
forests and involves tops disposal (removing
fallen tree tops resulting from logging operations
away from retained trees to prevent damage from
subsequent fires), the removal of host species for
the dieback fungus (mainly Banksia grandis), the
fertilising of specific areas (generally exotic
eucalypts to promote growth), and thinning.

Thinning is the major forest tending operation in both native forests and exotic plantations. It provides an intermediate yield of certain products, and allows the best trees in the stand to develop maximum sawlog volume before final harvesting. However this activity generally generates revenue to the State as it is done through logging operations paid for by the log purchasers, who also pay a royalty for the products removed.

Related to the thinning of forests are the activities of the Wood Utilisation Research Centre (WURC) at Harvey which is primarily examining seasoning techniques for young eucalypt and pine logs in a programme aimed at increasing future (high value) sawlog yields from thinnings.

The major resources devoted to this function come from within Operations Division, although significant planning and technical support is provided by Forest Resources Division.

The function is closely related to the similar function in pine forests (Section 3.9) and also is of critical importance to the protection of water quality and conservation values.

(ii) Contribution Towards Objectives

The function contributes significantly to the MANAGEMENT, PRODUCTION and CONSERVATION objectives of CALM.

For the future well being of the State's large timber industry, as well as the protection of water catchments and habitat values on State forests it is essential that CALM maintain high standards in forest regeneration and timber growing. Not to do this would lead very quickly to large scale degradation of forests, and a significant negative impact on the future of the timber industry and many rural communities in Western Australia.

In a more general sense the function is providing for the future revenue base of the Department, which is important in maintaining the level of self funding CALM will achieve in the 1990s. The forest nurseries (particularly Narrogin and Broome) also fulfill an important activity in raising tree and shrub seedlings for the regeneration of degraded rural areas in Western Australia.

(iii) Relevance to Government Policies

Government policies dictate that every area of disturbance on forest lands is to be appropriately rehabilitated and reforested. The major disturbances of this kind are mining (which alters ecosystems and landscapes and requires extensive rehabilitation as well as reforestation), and timber harvesting (which has a major short term effect on ecosystems and generally requires only reforestation).

The WURC was established as a result of Government and industry initiatives to add value to the sawn timber products from Western Australia.

The activities within this CALM function are all directed towards restoring ecosystems and production capacity on forested lands as quickly and efficiently as possible, and hence they are directly relevant to Government policy.

(iv) Background

Eucalypt forest regeneration and timber growing is, together with the similar function in pine forests, the largest activity in CALM at present. This stems from the historical role of the Forests Department (as the largest of the amalgamated agencies), and Government policy to maintain Western Australia's native forests for their conservation, recreation, protection, social and production values into the future.

The activities within this function are technically described as silviculture, which is the establishment and tending of forests to meet specific management objectives. Silviculture is a process that spans the life of a forest ecosystem from planting or seeding, to tending and thinning, and finally to timber harvesting (or any other designated use) and necessary regeneration.

In Western Australia's eucalypt forests the practice and development of silviculture has been ongoing for over 70 years, and in that time significant advances have been made in the knowledge base and range of operational techniques available to forest managers.

The operations of the Forests Department were initially dominated by the need to manage eucalypt forests for timber production on a sustained yield, and in the short term to cater for the huge demand for timber products that followed the two World Wars. In both of these cases this function was central to the successful implementation of these operations.

Until the 1960s most of the work done in this area by the Forests Department was for forest tending, and enhancing the growth of the jarrah forest. To that time there had been little clearing of forest for mining, and clear felling for timber harvesting in the karri forest was on a small scale, so relatively few resources were required for forest regeneration.

From the late 1960s the clearing for mining, and clear felling in the karri forest increased significantly. This has led to the devotion of increased resources to forest establishment (both for forest operations and nurseries), although in general terms these resources have come from the forest tending activities (such as non commercial thinning in the jarrah forest) which have been substantially downgraded in the past 20 years.

In the early phases of these new operations there was a substantial research input into developing effective techniques for forest regeneration, particularly the rehabilitation of bauxite mining sites (this was to a large extent funded by the mining companies). The research needed to underpin the regeneration activities following timber harvesting was also substantial, and has made a significant contribution to the development of proven and cost effective regeneration techniques.

Industry has made a an input to funding this function in the past 20 years. This has been mainly indirect through the conduct of thinning operations to improve forest growth, but also by direct funding of mining and harvesting rehabilitation research and operations.

With the formation of CALM the sources of advice to managers in this area were consolidated by the formation of a small Silviculture Branch. This allows the available information on silviculture matters to be easily disseminated to managers, and also provides a focus for preparing forest management prescriptions and assisting with the implementation of research results.

The WURC was established in 1986 (based at an existing CALM research mill and kiln), and is being funded for four years by State and Commonwealth Governments and industry to assist in developing new sawing and seasoning techniques for young eucalypt and pine timber.

(v) Methods and Procedures

There are many different procedures used in the conduct of this function which are summarised below:

(a) Forest establishment

- rehabilitation after mining operations involves generally earthmoving works to restore drainage lines and contours, the breaking down of compacted surface areas (usually by sub soil ripping), planting of tree seedlings and spreading of scrub species seed, and then fertilising to promote growth.
- forests after cutting regeneration of karri the use of high intensity fuel involves reduction burns in the logging areas to remove the bulk of the logging debris, and create ashbeds which are suitable for rapid tree growth. Following this burn the area is regenerated either by seed fall stimulated by from seed trees (high quality the burn vigorous trees which are removed after the burn to allow the resulting regeneration to If no seed is available in the prosper). trees then planting of tree seedlings, or seeding the area with karri seed from other sources (by hand or air) is conducted.

These operations are supported by a large forest nursery at Manjimup which raises these seedlings under conditions of strict hygiene (to prevent diseases being transported to the forest), and a seed collection program from logging areas, and cultivated seed orchards.

- Appendix 28 details the progressive karri forest regeneration program managed by CALM.
- regeneration of of jarrah forests after logging, involving the use of a range of cutting and protection prescriptions
- establishment of forests on cleared land for water catchment protection or timber production purposes is essentially similar to the first two operations with pasture control being done by chemical means.

(b) Forest tending

- thinning of forests is now almost solely done by timber harvesting operations, particularly in the karri forest. Some non commercial thinning is done around bauxite mining areas as part of the disease management program, and this is done manually with chainsaws, or by poisoning unwanted trees.
- tops disposal (the operation of removing logging debris from around the base of retained trees after a thinning operation) to protect future sawlog trees from fire damage is done manually using chainsaws.

(c) Other activities

- apart from the Manjimup nursery which raises large Departmental and other agency seedling requirements, there are two other eucalypt The nursery at Broome raises nurseries. seedlings for the north west, while Narrogin nursery raises seedlings for wheatbelt and Great Southern (and some seedlings for catchment reforestation plantings).
- seed stores are maintained at Como and Manjimup, and are supplied by Departmental and private collection. Some sales to the public are made, but the majority of the seed is used internally.
- the Department has made some progress towards developing assessment procedures and advisory services to owners of native forest wishing to harvest timber. This could lead to CALM undertaking logging and regeneration under contract on these lands.
- a rural tree advisory service is maintained, and the Department still receives many requests for information on garden trees from the metropolitan area.

CALM has established and maintains a network of inland arboreta.

(vi) Contribution by other Organisations

There are no significant contributions to this function (apart from to the WURC) by any other agencies or organisations. There are several other agencies who provide rural tree advice (eg. Greening Australia, Department of Agriculture), and private reafforestation schemes for cleared land are also available.

(vii) Performance of Similar Functions

No other government agency performs a function of this kind, and only CALM has the range of technical expertise required to manage it.

(viii) Comparison with Other States

All forest agencies in Australia manage large tracts of native (generally eucalypt) forests for a wide range of land uses. One of the principal land uses is still timbe harvesting, but as in Western Australia wildlife conservation, water production and recreation are major land uses of forests which are also generally compatible with each other.

Whilst the jarrah and karri forest ecosystems are unique to Western Australia, there are direct parallels in the native forests of other States. The silvicultural systems in use throughout Australia are generally consistent between forest types (ie. clear felling for harvesting and regeneration is an accepted technique in tall wet sclerophyll forests like karri).

The techniques used in other States for the regeneration and growing of native forests are generally similar to those in use by CALM, with an emphasis on establishment rather than tending. The establishment techniques used around Australia are very consistent, and all agencies maintain their own forest nurseries.

(ix) Service to Other Government Organisations

The Department reforests cleared land in certain harnessed catchments for the Water Authority on a cost recoup basis. The Department also manages these properties for WAWA in regard to fire protection and forest management.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

CALM DIVISION	Level 1-4	Human (Level 5	_ ·- · · · •	s Total	Financia Sals/Wage	
Operations Services	15.28 0	2.15 0	86.51	103.94	1,977,862	3,588,186
Admin. and Finance	=	Ŏ	Ö	Ö	ő	ŏ
Forest Resources	9.5	5.75	0.1	15.35	604,458	2,722,006
Policy Services	0	0.19	0	0.19	11,521	11,521
Research	10.37	2.14	1.4	13.91	373,242	439,477
Overheads	0	0	0	0	0	1,009,685
CALM Total	35.15	10.23	88.01	133.39	2,967,083	7,770,875

(1) as explained in Appendix 38 these overheads are mainly loan servicing costs.

The resources allocated to this function represent 9.54% of total direct CALM expenditure and 9.26% of total FTEs (before allocation of resources in services).

(b) Following Allocation of Resources in Services.

(2) 101101119	1111000	Ton or monogroup	THE OCTATOOD.		
_		Human	Financial		
	FTE	<pre>% of total</pre>	Total	% of total	
		in org. unit		in org. unit	
Operations	154.53	17.1	5,512,843	15.6	
Services	0.5	0.4	32,834	0.6	
Admin. and Finance	14.63	11.7	797 , 379	13.2	
Forest Resources	17.83	19.3	2,796,426	22.9	
Policy Services	5.62	11.5	194,800	10.1	
Research	16.73	11.1	535,786	10.1	
Overheads	0	0	1,469,538	9.8	
CALM Total	209.84	14.6	11,339,606	13.9	

The major allocation of resources from services to this function came from pro rata allocations of District cost centres across their functions, and the contribution of central support services to Departmental functions.

(xi) Revenue

In 1986/87 the following revenue accrued to the Department directly as a result of this function:

Seed and Tree Sales	\$533,544
WAWA/SECWA Recoups for Catchment	
reforestation	\$229,517
Alcoa (FIRS) treatment recoup	\$269,535
Hardwood Stumpage	\$910,426
Wood Utilisation (1)	•
Research Centre Grant	\$513,795
	02 456 017
	\$2,456,817

(1) the grant for the WURC was actually \$1.6M but this will be spent over four years.

The function also contributes significantly to the future revenue from timber harvesting (principally through the regeneration of new forests). As new regrowth forests become available for logging this revenue will increase significantly (through hardwood stumpage).

In addition to this there are significant benefits to the State in terms of maintenance of water quality, and the manipulation of water quantities from forested land. None of these benefits flow directly to CALM but the regeneration of forests in particular is central to the proper management of the State's water catchment areas.

(xii) Justification

The Government has determined that certain areas of State forest will be available for timber production activities. The eucalypt forest regeneration and timber growing function is a vital element of the management of forests for timber harvesting, as it ensures not only the regeneration of future forest crops and associated values, but also the protection of existing timber resources standing in the forest after a thinning operation.

However in addition to its relevance for the maintenance of the timber industry this function performs a vital role in supporting CALM's environmental protection and wildlife conservation functions. Without proper forest regeneration after mining and logging activities there would be an inevitable decline in the standard of water harnessed from catchments, and the quality of wildlife habitats and recreation available on public forest land.

CALM is the only agency with the necessary technical skills and spread of resources to properly manage this function on public land.

In the past the Department has been very successful in minimising the costs of this activity on a Statewide basis through the use of timber harvesting as a thinning strategy (paid for by industry), and in attracting direct funding or resources from the mining and timber industries to regenerate areas damaged by their activities (much of this is not defined in this submission as the resources are in the form of "work in kind" rather than finance).

(xiii) Previous Reviews

There has been an ongoing internal management review of this function which has resulted in operational efficiences and improved nursery management.

Nurseries were identified in the 1986 CALM "internal functional review" as an area in need of rationalisation. Consequently in 1987 the Karratha nursery was closed, and the Hamel nursery is now managed by Greening Australia (as a result of Cabinet approval of a CALM initiative).

3.9 PINE FOREST ESTABLISHMENT AND TENDING

(i) Statement of Function

The State's softwood timber industry is largely dependent upon the pine forests on public land (most of the private pine forests are still too young to contribute large volumes of timber). Because of the large upsurge in pine development activity in the late 1960s (coincidental with the establishment of the Commonwealth's Softwood Forests Agreement loan scheme) many of the State's pine forests are still not yet at maturity, so there is a significant expansion anticipated in the softwood industry in the future.

The pine forest establishment and tending function within CALM is the necessary base for these forest resources and the industry dependent upon them. Each activity within this function is designed to contribute to the more effective growing or tending of these forests, and to allow a consistent stream of resources (without annual highs and lows) to be available to the industry.

The function consists of two general areas of activity:

- (a) forest establishment, which includes the procuration and preparation of land for planting, raising and planting seedlings, and the necessary support operations such as roading and firebreaks. This activity is a once only capital contribution in the initial stages of a pine forest's growth.
- (b) forest tending: these operations are collectively the means by which the forest is tended (by thinning, pruning, fertilising, etc) to produce the necessary volumes and types of log products. The most intensive activity occurs in the first 7 or 8 years of a forest's growth, and from then is concentrated into 2 or 3 thinning operations before forest maturity is reached at about age 30 years.

(ii) Contribution Towards Objectives

The function contributes significantly towards the achievement of the PRODUCTION and MANAGEMENT objectives of CALM. The activities within this function are essential if the State is to continue to provide a high quality softwood resource for industry, in the correct mixture of product types and log volumes.

This function not only contributes to CALM's internal objectives, but also indirectly makes a significant contribution to the Government's decentralisation objectives, through its direct support of a significant rural industry.

(iii) Relevance to Government Policies

In 1987 the Government approved a policy document entitled "Timber Production in Western Australia". This policy commits the State to the continuing provision of a pine forest resource, and the expansion of the milling industry based on it, with consequent benefits to rural and industrial bases of the State.

In order to ensure the continuing supply of high quality pine timber for the various sectors of the timber industry involved it is essential for CALM to continue this function (although the methods may be altered in a continuing search for greater efficiency).

(iv) Background

Experimental planting of pine species in Western Australia began early this century, and expanded in the 1920s and 1930s. However it was not until the late 1960s with the advent of the Softwood Forest Agreement Act (Commonwealth legislation) that pine forests were established on a large scale in this State. The Agreement Act provided loan funds to States for pine establishment and tending, initially at very favourable interest rates (approximately 4% p.a.), but towards the end of the Scheme (1981/82) interest rates were around 16% p.a.

Early pine plantings in Western Australia experimented with a wide range of pine species, and were generally confined to the coastal plain. However as the Forests Department established a management presence throughout the forest areas the range of site types and conditions in which pines were planted increased significantly.

These processes eventually led to the adoption of only two major pine species for Western Australia, Pinus pinaster (maritime pine) which is generally planted on the sandy coastal plain, and Pinus radiata (monterey pine) which is planted in other areas. The P. radiata is a faster growing species on favourable sites, and also tends to be favoured by the marketplace because of its timber qualities, although the significant P. pinaster resource is still a valuable State asset.

In recent years the planting of \underline{P} . $\underline{pinaster}$ has virtually ceased, and \underline{P} . $\underline{radiata}$ plantings have been extended. CALM is also closely studying research results from around the world which indicate that certain new cultivars of pine may be well suited to this State's conditions.

The pine tending techniques will be detailed in paragraph (v) but they have been continually evolving, particularly since the late 1960s, to enable CALM to grow log products that are required by industry.

In particular the costs and efficiency of these operations are continually reviewed, and new methods evaluated to reduce the tending component of final log cost. These tending techniques, because they are concentrated over several years early in the forests' growth and are generally labour intensive, are the major component of the final cost of a pine log.

One factor that affects the tending regimes used, and their final cost, is the need to find markets for small logs produced from first thinnings of the pine forests (at about age 12). Much of this product is now used for particleboard and fencing materials, but as the newly established forests grow into this thinning program, and the significant young privately owned forests (which must be tended in the same manner) also become available existing markets will be inadequate for the supply.

In this case the thinning of young forests can be deferred for a short time, but it must be done eventually because of the need to maximise the final high value sawlog crop.

Until 1984 the public pine forests had been established either on marginal (generally very steep) agricultural land in the South West which was purchased by the Department at low prices, or on State forest where low productivity or dieback infected native forests had been cleared for the purpose. In 1983 the Government decided to discontinue clearing of native forests for pine development, at the same time as the previously large bank of relatively cheap agricultural land had virtually disappeared.

The Government can no longer fund large purchases of (expensive) private property for pine development, and there is significant opposition in some rural communities to this practice as well. Because the cost of land, and servicing this cost, is such a major factor in determining the economic viability of pine forests CALM commenced a Softwood Sharefarming Scheme in 1986. Essentially this Scheme pays landowners a lease fee for their land (in the form of an annuity), and a proportion of revenue generated by the pine forest, with all establishment and tending costs being met by CALM.

The Scheme is based on sound economic analysis, and is now contributing significantly to the development of the State's pine timber resources. There has recently been a decrease in landowner interest in the Scheme due to rising prices for other rural products (particularly wool), but CALM expects the long term viability of the Scheme to be assured. This concept has recently been joined by the Hardwood Sharefarming Scheme discussed in Section 3.8, which using similar techniques aims to expand the State's supply of high quality timber for paper pulp production.

(v) Methods and Procedures

(a) Pine Forest Establishment

- pine seed is produced from Departmental seed orchards in which the trees have been bred to provide the growth characteristics required for this State, and for resistence to the dieback disease. CALM also purchases some seed from other States and overseas.

The seedlings are raised in two forest nurseries (Gnangara and Nannup), although a development plan is being implemented to create one major nursery and close both existing ones.

CALM has also been researching the use of cuttings (which provide superior tree growth), and this may soon become an operational planting technique.

- site preparation involves the removal of existing single shade trees (on what is all generally cleared land), pasture control on planting lines and sub soil ripping if required, and road and firebreak construction.
- planting is done either manually or using a planting machine towed by a tractor, and is still done mainly by CALM staff. However new programs, including the Sharefarming Scheme, are being undertaken generally by contract staff which reduces cost overheads.

On most sites seedlings are fertilised at time of planting.

Appendix 29 details the pine forest establishment on public land from 1976 to 1986.

(b) Pine Forest Tending

fertilising is undertaken according to schedules developed for specific sites by CALM research programs. The fertilising is generally done by broadcast application (aerial or ground based), and most sites receive three separate applications before age 7.

These applications recover economic benefits in terms of the volumes of timber finally grown in the forest.

- pruning is undertaken on most sites (again in accordance with research results) with the objective of maximising the length of high value sawlog (without branch growth) available from each tree. The pruning is done by CALM staff (on wages or piecework) or contractors, and apart from pruning to the highest level (approx. 10 metres high) is generally a manual process using shears and chainsaws.

thinning is again done to a range of schedules which relate to site productivity and drought tolerance. The first thinning is generally non commercial, and hence costly, at about age 5. This reduces forest tree density to an acceptable level for growth into the log production stage, but could be avoided if the initial planting stock were guaranteed higher survival and better growth rates. CALM's research efforts have focused on this and have made large gains in the past few years.

The next two thinnings (at about age 12 and 20) generally produce small sawlogs and and chip logs. As they are timber harvesting operations they are paid for by industry and in addition generate revenue for the State.

The objective of these operations is to maximisee the site productivity by directing growth on the trees that remain to be harvested as the final sawlog crop at age 30 (approximately).

Each of these operations is managed through a comprehensive system of prescriptions and standards related to site type and environment, which ensure consitency throughout the Department. They are recorded and controlled through a "pine operations control system" which allows the history of each specific pine forest area to be recorded, and used for budgeting and planning requirements.

The pine forest function is also supported by an intensive research and economics program which has developed the current series of establishment and tending regimes for pine forests. Whilst the economics work remains a high priority, the pine research work will be reduced over the next few years as much of the base data now exists.

(vi) Contribution by Other Organisations

There are indirect contributions to this function by the timber industry through the funding of commercial thinning operations, and forest agencies (and the C.S.I.R.O.) in other States through the exchange of research and tree breeding information.

(vii) Performance of Similar Functions

No other State Government agency has a similar function, however there are several private companies growing pine forests in the South West.

These resources are being coordinated by CALM through the Government's "Timber Production Strategy" to the extent that they are included in total resource planning for an industry which will still be largely dependent upon public forests for many years to come.

(viii) Comparison to Other States

All of the State forest agencies (except in the Northern Territory) have been developing pine plantations for many years.

This development has all been for the same strategic reason, which is to augment the existing sawmill industry based on native forests so that total timber industry employment, and the resource base can be protected. In all States pine plantation establishment programme was given a major boost in the mid 1960s by the availability of the Commonwealth Softwood Forestry Agreement Act finance.

The management techniques used by all the agencies for pine forest establishment and tending are similar. Hence all agencies face the same problem as CALM with high capital expenditure early in the development phase, whilst the large revenue flows are still about 10 years away. All around Australia it appears that the sawmilling industry on native forest is being gradually replaced by a pine sawmilling and processing industry, so the long term financial viability of the pine forests should be assured.

From the information available it appears that CALM are at least the equal of other agencies in reducing the costs of pine forest development, particularly with the move into Sharefarming to alleviate high initial land costs.

(ix) Service to Other Government Organisations

There are no significant areas of this function that service other government agencies.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

CALM DIVISION	Level 1-4	Human Level		s Total	Financia Sals/Wages	
Operations	15.48	0.77	125.13	141.38	2,909,943	5,520,396
Services	0	0	0	0	0	0
Admin. and Finance	e 0	0	0	0	0	0
Forest Resources	1.5	1.3	0	2.8	97,700	120,200
Policy Services	0	0.78	0	0.78	33,953	35,836
Research	9.55	2.6	5.0	17.15	402,798	529,798
						(1)
Overheads	0	0	0	0	0	7,720,004
CALM Total	26.53	5.45	130.13	162.11	3,444,394	13,926,232

(1) the principal sources for these overheads are loan repayments for land purchase and establishment and tending operations, and the capital costs of land purchase in 1986/87.

The resources allocated to this function represent 17.10% of total direct CALM expenditure and 11.26% of total FTEs.

These high resource allocations have been gradually decreasing since CALM was formed and are all generally funded from capital, and not recurrent funds.

(b) Following Allocation of Resources in Services.

	Human		Financial		
	FTE	<pre>% of total in org. unit</pre>	Total	<pre>% of total in org. unit</pre>	
Operations	191.54	21.2	7,443,113	21.0	
Services	0.72	0.6	48,005	0.8	
			(1)	
Admin. and Finance	18.17	14.6	988,111	16.4	
Forest Resources	5.84	6.3	228,027	1.9	
Policy Services	7.50	15.3	266,848	13.8	
Research	21.44	14.2	688,717	13.1	
Overheads	0	0	8,390,937	56.2	
CALM Total	245.20	17.0	18,053,758	22.1	

(1) the allocation of resources from Admin. and Finance Division has resulted from the general prorata allocation of the central support Branches within that Division across CALM functions.

The resources from services allocated to this function generally come from pro rata distributions of services within District cost centres across their own functions, and the pro rata distribution of central support services across CALM functions.

(xi) Revenue

Significant revenue accrues to CALM as a result of this function. In 1986/87 the stumpage paid to the State for pine logs was \$3,234,856. Stumpage is the price paid by sawmills for pine logs from State forests, and originated in the 1970s from a public tender price for pine sawlogs that reflected growing costs at the time. It is increased as required (with Government approval, and after consultation with industry) to cover the increased costs of growing the forest.

CALM's objective is now to make each forest rotation (about 30 years in the case of <u>P. radiata</u>) financially viable in its own right (including operating charges, capital servicing costs and social benefits). The achievement of net self funding for CALM by 1993/94 will have a major impact on this by reducing the need for borrowed capital funds.

The basis for log pricing, and the various alternatives that exist are detailed in Chapter 8 of the document "Timber Production in Western Australia". This document provides an excellent background reference to the complex issues involved in the pricing of logs from public lands.

The revenue derived from the harvesting of pine forests is at present outweighed by the current costs of growing and tending the forests. However this needs to be considered in context with a number of other factors:

- of \$18,053,758 spent on this function by CALM in 1986/87, over \$6M is for loan repayments to meet past borrowings for this purpose
- the costs to 1986/87 have included the majority of tending costs CALM will incur in growing the presently existing pine forests, as most of these direct capital inputs occur in the first 8 years of the forests' growth. To illustrate this point in 1986 CALM's pine forests had the following age structure:

0-9 years	24,948.1 ha	41.2%
10-19 years	23,251.2 ha	36.8%
20-29 years	8,928.5 ha	14.8%
Over 29 years	4,384.0 ha	7.2%
-	60,511.8 ha	100%

In effect this means that 78% of the pine forests on CALM land are under 20 years of age. They have hence incurred large capital costs, but have contributed insignificant amounts to revenue. The largest amount of revenue from a pine forest accrue through clear felling at the end of the rotation.

- the net present value (discounted to 1986/87) of the pine forests on CALM land is approximately \$150M (CALM Economics Branch), and this asset is increasing in value continually. the softwood sawmilling and processing industries (which are dependent to a large extent on public pine forests) employ over 400 people directly (excluding CALM management staff). With an employer multiplier of 2.22 (some estimates range up to 2.6) this translates to almost 1,000 jobs dependent upon the softwood forests, which is an important contribution to the industrial base of the State.

In addition, as the large areas of pine forest mature in the next 10 years (the first of the Commonwealth Softwood Agreement plantings) the size of the industry will increase markedly. This will be led by the development of two major new sawmills (there is only one at present), and the downstream in forest and processing employment resulting from this.

the pine forests are also making a very valuable contribution to the conservation of the State's native eucalypt forests. The level of log removal from native eucalypt forests has been declining for several years as mature forests are cut, and large areas formerly available for wood production have been reserved for other purposes.

The large areas of karri regeneration in the South West will not make a substantial contribution to the State's sawlog supplies until about 2030, so the pine forests will form the basis of the State's timber industry for much of the next 50 years at least. This means that the total size of the timber industry can be maintained and increased through the use of pine to replace the declining eucalypt supplies in the medium term. Because the pine forests can supply larger log volumes per hectare, over much shorter rotations than eucalypts there is also a net reduction in the area of public land used for timber production.

- CALM is also vigorously examining the costs of all growing and tending operations in pine forests. Examples of this are the introduction of the Sharefarming Scheme (to reduce capital costs for land), and the plan to reduce pine tending costs by 30% in the 3 years from 1987/88.

Whilst the direct revenue to Government from this function is currently much less than the annual expenditure, it is not possible to consider the pine forests in the format of an annual balance sheet until the major areas of pine forest begin to contribute revenue through clearfelling. The stumpage prices paid at that time will be calculated (as described in the "Timber Production in Western Australia" document) to include all growing costs and appropriate profit, whilst also taking account of the social benefits created by the industry.

This will ensure large positive cash flows at that time to Government, which will more than compensate for the negative cash flows being experienced in the forest establishment phase.

(xii) Justification

The Government has approved a "Timber Production Strategy" which establishes a firm commitment to the growing of publicly controlled pine forests in order to provide a wide range of log products to the timber industry, and stable employment opportunities in the South West.

This pine forest establishment and tending function is a vital and necessary precursor to the provision of a high quality log resource for industry, and in this sense needs to be carefully managed and controlled. No other organisation, public or private, has the range of technical skills necessary to successfully accomplish this task, and manage the large areas involved.

However the means through which the function is carried out are by no means inflexible. The effective economic management of the cost inputs to the final log price to clients is of vital importance to the viability of the timber industry, particularly now that Sharefarming has been introduced with a firm schedule of costs and payments.

In the past the Forests Department and CALM have tended to use their own staff for pine forest operations (except for specific operations such as clearing of forests by contractors). There is now an increasing use being made of more flexible contract resources for a wide range of pine operations, and this is contributing towards a Departmental goal to reduce pine tending costs in total by 30% in the three years 1987/88 to 1989/90.

In addition to reducing these direct costs the Department has moved to reduce the land purchase component beyond 1986/87 by the introduction of leasing arrangements. The implications of all these factors have been discussed in greater depth in paragraph (xi).

(xiii) Previous Reviews

There have been many previous reviews of the technical standards maintained within this function, each of which will lead to eventual improvements in the final log quality.

In 1985/86 the costs involved in pine forests were closely examined (this is now an ongoing review), and this led to the many initiatives described above which have (and will continue to) reduced the costs of pine forest establishment and tending.

3.10 LIAISON AND PUBLIC PARTICIPATION

(i) Statement of Function

Liaison and public participation is a process through which interested groups or individuals are consulted and involved with the decision making of a government agency or corporate body.

Participation does not mean the public taking an executive management role or responsibility. Management decisions remain the responsibility of the Department, and political decisions are the perogative of the Government.

Within CALM the Act requires for public participation at two levels:

- (a) the three controlling bodies established by the Act have a wide range of membership backgrounds and knowledge relevant to conservation and land management.
- (b) Sections 53-61 inclusive of the Act describe the requirements for management plans for all land vested in the controlling bodies, and the formal processes of public participation.

In many of the activities CALM undertakes the principles and concepts of public participation are implemented as a prime management strategy of the Department. However the practice of public participation in land management decision making is still relatively new in Australia, and the processes are not yet firmly defined. This means that not only CALM staff, but also the interssted public are still learning how to manage the varied processes and outcomes involved in public participation.

Whilst this interim learning phase is proceeding there will inevitably be expectations made of the system which cannot be met in the short term. CALM's approach is to continue developing its expertise in interactive liaison and participation, and at the same time pass on experience and knowledge to interested groups.

(ii) Contribution Towards Objectives

Public participation is an integral part of planning and management at all levels of CALM, which has the capacity to provide the following benefits:

- a public better informed about land and wildlife management issues
- identification of management alternatives
- better informed decisions with potentially wider public acceptance
- availability of additional resources of information, ideas, labour and finance
- an improved relationship between the Department and the community

These benefits assist in the achievement of all departmental objectives, and hence public participation is a supporting theme for all of CALM's corporate objectives. The process ensures that each of the objectives and resulting programmes can be more completely met.

(iii) Relevance to Government Policies

The Government is firmly committed to the concept of community involvement in a wide range of public sector decisions. CALM is at the forefront of developing effective public participation procedures amongst the resource management agencies in Western Australia, and these activities are designed to assist in achieving the Government's wider objectives in public policy formulation.

(iv) Background

Before the formation of CALM in 1985 public participation was not a statutory requirement for any of the three amalgamated agencies. However all three had made some attempts to involve various sections of the public in their decision making processes, mainly through consultation by local staff.

These attempts at public participation were generally informal and tended to be selective in nature, hence they were of limited value in discerning the wider community views on particular issues. The processes were also not well developed which meant the quality of the input received was not always in an appropriate format to be used in management decision making.

Since the formation of CALM there has been a consistent effort at all levels of the Department to enhance the processes for public participation, to make it not only useful for decision making, but also a valuable experience for the individuals or groups involved. This effort has required the redirection of extensive resources within CALM, which is a trend the Department foresees continuing into the future.

(v) Methods and Procedures

CALM promotes public participation and liaison through a wide range of techniques and strategies. These are continually being reviewed for effectiveness, and there is also a strong innovation in new techniques to improve communication and participation. To date the major methods used to enhance public participation have included:

- (a) the formal policy level processes through the three controlling bodies
- (b) the establishment of consultative and advisory committees where appropriate, both for specific input to management plans and ongoing liaison
- (c) encouraging the formation of friends groups and voluntary assistance programmes
- (d) ongoing training for CALM staff in communication and interpersonal skills
- (e) the convening of workshops open to the public to establish major issues early in the management planning process
- (f) development of guidelines for people preparing submissions to management plans
- (g) ongoing consultation at formal and informal levels with interest groups during the planning process (generally at a local level)
- (h) the establishment and resourcing of office reception areas with a wide range of information for interested people
- (i) the ready availability of planning and information documents from CALM.

The specific planning procedures are described in Section 3.13.

(vi) Contribution by Other Organisations

Other government and private organisations contribute to the public participation process in their own sphere of expertise. The management and support of the process is generally a specific responsibility of CALM, although on occasions joint public seminars are conducted with other agencies for particular topics.

(vii) Performance of Similar Functions

Many government agencies, particularly in the social and health services fields, are intensively involved in public participation processes. By their nature of being subject specific each agency needs to maintain their own processes, although information on methods and procedures should be made freely available.

(viii) Comparison with Other States

All like agencies in other States register a commitment to some form of community or public involvement in the management of public lands they control. This involvement ranges from informal liaison and discussions with interest groups (for most agencies) to the complex set of community based land management committees (similar to CALM's advisory committees) that support the Victorian based Department of Conservation, Forests and Lands.

However it does not appear that any like agency has the strong legislative commitment to public participation that the CALM Act prescribes. This has meant that CALM has had to develop formal processes for allowing wider public participation in land management, which is more complex and difficult than dealing solely with established interest groups or community based committees.

(ix) Service to Other Government Organisations

There is no direct service to other agencies through CALM's public participation processes.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

CALM DIVISION	Level 1-4	Human (FT Level 5+		Total	Financial Sals/Wages	
Operations	11.47	2.15	0.04	13.66	382,605	423,245
Services	1.75	1.15	0	2.9	89,218	92,216
Admin. and Finance	e 0	0	0	0	0	Ó
Forest Resources	0	0	0	0	0	0
Policy Services	0	1.17	0	1.17	61,150	64,913
Research	0.68	0.8	0	1.48	45,960	73,960
Overheads	0	0	0	0	Ö	80,000
CALM Total	13.9	5.27	0.04	19.21	578,933	734,334

The resources allocated to this function represent 0.90% of total direct CALM expenditure and 1.33% of total FTEs before the allocation of resources in services.

(b) Following Allocation of Resources in Services.

	Hu	man	Financial		
CALM DIVISION	FTE	% of total	Total	% of total	
	i	n org. unit		in org. unit	
Operations	17.95	2.0	531,246	1.5	
Services	4.59	3.9	166,629	2.9	
Admin. and Finance	2.14	1.7	168,954	2.8	
Forest Resources	0.38	0.4	18,647	0.2	
Policy Services	1.96	4.0	102,031	5.3	
Research	1.86	1.2	92,376	1.8	
Overheads	0	0	191,948	1.3	
CALM Total	28.88	2.0	1,267,811	1.6	

The largest contributions of resources in services to this function were publications and public relations, both of which are integral parts of the participation process.

(xi) Revenue

No significant revenue accrues directly to CALM as a result of this function.

(xii) Justification

The public participation process is not only a legislative requirement for CALM, but is also being made an integral part of many of the Department's activities at all levels. CALM is committed to allowing individuals and groups to become involved with land use decisions that affect them, whilst recognising that the Department, the controlling bodies and the Government bear executive responsibility for decisions at different levels.

There is little doubt that in the initial phases of a broad public participation programme such as CALM's expectations will be raised in the minds of interest groups that cannot be met by the process. However CALM is committed to continually reviewing and upgrading its techniques and processes in this function, and hence further improving the standard of the public participation programme that already has some significant achievements. Not the least of these was the large number of submissions received on the Draft Forest Regional Management Plans, and the consequent formulation of these ideas into a management plan subsequently approved by the Minister.

The function is central to CALM's management philosophy, and must be continued and upgraded by CALM as the only government agency with the necessary technical skills in land and wildlife management.

(xiii) Previous Reviews

No previous reviews of this function have been conducted.

3.11 ENVIRONMENTAL EDUCATION

(i) Statement of Function

Environmental education is closely related to the public relations and publications services, and the functions "Liaison and Public Participation" and "Planning".

This function exists to foster a greater awareness and understanding in the community of environmental issues, which will result in attitudes, knowledge and behaviour more compatible with cost effective conservation and management of natural resources. The formal support for this function is provided by Information Branch, however the bulk of the activity and resources are increasingly being devoted to environmental education at Regional and District level.

CALM's work in this area occurs in two major formats. The first is through formal field study centres, of which there are now several in the forest areas run by various organisations. These centres are generally located at settlements once operated by CALM, or in buildings leased to other organisations by CALM. CALM incurs few of the running costs for these centres, but does provide support by way of lectures, demonstrations and field trips to the participants at the field study centres.

The second major involvement is at the informal level through group talks, field trips and other activities arranged through rural offices. CALM is also using commercial recreation facilities (eg. Underwater World at Hillarys Boat Harbour) to provide displays and information to users on environmental issues at little cost to CALM.

(ii) Contribution Towards Objectives

The gaining and provision of knowledge about the natural environment and wildlife is one of CALM's five corporate objectives. The environmental education function is a major contribution to the public understanding and knowledge of both the natural environment, and the management of human activities within it. The field study centres are particularly important in this regard because of the potential they offer for action learning.

This function will be of increasing importance to CALM in the future.

(iii) Relevance to Government Policies

Government policy currently dictates that CALM, the EPA and the Ministry of Education cooperate on environmental education.

With the decentralisation of the Ministry of Education this liaison now generally has to occur at Regional and District level. In addition the EPA is reducing its scope in this area so there is virtually no overlap with CALM.

The provision of information to the public on the natural environment is a Government policy priority, recently enhanced by the approval of the three Forest Region Management Plans.

(iv) Background

Environmental education commenced as a function with the formation of CALM in 1985, but continues a well established tradition with each of the amalgamated agencies - Forests Department, Department of Fisheries and Wildlife, and National Parks Authority.

It is incorporated in Departmental policy in the following ways:

- 1. "Knowledge" is one of the five primary objectives in CALM's corporate plan
- 2. "Public education and information" is one of the strategies in CALM's corporate plan
- 3. "Community education and interpretation" policy is specified in CALM policy statement No. 25
- 4. "Education" is a standard heading for prescriptions in area and regional management plans.

The mixture of field study centres and staff interaction with the community was established by all three agencies to varying degrees well before the amalgamation.

The significant recent change is that CALM is allocating greater resources and higher priority to this function, particularly at the regional level, as nominated in management plans. For instance this function is to be the highest priority for the two year implementation of the regional management plans for the three forest regions.

Also the approval of policy statement No. 25 has put in place a more planned and coordinated approach to this function.

(v) Methods and Procedures

The function is undertaken at all levels in CALM, but particularly in the Information Branch, regions and districts. Coordination, evaluation and training are centered on the Information Branch. Implementation is largely undertaken in the regions.

Environmental education uses a variety of communication methods (techniques) to reach the widest range of community audiences. Environmental education messages are identified for specific audiences and methods of communication.

Appendix 30 identifies broadly the target audiences and the methods of communication presently being used.

Internal procedures for achieving the environmental education function are:

- * The community education and interpretation policy identifies the objectives and strategy.
- * The Interpretation Officer, as leader of the Community Education and Interpretation Section, is responsible for the coordination of the environmental education function, services and activities.
- * In the 3 Forest Regions Regional Information Officers are responsible for the operation of this function.
- * Information Branch officers consult with the Regions, Branches and Directorate in identifying projects and procedures for production.
- * Appropriate officers (usually the Information Branch officers) are selected for preparation of project procedures (planning, design, staff, funds, preparation, standards, production, implementation, evaluation).
- All methods to achieve the environmental education function identified by the Districts are directed through the respective Interpretation Officer/Information Officers for approval, usually after consultation and assistance. The Community Edeucation and Interpretation Section and other Information Branch sections ofthe established standards and quidelines for and productions interpretative programmes (communication methods).
- * Staff development and training in personal and non-personal communication techniques is providing knowledge and skills to be able to meet the standards identified.
- * Informal evaluation is an ongoing procedure towards establishing effective communications methods for environmental education.

(vi) Contribution by Other Organisations

There is some liaison with the Water Authority of W.A., State Planning Commission, W.A. Museum, Perth Zoo, Kings Park Board, State Energy Commission and the Ministry of Education on environmental education initiatives, particularly publications.

The Icy Creek Field Study Centre (near Dwellingup) was developed by CALM and is administered by the Morley Senior High School.

The Department of Sport and Recreation maintains several camp schools in the forest areas and several of these interact intensively with CALM in providing environmental education.

CALM is also cooperating with Underwater World at Hillarys Boat Harbour to educate visitors to that facility about the marine environment. This is proving a cheaper alternative to a Government funded education centre, and may be extended to Atlantis Marine Park if certain licence conditions are fulfilled.

Volunteer assistance for this function is also a viable alternative in some cases. Examples of this include a volunteer guide group on Penguin Island in 1987/88, and several informal groups operating in National Parks.

(vii) Performance of Similar Functions

As detailed in paragraphs (iii), (v) and (vi) several other government agencies are involved in the field of environmental education. However these activities are generally well coordinated being based mainly on schools, and hence there is little overlap or duplication of functions.

CALM, because of its technical expertise, tends to fill the role of information provider in these situations whilst other agencies provide support and funding.

(viii) Comparison with Other States

Most similar agencies in other States appear to place a high priority on environmental education, generally in close association with their publications and information services, as is the case within CALM.

The agencies that have a wider charter than forest management (as does CALM) generally place a greater emphasis on this aspect of their work. In particular some agencies (notably the Queensland National Parks and Wildlife Service) appear to place great emphasis on the electronic media and joint productions with commercial television stations. To date CALM has used this to a limited extent, generally because of prohibitive costs, and instead has promoted the use of videos as a communication and education strategy.

All agencies appear to have a service section to coordinate the environmental education activities, but rely mainly on their field operations staff in a similar way to CALM for the bulk of the contact with the public.

(ix) Service to Other Government Organisations

As described in paragraphs (iv), (v) and (vi), and is generally cooperative rather than on a fee-for-service basis.

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres.

CALM DIVISION	Level 1-4	Human (F Level 5+		Total	Financial Sals/Wages	
Operations	5.28	0.31	0.34	5.93	150,461	207,311
Services	2.5	2.0	_	4.5	107,549	123,452
Admin, and Finance	9 0	0	0	0	0	0
Forest Resources	0	0	0	0	0	0
Policy Services	0	0.04	0	0.04	2,774	2,774
				(1)	
Research	1.57	1.6	0.05	3.22	110,696	111,696
Overheads	0	0	0	0	Ó	Ò
CALM Total	9.35	3.95	0.39	13.69	371,480	444,733

(1) the majority of the FTEs allocated to research Division for this function are Herbarium staff.

These resources represent 0.55% of total direct CALM expenditure and 0.95% of total FTEs (before allocation of resources in services).

(b) Allocation After Distribution of Services

Human			Financial (\$)		
CALM DIVISION	FTE	% of total in org. unit	Total	<pre>% of total in org. unit</pre>	
Operations	7.72	0.9	268,227	0.8	
Services	8.44	7.2	317,040	5.5	
Admin. and Finance	1.53	1.2	44,410	0.7	
Forest Resources	0.27	0.3	4,846	0.1	
Policy Services	0.61	1.2	14,305	0.7	
Research	4.32	2.9	157,872	3.0	
Overheads	0	0	30,154	0.2	
CALM Total	22.89	1.6	836,854	1.0	

The major allocations to this function from services were from Communications and Publications, with the remainder comprising allocations across the Department's functions.

(xi) Revenue

The only revenue accruing to CALM from this function (apart from publications detailed in section 4.33) is a small amount from lease fees for facilities, both ongoing and for short term hire.

This revenue will increase in the future as facilities such as the Perup Field Study Centre near Manjimup are promoted more, with a fee scale based on actual costs incurred.

(xii) Justification

The continuing emphasis on environmental education is required to ensure that the community is adequately informed on the natural environment's features and its management. This process will not only ensure a high level of awareness and knowledge of environmental matters within the community, but should also assist in the acceptance of Government and CALM policy objectives.

Whilst this is an important activity it is also one that has the potential to be a heavy user of resources. For this reason CALM is attempting to transfer the operational sections of many general tours and presentations on CALM lands to other organisations with an interest in the area (eg. in the Manjimup area the Forest Tours run by the Tourist Bureau are quite often used by CALM to handle large groups without specific interests, eg. school groups).

This has the effect of reducing CALM's resources dedicated to this function, whilst still providing the groups with a high standard of information.

(xiii) Previous Reviews

No previous reviews have been undertaken.

3.12 MARINE MANAGEMENT

(i) Statement of Function

CALM's marine management function is performed within the legal ambit of two Acts (the CALM Act 1984 and the Wildlife Conservation Act 1950). This means that there are distinct wildlife and land management responsibilities within this function, as well as the potential for considerable interaction with some of the provisions of the Fisheries Act.

The distinct activities within this function can be described as follows:

Marine Wildlife Management (a) this activity occurs both within marine parks and reserves, and in other territorial waters of It involves protection and Western Australia. management of all marine wildlife (ie. both animals and plants). Although the definition of fauna in the Wildlife Conservation Act encompasses all animals, by administrative agreement formalised) fish and shell-fish (ie. crustacea and molluscs) are regulated under the Fisheries Act.

The resources devoted to this activity have all been reported in the wildlife conservation function.

(b) Marine Habitat Management (and associated land management) this is of rapidly increasing importance within CALM's operations. Effectively it involves the management of the State's marine park and reserve system (there are currently two marine parks, with several others in the planning stage), and the management of access and recreation on adjacent lands.

Because of the inter-connected nature of marine habitats and communities (eg. transfer of nutrients and planktonic larvae over large distances by currents) it is necessary to manage marine reserves within the context of an overall marine environmental management strategy. This involves integration of CALM Act and Wildlife Conservation Act responsibilities with those of other agencies, especially the Fisheries Act.

(ii) Contribution Towards Objectives

The marine management function is a major contribution to the effective establishment and maintenance of marine parks and reserves.

These parks and reserves, similarly to terrestrial conservation lands are established to ensure conservation of habitats and species, the development and management of appropriate recreational activities, and to enable scientists to expand the available knowledge on conservation and management of similar ecosystems.

Hence the function contributes to the following corporate objectives: MANAGEMENT, CONSERVATION, RECREATION and KNOWLEDGE.

(iii) Relevance to Government Policies

Whilst the ability to establish marine reserves had existed in Western Australia for many years no effective action had been taken prior to 1984. The Government and the Parliament through the passage of the CALM Act provided a clear commitment to the establishment and management of a system of marine reserves, separate from the management of commercial fisheries.

The marine management function is the mechanism for undertaking this work, and its relevance has recently been enhanced by Government's declaration of the creation of the Ningaloo and Marmion Marine Parks.

(iv) Background

The pressure for formation of marine parks in Western Australia has gathered momentum only in the 1980s, and in 1986 the first such marine park at Marmion was gazetted under the CALM Act.

The ability to reserve marine areas for protection of marine life, and for other fisheries purposes and related matters, was provided by amendment to the Fisheries Act in 1974 (Section 30). The concept of such reserves falls short of the current concept of marine parks which embodies a more general view of public amenity comparable to that of national parks.

In 1984 the CALM Act introduced the ability to establish marine parks and marine nature reserves, directly equivalent to terrestrial national parks amd mature reserves respectively. An Acts Amendments Act (No. 112 of 1984) passed at the same time specifically removed the powers to declare reserves under Section 30 of the Fisheries Act "for any purpose for which a marine nature reserve or marine park could be constituted under that [CALM] Act". Thus, CALM acquired responsibility for management of marine parks and marine reserves intended for marine wildlife conservation and public recreation.

There are many areas along the Western Australian coast, and around the off-shore islands, where there are unique marine environments worthy of the protection marine park status provides. However in almost all of these areas there is a well established and legitimate recreation presence, both land and water based, which must be accounted for in any management planning. Some of these areas also coincide with small but significant commercial fisheries.

Amendments to the CALM Act are proposed which will change the concept of marine parks so that commercial fishing can be accommodated where it is of a kind and scale that it does not interfere with conservation and public recreation values.

CALM has attempted to develop a structured approach for local and recreational community input in the planning stages of marine parks, to enable it to balance the often competing interests of conservation, recreation and commercial fishing. In particular joint community and CALM advisory committees have been established at Marmion and Ningaloo to allow an ongoing input into reserve management from a wide range of interests.

Prior to 1985 the staffing for this function was virtually nil in the amalgamated agencies, and this level had not grown much by 1986/87 because most proposed parks were still at the planning stage. However since 1986/87 there has been a rapid increase in staff and financial resources allocated to this function because of the number of management operations (including consultation) now required. CALM intends to maintain responsibility for all aspects of park management within the Operations Division, whilst using the expertise of existing Service Branches. It is not CALM's intention to establish a separate Branch for marine management.

Of particular importance in marine parks is the management of commercial fishing. The Fisheries Act contains a definition of "fish" which may include any of the fauna protected by the Wildlife Conservation Act and managed by CALM. In the medium term it would appear that some amendments to all the Acts involved may be necessary to resolve this anomaly, although negotiations between CALM and the Fisheries Department have resulted in some operational guidelines which more accurately specify each agency's particular interests.

(v) Methods and Procedures

The methods and procedures used for marine park management are essentially the same as for terrestrial parks, although there is a need to have some qualified coxswains and divers among management staff. Attached as Appendix 31 is a summary of the tasks associated with the Ningaloo Marine Park, and the various sections of CALM that become involved. This list will essentially be the same for every marine park.

