

H. COASTS

Melbourne Area, District 2 includes the western coastal lands of Mornington Peninsula, above low-water mark of Port Phillip Bay, the Bass Strait coastline from Point Nepean to Cape Paterson and the Western Port coastline. It also includes the sea-bed of Western Port and the State territorial waters, which extend to 3 nautical miles (5.5 km) seaward.

In November 1991, the government directed the Land Conservation Council to carry out an investigation of marine, coastal and estuarine areas of the State and to make recommendations on the protection of significant environmental values and the sustainable use of those areas.

The area under review in the Marine and Coastal Special Investigation extends from the Victorian off-shore territorial limit to approximately one kilometre inland from high-water mark. It includes the land (terrain, and overlying water) affected by marine, estuarine and coastal processes, as well as all islands surrounded by marine and estuarine waters. Land extending about one kilometre inland from high-water mark on Phillip and French Islands is also included. The descriptive report for the investigation was published in June 1993.

The focus of the investigation is marine ecosystems, covering issues relating to the protection and/or sustainable use of marine resources along the Victorian coast, including that within Melbourne Area, District 2 and will include consideration of the extensive intertidal flats of Western Port. Issues relating to the coastal land, on the other hand, particularly those of a local nature, are covered in these recommendations. There may be a need to review some of these recommendations if new information becomes available during the course of the Marine and Coastal Special Investigation.

Victoria's coastline, particularly that around Port Phillip Bay and Western Port, forms a significant public resource having value for utility, recreation and the conservation of natural, cultural and historical values and sites.

Coastal reserves fringing Port Phillip Bay and Western Port rank among the State's primary coastal recreation resources; some three million people live nearby. Western Port is also readily accessible from the rapidly expanding growth corridors to the east and south-east of Melbourne. The main recreational activities here include swimming, fishing, boating, sailing, scuba-diving and snorkelling, picnicking, sightseeing, relaxing, camping and caravanning.

A number of navigation aids, piers, jetties and marinas are located along the shore and the Department of Defence has a major establishment on Commonwealth land at Crib Point.

The open and sheltered waters and wetlands of the coast, Western Port and other areas such as the Balcombe Creek estuary, near Mornington, support important habitat for a wide diversity of water-birds and waders. They are among the most important areas in Victoria for international migratory waders and sea-birds, such as shearwaters, skuas, albatrosses, prions and petrels, including the white-faced storm petrel.

Planning and management

Council believes that management plans prepared for the coastal reserves should provide for a range of recreational uses, recognise and protect valuable wildlife habitat, particularly for birds, and also ensure the protection of sites of conservation, historical or cultural significance.

In formulating recommendations for public land along the coast, the Council is aware that coasts represent a dynamic zone of interaction between land and sea, encompassing fragile

environments. In some instances coastal engineering works such as breakwaters and sea walls are depriving beaches of sand - resulting in severe beach erosion.

The Department of Conservation and Natural Resources (CNR) is responsible for managing the majority of the foreshore region of the study area. The Department may delegate management of sections of the coastal reserve to Committees of Management. These committees, which may consist of elected members of the public or be the local municipal council, generally focus their work on the more-developed foreshore areas. The role, number and boundaries of Committees of Management are presently being reviewed by CNR.

The Port of Melbourne Authority manages ports and has responsibilities in areas designated as 'associated ports'. Areas currently used for port purposes are discussed in Chapter M. Council is of the opinion that those coastal areas that are not currently required for port purposes, but that have high capability for such use, should be managed as part of the coastal reserve until they are required for port development.

For the coast and inshore waters of Port Phillip Bay, the Department of Planning and Development is responsible for overseeing the preparation of management plans and the issue of consents. Proposals to carry out works, change uses or plant or remove vegetation within the coastal reserve of the Bay require the approval of that Department, which, in turn, is required to consult CNR and other relevant agencies to ensure, as far as practicable, that their views are reflected in any consent.

The Coastal Management and Co-ordination Committee (CMCC), set up under the *Crown Land (Reserves) Act 1978*, has responsibility for overseeing the preparation of management plans and the issue of consents on coastal reserves outside Port Phillip Bay. These include within Western Port, including French and Phillip Islands, and the coastal reserve from San Remo to Cape Paterson.

