



B LUEPRINTS
FOR THE FUTURE

Syd Shea and Roger Underwood from CALM look at management plans to take the south-west environment into the 21st century.

In March 1985 the newly formed Department of Conservation and Land Management (CALM) became responsible for the management of huge areas of public land and waters as well as the conservation of all the State's wildlife — plants and animals.

The new Department draws on the skills of its contributing agencies: the Forests Department, the National Parks Authority and the Wildlife section of the Fisheries and Wildlife Department.

Unfortunately, CALM also inherited many problems. In particular, most of W.A.'s national parks and nature reserves did not have plans to guide operations, and there was a lack of confidence in forest management practices from both ends of the spectrum: the timber industry and environmental groups.

CALM itself sought fresh goals and a new identity — to make best use of newly-combined talents and experience in forging new strategies for land management and wildlife conservation in W.A. CALM is committed to the progressive philosophy of public participation in land management.

All this has led to the recent preparation and publication of a series of landmark documents:



the Department's corporate plan, which establishes clear goals and strategies to guide it over the years; a timber strategy, which is a blueprint for the management of timber production from State forests;

draft management plans for the three south-west forest regions. These recommend how CALM lands will be reserved, and provide policies and guidelines for all management operations.

These documents, together with detailed management plans being prepared for the specific parks or reserves in the South-West (such as the Lane-Poole Reserve and the D'Entrecasteaux National Park) are a revolutionary approach to conservation and land management in the most densely populated part of the State.

The new plans are designed to minimise or eliminate the controversy over land use in the forests, which has raged in W.A. for at least ten years. The controversy has inhibited wise land use decisions on the management of one of our most precious resources.

Who 'owns' CALM land?

The simple answer is that CALM land is owned by the public of W.A.; but legal and administrative mechanisms have to be set up to enable community demands and choices about land management to be expressed.

In W.A. the technicalities of land tenure ('ownership') are complex because our system has its roots in the medieval laws and customs of England, as modified by colonial and later State and federal governments.

Broadly speaking, there are two types of land tenure: private property and Crown land. Crown land can be divided into: vacant Crown land (areas nominated for no particular purpose and not assigned to anyone to manage) and reserved land. There are many types of reserves and many agencies are responsible for their management.

The reserves assigned to CALM are State forests, timber reserves, nature reserves, national parks and marine reserves and parks.

CALM does not 'own' these reserves. Ownership is vested in the Lands and Forests Commission (in the case of State forest and timber reserves) and the National Parks and Nature Conservation Authority (for the other types of reserve). These two bodies have membership representative of community interests. The Commission and the Authority assist the Minister to develop

policies and plans. CALM is responsible for implementing those plans and policies, but is also represented on the Authority and the Commission.

How secure are reserves?

The security of reserves depends upon their class:

The tenure of an A Class reserve can only be changed by agreement of both Houses of W.A. Parliament.

The tenure of a B Class reserve can be changed by the Governor. The reasons

for such an action, however, must be reported to Parliament by the Minister for Lands.

The tenure of a C Class reserve can be changed by the Governor, and then announced in the Government Gazette.

Most national parks and many nature reserves are A Class reserves.

The security of State forests is similar to that of an A Class reserve. Confusion exists, however, because for many years State forest has been divided into zones where different activities have priority, e.g. timber production, catchment protection or flora, fauna and landscape conservation. These zones have had no security — since they could be changed by the decision of the Government of the day — even though the underlying State forest was secure.

Apart from the serious problem of security of zoning in State forest, there are several other drawbacks to the present conservation reserve system in W.A.:

- marine reservation is not adequately catered for;
- there is confusion about areas of different tenure being managed for the same purpose;
- some areas (especially small conservation and recreation reserves) are inappropriately classified;
- in some instances the purpose for which an area is designated does not have adequate security.

The new system

In the recently released draft management plans for the south-west forested regions, a number of significant changes are proposed.

There will continue to be national parks, nature reserves and State forests. All of these have A Class security of



Western Pygmy-possum (*Cercartetus concinnus*) (left).

Agricultural land meets jarrah forest on the Darling Scarp (below).





Forests are for fun and learning, too (above).
Pemberton, a south-west timber town (left).

tenure, but are reserved for different purposes. Two new categories are proposed: State parks and forest parks/reserves.