The major emphasis will always be on management of activities on the adjacent lands (whoever controls them) because it is in these areas that education and information can most readily be transferred, and also where the major recreation impacts of vehicles and camping occur, and where access to and from the marine areas can be controlled.

For the activities in marine parks that involve water based management facilities, CALM is developing joint management guidelines with both the Department of Marine and Harbours and Fisheries to ensure the most effective allocation of staff between the agencies in the medium term. Marmion Marine Park was a joint proposal by the Ministers for Fisheries and CALM which indicates the level of cooperation existing in this area.

The major part of the research to date on marine ecosystems has been done by either tertiary institutions or the Fisheries Department (from the viewpoint of fisheries). CALM intends to establish a new research effort into marine management, and will seek to encourage reserve management research by other agencies.

(vi) Contribution by Other Organisations

No other agency contributes directly to the management of marine ecosystems inside marine parks, and the wider task of protection of marine animals in all areas adjoining the Western Australian coast.

For the management of water-based recreation activities, and the operations of commercial fisheries inside marine parks there is extensive cooperation between Fisheries Department, Marine and Harbours, and CALM. This cooperation will be extended further in the future to allow for maximum staff efficiencies.

By inter-departmental agreement, where they occur in marine parks, both commercial and recreational fishing are regulated under the Fisheries Act, with both CALM and Fisheries officers having enforcement authority.

(vii) Performance of Similar Functions

The Fisheries Department is responsible for the management of fisheries in Western Australian waters, generally on a sustainable yield basis. It has no charter for marine wildlife conservation generally or for habitat conservation. The focus of the Fisheries Department is on improving yields from fisheries. It does not maintain the information, recreation, land use planning and environmental protection sections that are necessary for conservation and recreation management in marine parks and adjacent lands.

The most important areas of overlap between the agencies (and Marine and Harbours) are in the provision of water based patrols for their particular purposes. Negotiations between CALM and the other agencies have resulted in the initial introduction of sharing of powers between staff from the different agencies, and a sharing of office and support facilities where appropriate. These arrangements will continue to be developed where necessary to improve operational effectiveness.

Where there is duplication of powers to pass regulations, as in the case of regulations controlling the taking of marine wildlife, the agencies will rationalise the matters. For example, in Ningaloo and Marmion Marine Parks, Fisheries Department has introduced regulations controlling the taking of fish by recreational fishers, while CALM has introduced regulations controlling the taking of other organisms, eg. by shell collectors. The two sets of gazetted notices were designed to complement each other.

Marine and Harbours is responsible for licensing charter vessels and determining safety and performance standards. CALM is responsible for licensing the operations of charter vessels within marine parks (under its "concessions" policy which applies also to terrestrial parks) and setting environmental and service standards.

The Australian National Parks and Wildlife Service has statutory responsibility for wildlife conservation in waters beyond the three mile limit, and where these are adjacent to marine parks joint management arrangements will be implemented, as in the case of the Ningaloo Marine Park.

(viii) Comparison with Other States

The most developed and largest marine park system in Australia is the Great Barrier Reef in Queensland, which is managed jointly by Commonwealth and State agencies, and is funded largely by the Commonwealth. There are many parallels between this area and CALM's proposed marine parks (in terms of scientific values, recreation and commercial fisheries), and CALM intends to study the management arrangements in this Park closely when formulating management prescriptions for Western Australia.

In the other States marine parks are not as well developed, although New South Wales does have several. The Council of Nature Conservation Ministers (CONCOM) have recently agreed to a national system of classification for marine and estuarine reserves, and CALM has followed these principles in developing Western Australian marine parks so that consistent management arrangements should be found throughout Australia.

It appears that in all marine parks throughout Australia the major concerns are with management of commercial fisheries, managing land based recreation and access adjacent to the marine park, and the expansion of the scientific knowledge base. Western Australian marine parks certainly face these same problems, and CALM intends to interact closely with interstate agenciesworking in this field to maintain the most up to date management procedures for marine parks.

(ix) Service to Other Government Organisations

CALM and the Departments of Fisheries and Marine and Harbours have negotiated agreements for the sharing of some staff duties on an operational basis in marine parks (as described above).

(x) Human and Financial Resources

(a) Direct Allocation from Cost Centres

Human (FTE) Financial (\$)						
CALM DIVISION 1	Level 1-4	Level 5+	Wages	Total	Sals.Wages	Total
Operations	1.0	0	0	1.0	24,692	50,076
Services	0.2	0	0	0.2	5,142	5,142
Admin. and Finance	0.1	0.1	0	0.2	6,500	6,500
Forest Resources	0	0	0	0	0	0
Policy Services	0	0.17	0	0.17	9,267	9,267
Research	0	0.1	0	0.1	3,000	4,000
Overheads	0	0	0	0	0	0
				(1)	1	
CALM Total	1.3	0.37	0	1.67	48,601	74,985

(1) the resources allocated to this function within CALM have appreciated markedly since 1986/87. Now (May 1988) there are approximately 7 FTEs directly involved (and approximately 11 FTEs including indirect involvement).

The resources allocated to this function represent 0.09% of total direct CALM expenditure and 0.12% of total FTEs before the allocation of services. Both of these figures in 1987/88 are more likely to be closer to 1% of total resources.

(b)	After	Allocation	Ωf	Resources	in	Services.

	H	uman	Fina	Financial		
	FTE	<pre>% of total</pre>	Total	% of total		
		in org. unit		in org. unit		
Operations	1.22	0.1	56,290	0.2		
Services	1.13	1.0	76,506	1.3		
Admin. and Finance	0.44	0.4	13,139	0.2		
Forest Resources	0	0	0	0		
Policy Services	0.25	0.5	10,729	0.6		
Research	0.13	0.1	4,935	0.1		
Overheads	0	0	3,769	0.03		
CALM Total	3.16	0.2	165,368	0.2		

The major allocation to this function came from the publications service, and general pro rata distribution of appropriate services across CALM functions.

(xi) Revenue

Negligible revenue accrued to CALM from this function in 1986/87. However revenue is expected to be substantial in the future, both from day user fees and commercial permits for recreation tours and other activities.

(xii) Justification

The establishment and maintenance of marine parks is a complex task which involves the management of marine and adjacent terrestrial environments, the provision of recreation and education facilities, and the conservation of protected wildlife.

These parks are a Government policy priority. Of the State Government agencies only CALM is adequately equipped to undertake all of the interacting tasks required to effectively manage marine reserves for the purposes for which they are declared. For any other Government agency to undertake this task would involve a duplication of resources. It would not be possible to transfer the CALM resources involved because the staff are also committed to other land management activities throughout the State.

(xiii) Previous Reviews

No previous reviews have been undertaken, apart from the ongoing negotiations with other agencies.

3.13 PLANNING

(i) Statement of Function

This function incorporates the resources devoted to formal management planning within CALM. This occurs at two significant levels:

- (a) strategic and operational planning which involves senior staff at each level of the Department.
- (b) the formal management planning required by the CALM Act, which was a new function initiated when CALM was formed. This planning requires significant resources of staff time at a senior level, and is hence a major corporate priority.

The planning function is closely related to the "Liaison and Public Participation" and "Environmental Education" functions, as often the activities within these three functions involve the same staff and processes. However they are each distinct functions and should be treated as such.

There are many other types of planning done in CALM (eg. task specific, works programmes, site planning, etc), but these have been allocated to the appropriate function.

(ii) Contribution Towards Objectives

The Department has a responsibility to prepare management plans for all lands and waters vested in the controlling bodies. This responsibility is generally embodied within the MANAGEMENT objective, however it does relate to the activities undertaken to achieve the other four objectives as well.

The planning function, and the two closely related functions listed above, are the mechanisms through which these public management plans are prepared for ultimate approval by the Minister. The plans themselves could not be adequately prepared without the support mechanisms provided within this function. Hence planning makes a major contribution towards the achievement of CALM's objectives.

(iii) Relevance to Government Policies

The Government is committed to appropriate land use planning for all public lands, and ensuring that all points of view in regard to a particular issue at least have the opportunity to be heard. The CALM planning function is directly relevant to the implementation of this Government policy objective.

(iv) Background

The legislative requirement for public management plans for CALM lands was introduced with the CALM Act in 1984. Prior to this the amalgamated agencies had land use planning processes in place, but apart from the Forests Department they were poorly resourced, and hence not able to take a pro active role in planning for public land use.

In fact on many occasions the two smaller agencies developed plans for specific areas, and were then forced to defer them because of a lack of resources. The Forests Department had a series of General Working Plans for State Forests, which detailed policies and strategies (with a major emphasis on timber production), and these plans could generally be implemented because of the Department's resources.

In none of these agencies was there any formal public participation process for the management plans, and the majority of plans were generally internal documents.

When CALM was initiated in 1985 the nucleus of a planning methodology and support staff was inherited from amalgamated agencies. However the processes had to be generally developed from first principles again, and this was done against a background of expectations from inside and outside the Department that plans would be produced quickly for many areas.

The planning process (as explained in paragraph v) for any large area is a lengthy and complex process. This occurs because much of the base data on recreation and conservation has to be collected anew, and the identification of interest groups and key issues is a time consuming process. However CALM have made excellent progress in completing many major management plans (as detailed in Appendix 24), and there is now a well understood priority rating system for new planning areas, which is regularly reviewed.

Despite this it is likely that in the medium term the production of plans will always lag behind the demand for them, simply because there are so many issues facing public land managers in this State which require some consistent resolution through the planning process.

(v) Methods and Procedures

In the development of land management plans there are several distinct procedures involved.

(a) Project Team

A CALM Project Team to prepare the plan, and manage the process is initiated. This Project Team involves staff from the relevant Region and the Planning Branch.

(b) Collation of Resource Information The existing data for an area is collected by Planning Branch from all internal sources. This data is then complemented by discussions with other agencies, and at a later stage formal submissions by all interested parties.

It also involves the project team spending time becoming familiar with the area in question, and the likely issues to be addressed.

- (c) Public Participation
 This process is well described in Section 3.10 and involves several activities, including the formation of advisory committees, public workshops and seminars, visitor surveys and discussions with interest groups.
- (d) Writing Management Plans
 A format for these plans has been developed that clearly states objectives and recommended prescriptions, while acknowledging the resources on which these are based. Word processing operations for the Plans are done internally, however the printing of them is contracted privately.
- (e) Approval
 The plan must be approved by the Policy
 Directorate and the relevant controlling body
 before being passed to the Minister for final
 approval as required by the Act. Each of these
 processes requires substantial liaison and
 negotiation.

As this process has been newly developed since CALM was formed it has been largely driven to date by the Planning Branch. In general terms of the staff time allocated to a particular management plan 60% is from the Planning Branch, and 40% from the relevant Regions or service Branches affected. However, the bulk of planning (for all purposes) in CALM is done in regions and districts.

With the large and growing demand for the preparation of management plans the Planning Branch in itself will not be able to cope with the demands of this process in the future. As part of a continual review of effectiveness CALM is now using Planning Branch staff to train Operations and Services staff in plan preparation needs. This will mean that plans will increasingly be prepared by regional staff with advisory guidance from Planning Branch, and should improve the efficiency of the process further.

(vi) Contribution by Other Organisations

Close liaison is maintained with other government Departments at all times during the preparation of management plans eg. Water Authority water catchment areas are often located on CALM land. These areas have to be carefully considered and proposals are made in consultation with these agencies.

Some plans or strategies have been jointly prepared by CALM and other Departments. This is where the area concerned involves the responsibility of two or more Departments. Some examples are:

The Swan and Canning River Strategy
Logue Brook/Waroona Dam Draft Management Plan
Wellington Dam Draft Planning Study
Abrolhos Islands Planning Strategy
Shark Bay Study

(vii) Performance of Similar Functions

No other government or private agency has the same requirement as CALM to produce land management plans through a public participation process, and then implement the plans. Several other government agencies have a land use planning function, notably EPA and the State Planning Commission (SPC), but these plans produce recommendations only, without the agencies necessarily having to implement them.

(viii) Comparisons with Other States

Planning is an integral part of the activities of all the like organisations to CALM in other States. Most of the planning is either resource or activity based, and hence like CALM is conducted as part of a specific function. The processes within each organisation for these types of planning are generally similar.

the wider and more complex area of land use In planning, where CALM statutory management has responsibilities, few other organisations have the legislative requirement for land management plans to meet particular purposes. However the Victorian Department of Conservation, Forests and Lands is also committed to public participation in the development of particular plans (eg. their Timber Strategy). appears that the planning procedures they use are similar, both with regard to community processes and the mixture of Regional and central support staff involved in the process.

(ix) Service to Other Government Organisations

Plans are not produced for other government agencies, although as detailed in paragraph (vi) there are some joint plans prepared. CALM also comments extensively on relevant plans produced by the SPC or Local Government Authorities.

(x) Human and Financial Resources

Direct Allocation from Cost Centres. Human (FTE) Financial (\$) CALM DIVISION Level 1-4 Level 5+ Wages Total Sals/Wages Total Operations 9.78 4.65 14.43 408,398 465,735 Services 4.85 5.0 0 9.85 311,459 514,118 Admin. and Finance 0 0 0 0 0 0 Forest Resources 2.5 1.25 0 3.75 113,600 115,300 Policy Services 0 1.39 0 1.39 71,342 75,105 Research 1.15 1.45 0 2.6 77,783 105,783 **Overheads** 0 0 0 0 0 0 CALM Total 18.28 13.74 0 32.02 982,582 1,276,041

The resources allocated to this function represent 1.57% of total direct CALM expenditure and 2.22% of total FTEs.

(b) Following Allocation of Resources from Services.

(a), 11 3.1	_	uman	Financial		
	FTE	<pre>% of total in org. unit</pre>	Total	% of total in org. unit	
Operations	21.97	2.4	671,389	1.9	
Services	14.37	12.3	721,354	12.6	
Admin. and Finance	3.57	2.9	405,982	6.7	
Forest Resources	11.81	12.8	401,245	3.3	
Policy Services	2.71	5.5	163,726	8.5	
Research	3.26	2.2	228,313	4.3	
Overheads	0	0	1,407,389	9.4	
CALM Total	57.69	4.0	3,899,398	4.8	

(1) about \$1.1 million of this overheads allocation relates to capital purchase costs, and loan repayments for land at Kemerton. This land is regarded as a State asset rather than a CALM asset and hence is difficult to account properly within an FRC submission.

The major resource allocations from services to this function (apart from the allocation of some specific services pro rata across functions) were from Land Information Services (inventory and mapping), Publications and Public Relations (Information Branch), and the allocation of costs associated with Kemerton.

(xi) Revenue

Little revenue accrues to CALM as a result of this function except from the sale of some management plan documents at cost of production (revenue included in Section 4.33).

(xii) Justification

The preparation of management plans for public lands is a legislative responsibility of CALM, and there is a large and growing demand, both internally and externally, for areas to gain a higher priority in the process.

These plans will form the basis for all management operations and other activities on CALM land. They are hence the mechanism through which the Department's varied functions are integrated and coordinated. CALM is the only agency equipped to manage the intricate public planning process that has developed as a result of the legislative need, and hence clearly needs to retain and enhance this function.

As detailed in paragraph (v) the Department is acting to expand the staff resources available for this function by allocating further responsibility to the Regions. This should further improve the efficiency of the existing process.

(xiii) Previous Reviews

There have been no previous specific reviews of this function, except for the internal reviews noted above.

4. DESCRIPTION OF SERVICES

4.14 HOUSING AND BUILDINGS

(i) Statement of Service

CALM currently maintains a significant housing estate Statewide to service the housing needs of staff working in rural areas. There are a growing number of staff housed in GEHA houses, and coupled with this a programme is in place to either sell the houses CALM owns or transfer them to GEHA.

Whilst CALM continues to manage this housing estate, there is a maintenance task (performed either by CALM staff or contractors), which in the past year has centred on preventing further deterioration of the houses, and maintaining health and safety standards. Limited capital development has been undertaken because of the impending transfer of the estate to GEHA.

CALM also manages a wide range of office and support buildings at many locations. Maintenance and development of these is planned with the Office of Government Accommodation (OGA) and the Building Management Authority (BMA) as appropriate, and is carried out by CALM staff, contractors or the BMA.

The development budget for housing and buildings is controlled centrally by Engineering Services Branch, but line managers have direct control of maintenance funds.

Section 1.6 details the extent of these housing and building assets (Appendices 16 and 17).

(ii) Contribution Towards Objectives

The effective development and maintenance of office and support facilities is necessary for CALM's staff to properly manage their activities. In past years the maintenance of a housing estate has been seen as necessary to attract and retain staff in rural areas. However the management of this can now be done effectively by GEHA, whilst still retaining housing for CALM staff, so arrangements are in hand for this transfer of responsibility.

(iii) Relevance to Government Policies

CALM's activities in this area comply with the requirements of OGA and the BMA. The eventual transfer of the housing estate to GEHA is compatible with that agency's objectives in the area of housing provision.

(iv) Background

Both the Forests Department and the National Parks Authority maintained substantial housing estates in rural areas. The Wildlife section generally used GEHA housing for its rural based staff.

The Forests Department's housing estate commenced in the 1920s, and grew rapidly in the 1950s when forest industries underwent a major expansion. The housing is generally old and requires a major maintenance effort, so since the mid-1970s there has been a gradual programme to both reduce the number of houses (by sale or demolition), and upgrade the standard of the remaining houses.

The National Parks Authority's housing estate was quite new by comparison (mainly dating from the late 1960s), but was more widely spread to remote areas. This created several management difficulties for an effective maintenance programme, and hence maintenance was generally attended to by Park Rangers themselves.

Of the amalgamated agencies only the Forests Department had a well developed system of rural offices and support facilities, and this now forms the basis of In the past 12 years CALM's current office system. particularly there has been a significant rationalisation of office locations and support facilities, with may sites (eg. Tone River, Nyamup, Wellington Mills, Grimwade) being closed and their activities transferred to bigger centres.

The Wildlife section generally shared office and support facilities with other agencies, whilst Park Rangers had workshops and offices attached to their houses in remote areas..

The formation of CALM has seen this rationalisation process continue, in particular at the older facilities where many high maintenance buildings are being demolished or remodelled to allow greater effectiveness in CALM's operations.

The location of CALM's administrative offices in the metropolitan area is of major concern to the Department. There are currently three such offices (Crawley and Como - managed and controlled by CALM; and Murdoch House - privately owned), and when finance allows CALM intends to centralise these three offices at the Como site. CALM has made several Budget submissions (including 1988/89) to this effect.

(v) Methods and Procedures

(a) Housing

Capital development, which has been very limited in recent years, is generally planned and developed by Engineering Services Branch with appropriate input by line managers. The maintenance task is controlled by line managers using either CALM staff or contractors, and in the past two years has centred (within health and safety guidelines) on the houses identified by CALM as being worthy of retention and transfer to GEHA.

(b) Offices and Support Facilities

The capital development of new offices is generally planned by Engineering Services Branch, with appropriate input from OGA and line managers. The vast majority of this work is completed by either BMA, or private contractors working for it.

Office maintenance is generally the responsibility of CALM (except for offices leased privately - see Appendix 17), and a mixture of CALM staff, BMA staff and private contractors are used for this. With the exception of BMA work, which is generally free to user, budget control for office maintenance is with line managers.

(vi) Contribution by Other Organisations

The Department liaises closely with OGA and the BMA for project development and bugeting, and many private companies contribute to this service through contracts. Several CALM offices are owned and managed by the BMA.

(vii) Performance of Similar Services

Each Government agency that is to a large extent decentralised maintains a similar housing and building service, with the exception that some agencies (eg. Police Department) are already far more reliant on GEHA for staff housing, and the BMA for office management and maintenance.

(viii) Comparison with Other States

Most other agencies in the forest management and national parks fields have a similar history of housing and buildings development and management. To CALM's knowledge most of these agencies are following the same course and divesting their housing estates to appropriate agencies.

(ix) Service to Other Government Organisations

This is limited to the occasional leasing of CALM houses to staff of other agencies, and sharing of office accommodation in some isolated areas.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (F Level 5+	-	Total	Financia Sals/Wage	
Operations Services Admin. and Finance Forest Resources Policy Services Research Overheads	2.72 0 5.0 0 0 0 0.73	0.15 0 1.44 0 0.05 0.01	18.26 0 3.8 0 0 0.95	21.13 0 10.24 0 0.05 1.69	0	1,432,868 0 3,006,889 0 15,920 79,843 344,955
CALM Total	8.45	1.65	23.01	33.11	747,333	4,880,475

These resources represent 5.98% of total direct CALM expenditure and 2.30% of total FTEs. They were generally allocated pro rata across CALM functions.

(xi) Revenue

Revenue accrues to CALM from housing rentals (\$420,571 in 1986/87) and the sale and removal of houses under public tender (\$47,498 in 1986/87). Occupants have first right of refusal to purchase these houses for sale at a Valuer General's valuation.

(xii) Justification

The office management and maintenance activity is a necessary part of the infrastructure CALM requires to perform its land management tasks. However there is an increasing trend to the use of contractors for the maintenance tasks as an aid to improving utilisation of CALM's human resources.

Management of a housing estate is no longer seen as a central CALM activity. From a total of about 450 houses in 1986, Cabinet approval was obtained to sell or remove up to 200. Since then 73 have been sold, generally for removal because of their poor standard. The progress of this programme is now slowing because most of the houses remaining on the disposal list are to be sold with the land, and this requires subdivision approvals in town sites and/or Parliamentary approval for land excision.

Negotiations are well advanced with GEHA on the transfer of the remaining 250 houses to that agency, with the remaining issues centring on budget and FTE transfers. CALM currently hopes to have shed its major housing responsibility by the end of the 1989/90 year.

(xiii) Previous Reviews

The 1986 CALM "internal functional review" defined the housing management activity as not being central to CALM's functions.

4.15 PLANT AND WORKSHOPS

(i) Statement of Service

The Department maintains a fleet of vehicles and equipment to suit its varied management needs. Appendix 18 details the numbers and types of vehicles and other equipment involved.

The vehicle fleet is managed through a computerised fleet management system, with each vehicle attracting a mixture of standing hire and running costs. This ensures that the system generates sufficient funds for capital and maintenance requirements, as well as placing the onus on managers to continually review the size of their vehicle fleets.

The majority of the vehicle repair and maintenance (except for major accident repair) is still done at Departmental workshops located at 13 rural locations. However the resources dedicated to workshops in the past 5 years have declined and much more use is now made of private workshops. The plant fleet is now much younger than was previously the case, and is turned over more frequently, so the need for maintenance activities is declining.

The capital purchasing is all coordinated by Engineering Services Branch through the State Tender Board, and there is a significant development programme for specialised fire management and other equipment through the workshops. Examinations are now being made of the potential for private workshops to handle this development.

(ii) Contribution Towards Objectives

A well maintained plant fleet is required to enable CALM staff to effectively discharge their land management responsibilities. However the most appropriate way to manage the maintenance and development operations is under continual review, as explained in paragraph (iv).

(iii) Relevance to Government Policies

CALM's activities in fleet management are compatible with general government standards for purchasing and fleet management.

(iv) Background

Each of the three amalgamated agencies developed plant fleets to suit their particular requirements. The Forests Department fleet (669 items at amalgamation) had been managed with the same system CALM now use; the National Parks Authority fleet (115 items at amalgamation) had been funded on an annual basis by

Treasury and used PWD and private workshops for maintenance; and the Wildlife section's fleet (48 items at amalgamation) had been funded through the Treasury's Motor Vehicle Purchase and Replacement Scheme.

The Forests Department operated 14 workshops (once has since closed) in the south west of the State for both vehicle maintenance and equipment development, and these form the basis of CALM's current workshop infrastructure.

In the past 6 years there has been a major reduction in workshop staffing as follows:

Date		Workshop Staff (Tradespersons and	
30 June	1982	60	
30 June	1983	54	
30 June	1984	52	
30 June	1985	50	
30 June	1986	47	
30 June	1987	44	
Current		42	

This has been achieved through an upgrading of the standard of the fleet (hence less maintenance), and the allocation of more work to private workshops. There is now a continual review process of the workshop resources, with a view to rationalising or relocating workshops and personnel.

Concurrent with the review of workshops many areas of the Department are also reviewing their use of heavy machinery (eg. graders, bulldozers), and in the past 3 years 16 items of heavy plant have been withdrawn from service without replacement. This has allowed the work to be done by private contractors with consequent savings of Departmental resources.

(v) Methods and Procedures

(a) Workshop and Fleet Financing

The fleet management system allocates both capital and running costs to all plant items. These charges are paid into a fund administered by Engineering Services Branch, together with the revenue from vehicle sales. This fund is used to pay for all vehicle purchase, running and maintenance costs.

Any growth in the fleet is met from capital funds applied for in the budget process.

(b) Fleet Servicing and Purchase

CALM operates 13 workshops in the south west of the State which carry out the majority of fleet servicing. There is increasing use being made of private workshops, particularly where an appropriate State Tender Board contract exists. In some instances CALM is also establishing its own service service contracts where Tender Board contracts do not exist.

(vi) Contribution by Other Organisations

Apart from the provision of workshop facilities explained in paragraph (v), CALM also hires vehicles and equipment from both other Government sources and the private sector to meet short term peak needs not able to be met from CALM resources.

Much of the Department's heavy machinery work programme is now completed by private contractors.

(vii) Performance of Similar Services

Many Government agencies maintain similar fleet management and workshop facilities, although no other agency has CALM's concentration of facilities in the south west. The two most comparable Government agencies are Main Roads Department and the WA Water Authority.

(viii) Comparison with Other States

All similar agencies of comparable size to CALM appear to maintain similar fleet management and workshop activities.

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4		(FTE) 5+ Wages	Total	Financia Sals/Wag	
Operations Services Admin. and Finance Forest Resources Policy Services Research Overheads	3.53 0 5.13 0 0 0.66	0.06 0 3.0 0 0.02 0	48.55 0 0.5 0 0 0	52.14 0 8.63 0 0.02 0.66	0 2,507,717 0 1,110	
CALM Total	9.32	3.08	49.05	(1) 61.45	1,162,647	3,969,285

(1) the people who work in the workshops have been reported within the Operations Division.

These resources represent 4.86% of total direct CALM expenditure and 4.27% of total FTEs. They were generally allocated pro rata across Departmental functions.

(xi) Revenue

Significant revenue accrues to CALM as a result of plant sales (\$1,484,009 in 1986/87) but this is all returned to the fleet management fund as part of the process of making the plant fleet self funding for maintenance and replacement.

(xii) Justification

The acquisition and maintenance of a plant fleet suited to CALM's management needs is required to meet Departmental objectives. However the maintenance system in particular is continuing to be critically reviewed by line managers and Engineering Services Branch.

It is considered that the most efficient and effective way to service the Departmental fleet is through a mixture of private and Departmental workshops, with an increasing emphasis on private workshops under period contract to further reduce costs. Along with the reductions to CALM workshops (as shown in paragraph iv) there has been an increase in the use of private workshops as follows:

Year	Expenditure on CALM fleet repairs (excluding accident damage) in private workshops
1981/82	\$ 37,778
1982/83	\$ 46,382
1983/84	\$ 40,951
1984/85	\$ 60,256
1985/86	\$168,054
1986/87	\$188.545

Private workshops are not a complete answer to CALM's fleet servicing needs, as in several areas their costs are actually higher than CALM's true internal costs, and there are additional resources required for work quality control.

CALM will continue to examine this service, and there will be further reductions in the resources devoted to it in successive financial years. The rate of progress is dependent upon many factors, not the least of which are the need to maintain satisfactory industrial relations, and a strong commitment to the CALM staff in rural areas. The reductions to date have been achieved without significant industrial problems.

(xiii) Previous Reviews

The Forests Department's fleet management system was reviewed in 1981, and this led to the development of the current system adopted by CALM. At the time of the amalgamation there was an extensive review of this service, which led to the adoption of an improved system throughout CALM.

4.16 PERSONNEL ADMINISTRATION

(i) Statement of Service

This service operates at two distinct levels within CALM; firstly at each office (District, Region or Branch) and involving line management staff, and secondly the central support service based at Como and offered by Human Resources Branch.

The personnel administration service interacts with many other services of CALM, but in particular the industrial relations, training and development services The general range of activities are closely linked. establishment involved include (Approved Average control, classifications, staff Staffing Level) and deployment staff records, entitlements, and processing of entitlements, and administration preparation of statistics for CALM staff covered by the salaries budget.

Each of these activities is a prime responsibility of line Managers within CALM, however the Human Resources Branch provide guidance and assistance as required, and undertake the central collation of statistics.

(ii) Contribution Towards Objectives

CALM regards its staff as its major resource and hence is committed to providing satisfactory working conditions and a supportive work environment. The proper administration of all the activities within this service plays a vital role in ensuring staff are satisfied with their own personal position, which in turn reflects directly on the quality and effectiveness of their work.

(iii) Relevance to Government Policies

CALM has major legal responsibilities under various industrial awards and agreements to provide certain entitlements to staff, as well as a requirement to provide information to various central agencies. The effective conduct of this personnel administration service is directly relevant to these requirements, which are supported by Government.

(iv) Background

Each of the amalgamated agencies maintained a similar personnel administration service, all generally designed to meet the objectives outlined above.

After CALM was formed the personnel administration task grew considerably because of the number of Awards now administered, and the wide range of different award conditions applying to staff working in the same area.

In particular this has meant a much greater effort has been needed to maintain personnel administration records and procedures. At the same time Government initiatives such as the 3% staff cuts and the more recent Second Tier productivity agreements have enlarged the task.

(v) Methods and Procedures

To maintain and update personnel records a mixture of manual and computerised systems (eg. PIMS) are used. These allow a ready access by staff to relevant information whilst at the same time maintaining confidentiality.

Each separate office within CALM also maintains some personnel administration records (which are generally derived from the central records) for internal management purposes.

(vi) Contribution by Other Organisations

Both the Office of Industrial Relations and the Public Service Commission provide continual advice on changes to Awards and administrative arrangements.

(vii) Performance of Similar Service

All public sector agencies, to CALM's knowledge, maintain similar personnel administration systems.

(viii) Comparison with Other States

Again to CALM's knowledge all similar agencies in other States maintain comparable personnel administration systems (although a computerised personnel record such as PIMS has not been widely developed yet).

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

		Human (F	TE)	Financial (\$)			
CALM DIVISION 1	Level 1-4	Level 5+	Wages	Total	Sals/Wages	Total	
Operations	7.4	2.35	6.35	16.1	390,072	461,916	
Services	0	0.4	0	0.4	21,000	21,100	
Admin. and Finance	4.88	0.67	0	5.55	130,840	130,840	
Forest Resources	0	0.1	0	0.1	5,000	5,350	
Policy Services	0	0.28	0	0.28	16,640	16,640	
Research	0.48	0.68	0	1.16	43,344	43,344	
Overheads	0	0	0	0	Ó	Ö	
CALM Total	12.76	4.48	6.35	23.59	606,896	679,190	

This service represents 0.83% of direct CALM expenditure and involves 1.64% of the total FTEs. These resources were generally allocated pro rata across CALM functions.

(xi) Revenue

No revenue accrues to CALM as a result of this service.

(xii) Justification

The maintenance and use of accurate personnel records is required to ensure CALM meets its legal responsibilities with regard to staff, and is a major part of CALM's commitment to providing a supportive and satisfactory work environment.

(xiii) Previous Reviews

The CALM "internal functional review" in 1986 examined these activities which resulted in the abandonment of several routine clerical tasks.

4.17 TRAINING AND DEVELOPMENT

(i) Statement of Service

The training and development of CALM's staff is an important organisational priority. This service is arranged at three distinct levels within the Department:

(a) Policy

The Policy Directorate sets training policy and approves training and development initiatives. However this is done on the advice of a CALM Training and Development Committee (made up of representatives of Divisional Managers and Human Resources Branch) which considers various Departmental operational and skills needs, and develops stragegies to deal with these needs (eg. revising Cadet Courses, developing courses to address specific skill needs).

In particular a revised training and development policy was approved in 1987 which closely links development, CALM needs and personal career training availability to ensure the skills CALM will require in the future are available. supported by an upgraded Training Section is within Human Resources Branch, and a revised Personal Performance Management System which closely relates skills needs to training undertaken.

(b) In-Service Training Delivery

The organisation and delivery of training and development opportunities is the clear responsibility of line managers and individual staff, both in the identification of needs and the major allocation of training resources (salaries and wages). This ensures that line managers and their staff, wherever they work in the Department, have control of training activities.

Human Resources Branch provide a support service in ensuring (1) the annual Training and Development Manual is prepared and updated; (2) the training records are maintained accurately; the training materials prepared by presenters (3) adequate; (4) the full range of relevant are courses offered external to CALM are continually appraised and evaluated; (5) the presentation of some training courses where the Branch staff have skills; relevant (6) the maintenance of central records and support system for CALM's Performance Management System; and (7) continued evaluation and assessment of training programmes.

(c) CALM Cadet Training

To provide a reliable source of qualified people to be recruited to the Forest Officer, Park Ranger and Wildlife Officer groups the Department operates a 2 year cadet course.

The first year of this course is conducted by TAFE and is based at the South West College in Bunbury. CALM selects about 12 cadets, from generally a large number of applicants, and these people then enter the TAFE course leading to a Certificate in Conservation and Land Management. CALM's involvement in this first year is limited to curriculum development with TAFE, and providing field employment to the cadets for one day a week during semesters.

The second year of the course is based at CALM's Dwellingup Cadet School where the cadets receive an intensive grounding in CALM's responsibilities, procedures and management techniques with an emphasis on practical experience with CALM organisation units. This ensures the cadets have an appropriate knowledge of the Department when they are selected (which is not guaranteed) to take up a position with CALM.

(ii) Contribution Towards Objectives

Because the range of CALM's responsibilities is so wide, and are increasing in both number and complexity, it is important that the Department's staff be adequately skilled to meet the technical, sociological and management challenges they will face.

All of CALM's staff join the Department with an appropriate technical or management background, but for these skills to remain relevant they have to be continually reviewed and updated. The Department's Training and Development policy and procedures, and the Personal Performance Management System are both vital elements in ensuring CALM's staff are properly equipped to undertake the tasks required for organisational objectives to be met.

(iii) Relevance to Government Policies

The Government has a strong commitment to training and skill development in its workforce, and recognises the need to continually review staff skills to meet the needs Western Australia has for its public sector. CALM's training and development policy contributes directly to the skill enhancement of the Department's staff, and their consequent ability to serve the community.

(iv) Background

Each of the three amalgamated agencies maintained a training and development service. However only the Forests Department, because of its size, was able to devote significant resources to formal training, and a personal performance management system.

The techniques and procedures for training have not changed markedly as the emphasis is still on in-service "on the job" training. However there are now a large number of staff who have been trained in training techniques, and this has led to an improvement in training delivery and presentation. There is also now a greater emphasis on management training for many levels of staff, and the range of programmes available to CALM staff has expanded considerably.

The procedures used to manage the process Department wide have also improved to the extent that now training records are kept for individual staff, and training opportunities are clearly linked to personal performance management plans.

The Cadet Course, which was formerly run entirely "in-house" by the Forests Department, has now also been revised to include a full year conducted by TAFE. This not only reduces the CALM resources involved, but also allows a wider range of subjects to be taught.

(v) Methods and Procedures

Training is needs based and is related strongly to the personal performance management system, which in turn relies heavily on direct interaction and review between line managers and their salaried staff (at present wages staff are not formally involved in the performance management system).

The majority of training is still done within individual organisation units and is directly related to specific tasks (ie. "on the job" training). However the advent of a formal Training and Development Manual has introduced a wider range of external courses to staff, and has also expanded the information available on the internal programmes being conducted. This in turn has led to a wider variety of staff being involved in specific training programmes.

The formal Training and Development process now also places a higher priority on programme evaluation and review to ensure that programmes remain relevant, and presentation standards are appropriate.

The resources devoted to training and development are spread through every organisation unit, with the support services from Human Resources Branch available at Como, Bunbury and Dwellingup.

(vi) Contribution by Other Organisations

Many Government agencies (eg. WAWA, Bush Fires Board) contribute expertise to the delivery of specific training programmes, and also have staff attend relevant CALM programmes. A number of private organisations, such as the Australian Institute of Management, also contribute through the provision of programmes, as does the Department of Executive Personnel.

(vii) Performance of Similar Services

Every Government agency maintains a training and development service to some extent.

(viii) Comparison with Other States

Every similar organisation to CALM in other States maintain a training and development programme. There is some exchange of staff between CALM and these agencies to attend specific skills courses of benefit to both agencies.

(ix) Service to Other Government Agencies

Some staff from other agencies attend internal CALM training programmes where they are relevant. Fees are not generally levied in these instances as they are infrequent and CALM also benefits from other agencies' training programmes.

(x) Human and Financial Resources

		Human (F	TE)]	Financial (\$)
CALM DIVISION	Level 1-4	Level 5+	- Wages	Total	Sals/Wages	Total
Operations	8.03	1.53	15.47	25.03	549,369	676,016
Services	1.97	0.88	0	2.85	80,184	99,363
				(1)	
Admin. and Finance	e 18.4	1.2	1.24	20.84	209,480	209,480
Forest Resources	1.25	0	0	1.25	28,700	36,560
Policy Services	0	0.19	0	0.19	10,590	10,590
Research	0.21	0.19	0	0.4	13,818	17,818
Overheads	0	0	0	0	0	0
				(2)	
CALM Total	29.86	3.99	16.71	50.56	892,141 1	.,049,827

- (1) this includes 15 FTEs for the Cadet School which has now been reduced (to about 8 FTE) because of the decision not to pay allowances to first year cadets.
- (2) the total FTE for this service excludes some informal training "on the job" which has been allocated to the appropriate functions.

This service represents 1.29% of total direct CALM expenditure and 3.51% of total FTEs. The resources allocated to this service were generally allocated prorata across CALM functions.

(xi) Revenue

No revenue accrues to CALM as a result of this service.

(xii) Justification

CALM must maintain a strong commitment to staff training and development using internal and external programmes, both to ensure that the skills required to implement Departmental programmes are available, and to provide the appropriate support to its staff as a model employer.

The level of formal training (3.5% of all FTEs) is considered necessary to ensure CALM's staff are continually kept up to date with new policies and techniques. As CALM is heavily regionalised training programmes are often costly and time consuming to arrange, and CALM's Training and Development procedures are designed to ensure that the training carried out is always effective.

The CALM Cadet Course has been extensively modified in recent years, and now consumes far less resources than was previously the case. This has been done through TAFE managing the first year of the course, with CALM providing the necessary practical training in the second year.

CALM will continue to examine and review the effectiveness of the Cadet programme, in association with TAFE, and changes will be made as necessary to improve its effectiveness in supplying trained staff to CALM.

(xiii) Previous Reviews

The CALM "internal functional review" in 1986 removed the payment of the weekly allowance to first year cadets without a decrease in the number of applications. Progress and procedures with training and development are continually reviewed and enhanced through the CALM Training and Development Committee.

4.18 OCCUPATIONAL HEALTH, SAFETY AND WELFARE

(i) Statement of Service

The promotion of occupational health, safety and welfare (OHSW) is an ongoing Departmental commitment. Apart from the legislative and regulatory requirements that apply in this area CALM has a very active accident prevention programme where safe working practices are seen as the responsibility of both line managers and individuals.

The Department has a Safety Section within Human Resources Branch to provide a support service, and ensure the provision of appropriate equipment and training to all staff. The accident prevention programme is supported by an active Safety Committee structure within CALM, and an awards programme to reward safe working practice.

In addition to the internal needs of staff the Department enforces the Timber Industry Regulation Act which provides for safe working practices and conditions within the timber industry.

(ii) Contribution Towards Objectives

The Department's OHSW programmes are designed to allow CALM's staff to work in safe conditions and using safe practices, where the opportunity for accident, injury or illness is minimised at all times. Apart from the personal benefits to staff this commitment ensures that CALM never has major staff resources committed to non-productive compensation involvements, and that staff are personally satisfied with the organisation's commitment to them.

All of this allows the Department's programmes to be implemented more fully and effectively.

(iii) Relevance to Government Policies

CALM's programmes in this area are directly relevant to the appropriate legislation, and are in line with the Government's stated objectives for industrial safety and workforce participation in these matters.

(iv) Background

Of the amalgamated Departments only the Forests Department deployed significant resources into a formal OHSW programme. This was commenced in 1969 when the forest industries generally had one of the worst industrial safety records of any Australian industry, and immediate and positive effects were seen in a declining accident rate.

In 1978 the Forests Department was awarded the Colonial Mutual Life Award (a national award) for industrial safety achievement. This progress has continued to the present time when the statistics show CALM to have the lowest accident frequency in the history of the amalgamated agencies. Appendix 32 details the Department's progress with regard to industrial accident prevention since 1960/61.

With the formation of CALM one of the early internal challenges faced by the Department was to extend the existing OHSW programme to encompass all staff, and ensure that the previous high standards were applied consistently throughout CALM. The statistics detailed in Appendix 32 indicate that this has largely been achieved.

The success of this entire procedure has led to large cuts in real terms in Workers' Compensation premiums.

(v) Methods and Procedures

The Department's OHSW programme relies largely on the commitment and attitude of individual staff and managers. However to support this CALM applies several major strategies:

- an active system of participative committees at all levels of the Department
- continual evaluation and supply of appropriate protective equipment
- the analysis of all work methods at the initial prescription stage to identify potential causes of accidents
- a strong commitment by senior staff (including the Executive Director's Award for achievement) to the programme
- a well developed and intensive accident prevention training programme where appropriate
- an accident investigation and evaluation system designed to identify and rectify accident causes
- the maintenance of support services such as first aid training, and noise and hearing monitoring.

(vi) Contribution by Other Organisations

The Department of Occupational Health, Safety and Welfare and the Industrial Foundation for Accident Prevention both interact intensively with CALM in accident prevention and occupational health matters.

(vii) Performance of Similar Services

All Government agencies are required to maintain a similar service, although CALM believes its programme is operating to a very high standard.

(viii) Comparison with Other States

All similar agencies in other States have OHSW programmes. However CALM is generally regarded as having the most intensive and successful programme, a view supported by the statistical records. A number of other agencies have also sent staff to visit CALM specifically to study the accident prevention programme.

(ix) Service to Other Government Organisations

Some agencies participate in CALM's training and occupational health briefings from time to time.

(x) Human and Financial Resources

CALM DIVISION	Human (FTE) Level 1-4 Level 5+ Wages			Total	Financial (\$) Sals/Wages Total	
Operations	4.22	0.62	7.4	12.24	275,758	389,934
Services	0	0	0	0	Ó	Ó
Admin. and Finance	3.5	1.0	0	4.5	98,550	160,376
Forest Resources	0	0	0	0	Ó	Ó
Policy Services	0	0.04	0	0.04	2,603	2,603
Research	0.45	0	0	0.45	10,739	14,439
					•	(1)
Overheads	0	0	0	0	0	280,000
CALM Total	8.17	1.66	7.4	17.23	387,650	847,352

(1) this figure includes wages paid to staff on Workers' Compensation (later recouped from the insurer).

The resources allocated to this service represent 1.04% of total direct CALM expenditure and 1.20% of total FTEs. The resources in this service were generally allocated pro rata across CALM functions.

(xi) Revenue

No revenue accrues to CALM as a result of this service.

(xii) Justification

CALM is committed to the maintenance of a healthy workforce and the provision (to the extent possible) of safe working conditions.

In achieving this CALM can ensure that the maximum staff resources can be applied to achieving the Department's objectives, as well as reducing personal pain and suffering and accident damage to equipment.

An additional benefit has been the reduction in real terms in Workers' Compensation insurance premiums as a result of CALM's past record.

(xiii) Previous Reviews

The programme is subject to continual management review.

4.19 INDUSTRIAL RELATIONS

(i) Statement of Service

The Department employs staff under Awards that provide constitutional coverage to nine major trade unions (the largest groupings are the Australian Workers Union; Civil Service Association; Federated Miscellaneous Workers Union; and Amalgamated Metal Workers Union).

Whilst industrial relations at the field level is the responsibility of line managers, the majority of the formal negotiations with Trade Unions, the Office of Industrial Relations and the Public Service Commission, occur centrally through the Human Resources Branch. These negotiations cover the usual range of subjects including Award provisions, personal employment conditions, pay and allowance schedules and award coverage.

(ii) Contribution Towards Objectives

The various staff who were combined within CALM came with a wide variation in employment and pay conditions, which became important industrial issues once they worked alongside each other. CALM has made a major effort in the past three years to rationalise Awards and conditions wherever possible, and this must continue if the Department's goal of a more flexible staffing structure, able to be deployed to meet new programmes, is to be achieved.

In the more immediate sense the maintenance of good industrial relations is important to the ongoing task of achieving CALM's objectives.

(iii) Relevance to Government Policies

The maintenance of good industrial relations, and the consistent application of industrial Awards is a requirement of Government agencies.

(iv) Background

Each of the amalgamated agencies maintained a similar industrial relations service, which handled most industrial negotiations centrally as is (and was) required by Government policy.

Since the formation of CALM the scope of the issues, and their complexity, has increased markedly although the management and negotiation processes have remained basically the same.

(v) Methods and Procedures

Apart from formal and informal negotiations which are held at any level, the main procedures for industrial relations in CALM are the maintenance of central registers, an internal research service, and ongoing consultation with Regions, Districts and Branches on industrial relations matters.

All liaison with central agencies, and formal negotiation on Award conditions with Unions is managed by Human Resources Branch. Some negotiations with Unions on specific grievances are undertaken by line managers.

(vi) Contribution by Other Organisations

Advice and guidance is received from the Office of Industrial Relations and the Public Service Commission. Assistance has also been received from the Western Australian Industrial Relations Commission in the case of specific disputes.

There is a continuing input and involvement by the Trade Unions with Award coverage within CALM.

(vii) Performance of Similar Services

Every Government agency maintains a similar service and liaison network.

(viii) Comparison with Other States

To CALM's knowledge similar agencies in other States maintain comparable services.

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

Human (FTE) Financial (\$)							
CALM DIVISION	Level 1-4	reset 2+	Wages	Total S	Sals/Wages	Total	
Operations	0.18	0.3	0	0.48	17,075	18,101	
Services	0	0	0	0	Ö	Ó	
Admin. and Finance	0.8	0.5	0	1.3	46,070	46,070	
Forest Resources	0	0	0	0	Ö	Ó	
Policy Services	0	0.04	0	0.04	2,603	2,603	
Research	0	0	0	0	Ó	0	
Overheads	0	0	0	0	0	0	
CALM Total	0.98	0.84	0	1.82	65,748	66,774	

The resources allocated to this service represent 0.08% of total direct expenditure and 0.13% of total FTEs. They were generally allocated pro rata across CALM functions.

(xi) Revenue

No revenue accrues to CALM as a result of this service.

(xii) Justification

The maintenance of a satisfactory industrial relations climate within the Department is a necessary precursor for staff to work effectively towards Departmental objectives. Because of the structure of Trade Unions and central agencies the formal consultations need to be handled centrally.

(xiii) Previous Reviews

The management working parties developed in the formative stages of CALM emphasised industrial relations as an important area for the Department. This led to the continuing high level of interest by senior staff in the maintenance of a satisfactory industrial relations climate.

4.20 HUMAN RESOURCE PLANNING

(i) Statement of Service

Human resource planning in CALM is an activity of line managers who are responsible for the ongoing performance of their own sections. However the Human Resources Branch provides a support service to line managers in recruitment procedures and techniques, skill identification and development, and personal career development planning for staff.

Since 1986/87 and the advent of the Approved Average Staffing Level (AASL) for agencies the Branch also provides support and assistance to a group of seni/r staff who meet regularly to assess ongoing employment needs and priorities. The Policy Directorate become actively involved in the strategic decisions regarding staffing needs within CALM.

(ii) Contribution Towards Objectives

One of the major concerns CALM is addressing is the internal reallocation of resources to meet changing management needs. The senior staff involvement in medium and long term human resource planning (for example in the upgrading of Park Rangers status and qualifications) is a necessary step in the process of allocating resources to corporate priorities.

(iii) Relevance to Government Policies

The Government's White Paper "Managing Change in the Public Sector" clearly addressed the need for improved resource allocation and planning in agencies. CALM's human resource planning activities are designed to address this need.

(iv) Background

Prior to 1984/85 human resource planning in the amalgamated agencies was not a formal process, and was generally undertaken by senior staff within their own portfolios. The creation of CALM, and the formation of a formal Policy Directorate, allowed the opportunity for more formal strategic consideration of ongoing human resource needs, in line with the expanding responsibilities of the new Department.

Since 1986/87 the need to manage an AASL has formalised the process further, and human resource planning and decision making is now part of the regular deliberations of the Policy Directorate.

(v) Methods and Procedures

The human resource planning process is an ongoing mixture of strategic consideration of new initiatives and changing needs by the Policy Directorate, with a continuing input to skills identification and needs by line Managers and Human Resources Branch.

In particular (as explained in Section 4.17) CALM's training and development processes are designed specifically to identify key skills needs for the Department, and this has major implications for human resource planning.

(vi) Contribution by Other Organisations

The Public Service Commission and the office of Redeployment and Retraining (Department of Employment and Training) both play a significant role in CALM's recruitment processes.