The government has made a commitment to establishing an integrated approach to planning and management of the coast, including public involvement. The CMCC is to be replaced by a Coastal and Bay Management Council. A discussion paper was released on this matter by the Minister for Conservation in early 1994.

In addition, CNR and the various Committees of Management are required to ensure that their management of coastal reserves is consistent with State-wide and regional coastal strategies, such as *A Coastal Policy for Victoria* (September 1988). Other relevant policies that have been published include *Making the Most of the Bay* - a plan for the protection and development of Port Phillip and Corio Bays (November 1990) - and *Western Port Bay Strategy* - a strategy plan for the protection and development of Western Port, Victoria (October 1992).

COASTAL RESERVE

A coastal reserve is an area of public land on the coast set aside primarily for public recreation, education and inspiration in coastal environments.

Coastal areas specifically reserved for some other purposes (parks, nature conservation reserves, sites for navigation aids or major ports) would not be included in the coastal reserve.

COASTAL RESERVE

Recommendations

~~H1,H2~~ That the coastal reserve shown on Map A be used to:

- ~~(i) provide opportunities for informal recreation for large numbers of people, and also for recreation related to enjoying and understanding nature~~
- ~~(ii) protect and conserve natural coastal landscapes, ecosystems and significant geomorphological, archaeological and historical features for public enjoyment and inspiration and for education and scientific study~~
- ~~(iii) ensure the protection and conservation of important aquatic and terrestrial fauna and flora~~
- ~~(iv) provide opportunities for fishing and facilities for boating, together with the necessary navigation aids~~

~~that~~

- ~~(v) the area be zoned in order to provide for the range of uses outlined above~~
- ~~(vi) the special features described below be protected~~
- ~~(vii) the area be managed according to policies developed by the Coastal Management and Co-ordination Committee or its successor~~
- ~~(viii) the following principles be recognised during preparation of policies for the coastal reserve:~~
 - ~~(a) new roads should not be sited along the coast; rather, they should be located far enough inland to avoid damaging sensitive environments or impairing the scenic qualities of the coastal landscape~~
 - ~~(b) any major coastal development projects (such as jetties, marinas, mining, seawalls, reclamation and non maintenance dredging) should be subject to detailed environmental studies and public consultation prior to commencement of work by the body proposing such development~~
 - ~~(c) occupation of coastal public land by individuals or organisations should be phased out, and no new occupation leases should be granted; certain coast-oriented uses such as yacht clubs and surf clubs could be permitted, subject to conditions laid down by the managing authority~~
 - ~~(d) when camp sites and car parks are to be established on the coastal reserve, the management authority should avoid locating these on sensitive areas or areas of importance for nature conservation or of archaeological significance; consideration should be given to relocating some existing camp sites and car parks~~

~~and that it be permanently reserved under Section 4 of the *Crown Land (Reserves) Act 1978* and managed by the Department of Conservation and Natural Resources. [Not approved; omitted from Order in Council 17/6/97]~~

~~[see ECC Marine, Coastal and Estuarine Areas Investigation Recommendations 2000]~~

The coasts of Bass Strait and Port Phillip Bay, and sandy beach sectors within Western Port

Recommendation

~~H1~~ That the area indicated on Map A be used in accordance with the general recommendation for coastal reserves outlined above —

and that

~~(ix) the seaward boundary be low water mark. [Not approved; omitted from Order in Council 17/6/97]~~

Intertidal mudflat sectors of Western Port

Recommendation

~~H2 That the area indicated on Map A be used in accordance with the general recommendation for coastal reserves outlined above~~

and that

~~(ix) the seaward boundary be 150 m seaward from high water mark.~~

[Not approved; omitted from Order in Council 17/6/97]

Notes:

1. Within Western Port, Recommendation H1 includes sandy beaches on Phillip Island.
2. Recommendation H2 specifies that the coastal reserve over the intertidal mudflats should extend a nominal distance of 150 m seaward of high-water mark to facilitate jurisdictional responsibility by Committees of Management. This includes 3 small areas on French Island. Two of the areas on French Island (one of which contains the Tankerton Jetty, the replacement of which is in progress) facilitate their management by a Committee of Management. The third is the jetty and former barge landing site near the former McLeod Prison Farm.
3. With respect to Recommendation H1,H2(v) above, a mechanism for the zoning of coastal reserves, which accounts for the identification of zone categories and special features, will be addressed in Council's Marine and Coastal Special Investigation.
4. With respect to Recommendations H1,H2(viii)(c) above, private structures on the coastal reserve, such as at Lang Lang Beach, should be removed as a matter of priority, in accordance with the Land Conservation Council's long-standing policy for phasing out private occupancies, and in accordance with the policies for this area approved by the government following publication of the final recommendations for the Melbourne Study Area in 1977. Structures, such as those at Lang Lang Beach, are visually intrusive, restrict public access, use and enjoyment of the beach area, may cause or aggravate erosion and constitute an exclusive use of a limited public resource.
5. Council is aware that unlicensed grazing occurs, principally between San Remo and Kilcunda, where the freehold/coastal reserve boundary is unfenced. Management of these areas should ensure that stock is confined to private land and that grazing of the reserve ceases by December 1995.
6. Freehold land extends down to high-water mark at Sunnyside, Safety Beach and the Point King area along the Port Phillip Bay section of the coast, at West Head, Sandy Point, Tyabb foreshore (part extends offshore), Tenby Point, Coronet Bay and the 'Punch Bowl' (east of San Remo) and short sections between Kennedy Point and San Remo (in Western Port). At these locations the coastal reserve extends no further inland than the high-water mark.
7. Council considers that the number of structures in the camping area at Kilcunda should be kept to a minimum and, where possible, they be screened by vegetation. If the opportunity arises, the caravan park should be relocated.

[CAs 7 & 8 Section 7 Township of Crib Point were sold in 1998; CA 85C Parish of Bittern, part of which was to be added to the coastal reserve, was sold in 1997]

Notes on sections of the coastal reserve and schedule of special features to be protected

The significance of all geological and geomorphological sites along the Victorian coast has recently been reviewed. Most of those listed below are considered to be of at least State significance; many more are of regional and local significance.

Port Phillip Bay

Sites of geological and geomorphological significance:

- Mount Martha - a raft of sedimentary rock that was not absorbed by the intruding magma and a series of sites of interest, including one of the few Victorian granitic shore platforms
- Point Macarthur - a cemented band in calcarenite interpreted as indicating a higher Holocene sea level

Sites of botanical significance:

- Portsea to Dromana - coast banksia woodland (particularly the mature banksia overstorey) and coastal dune scrub
- Mount Martha to Mornington - coastal dune scrub, coast banksia woodland and orchid populations

Sites of zoological significance:

- Mount Martha - populations of the uncommon common scaly-foot
- Bird habitat at Balcombe Creek, Rosebud foreshore and Sorrento

Sites of historical significance:

- Sorrento (Sorrento pier, Sorrento Park, kiosk and pier, steam-tram terminus and the band pavilion)
- Mornington (Mornington pier)

Flinders to Sandy Point

Sites of geomorphological significance:

- Point Leo to East Creek - features displaying different sea-level stages
- Merricks Creek sand spit is also geomorphologically interesting and supports remnant vegetation

Stony Point to Crib Point

Some facilities on the foreshore at Stony Point are located on road reserves and 'station ground'; these areas all form part of the coastal reserve and should be reserved as such.

Council's recommendations in 1977 incorporated the foreshore between Stony and Crib Points within the coastal reserve but also provided for the future development of port facilities. Subsequently, the former Public Works Department undertook a land purchase program and an extensive area is now public land. ~~However, this area is likely to become surplus to future port requirements.~~ (deleted by LCC)

While some of the land previously proposed for port development is disturbed, the balance retains a substantial cover of remnant vegetation including manna gum woodland that (east of Point Road) forms part of a larger area of coastal habitat considered to be of regional zoological significance.

Uncertainty remains as to the need and location of new port facilities in Western Port. To provide flexibility for any future proposal for port development, while protecting the intrinsic values of the land, Council has separately identified the harbour depot area at Stony Point and the jetty easement at Crib Point as services and utilities (port) reserves and placed the remainder in coastal reserve (see Map G and the discussion on port development options in Chapter M - Services and Utilities).