Many areas designated national park — or State forest zoned for recreation and conservation — are proposed for redesignation as State parks or forest parks or reserves. A State park has the same security as a national park — it is an A Class reserve, but it is either too small or too biologically altered to be worthy of classification as a national park.

A forest park or a marine park is primarily for conservation and recreation, but it may have areas zoned for logging or fishing on a sustained yield basis. In some sections of a marine park, controlled fishing may be permitted; in some sections of a forest park, managed timber production may occur.

Detailed management plans are to be prepared for each individual park or reserve. These will describe how the area is to be zoned for different purposes.

The community places five major demands on CALM land. The Department's charter specifies our responsibility to fulfil those demands, governed always by the express aim: 'to

provide for the use of the natural environment without detracting from possible future use' (from the Corporate Plan). CALM manages the land for:

- the conservation of wild-life (plants and animals);
- the preservation of landscape (scenic beauty and amenity);
- pure and plentiful water supplies;
- timber and other resources (e.g. honey, gravel, wildflowers);
- recreation.

In addition there are some 'imposed' activities, such as the provision of community services and public utilities (roads, reservoirs, power lines), and mining, where it has been approved under the Mining Act or Special Agreement Act.

Finally, lands managed by CALM are an important 'resource' for research, scientific study and education.

CALM's system of land management is based on two fundamental philosophies: SUSTAINED YIELD and MULTIPLE USE. To achieve sustained yield of renewable natural resources, such as timber, the rate of harvest must not exceed the rate of regeneration.

Multiple use is the management of the same area of land for several different compatible purposes. In this system, every area is assigned a PRIORITY USE. The priority use is determined according to:

- the specific attributes of each particular ecosystem;
- the location, or accessibility of the area;
- public demand for various resources or uses;
- the purpose for which the area is vested.

An area will often be suited to a number of uses. Uses which can be carried out in addition to, and without conflicting with, the priority use are called COMPATIBLE USES. Water catchment protection and timber production are compatible uses.

Uses that can be compatible with the priority use if practised at restricted times, under specified conditions or at a strictly regulated level, are referred to as CONDITIONAL USES. Recreation and water catchment protection are conditional uses.

Uses which will always conflict with the priority use are referred to as INCOMPATIBLE USES. Maintenance of mature forest and timber production are incompatible uses.