(vii) Performance of Similar Services

All State Government agencies would perform a similar service.

(viii) Comparison with Other States

To CALM's knowledge all like agencies in other States perform similar activities.

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

		Human (FT	E)	Fi	inancial (\$)
CALM DIVISION	Level 1-4	Level 5+	Wages	Total S	Sals/Wages	Total
Operations	1.08	0.55	0	1.63	48,865	51,865
Services	0	0	0	0	Ò	Ó
Admin. and Finance	0.95	1.6	0	2.55	95,714	95,714
Forest Resources	0	0	0	0	Ö	Ó
Policy Services	0	0.08	0	0.08	4,694	4,694
Research	0	0.05	0	0.05	2,594	2,594
Overheads	0	0	0	0	0	0
CALM Total	2.03	2.28	0	4.31	151,867	154,867

The resources allocated to this service represent 0.19% of total direct CALM expenditure, and 0.30% of total FTEs.

These resources were generally allocated pro rata across CALM functions in accord with Section 5.

(xi) Revenue

No revenue accrues to CALM as a result of this service.

(xii) Justification

Required at both the strategic and operational levels to ensure that CALM is always modifying resources allocation to meet land management demands.

(xiii) Previous Reviews

The human resource planning service is under continual review by senior management.

4.21 ACCOUNTS AND PAYROLL

(i) Statement of Service

The accounts and payroll service provided by CALM occurs at two levels.

Firstly all rural offices maintain accounts and payroll activity for the processing of supply orders, payment vouchers, preparation of cash orders for small local payments, wage payments and payments made under agreed public tender.

The scope and complexity of this service varies widely across CALM, with the most intensive activity occurring in the Districts of the Forest Regions where complex wages payrolls are prepared and paid locally, and a wide variety and large number of acounts are processed and paid. Generally these offices maintain control systems such as debtors and creditors ledgers, as well as the systems required by the Office of the Auditor-General.

In an attempt to reduce human resource needs for this service CALM is now developing a computerised wages payroll system which it is hoped will make obsolete many of the manual systems now in use.

The second level of activity is in the Finance Branch based at Como. This Branch provides a central support service for processing Treasury vouchers, monitoring and recording all CALM transactions for Treasury and Auditor-General requirements, maintaining wage and salary records and arranging payment for all salaried staff and Park Rangers. The Branch acts as a contact and liaison point for rural offices in relation to Treasury queries, and also is the prime receival point for Departmental revenue (particularly from CALM's large volume log sales clients).

(ii) Contribution Towards Objectives

Sound financial management and budgeting systems are required for all CALM activities. It is important that CALM's accounts and payroll system processes revenue and expenditure transactions promptly and acurately, as this ensures not only a timely service to clients, but also satisfactory financial information for Managers.

(iii) Relevance to Government Policies

Government commitments require prompt payment of public sector debts which CALM's accounts and payrolls system, and its level of delegation to rural offices is designed to achieve. The system's management controls are required to satisfy CALM's obligations to the Treasury and Auditor-General.

(iv) Background

Of the three amalgamated agencies only the Forests Department had any significant decentralisation of this service away from the respective Head Offices. On many occasions this centralisation led to delays in settling accounts and responding to queries, and in turn to a lowering of agency effectiveness.

Since the formation of CALM there has been a gradual movement to devolve accounts and payroll activities to rural offices, within appropriate constraints. CALM will continue this process wherever possible, and this should lead to a reduction of the need for resources in the central Finance Branch.

(v) Methods and Procedures

A wide variety of manual and computerised systems, that are common throughout Government and commerce, are used by CALM to perform this service. The past 5 years have seen an increasing use of computerised systems for many aspects of this service (eg. salary payment, payments to logging contractors), and this trend will be continued in the future with activities such as the wages payroll system.

(vi) Contribution by Other Organisations

There are limited external contributions to this service apart from the monitoring and assessment role of the Treasury and the Office of the Auditor-General.

(vii) Performance of Similar Service

All Government agencies perform a similar service to a level commensurate with their size and complexity.

(viii) Comparison with Other States

All similar organisations to CALM maintain a comparable service with some degree of decentralisation.

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

CALM DIVISION	Human (FTE) Level 1-4 Level 5+ Wages			Financial (\$) Total Sals/Wages Total		
Operations	11.03	0.23	0.7	11.96	247,668	284,889
Services	0	1.0	0	1.0	35,000	35,000
Admin. and Finance	19.55	0.75	0	20.3	362,544	409,997
Forest Resources	0	0	0	0	0	0
Policy Services	0	0.02	0	0.02	1,110	1,110
Research	1.35	0.05	0	1.4	28,979	28,979
Overheads	0	0	0	0	Ö	0
CALM Total	31.93	2.05	0.7	34.68	675,301	759,975

The resources allocated to this service represent 0.93% of total direct CALM expenditure and 2.41% of total FTEs. These resources were generally allocated prorata across Departmental functions.

(xi) Revenue

No revenue accrues to CALM directly as a result of this service.

(xii) Justification

The accounts and payroll service is required to ensure the effective accounting for CALM expenditure. The devolution of the service to rural offices will continue as a means of improving client service and response times, subject to legal and regulatory constraints.

(xiii) Previous Reviews

This service was reviewed in the 1986 CALM "internal functional review" and through the 3% staff reduction initiative, both of which resulted in small decreases in resources for this service.

4.22 BUDGETING AND FINANCIAL PLANNING

(i) Statement of Service

This service is undertaken at two levels within CALM.

Initially Regions, Districts and Branches undertake budget development in December/January prior to a financial year to address their specific management These budgets are then aggregated by the needs. respective Divisional Managers, and appropriate priorities placed on activities. The Policy to assign Directorate then meets Departmental priorities, and finalise expenditure proposals.

The Finance Branch is responsible for providing support for this process, and for the supply of relevant information to Managers.

Throughout the year the Finance Branch have the primary responsibility for monitoring expenditures and revenues, and providing accurate management reports to the various units of the Department.

Financial planning is a primary responsibility of the line managers in the first instance, using the support services of Finance Branch. However on the Departmental scale the Policy Directorate, who have this strategic responsibility, rely to a large extent on the economic and financial analysis provided by Economics Branch (discussed in Section 4.32) to support the revenue and expenditure records.

(ii) Contribution Towards Objectives

Accurate budgeting, which addresses organisational objectives, and a comprehensive expenditure and revenue monitoring and reporting system are essential to the proper management of public finances entrusted to CALM. This service allows managers to ensure that Government and CALM programmes can be implemented within budget, or to meet revenue projections.

(iii) Relevance to Government Policies

The Government, through the Financial Administration and Audit Act 1985 and other legislation, requires agencies to be fully accountable for public monies under their control. CALM's budgeting and financial planning activities are directly relevant to this requirement.

(iv) Background

Prior to the 1970s financial management in the three amalgamated agencies was generally very centralised. The advent of automated management control and reporting systems allowed the Forests Department in particular to devolve more aspects of budget control to line managers.

Line managers and field staff have always been involved in budget preparation. However there has also been a consistent trend towards making line managers at all levels accountable for their sections' budget management and financial planning on an ongoing basis.

(v) Methods and Procedures

The preparation of budgets is generally a paper based process, using strategic direction determined by the Policy Directorate and supplied to CALM organisation units by Finance Branch (including budget targets and relevant costings and wage rates). With the advent of new technology the budgets, once approved, are input into the budgeting programme at the remote terminals in CALM offices, rather than being input centrally in Finance Branch as in the past.

A series of regular management reports are available direct to managers via these remote terminals to provide accurate and timely expenditure and revenue information. These are complemented by expenditure reports prepared by Finance Branch, which document all debits costed against particular account codes and allow managers the opportunity to manage cash flows and expenditure targets with accuracy.

(vi) Contribution by Other Organisations

The Treasury is closely involved in the preparation and approval of CALM's budgets.

(vii) Performance of Similar Services

All Government agencies of comparable size maintain a similar decentralised budgeting and financial planning process.

(viii) Comparison with Other States

Like organisations to CALM in other States maintain similar budgetary control systems.

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

		Human (FT	E)	Financial (\$)			
CALM DIVISION	Level 1-4			Total	Sals/Wages	Total	
Operations	8.24	2.5	0.88	11.62	319,186	326,747	
Services	0.15	0.15	0	0.3	15,600		
Admin. and Finance	5.51	1.5	0	7.01	200,245	213,355	
Forest Resources	0	0	0	0	0	0	
Policy Services	0	0.72	0	0.72	41,950	41,950	
Research	0.36	0.3	0	0.66	22,613	22,613	
Overheads	0	0	0	0	0	0	
CALM Total	14.26	5.17	0.88	20.31	599,594	621,385	

(1) all of the Forest Resources staff involved in this process were allocated direct to the appropriate function.

The resources allocated to this service represent 0.76% of total direct CALM expenditure and 1.41% of total FTEs. These resources were generally allocated prorata across CALM functions.

(xi) Revenue

No revenue accrues to CALM as a direct result of this service.

(xii) Justification

The devolution of budgetary and financial management control to line managers, within policies and guidelines developed by the Policy Directorate, is a vital element in ensuring proper financial management and accountability within CALM.

The emphasis placed on this service within CALM will continue, as it is required to ensure the organisation's objectives can be achieved within financial limits.

For the 1989/90 financial year the Policy Directorate has approved the implementation of purpose based budgeting within CALM, and work on this development is proceeding at present (May, 1988).

There will also be a continued trend towards allocating more of the true overhead charges (eg. Workers' Compensation Insurance) to individual cost centres, to enable the true cost of activities to be reflected. A salary allocation system for CALM activities will be operational from July, 1988.

(xiii) Previous Reviews

The resources allocated to this activity were reviewed in 1986 during the CALM "internal functional review" and found to be warranted. This activity is seen as a primary responsibility for all line managers.

4.23 RECORDS MANAGEMENT

(i) Statement of Service

Records Management provided Service is at two significant levels. The Perth staff are served by a operating a computerised Records Records Branch Management System, and providing correspondence receipt and despatch, file creation, file identification and file tracking, retrieval, distribution and storage Some of these services also serve rural facilities. staff.

The second level is at individual Regional, District and Branch offices outside Perth where individual records systems suited to that organisation unit are maintained. These records systems are not coordinated with the Perth system, but in the larger Regions there is some coordination between the Regional office and District offices.

(ii) Contribution Towards Objectives

An effective and cost efficient records management system is central to the proper functioning of a heavily decentralised agency like CALM, which deals with a wide variety of different projects. The current system allows for timely responses to queries, and the ready provision of background information, both of which are essential to the conduct of Government business.

(iii) Relevance to Government Policies

Computerised Records Management is now widely implemented amongst the larger State Government agencies (eg. WAWA, Agriculture, Mines, Police, Education, Public Service Commission) and is an accepted management tool.

(iv) Background

The CALM Records Management Service can be traced back to 1896 (the oldest record maintained) when forests were the responsibility of the Lands Department. For many years the three amalgamating agencies, and then CALM operated manual card index systems for records management, which were slow and inefficient. The computerised Records Management System was introduced in 1986 in conjunction with the (then) Public Service Board, and now provides the service detailed in (i) above.

(v) Methods and Procedures

The Perth system uses all of the attributes of the Records Management System software package. Rural offices use manual systems, many of which use a variation of the Oxford Decimal classification system for file referencing. CALM intends to expand the use of RMS to rural offices (which are all on line to the mainframe computer) as resources allow.

To distribute files and records throughout the State extensive use is made of the Mail West system (enhanced by private couriers), whilst in Perth most records are distributed by departmental or private couriers. Australia Post is also used extensively for interstate mail and mail to private groups, and in 1987/88 the total expenditure on postage for Perth offices should approximate \$85,000.

(vi) Contribution by Other Organisations

The Public Service Commission (then PSB) was heavily involved in designing the RMS process, and for records distribution extensive use is made of Mail West, private couriers and Australia Post.

(vii) Performance of Similar Services

All State Government agencies perform a similar service, appropriate to their size.

(viii) Comparison with Other States

All similar organisations in other States have (to CALM's knowledge) a similar mixture of centralised and decentralised Records Management systems.

(ix) Service to Other Government Organisations

Apart from the interaction with Mail West (Department of Services), CALM operates in accord with the Library Act and relevant Government instructions and ensures that all necessary material is archived within the State Archives at the Battye Library.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (FTE) Level 1-4 Level 5+ Wages Tota			Financial (\$) l Sals/Wages Total		
Operations	9.86	0.72	0.04	10.62	192,339	198,495	
Services	0	0	0	0	Ò	ó	
Admin. and Finance	e 11.89	0	0	11.89	220,200	305,100	
Forest Resources	0	0	0	0	Ó	ó	
Policy Services	0	0.02	0	0.02	1,110	1,110	
Research	0.75	0	0	0.75	14,714		
Overheads	0	0	0	0	Ö	Ó	
CALM Total	22.5	0.74	0.04	23.28	428,363	533,559	

Within the allocation of resources to functions discussed in Section 5 these resources were generally distributed across CALM functions on a pro rata basis.

This service accounts for 0.65% of total CALM expenditure (in direct costs, exclusive of overheads).

(xi) Revenue

Not applicable.

(xii) Justification

As for paragraphs (i), (iv), and (v).

(xiii) Previous Reviews

There was a restructure of the Branch in 1986 to accommodate the computerisation of Records Management. The Branch was also involved in CALM's "internal functional review" during 1987.

4.24 ADMINISTRATIVE SUPPORT

(i) Statement of Service

The administrative support service is provided in all CALM offices and includes activities such as typing, telephone and radio communications, photocopying, public reception, and clerical work. Because of the nature of this service it is closely related to the management, records communications, personnel administration, public relations and accounts services. To this extent some of payroll resources allocated to this service could be allocated to one of the other services, but it has not been deemed necessary to go to this level of detail.

In all cases Managers minimised the level of resources allocated to this service in the original survey returns.

(ii) Contribution Towards Objectives

The services provided by staff working in administrative support are a very necessary contribution to land management activities. They also provide a vital personal link to a wide range of CALM clients.

(iii) Relevance to Government Policies

It is a necessary support service in enabling Government policies for land and wildlife management to be implemented.

(iv) Background

The development of the administrative support service within the amalgamated agencies has been gradual. The Forests Department, as the amalgamated agency with the greatest number of rural staff, had a well developed administrative support service which required considerable resources by virtue of the intensive decentralisation of the Department and the geographic separation of its offices.

The Wildlife Section and the National Parks Authority had limited administrative support for operations staff in rural areas (except where it could be provided by other agencies), and consequently management staff spent considerable time on routine administrative duties.

CALM has continued the development of a strong administrative support service to the point where the only staff who are not supported in this way are Park Rangers operating in isolated areas (who have a limited need for this support).

(v) Methods and Procedures

The general range of methods and equipment used by CALM in this service reflect the changing community trends in office management systems and automation since the 1950s.

Most CALM offices have modern and versatile support equipment including facsimile machines, word processors, personal computers, ergonomic furniture, sophisticated telephone and radio systems, photocopiers, electronic typewriters and the use of private courier systems. In addition CALM's District, Regional and rural Branch offices are connected with the Department's mainframe computers through on line terminals.

As resources allow CALM is extending the use of highly automated and efficient support systems and equipment. This is certain to lead to productivity and work quality increases in the future.

(vi) Contribution by Other Organisations

In some rural centres (eg. Exmouth, Kununurra) other organisations such as Tourist Bureau share office accommodation with CALM, and provide administrative support to required levels in return for rental payments.

At the Marmion Marine Park CALM, and the Department of Fisheries and Marine and Harbours share office and support facilities.

(vii) Performance of Similar Services

All Government agencies perform similar services, although in highly decentralised agencies the proportion of staff devoted to administrative support is sometimes higher than for centralised agencies because of the need to service small offices.

(viii) Comparison with Other States

All similar agencies have comparable administrative support systems.

(ix) Service to Other government Organisations

In some rural areas, where office accommodation is shared or other agencies have only a limited presence in the area, CALM provides some administrative support services.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (F Level 5+	-	Total	Financia Sals/Wage	
Operations	19.05	0.85	11.03	31.73	558,200	696,512
Services	8.6	3.0	0	11.6	243,406	368,228
Admin. and Finance	3.5	0	0.2	3.7	65,473	69, 773
Forest Resources	1.5	0	0.5	2.0	31,800	36,700
Policy Services	12.0	1.85	2.0	15.85	370,418	440,585
Research	6.69	0.34	6.03	13.06	228,195	453,595
Overheads	0	0	0	0	0	595,770
CALM Total	51.34	6.04	20.56	77.94	1,497,492	2,661,163

The resources defined for this service represent 3.26% of total CALM direct expenditure, and were allocated pro rata across functions of the particular organisation unit. The service represents 5.41% of total CALM FTEs.

(xi) Revenue

No revenue accrues directly to CALM as a result of this service.

(xii) Justification

This service is required to support CALM's management and policy staff in the efficient performance of their duties. In the absence of of these support staff the administrative burden would fall on professional and technical staff in rural areas, and hence reduce their effectiveness.

All of CALM's functions are supported by the resources detailed within this service. CALM could not serve the great many demands made of it now from many sources if an efficient administrative support system did not exist.

The maintenance of a high standard of client service also requires administrative support.

(xiii) Previous Reviews

Each facet of CALM's administrative support system was examined in CALM's "internal functional review" in 1986, and generally was found to be satisfactory (except for some rural areas where further support was required for Managers).

4.25 MATERIALS MANAGEMENT AND PURCHASING

(i) Statement of Service

The materials management and purchasing service operates at two distinct levels within CALM:

(a) the Como Store acts as a central liaison with the Department of Services (State Supply Division), and processes all requisitions and orders placed on suppliers. This Store also acts as the central CALM purchaser and supplier for stationery.

The Como Store now operates an automated stock management system as an aid to inventory and financial management. This allows orders placed by CALM offices to be processed quickly, and at the same time ensures stock levels are not unnecessarily high.

(b) each Branch, Regional or District office performs a materials management role to some extent. The most intensive involvement is in the Districts of the Forest Regions, where generally a separate store is maintained to supply the equipment and supplies for land management needs. These stores generally act as the liaison with the Como Store and are the receival point for all supplies, fuels and other stores.

All large purchases are made through the State Supply Division system, but many smaller purchases are made locally by Districts, Regions, and Branches, using accepted government procedures (eg. local purchase orders etc).

Most rural stores maintain their own stock control systems, and there is intensive annual stocktake of stores and equipment for both management and audit requirements.

(ii) Contribution Towards Objectives

The materials management and purchasing service is a required support service in ensuring that CALM's staff have the equipment and materials necessary to undertake their work. The introduction of an automated inventory system at the Como Store, and effective stock control measures at District and other rural offices ensures that CALM resources are not overly involved in maintaining large stock inventories.

(iii) Relevance to Government Policies

The CALM materials management and purchasing service is operated in accord with Government supply and tender guidelines. The purchasing of smaller items in rural communities is in line with the Government's decentralisation commitments.

(iv) Background

Of the three amalgamated agencies only the Forests Department had a decentralised materials management and stores system. The Wildlife Section and the National Parks Authority both operated centralised purchasing sections with rural staff generally ordering to meet demand, and only maintaining small stocks locally.

The existing materials management system has been improved and expanded to meet the accountability and supply requirements of CALM, at the same time acting to reduce inventory levels wherever appropriate.

CALM intends (in consultation with the Department of Services) to undertake more of the central supply role in the future (ie. acting as a purchasing agent within Government tenders), and this should further improve the service to CALM's field units. The existing Como Store inventory and stock management system should be adequate to deal with this intended expansion in workload, although at District level further work needs to be done on materials management and purchasing policies to ensure the full benefits flow to CALM.

(v) Methods and Procedures

Explained above.

(vi) Contribution by Other Organisations

The existing CALM materials management service operates within the guidelines and constraints established by the Department of Services and the Office of the Auditor-General. Any proposals to change the existing systems will be developed in close consultation with these agencies.

(vii) Performance of Similar Services

Most large Government agencies that are intensively decentralised (eg. WAWA, Department of Agriculture, SECWA) operate a materials management system comparable to CALM's.

(viii) Comparison with Other States

The Victorian Department of Conservation, Forests and Lands operates a very similar (and decentralised) materials management system, as do other similar agencies in Australia.

(ix) Service to Other Government Organisations

In many rural areas where CALM has a strong presence the Department provides materials management and stores services to other Government agencies (eg. W.A. Police, Fisheries Department, etc). Generally these services involve fuel supplies (at cost) or the maintenance of a parcel and stores pick-up and delivery service.

(x) Human and Financial Resources

		Human (FT	E)	F	inancial	(\$)
CALM DIVISION	Level 1-4	Level 5+	Wages	Total	Sals/Wage	s Total
Operations	1.12	0.04	17.63	18.79	329,907	516,474
Services	0.5	0.3	0	0.8	24,000	25,600
Admin. and Finance	1.9	0	2.8	4.7	93,526	291,381
Forest Resources	0	0	0	0	0	0
Policy Services	0	0.02	0	0.02	1,110	1,110
Research	0.75	0	0	0.75	13,525	13,525
Overheads	0	0	0	0	0	0
					(2)	(1)
CALM Total	4.27	0.36	20.43	25.06	462,068	848,090

- (1) this figure does not include the purchase of stores and equipment in 1986/87 (other than for Stores use) as all of these have been allocated to the appropriate function or service.
- (2) the \$386,000 in non salary and wage expenditure for this service reflects the cost of maintaining CALM's network of stores, the service vehicles used by stores staff and parcel, freight and carrier charges.
- (3) in 1986/87 the Como Store processed Government Stores Orders with a value in excess of \$9,000,000 (this expenditure is all reflected in the various cost centre returns).

This service represents 1.04% of total direct CALM expenditure and 1.74% of total CALM FTEs, and was generally allocated pro rata across the CALM functions.

(xi) Revenue

No revenue accrues to CALM as a result of this service, except small cost recoups (eg. for fuels) from other Government agencies.

(xii) Justification

The service is required as a necessary support to CALM's management activities. The intended move towards CALM undertaking more direct purchasing should improve effectiveness and reduce costs in this area, without necessarily requiring many more resources.

CALM will endeavour to effect this move as "rapidly as State Supply Division policies and operational needs allow".

Operations staff engaged in this service are also some of the very few wages staff who are generally located at the District offices during business hours. They hence represent a rapid despatch force for fire fighting, and a contact point for clients and suppliers, both of which are important secondary elements of their role.

(xiii) Previous Reviews

An internal review of the Como Store procedures in 1986 led to the implementation of the automated inventory control system during 1987. All of the various materials management resources were also examined by CALM during the 1986 "internal functional review", and this led to minor operational efficiencies such as transfer of staff to other duties (mainly recreation maintenance) in some areas.

4.26 INFORMATION TECHNOLOGY/COMPUTING SERVICES

(i) Statement of Service

The management of information technology, and the consequent provision of computing and other services are a major element of CALM's strategic land management processes.

In 1986/87 these processes occurred at two levels within CALM:

- (a) central support services for computing hardware and software development and maintenance were located at Como with Computer Services Branch. Most applications development was done centrally with some user input, and the main systems supported were general ledger, timber production, fleet management, several research programmes, other accounting functions, records management, fire management, and resource inventory analysis.
- (b) at Regional, District and Branch level there are remote terminals linked to the mainframe computers and accessing many of the available programmes. In addition to this micro computers and word processors are now available in most offices to improve effectiveness, and allow for specific computing applications to be developed.

These offices are also responsible for their own telephone and radio systems (described in Section 4.28), other office equipment and facsimile machines.

In 1987 a consultant's report on information flows and corporate data bases within CALM recommended, inter alia, the creation of an Information Technology Branch to combine mapping, computing and geographic information systems. This is being done (with Public Service Commission approval) and when fully established will provide land information systems, applications development and computing operations services to CALM.

A copy of the Executive Summary of this report is attached as Appendix 33.

(ii) Contribution Towards Objectives

In todays public sector and community environment the rapid provision of accurate and comprehensive land and resource data is imperative.

An Information Technology Plan for CALM is being developed (which includes the existing computing services plan) to address the needs of the Department, and rationalise the types of computing and other hardware in use within the Department.

All of these activities will lead to an integrated and ongoing analysis of corporate and operational information needs, which will be directly linked to corporate objectives. This development of information technology and its management and application are essential if managers are to have relevant and timely information available to them.

(iii) Relevance to Government Policies

The Department of Computing and Information Technology (DOCIT) was established, in part, to promote the analysis and evaluation of government Information Technology needs, and to develop integrated strategies to address these needs. CALM's activities in this are are designed to address both internal needs, and also the interface with other agencies and the public. To this extent this service within CALM is complementary to overall Government policies.

(iv) Background

The Computer Services Branch of the Forests Department was formed in 1975 to provide support services for accounting applications, whilst the Inventory Branch also had a programming section at that time for resource inventory applications. The role of this Branch, and the range of applications computing was used for grew quickly to 1984 within the Forests Department, to the stage where all non Inventory computing was serviced by the Branch.

The Wildlife Section had also developed a computing section for specific research applications before CALM was formed.

Since 1985 the Computer Services Branch has been responsible for operating CALM's central mainframe computers, coordinating all computer purchases through DOCIT, and developing commercial and general applications. All of the Research Division computing needs have been handled by that Division, except where it interfaced with the mainframe computers. There has also been a concentration on the purchase and development of micro computing facilities since 1986.

The Department currently owns Concurrent and VAX mainframe computers, and until recent times made extensive use of the Cyber computer at the WA Regional Computing Centre, and the VAX mainframe at DOLA. With the implementation of the approved sections of the consultant's report CALM has now adopted the objective of becoming a single vendor mainframe facility, although this will take several years to achieve because of the specific commercial applications the Concurrent computers are used for.

(v) Methods and Procedures

The mainframe computing system (and particularly the timber production, accounting, fleet management and fire management applications) is accessible in most rural offices through remote terminals. This network is now being extended to the eastern and northern parts of the State. There were also heavily utilised links centrally to other computing centres, which are now being phased out as CALM's new hardware procurement policy takes effect.

In addition to the mainframe facilities there are approximately 100 micro computers within CALM, many of which are used for word processing. There are many research and other specialist applications developed for these computers, and there are now a large number of CALM staff outside the Information Technology Branch who have programming and application development skills.

The former Computer Services Branch had eight staff members (all based at Como) who worked on maintenance and small systems, commercial systems, user training and micro computer maintenance and development. All of these activities and staff will be transferred to the Information Technology Branch when it is fully operational.

Appendix 34 contains a summary list of the computing hardware and software available within CALM.

(vi) Contribution by other Organisations

The Department still uses the DOLA mainframe for exchanging cadastral and geographic information, and until recently relied heavily on the Cyber computer at the WA Regional Computing Centre for specific applications.

CALM also uses the DOCIT IBM mainframe for running the PIMS system which is accessible by most remote terminals, and is involved with DOCIT in hardware procurement and Information Technology planning.

(vii) Performance of Similar Services

Most Government agencies maintain a separate computing service and make varying use, dependent upon agency size and requirements, of bureau systems. Many agencies are now examining their information technology management, and consequently revising management processes and structures to meet the emerging challenges in this field as CALM have done.

(viii) Comparison with Other States

Similar agencies to CALM that have a wide spread of land management responsibilities in other States maintain comparable integrated information technology systems. The scope of these systems seems to vary depending upon the agencies need for accessibility, and the level of integration required with other agencies.

(ix) Service to Other Government Organisations

There is cooperation with other Government agencies for systems such as PIMS, but the service offered to other agencies is of little significance to CALM's operations in this area.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (FT Level 5+	E) Wages	Total	Financial Sals/Wages	
Operations	0.05	0.02	0	0.07	1,485	7,116
Services	4.3	0.5	0	4.8	113,430	408,857
Admin. and Finance	e 0	0	0	0	0	0
Forest Resources	0	0	0	0	0	0
Policy Services	0	0.22	0	0.22	13,056	13,056
Research	3.65	2.05	0	5.7	143,442	278,442
Overheads	0	0	0	0	0	0
CALM Total	8.0	2.79	0	10.79	271,413	707,471

These resources represent 0.87% of total direct CALM expenditure and 0.75% of total FTEs. The resources were generally allocated pro rata across CALM functions, with some specific allocations to functions such as "Commercial Timber Operations".

(xi) Revenue

No revenue accrues to CALM as a result of this service.

(xii) Justification

The provision and maintenance of information technology systems able to ensure staff access to land and resource data is critical to the achievement of CALM's objectives. The recently implemented structural changes in this area will allow better coordination of land information and computing systems, as well as providing for specific applications development.

The resources to properly staff and manage these systems are being provided by internal reallocation.

(xiii) Previous reviews

The Computing Services Branch has worked to a 5 year rolling plan for hardware and software development for about 10 years. The consultant's report referred to above led to several significant changes to information technology management within CALM.

4.27 LAND INFORMATION SERVICES

(i) Statement of Service

The Land Information Services activity comprises both mapping (and associated activities) and the inventory process, which includes the undertaking of resource surveys, the maintenance of land data bases and the development of land information systems. The Branches who contribute most to this service are Mapping Services and Inventory.

The mapping activities of the Department are designed to produce maps suitable for general management (and public) use, and a large array of special purpose maps for management plans, logging and recreation activities, land tenure considerations and dieback disease management.

The inventory activities of the Department tend to focus more specifically on the timber production forests where accurate resource information on log volumes and forest growth rates is required. However the Department's expertise in this area is increasingly being used for resource inventory and data base collation in other areas of the State.

(ii) Contribution Towards Objectives

The provision of accurate and comprehensive resource inventories, and the development of land and geographic data bases that are accessible to line managers are an essential feature of the Department's land management activities. Without this information it would be impossible for timber production activities to be properly managed, and other resource utilisation to be adequately controlled.

The mapping service is an essential end point of the inventory process, but also is a central feature of both the management and site planning work of the Department across all of its functions. High quality and accurate maps are required for activities on public land to be responsibly managed.

(iii) Relevance to Government Policies

The Government is supporting the establishment of a central Land Information System (WALIS) which is directly relevant to CALM's activities in this area. The land use planning process now supported by Government also requires the establishment of integrated land and geographic data bases which CALM's activities contribute to in many ways.

The proper regulation of timber harvesting to within sustainable limits is also a feature of Government forest policy, and precise inventory information is central to this regulation.

(iv) Background

Both the inventory and mapping areas of this service have been long established activities of the Forests Department and CALM. The level of technology applied to these activities has increased greatly in the 1980s, to the stage where many of the manual methods associated with mapping and data analysis are almost obsolete.

A consultant's report was commissioned in 1987 to study information flows within the Department, and concluded that land information was a critical element in these information flows, and consequently for CALM decision making. This report has now led to the establishment of an Information Technology Branch which combines Mapping Services and Computing Services Branches, and the Geographic Information Systems group from Inventory Branch.

At the same time CALM has been intensively involved with the development of the Western Australian Land Information System in association with other agencies. When operational this system will allow for the development of a much wider and more accessible data base on Western Australian land.

(v) Methods and Procedures

The land information service generates information for several distinct purposes:

- strategic information for the Policy Directorate
- tactical information to CALM organisation units for use in developing management strategies and policy implementation
- information supplied to other Government agencies, private organisations and the general public.

All of this information is supported at some stage by the mapping activities of the Department.

The methods used to procure this resource information include broadscale sampling of whole forest types for timber products (the last strategic inventory of the native forests was completed in 1973), with a new inventory of the production zones of the jarrah forests to be completed by 1991. To provide more detailed management information for timber production control, management level inventories are undertaken by intensive sampling within logging areas using a necessarily high level of human resources.

In addition to these resource inventory techniques extensive use is made of a wide range of aerial and satellite photographs for resource management, land classification, dieback disease management and vegetation classification.

The mapping methods used are similar to industry standards elsewhere in Government, with an increasing use of computerised data base and graphics facilities.

The Mapping Services Branch is generally based at Como, with some staff in the Regions, whilst the Inventory Branch is intensively regionalised with most of its staff at Manjimup, Bunbury or Kelmscott.

(vi) Contribution by Other Organisations

The Department of Land Administration supplies most of the aerial photographs used by CALM, and all of the cadastral information used for plotting land boundaries on maps. The Department of Marine and Harbours provides hydrographic information required for marine parks and reserves.

All of these exchanges are part of a long-standing commitment by all Government agencies dealing with land management to exchange basic land data.

(vii) Performance of Similar Services

The Department of Land Administration, Agriculture and Mines, WAWA, State Planning Commission and the Environmental protection Authority all provide land information services, with the data exchange referred to above.

Organisations such as WALIS have been established to ensure a coordinated approach to this issue by all agencies.

(viii) Comparison with Other States

The similar organisations to CALM in other States all maintain comparable service activities, relative to the size of the agency and its responsibilities.

(ix) Service to Other Government Organisations

CALM provides land information and resource data as required to other agencies in line with the data exchange process outlined in paragraph (vi). These exchanges are generally free of direct cost to the user.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (F		Total	Financia Sals/Wage	
	HCVCI I 4	Bever 51	wages	TOULT	builby wag	CD TOCKL
Operations	3.13	1.28	2.75	7.16	159,815	201,757
Services	0	0	0	0	0	0
Admin. and Finance	0.5	0	0	0.5	10,700	10,700
Forest Resources	24.58	5.8	2.0	32.38	831,400	1,040,200
Policy Services	0	0.12	0	0.12	7,083	7,083
Research	0	0	0	0	Ò	Ö
Overheads	0	0	0	0	0	140,000
				(1)		
CALM Total	28.21	7.2	4.75	40.16	1,008,998	1,399,740

(1) the FTEs in Mapping Services Branch were allocated initially to the appropriate function, rather than to this service.

The resources allocated to this service represent 1.72% of total direct CALM expenditure and 2.79% of total FTEs. They were allocated across CALM functions in several ways dependent upon the specific activities of the organisation units represented in this service (explained in more detail in Section 5).

(xi) Revenue

The sale of maps (mainly 1:50,000 coloured series) grossed about \$32,000 in 1986/87. However most of these maps are still used for internal use.

(xii) Justification

The provision of land information and resource data bases, and the subsequent mapping service are essential in ensuring the effective management of public land and resources. There is a large exchange of information with other agencies in developing data bases and this will increase in the future. However the analysis and presentation of the data for CALM's specific requirements could not effectively be the province of another agency, and hence CALM will support the maintenance and enhancement of existing arrangements.

The mapping service delivers many products specific to CALM's needs, and while data base sharing with other agencies is being encouraged, CALM believes it needs to maintain a separate mapping service geared to delivering the specific needs of its managers.

(xiii) Previous Reviews

The consultant's report examined the entire information flows within CALM. This led to the creation of an Information Technology Branch (combining mapping, computing and geographic information systems) with the approval of the Public Service Commission.

The activities within this service have been subject to a CARE review in 1986 (for mapping) and the CALM "internal functional review" in 1986.

4.28 COMMUNICATIONS

(i) Statement of Service

Apart from written communications (dealt with in Section 4.23) the Department is intensively involved in the operation of extensive telephone and radio communication systems.

The telephone service is provided and maintained solely by Telecom Australia (although CALM has purchased many telephones and switchboards to reduce future leasing costs), and in 1986/87 the total CALM telephone cost exceeded \$800,000 for equipment and calls. The telephone system within CALM involves modern equipment, and is very reliable.

Radio communications involve High Frequency (HF) for long distance communication, Very High Frequency (VHF) medium distance communication, to portable citizen band (CB) for short distance communication radios. It involves in excess of 1,000 individual radio sets, and 24 VHF repeater sites, and been one of the areas of strongest demand for new within CALM. Radio installation and services servicing is done by CALM staff.

Each Branch, District and Region has access to excellent telephone communications, and satisfactory radio communications although there are isolated areas where further development (generally at a high cost) is required.

(ii) Contribution Towards Objectives

The maintenance of high quality and reliable telephone and radio communications are vital to the effective operation of decentralised agencies such as CALM. Apart from facilitating rapid transfer of information on day-to-day management issues these two systems are vital for the management of crises (such as bushfires), and in ensuring the safety of staff working in remote areas.

(iii) Relevance to Government Policies

The Government's State Communications Strategy outlines the importance of cost effective and reliable telephone and radio communications across the State. CALM participates actively in the Communications Strategy Working Group established by DOCIT to oversee these communication networks, and cooperates with a wide range of Government agencies.

(iv) Background

The HF radio service began in the Forests Department in 1946 as an aid to fire control. Following the severe fires of 1961 the deficiencies of this system led to it being replaced by a VHF system in 1962, which has been upgraded and expanded since. The other two amalgamating agencies both maintained small HF radio operations for their land and wildlife management staff.

The system has expanded from a total of approximately 700 radios in 1984 to over 1,000 in 1988 without any additional staff for the maintenance and development of the system. The radio communications area has been one of the service areas within CALM to experience the strongest growth in demand, particularly from managers outside the Forest Regions who see the need to improve their communication systems.

particular there has been a major and continuing programme to upgrade equipment standards, and operational area of the VHF network, which is a more system for short range flexible and reliable radio (less than 50 km) work. The telephone system is now based Telecom's entirely on network, which has superseded the Forests Department telephone system of the 1930s to 1960s.

(v) Methods and Procedures

The Communications Section provides the following service for the CALM radio network:

- purchase and supply of radios and associated equipment
- mobile radio and repeater station maintenance
- base station installation and maintenance
- vehicle wiring and radio installation
- tower maintenance and rigging
- training
- radio evaluation and development

All of the telephone requirements are attended to by Telecom Australia under their normal commercial arrangements.

Appendix 35 details the Department's communications equipment inventory.

(vi) Contribution by Other Organisations

Apart from Telecom no other agency contributes to the telephone system. Minor contributions to the radio system are made by SECWA and DOCIT who each control a repeater site used by CALM.

(vii) Performance of Similar Services

Many decentralised Government agencies maintain similar radio and telephone networks (eg. SECWA, WAWA, MRD, Bush Fires Board, Local Government Authorities), although CALM has by far the most extensive network in the South West Region of the State.

Each of these State Government agencies has a radio maintenance group for its own purposes. DOCIT has established a Working Group (see paragraph iii) to coordinate Government radio use, and whilst joint purchasing of equipment and use of facilities such as repeater towers has been encouraged the separate agencies, for a wide variety of reasons, have been unable to significantly combine maintenance resources. This has generally been because of an unwillingness by agencies to share radio channels, and the intermittent nature of maintenance requirements for radio equipment.

However the DOCIT Working Group and individual agencies are continuing to investigate every aspect of this issue.

(viii) Comparison with Other States

Like organisations in other States operate very similar radio and telephone communications networks, and generally maintain their own radio maintenance groups because of the specialised nature of the tasks and equipment involved.

(ix) Service to Other Government Organisations

Many Government organisations (including WAWA, DOCIT, Police, SECWA, Telecom, State Emergency Service and Local Government Authorities) use the physical facilities (eg. towers etc) provided by CALM at remote sites for their radio equipment. A standard lease fee of \$50 per annum is charged.

Some vehicle radio installation is conducted for WAWA outside Perth, and a liaison service with some Local Government Authorities (for a \$60 standard fee) is maintained to advise on equipment and service operations.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (Fine Level 5+	-		Financial (Sals/Wages	
Operations	3.29	0.03	0.13	3.45	117,714	470,195
Services	7.9	1.0	2.5	11.4	254 , 761	458,845
Admin. and Finance	0	0	0	0	0	302,040
Forest Resources	0	0	0	0	0	0
Policy Services	1.0	0.09	0	1.09	21,284	25,047
Research	0	0	0	0	Ô	o ·
Overheads	0	0	0	0	0	0
CALM Total	12.19	1.12	2.63	15.94	393,759 1	,256,127

This represents 1.54% of the total direct CALM expenditure, and was generally allocated pro rata across CALM functions. The 3.45 FTEs in Operations Division are the sum of many people spending time managing the radio systems, while the 11.4 FTEs in Services Division are responsible for procurement and technical standards.

(xi) Revenue

Limited revenue accrues to CALM as a result of lease fees for radio communications facilities. There is substantial revenue flowing from recoups of private telephone expenditure (from staff supplied with a private telephone for business purposes), but this only balances costs incurred.

(xii) Justification

To maintain CALM's operational effectiveness it is essential that the telephone and radio communication network be maintained and upgraded where practicable.

The maintenance of the radio communication network is considered to be most effectively undertaken by Departmental staff who are familiar with the highly complex equipment involved, and are also subject to operational direction by CALM managers. CALM will continue its close involvement with the DOCIT Working Group, particularly in regard to equipment purchasing and maintenance procedures, and will take every opportunity to improve inter agency cooperation.

The 12 staff in Communications section are located at Manjimup (2), Harvey (1) and Perth (9). CALM has found this to be the most efficient manner in which to manage the procurement and technical standards of the system. In Manjimup there is one technician and an apprentice who maintain the radio system from Bunbury to Esperance; the Harvey staff member deals mainly with repeater and tower maintenance; and the Perth based staff include a manager, senior technician (with a large user training role), a person largely engaged in wiring new vehicles, an apprentice, a storeman, and several technicians involved with radio repairs.

Generally (apart from the South West) the radio equipment is sent to Perth to be repaired, as the technical skills are not widely available in the private sector outside Perth, and only in the South West are there enough radios to justify CALM basing staff there full time. By itself CALM does not generate sufficient business to allow private repair shops to economically gear up for maintaining its radios, and will not take any independent action to use significant levels of private resources for maintenance (because maintenance standards would not be to the level required).

The Department is also planning to introduce an internal "user pays" system for radio communications to both ensure the capital and maintenance requirements of the system and also potentially to rationalise the number of radios. It is hoped this system will be in place for the 1989/90 financial year.

(xiii) Previous Reviews

The radio and telephone communications facilities were reviewed during the 1986 CALM "internal functional review".

4.29 LIBRARY

(i) Statement of Service

The Department provides a central Library service, based at Woodvale Research Centre with a Resource Centre at Como. The Library carries a wide range of scientific, technical, economic, and sociological reference books, as well as many journals and magazines, and is partially linked to other State and Australian reference library systems.

It provides a reference and study centre for management and research staff involved with a wide range of CALM activities, as well as an active and effective loan system to CALM's metropolitan and rural staff (using mainly the Mail West system for distribution).

In addition to the central reference library many District, Regional and Branch offices and field research stations maintain small independent libraries with material of particular interest to their sphere of operations.

(ii) Contribution Towards Objectives

The provision of accurate and complete scientific, technical and economic information is vital to the planning and implementation of land resource management. The Library service, and particularly the ability to access other reference collections is a vital element of the information network needed to support public land management in Western Australia.

(iii) Relevance to Government Policy

The ready provision of information is vital to all aspects of public management. The State Government supports an extensive network of reference libraries, including the Battye Library, and the CALM Library is seen as being complementary to this in specific subject areas.

(iv) Background

The formal library systems of the (then) Forests Department, and the (then) Department of Fisheries and Wildlife were established in 1953 and 1961 respectively. In 1985, just after the creation of CALM, the central library services were relocated from their previous sites and consolidated into one centre at Woodvale.

(v) Methods and Procedures

The central reference collection is managed with a software system on a microcomputer to control loans, accounts and cataloguing. This also allows for on-line access to two major library information networks (one Australian, and one from the United States).

The current software has a major disadvantage in its lack of networking capability, which prohibits the use of external cataloguing data, and does not allow for enquiries regarding other libraries' network It is hence proposed to phase out the holdings. microcomputer, and several alternatives are being considered including joining the Government Library based on the State Library database and Network, suitable software, which would then allow on line access to the Australian Bibliographical Network (ABN) in Canberra.

CALM is committed to improving Library services and will constantly be examining new systems for increasing its access to information.

It is also proposed to develop a standardised method for document indexing throughout the Department, which in turn would allow on line retrieval of indexing details from every Departmental location.

(vi) Contribution by Other Organisations

The CALM library is very dependent upon ABN and other Australian libraries to supply reference material not held at Woodvale (in particular the libraries at the University of Western Australia, and the W.A. Department of Agriculture).

(vii) Performance of Similar Services

Almost every Government agency has a library service, with many of them being larger than CALM's.

(viii) Comparison With Other States

The similar organisations to CALM in other States all maintain reference libraries of varying standards, and access the same (or similar) information networks.

(ix) Service to Other Government Organisations

A highly developed inter library loan and copy system operates throughout Australia. In the case of inter agency loans within Western Australia these are free of a service charge.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (FT) Level 5+	•	Total	Financia Sals/Wages	
Operations Services Admin. and Finance Forest Resources Policy Services Research Overheads	0.35 0.04 0 0 0 0 0.86	0 0.06 0 0 0.02 0.01	0 0 0 0 0 0	0.35 0.1 0 0 0.02 0.87	7,925 2,255 0 0 1,110 22,565 0	10,625 3,112 0 0 1,110 33,615 40,000*
CALM Total	1.25	0.09	0	1.34	33,855	88,462

* Overheads include purchase of library books.

The above figures include only those resources dedicated to libraries in the survey. In fact most of the FTE's working in the Woodvale Library were allocated to functions initially and hence cannot be shown separately, although there are currently five FTEs allocated to libraries within CALM (including 0.9 FTE in the W.A. Herbarium).

The resources defined above were generally allocated pro rata to Departmental functions in accord with Section 5.

(xi) Revenue

A small amount of revenue is generated by inter library loans outside the Western Australian public sector, for which a service fee of \$6 per item is generally charged.

(xii) Justification

The Library service is an essential reference source for informed decision making on land management issues, and should be retained and expanded in line with the comments in Section (v).

As part of this process the Library will be relocated to Como (as funds allow) and initially be made part of the Information Branch.

(xiii) Previous Reviews

The Library service was reviewed by the Task Force On Land Management in 1984, and in CALM's "internal functional review" in 1986 and 1987. The current structure and location is a result of these reviews.

4.30 INTERNAL AUDIT

(i) Statement of Service

The Internal Audit Section was established by the (then) Forests Department in January 1981. The service provides:

- appraisal and evaluation of financial control systems
- review of arrangements for protection of assets
- appraisal and evaluation of non financial management control systems
- review of ongoing activities to ensure compliance with legislation, policies and procedures.

To achieve these aims the Audit system has progressed from transactional audit methodology to compliance and system based audit methodology, which allows for more complete examination of management systems and interactions.

(ii) Contribution Towards Objectives

The Internal Audit service allows senior management to have access to regular and accurate reports on the financial and management systems used within CALM. This information is of importance in ensuring that all parts of the organisation are adopting consistent methods and systems.

(iii) Relevance to Government Policies

The proclamation of the Financial Administration and Audit Act 1985, and the associated Regulations and Treasurer's Instructions, formalised Internal Audit as an important management tool.

(iv) Background

The move into compliance and system based audit methodology expanded the scope of the Section's work, as did the amalgamation.

More recently the Office of the Auditor-General and the Treasury Inspectorate have vacated some aspects of the traditional role of reviewing new financial management systems before implementation. This is now being completed by the Internal Audit Section, and will be a new workload (eg. for wages payroll system, hardwood logging management).

As a result most offices in the Department are now being audited only annually.

(v) Methods and Procedures

The Internal Audit service is undertaken using two types of audit:

- compliance auditing with appropriate substantive testing
- system based auditing on large financial accounting and information systems.

The Internal Audit Section reports to the General Manager functionally, and administratively to the Divisional Manager, Administration and Finance.

(vi) Contribution by Other Organisations

All of the actual audit work is done by CALM's Internal Audit staff. However, there is close co-operation with the Office of the Auditor-General and the Treasury Inspectorate. The Office of the Auditor-General has 2 staff based at Como for about 9 months in each year for its own purposes.

(vii) Performance of Similar Service

Most other large Government agencies have a similar Internal Audit Section.

(viii) Comparison with other States

All comparable organisations of medium size or above appear to have a similar service.

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

The resources devoted to Internal Audit in 1986/87 were as follows:

	Huma	Financial (\$)				
CALM DIVISION	Level 1-4	Level 5+	Wages	Total	Sals/Wages	Total
Operations	0.2	0	0	0.2	3,590	4,590
Services	0	0	0	0	0	Ó
Admin. and Finance	e 3.0	0	0	3.0	68,680	90,509
Forest Resources	0	0	0	0	Ö	Ö
Policy Services	0	0.02	0	0.02	1,110	1,110
Research	0	0	0	0	Ò	Ó
Overheads	0	0	0	0	0	0
CALM Total	3.2	0.02	0	3.22	73,380	96,209

These resources were allocated pro rata across all CALM functions in accord with Section 5, and this Service represents (in direct expenditure terms exclusive of overheads) 0.12% of CALM expenditure.

(xi) Revenue

No revenue accrues directly as a result of this Service.

(xii) Justification

The Internal Audit service is an important element of maintaining management effectiveness and efficiency within CALM.

(xiii) Previous Reviews

The Internal Audit section was involved with the 1986 CALM "internal functional review".

4.31 INSURANCE

(i) Statement of Service

Three major types of insurance are carried by the Department, all of which are arranged and managed centrally at S.O.H.Q. These insurances are Workers Compensation (\$964,000 in 1986/87); Public Liability Insurance (\$288,000 in 1986/87); and Building Insurance (\$46,000 in 1986/87), a total of \$1,298,000.

All policies are held with S.G.I.O., and are funded from the C.R.F. Budget.