Site of botanical importance:

- Stony Point - site of mangrove regeneration

Crib Point to Yaringa

Parts of this sector of Western Port has high value for port purposes. Relevant planning policies state that the development of this deep-water resource should be sympathetic with the protection and maintenance of the sensitive ecosystem of Western Port. The sites proposed for

port development in this area are described in Chapter M - Services and Utilities.

Much of the foreshore adjoining Hastings township was originally saltmarsh and has been subject to landfill with refuse. Little development has taken place on the site other than for recreation facilities and the 500-berth Western Port Marina. Recent works, including mounding and tree-planting, have been undertaken in accordance with a landscape concept plan under a management plan being prepared by the Shire of Hastings. The plan also proposes the development of a mangrove interpretation centre and associated walkways and an indigenous 'botanical garden' on the coastal reserve.

The Hastings Family Leisure Centre, Hastings Park and the tennis and netball courts, bowling greens and associated car-parking areas are not included in this recommendation for coastal reserves (see Chapter J - Community Use Areas).

Sites of geological and geomorphological significance

- the Silurian and Tertiary outcrops north of Woolleys Beach and at Jacks Beach (added by LCC)

Sites of botanical importance:

- valuable remnants of sand heathland, swamp scrub and coastal saltmarsh, as well as diverse orchid populations, which may include the vulnerable green leek-orchid
- record of the rare tiny arrowgrass

Site of zoological significance:

- the manna gum open forest and woodlands here, together with the fringing swamp paperbark and saltmarsh/mangrove zone, provide habitat for 11 native mammal species, including one of the few sites in the State where the New Holland mouse has been recorded and the uncommon white-footed dunnart; in addition, 127 native bird species, including 9 significant species and the uncommon southern emu-wren, 8 species of reptile, including the rare swamp skink and 7 species of amphibian have been found here
- Jacks Beach area - foraging area used by waders (added by LCC)

Site of historical significance:

- Jack's Beach tan pit

Heritage Cove

A large parcel of land lying between the townships of Crib Point and Hastings was originally purchased by a private company for industrial purposes but was sold when it became surplus to the company's requirements. The land has been subject to a number of development proposals, the last under the name of 'Heritage Cove'. While all of this land is freehold, the agreement entered into under the Heritage Cove proposal included the transfer into public ownership of a large parcel adjoining the coastal reserve. Most of this land supports remnant native vegetation, including saltmarsh, fringing melaleuca scrub and, in places, manna gum woodland.

The agreement was adopted by all parties, and was incorporated into the relevant planning scheme amendment. However, it was not implemented before the development company ceased business. The status of the agreement remains unclear, but the mortgagees are investigating the development of the balance of the land.

The Council believes that the vegetated land, if it comes into public ownership, should be included in the coastal reserve.

North shore, Western Port

Much of the northern coastline of Western Port is in the City of Cranbourne (see Appendix II). Below high-water mark a strip 150-m wide is included in a proposed fauna and flora reserve (see Recommendation C40).

Lang Lang Beach to San Remo

A number of private structures located on the coastal reserve at Lang Lang Beach originated as holiday shacks, but are increasingly being used as semi-permanent accommodation. Council endorses the policy that the occupation of coastal public land by private individuals or organisations should be phased out.

Sites of geological and geomorphological significance:

- Corinella - a raised beach indicating a sequence of fresh-water, marine and intertidal sediments that record the Holocene sea-level history of the region
- Red Bluff - the exposure of the Red Bluff Formation (added by LCC)
- Stockyard Point - the cusped foreland (added by LCC)
- Pioneer Bay - the Quaternary Stratigraphy of the northern coastline (added by LCC)

Sites of historical and cultural significance:

- Aboriginal archaeological sites at Settlement Point, Corinella and Cobb Bluff
- the old settlement site at Corinella and nearby Settlement Point - associated with the first 'permanent' European settlement in Victoria (note - the known archaeological sites are on freehold land)

Sites of zoological significance

- Stockyard Point- a significant high tide roost for wading birds (added by LCC)

Phillip Island

The coastal reserve includes the following adjoining areas:

- two small blocks at Ventnor
- Cowes caravan park
- the existing Cowes West Bushland Reserve - this reserve supports mature swamp paperbark and includes a fire dam. Plans are being considered for a new public boat ramp on the adjoining foreshore - this would have the advantage over the existing Cowes boat ramp in that it would not be subject to extensive sand movement.