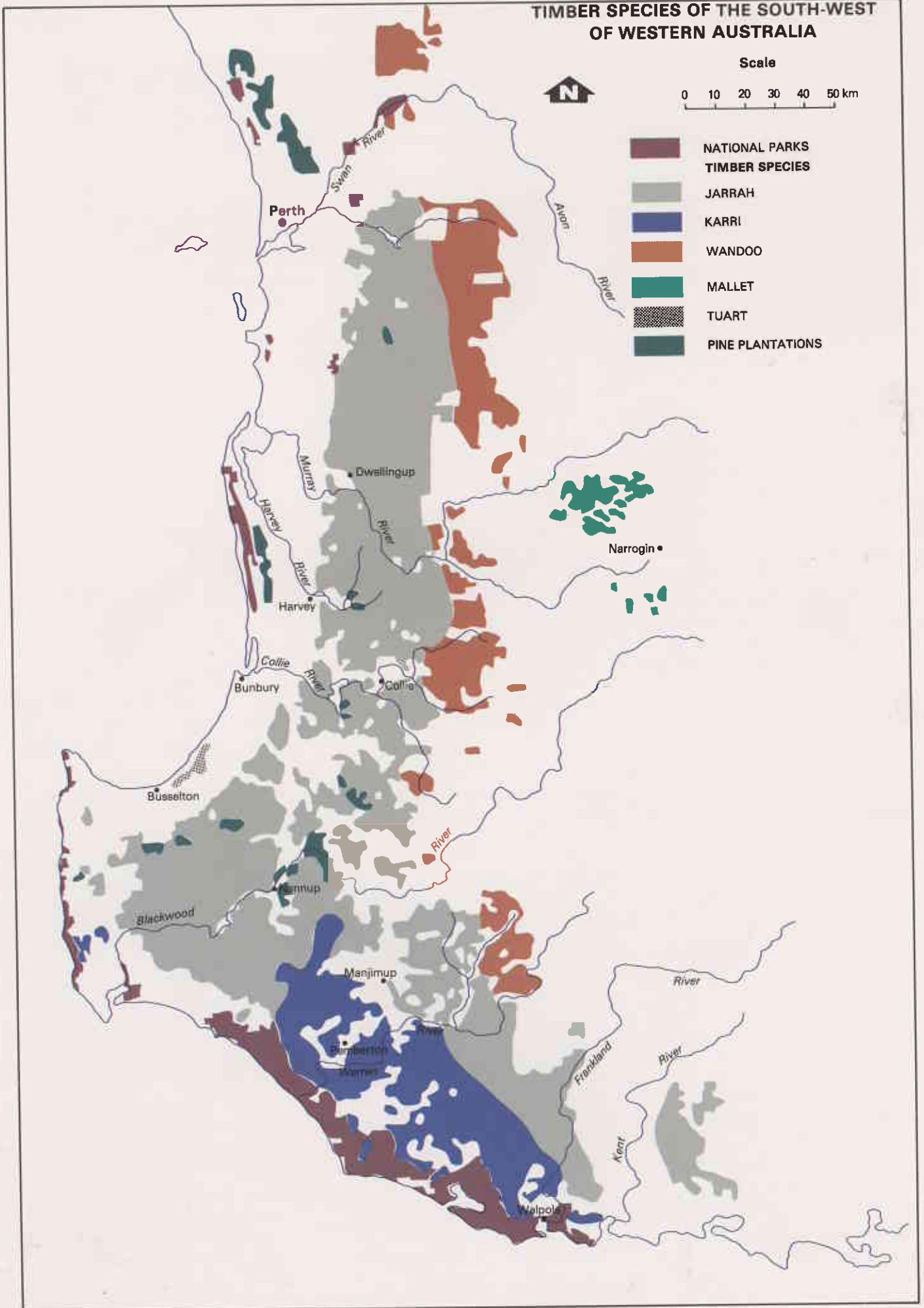
TIMBER SPECIES OF THE SOUTH-WEST OF WESTERN AUSTRALIA

Scale

0 10 20 30 40 50 km



-  NATIONAL PARKS
-  JARRAH
-  KARRI
-  WANDOO
-  MALLET
-  TUART
-  PINE PLANTATIONS





Cliff Winfield

Exploring the wilderness.

There are two basic rules in the allocation of uses to land: any use allocated must be in accord with the tenure and purpose of the area; and no use may be permitted which is detrimental to the priority use.

Once the priority use of an area has been decided, a detailed land use plan is prepared.

A land use plan has two important functions: it provides the community with information about, and the opportunity to comment on, and seek changes to, land use decisions; and it provides for day-to-day management by CALM staff.

The three draft management plans for the forested regions are essentially land use plans.

As the population grows and more people visit and live in

our forests, the demands on them will grow and the potential for conflict will increase.

CALM's draft management plans provide the ecological framework to satisfy the conflicting demands of the community.

When these plans are implemented:

the parks and reserves system will be classified and named and will not be able to be changed without the agreement of both Houses of Parliament;

commercial operations such as timber production will be practised according to strict principles of regeneration and sustained yield;

more than 30 per cent of the forest estate, including a representative of every major forest ecosystem, will be set aside from commercial exploitation.

That part of the forest estate protected from commercial exploitation and reserved exclusively for conservation is embedded in a larger matrix, which is also managed to foster conservation. This is far preferable to a series of isolated reserves tenuously linked by corridors along road reserves (see page 40).

The very nature of forests is such that, if properly managed, they can accommodate a vast range of users in perpetuity. CALM, in consultation with the public 'owners' of the land, is planning to achieve that aim.

	NATIONAL PARK	STATE PARK	NATURE RESERVE	FOREST PARK OR MARINE PARK	STATE FOREST	TIMBER RESERVE
Flora and Fauna Conservation Sanctuary	Yes	Yes	Yes	Yes	Conditional	Conditional
Wilderness	Yes	Conditional	Yes	Yes	N/A	N/A
Passive Recreation	Yes	Yes	Conditional	Yes	Yes	Yes
Active Recreation	Conditional	Conditional	No	Conditional	Conditional	Conditional
Catchment Protection	Yes	Yes	Yes	Yes	Yes	Yes
Forest Production	No	No	No	Conditional	Yes	Yes
Water Production	Conditional	Conditional	No	Yes	Yes	Yes
General Production	No	No	No	Yes	Yes	Yes
Public Utility	Conditional	Conditional	No	Conditional	Conditional	Conditional
Mining	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional



Cliff Winfield

Karri at Dombakup.