(ii) Contribution Towards Objectives

These insurances are required to protect the Department's position in the event of personal injury or material damage suffered by any person on CALM land, or as a result of CALM activity.

(iii) Relevance to Government Policy

Government policy dictates that Departments such as CALM carry insurance.

(iv) Background

This activity has been part of the processes of CALM and the three amalgamating agencies for many years. However the level of premiums has caused concern in recent years, and for Workers Compensation in particular negotiations with S.G.I.O. based on CALM's excellent industrial safety achievements have resulted in some savings in premiums in real terms in the past 2 years.

The Department's objective is to maintain safe working conditions, and offer alternative work within the capabilities of injured staff wherever appropriate. This is reflected in the attitude of Managers not regarding Workers Compensation as the first and only answer in cases of industrial accident and injury.

(v) Methods and Procedures

All policies and payments are arranged centrally, based on wage and salary records, or annual returns of buildings to be insured that are submitted by Districts and Regions. The Workers Compensation area now has one person working virtually full time on claims administration to improve the service to injured staff, the speed and accuracy of wage and salary refunds from S.G.I.O., and general liaison with the insurer. In 1986/87 there was approximately 0.5 FTE working on this process. This proved to be inadequate.

(vi) Contribution of Other Organisations

Both S.G.I.O. and the Crown Law Department assist in the examination and processing of claims, and representation at judicial hearings as required.

(vii), Performance of Similar Services (W.A. and Interstate)

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (FT: Level 5+		Total	Financi Sals/Wag	
Operations	2.94	0.06	3.48	6.48	122,026	122,464
Services	0	0	0	0	0	0
Admin. and Finance	0.53	0.73	0	1.26	3,445	3,445
Forest Resources	0	0	0	0	0	0
Policy services	0	0.11	0	0.11	6,064	6,064
Research	0	0	0	0	Ò	8,575
Overheads	0	0	0	0	0	1,298,000
CALM Total	3.47	0.90	3.48	7.85	131,535	1,438,548

These figures include some staff on full time Workers Compensation during the 1986/87 year. As a proportion of direct CALM expenditure this service represents 1.76%.

Under the allocation system explained in Section 5 these resources were distributed pro rata across CALM functions.

(xi) Revenue

No revenue accrues to CALM as a result of this service except wage and salary rebates from Workers Compensation Insurance, and other insurance claims that are paid to CALM.

(xii) Justification

Necessary to protect the Department's position and meet regulatory and legislative requirements.

(xiii) Previous Reviews

An internal review of Workers Compensation administration in 1986 led to revised management procedures in this area, and a reduction in premiums paid which was linked to CALM's relatively low level of claims.

4.32 ECONOMIC ANALYSIS AND PLANNING

(i) Statement of Service

The Economics Branch of the Department provides the bulk of the economic analysis and planning service. The Branch advises the Executive Director and Policy Directorate on the economic aspects of natural resources policy and management.

The Branch's work consists of economic (financial) analysis and socio economic analysis of many of the functions of CALM and its constituent Regions and Branches. The Policy Directorate places a high level of importance on economic analysis and as a consequence it directly influences the magnitude of CALM revenues and expenditures, and the management of forests and other resources.

(ii) Contribution Towards Objectives

The economic analysis and planning service is used extensively in the planning and monitoring of activities in production forestry, conservation, recreation and water production. In each of these areas a sound knowledge of the economic impact (both internal and external to CALM) of planned activities is required to ensure they will contribute towards achieving Government and CALM policy goals.

Hence the service is central to appropriate management of the public land resource.

(iii) Relevance to Government Policies

The Government's stated objective of ensuring the most effective use of public resources, in particular finance, is directly relevant to a strong economic analysis service. In addition some Government initiatives require Departments to recoup all management costs from land users, and economic analysis is a central factor in ensuring this occurs.

(iv) Background

The Economics Branch was established by the (then) Forests Department in 1975 (with one staff member) to provide economic advice to senior staff. With the creation of CALM in 1985 the Branch was given increased responsibilities and staffing (there are now five permanent staff in the Branch), basically to reflect the wide range of activities requiring economic analysis within the new organisation.

Specific activities or involvements since 1986 have included:

- operations research modelling for long term strategic forest management planning
- target unit costs to maximise efficiency in silvicultural operations
- royalties and stumpages, and the indexation of the charges to maximise economic returns
- future State timber requirements
- economic framework for the Government's Timber
 Production Strategy
- determination of a licensing system for wildflower picking
- socio economic input for resource valuation
- water production and pine forest management on the Swan Coastal Plain
- numerous contributions to Grants Commission hearings and other CALM activities.

(v) Methods and Procedures

The Branch uses the following methods to perform this service:

- econometrics
- mathematics and statistics
- operations research
- cost/benefit analysis
- financial analysis
- socio economic analysis.

The application of each of these to natural resource management issues requires knowledge of biological and environmental elements.

(vi) Contribution by Other Organisations

Limited except for provision of specialised data by other agencies when required - eg. farm profitability from the Department of Agriculture, and the funding of Public Interest Projects (current in 1987/88) by the Commonwealth and State.

(vii) Performance of Similar Service

No other agency in Western Australia deals with the full range of economic analysis in natural resource management. However several agencies (eg. Treasury, Department of Agriculture) have similar economic analysis units for their specific areas.

(viii) Comparison with Other States

The agency most comparable to CALM is the Department of Conservation, Forests and Lands in Victoria. This Department has a very similar Economics Unit. None of the other State Government land management agencies have CALM's broad range of responsibilities, hence their economic analysis service is less intensive.

(ix) Service to Other Government Organisations

Limited except in the provision of advice and information as required, and occasional cooperatove projects on activities of special interest (eg. agroforestry on farm land).

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (FT Level 5+	•	Total	Financia Sals/Wage	
Operations	0.04	0.01	0	0.05	3,000	3,050
Services	0	0	0	0	0	0
Admin. and Finance	e 0	0	0	0	0	0
Forest Resources	0	0	0	0	0	0
Policy Services	3.0	2.02	0	5.02	182,277	201,092
Research	0	0	0	0	Ô	Ö
Overheads	0	0	0	0	0	0
CALM Total	3.04	2.03	0	5.07	185,277	204,142

The resources in this service were allocated pro rata across the Department's functions as explained in Section 5, and they total 0.25% of CALM's direct expenditure.

Since 1986/87 the Branch staffing has been upgraded by three people under the auspices of a joint Commonwealth/State funded Public Interest Project studying log processing and timber marketing.

(xi) Revenue

No revenue accrues to CALM directly as a result of this service, but the Branch is involved in all reviews and calculations of revenue generated within CALM.

(xii) Justification

This service is now a vital element of CALM's strategic planning and decision making process. It reflects the Government's commitment to maximise the effectiveness of public resource usage.

In particular many of the elements of CALM's timber production functions are subject to continuing economic analysis, in order to ensure the appropriate setting of target royalty levels as required by the Government's Timber Strategy. The Economics Branch liaises closely with Forest Resources Division in this regard.

To effectively perform this service the Branch does not require additional major resource inputs, although it is likely that the 1988/89 year will see a small increase in the resources allocated to this area.

(xiii) Previous Reviews

None except for the Task Force Report that led to the establishment of CALM, and which recognised the importance of this service.

4.33 PUBLICATIONS

(i) Statement of Service

The publications service within CALM is provided principally by Information Branch, with input and assistance as required by operations and technical staff.

Publications are used to inform people on the natural environment and wildlife, promote the attractions of natural areas, advise people of the safety hazards found on CALM lands, promote Departmental policies and activities, and extend the Department's knowledge base through the publication of research and technical material.

There are two general categories of publications provided by CALM:

(a) Saleable: these are the publications where there is a greater "private good" than public good, and which on balance benefit the individual consumer more than the general community.

Some "public good" publications are likely to experience a large demand for relatively insignificant benefits, particularly where schools are involved. The strategy in these cases is generally to charge for individual copies, but make it available to groups free of charge.

(b) Non Saleable: these are the publications that fall into the categories of corporate promotional material, or are for a public benefit such as providing information on individual safety. Research and technical publications are generally in this category.

The publications are generally either books, magazines or posters of varying finish standards dependent upon the target audience. All of the production process is generally arranged by Information Branch, as is the editing and graphic design. However the relevant line managers, and research or technical staff who initiate the particular publication retain general control over content and structure.

Much of the initial drafting of publications is done by staff outside of the Information Branch as this ensures both technical accuracy, and that the publications address the needs seen by CALM's staff.

(ii) Contribution Towards Objectives

CALM's publications support each of the corporate objectives to an extent. However they are a vital element in CALM's strategies for addressing the provision of information to, and education of both CALM's staff and the wider community.

Because of the decentralisation of CALM it is essential that the Department communicates with its staff and many interest groups primarily through the medium of publications. This communication is a primary factor in building community support for the organisation's objectives and activities.

(iii) Relevance to Government Policies

Specifically through the CALM Act, and more generally in other policy areas the Government is committed to public participation in the management of public assets. This implies that government agencies must communicate extensively with the community to ensure the relevant information is available for informed participation. To this extent CALM's publications are a necessary element in this process.

(iv) Background

Each of the three amalgamated agencies entered CALM with a publications service to provide general public information, as well as research and technical information.

These three individual sections generally operated in similar ways with the writing and editing done internally, and most of the graphics and final production being completed externally (either through the Government Printer or private contractors).

With the additional resources available within CALM the technical resources of the publications service have expanded, and consequently the range and quality of publications has increased greatly. In particular there is now an extensive effort placed into the production of land management plans as part of the overall management planning process.

objective production for the of saleable publications is to produce them at no net cost to the This will be achieved through a mixture of public. price increases where appropriate, better definition of saleable publications, improved cost controls, more cost effective production processes, and in particular much more aggressive and targetted marketing operation.

(v) Methods and Procedures

Much of the written preparation is completed in the offices where the need for a particular publication is seen. The Information Branch staff are principally involved with editing the prepared texts, arranging layout and graphic design work (the Department has its own graphic design resource), preparing final proofs, arranging printing (CALM does not have a publishing facility), and then distribution of the final product.

Each of these procedures is now highly automated, particularly through the use of a desk-top publishing system for the production of final proofs.

The marketing of all publications is done at several levels. All saleable and non saleable publications are generally available from Departmental offices such as Tourist Bureau offices. In addition a range of saleable publications is now available through commercial outlets, such as newsagents, within the guidelines of CALM's publications policy. Landscope, the Department's magazine is also available through a credit card purchasing system.

The area of marketing CALM's saleable publications has recently been upgraded through the appointment of a specialist marketing officer, who is developing strategic marketing plans for publications in association with senior staff. CALM confidently expects this marketing plan to expand publication sales, and net profits, considerably.

(vi) Contribution by Other Organisations

The Government Printer is heavily involved in the printing of CALM publications, and there is some liaison maintained with the publications services in other government agencies. The Ministry of Education has an officer seconded to CALM to work with Departmental staff on the production of publications (and environmental education programmes) suitable for schools.

(vii) Performance of Similar Services

Many government agencies in Western Australia maintain sections to produce publications and other written material for internal, promotional and educational needs. The reasons for this publications activity generally tend to be similar to the rationale for this service within CALM.

(viii) Comparison to Other States

The comparable agencies to CALM in other States all have a publications unit geared to their particular needs, and with many of the same goals as CALM's publications unit.

The land management agencies in the more populous States all operate larger publications services than does CALM, generally because of the greater demand in those States.

(ix) Service to Other Government Organisations

Most of CALM's publications are produced specifically for CALM's and the community's needs. However there is a close interaction with the Ministry of Education in preparing material for use in schools, and in other specific areas CALM cooperates with other agencies as appropriate (eg. WAWA, Department of Agriculture).

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (F Level 5+	•	Total	Financial Sals/Wages	
Operations	0.56	0.17	0	0.73	22,137	37,180
Services	5.65	2.0	Ö	7.65	208,790	650,048
Admin. and Finance	9 0	0	0	0	0	0
Forest Resources	0	0	0	0	0	Ö
Policy Services	0	0.12	0	0.12	9,097	9,097
Research	0.72	2.25	0	2.97	•	137,348
Overheads	0	0	0	0	Ó	0
				(1)		
CALM Total	6.93	4.54	0	11.47	344,517	834,303

(1) some of the resources devoted to this service outside Information Branch have been allocated direct to the appropriate function by cost centres.

The resources within this service represent 1.02% of total direct CALM expenditure and 0.8% of total FTEs.

Generally these resources were allocated to the specific CALM function the publications were designed to serve. Hence recreation, planning, marine management, fire management, environmental protection, and liaison and public participation received the bulk of the allocation from this service.

Using the accepted Functional Review methodology services such as publications do not receive an allocation of resources from other services.

Because publications are intended to be a large source of revenue for CALM, and the medium term objective is for the saleable publications to be of no net cost to public funds CALM undertook a detailed revenue and expenditure analysis for this service in 1986/87. A summary of this analysis is presented as Appendix 36.

There is a deficit in the revenue from saleable publications which has been addressed successfully in the past two years. In particular the introduction of desk-top publishing has reduced preparation costs (and increased quality), and other cost efficiencies and pricing policy are continually being reviewed.

However the major advance in 1988 has been the appointment of a full time marketing professional. The Department will continue the expansion of its quality products into the commercial publications marketplace, where they have already established a foothold. In addition many other potential markets are being examined professionally with a view to expanding the revenue base whilst maintaining the expenditure base essentially static.

The marketing plan will be reviewed at the end of 1987/88 to determine its effectiveness, and any necessary actions to be taken.

(xi) Revenue

As explained in Appendix 36 the publications service earns considerable revenue for CALM. In 1985/86 this was \$15,000; in 1986/87 it was \$120,000; and in 1987/88 it is expected to be \$180,000. The potential for larger revenue increases in the future appears to be considerable.

In addition about \$30,000 per annum accrues through the sale of maps (the expenditure for which is included within Section 4.27 - Land Information Services).

(xii) Justification

CALM requires a comprehensive publications service, able to develop material at several standards for the corporate goals in public participation and environmental education to be met

Because of the Statewide interest in environmental matters it is not possible for CALM staff to personally attend to every individual or group request for information or guidance. Hence CALM staff require the support of suitable publications to effectively assist people to better understand the natural environment and CALM's operations.

The range of publications is extensive, which increases the costs and complexity of the service. However the wide range of publications is necessary to reflect the many areas the Department is involved in.

(xiii) Previous Reviews

The publications service was reviewed generally within the 1986 CALM "internal functional review". An Information Branch review in 1987 led to the greater emphasis now being placed on marketing saleable publications.

4.34 PUBLIC RELATIONS

(i) Statement of Service

This CALM service involves nearly all staff from time to time. CALM places a high priority on the enhancement of the Department's image, and the provision of information on land and wildlife management to the public.

Activities undertaken include: school talks and demonstrations, nature walks with interested groups, provision of information at office reception areas, displays at agricultural shows and recreation areas, joint site development projects with community groups, and liaison with all the different industry groups operating on CALM land.

The Department has a Public Relations Officer for formal media releases and consultation. Many of CALM's publications fulfill a public relations role.

Some of the resources devoted to these activities have been included in the recreation, wildlife conservation and planning functions where this best suited the ultimate purpose of the involvement of CALM staff.

(ii) Contribution Towards Objectives

CALM is dependent upon goodwill and support within the community. The intensive effort by many CALM staff in promoting excellent relations with the public generates support for the Department. This allows plans and programmes to be implemented more easily than would otherwise be the case.

(iii) Relevance to Government Policies

The Government is committed to providing information to the community on its activities, and involving people in public decision making. The public relations activities of CALM contribute to increasing knowledge of the State's natural environment, and hence encourage community involvement.

(iv) Background

The public relations service generally uses the same techniques as the amalgamated agencies have used for many years.

All three agencies placed importance on good public relations, although since the advent of CALM the emphasis on this activity has increased, as has the quality of supporting material.

Public relations has generally been seen as the responsibility of all Departmental staff, and not just a specific service Branch.

(v) Methods and Procedures

The public relations activity relies heavily on CALM publications (described in detail in Section 4.33), and the personal contact between CALM staff, clients and other members of the community. This personal contact occurs through talks to school and community groups, nature walks, clients coming to CALM offices, and high level of contact between CALM staff and visitors at recreation sites.

There are a range of formal and informal consultative groups established with various industries that allow CALM the opportunity to explain policies and strategies.

(vi) Contribution by Other Organisations

There are no significant direct external contributions to CALM's public relations activities.

(vii) Performance of Similar Service

Many Government agencies rely to a similar extent on publications for their public relations activities, and also encourage the public to become aware of their activities through similar mechanisms.

(viii) Comparison with Other States

Similar organisations to CALM in other States maintain a prominent public relations activity (using many of the same techniques as CALM), although some of the smaller agencies with more limited land management responsibilities are not able to develop their written material to the same extent.

(ix) Service to Other Government Organisations

Other Government organisations benefit indirectly from some CALM public relations activities where the objectives of the two agencies are complementary (eg. water catchment management). On occasions CALM combines with other agencies to produce written public relations material, or engage in joint activities (eg. recreation development at Big Brook Dam near Pemberton).

(x) Human and Financial Resources

	Human (FTE)			Financial (\$)			
CALM DIVISION	Level 1-4	Level 5+	Wages	Total S	Sals/Wages	Total	
Operations	8.83	1.66	0.59	11.08	241,472	301,505	
Services	0.2	1.0	0	1.2	40,000	40,000	
Admin. and Finance	1.0	0	0	1.0	17,200	17,200	
Forest Resources	0	0	0	0	0	0	
Policy Services	0	1.57	0	1.57	59,210	64,854	
Research	1.57	0.95	0.2	2.72	66,633	71,633	
Overheads	0	0	0	0	Ò	Ö	
CALM Total	11.6	5.18	0.79	17.57	424,515	495,192	

This service represents 0.61% of total direct CALM expenditure, and was generally allocated across Departmental functions. The service represents 1.22% of total CALM FTEs.

(xi) Revenue

No revenue accrues to CALM as a direct result of this service.

(xii) Justification

The resources allocated to public relations are a necessary part of CALM remaining in touch with the people it serves. A community that is generally supportive of CALM's objectives and understands them, will enable the Department's management plans and processes to be implemented more easily.

CALM intends to maintain a high involvement in public relations as a general responsibility of all staff in their local communities, and will progressively upgrade staff skills in this area through training and supporting material.

(xiii) Previous Reviews

CALM's public relations activities were reviewed in the 1986 "internal functional review".

4.35 REVENUE COLLECTION AND PROCESSING

(i) Statement of Service

Revenue collected by CALM comes from six main sources - timber production, house rents, recreation, wildlife management, leases, and publications (the revenue accruing to each of these has been specifically discussed in the relevant sections of this submission).

There are three major revenue collection techniques used by CALM:

- most of the recreation revenue is collected on site by CALM staff on a fee for service basis (ie. camping fees, tour fees, etc.)
- each District and Regional office collect varying amounts of revenue. This revenue can include minor forest produce, lease payments, timber contract payments, maps, publications, and kangaroo tags.
- the largest money amounts of revenue are collected centrally by Finance Branch, and include timber royalties and contract receipts (from approved account holders who maintain Bank Guarantees or the like with the Treasury), bulk publications (such as Landscope), lease fees, and house rents. The Finance Branch both raise the account for payment (on advice from the relevant CALM Branch or Region), and process and record payments from all sources in the manner required by the Treasury and the Office of the Auditor-General.

(ii) Contribution Towards Objectives

To ensure proper acountability and timely cash flows the mechanisms for collecting and acounting for revenue from all sources must be well managed. In addition there is inestimable benefit derived to CALM's public image as a result of the decentralised revenue collection process (for most items of revenue), which allows clients personally to query accounts and process payments at local offices.

(iii) Relevance to Government Policies

Government policies, and the relevant legislation demand a high level of acountability and accuracy from revenue collection processes. This is reflected in CALM's approach.

(iv) Background

The revenue collection processes in the three amalgamated agencies were originally very centralised for most revenue collection (except minor forest produce, and recreation revenue in National Parks). Over time, and particularly since the creation of CALM, many of the revenue collection processes have been transferred to District and Regional offices. This has been particularly marked in the case of timber supplies where many contract and log sales payments are now made at CALM rural offices.

All necessary staff are trained in the relevant Treasury and Audit Regulations, and security of offices (and safes) is being continually upgraded.

(v) Methods and Procedures

All money received is receipted, and banked within the various times specified by Regulation. This creates a little difficulty in National Parks remote from towns and banks, and special arrangements have been made for this.

management information system for The assessment has also been progressively upgraded in the past five years, and now regular monthly reports of revenue against estimates are available for many of the major revenue sources (these are developed from CALM's system). accounting General Ledger computerised Attention will continue to be paid to improving the system's ability to detail revenue flows more explicitly for the lesser sources such as maps, and the various categories of minor forest produce.

CALM is also trialling the use of credit card payments for mailed publications paid for at Como.

(vi) Contribution by Other Organisations

Other Government agencies such as the Crown Law Department (through Clerks of Courts) accept some revenue for CALM, and in many rural locations Tourist Bureaux collect revenue for maps and publications on behalf of CALM.

Several CALM publications are sold through retail outlets (such as newsagents) which creates an extra demand for publications, with all the CALM revenue involved being collected centrally.

(vii) Performance of Similar Services

Several government agencies with a strong rural presence perform a similar revenue collection service.

(viii) Comparison with Other States

Generally CALM's processes and procedures, and the decentralised nature of revenue collection are similar to those adopted by like organisations in other States.

(ix) Service to Other government Organisations

CALM collects only isolated amounts of revenue for other State Government agencies, although with the progressive transfer of the housing estate to GEHA the level of rent revenue collected for that agency will increase. There is also a substantial amount of PAYE income tax collected from salaries and wages for the Australian Taxation Office.

In addition to Government agencies CALM collects the log levy for the Forest Products Association (as part of the log royalty structure), Trade Union subscription fees for several Unions, and a wide array of revenues from salaries and wages for Insurance companies, Credit Unions and the like (some of these Companies pay a small commission fee).

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (FT Level 5+		Total	Financia Sals/Wages	l (\$) Total
Operations	5.26	0	1.15	6.41	117,245	139,456
Services	0	0	0	0	0	0
Forest Resources	0	0	0	0	0	Õ
Admin. and Finance	6.5	0.75	0	7.25	146,999	149,955
Policy services	0	0.07	0	0.07	4,097	4,907
Research	0	0	0	0	0	0
Overheads	0	0	0	0	Ö	ŏ
CALM Total	11.76	0.82	1.15	13.73	268,341	293,508

These resources represent 0.36% of total CALM expenditure in 1986/87 (direct costs only). In the distribution of these resources across CALM functions the major allocations were made to Timber Industry Regulation (approximately 70% of the total for this service), and Recreation Management (approximately 20% of the total for this service).

(ix) Revenue

As described above.

(xii) Justification

Required as to ensure proper accounting for CALM activities. Also provides improved client service through decentralising the revenue collection process.

(xiii) Previous Reviews

Several internal management and audit reviews have been involved in establishing the present system.

4.36 POLICY COMMITTEE SUPPORT

(i) Statement of Service

The Department has three formal policy or advisory Committees operating at Ministerial level (as detailed in Section 1.1), all of which are supported by CALM staff for secretarial and research requirements.

In addition these legislative Committees the to Department's policy is to establish advisory and groups consultative throughout the State where appropriate. Each of these groups is comprised of community members, and as they are generally volunteers CALM must provide research, advisory and secretarial assistance. Neither advisory or consultative groups have any responsibility for management decisions, nor do they have an executive role.

Examples of the groups established throughout the State are the Shark Bay Consultative Committee, the Marmion Marine Park Consultative Committee, the Ningaloo Marine Park Advisory Committee, Friends of the Tuart Forest, and the Karri D'Entrecasteaux Region Advisory Committee.

The resources devoted to servicing CALM's Policy Directorate and the Hon. Minister's office have been included in this service.

(ii) Contribution Towards Objectives

of CALM's diverse and growing management Because responsibilities it is not possible for the Department to service all the demands made of it across the The creation of community based advisory State. groups vital in ensuring is a strategy communities have input into the management plans and arrangements for CALM land in their area. This may facilitate implementation of these plans once approved.

However, with mainly volunteer members these Committees could not function without secretarial and research assistance from CALM staff.

The Policy Directorate acts as a Corporate Executive in bringing the views of policy and operations staff together, and is an essential element of decision making within the Department.

(iii) Relevance to Government Policies

In a wide range of areas Government is encouraging local communities and interested persons to participate in public decision making. The Committees established and supported by CALM are an important part of this Statewide approach.

(iv) Background

The background information to the establishment of these various levels of Committees is explained in Sections 1.1 and 1.8.

(v) Methods and Procedures

Generally the support provided to these Committees is secretarial (ie. venues, distribution of minutes and briefing papers, verbal briefings and presentations, typing of letters etc). However the nature of their deliberations demands a knowledge of the sites and issues being addressed, so time is also spent by CALM staff in arranging and conducting field briefings.

The same type of support is provided for Policy Directorate meetings, although the level of this support is more intensive than for community committees because of the wider range of policy and management issues addressed.

(vi) Contribution by Other Organisations

Whilst the deliberations of these various Committees overlap the responsibilities of many other organisations, the actual support service is generally provided solely by CALM.

(vii) Performance of Similar Services

Several Government agencies have a similar grouping of consultative and advisory committees which they support and maintain to various levels. Some of the better established examples are the Soil Conservation groups supported by the Department of Agriculture, and the Regional Development Advisory Committees supported by the Department of Regional Development.

(viii) Comparison with Other States

From the information available it appears that like organisations to CALM in other States are not as intensively involved with advisory and consultative Committees as is CALM. The Victorian Department of Conservation, Forests and Lands has some rural advisory committees, and all of the other agencies are involved with appropriate cross sector Committees which involve both public sector and community representatives.

(ix) Service to Other Government Organisations

CALM provides an indirect service to other Government agencies where they are involved in these consultative or advisory Committees. No charge is levied for this as there are many Committees on which CALM is represented where the secretarial and support costs are paid by other agencies.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (FT Level 5+	-	Total	Financial (: Sals/Wages	
Operations Services Admin. and Finance Forest Resources Policy Services Research Overheads	0.03 0.1 0 0.3 6.0 0	0.38 0.4 0 0.2 4.54 0.01	0.13 0 0 0 0 0	0.54 0.5 0 0.5 10.54 0.01	19,159 14,261 0 28,200 334,632 519	20,449 14,461 0 48,200 350,276 519 389,000
CALM Total	6.43	5.53	0.13	12.09*	396,771	822,905

^{*} the total FTE figures include the Hon. Minister's office (9 FTEs).

This service represents 1.01% of total direct CALM expenditure and 0.84% of total CALM FTEs, and was generally allocated pro rata across CALM functions.

(ix) Revenue

No revenue accrues to CALM as a result of this service.

(xii) Justification

The involvement of community based Committees in the decision making and management processes for public land are a necessary precursor to ensuring appropriate management procedures can be implemented. This interactive process also greatly expands the bank of knowledge on local areas and issues that is available to CALM staff.

The CALM Act establishes public participation as an integral part of public land management, and these Committees contribute greatly to this process.

(xiii) Previous Reviews

The Task Force Report leading to the establishment of CALM examined public participation in land management planning in some detail, and the eventual passage of the Act created the three controlling bodies.

4.37 REVENUE RAISING

(i) Statement of Service

All of CALM's activities from which revenue is either currently or potentially earnt, are continuously examined as part of Departmental policy. In this regard staff of Regions and Branches consider the issues of revenue potential (and cost of collection) in their management of most CALM's activities.

aid to revenue management, Finance Branch As an provides a complete listing of all Departmental fees Responsibility for the regular se fees and charges has been charges. and examination of these allocated to various line managers. The intensive examination occurs during Budget preparation when Managers responsible for an area each year estimate revenue for the following year, and prepare the necessary proposals to increase (or decrease) fees charges for approval by the Executive Director or Hon. Minister.

The revenues accruing from the timber production area are the most intensively examined because of their importance, and the Timber Strategy document clearly establishes processes to increase revenue in this area.

(ii) Contribution Towards Objectives

The Department has the objective of moving towards net self sufficiency in regard to funding. This means that the process of revenue raising, and continual examination of potential sources of revenue (and cost of collection) is vital to CALM's progress towards this objective.

(iii) Relevance to Government Policies

There is an increasing trend within government for the application of fee for service policies in areas where users have the capacity to pay. All services provided by Government in the commercial area should be self funding and CALM's examination of revenue raising is relevant to this aspect of Government policy.

(iv) Background

The revenue raising service has existed within the amalgamated agencies for many years. However in the past few years, with declining budgets in real terms, agencies have been looking more intensively at methods for raising revenue, consistent with the Government's overall social and community obligations.

Within CALM the areas of timber production, leases and concessions on National Parks, publications, wildflower management and recreation management have been particularly targeted for close examination internally. The action taken in regard to these issues will be detailed in the relevant sections of this submission.

(v) Methods and Procedures

The principal methods used to determine potential sources and levels of revenue are the economic, financial and social planning and analysis procedures detailed in Section 4.32.

Wherever possible the revenue accruing from log sales and leases of all kinds is determined by public tender.

(vi) Contribution by Other Organisations

Many of the groups and individual clients that interact with CALM are involved in the process of setting fee levels, and developing revenue collection procedures. The principal types of groups involved where appropriate are the timber industry at all levels, recreation and tour operators, concession holders, apiculturists, the kangaroo harvesting industry and the wildflower harvesting industry.

However through its legal charter and responsibilities CALM, and where appropriate the Hon. Minister, maintain the ability to determine fee levels it believes are necessary and reasonable, bearing in mind capacity to pay.

(vii) Performance of Similar Services

Many other Government agencies have a similarly wide range of fees and charges which impact upon the community, and are in need of continual review.

(viii) Comparison with Other States

Like agencies to CALM in other States have very similar revenue raising processes appropriate to their areas of responsibility. It appears that all of them are looking intensively at revenue increases within the guidelines set by their respective State Governments.

(ix) Service to Other Government Organisations

Not applicable.

(x) Human and Financial Resources

CALM DIVISION	Level 1-4	Human (F Level 5+		Total	Financial Sals/Wages	
Operations	1.33	0	6.46	7.79	132,381	266,378
Services	0	0.1	0	0.1	2,897	2,897
Admin. and Finance	0.2	0	0	0.2	5,500	5,500
Forest Resources	0	0	0	0	0	0
Policy Services	0	0.22	0	0.22	12,083	12,083
Research	0	0	0	0	0	0
Overheads	0	0	0	0	0	0
			*(1	.) (2)		
CALM Total	1.53	0.32	6.46	8.31	152,861	286,858

- (1) the wages FTE include some Nursery staff who are involved in the raising of seedlings for sale, and who cannot be readily allocated to a CALM land management function.
- (2) many of the staff resources applied to this service were initially allocated to the appropriate CALM function by cost centres and hence are reflected in the relevant section of this submission (the major part of these are in Commercial Timber Operations, Section 3.7).

The resources allocated to this service represent 0.35% of the total CALM direct expenditure, and were generally allocated to the Hardwood Regeneration and Timber Growing function.

(xi) Revenue

Not applicable.

(xii) Justification

The process of regular examination of all of CALM's activities to identify fees and charges that should be increased, or new revenue sources that should be tapped is an ongoing and vital part of the Department's funding objectives

(xiii) Previous Reviews

The regular review of all fees and charges mentioned in paragraph (i) is ongoing. A small Committee of senior Managers from various Divisions has been established to provide regular advice to the Policy Directorate on the adequacy of fees and charges, and in particular potential new sources of revenue.

This Committee includes Regional Managers, Finance Branch, the Policy Directorate and other staff and meet every two to three months.

4.38 INTRA GOVERNMENT LIAISON

(i) Statement of Service

This service includes resources allocated to formal liaison (i.e. through Committees etc.) with other Government organisations (State, Federal or Local), where the purpose of the liaison cannot readily be identified as an activity that is solely CALM's responsibility (eg. public sector wide Committees on land use etc.)

This service represents only a small proportion of the liaison conducted with other Government organisations by CALM as most of this liaison has been included in the resources allocated to the function or service for which it was conducted.

(ii) Contribution Towards Objectives

The resources devoted to liaison are necessary for maintaining appropriate management of public lands. It is vital that CALM remain continually aware of the proposals from other Government organisations wishing to use CALM land for some purpose, so that the Department can have appropriate and ongoing involvement in the planning of projects that will impact upon CALM land.

It is also necessary for the Department to maintain a firm interest in the many initiatives in Information Technology and Systems being developed in Western Australia, so that, as a major land manager, CALM can ensure the proposed systems suit its purposes to the extent possible.

(iii) Relevance to Government Policies

Liaison of this kind, and the coordination between government agencies that results from it, is an integral part of ensuring that the Government's aims of maximum efficiency, and the proper management of public lands are met.

(iv) Background

Each of the three amalgamating agencies were involved with liaison of this kind. However, since the formation of CALM, with its much wider land and wildlife management responsibilities, and a sharp increase in the number and scope of projects on public land being initiated outside CALM (eg. mining, tourism, water supplies, public utilities, etc), the level of Intra Government Liaison has increased greatly.

Appendix 10 indicates the wide range of formal Committees the Department is represented on.

(v) Methods and Procedures

Most of the resources in this service are devoted to attending meetings, and ensuring that CALM acquires and maintains a wide range of senior contacts in appropriate external organisations.

(vi) Contribution by Other Organisations

Other Government organisations contribute to this process in the same way as CALM.

(vii) Performance of Similar Services

Most Government agencies are now intensively involved in these activities, to ensure that projects are appropriately planned and implemented.

(viii) Comparison with other States

Similar organisations to CALM in other States have a high degree of involvement in this formal liaison process within their own States, and in some cases with CALM at a national level.

(ix) Service to other Government Organisations

The liaison process is by nature interactive, and the consequent sharing of information and ideas is of value to all agencies involved.

(x) Human and Financial Resources

The resources devoted to this service throughout CALM can be summarised as follows:

Human Resources Financial						
CALM DIVISION	Level 1-4	Level 5+	Wages	Total	Sals/	Wages Total
Operations	0.25	0.52	0	0.77	29,867	39,867
Services	0.4	0.2	0	0.60	23,165	27,585
Admin. and Finance	∍ 0	0	0	0	0	Ô
Forest Resources	0	0.25	0	0.25	9,700	10,600
Policy Services	0	0.77	0	0.77	35,269	37,150
Research	0	0.17	0	0.17	8,040	8,040
						(1)
Overheads	0	0	0	0	0	1,131,854
CALM Total	0.65	1.91	0	2.56	106,041	1,255,096

(1) includes the 1986/87 costs of the transfer of the Kemerton land from ILDA to CALM (both a capital purchase of \$570,569 and loan repayments of \$561,285). The resources in this service were allocated over the Departmental functions (in accord with Section 5) using a pro rata allocation to all functions.

This service consumed 1.54% of CALM's 1986/87 budget. However, the majority of this was for the Kemerton land transfer, which could not correctly be accounted for elsewhere.

(xi) Revenue

No revenue is raised directly as a result of this service.

(xii) Justification

This service should be continued at its current level to ensure CALM has direct involvement at both the planning and implementation stages of projects or activities being considered for public lands. Not to do this would severely hamper CALM's management effectiveness.

(xiii) Previous Reviews

CALM's staff involvement with formal external liaison is kept under regular management review.

5. ALLOCATION OF RESOURCES WITHIN CALM

5.1 METHODOLOGY

The resource allocation survey conducted within CALM, and explained in Section 2, formed the basis for all of the resource allocation data provided in Sections 3 and 4.

After the base data from managers within CALM was prepared (in accord with Appendix 25), and entered into a data base the next process was to reconcile the data to actual Departmental resources (human and financial) reported in 1986/87.

This was done (detailed in Appendix 37) and showed that the FTEs reported were within 0.04% of the actual for 1986/87, and the total finance was understated by 1.05% from the audited 1986/87 accounts. Because of the retrospective nature of this survey these levels of accuracy were deemed to be satisfactory.

Included within this reconciliation were a number of "Overhead costs" (totalling \$14.92M) that are detailed in Appendix 38. These Overhead costs are a mixture of the more usual overheads such as Workers' Compensation Insurance and loan repayments, and other costs identified from the final CALM financial management report for 1986/87 which could be directly attributed to a particular organisation unit, but were not included in survey returns. These items included some professional consulting fees and expenditure associated with grants finance.

When the direct allocation of resources to functions and services had been completed, the distribution of the resources in services across the functions was undertaken. In the first instance this was done by returning to each manager initially involved in the survey a copy of the resource allocation for their organisation unit, with a request for their advice on the appropriate mechanism for allocating services across functions in their own particular situation. The replies from these managers were confirmed with Divisional Managers, and generally were found to be accurate.

Appendix 40 is a copy of the letter sent to managers concerning this reallocation of services, and provides details of the guidance they were given.

The allocation of services to functions was then done manually, and was summarised for each Division so that the full contribution of each to a particular function could be accounted for.

The work sheets have not been included in this submission, but are available in CALM's records for further analysis as required. The resource data generated from this process formed the basis of the information contained in part (b) of paragraph (x) of each function description in Section 3. A summary of the mechanism for allocating resources in services for each organisation unit is attached as Appendix 39.

5.2 CALM RESOURCE ALLOCATION

The resource allocation to functions and services is detailed separately in individual descriptions in Sections 3 and 4. However Appendix 41 is a summary of the human and financial resource allocation to CALM functions after the allocation of services.

The locations in which these staff work are spread widely throughout the State (as shown in Appendix 9). To expand upon this earlier information the individual organisation unit returns have been analysed to provide a summary of the locations in which each function or service is performed. This summary is attached as Appendix 42.

6. SUMMARY

This submission accurately depicts the manner in which the Department of Conservation and Land Management allocated resources to its various functions and services in 1986/87.

Whilst the functions and services are presented separately (as is required by the Functional Review Committee Guidelines) the nature of land and wildlife management, and the consequent social and community interactions, is such that each function is integrally linked to the other functions at each level of Departmental activity. This occurs because an operation within any specific function generally also has consequences for activities within other functions (eg. timber harvesting operations can have major effects on environmental protection; planning has an effect on all other functions).

However, the resource allocation shown here is only valid for the 1986/87 year. The demands on CALM, and its range of responsibilities and activities are growing so quickly as a result of both Government direction and community needs, that the allocation of resources is constantly changing. To address this issue, the individual sections contain comments where appropriate which indicate both the changes that have occurred since 1986/87, and also the changes that CALM plans to introduce shortly.

The constantly changing demands made of CALM are also reflected in the continual process of internal review being carried out by the various parts of the Department. Perhaps the largest single instance of this is the Timber Strategy document which, when fully implemented, will substantially change CALM's resource allocation for activities related to timber production, as well as the revenue flowing to the State from the industry. However there are many other instances where the continual review of activities has led to changes in management structures and practices. These are detailed in this submission.

As a new agency, operating in a complex environment, CALM believes it has adjusted well to meeting the community needs it was set up to serve. The complex resource allocations described here reflect the large and diverse task facing the Department. The Functional Review process is of value in assisting CALM meet this challenge.

LEGISLATIVE REQUIREMENTS FOR MEMBERSIP OF THE STATUTORY CONTROLLING BODIES

(i) LANDS AND FOREST COMMISSION

Under Section 20 of the Conservation and Land Management Act, 1984

2 persons appointed by the Governor on the nomination of the Minister

and the Executive Director of the Department.

(ii) NATIONAL PARKS AND NATURE CONSERVATION AUTHORITY

Under Section 23 of the Conservation and Land Management Act 1984.

The Authority shall comprise:

- (a) 4 ex officio members being -
 - (i) the Executive Director;
 - (ii) the Director of Nature Conservation (CALM);
 - (iii) the Director of National Parks (CALM); and
 - (iv) the Director of Forests (CALM).
- (b) 10 persons appointed by the Governor on the nomination of the Minister of whom -
 - (i) 2 shall be representative of voluntary organisations having a special interest in conservation, being organisations that are affiliated with the Conservation Council of Western Australia Inc;
 - (ii) 2 shall be representative of voluntary organisations having a special interest in the use of land, flora and fauna for recreation purposes;
 - (iii) one shall be representative of tertiary educational institutions in the State and shall be a person with special knowledge of, and experience in, a discipline relevant to nature conservation;
 - (iv) one shall be representative of bodies of persons the members of which, by reason of their profession, are concerned with nature conservation;
 - (v) 2 shall be representative of local government and shall be at the time of nomination elected members of a local authority;

- (vi) one shall be representative of fishing
 interests; and
- (vii) one shall be a person employed in the Department, not being an ex officio member, whose duties relate principally to the management of land vested in the Authority.
- (c) One of the members so appointed in (b) shall, on the nomination of the Minister, be appointed by the Governor as chairman and another as deputy chairman.

(iii) FOREST PRODUCTION COUNCIL

Under Section 26 of the Conservation and Land Management Act 1984.

The Council shall comprise:

- (a) 2 ex officio members being -
 - (i) the Executive Director, who shall be the chairman of the Council; and
 - (ii) the Director of Forests (CALM), who shall be the deputy chairman of the Council;

and

- (b) 12 persons appointed by the Governor on the nomination of the Minister of whom -
 - (i) one shall be a person who is a member of the Water Resources Council established by the Western Australian Water Resources Council Act 1982;
 - (ii) shall be representative of timber industries or industries which significant users of timber or timber products;
 - (iii) one shall be representative of primary
 producers, not coming within sub-paragraph
 (ii), associated with forests;
 - (iv) one shall be representative of bodies of persons the objects of which, or the members of which by reason of their profession, are concerned in the management of forests;
 - (v) one shall be representative of country interests and be a person with special skill or experience relevant to the functions of the Council; and
 - (vi) one shall be a person having special experience in commercial forestry production.

APPENDIX 2

FUNDING, REVENUE AND STAFFING LEVELS - AMALGAMATED AGENCIES

	Agency	Area Managed (vested or on behalf of others) (Ha.)]	Funding	Staff		
Year			Revenue Recpts. \$,000	Expend. (all sources) \$,000 (5)	Salaried	Wages	Total
1975–1976	NPA	2,281,540	226	1,109	14	54	68
	WAWA (2)	5,339,947	14	851	45	0	45
	FD	1,975,196	8,602	12,723	452	481	933
	Total	9,596,683	8,842	14,683	511	535	1,046
1980–1981	NPA	4,363,968	520	2,716	16	81	97
	WAWA (4)	9,883,231	14	1,722	64	0	64
	FD	2,012,972	15,782	26,816	541	511	1,052
	Total	16,260,171	16,316	31,254	621	592	1,213
1983–1984	NPA	4,426,811	1,148	4,162	21	81	102
	WAWA	9,900,531	48	2,381	66	5	71
	FD	2,013,000	19,640	40,676	591	490	1,081
	Total	16,340,342	20,836	47,219	678	576	1,254
1986–1987	CALM	17,057,209	32,928	81,601	(7) 770	572	(3) 1,342

NOIES:

(1)	Abbreviations:	NPA	National Parks Authority
		Wawa	W.A. Wildlife Authority
		FD	Forests Department

- (2) Based on an estimate of 30% of the budget of the Department of Fisheries and Wildlife being devoted to wildlife management and research.
- (3) The total FTE figures include only permanent wages and salaried staff, and not FTE used for seasonal positions etc.

- (4) The 1975/76 and 1980/81 staffing figures for WAWA are approximate only because of difficulties in separating WAWA and Fisheries staff resources from Annual Reports.
- (5) Expenditure is totalled from all sources including CRF, Capital, Trust Funds, grants, etc.
- (6) All data obtained from published Annual Reports.
- (7) At the time of the gazettal of the CALM Act in 1985, the Government allocated 75 more staff to CALM (over and above the amalgamated agencies). These staff were principally for staffing the Policy and Operations Directorate, research staff, park Rangers, new Regional managers, and new Wildlife Officers.



Department of the Premier and Cabinet

Task Force on Land Resource Management in Western Australia

A REPORT TO THE GOVERNMENT OF WESTERN AUSTRALIA

January 1984

1. General

This report outlines proposals for reorganisation of land resource management and administration in Western Australia. At an early stage of the study we concluded that it was impossible to confine it to the South West region because all of the agencies with which we were concerned had staff and responsibilities outside the region. With the approval of the Premier we have therefore made proposals on land resource management and administration which apply to the whole State.

During the period of this study we have been impressed by the competence and dedication of the staff of the government agencies involved in land resource management and administration. We have concluded that additional resources will have to be deployed to achieve effective and acceptable land resource administration and management in Western Australia. However, existing arrangements are not conducive either to the efficient use of resources or the development of community consensus on land use.

2. Land use planning in rural areas

Currently there are few formal mechanisms for co-ordinated planning outside the metropolitan region and relatively few resources are available for land use planning.

We propose:—

- a) the formation of a Department of Urban and Rural Planning, based on the existing Town Planning Department. It would support and co-ordinate land use planning by local authorities through the provision of land use planning skills;
- the integration of land use planning for rural areas with controls on management practices through the Soil and Land Conservation Act for prevention of soil and land degradation;
- statutory regional co-ordination of local authority planning only where the intensity and range of land uses requires it. We suggest a region

based on Bunbury for early consideration.

These proposals would necessitate additional expertise and staff for the new Department of Urban and Rural Planning, and for the Department of Agriculture for land evaluation and soil conservation work.

Since our proposals for better land use planning require further development, it would be appropriate for them to be considered by the Committee of Inquiry into Statutory Planning in Western Australia.

3. Public land management

The Task Force believes that a major improvement in efficiency and coordination can be achieved by the incorporation into one organisation of the government agencies concerned with public land management and its associated research.

- a) We propose the formation of a Department of Natural Land Manage ment which would incorporate the Forests Department, the National Parks Authority and the Wildlife section of the Department of Fisheries and Wildlife, and administer the Waterways Commission, the Kings Park Board, the Bush Fires Board, and smaller elements of other agencies involved in land management or natural resources research.
- b) The new Department would be responsible for management, and advice to the Government on disposal. of land currently vested in the Forests Department, the Western Australian Wildlife Authority and the National Parks Authority, and of vacant Crown land and unvested reserves. It would be responsible for land management planning of Rottnest Island and the co-ordination of management of Regional Parks. It would have a Statewide responsibility for management and research for wildlife and it would provide land management expertise to other public agencies and the community as required.

- c) The major features of the new Department would be:
 - a Commission consisting of one full-time Director and two parttime Commissioners;
 - policy forming groups within it concerned with recreation in National Parks, Conservation of Nature and Forest Production, each headed by a Conservator;
 - corporate departmental policy formation by the Commission, Deputy Director, Assistant Director (Research) and the three Conservators;
 - operations based on integration of land management services at regional centres throughout the State;

 land management according to plans which would be open for public comment and subject to formal approval.

4. Co-ordination and development of land use policy

We propose the establishment of a Land Resource Policy Council chaired by the Director-General of the Department of Premier and Cabinet and comprised of representatives of government departments who have a responsibility for land resource management or land use. The Council will be serviced by an executive support group. The Land Resource Policy Council's primary role will be to coordinate government land use and management policies and to ensure that regional land use plans are in accordance with them.