San Remo to Powlett River

Council believes there is some merit in the suggestion received in a number of submissions that a coastal walking track should be established in this vicinity.

National Electricity maintains a testing station on the cliff top at Kilcunda to assess the corrosion resistance of products used on sub-transmission and distribution supply networks.

Sites of geological and geomorphological significance:

- between Griffith Point and Kilcunda - a cliffed, calcareous sandstone coast with shore platforms and arches
- the extensive saltmarsh and fresh-water swamps of the Powlett River floodplain are also interesting
- Punchbowl - dinosaur fossil site of National significance (added by LCC)

Site of botanical importance:

- this section of coastline supports a variety of relatively weed-free coastal vegetation communities

Site of zoological significance:

- the rare *Antechinus minimus* has been recorded near the mouth of the Powlett River, as has the endangered orange-bellied parrot, which uses this area for feeding

Sites of historical significance:

- a wooden trestle bridge and the dismantled Nyora to Wonthaggi railway at Kilcunda
- relics associated with the early mining of black coal in the Kilcunda area

Wonthaggi

Much of the northern section of this coastline comprises beach and dune systems; further south, it is cliffed and fronted by reefs. Little of the area is disturbed and the coastal vegetation communities remain relatively weed-free. Part of this reserve is known locally as the 'William Hovell Flora and Fauna Reserve'.

The recently declared Bunurong Marine Park lies at the eastern end of the study area (see Chapter A - Parks). In the draft management plan for this park, the Department of Conservation and Natural Resources proposed that the park should incorporate the corresponding section of the foreshore reserve to form a marine and coastal park and in order to integrate its management with the marine section.

Council will consider the values of the off-shore areas during the Marine and Coastal Special Investigation.

The small size, condition, absence of either known species of significance or land types not otherwise represented in the parks system and the extent of development at Cape Paterson would mitigate against the coastal area being considered as a park in its own right. Nevertheless, this section of the coastline should be managed to protect the nature conservation values of the intertidal rock platforms and the sub-tidal reef environment (presently part of the Bunurong Marine Park), as well as to ensure that recreational access is controlled.

SCENIC COASTS

In its final recommendations for the Melbourne Study Area in 1977, Council designated two sectors of the coastline as 'scenic coast' in which planning and management were to 'give special emphasis to protecting their outstanding natural landscape qualities'. A scenic coast was defined as a coastline of outstanding beauty that remains in a relatively unspoilt state.

Council believes that several stretches of the coastline within the study area are outstandingly beautiful and that it is important to protect their natural landscape qualities. In its review of the 'scenic coast' designation, however, the Council recognised that the areas are not necessarily restricted to the public land component of the coastal environment. It now believes that adequate recognition of the intrinsic values is already provided through the specific parks and reserves recommended along the coastline, through the land-use aims for coastal reserves and through complementary action on other land. Coastal scenic values will be further discussed in the Council's current Marine and Coastal Special Investigation.

COASTAL WATERS

The coastal waters of the study area encompass the intertidal region and extend to the off-shore territorial limit (5.5 km) of the State of Victoria and include the waters of Western Port.

Council's current Marine and Coastal Special Investigation is covering issues relating to the protection and sustainable use of marine resources within Melbourne Area, District 2 and includes the extensive intertidal flats of Western Port. Accordingly, no recommendations for coastal waters are included in this document.

The Council's recommendations for the Marine and Coastal Special Investigation will take into account such issues as:

- protection of the natural environment and features of cultural significance
- provision for controlled exploitation of natural resources, including the sustainable use of fish
- aquaculture activities
- provision for the use of the area for a diversity of recreational and educational purposes
- provision of the navigational and safety aids and associated facilities necessary for shipping and boating.