The Karri Forest — A Case Study

Few issues provide a better case study of managing renewable resources than does the conservation of the karri forest. The karri forest is simultaneously one of W.A.'s most beautiful and most useful resources. The same trees that inspire awe and satisfy the spirit with their grace and grandeur produce strong, beautiful timber and pulpwood for fine writing paper. Some people visit the forest to make their living from timber, others to take pleasure from the trees. How can these apparently irreconcilable demands be satisfied?

The former Forests Department tackled the problem by developing land use plans: some areas of State forest were designated for conservation and others for timber production. In the first no logging could occur; in the second areas would be progressively cut-over and regenerated, the new forests providing forest resources *ad infinitum*.

There was nothing wrong with this system in theory. In practice it found many critics. Some criticisms:

- 'Conservation and recreation zones' in State forest have no security. At any time a Government might decide to change the plan and start logging in these areas.
- Timber production zones were equally insecure — another change to the plan might simply turn all these into reserves, locking up the resources and forcing mills to close.

- There was an insufficient area allocated to conservation, compared with that allocated to timber production, and vice versa.
- Regrowth forests would be felled on short rotations (less than 50 years), degrading them as wildlife habitat or recreation areas.
- Road, river and stream reserves might be clear-felled to provide timber.

All these problems are addressed in the new plans and the timber strategy.

The major conservation and recreation zones in State forest are recommended to be converted to national park, nature reserve or forest park. The tenure and purpose of these areas will not be changed without the agreement of both Houses of Parliament.

It is proposed that the Shannon Basin become a national park. In all, 'conservation' forests and 'production' forests in the karri forest will be about equal in area.

It is also proposed that the CALM Act be amended to provide security of purpose to areas zoned for timber production, and the levels of harvest adjusted so that, in the long term, regrowth forests can be managed on very long rotations (over 100 years).

The draft management plans and timber strategy should ensure that all values in the karri forest are secure. In other words, we can 'have our karri and cut it too' — or some of it anyway!

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COVER PHOTO

Shipwreck at Broome (Jiri Lochman).

EDITORIAL

For more than 100 years W.A. has recognised the importance of protecting significant areas of its natural heritage.

Today, about 4.5 million hectares of our State is classified as national parks, vibrant natural museums ranging from the hardwood forests of the south-west to vast inland deserts that represent our unique terrestrial flora and fauna.

Until now, however, there has been a missing element: the marine environment.

Clearly, its absence has made our park system less representative of W.A.'s environment, especially considering that the State has some 12700 km of coastline.

Recently a start was made to address this imbalance with the official opening of the Marmion Marine Park, W.A.'s first marine park.

The primary objective in establishing this park, which is located on metropolitan Perth's doorstep, is to conserve significant examples of our marine heritage, and to encourage public understanding, appreciation and continued enjoyment of the marine environment in ways which will leave it unimpaired for future generations.

These same values apply to the proposed Ningaloo Marine Park which is situated along 260 km of the State's coastline south of Exmouth. Ningaloo will be vested in the National Parks and Nature Conservation Authority as a marine park in July.

Both of these marine parks not only allow for the development of proper management techniques to protect the marine environment, but also to enhance recreation.

Marmion reef has long been a popular holiday destination for many Western Australians who fished for the huge groper and crayfish offshore, and swam in the protected lagoons.

Ningaloo might be less well known because of its isolation, but the tourist industry is expected to promote this area of our coastline and the adjacent Cape Range National Park and, as a consequence, it will become one of the State's premier tourist attractions.

The establishing of marine parks will provide many benefits.

Some intangible, such as the knowledge that future generations will be able to appreciate areas of unspoiled natural beauty.

Others more tangible, such as the enjoyment of visiting a marine park.

There will also be benefits in terms of jobs created and the expansion of a growing and viable tourist industry.

Furthermore, marine parks will provide ecological benchmarks for research into natural processes and into the relative effects of marine and coastal uses.

W.A. has a responsibility to protect special marine environments and to encourage public appreciation of these areas now and in the future.

Our marine parks will do this.