TABLE OF CONTENTS

			PAGE			
Chapter 1	Int	roduction	-			
Chapter 2		nd Use Planning and Management of Land Resources in stern Australia	2			
	2.1	2.1 General				
	2.2	Public and private land				
	2.3	Alienation of Crown land	:			
	2.4	Development of the system of planning and management	4			
	2.5	The need for land use planning	4			
	2.6	Current land tenures	r,			
	2.7	Co-ordination of planning and development	7			
	2.8	Attempts to improve land use planning	7			
	2.9	Conclusion	8			
Chapter 3	Cur	rent Land Management Arrangements	11			
	3.1	Management of public land	11			
		3.1.1 Timber production 3.1.2 Conservation of nature	11 12			
		3.1.3 Recreation in natural surroundings	13			
		3.1.4 Water supply 3.1.5 Mining	14 14			
	3.2	Management of private land	14			
	3.2.	3.2.1 Agriculture	15			
		3.2.2 Pastoral grazing 3.2.3 Water supply	15 16			
	3.3	Conclusions	10			
		3.3.1 Classification of parks and reserves	10			
		3.3.2 Duplication of activities 3.3.3 Professional staff	17			
		3.3.4 Research	1 <i>7</i> 18			
		3.3.5 Regional deployment	18			
		3.3.6 Total resource allocation	18			
Chapter 4	Man	agement of Private Land in Rural Areas	21			
	4.1	General	21			
	4.2	Planning and control proposals 4.2.1 A Department of Urban and Rural Planning	21			
		4.2.1 A Department of Urban and Rural Planning4.2.2 Department of Agriculture responsibilities	23 23			
		4.2.3 Boards and Committees	24			
		4.2.4 Other Departments	24			
	4.3	Discussion	25			
		4.3.1 Higher rainfall and coastal areas 4.3.2 Farming areas	25 25			
		4.3.3 Central and northern areas	25 25			
	4 4	Conclusion	96			

Table of Contents (continued)

			PAGE				
Chapter 5	Management of Public Land in Rural Areas						
	5.1	1 A Department of Natural Land Management					
	5.2	Objectives	27				
	5.3	Land resources for which the Department would be responsible 5.3.1 The State Forest 5.3.2 National Parks 5.3.3 Nature Reserves 5.3.4 Vacant Crown land and unvested reserves 5.3.5 Regional Parks	28 28 28 28 28 30				
	5.4	Components of the proposed Department 5.4.1 The Forests Department 5.4.2 Wildlife Research 5.4.3 Nature Reserves Management 5.4.4 Wildlife Management 5.4.5 National Parks Authority 5.4.6 Herbarium 5.4.7 Kings Park Board 5.4.8 Bush Fires Board 5.4.9 Waterways Commission 5.4.10 Rottnest Island land management	30 30 31 31 32 32 33 33 33				
	5.5	Proposed structure for the Department of Natural Land Management 5.5.1 Policy forming structure 5.5.2 Policy forming procedures 5.5.3 Field operations 5.5.4 Research 5.5.5 Service Divisions	34 34 38 38 4(40				
	5.6	Functions of the proposed Department 5.6.1 Public land management 5.6.2 Wildlife management 5.6.3 Regional Parks 5.6.4 Extension	41 41 42 42				
	5.7	Additional resources recommended	43				
	5.8	Implementation 5.8.1 Administrative requirements 5.8.2 Legislation 5.8.3 Staff	44 44 44				
Chapter 6	Lan	d Use Policy and Co-ordination	47				
	6.1	Introduction	47				
	6.2	Proposed Land Resource Policy Council	47				
	6.3	Functions of the Land Resource Policy Council	48				
Chapter 7	lmo	lications of Task Force Proposals	51				
·//	7.1	General	51				
	7.2	Public involvement	51				
	7.3	Public land	51				
	1.3	i upito tatiu	51				

Table of Contents (continued)

		PAGE
	7.4 Private freehold and leasehold land	52
	7.5 Regional organisation	52
	7.6 Town Planning Department	52
	7.7 Department of Fisheries and Wildlife	53
	7.8 Forests Department	53
	7.9 National Parks Authority	53
	7.10 Department of Lands and Surveys	53
	7.11 Department of Conservation and Environment	54
	7.12 Department of Agriculture	54
App	pendices	
1.	Government Departments, Committees etc. with Interests in Land Resources.	56
2.	Structure of Agencies Involved in Land Management.	58
3.	List of Reports on Land Use Planning.	84
4.	Approximate Staff Composition of Departments and Agencies Proposed for the Department of Natural Land Management.	85
5.	Classifications of Natural Areas.	86
6.	Task Force Meetings with Groups and Individuals.	88
7.	Review of Submissions to the Task Force.	90
8.	List of Submissions to the Task Force.	95
Figu	ıres	
2.1	Land tenure and purpose in Western Australia	6
4.1	Proposals for planning in rural areas	22
5.1	Forests Department Management Priority Areas for Conservation and Recreation	29
5.2	Conceptual outline of proposed structure of the Department of Natural Land Management	35
6.1	Relationships of the Land Resource Policy Council	49
Tabl	es	
3.1	Categories of Land in South-Western Australia (the South West Land Division Plus Esperance, Ravensthorpe and Westonia Shires), and total for W.A.	11
3.2	Areas, staff and expenditure for four land management agencies	10
3.3	Areas, staff and expenditure of interstate land management agencies concerned with National Parks	19
3.4	Total and endangered plant species in Australian States	20
3.5	Resources allocated to Forests Departments in three States	20

CHAPTER 1

Introduction

The Terms of Reference for this inquiry are as follows:—

"To investigate, evaluate and make recommendations consistent with the implementation of Government policy on the most efficient and effective means of co-ordinating the administration and management of land resources in the South West of Western Australia.

In making its recommendations, the Task Force is to report its findings in relation to:

- the structure, functions and interrelationship of all existing government agencies involved with land resource administration and management;
- (2) a review of all relevant reports on land resource management, with special attention to recommendations upon which no action has been taken;
- (3) the establishment of formal mechanisms by which all interested and relevant parties may contribute to the formulation and implementation of policies on land resource management;
- (4) the form of legislation necessary to give effect to the implementation of its recommendations."

These Terms of Reference clearly direct us to consider the structure and organisation of government departments concerned with land resource management in south western Australia. We have taken this to mean both departments which manage land vested in them and departments which do not hold land, but influence its management through planning, controls, or technical advice. Thus we have concerned ourselves with forests, parks, reserves and vacant Crown land where management is a direct responsibility of government departments, and coastal, farming, and pastoral areas where the land is owned or held by private interests who are the actual managers on the ground. Our proresals are concerned with planning and management for natural areas (bushland or torest), farming areas, and pastoral areas, and we have referred to these areas as "itiral" as opposed to urban areas with which we have not been concerned.

The restriction to south western Australia presented some difficulties, even if loosely interpreted to include the South West Land Division and the Shires of Esperance, Ravensthorpe and Westonia, i.e. the more intensively used land areas of the State. This is because the government agencies concerned with land management usually have responsibilities which are not confined to the south west and their structure and organisation has to reflect this State-wide responsibility. With the approval of the Premier, we have extended our proposals to the whole State.

We have reviewed the large number of relevant reports which have preceded our inquiry. Most of them deal with planning mechanisms rather than specific recommendations for better land management. A list of these reports appears in Appendix 3.

We have given some consideration to land use planning as a basis for management and made some recommendations for improvement before proceeding to the development of proposals for direct land management by State Government agencies.

Our fourth term of reference is concerned with legislation. We have received legal advice that there is no serious impediment to our proposals, and that they can readily form the basis for a brief for the necessary legislation. This should take place after the Government makes its decision on all or part of the Report.

During the Task Force inquiry the Environmental Protection Authority's recommendations on conservation reserves in System 6 have been under final consideration and "A Conservation Strategy for Western Australia" has been prepared by the Conservation and Environment Council for presentation to the Government. Both these documents are of importance to the Task Force and fortunately we were able to examine them in draft form.

In order to give an opportunity for public input to our inquiry we advertised for submissions and also directly invited them from organisations which we believed could be interested. We have received 186 submissions

from organisations, private individuals and government agencies. In addition we have received detailed information from virtually all relevant government departments. Summaries of this information on government agencies is given in Appendix 2. We have made 6 country visits to make on-the-spot inspections and to supplement and share the very considerable background knowledge of government land management activities we

had as individuals. A great number of meetings have also been held with individuals and organisations and these are listed in Appendix 6.

The submissions, visits and discussions we have had have been extremely valuable to us and we thank those people who helped us in this way. We hope that our Report reflects the benefit we obtained from this co-operation.

VESTING, TENURE AND PURPOSE OF LAND MANAGED BY CALM (AND PROPOSED ALTERATIONS)

This section describes the system of classification, reservation and vesting which applies to lands managed by the Department of Conservation and Land Management.

The Controlling Bodies and the Department

The proclamation of the Conservation and Land Management Act in 1985 established two controlling bodies (the National Parks and Nature Conservation Authority and the Lands and Forest Commission) in which land is vested. The Act also established the Department of Conservation and Land Management which is responsible for management of the land vested in the controlling bodies.

The membership of the controlling bodies is representative of the many community interests associated with the lands vested in them.

Categories of Land Currently Vested in the Controlling Bodies and Managed by the Department

The CALM Act currently (Sept 1987) lists seven categories of land to which the legislation applies. These are:

State forest
timber reserve
national park
nature reserve
marine park
marine nature reserve
any other land yested in the Commission or the Authority

In addition, the Department also manages land held freehold in the name of the Executive Director

Vesting and Management

State forests and timber reserves are vested in the Lands and Forest Commission. National parks and nature reserves are vested in the National Parks and Nature Conservation Authority. Miscellaneous reserves may be vested in either body.

The Department is responsible for management of lands vested in the Authority and the Commission. Management is carried out according to government policies, and as specified in management plans submitted by the controlling bodies and approved by the Minister for Conservation and Land Management.

Tenure

'Land tenure' is the term used to describe the form of right, or title to land. The two broad classes of land tenure are private land and Crown land. Crown lands which are managed by the Department fall into two broad categories: reserves and State forests.

Security of Tenure of Land

In Western Australia, the security of tenure of Crown land reserves varies, depending upon whether the reserve is Class A, B or C.

A Class reserve - tenure can be changed only by agreement of both Houses of the W.A. Parliament.

B Class reserve - tenure can be changed by the Governor of Western Australia without approval by Parliament. However, the reasons for any change must be reported to Parliament by the Minister for Lands.

C Class reserve - tenure can be changed by the Governor, without reference to Parliament. However, any changes must be published in the Government Gazette.

This system therefore determines the degree of difficulty involved in changing the tenure of Crown land.

Most national parks and nature reserves are A Class reserves. However, some parks and nature reserves were given B or C Class status when they were created many years ago and this status has persisted.

The security of tenure of State forest is the same as that of an A Class reserve. State forest is not a 'reserve', and therefore is not classed A, B or C. However, any change to the tenure of a State forest requires the agreement of both Houses of Parliament.

Purpose and Security of Purpose

There are a variety of purposes for which lands vested in the Authority or the Commission are managed. Different categories of land have a different purpose, for example, conservation, production or recreation.

Under existing legislation, secure purpose is already provided for lands managed for conservation and recreation (for example nature reserves and national parks). On the other hand, in State forest, which in the past has been zoned for a variety of purposes (i.e. multiple use), there has been no legislative mechanism to make these purposes secure.

Therefore, although State forest has security of tenure identical to an A Class reserve, the purpose for which a particular area of State forest is managed may be decreed at the level of a management plan prepared within the Department and approved by the Minister, but without approval of Parliament.

Changes to be Introduced

The current requirements for reservation, classification, and security of purpose for land managed by CALM have disadvantages.

For example:

marine conservation is not adequately catered for;

there is confusion where areas of different tenure are managed for the same purpose; some areas (especially small conservation and recreation reserves) are inappropriately classified:

in some instances, the tenure of the land is secure, but the purpose of its management is not.

Subject to the amendment of the CALM Act, a new system is to be adopted. Under this system there will be seven categories of Crown land managed by CALM:

nature reserve national park conservation park marine park State forest timber reserve miscellaneous reserves In addition, the Department will continue to manage land held freehold in the name of the Executive Director.

Furthermore, it is proposed that State forests will have A Class security of purpose as well as tenure. This will mean that the procedure for removal of forest areas from public ownership will not change. In addition, the purpose for which they have been reserved (the multiple uses incorporating conservation, recreation, timber production and water catchment protection) will not be able to be changed without the agreement of both Houses of State Parliament.

The categories are defined in terms of vesting, tenure and purpose as follows:

NATURE RESERVE

Vesting: National Parks and Nature Conservation Authority

Tenure: A Class (B and C Class reserves will be progressively reviewed and changed to A Class

where appropriate).

Purpose: Wildlife and landscape conservation, scientific study and preservation of features of ar-

chaeological, historic or scientific interest.

Comment: Nature reserves may be terrestrial or marine. These are areas in which wildlife values

may not be commercially exploited and where forms of recreation which damage natural

ecosystems are not permitted.

NATIONAL PARK

Vesting: National Parks and Nature Conservation Authoray

Tenure: A Class (B or C Class parks will be progressively reviewed and changed to A Class where

appropriate).

Purpose: Wildlife and landscape conservation, scientific study, preservation of features of ar-

chaeological, historic or scientific interest, together with recreational enjoyment by the

public.

Comment: National parks may be terrestrial or marine. With the exception of beckeeping in some

parks, commercial exploitation of flora and fauna is not permitted. Only those recreational pursuits which do not adversely affect ecosystems and landscapes are permitted.

The classification of national park applies to areas which have national or internation-

al significance for scenic, cultural or biological values.

CONSERVATION PARK

Vesting: National Parks and Nature Conservation Authority

Tenure: A Class

Purpose: Identical to national park

Comment: Conservation parks differ from national parks only in their significance, size or condi-

tion. They are managed as if they were national parks. The difference is that these areas do not have major national or international significance, are relatively small in size or the landscape or biota has been affected by past land use. Conservation parks in forest areas will not be zoned to include areas where commercial timber production may occur.

MARINE PARK

Vesting: National Parks and Nature Conservation Authority.

Tenure: A Class

Purpose:

Marine conservation and recreation, with areas zoned for commercial fishing on a sustained yield basis.

Comment: This classification is generally in accord with the internationally accepted concept of a

managed resource area. It allows for management for conservation and recreation, plus

controlled exploitation where appropriate.

STATE FOREST

Vesting: Lands and Forest Commission

Tenure: Identical to A Class, in that the agreement of both Houses of Parliament is required

before tenure can be changed.

Purpose: Multiple use.

Comment: The major uses of State forest will be for water supplies, recreation, sustainable timber

production and for wildlife conservation. State forests will also provide for public

utilities and mineral production, where these activities are imposed.

TIMBER RESERVE

Vesting: Lands and Forest Commission

Tenure: Similar to C class

Purpose: Timber production

Comment: Timber reserve is a transitional classification. As timber reserves are evaluated, they will

be reclassified as State forest, nature reserve or conservation park, as appropriate.

MISCELLANEOUS RESERVES

Vesting: Lands and Forest Commission or National Parks and Nature Conservation Authority

Tenure: Normally B or C Class

Purpose: These reserves have a wide variety of purposes, but normally are related to recreation or

wildlife conservation. As with timber reserves, this classification is often transitional, and on further evaluation the classification can be changed to a more appropriate one.

Criteria for Allocation of Land to CALM Categories

Where land is acquired by CALM, or where the classification of a particular area is under review, the following criteria are applied:

NATURE RESERVE

Areas to be managed for wildlife conservation and scientific study.

Have important conservation value, either as part of a reserve system, as a remnant or because of particular species.

No historical commitments to inappropriate uses or activities.

NATIONAL PARK

Areas to be managed for wildlife conservation, scientific study and public enjoyment.

Have important conservation, cultural and scenic values.

Nationally or internationally unique, in terms of landscape and/or biota.

Size must be sufficiently great to accommodate recreation or historical uses without significantly detracting from conservation values.

CONSERVATION PARK

Purpose identical to national park.

Areas generally are not nationally or internationally unique, in terms of landscape and/or biota.

These are areas generally less than 1 000 ha in size and/or where wildlife conservation values have been affected by past activities or land use decisions.

MARINE PARK

Marine areas managed for conservation, study, public enjoyment and commercial fishing on a sustained yield basis.

Where zoning includes commercial fishing, a marine park must be large enough to allow this fishing without detracting from the overall conservation and recreational value.

STATE FOREST AND TIMBER RESERVE

Areas to be managed for multiple use, with the primary uses in most cases being sustainable timber production and protection of water catchments.

CALM Responsibilities on Lands Not Vested in the Controlling Bodies

CALM is responsible for the conservation and protection of native flora and fauna on all land and waters within the State boundaries, under Section 6 of the Wildlife Conservation Act.

Vacant Crown land and unvested reserves are nominally controlled by the Department of Land Administration. However, forest produce on vacant Crown land is controlled by CALM under Section 88 of the CALM Act. Forest produce includes trees, timber, firewood, honey, seed, rocks, stone and soil, but excludes minerals under the Mining Act 1978. The Bush Fires Board is responsible for fire prevention measures on vacant Crown land and unvested reserves under Section 10 of the Bush Fires Act.

Under Section 45 of the Bush Fires Act, CALM may take responsibility for the suppression of bush fires threatening State forest. Under an agreement with the Department of Land Administration, the Agriculture Protection Board has responsibility for the control of vermin and declared plants on vacant Crown land and unvested reserves.

CALM has the responsibility of administering regulations made under the Wildlife Conservation Act for the protection, management and control of nature reserves. Under section 130 of the CALM Act those provisions also apply to those reserves created under the Land Act for the conservation of flora and/or fauna, which are not vested in the National Parks and Nature Conservation Authority.

Under Section 139 of the CALM Act the forest produce on road reserves through State forest and timber reserves is controlled by CALM. This also applies to all roads within Manjimup Shire. However, Shires have the right to the timber from trees felled in bona fide road clearing or widening.

Under Sections 137 and 138 of the CALM Act, CALM may control the timber on particular reserves or gazetted catchments if the Governor so directs. Timber royalties derived from such reserves are usually apportioned between CALM and the vesting authority.

Under arrangements ratified by Section 151 of the CALM Act, CALM controls forest produce on Land Act timber reserves and Timber for Settlers reserves. The Department of Land Administration controls the land.

Acquisition of Private Land

As part of the State's timber and conservation strategies, CALM has a policy of seeking to acquire suitable land for forest development and for conservation values. However, CALM will buy no more private land in the Manjimup Shire for afforestation, without prior approval of both Houses of Parliament.

Exchange of land is also considered when the Department's assets will benefit from the transaction e.g., when land can be obtained for addition to a national park, or for forest production or conservation, and when the land given up in the exchange has no conservation values.



WESTERN AUSTRALIA

REPORT OF THE HONORARY ROYAL COMMISSION INTO THE CONSERVATION AND LAND MANAGEMENT ACT 1984

Legislation]
Naming of the Department	
Administration	ŗ
Appointment of Staff to the Department	10
Flying Squad	11
Exchange of Personnel	13
Lease of Rental Properties Controlled by the Department of Conservation and Land Management	15
Cost Benefit Analysis	17
Naming of Regions	19
The Timber Bureau	20
Joint Standing Committee of the Parliament	22
Provision of a Review Clause in the Conservation and Land Management Act 1984	23
Promotion of Public Awareness	24
Land Resources Inventory	31
Forestry	36
Hazard Reduction and Fire Management Regimes	40
Provision of Fire Services	43
Planning and Insurance	45
National Parks	48
Nature Reserves	57
Marine and Estuarine Protected Areas - Marine Parks and Marine Nature Reserves	60
Recreation	66
Local Government	72
State Emergency Services	74
Tourism	75
Waterways	76
Water Conservation	77
Soil Conservation	79
Mining	80
Appendix 1	84
Appendix 2	86
Appendix 3	105
Appendix 4	106
Appendix 5	107
Appendix 6	122
Appendix 7	126

Recommendations

The Commission recommends that:-

- The Conservation and Land Management Act 1984 be 1. amended to provide for areas currently excluded by Section 17(1) of the Act to be referred to the Commission or Authority for consideration. the interim, the Minister should refer all such proposals for recommendation to the respective (paragraph 4) bodies.
- The Department of Conservation and Environment 2. become the Department of the Environment. The new Department should not have direct responsibility in the management of public lands. (paragraph 13)
- The Department of Conservation and Land 3. Management be renamed the 'Department of Land Management'.

(paragraph 15)

- Within the Department there should be a Forest 4. Service, a National Parks Service and a Wildlife Service. Each Service should be distinguished by the wearing of appropriate shoulder flashes. (paragraph 18)
- Vehicles belonging to the Department of 5. Conservation and Land Management should have no identification other than the Department's logo. (paragraph 19)
- The State Government and the Department of 6. Conservation and Land Management should endeavour, as far as possible, to house the Department's central administration within a single complex. (paragraph 22)
- The Forest Research Unit and any other research 7.(a) units now located at Como should be transferred to the Woodvale complex.
 - The regional Research Unit now at Manjimup (b) remain at Manjimup.
 - Consideration be given to transferring the Mapping Section (possibly to the Department's offices at Crawley).

(paragraph 23)

The efficient library circulation system 8. currently in operation continue. (paragraph 25) 9. The Engineering Services Section of the Department of Conservation and Land Management be completely decentralised to ensure that each region has full responsibility for the preparation and execution of its works programme.

(paragraph 28)

10. The Accounts Section of the Department of Conservation and Land Management be further decentralised, ensuring greater autonomy to the regions. Each region should have responsibility for all its operations, including the preparation and administration of its budget.

(paragraph 31)

11. The Department of Conservation and Land Management's Planning Branch be decentralised, giving each region responsibility for its planning.

(paragraph 34)

12. The highest priority be given to the preparation of regional plans so that each regional manager can effectively manage the lands he has responsibility for.

(paragraph 35)

13. The Department of Conservation and Land Management's senior management reaffirm and strengthen the chain of command, allowing for greater communication and more effective administration.

(paragraph 39)

14. The Wildlife Officers be integrated more fully with their fellow officers at both the district and regional level.

(paragraph 42)

15. In the training of Wildlife Officers emphasis be given to public relations, with a view to assisting them in their role as public educators.

(paragraph 44)

16. A 'flying squad' with three members be formed to visit both regional and district offices of the Department of Conservation and Land Management on a regular basis. Such a group would listen to the problems faced by

field staff and then report to the Department's General Manager, so that any problems may be resolved.

(paragraph 52)

- 17.(a) The Department of Conservation and Land Management instigate a scheme allowing exchange of personnel between itself and the Ministry for Natural Resources in Ontario, Canada.
 - (b) Staff chosen for such a system of exchange should have relatively senior ranking within the organisation. However, other personnel showing initiative and potential should not be precluded.
 - (c) Any personnel exchange that takes place should be for a period of twelve months. (paragraph 56)
- 18.(a) The Department of Conservation and Land Management with assistance from the Valuer General's Office immediately assess all rental and lease agreements for properties under the Department's control.
 - (b) The Department of Conservation and Land Management seek to rationalise the problem of properties under its control, either by selling the property or by negotiating long term lease agreements. Either option should be carried out as a commercial venture.

(paragraph 61)

- 19. The following regional names be changed:
 - Central Forest to Central South West Northern Forest to Northern Darling Range Southern Forest to Southern South West. (paragraph 72)
- 20. The Timber Bureau be incorporated into the Department of Conservation and Land Management. (paragraph 76)
- 21. The Forest Production Unit of the

Department of Conservation and Land Management be raised to Divisional status. (paragraph 78)

- 22. A Joint Standing Committee of both Houses of Parliament be created. Such a Committee should be known as the Standing Committee on Natural Resources. This Committee should have seven members and have terms of reference covering all natural resources.

 (paragraph 83)
- 23. The Conservation and Land Management Act 1984 be amended with the provision of a Review Clause. The period of review should be five years.

(paragraph 85)

24. More educational literature be provided for the public on matters relating to conservation and land management. Where a high quality product is prepared, the public should be charged at least the cost of production and possibly more. Such material should be made available to and sold through retail outlets. Provision should be made to provide certain publications free of charge to educational outlets.

(paragraph 92)

25. Further ecological field study centres be upgraded or built and that future courses cover all aspects of land use and management.

(paragraph 93)

26. A concerted effort be made to provide interpretation centres at as many National Parks and other places of interest as soon as possible. A central interpretation centre should also be established, so visitors to the State have only to visit one central location to obtain information about all lands managed by the Department. One possible suggestion for the location of this centre is Kings Park.

(paragraph 94)

27. The interdepartmental co-operation in education that existed prior to amalgamation should be continued and

broadened so as the cover all aspects of land management (i.e., National Parks, wildlife reserves, forests etc.).

(paragraph 96)

Courses in expedition skills should not 28. only be continued but be expanded to cover those skills required in remote National Parks, wildlife reserves or forest reserves.

(paragraph 97)

The Information Branch be provided with 29. sufficient resources to ensure that it is able to fulfill its role in promoting the Department's role in conservation and land management.

(paragraph 100)

The Department of Conservation and Land 30. Management give consideration to the design of a new logo. The logo's concept should be simple and inexpensive to reproduce for any purpose.

(paragraph 101)

- (a) Either private enterprise or volunteer 31. organisations, be permitted to operate information centres within National Parks.
 - (b) The existing systems in relation to private concessionaires be retained and where possible further encouraged. (paragraph 105)
- The Department retains monies collected 32. from the sales of educational materials in order that it be used to improve the public's awareness of the Department's goals and objectives with respect to land management.

(paragraph 106)

Where other departments have access to 33. material prepared by the Department of Conservation and Land Management to promote public awareness, some payment should be made to the Department to help finance such projects.

(paragraph 107)

- The public be encouraged to submit proposals allowing areas to be proclaimed National Parks. The final decision, however, in deciding on declaration of an area must always reside with the Minister.

 (paragraph 108)
- 35. The Department of Conservation and Land Management establish a core of permanent volunteers, to be called Honorary Rangers. Any such group would work under directions received from the Department.

(paragraph 111)

- 36. Funds be made available for the collation of data held by the various Government departments (e.g. the Department of Lands and Surveys, Mines Department, etc.).

 (paragraph 119)
- 37. In the preparation of a land resource inventory, the inventory produced by the Land Conservation Council of Victoria should be used as a guide.

 (paragraph 120)

38. Officers of the Division of Resource
Management of the Department of Agriculture
be responsible for collation of data for
inclusion in a land resource inventory.
The Division of Resource Management should
be further assisted by officers from other
Government departments having similar areas
of expertise. All work should be carried
out under the direction of the Land
Resource Policy Council.

(paragraph 124)

- 39. The Land Resource Policy Council be given the responsibility of setting priorities and allocation of funding for the collection and collation of material to be used in a land-use inventory.

 (paragraph 125)
- 40. The Division of Resource Management liaise with the Department of Lands and Surveys to gain access to information collected by that Department's Remote Sensing Unit for

use in the preparation of a land resource inventory.

(paragraph 126)

- 41. The Department of Conservation and Land Management investigate the possibility of forest management within National Parks. The Director of National Parks should make recommendations permitting such activities only after comprehensive studies have shown that there will be no adverse impacts on the long term objectives of the Park. Any work conducted within a National Park must adhere closely to guidelines prepared by the National Parks and Nature Conservation Authority.
 - (paragraph 137)
- 42. The State Government make representations to the Commonwealth Government to establish a task force to assess the impact of proposed tax changes on private afforestation initiatives and recommend, where appropriate, direct assistance packages along the lines suggested by the Commonwealth Government in their Draft White Paper.

(paragraph 138)

43. The Department of Conservation and Land Management be provided with the extra resources needed to further research into the effects of different fire regimes on the environment.

(paragraph 146)

44. The structure of the Bush Fires Board remain unaltered and it be amalgamated with the Department of Conservation and Land Management.

(paragraph 151)

45. All applications for building in designated fire prone areas should be referred to a services referee representing the appropriate fire authority for that location and other services.

(paragraph 158)

46. The State Minister responsible for Local Government and Fire Services in

consultation with the Australian Insurance Industry Council, review the current means of premium loading with a view to increasing the loading on premiums for properties in high fire risk areas. The extra revenue collected should be made available to the relevant fire protection authorities.

(paragraph 160)

The State Government recognise the inadequacy of funding to the former National Parks Authority and ensures that the Department of Conservation and Land Management is provided with the necessary resources to resolve many of the problems faced by the National Parks Service without having a detrimental effect on either the Wildlife or the Forest Services.

(paragraph 165)

48. The Department of Conservation and Land Management be provided with the necessary resources to ensure that once facilities have been brought to a high standard they are maintained.

(paragraph 166)

49. The word 'dogs' be replaced with the word 'pets' on notices informing the public that pets are not permitted.

(paragraph 168)

Pets be allowed into selected National Parks and the public be advised of these areas and the conditions under which pets will be permitted.

(paragraph 172)

51. The issue of horses within the John Forrest National Park be reviewed. If it is found that the presence of horses within the Park is detrimental then steps should be taken to revoke the permits of people using the Park. In the case of commercial riding ventures, revocation of the permit should be gradual to cause minimal disruption to the permit holder's livelihood.

(paragraph 175)

52. The Department of Conservation and Land Management adopt the land classification scheme prepared by the International Union for Nature Conservation and Natural Resources (IUCN).

(paragraph 177)

Before permission for exploration within a National Park is granted, the Department of Conservation and Land Management prepare an Environmental Review and Management Assessment, with funds provided by the applicant for the preparation of this work. The Department of Conservation and Land Management should be responsible for ensuring that all conditions given in the Assessment are followed.

(paragraph 181)

Where exploration locates a find of national significance further studies be conducted and an Environmental Review and Management Plan (ERMP) prepared. The ERMP should be prepared by the Department of Conservation and Land Management but funded by the exploration company seeking approval for mining. Finally, approval for mining should be the subject of an agreement between the miner and the Government, requiring ratification by the Parliament of Western Australia.

(paragraph 182)

- 55.(a) The Department of Conservation and Land Management adopt the IUCN system of land classification.
 - (b) The Department of Conservation and Land Management declare buffer zones around a townsite to protect the surrounding National Park from degradation.
 - (c) The Department of Conservation and Land Management liaise closely with any Local Government Authority that has vesting of a townsite adjoining a National Park.
 - (d) That the Department of Conservation and Land Management adopt the Canadian policy with respect to the development or

continuation of a townsite within a National Park.

(paragraph 186)

- 56.(a) The Department of Conservation and Land Management immediately assess the extent and severity of jarrah dieback outbreaks within the State's National Parks.
 - (b) The Department of Conservation and Land Management take immediate action to restrict further spread of the disease. (paragraph 189)
- The Department of Conservation and Land Management close areas most seriously affected by disease for quarantine purposes. Quarantine should be maintained until it is possible to allow planned reentry with minimal risk.

 (paragraph 190)
- 58. Joint management agreements be restricted to Government agencies but where a particular group has special interest or skills these should be utilised through Advisory Committees.

 (paragraph 194)
- 59. The Department of Conservation and Land Management look to rationalising those nature reserves vested in the National Parks and Nature Conservation Authority and those locations without vesting.

 (paragraph 199)
- 60. Any area found to have little or no inherent conservation value should have its "A" class classification revoked and its vesting removed.

 (paragraph 200)
- 61. Those areas without vesting found to have conservation value should be dedicated as nature reserves as prescribed in the Act.

 Once dedicated these nature reserves should be vested in the National Parks and Nature Conservation Authority.

 (paragraph 201)
- 62. Interim regional plans be prepared for the

management guidelines of nature reserves, pending final management plans.

(paragraph 202)

The State Government immediately provide the Department with additional funds to increase staffing levels within the Department's Inventory and Planning Section. Additional staff will allow for management plans for nature reserves at a regional level to be prepared more rapidly.

(paragraph 204)

- Any area set aside for the purpose of flora and fauna conservation and vested in an Authority other than the National Parks and Nature Conservation Authority should remain vested with the other Authority.

 (paragraph 207)
- 65. Section 13(3) of the Conservation and Land Management Act be amended in order that marine parks be defined as multiple use management areas, providing both conservation and protection of the marine environment, as well as contributing to the State's economic, social and material requirements.

(paragraph 218)

66. The Department of Conservation and Land Management establish, as a matter of urgency, a listing of areas which should be given protection as Marine and Estuarine Protected Areas (MEPAs).

(paragraph 220)

67. The State Government provide the Department of Conservation and Land Management with the resources needed to prepare and implement management plans for proposed MEPAs.

(paragraph 230)

68. The State Government provide funding for the necessary equipment for the Department of Conservation and Land Management to properly manage the marine parks and marine nature reserves under its control.

(paragraph 231)

- 69. Attention be given to training existing staff, i.e., National Parks rangers, in marine craft, so that the Department of Conservation and Land Management will be capable of managing the marine parks and marine nature reserves under its control.

 (paragraph 232)
- 70. The Point Maud Marine Nature Reserve and the Point Quobba Marine Nature Reserve have their vesting transferred from the Department of Fisheries to the National Parks and Nature Conservation Authority.

 (paragraph 234)
- 71. The Commonwealth Government be approached to financially assist the Department of Conservation and Land Management in the management of areas made accessible following the construction of Highway 1. (paragraph 239)
- 72. The Department of Conservation and Land Management seek public participation in recreation planning with volunteer assistance in construction of certain recreational facilities.

 (paragraph 245)
- 73. The Department of Conservation and Land Management take steps to increase the level of co-ordination, whether formal or informal, between other land management agencies ensuring rational recreational land-use planning.

(paragraph 249)

74. Off-road activities be permitted in certain areas. In permitting such activities, the Department of Conservation and Land Management should maintain strict environmental controls on any land set aside for such activities.

(paragraph 258)

75. In all management plans, recreation areas should be delineated. These areas should be given equal priority with other forms of land management performed by the Department, in order that outdoor recreational facilities may be provided.

(paragraph 260)

- 76. All staff be encouraged to participate in recreation based training programmes.

 (paragraph 261)
- 77. The Department of Conservation and Land Management continue to protect historic sites as part of Western Australia's heritage.

(paragraph 262)

78. There be constant interchange of information between Local Government bodies and the Department of Conservation and Land Management. This interchange should be conducted at all levels.

(paragraph 269)

79. In addition to the money spent on promoting tourism in Western Australia, funds also be allocated to ensure that the State's indigenous flora and fauna are managed effectively and facilities provided to cope with the additional visitors generated by this promotion.

(paragraph 275)

80. All rivers and estuaries either cutting or running through land managed by the Department of Conservation and Land Management should be managed by the Department.

(paragraph 281)

- 81. The Department of Conservation and Land Management continue to have responsibility for water catchment areas managed previously by the former Forests Department. Consultation between the Department and other government bodies having similar responsibilities should continue.

 (paragraph 295)
 - The Soil Conservation Service remain with the Department of Agriculture.

(paragraph 299)

83. The International Union for the Conservation of Nature and Natural Resources' (IUCN) classification of landuse options be adopted.

82.

(paragraph 304)

84. Quarrying and open cut mining be permitted in areas where the impact of such operations will be minimal.

(paragraph 305)

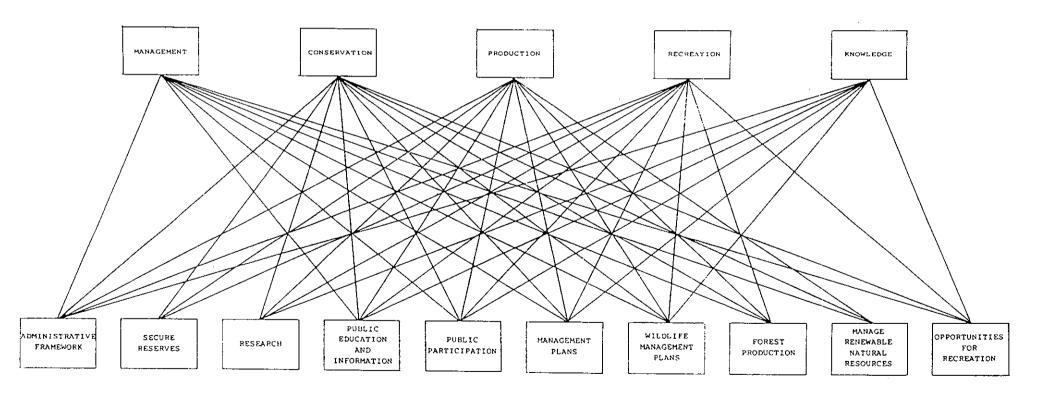
85. Management policies, such as those prepared by the New South Wales Department of Environment and Planning, be drawn up to cover mining within Western Australia's National Parks and other areas managed by the Department of Conservation and Land Management.

(paragraph 308)

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT STRATEGIC PLAN

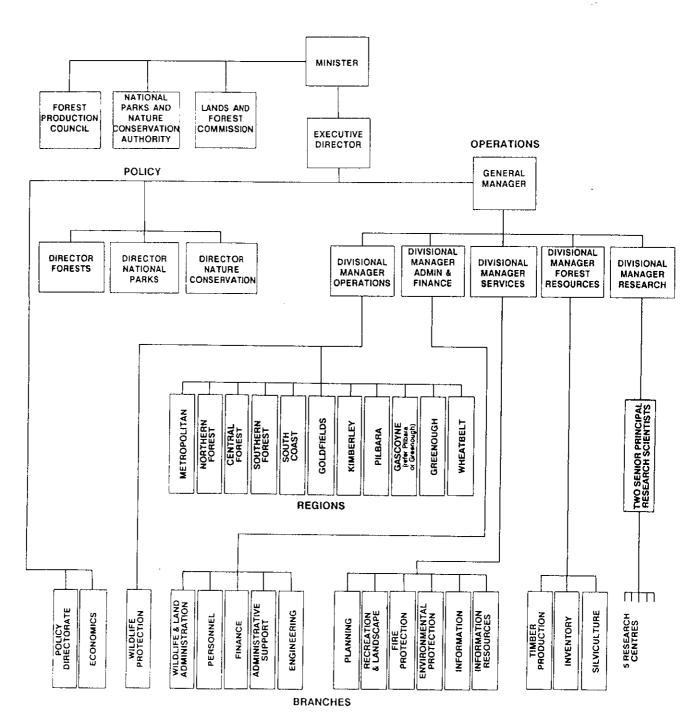
LINKS FROM PRIMARY OBJECTIVES TO BROAD STRATEGIES

PRIMARY OBJECTIVES



BROAD STRATEGIES

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT POSITIONS AS AT FEBRUARY 1988



APPENDIX 8

STRUCTURAL DISTRIBUTION OF CALM STAFF - APRIL 1988

Division	Region/Branch	Salaried Staff and National Park Rangers	Wages Staff	Total
Policy Services	Policy and Operation			
	Directorates (and	47	1	48
	Minister's Office) Sub Total	al $\overline{47}$	1	48
Operations	Southern Forest	69	109	178
•	Central Forest	100	215	315
	Northern Forest	96	155	251
	Wheatbelt	10	16	26
	South Coast	30	3	33
	Greenough/Gascoyne Pilbara	17 15	1 3	18 18
	Kimberley	13	4	17
	Metropolitan	13	4	17
	Goldfields	4	$\overline{4}$	8
	Wildlife Protection	32	_	32
	Sub Tot	al $\overline{399}$	514	913
Administration				
and Finance	Records	13	_	13
	Finance	32	11	32 25
	Engineering Services Human Resources	14 35	11	35
	Land and Wildlife	17	_	17
	Internal Audit	2	-	2
	Sub Tot	al $\overline{113}$	11	124
Services	Fire Protection	23	5	28
	Environment Protecti		-	5
	Mapping Services	30	_	30
	Computer Services	7 8	3	7 11
	Planning Information	22	1	23
	Recreation and Lands		_	6
	Sub Tot	al $\overline{101}$	9	110
Forest	Inventory	50	4	54
Resources	Inventory Silviculture	30 7	-	7
	Timber Production Wood Utilisation	23	1	24
	Research Centre	11	-	11
	Sub Tot	al 91	5	96

Research	Woodvale Como Dwellingup Narrogin Manjimup Busselton Karratha W.A. Herbarium	37 33 18 3 23 6 1 20	4 3 4 - - 3 - 2	41 36 22 3 23 9 1 22
	Sub Total	141	16	157
				
	CALM TOTAL	892	556	1,448

Note:

the data presented in this Appendix, and Appendix 9, do not quite match the data prepared from the FRC Survey (total FTE of 1440.3). This is because these Appendices refer to April 1988 (not 1986/87 as the FRC Survey does), and also in some Regions the data is a slight mixture of FTEs and actual people because of the effect of 17 mobile National Park Rangers who alternate biannually between the south and north of the State.

This small discrepancy does not affect the overall balance of either Appendix.

APPENDIX 9

WORK LOCATION OF CALM STAFF - APRIL 1988

Location	Salaried Staff and Nat. Park Rangers	Wages Staff	Total
Policy, Operations Directorate Murdoch House, Minister's Offi		1	48
Como	207	19	226
Como Research (1)	13	1	14
Woodvale Research (1)	13	3	16
W.A. Herbarium (2)	20	2	22
In Perth (Sub Total)	300	26	326
Central Forest Region (4)	152	222	374
Southern Forest Region	115	111	226
Northern Forest Region	149	159	308
South Coast Region	34	3	37
Wheatbelt Region	15	16	31
Greenough/Gascoyne Region	22	1	23
Pilbara Region	17	3	20
Kimberley Region	15	4	19
Goldfields Region	5	4	19
Metropolitan Region (3)	13	4	17
Murdoch House Wildlife (3)	11	0	11
Woodvale Research (3)	24	1	25
Como/Wanneroo Research (3)	20	2	22
Outside Perth (Sub Total)	592	530	1,122
CALM TOTAL	892	556	1,448

Notes:

- (1) Includes staff performing management or central support roles.
- (2) These figures include the WA Herbarium which is not yet formally part of CALM.
- (3) Includes staff who work in Perth because that is where their land and wildlife management responsibilities are (or Research staff whose work is widely spread throughout the State, and for whom Perth is a convenient base).
- (4) The Regional figures include all research and service Branch staff permanently located in that Regional area.

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

REPRESENTATION ON EXTERNAL COMMITTEES (GOVERNMENT AND INDUSTRY)

COMMITTEE/ BOARD	RESPONSIBLE AUTHORITY/ CHAIRMAN	STATUTORY/ NON STATUTORY	CALM REPRESENTATIVE	TERM OF APPOINTMENT (Annual) (Ongoing)
Public Sector Image Committee	Executive Director Dept of Executive Personnel	Non Statutory	Dr S Shea	Ongoing
WALIS Executive Policy Committee	Commissioner - Public Service Commission	Non Statutory	Dr S Shea	Ongoing
Country Planning Council	Chairman - State Planning Commission	Non Statutory	Dr S Shea	Ongoing
Standing Committee on Forestry	Dr R Smith - Commonwealth Dept of Primary Industry and Energy	Non Statutory	P Hewett	Ongoing
Forestry & Forest Prod, Pests and Diseases Committee	Dr R Smith - Standing Committee on Forestry	Non Statutory	P Hewett	Ongoing
Heads of Forest Services Committee	Standing Committee on Forestry	Non Statutory	P Hewett	Ongoing
Forest & Forest Products Industry Council	Mr C Northoven - Australian Manufacturers Council	Statutory	P Hewett	Biennial
Keep Australia Beautiful Council of WA	Mr W Kellihan - Minister for Local Government	Statutory	P Hewett P Jones	Ongoing
WA Water Resources Council	Mr S Shelton - Minister for Water Supply	Statutory	P Hewett Dr E Hopkin	Ongoing s
Greening Australia (WA) Inc.	Dr D Bennett - Greening Australia	Non Statutory	P Hewett	Ongoing
Roadside Conservation Committee	Mr J Blyth - Minister for Conservation and Land Management	Non Statutory	P Hewett	Ongoing
Public Interest Project	Mr L Marsh - Dept Industry, Technology & Commerce	Non Statutory	P Hewett	4 years
Hyogo Flora and Fauna Committee	Mr P Hewett - Department of Premier and Cabinet	Non Statutory	P Hewett	Ongoing
CONCOM Standing Committee	Rotates (CALM was Chairman in 1986/87)	Non Statutory	C Haynes Dr B Wilson (co-membe	

WA Tourism Industry Assoc.	Mr K Harrison (private enterprise)	Non Statutory	C Haynes Annual (elected)
Mining Interests and Conservation Lands	Premier's Department (officers not yet appointed)	Non Statutory	C Haynes Ongoing F Batini
Shark Bay Consultative Committee	B Wilson, CALM	Non Statutory	Dr B Wilson Ongoing
Marine Parks and Reserves Selection Working Group	B Wilson, CALM	Non Statutory	Dr B Wilson Ongoing R May
Ningaloo MP Advisory Committee	B Wilson, CALM	Non Statutory	Dr B Wilson Ongoing
Peel-Harvey Steering Committee	B Wilson, CALM	Non Statutory	Dr B Wilson Ongoing
Abrolhos Islands) Task Force)	No Chairman Min. Fisheries & Min. CALM Committee appointed jointly	Non Statutory	Dr B Wilson Ongoing
Abrolhos Islands) Consultative) Committee)	by Ministers for Fisheries and CAIM. Chairman, R Maslen	Non Statutory	G Mercer Ongoing
Coastal Management Coordinating Committee	Max Pool, SPC	Non Statutory	Dr B Wilson Ongoing
Aquaculture IDC	Fisheries Department	Non Statutory	K McNamara Ongoing (new rep soon to be determined)
Kangaroo Management Advisory Committee	CALM 7	Non Statutory	Dr B Wilson Ongoing A Errington K McNamara N Press
Rangeland Kangaroo Working group	Pastoralists & Graziers Association	Non Statutory	K McNamara Ongoing
IDC on Emu Farming and Processing	Agriculture	Non Statutory	K McNamara Ongoing S Hancocks
NPNCA Fauna Committee	CALM	Non Statutory	Dr B Wilson Ongoing
NPNCA Fauna Subcommittee	CALM	Non Statutory	B Wilson Ongoing K McNamara
Interdepartmental Working Group on Crocodile Utilisati	CALM .on	Non Statutory	K McNamara Uncertain D Mell
CONCOM Working Group on World Heritage Matters	CONCOM	Non Statutory	K McNamara Ongoing

CONCOM Working Group on Wildlife Utilisation	CONCOM	Non Statutory	K McNamara	Ongoing
Australian Committee for IUCN	ACIUCN (rotating Chairmanship)	Non Statutory	K McNamara	Ongoing
Working Group on World Heritage (Shark Bay)	Advises Ministerial Committee established by State Cabinet Working group chaired by SPC.	Non Statutory	K McNamara	Ongoing (for duration of issue)
Council of Ecological Society of Australia	ESA	Non Statutory	K McNamara (but not in capacity of representing CALM).	2 years
Aquatic Ecosystems Sub Committee	J Blyth (convenor) CALM	Non Statutory	J Blyth	Ongoing
Peel Harvey Catchment Developme Committee	J Blyth (convenor) CALM nt	Non Statutory	J Blyth	Ongoing
Argentine Ant Tech Sub Committee (of Herdsman Lake Advisory Committee)	J Blyth, (convenor) CALM	Non Statutory	J Blyth	Ongoing
Planning and Management Committee	K Webster (WAWRC) - Water Resource Council	Non Statutory	Dr E Hopkins	Ongoing
Gnangara Mound Technical Advisory Committee	E Hopkins (convenor) Integrated Catchment Managemen Policy Committee	Non Statutory t	Dr E Hopkins	Ongoing
Water and Land Planning Liaison Committee	E Hopkins (convenor) - Water Resources Council (WAWRC)	Non Statutory	Dr E Hopkins P Frewer J Williamson	Ongoing
Policy Advisory Committee on Greenhouse Effect	C Sanders - EPA	Non Statutory	Dr E Hopkins	Ongoing
WA Soil Advisory Committee	E Butcher (Chairman)	Statutory	Dr F McKinnell	5 years
WA Land Information System Council	Dr F McKinnell (Chairman)	Non Statutory	Dr F McKinnell	1 year
DOCIT Communications Strategy Committee	DOCIT	Non Statutory	Dr F McKinnell	Ongoing

WA Heritage Committee	Dr A O'Brien (Chairman)	Statutory	Dr F McKinnell	Ongoing
Steering Committee for Australian Heritage Commission WA project	G Beeston (Chairman)	Non Statutory	Dr F McKinnell	Ongoing
Curtin University Biology Course Advisory Committee	Dr B Collins	Non Statutory	Dr F McKinnell	Ongoing
ANZAAS State Committee	Dr M Gracey	Non Statutory	Dr F McKinnell A Burbidge	Ongoing
Roadside Vegetation Committee	J Blyth, CALM	Non Statutory	J Blyth	Ongoing
Australian Forestry Council Research Working Group 8 - Forest Entomology	Australian Forestry Council	Non Statutory	I Abbott	Ongoing
Research Steering Committee - Forest Management Subcommittee - Bauxite Subcommittee - Agricultural Catchme Subcommittee - Coastal Plain Land Management Subcommittee	ent	Non Statutory	J Bartle	Ongoing
Peel Inlet Management Authority	Waterways Commission	Statutory	J Bartle	Ongoing
Peel-Harvey Study Grou	np Waterways Commission	Non Statutory	J Bartle	Ongoing
Australian Forestry Council - Research Working Group 3 - Research Working Group 5	Australian Forestry Council	Non Statutory	J McGrath	Ongoing
WA Regional Comm, Australian Timber Research Institute	-	Non Statutory	G Siemon	going
WA Australian Softwood Production Association		Non Statutory	G Siemon	Ongoing
Standards Association Australia	of -	Non Statutory	G Siemon	Ongoing
WA Pesticides Advisory Committee - Reviewer	_	Non Statutory	G Siemon	Ongoing
Australian Forestry Council Research Working Group 7 - Forest Pathology	Australian Forestry Council	Non Statutory	Ms J Tippett B Shearer	Ongoing

National Trust Technical Advisory Committee	-	Non Statutory	Ms J Tippett Ongoing
Research Coordination Exec Comm for Land Salination	Dept. of Agriculture	Non Statutory	P Brown Ongoing
The Prosopis Introduction Committee	Dept. of Agriculture	Non Statutory	P Brown Ongoing
Biological Surveys Committee	A Burbidge (Chairman)	Non Statutory	Dr A Burbidge Ongoing
Bush Fires Board	-	Statutory	Dr A Burbidge 3 years J K Smart
Working Group on Land Releases	DOLA		Dr A Burbidge
CONCOM Working Group on Endangered Fauna	-		Dr A Burbidge
Scientific Advisory Committee, World Wildli Fund Australia	- ife		Dr A Burbidge
IUCN Species Survival Commission, Australian Marsupials Specialist Group			Dr A Burbidge
IUCN Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group	_		Dr A Burbidge
Kimberley Research Project 1988 - WA Committee	A Burbidge (Chairman)		Dr A Burbidge
LISSC - Vax Users Group	DOLA	Non Statutory	M Choo
WALIS - Restricted Site Databases	DOLA	Non Statutory	M Choo
Numbat Breeding Management Advisory Committee	CALM		T Friend
Herdsman Lake Argentine Ant Advisory Committee	APB		S Halse
CONCOM Working Group on Mallee Conservation	-		A Hopkins

Mineral Sands Agreement Rehabilitation Committee	Mines Dept.	A Hopkins
CONCOM Working Group on Endangered Flora	-	Dr S Hopper
Australian Flora Foundation Res Com	-	Dr S Hopper
IUCN Species Survival Commission Orchid Specialist Group	-	Dr S Hopper
IUCN Species Survival Commission Australasian Plant Specialist Group		Dr S Hopper
Midge Research Steering Committee	J Lane (Chairman)	J Lane
CONCOM Working Group on International Agreements Relating to Migratory and Wetland Birds	J Lane (Chairman)	J Lane
Yenyenning Lakes Working Group	J Lane (Chairman)	J Lane
Associated Minerals Consolidated Wetlands Management Committee	-	J Lane
Biological Surveys Committee	CALM	N McKenzie
Pilbara Regional Herbarium Comm	W.A. Herbarium	K Morris
Karratha College Science & Technology Committee	-	K Morris
Burrup Peninsula Working Group	Dept. of Regional Development	K Morris
NW Island Management Committee	-	K Morris
Shark Bay Technical Working group	CALM	R Prince

IUCN Species Survival Commission, Sirenia Specialist Group	-	Non Statutory	Prince	Ongoing
WA Agroforestry Working group	CALM	Non Statutory	R Moore	Ongoing
National Corresponding Working Group on Agroforestry	Australian Forestry Council	Non Statutory	R Moore	Ongoing
Australian Forestry Council Research Working Group 4 - Forest Hydrology	Australian Forestry Council	Non Statutory	G Stonemar	Ongoing
Australian Forestry Council Research Working group 6 - Fire Management	Australian Forestry Council	Non Statutory	N Burrows L McCaw	Ongoing
Australian Forestry Council Research Working Group 12 - Forest Fauna	Australian Forestry Council	Non Statutory	G Wardell- Johnson	- Ongoing
Australian Forestry Council Research Working Group 12 - Native Forest Silvicu	Australian Forestry Council Ulture	Non Statutory	G Inions	Ongoing
WA Native Orchid Study and Conservatio Group - Endangered Orchid Species Working Group	on.	Non Statutory	A Brown	Ongoing
Star Swamp Management Committee	CAIM	Non Statutory	Ms J Brown	n Ongoing
Mosquito Control Review Committee	APB	Non Statutory	G Pearson	Ongoing
State Counter Disaster Advisory Committee	Commissioner of Police	Non Statutory	J K Smart	Ongoing
Australian Inter Agency Incident Management Committee	Chief Officer, Victorian CFA.	Non Statutory	J K Smart	Ongoing
Sandalwood Export Committee	Mr B J Beggs (CALM staff member acts as Secretary)	Non Statutory	D J Keene	Ongoing

Export Committee of WA Guild of Furniture Manufacturers	Mr A Gosatti	Non Statutory	P Shedley	Ongoing
Research Committee (Combined Forest Products Assoc. and Australian Timber Research Inst.)	Mr J Oldham	Non Statutory	P Shedley	Ongoing
Joint Timber Seasoning Committee (All States and CSIRO)	Mr D Gough	Non Statutory	P Shedley	Ongoing
Marketing Committee of WA Softwood Products Assoc.	Mr S Brown	Non Statutory	D Challis	Ongoing
WA Timber Industry Training Committee	National T.I.T.C. Chairman - T. Reed (Bunnings)	Non Statutory	J Clarke	Ongoing
T.I.R. Act	Mr D.J. Keene	Statutory	DJ Keene	Ongoing
Australian Forest Development Institute	A.F.D.I.	Non Statutory	D J Keene	Ongoing
F.P.A. Hardwood) Log Levy Committee) Management Committee)	Forest Products Association	Non Statutory	D J Keene	Ongoing
WASPA Management Committee	West Australian Softwood Producers Association	Non Statutory	D J Keene	Ongoing
		Non Statutory Non Statutory	D J Keene D J Keene	Ongoing Ongoing
Committee Australian Forestry Council Committee	Producers Association Australian Forestry Council	-	D J Keene	
Committee Australian Forestry Council Committee of Marketing Officers Playford - Conservation and Rehabilitation in	Producers Association Australian Forestry Council	Non Statutory	D J Keene	Ongoing
Committee Australian Forestry Council Committee of Marketing Officers Playford - Conservation and Rehabilitation in the Mining Industry Mining and Management Planning and Liaison	Producers Association Australian Forestry Council Mines Dept.	Non Statutory Non Statutory	D J Keene F Batini	Ongoing
Australian Forestry Council Committee of Marketing Officers Playford - Conservation and Rehabilitation in the Mining Industry Mining and Management Planning and Liaison Group	Producers Association Australian Forestry Council Mines Dept. DRD	Non Statutory Non Statutory Statutory	D J Keene F Batini F Batini	Ongoing Ongoing Ongoing
Australian Forestry Council Committee of Marketing Officers Playford - Conservation and Rehabilitation in the Mining Industry Mining and Management Planning and Liaison Group Greenbushes Tin Capel - Mineral Sands	Producers Association Australian Forestry Council Mines Dept. DRD Mines Dept.	Non Statutory Non Statutory Statutory Non Statutory	D J Keene F Batini F Batini R Chandler	Ongoing Ongoing Ongoing
Australian Forestry Council Committee of Marketing Officers Playford - Conservation and Rehabilitation in the Mining Industry Mining and Management Planning and Liaison Group Greenbushes Tin Capel - Mineral Sands Rehabilitation	Producers Association Australian Forestry Council Mines Dept. DRD Mines Dept. Mines Dept.	Non Statutory Non Statutory Statutory Non Statutory Non Statutory Non Statutory	D J Keene F Batini F Batini R Chandler J Skillen	Ongoing Ongoing Ongoing Ongoing Ongoing
Australian Forestry Council Committee of Marketing Officers Playford - Conservation and Rehabilitation in the Mining Industry Mining and Management Planning and Liaison Group Greenbushes Tin Capel - Mineral Sands Rehabilitation Basic Raw Materials Basic Raw Materials	Producers Association Australian Forestry Council Mines Dept. DRD Mines Dept. Mines Dept. Mines Dept.	Non Statutory Non Statutory Statutory Non Statutory Non Statutory Non Statutory	D J Keene F Batini F Batini R Chandler J Skillen D Hilder	Ongoing Ongoing Ongoing Ongoing Ongoing

Feral Pig Control Committee	APB	Non	Statutory	F Batini	Ongoing
Beekeepers Section (P.I.A.) Committee	CALM	Non	Statutory	N Caphorn	Ongoing
Aquaculture Committee	Fisheries Dept.	Non	Statutory	K McNamara	Ongoing
Seismic Lines	Mines Dept.	Non	Statutory	N Caphorn	Ongoing
Bailey Implementation	EPA	Non	Statutory	F Batini	Ongoing

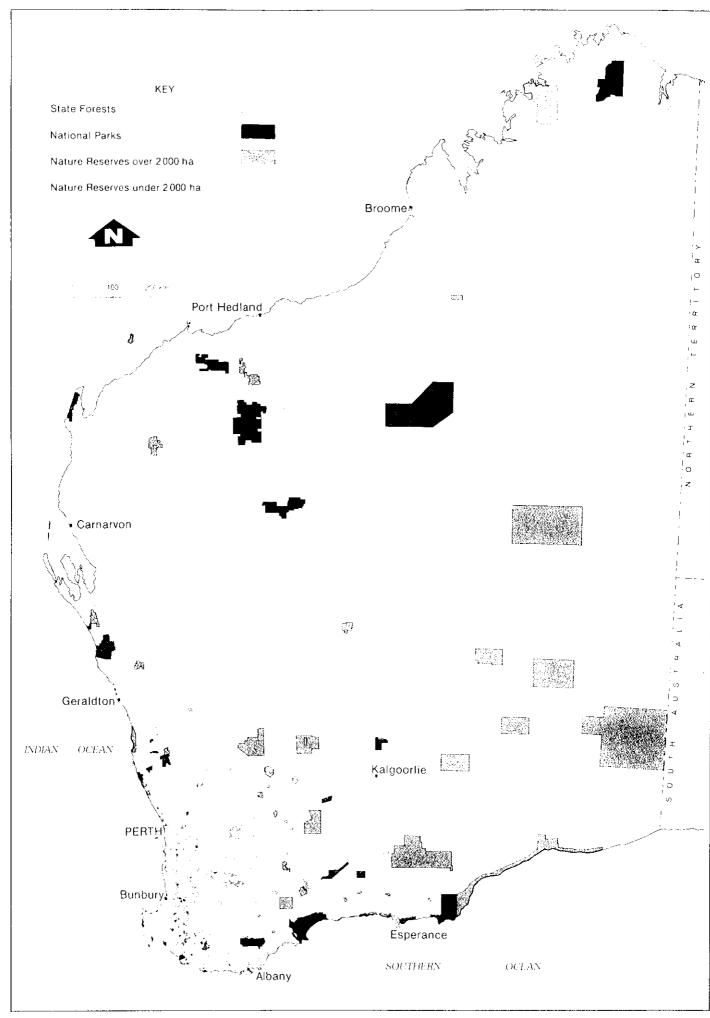
APPENDIX 11

PUBLIC LANDS

AREAS MANAGED BY THE DEPARTMENT (AS AT 30 JUNE 1987)

PURPOSE	NUMBER	AREA (ha)
State forest (1)	70	1,821,965
Timber Reserves (2)	97	144,851
Freehold vested in Executive Director (3)		31,794
National Parks (4)	56	4,649,732
Marine Parks	2	233,350
Conservation of Flora and Fauna Reserves (5)	932	9,988,375
Conservation/Recreation Reserves	5	187,142
TOTAL	1162	17,057,209

- (1) The 1986/87 figures show a nett decrease of 75,381 ha over the 1985/86 figures. This was largely due to the excision from State Forest of four areas totalling 76,520 ha, which have since been set aside as the Lane Poole, Dale, Monadnocks and Serpentine conservation reserves.
- (2) The total area of timber reserves rose by 25,676 ha during 1986/87 ha due largely to the creation of two large timber reserves in the Perenjori District.
- (3) Freehold land vested with the Executive Director was increased by 5,236 ha during 1986/87. The bulk of this land was acquired for the purpose of pine production.
- (4) The total area of National Parks rose by 211,016 ha. The bulk of this increase (208,723 ha) due to the reservation of the Bungle Bungle National Park.
- (5) The number of conservation of flora and fauna reserves listed here includes many reserves that are subject to joint vesting with other Authorities (eg. Local Government). There are additional nature reserves that CALM has no management control over that are not included in this Appendix.



PUBLIC LANDS

LEASES - IN STATE FOREST AND TIMBER RESERVES

PURPOSE	AREA (ha)	NUMBER	ANNUAL INCOME
RECREATION/TOURIST FACILITIES (1)	1,338.15	29	518
WATER SUPPLY (2)	93.96	50	1,000
LOCAL/STATE/COMMONWEALTH AUTHORITIES REQUIREMENTS (3)	2,115.06	52	562
GRAZING UNDER NATIVE FOREST	8,081.74	87	3,462
GRAZING UNDER PINE FOREST	13,358.63	68	5,672
OCCUPANCY/OTHER (4)	1,493.40	33	2,201
TOTAL	26,480.94	319	13,415

⁽¹⁾ RECREATION/TOURIST FACILITIES - INCLUDES RIFLE RANGES, PLAYING FIELDS, CARAVAN PARKS, GOLF COURSES, ETC.

⁽²⁾ WATER SUPPLY - INCLUDES DAM SITES, BORE SITES, WATER STORAGE AREAS, ETC.

⁽³⁾ LOCAL/STATE/COMMONWEALTH AUTHORITIES

REQUIREMENTS - INCLUDES PRISON SITES, SANITARY SITES, OFFENSIVE TRADES

AREAS, AIRCRAFT LANDING STRIPS, POWER STATIONS, SCHOOL

SITES, RADIO SITES, AND QUARRY SITES.

⁽⁴⁾ OCUPANCY/OTHER - INCLUDES PRIVATE AIRCRAFT LANDING STRIPS, ACCESS TO PRIVATE LOCATIONS, SAW MILL SITES, OCCUPANCY OF LAND PURCHASED BY CALM UNTIL LAND REQUIRED FOR PLANTING.

PUBLIC LANDS

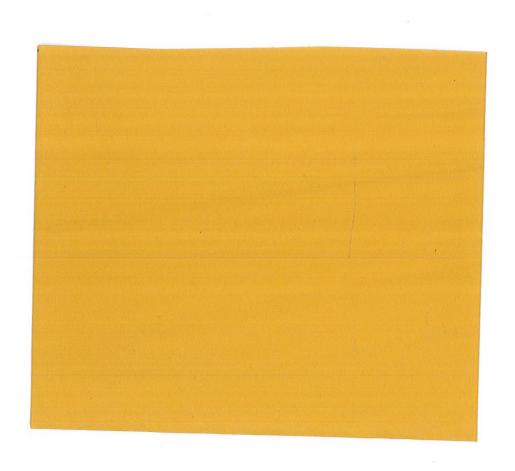
LEASES - IN NATIONAL PARKS AND NATURE RESERVES

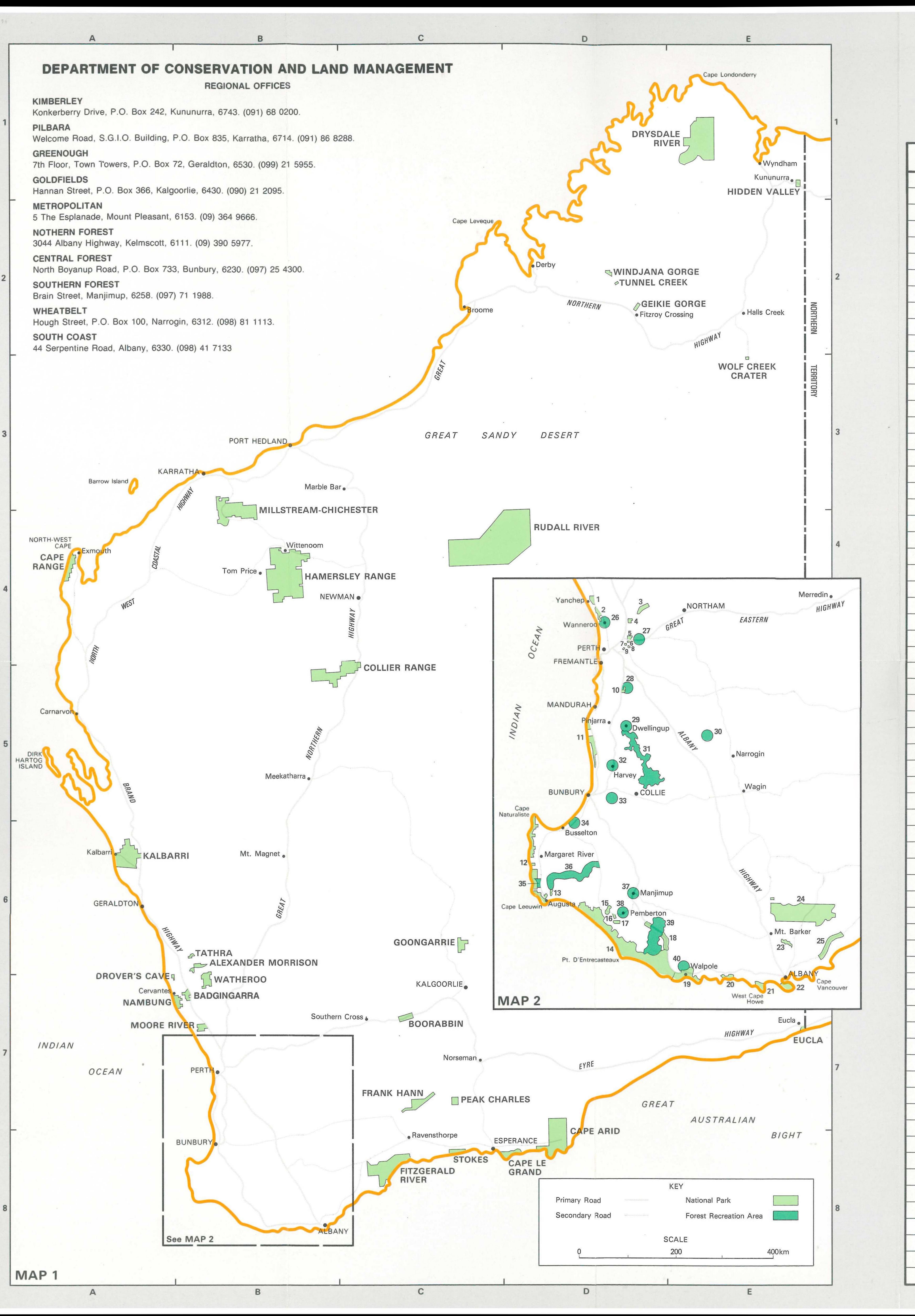
PURPOSE	AREA (Ha)	NUMBER	ANNUAL INCOME (\$)
CARAVAN PARK	4.0	1	50
YACHT/SAILING CLUBS	5.3	4	56,400
BOAT SHEDS	0.8	3	323
RADIO SITE	0.6	2	50
PARK	6.0	1	1
MUSEUM	0.1	1	1
GUEST HOUSE	0.2	1	1,300
(1) RESTAURANTS/TAVERN	1.6	4	26,421
TOTAL	18.6	17	84,546

(1) Restaurants/Tavern - includes Tearooms, Hamburger Bar, Kiosk.

The above figures do not include new leases being negotiated on "A" Class Nature Reserves on Varanus and Thevenard Islands.

WESTERN AUSTRALIA'S NATIONAL PARKS AND FORESTS - RECREATION GUIDE





						7	7	7		7					
			/	ERTH.							15				
			FROM				1/4	MIED		PR THE					
		1 / N	15 T		RENEE S	2 / NO	NW.	W SW			20/	EING.	2 / 3		
NATIONAL PARKS AND FORESTS		783			2 / E	7000	18/0	BAD			3/3	0 / S	SW/WS	MAIN FEATURES	CALM OFFICE FOR FURTHER INFORMATION
Alexander Morrison	NP	260	1	B6										Wildflowers in Spring	* (006) 26.2540
Avon Valley	NP NP	200	1	3 B7	<u> </u>						4			Woodland, River Valleys Wildflowers in Spring	* (096) 26 2540 see Nambung
Badgingarra Beedelup	NP	340	2	15										Karri Forest, Waterfall	see Warren or Pemberton
Blackwood River		342	2	36						74	-AL	E	2	Jarrah Forest, River Valley	Nannup (097) 56 1101
Boorabbin Boronup Forget	NP	450 306	1	C7 35										Sandplain, Shrubland Karri Forest	Kalgoorlie (090) 21 2095 Busselton (097) 52 1677
Boranup Forest Brockman	NP	340	2	16	<u>~~~</u>									Karri Forest	see Warren or Pemberton
Cape Arid	NP	820	1	D8		QI.		IM				<u></u>	2	Coastal Scenery	* (090) 75 0055
Cape Le Grand	NP	1260	1	D8 A4		<u>an</u>		LAI	6	99		E E	20	Coastal Scenery & Beaches Coral Reef, Inland Gorges	* (090) 75 9022 * Exmouth (099) 49 1676
Cape Range Collie River	NF	1260 190	2	33				121			-AL	<i>h</i> ~	2	River Valley, Jarrah & Marri Forest	Bunbury (097) 25 4300
Collier Range	NP	960	1	B5										Spinifex Highground	Karratha (091) 86 8258
D'Entrecasteaux	NP	380	2	14							4	<u>F</u>	22	Wetlands, Forests, Coastal Dunes Caves	see Pemberton (097) 76 1042 see Nambung
Drover's Cave Dryandra	NP	258 195	2	30		Q1	I			74				Numbats, Wandoo Woodland	Narrogin (098) 81 1113
Drysdale River	NP	3060	1	E1										Isolated Woodland Wilderness	Kununurra (091) 68 0200
Dwellingup	ND	97	2	29	1		L			11.0		E		Jarrah Forest, Rivers, Scarp Mallee, Sandhills, Limestone Cliffs	Dwellingup (095) 38 1078 Albany (098) 41 7133
Eucla Fitzgerald River	NP NP	1430 410	1	C8				TAI		777		l F≤	20	Coastal Scenery, River Gorges, Mountains	* (098) 35 5043
Frank Hann	NP	520	1	C 7										Inland Sandplain, Heath, Flora	Albany (098) 417133
Geikie Gorge	NP.	2680	1	D2		<u>=1</u>	<u>I</u>			ŶŶ			22	Ancient River Gorge	* Fitzroy Crossing (091) 91 5030
Gooseberry Hill	NP NP	700	2	C6 7										Mulga Country Darling Range Lookout	Kalgoorlie (090) 21 2095 see John Forrest
Greenmount	NP	25	2	6										Darling Range Lookout	see John Forrest
Hamersley Range	NP	1400	1	B4	1	-11	I			910			2	Mulga, Spinifex, Gorges, Mountains	* (091) 89 8157
Hassell	NP	140 450	2	32 25							4	<u></u>	22	Jarrah Forest, Dams, River Roadside Flora	Harvey (097) 29 1505 Albany (098) 41 7133
Hidden Valley	NP	3300	1	E1										Ancient Valleys & Cliffs	Kununurra (091) 68 0200
Jarrahdale		54	2	28						11				Jarrah Forest	Jarrahdale (095) 25 5177
John Forrest Kalamunda	NP NP	25 25	2	<u>ა</u>										Jarrah Forest, Wildflowers in Spring Jarrah Forest, Wildflowers in Spring	* (09) 298 8344 see John Forrest
Kalbarri	NP	590	1	A6				IAI		110			2	River Gorges, Coastal Scenery, Wildflowers	* (099) 37 1140
Lane-Poole Reserve		105	2	31	1		Ţ			11		E	2	River Valley, Jarrah Forest	* see Dwellingup
Leeuwin-Naturaliste Lesmurdie Falls	NP NP	260	2	12 g	<u>A</u>	<u>en</u>								Coastal Scenery, Karri Forest, Caves Darling Scarp Lookout	* (097) 55 2144 see John Forrest
Ludlow Forest		220	2	34						110				Tuart Forest	Busselton (097) 52 1677
Manjimup		300	2	37			I	LAI	E			İ.	2	Karri & Jarrah Forest	Manjimup (097) 71 1988
Millstream-Chichester Moore River	NP NP	1500 120	1 1	B4 B7		C.I.				7 9				Trees, Pools, Palms, Spinifex Country Wildflowers in Spring	* (091) 84 5125 see Yanchep
Mundaring	141	34	2	27			I		E	P P				Jarrah Forest	Mundaring (09) 295 1117
Nambung	NP	230	1	B7								<u>k</u>	2.	Pinnacle Desert, Coastal Scenery	* (095) 45 7043
Neerabup Peak Charles	NP NP	30 580	1	2 C7										Woodland, Heath Granite Outcrops, Scenic Panorama	see Yanchep
Pemberton	141	330	2	38		en en	I			177	À	İ.	2.	Karri & Marri Forest	Pemberton (097) 76 1200
Porongurup	NP	480	2	23										Karri Forest, Granite Peaks	* (098) 53 1095
Rudall River	NP	1350	1	C4 13										Sand Dunes, Salt Lake System Divore Eugalynt Forest	Karratha (091) 86 8258 (097) 58 1756
Scott	NP	360 60	2	10			I		E	110		<u> </u>	20	Rivers, Eucalypt Forest Waterfalls, Jarrah Forest	* (095) 25 2128
Shannon Forest		358	2	39		GIL.	II.	IAI	F	140		E	22	Karri & Coastal Wetlands	see Pemberton
Sir James Mitchell	NP	340	2	18						FF				Roadside Flora	see Manjimup
Stirling Range Stokes	NP NP	450 600	1	24 C8					(5.	<u> </u>		į.	<u></u>	Mountains, Wildflowers in Spring Fishing & Waterways	* (098) 27 9230 * (090) 76 8541
Tathra	NP	300	1	В6										Wildflowers in Spring	see Nambung
Torndirrup	NP	460	2	22								E	2	Coastal Scenery	* (098) 44 4090
Tunnel Creek Walpole		2460 420	2	D2 40						0.0	id.	k		River Cave, Historical Site Karri & Tingle Forests	Fitzroy Crossing (091) 91 5030 Walpole (098) 40 1027
Walpole-Nornalup	NP	430	2	19							4	Man Man	2.	Karri Forest, Coastal Scenery	* (098) 40 1026 or see Walpole
Walyunga	NP	30	2	4			A	LAI						River Valleys, Eucalypt Forest	* (095) 71 1371
Wanneroo Warren	NP	30 345	2	26 17							液	b		Pine Forests, Banksia Woodland Karri Forest, River Valley	Wanneroo (09) 405 1222 * (097) 76 1042 or see Pemberton
Watheroo	NP	220	1	B7	(A)							11		Wildflowers in Spring	* (097) 76 1042 or see Pemberton * (099) 52 5051
West Cape Howe	NP	430	2	21								E	2	Coastal Scenery	Albany (098) 417133
William Bay Windjana Gorge	NP NP	500 2500	1	20 D2					6	P A		<u>F</u>	2	Beach & Coastal Scenery Ancient River Gorge	* (098) 40 9255 Fitzrov Crossing (091) 91 5030
Willujalia Gurge Wolf Creek Crater	NP	3100	1	E3	41									Ancient River Gorge Meteorite Crater	Fitzroy Crossing (091) 91 5030 Kununurra (091) 68 0200
Yalgorup	NP	120	2	11						111	- i	E	2	Woodlands & Wetlands	* (095) 39 1067
Yanchep	NP	50	2	1			L		16	**				Wetlands, Woodlands, Caves, Flora & Fauna	* (095) 61 1004
															* Ranger Based in Park

RECREATION GUIDE S'ALIANTENA URATES W



where to go and what to do.

SICINS

on signs, and in pamphlets, to show you

Land Management uses these symbols

The Department of Conservation and

aturally in vegetated gullies of the Darling national park. with the ranger before fishing in a from the Department of Fisheries. Check licence for marron fishing is available FRESH WATER FISHING: An annual situation. Land Management for advice on the fire of the Department of Conservation and the tourist bureau, or the nearest office but please check with Shire authorities, stations broadcast fire risk warnings, ban exists on these days. Local radio is "very high" or "extreme". A total fire December and March, the fire forecast On some days, usually between exfinguish the embers, and bury the before leaving. Use soil and water to Make sure the fire is completely out Never leave a fire unattended. (This also applies to portable stoves). least three metres around the fire. anything else that may burn, for at Clear all leaf litter, dead branches and boys and zamia palms. smaller species such as banksia, blackattacks the root systems of trees and infected by a soil-borne fungus which Some forest and woodland has been DIEBACK

to contain the embers. build a stone ring, or dig a shallow pit In State forest, if no fireplace exists, national parks open fires are not Always use the fireplaces provided. In

if possible. If not: your own portable gas stove

summer months. Always take particularly during the dry A REAL DANGER, FIBES: BUSH FIRES ARE

take in. Bury organic waste at least on the principle of taking out what you provided. If there are no bins, operate RUBBISH: Place all litter in bins

roads and designated four-wheel drive and roadworthy. Keep to authorised be registered for use on public roads used in national parks or the forest must VEHICLES: All vehicles and motorbikes permitted in national parks. animals are protected. Pets are not FLORA SINBIG Svits Native plants and

allowed in forests or national parks. FIREARMS: No offensive weapons are points, it should be boiled before use. use water from the few permanent water own drinking water. If you do have to summer months. Always carry your Western Australia are dry during WATER: Most creeks and rivers in

LO KNOM LHING2 KON NEED

EEE0 73E (90) anodqala COMO, W.A. 6152 THE LAND MANAGEMENT DEPARTMENT OF CONSERVATION

For brochures write to:

regional offices are listed on the grid. Confact numbers for the appropriate

need information or assistance. Do not hesitate to contact them if you visit more enjoyable and informative. ers are always glad to help make your National park rangers and forest offic-

NOITAMROANI REHTRUA

road rules apply. and stay on approved roads. Normal STAY ON THE ROAD: Follow the signs No firearms or pets please. PROTECT ANIMALS AND PLANTS: portable gas stove. fireplaces provided. Bring your own STAY COOL: Don't light fires, except in better still, take it with you. BE CLEAN: Put your litter in bins, or concern and your responsibility. ment in national parks and forests is our BE CAREFUL: Your safety and enjoy-

REMEMBER

WESTERN AUSTRALIA IS A LAND OF CONTRASTS

In the cool South-West, towering forests of native hardwoods rear above deep rivers; pristine beaches front the cold southern ocean; and the 300km sweep of the jarrah forest follows the ancient spine of the Darling Scarp to

North of the capital the coastal sand plain stretches out to Geraldton; dry and featureless for much of the year, but between August and November a sea of wildflowers.

North again: the endless red plains of W.A.'s heartland stretch out before you. The North-West is stark and strange: a land of jasperlite and iron ore, baked by the fierce summer heat. Deep gorges, silver beaches that run forever, ghost gums and dust-devils . . .

With care and thoughtfulness Western Australia's forests will remain some of the most beautiful in the world.



You may camp in State forest and national parks at areas marked with the

Three types of camp site

are available:

Formal Camp:

A caravan or tent site which may have ? water, electricity, drainage, showers and toilets. Only a few national parks have 'formal' camp sites (see grid). Usually Shire or commercial caravan parks and camping areas may be found near parks and forest reserves. Contact Holiday W.A. centres for more informa-

Vehicle-based Camp:

Bush sites for pitching a tent and parking a vehicle are provided. In some areas basic facilities such as toilets, and a source of fresh water are nearby.

Back-pack Camp:

For bushwalkers and canoeists who are travelling through remote areas where there are no facilities. Please...be careful with fires, and leave no trace of your visit

In some circumstances the ranger may ask you to move camp after seven nights. This helps prevent overcrowding, or wear and tear on the environ-

FEES

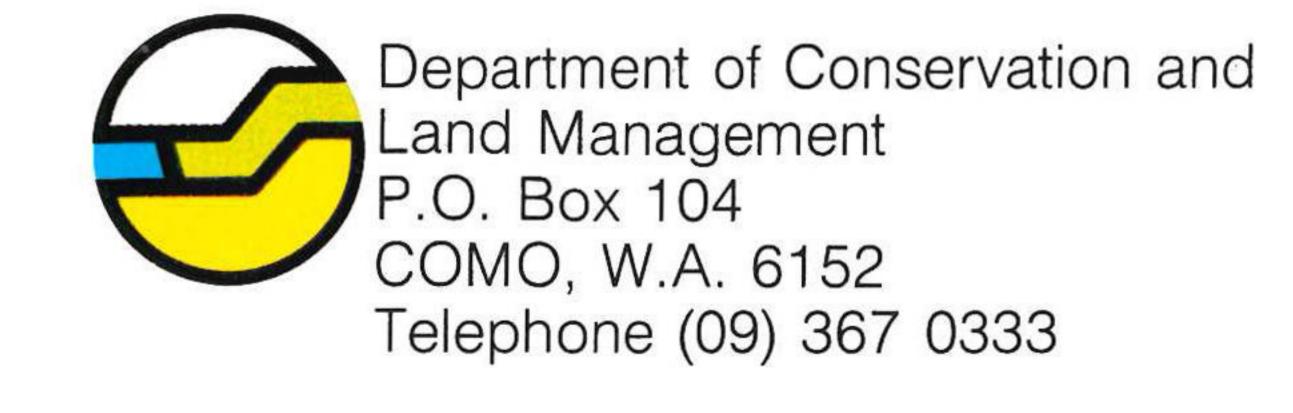
Entry and camping fees are charged for some national parks and forests.

DAY USE AREAS

Areas not marked with the camping sign are intended for day visitors only. PLEASE... Do not camp in day-use areas.



The alarming expanded frill of the Frilled Lizard deters most enemies in it's North West



The splendor of Walyunga National Park

BUILDINGS - OTHER THAN OFFICE ACCOMMODATION

	Description	No. Off
1.	Houses (1)	432
2.	Garages and Sheds	618
3.	Toilet Blocks (2)	84
4.	Huts	68
5.	Stores	58
6.	Glass Houses/Shade Houses etc.	32
7.	Lookout Towers (3)	30
8.	Workshops - Auto, Carpenters etc.	26
9.	Lecture Rooms/Halls/Schools	15
10.	Mess Rooms/Amenities	9
11.	Taverns/Inns/Kiosks etc. (4)	7
12.	Hangars	4
13.	Information Centres	3
14.	Power Houses	3
15.	Research Outstations	2
16.	Golf Course Clubhouses	1

- (1) The 432 Houses listed are located on freehold land in the name of the Executive Director 20%, freehold land in the name of the Crown 3%, Reserves 50%, and State Forest 27%.
- (2) The 84 Toilet Blocks are widely dispersed throughout State Forest and National Parks.
- (3) Lookout Towers are all situated within the three Forest regions and are mostly located on State Forest.
- (4) The 7 Taverns/Inns/Kiosks are all located within National Parks.

^{*} House numbers are accurate at February 26 1988 but exclude Penguin Island shacks. All other numbers have been extracted manually from the Insurance Schedule and may contain minor inaccuracies due to varying descriptions and omissions.

BUILDINGS - OFFICE ACCOMMODATION

				Y
:	LOCATION	MANAGING AUTHORITY	ANNUAL RENTAL	TYPE OF USE
- 1 - 1	CRAWLEY COMO MURDOCH WOODVALE MARMION	CALM CALM PRIVATE CALM MARINE & HARBOURS	105,000 18,000	POLICY EXECUTIVE SOHQ - RESEARCH PLANNING-RECREATION-METRO RESEARCH - LIBRARY MARINE PARK
NORTHERN FOREST	 KELMSCOTT DWELLINGUP JARRAHDALE MUNDARING WANNEROO YANCHEP (NP) 	CALM CALM CALM CALM CALM CALM		REGION - INVENTORY DISTRICT - RESEARCH DISTRICT DISTRICT DISTRICT - RESEARCH NATIONAL PARK
CENTRAL FOREST	- BUNBURY - BUSSELTON - MARGARET RIVER - LUDLOW - HARVEY - COLLIE - KIRUP - NANNUP - GRIMWADE	CALM GOVT. OFFICES CALM CALM CALM CALM CALM CALM CALM CALM		REGION - INVENTORY DISTRICT - RESEARCH OUTSTATION OUTSTATION DISTRICT DISTRICT DISTRICT DISTRICT OUTSTATION
SOUTHERN FOREST	- MANJIMUP - PEMBERTON - WALPOLE	CALM CALM CALM		REGION-DISTRICT-RESEARCH DISTRICT DISTRICT
WHEATBELT	- KATANNING - NARROGIN - PINGELLY - MERREDIN	SHIRE CALM SHIRE PRIVATE	8,800 2,400 5,000	OUTSTATION REGION - DISTRICT OUTSTATION OUTSTATION

LOCATION	MANAGING AUTHORITY	ANNUAL RENTAL	TYPE OF USE
SOUTH COAST - ALBANY - ESPERANCE	PRIVATE PRIVATE	23,600 9,500	REGION DISTRICT
GOLDFIELDS - KALGOORLIE	GOVT. OFFICES		REGION
GREENOUGH & GASCOYNE - GERALDION	PRIVATE	15,000	REGION
- CARNARVON - MOORA - EXMOUTH	GOVT. OFFICES MAIN ROADS DEPT. PRIVATE	4,500 13,000	WILDLIFE OFFICER DISTRICT DISTRICT
KIMBERLEY - KUNUNURRA - BROOME	GOVT. OFFICES CALM		REGION W'LIFE OFFICER NURSERY
PILBARA - KARRATHA	SGIO	54,000	REGION - RESEARCH
TOTAL		258,800	

- (1) ALL ANNUAL RENTAL FIGURES STATED INCLUDE CLEANING COSTS.
- (2) ALL OTHER BUILDINGS ONLY INCUR CLEANING COSTS AS THEY ARE OWNED BY CALM OR THEY ARE GOVERNMENT OFFICES.

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT INVENTORY OF EQUIPMENT - VEHICLE FLEET

DESCRIPTIO	N	NUMBER	REPLACEMENT COST (FEBRUARY 1988)
LIGHT VEHICLE FLEET - MOTOR CYCLES - TRANSPORT 4 x 2 - TRANSPORT 4 x 4		14 261 352	25,200 3,028,000 5,969,700
	SUB TOTAL	627	9,022,900
TRUCK FLEET - GANG TRANSPORT - TABLE TOP TRUCKS - FIRE TRUCKS - TIP TRUCKS - TILT TRAY TRUCKS - EQUIPMENT TRANSPORT	ORTERS	55 3 61 19 3 6	2,413,000 130,000 3,158,000 775,000 135,000 750,000
	SUB TOTAL	147	7,361,000
INDUSTRIAL/EARTHMOVING - CRANES - GRADERS - WHEEL TRACTORS - CRAWLER TRACTORS - LOADERS	FLEET SUB TOTAL	11 7 45 5 16	680,000 1,190,000 1,291,000 840,000 2,320,000
OTHER - TRAILERS - CARAVANS - BOATS	SUB TOTAL	149 26 23	119,000 320,000 247,000
	TOTAL	1,056	23,390,900

Note: Registration cost for vehicles 1986/87 was \$85,692.00 which did not include costs associated with new vehicles as registration is part of purchase cost.

INVENTORY OF EQUIPMENT
(1)
(INDIVIDUAL ITEMS VALUED AT \$1,000 OR MORE)

Type of Equipment	Number (where appropriate)	Total Replacement Value (\$) (April 1988)
Chainsaws and Brushcutters	396	251,670
Generators	50	173,500
Other Workshop Equipment	-	574,300
Scientific Equipment		289,938
Fire Management Equipment	-	2,347,200
Computing Equipment	-	2,604,000
Communications Equipment	-	1,614,000
Forest Silviculture (Nurseries)	-	707,600
Office Equipment	and a	311,730
TOTAL		\$8,873,938

⁽¹⁾ this Appendix does not include the plant fleet which is detailed separately in this Appendix.

TRUST GOVERNMENTAL CONSERVATION AND LAND MANAGEMENT TRUST FUND STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30th JUNE 1987

'85/86				
		RECEIPTS		186/87
\$	\$		\$	\$
1 645 679		Balance Brought Forward (1)		1 698 341
51 225 300		Consolidated Revenue Fund (2)		61 652 000
1 213 923		Mining Compensation		1 496 986
137 688 1 146 377		Main Roads Department Grant (3)		1 332 163 511 325
371 837		Community Employment Program (4) Youth Trainee Scheme (5)		712 453
15 957		Saleable Publications (6)		120 308
13 73,		Aboriginal Community Development Pro	gram (7)	136 308
		Ningaloo Bicentennial Grant (8)	5 ()	11 893
14 897 731		Private Borrowings (9)		13 192 000
830 904		Sale of Assets (10)		1 484 009
1 053 681		Recoupable Projects (11)		1 570 071
167 098		Wildlife Special Projects Recoups (11)		295 643
1 058 629		Income from National Parks (3)		779 505
384 058 43 099		Other Notice Conservation & National Parks A	/c (12)	99 798 126 612
74 191 961		Nature Conservation & National Parks A/	C (12)	85 219 415
		PAYMENTS.		
		Capital -		
2 217 305		Hardwood Forests - Est. & Tending (13)		2 232 090
7 700 877		Softwood Forests - Est. & Tending (13)		6 153 529
		Softwood Sharefarming Scheme (13)		361 783
967 535		Access Road Construction (13)		1 080 042
826 880		Land Purchases (13)		2 519 052
2 054 580	3 860 028	Housing & Buildings (13) Plant & Equipment (13)	4 453 994	1 878 141
2 120 028	1.740.000	Less Depreciation	1 830 000	2 623 994
27 433	<u> </u>	Sawmilling & Seasoning Plant (13)		4 963
		Ningaloo Marine Park (13)		23 787
15 914 638				16 877 381
(39 683)		Plant Workshop - Operating Costs		$(62\ 059)$
		Recurrent Expenditure -		
44 544 530	23 233 500	Salaries (14)	24 459 147	22 021 147
21 733 500	1 500 000	Less - Charged to Capital Works (14)	1 628 000	22 831 147
16 706 616	17 688 616	Central Administration	21 070 198	20 104 100
16 736 616	932 000	Less - Charged to Capital Works (14)	966 000	20 104 198
4 811 339		Environmental Protection (15)		4 244 142
1.040.560		Natural Disasters (15)		692 725 2 173 114
1 942 560 2 589 755		Engineering Services Recreation & Tourism Services (16)		1 907 899
2 086 056		Planning & Research		1 913 987
5 907 040		Commercial Operations (17)		8 614 399
452 983		Information Services		412 384
45 441		Nature Conservation & National Parks		42 198
7 632		A/c (12) Refund to Tsy of Funds Incorrectly Credited in 1984/85		
305 743		Cash Order Balance		(15 109)
72 493 620				79 736 406
1 698 341		Balance June 30 (18)		5 483 009

The accounts for the Department of Conservation and Land Management are prepared on a cash basis and rounded to the nearest dollar.

The purpose of the Conservation and Land Management Trust Fund is to hold funds derived under Sections 64 and 68 of the Conservation and Land Management Act 1984.

(1) Includes:

Nature Conservation & National Parks Trust Account

01/07/85

\$118 008

01/07/86

\$115,666

- (2) The increase of \$10,476,000 in the allocation from CRF over the 1985/86 allocation was due primarily to the Department's increased liability for loan repayments (\$3,310,000), increased activity in Commercial Operations (\$5,702,960) and increased salary costs (\$1,205,500).
- (3) Main Roads Department grants for National Parks Roads in 1985/86 were reflected in the Income from National Parks figures.
- (4) The Community Employment Program was wound down in 1986/87 resulting in fewer funds for these projects.
- (5) The Youth Trainees Scheme was operational for the full year in 1986/87 as against the six months in 1985/86.
- (6) During 1986/87 the Department successfully launched a marketing campaign for its saleable publications.
- (7) The Aboriginal Affairs Planning Authority provided funds for this program in 1986/87 and it will continue for 1987/88.
- (8) A grant from the Australian Bi-Centennial Authority was received to assist with the establishment of the Ningaloo Marine Park. Work on this project commenced late in the financial year.
- (9) Private Borrowings

The outstanding principal at June 30, 1986 was \$43,431,809. During the year loans to the value of \$13,192,000 were raised.

Principal repayments, interest and sinking fund instalments during the year amounted to \$1,661,529, \$5,781,533 and \$15,420 respectively. In addition, proceeds from sinking fund investments with the Treasury amounting to \$1,061,310 were applied to the reduction of principal on loans due to the WA Treasury Corporation. The outstanding principal at June 30, 1987 was \$53,900,970.

Sinking funds held at Treasury and private banks totalled \$501,540.

Softwood Forestry Agreement Loans

Between the years 1966/67 and 1982/83 the Commonwealth Government provided loans of \$10,078,510 for the purposes of establishing and tending softwood plantations. The outstanding principal at June 30, 1986 was \$9,311,508. During the year principal and interest payments amounted to \$210,929 and \$777,524 respectively. The outstanding principal at June 30, 1987 was \$9,100,579.

- (10) The increase in funds from the sale of assets was due to vehicles realising a higher price than expected resulting in a greater number of vehicles being sold.
- (11) A greater level of activity in these areas contributed to the increased receipts.
- (12) Nature Conservation and National Parks Trust Account.

Section 68 of the Conservation and Land Management Act 1984 provides for the establishment of the Nature Conservation and National Parks Trust Account within the Conservation and Land Management Trust Fund.

The account is credited with money derived under the Wildlife Conservation Act 1950 and income from investments, gifts, devises, bequests and donations. The funds may be applied to research or any other purpose relating to the conservation of fauna and flora, or the management of national parks, nature reserves, marine nature reserves or marine parks subject to compliance with any conditions imposed in connection with any gifts or bequests.

The balance at June 30, 1986 was \$115,666. During the year receipts totalled \$126,612 and payments amounted to \$42,198 leaving a balance of \$200,080 at June 30, 1987.

Proceeds from Duck Licenses realised \$21,000 more than 1985/86.

Bequests and gifts to the Account totalled \$51,700 against Nil in 1985/86.

As a result of these increased funds the interest from investments was \$7,300 greater than for 1985/86.

- (13) The Capital Works priorities are set annually and do not necessarily bear any relationship to previous year's expenditure.
- (14) Salaries and Central Administration Expenses

Salaries and Central Administration Expenses are allocated to Capital Works on a predetermined basis after analysis of resources applied to Capital Works.

The following allocations were made during the period.

1985/86		198	6/87
Salaries	Admin	Salaries	Admin
\$		\$	
312,000	193,000	340,000	200,000
908,400	564,000	990,000	585,000
67,200	41,000	70,000	43,000
104,400	67,000	108,000	69,000
108,000	67,000	120,000	69,000
1,500,000	932,000	1,628,000	966,000
	Salaries \$312,000 908,400 67,200 104,400 108,000	Salaries	Salaries Admin Salaries \$ 312,000 193,000 340,000 908,400 564,000 990,000 67,200 41,000 70,000 104,400 67,000 108,000 108,000 67,000 120,000

(15) For 1985/86 "Natural Disasters" was included under Environmental Protection.

Natural Disasters includes expenditure on wildfires and other emergency operations for which no budget was provided.

- (16) In 1985/86 there was an overspending of \$396,755 attributed to expenses for establishment of the Marmion Marine Park, the provision of toilet facilities at the Dwellingup Recreation Park and expenses of park management generally. The lower level of expenditure in 1986/87 reflects the cost of ongoing management programs.
- (17) The increased level of activity in the timber industry is reflected in the increased expenditure on this item for 1986/87.
- (18) Includes:

Nature Conservation and National Parks Trust Account

30/06/86

\$115 666

30/06/87

\$200 080

(19) Comparative Figures

Expenditure figures for 1985/86 have been amended to include \$191 640 relating to the Timber Bureau and \$99 788 relating to Mycological Research which were transferred from the Department of Premier and Cabinet and the Department of Conservation and Environment respectively. Expenditure of \$129 357 relating to the Censorship Office and \$112 771 relating to the Heritage Committee now included under the Department of the Arts and the State Planning Commission respectively have been excluded from the 1985/86 figures.

CONSOLIDATED REVENUE FUND STATEMENT OF REVENUE AND EXPENDITURE FOR FINANCIAL YEAR JULY 1 1986 TO JUNE 30 1987(continued)

EXPENDITURE			
	Estimate	Actual	Variation
	S	\$	\$
Amount required for services for the	< * * * * * * * * * * * * * * * * * * *	< - < 52 000	N.T.1
year (paid to Conservation and Land	<u>61 652 000</u>	<u>61 652 000</u>	<u>Nil</u>
Management Trust Fund)			
being		22.224.4.5	400.050
Salaries & Allowances (4)	22 939 000	22 831 147	107 853 -
Other Staffing Costs	3 323 000	3 266 766	56 234 -
Communications	1 006 000	1 026 103	20 103
Services & Contracts (5)	2 147 000	2 274 716	127 716
Consumable Supplies	1 366 000	1 393 452	27 452
Mtce of Plant & Equip	325 000	330 183	5 183
Purch, of Plant & Equip	239 000	242 812	3 812
Grants, Subsidies &	11 006 000	11 570 166	564 166
Transfer Payments (6) Environmental Prot (7)	4 336 000	4 936 868	600 868
Engineering Services	2 243 000	2 173 114	69 886 -
Rec & Tourism Serv (8)	1 786 000	1 907 899	121 899
Research & Planning (9)	2 391 000	1 913 987	477 013 -
Commercial Operations (10)	11 610 000	8 614 399	2 995 601 -
Information Services (11)	278 000	412 384	134 384
12101221022 00111000 (11)	64 995 000	62 893 996	2 101 004-
Less Contributions			
from Industry & Other			
Sources (12)	4.061.000	5 077 702	<u>1 016 702</u>
	60 934 000	57 816 294	3 117 706-
Plus consequential increase in			
Trust Fund Balance	718 000	3 835 706	3 117 706
Payment to Conservation and Land			~~
Management Trust Fund	61.652.000	61 652 000	Nil
Special Acts			
Salary of Executive			
Director	80 000	78 750	1 250
Director	Ç0 000	.5,00	1 = 2 3

Variation from Estimates

Revenue

- (1) The increase in the level of activity in the timber industry was less than anticipated when the budget was framed in early 1986. As a consequence the Department's revenue collections were short of the budgetted amount.
- (2) Sandalwood collections exceeded the budget by \$853,553 due to a substantial increase in rates applicable from 1/1/87 which were not known at the time the budget was framed.
- (3) Sale of Assets (Houses) was short of the budget by \$1,452,502 due to delays in obtaining the necessary approvals and legislation to enable the houses to be sold.

Expenditure

- (4) Expenditure was \$2,101,004 less than the estimate of \$64,995,000. Net savings of \$107,853 were achieved on the payment of Salaries and Allowances after allowing for an excess of \$288,449 on Retiring Allowances. These figures reflect the effect of the government's 3% staff reduction policy.
- (5) An excess of \$127,716 occurred in the Services and Contracts item due primarily to the necessity to pay two premiums on the Department's public risk insurance policy to bring it into line with the financial year.
- (6) The Grants, Subsidies and Transfer Payments item exceeded the budget by \$564,166.

This was the net result of several unbudgetted items of expenditure totalling \$1,299,831 offset by a saving of \$612,064 on Loan Repayments. The balance of \$123,601 was caused by several minor savings.

The unbudgeted expenditure of \$1,299,831 was as follows:-

\$265,000 grant to the Shark Bay Shire Council for the Monkey Mia dolphins tourist facility.

\$161,456 for the Aboriginal Community Development Program. (This expenditure is recoupable).

\$818,375 for wages incurred on the Youth Traineeship Scheme and the National Employment Strategy for Aboriginals. (Both these items are fully recoupable).

\$55,000 on Workers' Compensation Wages. (Recoupable in full to CRF).

The saving on the Loan Repayments was due to a decision to delay the Department's Capital Works Program reducing the requirement for capital funds in the first half of the financial year.

- (7) Environmental Protection exceeded the budget by \$600,868 due to unbudgetted expenditure on Fire Suppression. In future years this expenditure will be recorded under the category "Natural Disasters".
- (8) Recreation and Tourism Services exceeded the budget by \$121,899 due mainly to unbudgeted expenditure on Parks Management.

- (9) Savings of \$477,013 were achieved in the Research and Planning category some of which were used to offset over-expenditure in Recreation and Tourism and Information Services.
- (10) A saving of \$2,995,601 was achieved in the Department's Commercial Operations due to the lower than anticipated increase in activity in the timber industry resulting in a corresponding loss of revenue.
- (11) Information Services exceeded the budget by \$134,384 due primarily to unbudgeted expenditure on the launch of Draft Regional Management Plans for the South West and the Timber Industry, and the demand for publicity information during the America's Cup.
- (12) Funds retained by the Department to finance its expenditure program exceeded the estimate by \$1,017,058. Recoupable Project revenue was \$431,562 greater than expected and this together with excesses of \$131,509 for recoups for salaries of officers employed on outside projects, \$175,643 for Wildlife Special Projects recoups and \$129,505 Income from National Parks account for the bulk of this increase.

CRF Revenue due but uncollected at the 30th June 1987 was \$4,347,047 and it is expected that all but approximately \$1,300 will be collected.

Expenditure claims for CRF on hand but unpaid at the end of the financial year totalled \$134,583.

The following amounts were written off under the provisions of Section 45 of the Financial Administration and Audit Act.

Revenue

nevenue		
Irrecoverable amounts	\$ 181.75	
Uncollected (Yanchep Boat Hire)	9 558.00	
Theft (Dwellingup)	102.50	
Other	_20.00	9 862.25
Stocktaking Deficiencies		
Fuel - Unlead	498.81	
Publications	254.00	
General	3 362.00	. 4 114.81

\$13 977.06

CAPITAL WORKS FOR FINANCIAL YEAR JULY 1 1986 TO JUNE 30 1987 CONSERVATION AND LAND MANAGEMENT TRUST FUND STATEMENT OF REVENUE AND EXPENDITURE

	Estimate	Actual	Variation
	\$	\$	\$
Expenditure			
Establishment & Tending			
Hardwood Forests	3 019 000	2 232 090	786 910 -
Softwood Forests	6 357 000	6 153 529	203 471 -
Access Rds - Construction	1 009 000	1 080 042	71 042
Land Purchase	4 582 000	2 519 052	2 062 948 -
Plant & Equipment	3 850 000	4 453 994	603 994
Housing & Buildings	1 642 000	1 878 141	236 141
Sawmilling & Seasoning Plant	15 000	4 963	10 037 -
Ningaloo Marine Park	500 000	23 736	476 214 -
Softwood Sharefarming Sch	220 000	<u>361 783</u>	<u>141 783</u>
	21 194 000	18 707 380	2 486 620 -
Source of Funds			
Commonwealth Grant -			
Bicentennial Trust Fund	250 000	11 893	238 107 -
Borrowings	14 832 000	13 192 000	1 640 000 -
Contribution - Main Roads	472 000	407 863	64 137 -
Department Internal Funds & Balances	5 640 000	5 095 624	544 376 -
	21 194 000	18 707 380	2 486 620 -

GENERAL LOAN AND CAPITAL WORKS FUND

Building Management Authority - Moneys raised by the Western Australian Building Management Authority for capital works undertaken by them were expended on the following projects:

	Estimate	Actual	Variation	
	\$	\$	\$	
Addition and Improvements				
Katanning	10 000	16 303	6 303	
Manjimup	381 000	428 863	47 863	
Administration	Nil	33 966	<u>33.966</u>	
	391 000	479 132	88 132	

Additions and Improvements were financed from borrowings and Administration costs from General Loan and Capital Works Fund.

Variations from Capital Estimates

Conservation and Land Management Trust Fund

Source of Funds

As the Department budgets only to raise sufficient funds to support its spending program any reduction in spending is reflected in funds being sought to finance the program. The Commonwealth Grant from the Bicentennial Trust Fund relates solely to expenditure on the Ningaloo Marine Park.

2. Expenditure

The total underspending of \$2 486 620 relates almost entirely to the Land Purchase and Ningaloo Marine Park items.

The proposed visitors information centre at the Ningaloo Marine Park was not commenced as early as anticipated. This expenditure will now be incurred in 1987/88.

Land purchases were not proceeded with at the rate anticipated when the budget was framed resulting in a saving.

All other variations were a result of the reallocation of priorities that became apparent after the budget was framed.

General Loan and Capital Works Fund

1. Expenditure

Expenditure on Additions and Improvements to Katanning and Manjimup offices exceeded the estimates due to construction problems not anticipated at the time the budget was framed.

SOURCES OF REVENUE FOR CALM - 1985/86 AND 1986/87

1985/86	REVENUE SOURCE	1986/87
	To Consolidated Revenue Fund Royaltie	s
10,955,726 3,411,155 530,965 99,157 1,687,247 12,986 84,705 18,977	Logs Chip Logs Poles, Piles, Mining Timber Firewood, Posts Sandalwood Gravel, Sand, Shale Leases and Apiary Sites Other Rents, Miscellaneous	11,929,097 4,491,547 318,923 187,407 2,853,553 21,222 105,036 22,946
16,800,918	Sub Total	19,929,731
5,554,877 1,839,926	Pine Conversion Hardwood Conversion	7,002,105 4,348,534
7,394,803	Sub Total	11,350,639
	Other Sales, Fees and Recoups	
489,514 112,207 329,421 121,159 270,437 296,488	Seed and Tree Sales Inspection Fees House Rents Wildlife Licences Workers Compensation Recoups Miscellaneous Revenue Sub Total	533,544 156,335 420,571 108,094 227,129 154,451
	Grants and Other Revenue	
1,146,377 371,837 15,957 	M.R.D. Grant C.E.P. Grant Youth Trainee Scheme Saleable publications Aboriginal Comm. Dev. Programme Recoupable Projects Wildlife Special Group Income from National Parks Other	924,300 511,325 712,453 120,308 136,308 1,570,071 295,643 779,505 27,788
4,197,637	Sub Total	5,077,701
\$30,012,584	Consolidated Revenue Fund	\$38,005,693
(53.34% of \$56,263,622)	Represented as a percentage of total CRF expenditure for year (1)	(64.35% of \$59,058,290)

\$ 43,099	To Nature Conservation and National Park Trust Fund	\$ 126,612
1,213,923 137,688 830,904 -	To Capital Accounts Mining Compensation M.R.D. Grant Sale of Assets Ningaloo Bicentennial Grant Grants, Advances and Other	1,496,989 407,863 1,484,009 11,893 72,010
2,182,515	Sub Total	3,472,761
\$32,238,198	Total Revenue Gained by CALM from all sources	\$41,605,066
\$72,493,620	Total Expenditure by CALM (2)	\$79,736,406
44.47%	<pre>% of total expenditure generated by CALM as revenue</pre>	52.18%

Notes:

- (1) the total CRF expenditure here is defined as total expenditure on activities for the year, less the consequential increases in the CALM Trust Fund balance.
- (2) the total CALM expenditure here is defined as total payments for the year for all activities.
- (3) the data presented here, and in the FRC survey do not exactly match because of the factors mentioned in the reconciliation in Section 2. The FRC Survey essentially counted items such as vehicle costs which are effectively double counted in the internal management reporting system at Departmental level.

CAPITAL BORROWINGS AND OUTSTANDING LIABILITIES DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT (JUNE 1987)

Source of Borrowings	Period of Borrowings	Total Amount Borrowed (1) (\$)	Total Liability Outstanding (\$)
General Loan Fund	1948/49 to 1983/84 inc	• •	(2) NIL
Softwood Forestry Agreement	1967/68 to 1982/83 inc	10,078,511	9,100,579
Conservator of Forests Private Borrowings	1976/77 to 1981/82 inc	6,400,000	2,893,646 (3)
W.A. Treasury Corporation (inc. Central Borr. Auth.)	1981/82 to present	45,715,800	51,007,329 (3)
W.A. Treasury Corp. (Kemerton loan transferred frp, ILDA)	1986/87	7,533,300	NIL (3)
TOTAL (including General Loan Fund):	eral	113,392,611	63,001,554
TOTAL (not including Loan Fund):	General	69,727,611	63,001,554

Notes:

- (1) the total amount borrowed is expressed in historical cost terms (ie. dollars are expressed in the value of the year of borrowing, and not indexed forward to 1986/87).
- (2) the General Loan Fund allocations ceased in 1983/84, but no liability for these borrowings accrued to Departments.
- (3) the loan transferred from I.L.D.A. is not separately identified and is included in the outstanding liability from the W.A. Treasury Corporation. Also in this W.A. Treasury Corporation liability are some private borrowings which have matured and were rolled over into a new loan from W.A. Treasury Corporation.

APPENDIX 23

REPAYMENTS ON CAPITAL BORROWINGS DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Year	On Private Borrowings (\$)	On Swd. For. Agree. (\$)	Total Repayment (\$)	Total CRF Expend. in year (\$)	Z Increase in CRF Budget over previous year	Z of CRF used for loan repay.
1977/87	178,467	3,818.84	182,286	12,232,761		1.49%
1978/79	288,467	45,347.39	333,814	14,128,370	15.50%	2.36%
1979/80	384,210	169,618.42	553,828	16,612,373	17.58%	3.33%
1980/81	556,033	339,292.49	895,325	20,133,004	21.19%	4.45%
1981/82	833,948	487,644.19	1,321,592	23,203,984	15.25%	5.69%
1982/83	1,075,090	624,269.66	1,699,360	27,366,328	15.21%	6.21%
1983/84	1,339,158	772,590.62	2,111,749	32,757,297	19.70%	6.45%
1984/85	2,533,860	807,948.78	3,341,809	44,241,140	35.06%	7.55%
1985/86	4,251,839	886,936.35	5,138,775	56,263,662	27.17%	9.13%
1986/87	7,458,483	988,452.64	8,446,936	62,893,996	11.78%	13.43%
TOTAL	18,899,555	5,125,919	24,025,474	309,832,915		7.75%

Notes:

- 1. This list excludes General Loan Fund borrowings prior to 1983/84 when GLF ceased as no Department costs were raised against these borrowings.
- 2. The repayments listed above are inclusive of both principal and interest.

PREPARATION OF PUBLIC MANAGEMENT PLANS FOR LAND OR WILDLIFE MANAGED BY CALM

1. MANAGEMENT PLANS ALREADY APPROVED OR IN PREPARATION

FINAL MANAGEMENT PLANS APPROVED	DATE APPROVED
Mooradung Nature Reserve	28 November 1986
Nature Reserves of the Shire of	
Wyalkatchem	21 January 1986
Forrestdale Lake Nature Reserve	29 April 1987
Nature Reserves of the Shires of	
York and Northam	19 May 1987
Benger Swamp Nature Reserve	1 December 1987
Shannon Park and D'Entrecasteaux	
National Park	2 December 1987
Cape Range National Park	24 December 1987
Northern Forest Region RMP	
Central Forest Region RMP	
Southern Forest Region RMP	December 1987

FINAL MANAGEMENT PLANS BEING PREPARED

Lane Poole Reserve

DRAFT MANAGEMENT PLANS RELEASED FOR PUBLIC COMMENT	DATE OF RELEASE
Leeuwin Naturaliste National Park Waroona Catchment Loque Brook Catchment	11 December 1987 9 March 1988 9 March 1988
Yanchep National Park Ningaloo Marine Park	20 April 1988 20 April 1988

DRAFT MANAGEMENT PLANS BEING PREPARED

Bungle Bungle National Park
Dampier Archipelago
Fitzgerald River National Park
Hamersley Range National Park
Herdsman Lake
Marmion Marine Park
Penguin Island
Rudall River National Park
South Coast Region
Two Peoples Bay
Walpole Nornalup National Park

CO-OPERATION WITH OTHER ORGANISATIONS

Abrolhos Islands Planning Strategy (with SPC and Fisheries)
Kimberley Region Planning Study (SPC)
Leeuwin-Naturaliste Regional Plan Part II (SPC)
Peel Region Study (SPC)
Wellington Dam Planning Strategy (SWDA)

2. CALM PROPOSED FIVE YEAR MANAGEMENT PLAN PROGRAMME (1)

CALM REGION LAND AREA South Coast Region West Cape Howe Southern Forest 2. Walpole Nornalup 3. Kimberley Regional Plan Kimberley Metropolitan 4. Alfred Cove Northern Forest 5. John Forrest Wheatbelt Dryandra 6. Metropolitan 7. Beeliar Central Forest Region Plans eg Ludlow Central Forest Goldfields Goldfields Regional Plan 10. Nambung NP Greenough Wheatbelt 11. Lake Dumleyung Wheatbelt 12. Wheatbelt Regional Plan 13. Boyagin Wheatbelt 14. Vasse Wonnerup Central Forest 15. Review Thompson's Lake Metropolitan Gascoyne 16. Shark Bay 17. Abrolhos Greenough Kimberley 18. Parry's Lagoon 19. Millstream Chichester Pilbara Northern Forest 20. Serpentine Greenough 21. Kalbarri Kimberley 22. Devonian Reefs

NOTE:

23. Review Forrestdale Lake24. Metropolitan Regional Plan

25. Lake Muir and Lake Unicup

(1) The proposed five year order of priority for management plan preparation is reviewed at least once every 6 months by the CALM Policy Directorate, and is hence subject to regular evaluation and change.

Metropolitan

Metropolitan Southern Forest 007268F2006 CS:KC

FUNCTIONAL REVIEW - DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

The Western Australian Government's Functional Review Committee will shortly be re-commencing a review of the Department of Conservation and Land Management, following some preliminary work early this year.

The Functional Review Committee was established by the Hon Premier in September 1983 (a copy of the Terms of Reference is attached for your information) and consists of a number of senior public servants who operate with the assistance of full time Review Co-ordinators. These Co-ordinators are responsible for working directly with the agencies under review, and prepare a report for the Committee's consideration.

Attached is a paper listing the membership of the Functional Review Committee. The Review Co-ordinator who has been allocated to our Department is Ms Maxinne Sclanders.

The initial segment of the Functional Review Committee Report is termed a Phase 1 document and has two main sections:

- (i) a document prepared by the Department which will be a complete summary of the functions and services undertaken by CALM, together with details of resource allocation, assets, legislative base and other required information;
- (ii) the Review Co-ordinator's Report, which will draw upon CALM's document, interviews and field trips undertaken throughout CALM, and information gathered from our clients, industry and relevant Government agencies.

Both of these documents are presented to the Functional Review Committee for consideration. In some cases the Committee will require more detailed information on one or more of an agency's functions, and a Phase 2 document is then prepared which concentrates on the necessary aspects.

In preparing her report Ms Sclanders (who has already visited the Pilbara and Greenough Regions) will be available to talk to any CALM staff who wish to speak with her, as well as arranging specific interviews with key staff in Branches and Regions. It is anticipated that she will be making visits to, and talking with, staff in the metropolitan area, at least one of the Forest Regions, the Wheatbelt Region and the South Coast Region. Your co-operation in providing information and advice to Ms Sclanders will be appreciated.

The General Manager will be responsible for the preparation of the CALM Phase 1 document, and he will be assisted by Mr Cameron Schuster after 28 January 1988. Mr Schuster will also be co-ordinating Ms Sclander's interviews with members of CALM's staff, and he should be your first point of contact for any staff member wishing to talk with Ms Sclanders. Prior to 28 January 1988, he can be contacted at the Public Service Board by telephone on (09) 222 8228.

A central part of the preparation of CALM's Phase 1 document will be the completion of an updated survey of our functions and services, and the resources (people, financial, material and plant) allocated to them. The survey form, and clarifying instructions are attached, and you are requested to complete this survey form for your Branch or Region and return it under Confidential Cover to Mr Trevor McGill, Records Section, SOHQ by 29 January 1988.

If you have any specific queries relating to the survey, please phone Cameron Schuster.

I recognise that this request comes at a busy time of the year, but it is important that we present accurate information to the Committee and I look forward to your co-operation.

Syd Shea EXECUTIVE DIRECTOR

22 December 1987

Distribution:

General Manager
Divisional Managers
Policy Directors
Manager, Policy Directorate
Regional Managers
Branch Managers
Internal Audit Section
Manager, Records Section
Mr John Ireland, Senior Personnel Officer
Mr Shane Knapp, Admin Assistant
Mr Cameron Schuster, Public Service Board

2. TERMS OF REFERENCE

The Terms of Reference of the Committee are:

- (i) To undertake a comprehensive review of all functions, activities and services performed by each and every Government Department, State Trading Concern, State Instrumentality, State Agency and Public Statutory Body, corporate or unincorporate, established by or under a law of the State or by administrative action.
- (ii) To recommend to the Hon Premier, on an ongoing basis, those functions, activities and services which the Committee considers could be rationalised, modified, scaled down or abandoned to increase effectiveness, efficiency and economy in the use of existing Government resources of manpower, funds, materials, equipment and other property.

3. SCOPE OF THE FUNCTIONAL REVIEW

3.1 The Premier has said:

- (i) no area of Government activity would be exempted from scrutiny;
- (ii) the Review will make the most basic appraisal of Government functions and services possible, namely, whether it is appropriate for each function and service to be continued and, if so, whether it should continue to be carried out by Government; and
- (iii) those responsible for each Government activity will be required to justify its continued existence.

No such fundamental review has ever been carried out before in this State. To the extent that there have been previous assessments of the range of Government activities, they have been confined solely to budgetary exercises.

While the Government expects cost savings to result from the Review, the primary basis of investigation is:

- (i) to allow Government to be fully informed on the breadth and complexity of its activities, and as a result, be in a position to exert some measure of political control according to its own priorities; and
- (ii) to provide Government and its Departments and Instrumentalities with a clear understanding of the way in which resources have been allocated towards achieving objectives.
- 3.2 Application of functional reviews within organisations:

Reviews of functions are carried out in conjunction with the responsible agency using a standard methodology.

Benefits arising from the process include:

- . involving staff in demonstrating the worth, capability and performance of the organisation.
- . encouraging resolution of known problems.
- . assisting with corporate planning and monitoring of organisational progress.
- encouraging consideration of efficiency improvements.
- providing a basis for change to occur in a rational, planned way.

4. MEMBERSHIP OF THE FUNCTIONAL REVIEW COMMITTEE (as at November 1987)

The members of the Functional Review Committee are:

MR B M EASTON Commissioner, Public Service Board (Chairman)

MR K EDWARDS Executive Director, Policy Division, Department of the Premier and Cabinet

MR M J BOWLER Assistant General Secretary Civil Service Association

MR G McCULLAGH Director, Policy
Department of the Premier and Cabinet

MR M CROSS Executive Director
Department of Employment and Training

MR I HILL Executive Director
Department of Corrective Services

MR P J FARRELL Assistant Under Treasurer Treasury Department

MR M O'KANE Principal Private Secretary
Minister for Labour, Productivity and
Employment

The Committee operates with assistance of a full-time working group of four Review Co-ordinators headed by an Executive Officer.

CONTACT ADDRESS OF THE COMMITTEE

Mr B W Denham
Executive Officer
Western Australian Government
Functional Review Committee
9th Floor
111 St George's Terrace
PERTH WA 6000

Telephone: (09) 222 8400

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

PHASE 1 FRC DOCUMENT

Responsibilities for preparation of Survey Document:

In each case the Region/Branch Manager's returns will be submitted to the relevant Divisional Managers. This will be the responsibility of Messrs McGill and Schuster at Como.

Operations Division

- Regional Managers where Districts are established within a Region the survey report should be prepared independently for each District (staff who have dual reporting responsibilities, eg Wildlife Officers, Information Officers should be accounted for in specialist Branch return).
- 2. Manager, Wildlife Protection Branch for his own Branch and regionally based Wildlife Officers.
- 3. Mr John Ireland any SOHQ based staff not included in Branch returns (includes Divisional Managers, General Manager, etc).

Policy Directorate

1. Manager, Policy Directorate for all Crawley based staff.

Forest Production, Technical Services, Finance and Administration Divisions

1. By relevant Branch Managers (only to include resources directly controlled by Branches, eg Fire Protection Branch will include all spotter and fixed wing aircraft hire, and allocate resources to the appropriate function).

For the purpose of this exercise all Workshop staff will be accounted for by the District they work in, unless Districts make an explicit arrangement with Engineering Services (which should be clearly noted on survey returns).

Research Division

1. By Managers of Research Centres (Manjimup, Como (to include Wanneroo), Dwellingup, Woodvale (to include Library, Kalgoorlie and Karratha Research staff), Busselton). Research Division should complete the survey forms on the basis of their existing research programmes and how these relate to the functions outlined in this survey.

Clarifying Notes

- 1. The completed survey forms should be typed wherever possible.
- 2. All forms should be clearly labelled with respect to the organisation unit they relate to.
- 3. Comments should be provided as an attachment to each survey form to clarify the resources included in the survey when they conceivably could be the joint responsibility of another organisation unit.
- 4. The base year for financial resources should be the actual result (revenue or expenditure) in 1986/87.
- 5. The allocation of human resources across functions and services should be done on the basis of FTE's on a quarterly basis (as shown on the forms) wherever possible. If you are at all unsure of how to handle seasonal workload fluctuations please contact Cameron Schuster. These FTE's should be balanced to your 1986/87 actual financial result, and a statement prepared to show total FTE's per quarter for each organisation unit the total FTE's allocated to functions and services should balance with this figure.
- 6. Regions should report for the Regional Group separately from any Districts responsible to them.
- 7. The revenue collection service is to be reported on, to the extent possible, from the office actually collecting the revenue (ie royalties, publication sales, kangaroo tags, lease fees, etc are to be reported on from the Region/District/Branch issuing the receipt). Complete accuracy in regard to amounts collected at each office is not necessary (this is available from Finance Branch), but the human resources devoted to revenue collection should be reported as accurately as possible.
- Cameron Schuster will collate asset inventories, financial sources and the like centrally from SOHQ records, and will only query Branches or Regions on an exception basis if required.
- 9. Where recoupable projects are done for either private or groups, or other Government agencies could the organisation unit responsible please attach a brief statement detailing the level of these projects in 1986/87, resources allocated, recoup arrangements, and whether the project is likely to continue in future years. The recoupable project should be reported on within the relevant function or service.
- 10. In all cases the allocation of resources to functions or services is only to include ordinary hours of work, and not overtime, except in the specific column of the financial resources survey sheet.

11. The functions and services detailed in the survey have been developed according to the Functional Review Committee definitions:

Function: A major activity performed to accomplish or contribute towards achievement of an organisation's objectives.

Service: A supporting activity essential to the performance of more than one function, eg management services, accounting, library.

The Functions defined for CALM are (in no particular order of importance):

- (a) Environmental Protection
- (b) Fire Management
- (c) Wildlife Conservation
- (d) Recreation Management
- (e) Industry Control and Regulation (all except Timber Production)
- (f) Industry Control and Regulation (Timber Production specifically)
- (g) Commercial Timber Production (contracts and log sales etc)
- (h) Hardwood Silviculture establishment
- (i) Hardwood Silviculture tending
- (j) Softwood Silviculture establishment
- (k) Softwood Silviculture tending
- (1) Liaison and Public Participation Programmes
- (m) Environmental Education
- (n) Marine Management
- (o) Planning (includes legislatively required management planning; resource planning; corporate/strategic organisation planning)

as research, law enforcement, Activities such Note: recoupable advisory services, extension and projects, and road works should be split across as is appropriate. It is recognised this functions may be difficult (ie, do we maintain a road for fire protection, recreation access, conservation management, timber production or other reason) so judgement will undoubtedly be required. managerial

The Services defined for CALM are:

- (i) Housing and buildings (activities to be split whenever possible between maintenance and construction).
- (ii) Plant and Workshops.
- (iii) Personnel Administration.
 - (iv) Training and Development.
 - (v) Occupational Health, Safety and Welfare.
 - (vi) Industrial Relations.
- (vii) Human Resource Planning.
- (viii) Accounts and Payrolls.
 - (ix) Budgeting and Financial Planning.
 - (x) Records Management

 - (xii) Materials Management and Purchasing (ie stores).
- (xiii) Information Technology/Computing Services.
 - (xiv) Land Information Services (to include Mapping Services, Aerial Photography, Inventory Services).
 - (xv) Communications (to include telephone, radio, video and other).
 - (xvi) Library (Regional/District/Branch Offices please include your libraries as well).
- (xvii) Internal Audit.
- (xviii) Insurance (principally Workers Compensation, but to include all types).
 - (xix) Economic Analysis/Planning.
 - (xx) Publications.
 - (xxi) Public Relations
 - (xxii) Revenue Collection and Processing.

(List of Services continues on page 5)

<u>List of Services Continued</u>

- (xxiii) Policy Committee Support (to include NPNCA, Lands and Forest Commission, Karri D'Entrecasteaux, etc).
 - (xxiv) Revenue Raising (please attach, if appropriate, a brief statement of areas where you believe additional revenue could cost effectively be raised).
 - (xxv) External Research Liaison (ie tertiary institutions, CONCOM, Research Working Groups, industry etc.).

Meetings and Seminars

Time and resources spent on arranging, conducting, attending or complaining about meetings and seminars (other than training) should be accounted for within the appropriate function or service.

However for internal purposes would Managers please provide for their own organisation units a summary of the time spent on (expressed as person days), and expense (reflected by an estimate of non salary/wage travel and other costs) of meetings and seminars (except for training purposes) attended by their staff in 1986/87. A completed example sheet is attached for information.

The Forms

I have attached copies (and a completed example) of the survey sheet to be used. A separate sheet is to be completed for each function or service undertaken by your organisation unit - no nil returns are required; but if your organisation unit doesn't participate in a function or service, please attach a list of the functions or services you haven't returned a form for.

Thank you for your forbearance and I look forward to your co-operation in this important exercise.

Syd Shea

EXECUTIVE DIRECTOR

22 December 1987

	ALLOCATION OF HUMAN RESOURCES (1986/87)	
FUNCTION OR SERVICE:	ORGANISATION UNIT:	DATE:
(as per list in attached notes)	 _	
	NUMBER OF FEELS - () () ()	1

DATE:		

SALARY/WAGE	l	NUMBER OF FIE'S Invol	COMMENTS		
RANGE	July, Aug, Sept.	Oct, Nov, Dec	Jan, Feb, March	April, May, June	
ForestWorker, Mechanic other non supervisory wages staff	1				
Supervisory wages staff eg. Overseer (Act. Overseer)		-			
National Park Rangers					
National Park Rangers (Ranger In Charge, Supervisory)	 				
LEVEL 1 SALARIED	1				
LEVEL 2					
LEVEL 3					
LEVEL 4		1			
LEVEL 5			1		
LEVEL 6	<u> </u>				
LEVEL 7					
LEVEL 8					
LEVEL 9					
ABOVE LEVEL 9	1				
TOTALS]
	.i	1		1	

NOTE: 1. In allocating Forests (CALM) Act Field Staff, please use the provisional broad banding determination for the purposes of this exercise.

2. In all cases round FTE's to nearest 0.5 FTE or whole FTE. (eg. 0.2 FTE becomes zero; 0.8 FTE becomes 1 FTE).

:	BY:	REPARED	Р
	в::	KELAKED	М

ALLOCATION OF HUMAN RESOURCES (1986/87)
ORGANISATION UNIT: BUSSELTON DISTRICT

EXAMPLE ONLY

DATE: JANUARY 1988

FUNCTION: FIRE MANAGEMENT
(as per list in attached notes)

NUMBER OF FIE'S Involved in quarterly periods. SALARY/WAGE COMMENTS July, Aug, Sept. RANGE Oct, Nov, Dec | Jan. Feb. March | April, May, June ForestWorker, Mechanic other 10.5 2.5 5.5 non supervisory wages staff 2.0 Supervisory wages staff 1.5 eg. Overseer (Act. Overseer) 0.5 2.0 1.0 0.0 0.5 National Park Rangers 0.5 1.0 National Park Rangers 0.0 (Ranger In Charge, Supervisory) 0.0 0.5 0.5 0.0 LEVEL 1 SALARIED 0.0 1.0 1.0 3.0 2.0 1.0 1.0 LEVEL 2 LEVEL 3 1.0 2.0 1.0 1.0 0.0 0.0 LEVEL 4 0.0 1.0 0.0 0.5 0.0 LEVEL 5 0.0 0.0 1.0 0.5 0.5 LEVEL 6 0.0 0.0 0.0 LEVEL 7 0.0 0.0 LEVEL 8 0.0 0.0 0.0 0.0 0.0 LEVEL 9 0.0 0.0 0.0 0.0 0.0 ABOVE LEVEL 9 0.0 9.0 22.0 ! 9.0 6.0 TOTALS

NOTE: 1. In allocating Forests (CALM) Act Field Staff, please use the provisional broad banding determination for the purposes of this exercise.

2. In all cases round FTE's(up or down as required) to nearest 0.5 FTE or (eg. 0.2 FTE becomes zero; 0.8 FTE becomes 1 FTE) whole number.

PREPARED BY:

ALLOCATION	OF	FINANCIAL	RESOURCES	(1986/87)
ORGANTS	SATIO	ON LINIT-		

FUNCTION OR SERVICE:	
----------------------	--

(as per list in attached notes)

ORGANISATION UNIT:	DATE PREPARED:	

VITIES (these are not to include any listed	SALARIES/WAGES	OVERTIME PAID	OTHER	TOTAL
ERVICES)				ļ
		l		l
 	:	l 	! !	
		1	i	İ
i			i	
İ			1	1
I			!	
l				
 			į t	
			[[
			Ī	
i				1
i			i	l
1		.	1	
1			!	<u> </u>
			!	l !
	:		1	i I
j I		 	<u> </u>	i
1		l 	İ	
			I	1
		Ì	1	<u> </u>
		l	Į.	
1]
				!
TOTALS				! !

NOTE: Salaries/Wages: gross payments from District/Branch/Region financial reports and timesheets for wages. (Salaried and N.P. Ranger staff to be allocated acros basis of the Manager's best judgement (attached is a list of the base salaries/wages to be used for these staff for 1986/87)

Overtime: to be accounted separately on the basis of the best information available.

Other: payments to others for materials and contracts; plant and vehicle costs.

Overheads: such as payroll tax and Worker's Compensation will be added at a later date.

Activities: the principal activities carried out to undertake a function or service eg: Environmental Education could include school tours, the Perup Centre, internal training,

courses, lectures to external groups.

PLEASE NOTE: EXCEPT FOR COMPLEX FUNCTIONS OR SERVICES PLEASE LIMIT THE NUMBER OF ACTIVITIES TO AT MOST 6 OR 7

WHEREEVER POSSIBLE. THE ACTIVITIES YOU NOMINATE CAN BE THOSE YOU SEE AS MOST APPROPRIATE FOR YOUR AREA.

PREPARED BY:	
--------------	--

EXAMPLE ONLY

DATE PREPARED: JANUARY 1988

FUNCTION: FIRE MANAGEMENT
(as per list in attached notes)

ORGANISATION UNIT: BUSSELTON DISTRICT

ACTIVITIES (these are not to include any listed	SALARIES/WAGES	OVERTIME PAID	OTHER	TOTAL
SERVICES)	(\$)	(\$) 	(\$) 	(\$)
FIRE DETECTION (Including Duty payment in other)	1000	500	10000	11500
FIRE SUPPRESSION	17000	3200	1800	22000
LIAISON WITH INTEREST GROUPS	1000	-	500	1500
FIRE EQUIPMENT	500	-	5500	6000
PRESCRIBED BURN PLANNING	1500	-	1 1000	2500
PRESCRIBED BURN IMPLEMENTATION	25000	2500	5000	32500
MANAGEMENT PLAN PREPARATION AND REVIEW	2500	i !	500	3000
FIRE BEHAVIOUR RESEARCH	1000	-	1000	1000
FIRE ECOLOGY RESEARCH	1000	-	1 1000	1000
! !		1		
! !		[
; ;		 	!	ł
	50500		 	91000
TOTALS (\$)	50500	6200	ا جوءوں	81000

NOTE: Salaries/Wages: gross payments from District/Branch/Region financial reports and timesheets for wages. (Salaried and N.P. Ranger staff to be allocated across activities on the basis of the Manager's best judgement (attached is a list of the base salaries/wages to be used for these staff for 1986/87)

Overtime: to be accounted separately on the basis of the best information available.

Other: payments to others for materials and contracts; plant and vehicle costs.

Overheads: such as payroll tax and Worker's Compensation will be added at a later date.

Activities: the principal activities carried out to undertake a function or service eg: Environmental Education could include school tours, the Perup Centre, internal training,

courses, lectures to external groups.

PLEASE NOTE: EXCEPT FOR COMPLEX FUNCTIONS OR SERVICES PLEASE LIMIT THE NUMBER OF ACTIVITIES TO AT MOST 6 OR 7 WHEREEVER POSSIBLE. THE ACTIVITIES YOU NOMINATE CAN BE THOSE YOU SEE AS MOST APPROPRIATE FOR YOUR AREA.

PREPARED	BY:	

LIST OF STANDARD AVERAGE SALARIES AND WAGES TO BE USED (1986/87)

Forest Worker (all grades including average margins)	\$ 636.80/for	rtnight
Overseer (or Acting Overseer)	\$ 746.60	11
Tradesperson	\$ 725.40	Ħ
Mechanic in Charge (average all grades)	\$ 753.70	**
National Park Ranger (average of non supervisory grades)	\$ 831.41	17
National Park Ranger (supervisory grades)	\$ 957.75	W
Salaried Staff		
Level 1	\$ 603.60	**
Level 2	\$ 844.75	11
Level 3	\$ 988.87	11
Level 4	\$1123.59	H.
Level 5	\$1266.10	н
Level 6	\$1486.70	11
Level 7	\$1745.64	11
Level 8	\$1995.53	11
Level 9	\$2290.04	11

For other awards your staff may work under, please use an average salary/wage from your own records.)

SUMMARY OF MEETINGS ATTENDED BY CALM STAFF (1986/87 - EXCEPT TRAINING AND DEVELOPMENT)

RESOURCES ALLOCATED IN 1986/87 BROAD REASON FOR MEETINGS	Human Resources (person days)	Vehicle and other non salary/wage travel costs	Accommodation costs

Notes:

- 1. Wherever possible use the Functions as the "broad reasons for meetings", with the addition of a "Managerial Administrative" class.
- 2. Complete accuracy not essential so please exercise managerial judgement concerning the extent of research necessary.

SURVEILLANCE AIRCRAFT COSTING COMPARISON

(All costs in 1986/87 dollars, and based on 7,600 detection hours/annum - the 5 year average)

Owned

Hired

Piper PA Super Cub	Hourly Cost	Cessna 150	Hourly Cost
G.A.A. Subscription	0.17		0.17
Management Fee Management Expenses	6.23 0.18		6.23 0.18
100 Hourly Inspection Unscheduled Maintenance Engine Overhauls Engine Top Overhauls Propellor Overhauls Support Spares Radio	3.36) 1.61) 1.57) 0.34) 0.13) 3.82) 0.17	N.A.	
Nadio	0.17	each year	1.80
Avgas and Aero Oil	15.65		14.82
Pilot Wages Pilot Expenses Pilot Uniforms Pilot Training	32.17 0.49 0.20 0.20		32.17 0.49 0.20 0.20
Stationery	0.04		0.04
Hire Rate	N/A	Dry Hire, without Pilot (based on aviation industry standards at present for long term hire)	50.00
Aircraft Hull and Indemnity Insurance	1.80		N/A
New Engines	5.80		
Total Operating Cost:	73.93		105.39

(a) Capital Cost based on borrowing \$50,000 per aircraft over 10 years at 14% per annum

11.03

84.96

105.39

(b) Depreciation Sinking Fund to purchase 9 new aircraft in 5 years time (additional cost per flying hour in addition to operating costs)

8.85

82.78

105.39

(a) <u>Capital Financing</u>: (Maximum cost scenario)

Depreciate new aircraft over 10 years

Purchase price (1988)

\$80,000/plane

<u>Less</u> Trade-in price

\$30,000/plane

Changeover

\$50,000/plane

Assume 9 aircraft turned over at once. Therefore borrow \$450,000 over 10 years.

At 12% p.a. repayments are \$77,474.31/annum At 14% p.a. repayments are \$83,843.87/annum

For 7,600 flying hours/annum the capital cost per hour is hence:

At 12% p.a. \$10.09c/hr.

Total Operating Cost \$84.02/hr.

At 14% p.a. \$11.03c/hr.

Total Operating Cost \$84.96/hr.

(b) <u>Depreciation Sinking Fund</u>:

Assume current aircraft will all need replacing in 5 years To obtain \$450,000 (1986/87) over 5 years at 11% p.a. compound we require:

\$ 5,607.69/month

or \$67,292.24/year

At 7,600 hours/year this represents an additional \$8.85 per hour.

Note: All of these money values would have to be adjusted annually for changes in aircraft prices.

(c) Depreciation Replacement Fund:

Assume replace one aircraft per year at changeover cost of \$50,000

At 7,600 hours per year we will require \$6.58 per hour to provide \$50,000 per year (without interest contribution).

EXAMPLES OF ECONOMIC BENEFITS OF RECREATION (SPECIFIC TO NATIONAL PARKS)

Introduction

Tourism is one of few industries which can earn foreign exchange for Australia on a large scale (\$1.2 billion 1983/84). Of those few industries, none has better growth prospects than tourism.

Essentially the economic values of parks are realisable through tourism (though there are other economic benefits such as catchment protection).

National parks contribute significantly to tourism earnings because:

- * about 1 in 4 overseas visitors will go to a national park while in Australia;
- * a survey of overseas visitors in 1983 showed that interesting landscapes and unusual animal and bird life were big drawcards (much bigger than good night-time entertainment etc).

This general indication of tourism value has been supported by studies of specific areas.

Warrumbungle National Park

A few years ago a study on Warrumbungle National Park in NSW was undertaken. Established in the 1950s, Warrumbungle National Park is more than 300 km from Sydney. It is not near any major population centre which would provide substantial day use. Visitor numbers now exceed 80,000 per year. The economic evaluation of the park carried out by Ulph and Reynolds in 1980 showed that, on the basis of recreation usage alone, the park supported 39 jobs in a nearby town and contributed to regional income an amount of about \$875,000 at today's prices.

Tourism/Rainforests Study (NSW)

Another step towards clarifying economic value has been taken by the NSW NPWS, partly using funding under the National Rainforest Conservation Programme. This step involves a major study of the tourism and other contributions of rainforest and is based on rainforest parks in the New England/Dorrigo area. The study will run for twelve months and should conclude in mid 1988.

The study outputs will be:

- * closer liaison between the Service and the tourist industry as well as a greater appreciation by the tourist industry of the role of national parks in tourism;
- * an indication of the economic contribution of rainforests to the economy of the New England/Dorrigo region, with particular reference to tourism.
- * identification of the requirements of the tourist industry in the region and opportunities for increased tourism and marketing of rainforest parks, consistent with conservation objectives.

TOURISM VALUE OF NAMBUNG NATIONAL PARK WITH REFERENCE TO ROAD IMPROVEMENTS

Background

Nambung National Park is 245 km north of Perth. It contains about 20 km of unspoiled coastline, and excellent examples of northern sandplain ecosystems, but is best known for the "Pinnacles Desert". This unique landscape of limestone pillars left behind after the erosion of lime sands makes a visit to the park one of the most popular tourist attractions in the southwest of WA.

Prior to 1986 access to the Pinnacles was by way of a rough and circuitous track. After several years of careful analysis it was decided to provide access by a new road which incidentally cut travel distance within the park by about half, and travel time to less than one third. New construction took place in two stages: (i) a new section which rationalised access (completed in 1986); and (ii) realignment and upgrading of the first 11 km within the park (completed in 1987).

Visitor Patterns

Prior to 1984 only one coach company was operating tours to the park. This averaged five tours a week. From June 1986, 23 different companies were operating within the park. One company alone conducts three tours daily for seven days a week taking 20 people/tour.

In addition, a further five tours/day are conducted during the wildflower season (August-October). These carry on average 50 people/tour.

Table 1 shows that in 1984 the total number of visitors to the park was 50,000. In 1985 the visitor numbers were 16% less. This may have been due to the poor condition of the road access into the park.

In 1986 (completion of the first part of the road improvement programme) total visitor numbers increased by 123%. For the first nine months of 1987, the number of visitors to the park was 85,000. The total number of visitors for the current year (1987) is projected to be 105,000, an increase of 13% from 1986.

Table 1 - Estimated Numbers of Visitors to Nambung National Park

YEAR		TOTAL NUMBER OF VISITORS
1984		50,000
1985		41,000
1986	(first part of new road section	·
	programme completed)	92,000
1987	(new road completed end April)	105,000

Conservation Values

The Department (and the National Parks Authority before it) understood that the new road would lead to increases in visitor numbers, although it did not anticipate such a strong increase as has occurred. Nevertheless we believe that the decision was inevitable:

- (a) The existing track was causing a high level of complaint.
- (b) Notwithstanding its poor condition there were still 40-50,000 visitors per year visiting the Pinnacles.
- (c) The track gave an uncared for "image" to visitors.
- (d) It was not only difficult for visitors to get there; the rangers also had difficulty in patrolling the area.

The results with respect to conservation have been pleasing. People are staying on marked access tracks, both the new access and the circuit track within the Pinnacles area. Despite the 123% increase in numbers there has been no appreciable rise in vandalism or irresponsible behaviour.

There is still more work to be done in visitor services, and general tidying up, but the response by the public to what has been done so far has been generally very positive.

Economic Values

(a) Costs and Returns to Government

The road (both stages) cost \$240,000 (plus an amount of salary costs for planning and supervision).

Entry fees of an average of about \$1.00 per person are now imposed. (There is some variation in charges, but \$1.00 is a reasonable average). There are obvious problems in collecting all fees because it has not been possible to staff collection points. This is under review. For the purposes of this exercise, however, a 100% recovery is assumed.

If fees had been collected throughout the period returns to the Government would have increased from \$41,000 in 1985 to \$105,000 in 1987. On this basis, the increase of over \$60,000 per year would pay for the road in about 5 years. At the same time visitor amenity and conservation practice are believed to have been improved.

(b) Increased Economic Value

The net benefit to the economy, generated by Nambung National Park, is conservatively estimated to be \$9 million per annum. This is based on the "travel cost method" and 1987 visitor numbers.

(The estimation does not take into account alternative destinations but this is believed to be more than offset by zero valuation of motel accommodation and travel from origins other then Perth).

Approximately 50% of this value can be derived from the additional roadworks. In other words, expenditure of \$200,000 has generated, in conjunction with the intrinsic value of the resource, more than \$4 million per annum.

ESTABLISHMENT OF EVEN AGED KARRI FOREST REGENERATION

YEAR OF REGENERATION	AREA (ha)
Before 1966	8,940
1966	180
1967	320
1968	850
1969	1,670
1970	70
1971	100
1972	1,840
1973	180
1974	230
1975	1,190
1976	1,720
1977	1,880
1978	1,810
1979	2,310
1980	2,300
1981	3,350
1982	2,520
1983	2,340
1984	2,180
1985	2,360
1986	1,990
Total to 1986	40,330

PINE FOREST ESTABLISHMENT 1976 TO 1986

YEAR (CALENDAR YEAR)	RADIATA (ha)	PINASTER & OTHER SPECIES (ha)	TOTAL (ha)
1976	1,792	1,139	2,931
1977	1,883	880	2,764
.1978	2,254	556	2,810
1979	1,973	561	2,534
1980	1,617	978	2,595
1981	1,600	996	2,596
1982	1,548	642	2,190
1983	1,390	827	2,207
1984	1,996	537	2.534
1985	1,770	519	2,289
1986	1,406	610	2,016

Audience and Locations	"METHODS AND TECHNIQUES FOR ENVIRONMENTAL EDUCATION"						
including pre/post	Perso	onal	Non-personal				
and other communications	informal	planned	facilities	print	electronic		
Educational groups	public enquiries (telephone and counter)	school visits, field trips, lectures, courses, activities programs	Field Study Centres Demonstration Forests	Landscope Poster Resource Notes Wildlife Exploring	video - forests - CALM AVs - fire		
CALM Land Visitors (User Groups)	public contact enquiries and public contact	activities programs public contact public participation	Office Display Shelters Visitor Centres Nature Trails Drive Trails	Ranger Notes Landscope Park guide Drive Trail Nature Trail Wildlife Regional Cover	video - Ningaloo AVs - activities programs video - forests		
Children	public contact enquiries and public contact	activities programs	Playgrounds	Explorer Forest Packs Poster			
Scientific	enquiries	field trips, lectures, consultation, public participation, groups, courses	Field Study Centres Offices	Technical Reports Journals Landnote			
Industries - Tourist - Production	enquiries	field trips, lectures, consultation, public participation, groups, courses	Offices	CALM News Landscope			
Urban	enquiries and public contact	staffed displays, lectures, activities programs, volunteers programs	Offices Library Resource Centre	Newspapers Wildlife Poster Landscope	radio talkback		
Rural	enquiries and public contact	staffed displays, farm visits, field days, lectures, seminars, workshops, volunteer programs	Offices Arboretum Nursery Demonstration farms	Local newspapers Regional cover Landscope Poster	radio talkback		

TASK

Cons	ervation			\PPENDI
(1)	Administration of Wildlife Conservation Act for protection of marine fauna and flora.		Land and Wildlife Branch	×
(2)	Regulation of public recreational activities to minimise/ prevent detrimental effects on fauna and flora and habitats.		Operations (Ranger) staff	31
(3)	Enforcement.		Operations (Ranger) staff	plus Wildlife Protection Branch
Recr	<u>eation</u>			
	ide for public recreation to the extent consistent with ervation.			
(a)	Recreational fishing: . bag and size limits . methods of catch . zoning))	Operations (Ranger) staff	plus Fisheries Dept. Inspectors
(b)	Other boating		Operations (Ranger) staff	plus Marine & Harbours Inspector
(c)	Diving: . underwater nature trails . safety and supervision . zoning)))	Operations (Ranger) staff	plus technical input
(d)	Swimming: . safety and supervision . zoning)	from <u>Planning Branch</u> and <u>B</u>	Recreation and Landscape Branch
(e)	Camping: design, construction and servicing of camp-sites)		
(f)	Enforcement		Operations (Ranger) staff	(see also (a))

Education

Provide environmental education programs.

- (a) Visitor centre displays etc
- (b) Guided tours by park staff
- (c) Printed brochures, field activity programs etc
- (d) Talks and workshops

Environmental Management

- (a) Construction and maintenance of:
 - . access tracks and roads
 - . carparks
 - . boat ramps
 - . public toilets
 - . information structures
- (b) Rehabilitation of over-used coastal dunes etc. (eg, soil erosion control, revegetation programs).
- (c) Pest control (eg, fox baiting on turtle-nesting sites).
- (d) Administration of applications for mining.

Planning

Research

Operations (District) staff plus <u>Information Branch</u>

Operations (District) staff plus Engineering Branch

Operations (District) staff <u>plus</u> <u>Environmental Protection</u>

Branch

Environmental Protection Branch

Planning Branch plus District and Research Division staff

Research Branch plus District staff

DEPARIMENT OF CONSERVATION AND LAND MANAGEMENT ACCIDENT PREVENTION RECORD - 1960/61 TO 1986/87

		NO.	OF ACCIDE	VIS	FRE	QUENCY RA	ГЕ	DAYS LOST
YEAR	PERSON HOURS WORKED	LOST TIME ACCID.	MEDICAL TREAT. ACCID.	TOTAL	LOST TIME ACCID.	MEDICAL TREAT. ACCID.	волн	
1960/61		188			140			3 015
1961/62		188			142			2 516
1962/63		200			154			2 763
1963/64		172		:	135			2 498
1964/65		181			153			3 700
1965/66		179			144			2 455
1966/67		185		!	100			3 244
1967/68	1 895 000	124	312	436	65	164	230	1 701
1968/69	2 019 568	96	155	251	48	76	124	1 738
1969/70	1 901 020	70	129	199	37	67	104	721
1970/71	1 808 406	48	158	206	27	76	110	458
1971/72	1 759 888	40	128	168	23	72	95	275
1972/73	1 728 577	45	112	157	26	64	90	414
1973/74	1 651 621	45	119	164	27	72	99	359
1974/75	1 748 219	55	127	182	31	72	104	634
1975/76	1 762 693	31	113	144	17.5	64	82	383
1976/77	1 707 635	32	157	189	19	92	111	620
1977/78	1 764 519	26	151	177	15	86	100	731
1978/79	1 835 917	44	143	187	24	76	100	810
1979/80	1 826 452	32	125	157	17.5	68	86	983
1980/81	1 897 463	24	135	159	13	71	84	490
1981/82	1 915 684	19	141	160	10	74	84	459
1982/83	1 931 192	27	134	161	14	69	83	849
1983/84	2 144 995	43	198	241	20	92	112	819
1984/85	2 093 453	30	189	219	14	90	105	776
1985/86	2 649 390	41	204	245	15	77	92	1 477
1986/87	2 505 789	28	127	155	11	50	61	1 382*

^{*} Of the 1 382 days lost, 660 were carried over from 9 accidents sustained during the previous year.



CALM BRIEFING PAPER 1/88

INFORMATION MANAGEMENT WITHIN CALM

Earlier this year the Department retained the services of the consultant group Arthur Young Ltd to carry out a review of CALM's information management requirements. The consultant's report has now been received and has been considered at length by the Policy Directorate and the Departmental Computer Policy Committee. A copy of the consultant's report will be sent to all regional managers and branch managers, who are asked to make it freely available to staff under their control. A copy of the Executive Summary and the seven major recommendations of the report are attached.

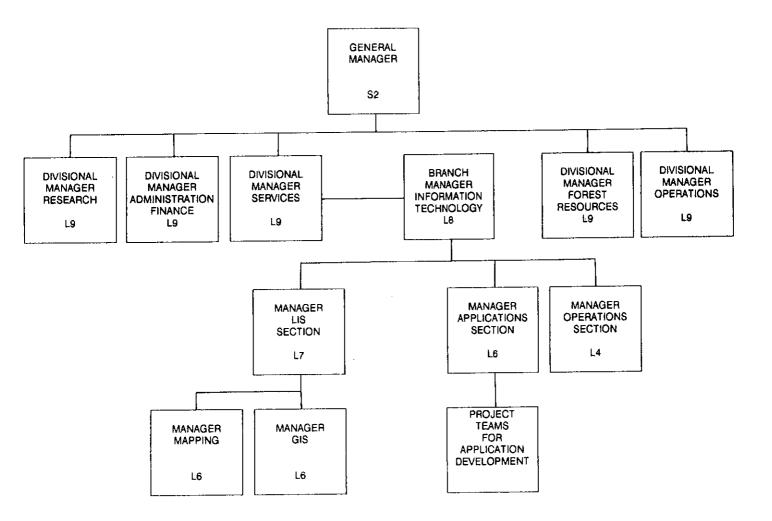
The Policy Directorate has accepted all the recommendations in principle, but has modified two important ones; those dealing with organisational structure and hardware strategy.

Subject to Public Service Board approval, it is proposed to create a new Information Technology Branch, responsible to the Divisional Manager Technical Services, which will have three Sections:

- (i) The Land Information Systems (LIS) Section, which will contain the present Mapping Branch and the Geographic Information Systems Group. However, Dr C Pearce and Mr M Green are heavily involved with an inventory project team, and although located within the LIS Section, the bulk of their work for the foreseeable future will be in that project team.
- (ii) The Applications Development Section, which will be responsible for a number of project teams working on corporate systems development, as well as personal computer user support.
- (iii) The Computer Operations Section, which will be responsible for the day-to-day running of the central computer system.

The attached chart shows the proposed structure of the new Branch.

PROPOSED CALM STRUCTURE



Extra staff positions have been allocated to this branch along the lines proposed by the consultants. A branch manager will be appointed as soon as possible and the position of LIS Manager will be allocated when a position becomes available in about six months time. Negotiation with the Public Service Board on these matters will commence immediately.

In respect of the CALM Hardware Strategy, the Directorate has accepted the recommendation of the Computer Policy Committee that CALM adopt a policy of working towards a single mainframe computer environment instead of using three separate machines (Concurrent, DOLA, VAX and WARCC CYBER) as at present. Because of CALM's large requirements for graphic and geographic information systems, where Concurrent have little experience or capability, the new mainframe will not be Concurrent. However, we do have a large investment in commercial systems for the Concurrent, so we are locked into a 2-mainframe environment for the life of those systems. The present Concurrent 3240 is also overloaded and the commercial systems have immediate requirements for growth.

It has therefore been decided to purchase a new Concurrent 3275 to replace the 3240. Apart from redevelopment of the Softwood Logging System, no new system development will take place on the Concurrent. All new systems will be developed or purchased for the new mainframe.

It is hoped the 3275 will be in operation in January, with the new mainframe computer being delivered in January-February. At that point CALM will withdraw from use of the CYBER, and the DOLA VAX. There will still be a connection to the DOLA VAX to access DOLA's legal and graphical cadastral data base and other components of the WA Land Information System.

With these improvements in Departmental organisation, staff resources and computing power, we look forward to a marked improvement in information management within the Department.

You will be advised as to the outcome of negotitations with the Public Service Board on the proposed organisational structure.

Syd Shea
EXECUTIVE DIRECTOR
15 October 1987

EXECUTIVE SUMMARY

The Department of Conservation and Land Management has been involved with computing for a number of years via the Forests Department and the Wildlife section of the Department of Fisheries and Wildlife.

At the time of planning CALM it would appear that little analysis was undertaken on the computing/information requirements of the new organisation. Now that the reorganisation has somewhat stabilised, it is clear that the resources available to CALM are inadequate to meet the demands being placed on information needs by the role and structure of the new department.

The lack of resources and the high demand levels has tended to direct computing activities towards operational systems with little consideration for a corporate view of information needs. This has been reinforced by the structure and allocation of computing resources, particularly people and funding.

The demands on the Department in terms of accountability and performance require CALM to adopt a much higher profile in the use of information technology with particular emphasis on corporate information needs. This includes the need to ensure that information is widely accessible across the organisation and in a form that is relevant to the user. In particular the availability of CALM information in graphical and related textual forms is a priority requirement of both senior management and operations level staff.

To meet this challenge CALM will require to increase the resources available to information technology areas on several fronts. While the question of hardware strategies dominates most discussions it is felt that this pre-eminent profile is not warranted. The cargo-cult approach that hardware will resolve the problems of CALM is not warranted and hides the key issues of staff resources and management control. CALM staff resources are considered inadequate to meet the needs created by its corporate role. Without proper staff resources CALM is unlikely to progress its information plans.

The plan developed in this document attacks CALM's requirements on four fronts.

Firstly the plan establishes, at a corporate level, the information needs of the department. It identifies 15 corporate subject areas, prioritised according to the department's corporate plan. The 5 priority areas requiring immediate analysis are:

- * Accounting
- * CALM Estate
- Forest Produce
- * Geographic Information Systems
- Records

In addition the corporate information model indicates a list of 68 potential systems needed to satisfy the departments' information needs.

The second area is that of staffing resources. To meet the backlog of systems identified above, CALM could utilise any number of staff. Given the existing and future prospects for staff the plan has identified key positions on which to build the resources needed. As systems are developed and implemented staff savings should be fed back into the information technology function until a stable self supporting group has been established.

The third area addressed in the plan is the hardware strategy. Two options are developed within the plan. Both options, the Concurrent/DEC environment and the single vendor environment will meet the demands of CALM given the staff resources are made available. The single vendor (DEC) environment is recommended as being more strategically desirable and one which will provide for long term gains over the dual vendor environment. This comes at a cost which has been identified as being in the order of \$1.5 million over the next 3-4 years. The strategy recommended allows for CALM to work progressively towards the single vendor situation with the major decision point occurring in about 12 months.

The fourth area of the plan is the creation of the supporting environment in which to develop information systems. To meet the challenges caused by large user demands and limited resources productivity must be a major goal of the existing resources. For this, 4GL productivity tools, formal project management and user involvement in systems analysis and design are paramount. The plan outlines how this should be achieved starting with the Computer Policy Committee and the project development processes needed to support information systems development.

In summary, the commitment of CALM over the next 4-5 years will be in the order of \$6-7 million to achieve the plan. Against this, significant gains are expected which provide a breakeven position in 4-5 years and then provide an ongoing benefit in the order of \$1 million pa.

It cannot be expected that the next 3 years will be easy. There is no magic elixir for success. Success will only come from:

- * a strong commitment to information technology from senior management;
- * strong controls and management of information technology resources;
- * allocation of resources to meet corporate objectives;
- * a well motivated and committed staff that is properly managed and directed.

SUMMARY OF RECOMMENDATIONS

This list does not represent a priority ordering of the recommendations contained in the plan. It is intended to offer a summary for reference only.

* CALM Corporate Plan (Section 4.2)

The CALM corporate plan should be further developed to identify Critical Success Factors for CALM and each business unit.

* Priority Business Areas (Section 6.2)

The priority business areas for further systems analysis are

- Accounting
- Calm Estate
- Forest Produce
- GIS
- Records

* Network (Sections 7.3 and 9.5)

The existing network should be extended to ensure existing CALM business units have access to CALM's information systems. This network should be converted to DEC network as part of the long term hardware strategy.

* Organisation Structure (Section 8)

A proposed structure for the management of information technology is set out in section 8.3. This needs to be read in conjunction with section 10.6 (Project structure) to ensure the full intent of the organisational structure recommendations is understood.

* Hardware Strategy (Section 9)

It is recommended that CALM adopt a medium to long term strategy to become a single vendor installation.

* Development Approach (Section 10)

It is recommended that CALM adopt a formal project approach to information systems development including the use of formal information engineering analysis and design methodology.

* Action Plan (Section 13)

The priority projects for Phase 2 of the Planning Brief are the Accounting and Calm Estate business areas. The business area analysis of these should commence immediately.

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT COMPUTING EQUIPMENT INVENTORY

(As at April 1988)

ITEM	_	STIMATED CEMENT COST
Mainframe computer(s) and associated equipment	\$1	,172,000
Remote terminals (64) and printers (22)	\$	135,000
Graphic Information Equipment	\$	184,000
Aerial Photography Equipment	\$	139,000
Remote Data Capture Equipment	\$	107,000
Network Equipment	\$	177,000
Records Management Equipment	\$	10,000
Micro computers (106) and printers	\$	518,000
Micro computer software	\$	76,000
Word processing	\$	86,000
	\$2	,604,000*

^{*} This excludes annual non salary maintenance costs of \$244,000.

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT RADIO COMMUNICATIONS EQUIPMENT (JULY 1987)

Equipment	Number	Approx. Replacement Value (\$)
VHF Mobiles VHF Repeaters (Fixed) VHF Control Stations VHF Radios Liaison Shire/BFB VHF National Park Ranger Office VHF Radios (aero control/tower)	584 22 47 17 7 46	700,000 88,000 56,400 20,400 8,400 55,200
HF Mobile Radios HF Base Station HF National Park Ranger Office	151 18 14	422,800 68,400 32,200
VHF Portable Radios	54	108,000
LFO Vans	12	14,400
HF Portables	50	27,800
HF Beacons	12	12,000
	TOTAL	\$1,621,000

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT REVENUE AND EXPENDITURE ON PUBLICATIONS (1986/87)

Publications Category	1985/86 Revenue	1986/87 Revenue	Expenditure Type	Total (\$)
Saleable	\$15,000	\$120,000	Information Branch Direct Costs	\$ 209,034
			Information Branch Salary Costs (2.15 FTEs)	\$ 56,253
			Other Departmental Salary Costs	\$ 51,775
			Indirect Costs (1)	\$ 54,357
			Postage	\$ 25,325
			Sub Total	\$ 396,754
Non Saleable	_	_	Information Branch Direct Costs	\$ 219,442
			Information Branch Salary Costs (5.5 FTEs)	\$ 149,358
			Other Departmental Salary Costs	\$ 132,480
			Indirect Costs (1)	\$ 92,581
			Postage	\$ 21,271
			Sub Total	\$ 615,132
	For Sa	leable and	Non Saleable Total	\$1,011,886

⁽¹⁾ the Indirect Costs quoted accrued to both Information Branch and CALM, and include the usual salary overheads, electricity and telephone charges, office maintenance, staff travel and equipment rental or purchase.

FINAL RECONCILIATIONS - CALM FRC DATA

1. FTES	Services Division 11 Research (inc. Herbarium) Division 15 Forest Resources Division 9 Admin and Finance Division 12	06.41 .7.00 .0.63 .2.46 .4.81 .8.99
		1,440.30
2. FINANCI	Operations Division Services Division Research (inc. Herbarium) Division Forest Resources Division Admin and Finance Division Policy Directorate and Others	\$35,366,369 \$5,728,898 \$5,253,849 \$12,220,620 \$6,033,341 \$1,762,423
	Sub total	\$66,365,500
<u>Plus</u>	Overhead payments not allocated to cost centres (as per Appendix)	\$14,920,929
	Sub Total	\$81,286,429
Plus	Capital cost of vehicles above revenue Sawmilling equipment	\$ 573,000 \$ 4,693
	Sub Total	\$81,864,122
<u>Less</u>	Double counting of plant operations (as per attached sheet A)	\$ 2,969,285
	TOTAL	\$78,894,837

ACTUAL TARGETS

1. FTEs

Actual FTE for 1986/87 (including Herbarium) 1439.74

(Taken from 1986/87 Annual report and other records)

The FTE reconciliation from this survey (1440.3 FTE) is hence an overstatement of 0.04%.

2. FINANCE

Actual Expenditure for 1986/87: (From CALM Trust Fund Accounts, Annual Report)

Recurrent and Capital Payments \$79,736,406

The FRC Survey (\$79,894,837 - after reduction for double counting) hence represents an understatement of 1.06% from the actual result.

NOTES:

1. The survey methodology, being essentially a retrospective analysis of a Department using a great deal of seasonal labour, and with a great degree of financial interaction between cost centres (for contracts and the like) appears to have understated gross wages and salaries for the Department by \$0.86M.

Actual Salaries and Wages result was:

Salaries	\$22,831,747	(including \$2,010,000
		for National Park Ranger
		wages)

Wages	\$11,883,000
Total	\$34,714,747

FRC Survey result was:

05
00
00
00
—
05

Little can be done to adjust this figure (other than a pro rata increase to all functions), and it is considered that for the FRC purpose this level of accuracy is acceptable (particularly when, in common with most Departments, only limited records are kept of the tasks salaried staff spend their time on).

SHEET A

Double counting of plant operation:

86/87 CALM Totals for Plant and Workshops:

Fuel	\$1,	,366,606
Oil	\$	61,522
Parts	\$	430,530
Wages	\$	534,000
Tyres	\$	172,220
Tools	\$	56,000
Power	\$	53,800
Private Works	\$	188,545
Acc. Repairs	\$	141,389
Other	\$	273,416
Total	\$3	,370,167

Plant and workshop totals reported in survey returns (Service No. 4.15) \$3,969,285

Notionally it appears about \$1.00M of this is either salaries (not counted in the list above) for Workshop and plant management, or plant running costs detailed by cost centres to the Workshops service item.

Hence, possible double count is \$3,969,285 - \$1.00M

= \$2,969,285.

ALLOCATION OF OVERHEAD COSTS (NOT INCLUDED IN COST CENTRE RETURNS) TO FUNCTIONS AND SERVICES

GRANTS 789,000 400,000 Recn; 389,000 Pol. Comm. WORKERS COMP. INSURANCE 964,000 All to Insurance. WORKERS COMP. WAGES 280,000 All to Occ. Health, Safety.		<u>\$</u>	ALLOCATION TO FUNCT./SERV.
WORKERS COMP. INSURANCE 964,000 All to Insurance. WORKERS COMP. WAGES 280,000 All to Occ. Health, Safety.	GRANTS	789,000	400,000 Recn: 389,000 Pol. Comm.
	WORKERS COMP. INSURANCE	•	
	WORKERS COMP. WAGES	280,000	All to Occ. Health, Safety.
SUPERANNUATION 52,000 All to Admin. Support.	SUPERANNUATION	52,000	All to Admin. Support.
PUBLIC LIAB. INSURANCE 288,000 All to Insurance.	PUBLIC LIAB. INSURANCE	288,000	All to Insurance.
LAND PURCHASE 2,519,000 <u>To</u> 265,000 to Wildlife Cons.	LAND PURCHASE	2,519,000	To 265,000 to Wildlife Cons.
22,000 to House/Build.			22,000 to House/Build.
1,645,900 to Swd Estab.			
15,531 to Hwd Estab.			
570,569 to Intra Govt. Liaison			
(Kemerton) (From land purchase			•
records).			•
BUILDING INSURANCE 46,000 All to Insurance.			
REMOVALS 83,000 All to Admin. Support.		•	
STAFF ACCOM. SUBSIDIES 8,770 All to Admin. Support.		•	• •
TAX - LATE PAYMENT FINE 1,120 All to Budgeting & Fin. Planning.			
OPERATIONS DIRECTORATE 143,000 All to Admin. Support.		·	- ·
REVENUE REFUNDS 48,000 All to Admin. Support.		•	
PROFESSIONAL FEES 261,000 All to Admin. Support.		•	
DATA PROCESSING 140,000 All to Land Inform. Services.		·	
LIBRARY ACQUISITIONS 40,000 All to Library. N.E.S.A. 95,000 50% to Cons; 50% to Recn.			
HERITAGE TRAIL 5,000 All to Recreation.		-	•
ABORIGINAL COMM. DEVELOP. 161,456 81,456 to Env. Prot; 80,000 to			
Liaison and Pub. Participation.	ABORIGINAL COM. DEVELOT.	101,430	
NINGALOO MARINE PARK 23,800 All to Conservation.	NINGALOO MARINE PARK	23 800	
SHAREFARMING 361,783 All to Swd Estab.		-	
CEP STATE SHARE 164,000 50% to Recn; 50% to Swd Tend.		•	
LOAN REPAYMENTS 8,447,000 To 988,453 Swd Estab (Swd: For. Agree)		•	
4,107,422 Swd Tend.		-, ,	
54,447 Swd Access Roads.			
58,922 (1) } to Fire(1) & Recn(2).			
58,923 (2) } from Hwd Access Roads.			
820,440 Plant and Equipment.			
322,955 Houses and Buildings.			
479,999 Swd Estab (Land purchase).			
986,011 Hwd Estab and Tend.			
8,143 Hwd Estab (1.43% of other land			
purchase); 561,285 Intra Govt.			purchase); 561,285 Intra Govt.
Liaison (other land purchase -			Liaison (other land purchase -
mainly Kemerton)			mainly Kemerton)

\$14,920,929

<u>Note:</u> The resources allocated to services in this table were then further distributed over CALM functions in accord with Section 5.2.

NOTES:

- 1. These costs are all the costs contained in the 1986/87 Financial Management reports which were not allocated by any cost centre during the compilation of the FRC Survey.
- 2. This table defines how these costs were assigned to the relevant functions or services. How the services were then allocated over functions for the Department is described in Section 5.2 of this Submission.
- 3. The loan repayments are allocated to functions on the basis of the combined historical borrowings assigned to that particular function, varied to account for the non borrowed funds (eg. sale of plant) attributable to an activity. The workings for this process are available on CALM FRC Records if required.

MECHANISM FOR ALLOCATING RESOURCES IN SERVICES TO DEFINED FUNCTIONS

All organisation units were sent copies of computer data for Service/Function allocation and requested to check data and advise of the service to function allocation.

The following table is by organisation unit showing the mechanism used as stated by the units.

	Organisation Unit	
01	Busselton District	All services were allocated pro rata across the District functions, except: "Revenue Collection & Processing" which was split between "Wildlife Conservation" 5%, "Recreation Management" 80%, and Commercial Timber Production" 15%; and "Policy Committee Support" which was allocated to "Planning".
02	Mundaring District	All services were allocated pro rata across the District functions.
03	Dwellingup District	All services were allocated pro rata across the District functions.
04	Collie District	All services were allocated pro rata across the District functions, except: "Revenue Collection and Processing" which was allocated pro rata across "Recreation Management" and "Commercial Timber Production".
05	Kirup District	All services were allocated pro rata across the District functions, except:

to "Cor Production".

"Revenue Collection and Processing" which was allocated

"Commercial Timber

06 Manjimup District

All services were allocated pro rata across the District functions, except:

- "Land Information Services"
 which was allocated equally to
 "Industry Control & Regulation
 Timber Production",
 "Commercial Timber Production",
 "Softwood Silviculture Establishment and Tending" and
 "Planning";
- "Publications" which was allocated equally to "Recreation Management" and "Liaison & Public Participation Programs";
- "Public Relations" which was allocated to "Liaison & Public Participation Programs";
- "Revenue Collection and Processing" which was allocated equally to "Industry Control & Regulation Timber Production" and "Commercial Timber Production"; and
- "Revenue Raising" which was allocated to "Hardwood Forest Regeneration and Timber Growing".

07 Narrogin District

- All services were allocated pro rata across the District functions, except:
- "Revenue Collection and Processing" which was allocated to "Commercial Timber Production"; and
- "Revenue Raising" which was allocated to "Commercial Timber Production".

08 Jarrahdale District

- All services were allocated pro rata across the District functions, except:
- "Revenue Collection and Processing" which was allocated to "Recreation Management" 5%, "Commercial Timber Production" 90%, and "Liaison & Public Participation Programs" 5%.

09 Kununurra District

- All services were allocated pro rata across the District functions, except:
- "Land Information Services"
 which was allocated to "Wildlife
 Conservation";
- "Publications" which was
 allocated to "Recreation
 Management";

- "Public Relations" which was allocated equally to "Wildlife Conservation" and "Recreation Management";
- "Revenue Collection and Processing" which was allocated to "Recreation Management"; and
- "Intra Government Liaison" which was allocated to "Planning".
- 10 Harvey District

- All services were allocated pro rata across the District functions, except:
- "Land Information Services" which was allocated to "Industry Control & Regulation Timber Production".
- 11 Pemberton District
- All services were allocated pro rata across the District functions, except:
- "Revenue Collection and Processing" which was allocated to "Commercial Timber Production".
- 12 Nannup District

- All services were allocated pro rata across the District functions, except:
- "Land Information Services" which was allocated to "Industry Control & Regulation Timber Production".
- 13 Walpole District
- All services were allocated pro rata across the District functions, except:
- "Public Relations" which was allocated equally to "Wildlife Conservation" and "Recreation Management"; and
- "Revenue Collection and Processing" which was allocated to "Recreation Management".
- 14 Kalgoorlie District
- All services were allocated pro rata across the District functions
- 15 Wanneroo District
- All services were allocated pro rata across the District functions, except:
- "Industrial Relations" which was allocated to "Recreation Management";

- "Communications" which allocated pro rata to "Fire Management", "Softwood Silviculture - Establishment and Tending", and "Industry Control Regulation Production";
- "Economic Analysis/Planning" which was allocated pro rata to "Softwood Silviculture Establishment and Tending", and "Recreation Management";
- "Public Relations" which was allocated pro rata to "Wildlife Conservation", "Recreation Management", "Liaison & Public Participation Programs", and "Environmental Education";
- "Revenue Collection Processing" which was allocated to "Recreation Management"; and
- "Intra Government Liaison" which was allocated to "Planning".

16 Albany District

All services were allocated pro rata across the District functions, except:

- which "Publications" allocated equally to "Wildlife Conservation" and "Recreation Management";
- "Public Relations" which was allocated equally to "Wildlife Conservation" and "Recreation Management"; and
- "Revenue Collection Processing which was allocated to "Recreation Management".

17 Esperance District

- All services were allocated pro rata across the District functions, except:
- "Publications" which allocated equally to "Recreation and Management" and "Liaison & Public Participation Programs"; and
- "Revenue Collection Processing" which was allocated to "Environmental Protection" 25%, "Wildlife Conservation" 25%, and "Recreation Management" 50%.

18 Katanning District

All services were allocated pro rata across the District functions.

- 19 Geraldton District
- All services were allocated pro rata across the District functions, except:
- "Revenue Collection and Processing" which was allocated to "Recreation Management".
- 20 Moora District

- All services were allocated pro rata across the District functions, except:
- "Revenue Collection and Processing" which was allocated to "Recreation Management".
- 21 Gascoyne District
- All services were allocated pro rata across the District functions.
- 22 Exmouth District
- All services were allocated pro rata across the District functions, except:
- "Revenue Collection and Processing" which was allocated to "Recreation Management".
- 23 Karratha District
- "Housing & Buildings" which was allocated to "Recreation Management";
- "Plant & Workshops" and "Policy Committee Support" which were allocated pro rata across the District functions;
- "Training & Development",

 "Budgeting and Financial
 Planning", "Records Management",

 "Admin Support", and

 "Communications" which were
 allocated pro rata to

 "Environmental Protection",

 "Fire Management", "Wildlife
 Conservation" and "Recreation
 Management";
- "Human Resource Planning" and
 "Accounts and Payroll" which
 were allocated pro rata to "Fire
 Management", "Wildlife
 Conservation", and "Recreation
 Management";
- "Public Relations" which was allocated pro rata to "Wildlife Conservation" and "Recreation Management"; and
- "Revenue Collection and Processing" which was allocated to "Recreation Management".

24 Broome District

All services were allocated pro rata across the District functions, except:

- "External Research Liaison" which was allocated to "Wildlife Conservation".

25 Metropolitan Region

All services were allocated pro rata across the Region functions, except:

- "Publications" which was allocated pro rata to "Wildlife Conservation" and "Recreation Management".

26 Manjimup - Regional Headquarters All services were allocated pro rata across Regional functions, except:

- "Personnel Administration" which was allocated pro rata across Regional functions but excluded "Liaison & Public Participation Programs".
- "Training & Development" which was allocated pro rata across Regional functions but excluded "Environmental Protection", "Industry Control & Regulation Except Timber Production", and "Liaison & Public Participation Programs".
- "Industrial Relations" which was allocated equally to "Environmental Protection" and "Fire Management";
- "Land Information Services"
 which was allocated to
 "Planning"; and
- "Revenue Collection and Processing" which was allocated equally to "Wildlife Conservation" and "Liaison & Public Participation Programs".

27 Bunbury - Regional Headquarters

All services were allocated pro rata across Regional functions, except:

- "Training & Development" which was allocated pro rata across Regional functions but excluded "Wildlife Conservation", "Industry Control & Regulation - Except Timber Production". "Commercial Timber Production, "Liaison & Public Participation Programs", "Marine Management" and "Planning".

- "Land Information Services"
 which was allocated to
 "Planning";
- "Public Relations" which was allocated pro rata across Regional functions to "Environmental Protections", "Wildlife Conservation", "Fire management", "Recreation Management", and "Liaison & Public Participation Programs".
- 28 Kelmscott Regional Headquarters

All services were allocated pro rata across the Regional functions.

29 Research Division

All services were allocated pro rata across the Division functions, except:

- "Training & Development" which
 was allocated to "Wildlife
 Conservation" 75%, and
 "Environmental Education" 25%;
- "Publications" which was allocated to "Wildlife Conservation" 50%, and 50% to Division functions pro rata;
- "Public Relations" which was allocated to "Wildlife Conservation" 66%, and 34% to Division functions pro rata; and
- "External Research Liaison" which was allocated to "Wildlife Conservation" 50%, and 50% to Division functions pro rata.
- 37 Computer Services

All services were allocated pro rata across Departmental functions, except:

- "Training & Development" and "Information Technology" which were allocated to "Fire Management" 10%, "Industry Control & Regulation Except Timber Production" 10%, "Commercial Timber Production" 20%, "Liaison & Public Participation Programs" 10%, and 50% to Department functions prorata.
- 38 Internal Audit

All services were allocated pro rata across Departmental functions.

39 Mapping Branch

All services were allocated pro rata across Branch functions.

- 40 Fire Protection
- All services were allocated to "Fire Management".
- 41 Environmental Protection
- All services were allocated to "Environmental Protection", except:
- "Policy Committee Support" which was allocated to "Planning" 20%, and "Environmental Protection" 80%;
- "Revenue Raising" which was allocated to "Industry Control & Regulation - Except Timber Production"; and
- "External Research Liaison" which was allocated to "Wildlife Conservation" 20%, and "Environmental Protection" 80%.
- 42 Wildlife Protection
- All services were allocated pro rata across Branch functions, except:
- "Training & Development" which
 was allocated to "Wildlife
 Conservation";
- "Occupational Health, Safety & Welfare" which was allocated to "Wildlife Conservation";
- "Budgeting & Financial Planning" which was allocated to "Wildlife Conservation";
- "Admin Support" which was allocated to "Wildlife Conservation"; and
- "Revenue Collection and Processing" which was allocated to "Industry Control & Regulation - Except Timber Production".
- 43 Planning Branch

- All services were allocated pro rata across Branch functions.
- 44 Timber Production
- All resources initially allocated to functions.
- 46 Timber Utilisation
- All resources initially allocated to functions.
- 47 Land and Wildlife Administration
- All services were allocated pro rata across Branch functions, except:
- "Admin Support" which was allocated to "Wildlife Conservation" 40%, and "Industry Control & Regulation Except Timber Production" 60%; and

- "Revenue Collection and Processing" and "Revenue Raising" which were allocated to "Wildlife Conservation" 60%, and "Industry Control & Regulation - Except Timber Production" 40%.

48 Information Services

All services were allocated pro rata across Branch functions, except:

- "Communication" which was allocated to "Environmental Education":
- "Publications" and "Public Relations" which were allocated to "Environmental Protection" 10%, "Fire Management" 10%, "Wildlife Conservation 10%, "Recreation Management" 20%, "Commercial Timber Production" 10%, "Environmental Education" 20%, "Marine Management" 10%, and "Planning" 10%.
- 49 Silviculture Branch

All resources initially allocated to functions.

- 50 Inventory Branch
- All services allocated pro rata across Branch functions, except:
 "Land Information Services",
 "Policy Committee Support" and
 "External Research Liaison"
 which were allocated to
 "Commercial Timber Production"
 25%, "Planning" 20%, and 55%
 across Departmental functions on a pro rata basis; and
 "Intra Government Liaison" which

"Intra Government Liaison" which was allocated equally to "Environmental Protection" and "Commercial Timber Production".

- 51 Recreation and Landscape Management
- All services were allocated to "Recreation Management".
- 52 Engineering Services
- All services were allocated pro rata across Departmental functions.
- 53 Operations Directorate
- All services were allocated pro rata across Departmental functions.

54 Finance Branch

All services were allocated pro rata across Departmental functions, except:

- "Revenue Collection and Processing" which was allocated to "Wildlife Conservation" 5%, "Recreation Management" 10%, and "Industry Control & Regulation -Timber Production" 85%.

55 Policy Directorate (including Minister's Office and Economics Branch) All services were allocated pro rata across Departmental functions.

56 W.A. Herbarium

All services were allocated pro rata across Branch functions, except:

- "Publications" which was allocated to "Wildlife Conservation".

58 Records Branch

All services were allocated pro rata across Departmental functions.

60 Human Resource Branch

All services were allocated pro rata across Departmental functions.

61 Overheads
(not charged to cost centres)

All services were allocated pro rata across Departmental functions, except:

- "Land Information Services" which was allocated equally to "Industry Control & Regulation Timber Production" and "Commercial Timber Production"; and
- "Intra Government Liaison" which represents capital purchases and loan repayments on the Kemerton site was allocated direct to "Planning".

026046f2006 CS:KC

FUNCTIONAL REVIEW SUBMISSION - ALLOCATION OF RESOURCES IN "SERVICES" TO "FUNCTIONS"

The initial analysis of the data base resulting from the Functional Review resource allocation survey within CALM has now been completed.

One of the tasks we must now complete in preparing our submission to the Functional Review Committee is the allocation of the resources (both human and financial) devoted to "Services" across the "Functions" defined for CALM. In doing this I will be asking each manager for their views on how this would best be done for their branch, region or district in order to accurately reflect the resources ultimately devoted to CALM's functions.

- I have attached a copy of the data relating to your organisation unit, with the following relevant comments:
 - (i) The numbers 1 to 41 inclusive refer to the list of functions and services attached.
 - (ii) The data may vary slightly from your original submission for a wide variety of reasons (eg. rounding up or down, double counting with other organisation units, etc). If you are particularly concerned with any of the variations please call me on (09) 367 0212 to discuss the issue.
 - (iii) You should analyse this list and decide how best the services can be allocated to functions. As examples of how to do this you may decide for your organisation unit:
 - (a) The services should be allocated pro rata across the functions of CALM. (An example of this could be Human Resources Branch).
 - (b) The services should be allocated pro rata across the functions for your organisation unit. (An example could be a district in a forest region).
 - (c) The services should be allocated to a specific function(s). (An example could be Timber Production Branch).
 - (d) There may be a mixture within your area with some services being specifically related to one function, and other services being pro rata across several functions (eg. Housing and Buildings is generally likely to be suitable for pro rata allocation across functions, whilst Revenue Collection and processing may be specific to one or two functions).

I would appreciate you notating your proposed allocation of services to functions on a copy of the attached computer sheet, and returning it to me at SOHQ by 1 April 1988. If I have any specific queries with your proposal I will then contact you direct soon after that date.

In preparing this allocation I would suggest that branch managers liaise with the relevant divisional manager, and district managers with the relevant regional manager. I will of course be discussing the final allocations with each divisional manager to ensure they are satisfied with the accuracy of the result.

If any aspect of this request is unclear to you please do not hesitate to contact me on the telephone number listed above.

Cameron Schuster
COORDINATOR, CALM (FRC) SUBMISSION

21 March 1988

Att

Distribution:

Acting General Manager - FYI Divisional managers - FYI

Mr S Knapp, Como. (Please liaise with Manager, Policy Directorate for joint return to include Hon. Minister's Office).

Mr J Lane, Woodvale. (Please liaise with Divisional manager, Research for the entire Research submission).

District Managers - Wanneroo, Mundaring, Jarrahdale, Dwellingup, Harvey, Collie, Kirup, Busselton, Nannup, Manjimup, Pemberton, Walpole.

Regional Managers - Northern Forest, central Forest, Southern Forest. (Please allocate for your cost centre return only - copies of relevant district data attached for information).

Regional Managers - Metropolitan, South Coast, Goldfields, Kimberley, Pilbara, Greenough/Gascoyne, Wheatbelt.

Manager, Wildlife Protection Branch.

Branch Managers - Timber Production, Silviculture, Inventory, Fire protection (includes Communications), Environmental Protection, Mapping, Computer Services, Recreation and Landscape, Planning, Wildlife and Land Administration, Finance, Internal Audit, Engineering Services, Information, Human Resources (includes cadets), Records.

Acting Curator, Western Australian Herbarium.

Wood Utilisation Research Centre (Att: P. Shedley).

APPENDIX 41

ALLOCATION OF HUMAN AND FINANCIAL RESOURCES TO FUNCTIONS

	FUNCTION	Wages FTE	Broadband Level 1-4 FTE (1)	Broadband Level 5+ FTE	Total FTE (2)	% of Total	Finance Allocation (Total) (2)	% of Finance
3.1	Environmnt Prot.	37.69	78.62	21.83	138.14	9.6	5,808,394	7.1
3.2	Fire Mgt.	119.32	100.51	23.15	242.98	16.9	11,645,700	14.3
3.3	Wildlife Cons.	16.27	66.64	23.25	106.16	7.4	4,737,320	5.8
3.4	Recn. Mgt.	67.37	99.18	16.96	183.51	12.7	7,880,964	9.7
3.5	Ind. Contl (except Timber)	8.78	18.12	3.47	30.37	2.1	1,027,669	1.3
3.6	Ind. Contl (Timber)	19.59	90.25	15.61	125.45	8.7	5,209,994	6.4
3.7	Comm. Timb Ops.	13.33	24.99	7.71	46.03	3.2	9,574,034	11.7
3.8	Eucalypt Forest	111.94	77.96	19.94	209.84	14.6	11,343,215	13.9
3.9	Pine Forest	156.13	73.06	16.01	245.20	17.0	18,053,758	22.2
3.10	Liaison and P.P.	3.07	19.31	6.50	28.88	2.0	1,267,811	1.6
3.11	Env. Educ.	3.27	14.50	5.12	22.89	1.6	836,854	1.0
3.12	Marine Mgt	0.47	2.13	0.56	3.16	0.2	165,368	0.2
3.13	(3) Planning	8.04	32.65	17.00	57.69	4.0	3,899,398	4.8
		565.27	697.92	177.11	1440.30	100.0	81,450,479	100.0

NOTES:

- (1) Broadband levels 1-4 inclusive includes National Park Rangers (who are actually wages staff paid from S.O.H.Q.).
- (2) These resource figures include all resources in services allocated as per Section 5.2 of this Submission.
- (3) The resources allocated to planning have been increased significantly by the addition of the Kemerton transactions detailed in Appendix 38.

LOCATION	FUNCTIONS															
	1	2	3	4	5	6	7	8	g	10	11	12	13	Sub Total Functions	Sub Total Services	TOTAL for work location of all functions and services
Busselton	3.50	6.75	0.38	5.63	0.75		1.00	3.51	37.00	0.62	0.38	-	_	62.77	14.47	77.24
Mundaring	1.80	6.63	0.38	18.13	0.88	1.88	1.13	7.51	3.76	0.75	0.13	-	_	42.98	12.67	55.65
Dwellingup	22.15	11.59	0.17	7.80	1.50		1.45	22.75	0.20	0.60	0.39	i -	0.44	71.49	33.88	105.37
Collie	1.51	7.38	-	2.00	0.13		1.12	13.26	5.23	0.10	0.05	-	-	33.41	18.24	51.65
Kirup	2.75	8.63	! -	0.50	0.40	2.63	2.50	3.01	22.85	-	-	-	· –	43.27	10.58	53.85
Manjimup	4.24	12.93	8.98	5.25	0.55		7.15	18.66	6.28	0.81	0.66	-	4.22	78.91	53.94	132.85
Narrogin	3.81	4.50	3.55	1.74	-	0.25	~ !	1.02	-	0.16	-	-	0.24	15.27	7.46	22.73
Jarrahdale	1.23	5.21	-	5.27	5.22	3.86	0.02	5.79	0.08	0.10	0.22	-	0.01	27.01	11.52	38.53
Kununurra	0.15	0.20	0.05	3.51	1.05	-	-	0.46	-	0.72	0.43	-	0.15	6.72	3.78	10.50
Harvey	1.75	9.13	-	1.88	1.50	3.00	17.75	3.50	14.90	-	_	-	-	53.41	15.03	68.44
Pemberton	0.48	9,98	-	6.63	0.33	5.95	3,48	11.40	2.93	0.75	0.30	_	0.55	42.78	7.66	50.44
Nannup	3.03	10.30	i –	0.88	-	4.03	3.50	4.63	22.05	_	-	ļ _	2.30	51.22	16.19	67.41
Walpole	1.85	7.18	0.23	2.65	0.35	2.43	0.40	6,81		1.03	0.05	-	0.53	23.51	9.76	33.27
Kalgoorlie	0.25	0.30	1.20	0.75	-	1.75		0.75		0.05	_	_	0.10	5.15	1.80	6.95
Wanneroo	0.42	12.53	0.21	15.50	0.15	3.69	-	-	35.69	0.50	1.34	! –	1.29	71.32	26.55	97.87
Albany	1.42	1.80	5.02	12.74	_	-	-	-	1.00			-	0.39	22.37	4.14	26.51
Esperance	0.56	0.81	0.05	3.49	-	0.30	- 1	0.26	0.99	_	_	-	-	6.46	3.90	10.36
Katanning	1.87	2.19	1.15	0.24	-	-	0.08	-	-	0.22	0.05	<u> </u>	0.10	5.90	2.10	8.00
Geraldton	0.60	0.95	4.00	0.35	0.70	-	- :	_	-	0.80	-	0.20	0.95	8.55	2.90	11.45
Moora	1.35	1.45	0.38	3.13	0.15	-	~	-	-	0.83	_	_	_	7.29	2.99	10.28
Carnarvon	0.20	0.16	0.28	0.12	-	j –	-	-	-	0.04	-	-	0.20	1.00	-	1.00
Exmouth	0.06	-	-	0.98	0.03	-	- '	_	-	0.02	0.49	1 -	0.10	1.68	1.68	3.35
Karratha	6.25	1.00	2.55	1.88	-	-	- 1	-	-	_	0.10	0.10	0.25	12.13	6.66	18.79
Broome	3.58	0.05	0.05	0.05	-	-	-	0.13	-	-	-	ł –	-	3.86	0.71	4.57
Bunbury	2.50	7.63	1.00	1.25	1.53		2.00	0.51	2.13	0.75	0.63	-	1.88	28.29	24,35	52.64
Kelmscott	2.12	0.90	0.16	0.38	0.65	1.27	_	0.08	0.09	0.30	0.63	-	0.92	7.50	14.82	22.32
Woodvale	7.70	5.00	6.67	-	0.35	- '	-	-	2.15	1.48	-	-	1.60	24.95	14.67	39.62
Murdoch	4.00	1.29	4.50	5.25	-	-	- !	-	-	5.91	0.68	0.80	9.00	31.43	12.08	43.51
Crawley	1.00	_	2.00	1.50	-	0.50	0.50	-	0.50	1.00		~	1.00	8.00	28.00	36.00
Como	11.89	17.27		5.14	1.95	12.54	16.34	8.19	4.28	1.67	4.04	0.57	5.30	101.21	156.93	258.14
WA Herbarium	0.15		11.67	-	-	_	-	<u>-</u>	_	-	3.12	-	-	14.94	6.07	21.01
	94.17	153.74	66.75	114.52	18.18	67.97	58.42	112.23	152.11	19.21	13.69	1.67	32.02	914.78	525.52	1,440.30

SERVICES

	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	Tota
usselton	2.00			4.50			-	0.88	0.25	0.38	0.38	2.00	-	0.25	-	_	-	T_	-			0,20	2 40	\vdash		 	┼
undaring	1	1 -	1	1.65	0.20	1		0.63	0.75	[-	0.63	2.10	-	-	0.50	i –	} _	0.70	_	-	_	0.20	0.13	-	j -	j -	14.4
vellingup	2.31	4.11				0.04	0.03		0.13	0.24	2.60	3.02	0.05	-	0.50	0.05	_	0.02	_	0.09	0.63	0.06	ļ <u> </u>	i] _	-	12.6
ollie	1.00		ı	0.25			-	0.63	0.50	0.75	1.13	1.63	-	0.75	0.05	0.05	-	_		-	0.20	0.80]] _	} _	-	33.8
irup	1.50	,	1	2.25		1	-	0.75	0.25	1.63	0.50	1.00	-	0.25	-	_	- 1	l –	_	~	0.10	0.10	_] _	-	18.3
anjimup	2.00	,		,		0.23	ļ -	1.13	0.76	0.68	8.53	0.05	_	10.03	0.88	0.05	l -	l –	} _	1.10	0.85	0.20	0 12	3.50] -	_	10.5
arrogin	0.38	i	1			1	-	0.50	0.13	0.37	0.48	-	-	-	_	_	ì –	-	} _	-	-	0.52	0.13] ~	-	53.9
arrahdale	0.20			4.43		1	0.11	1.03	0.51	0.26	0.26	0.97	-	-	_	-	-	1.23	_	_	0.54	0.17		4.29	_	-	7.4
ınunurra	0.43				0.23		-	0.18	0.10	0.23	0.15	0.28	-	0.10	0.13	0.10	0.05	_	_	0.08	0.95	0.13	} _	_	-	_	11.5
ırvey	2.13	1			1.63	4	-	- 1	1.63	-	-	1.00	-	1.38	_	_	_	-	_	-	-	0.13	Ĭ	1	-	0.08	1 7,
emberton	0.83	2.33		1	0.43	1	-	0.81	0.10	-	1.23	1.20	-	-	_	- :	_	_	_	_	_	0.60	_	_	-	} -	15.0
ınnup	1.75		1	1.30	3.50	1	-	0.38	0.80	0.90	2.63	1.62	_	0.50	0.13	-	_	_	_	_	0.18	0.00	_	1	-	-	7.6
lpole	0.98	2.20		,	0.63	0.05	-	0.50	0.50	0.13	0.75	0.50	~	_		0.10	0 10	_	_		1.38	0.10	-] -	ļ -	-	16.
.lgoorlie	0.20	0.25			-	-	-	0.20	0.05	0.05	0.25	0.05	_	0.05	0.05	-	-	-	- 1	_	0.05	0.05	-	-	-		9.1
nneroo	2.68	3.63				0.05	0.90	1.54	0.95	0.61	3.13	2.65	-	-	0.33	_	0.05	4.48	0.04		0.03	1.00	_] -	-	0.05	
bany	0.10	0.10	1	0.40	0.20	1	-	-	0.40	-	1.60	0.04	-	_	0.10	_	_	~	0.04	0.20	0.60	0.40	}	-] -	0.20	
sperance	0.41	0.10	1	0.94	0.16	-	-	-	0.15	-	1.09	0.11	-	_	_	_	_	-	_	0.07	0.57	,	-	-] -	ļ -	4.1
tanning	! -	-	0.12	0.39	-		-		0.21	0.18	1.20	- 1	- i	- :	_		_ :		_	0.01	0.57	0.30	-	-]] -	3.9
raldton	-	-	-	0.30	-	-	i –	-	1.10	-	1.30	-	-	0.10	_		_	_			_	~~~	-	-	, –	-	2.1
ora	0.13	0.15	0.10	0.23	-	[-	[-]	0.28	0.10	0.45	0.20	0.10	_	0.25		_	_	- 1	_	_	0 00	0.10	-	ļ —	-	ļ -	2.9
rnarvon	[-	-	-	-	-	-	- :	-	-	_	-	-	~	-	_	_ 1	_	_	_	_	0.80	0.20	-	_	} -	-	2.9
mouth	-	l –	0.17	-	-	-		-	0.12	0.05	0.18	0.09	_	_	_	_	_	_	_	0.09			-	1 -	~	~	1 -
rratha	0.50	0.38	-	0.13	-	-	0.38	0.50	0.13	0.25	1.38	_	~	_	0.50	_	_	-	_	0.09	0.60	0.37	-	1 -	ļ -	-	1.6
oome	0.13	-	0.13	-	-	-	-	- 1	-	_	0.40	_	_	_	-	_	_	_	_	-	1.50	0.88	0.13	1 -	-	-	6.6
inbury	0.75	-	-	0.88	-	-	-	0.75	0.75	1.63	2.83	0.38	_	14.88	_	_	_		-				-	j –	0.05	-	0.7
lmscott	0.34	0.04	0.40	0.46	0.14	0.11	0.11	0.50	0.55	1.13	1.65	~	0.02	9.00	0.10	_	-	0.05	0.01	- 1	1.50	_ '] ~	-	-	24.3
odvale	0.70	0.60	0.93	0.37	0.45	-	-	0.30	0.64	0.65	3.40	0.70	3.65	-	- 10	_		0.05	0.01		0.12	_	0.05	j -	I	0.04	1
rdoch	-	0.30	1.80	1.00	0.90	i – i	0.10	0.30	0.60	0.20	5.35	0.50	_	_	_	· _		_	-	0.61	1.00	_	-	-	0.67	! -	14.6
awley	-	-	-	-	-	-	_	_	_	-	9.00	_	_ }	_	1.00	_			- 00	0.10	0.20	0.23	0.10	-	-	0.40	1
mo	10.29	8.65	6.83	5.16	3.54	1.34	2.63	21.82	8.13	11.91	24.05	5.02	7.02	2 62		0 10	2 00	- 20	5.00	_	1.50		10.50	-	0.50		
Merbarium	0.99	0.06	0.23		-		0.05		0.02		1.66	0.05	0.05	-		0.12		1.30	V-02	7.77	3.27	7.32		0.52	ı	1.12	1
c.Dar.rull			-				<u></u>						i		1		i		_	1.36	0.32	-	0.01	-		0.17	
	33.11	61.45	23.59	50.56	17.23	1.82	4.32	34.68	20.31	23.28	77.94	25.06	10.79	40 16	15.94	1 24	2 22	7 94	5 07	44.47	17 62	40.70		<u> </u>	 	 	†

NOTE:

- (1) People employed in Metropolitan Region have been recognised as being located at Murdoch.
- (2) Manjimup RHQ staff have been placed under Manjimup with the District staff.
- (3) See over for list of Functions and Services.

 \wedge

FUNCTIONS

01	Environmental Protection	14	Housing and Buildings
02	Fire Management	15	Plant and Workshops
3	Wildlife Conservation	16	Personnel Administration
) 4	Recreation Management	17	
)5	Industry Control & Regulation (Except	18	Training and Development
	Timber Production)	19	Occupational Health, Safety and Welfare
06	Industry Control & Regulation (Timber	20	Industrial Relations
	Production)		Human Resource Planning
7	Commercial Timber Production	21	Accounts and Payroll
8		22	Budgeting and Financial Planning
, 0	Eucalypt Forest Regeneration and Timber Growing	23	Records Management
)9		24	Administration Support
)9	Pine Forest - Establishment and	25	Materials Management and Purchases
_	Tending	26	Information Technology/Computer Services
.0	Liaison and Public Participation	27	Land Information Services
	Programs	28	Communications
.1	Environmental Education	29	Library
.2	Marine Management	30	Internal Audit
.3	Planning	31	Insurance
		32	Economic Analysis and Planning
		33	Publications
		34	Public Relations
		35	Revenue Collection and Processing
		36	Policy Committee Support
		37	Revenue raising
		38	Intra Government Liaison
		20	THELE GOVETIMENC PISTSON

SERVICES

 ω