WESTERN PORT WILDLIFE MANAGEMENT CO-OPERATIVE AREA

In recognition that some areas have values for wildlife conservation that overlap with capabilities for other uses, the Council, in its 1977 final recommendations for the Melbourne Area, recommended that most of the northern part of Western Port and the waters off the southern shore of French Island, between Rhyll and Newhaven and between the Bass River outlet and Reef Island, be declared 'wildlife management co-operative areas'.

Council noted that these areas (indicated by hachure on Map A) have particular value for wildlife because of their special characteristics. The mangroves and seagrass flats, for example, support many forms of life and provide shelter and breeding grounds for juvenile and adult fish. They also play an important role in the cycling of nutrient materials and energy for the whole bay. However, the waters are also used for recreation and for commercial and industrial purposes.

The 1977 recommendation required that a management plan be prepared and agreed to by those government departments with responsibilities for the area in order to protect the wildlife values. The Council also noted that research was in progress at the time to identify areas that have outstanding wildlife values or are in need of special protection, that these will be considered for reservation as marine reserves when more information is available and that parts of some wildlife management co-operative areas may eventually be included in these marine reserves.

Since 1977, substantial new information has been documented about the region's wildlife and other nature conservation values. The area has been listed on the Ramsar Convention as 'wetlands of international importance especially as waterfowl habitat'. It is also covered by two other international agreements concerning migratory bird species - JAMBA (with Japan) and CAMBA (with China).

As yet, the recommended wildlife management co-operative areas have not been implemented. Preliminary drafts of management plans have been prepared, but none has been finalised. A number of government agencies have responsibilities over the areas but, because they remained as unalienated Crown land, none has overall responsibility. As a result, and in the absence of an

agreement between all affected parties, protection of wildlife values cannot be assured precedence over any other activity that may be proposed.

As noted previously, issues relating to the coastal area of Melbourne Area, District 2, particularly those of a local nature, will be covered during the present review; those relating to the protection and sustainable use of marine resources will be addressed during the Marine and Coastal Special Investigation.

In the interim, the Council endorses its 1977 recommendation that the areas 'be used for the conservation of wildlife and for commercial and recreational activities'. Council is of the view, however, that the nature conservation values of the areas, and particularly the wildlife values, are of such significance that they should be included in land use categories where their protection is the principal goal of management. The most appropriate form of protection, the appropriate range of uses and the boundaries will be considered as part of the Marine and Coastal Special Investigation.

The Council also believes that the near-shore areas and channel access to the Warneet, Tooradin and Corinella foreshores should remain subject to the provisions recommended for a wildlife management co-operative area. That is, in order to protect the wildlife values associated with these areas, the Department of Conservation and Natural Resources should prepare management plans in consultation with the appropriate government departments with responsibility for various activities associated with either the sea-bed or waters of the respective areas, and submit the plans to them for agreement.

SANDY POINT

Commonwealth land at Sandy Point on the eastern Mornington Peninsula is part of the Australian Defence Force's HMAS *Cerberus* training facility. HMAS Cerberus consists of a number of buildings, dwellings, training grounds and a dredged port facility. The southern portion, Sandy Point, contains one of the few remaining substantial areas of relatively undisturbed native vegetation on the peninsula.

The range of vegetation communities represented here includes coastal dune scrub, coastal banksia woodland, coastal grassy forest, coastal heathland and swamp scrub.

The area is used mainly for training exercises without vehicles and is managed in a manner largely consistent with the maintenance of its nature conservation values.

As one of the largest spit systems on the Victorian coast it is considered of State geological/geomorphological significance. (added by LCC)

Council believes that, in recognition of the area's important nature conservation values, the State Government should discuss the future use of this area with the Commonwealth Government, with a view to permanent protection of those values.

In accordance with the Western Port Bay Strategy, prepared by the Westernport Regional Planning and Co-ordination Committee and endorsed by the government in October 1992, the Department of Defence is preparing a management plan for Sandy Point in consultation with the Department of Conservation and Natural Resources. That plan will address the management of environmental values and use of the area.

I. ALPINE RESORTS

The *Alpine Resorts Act 1983* established the Alpine Resorts Commission (ARC) and includes the following Alpine Resorts on a schedule to the Act:

Mount Hotham
 Falls Creek
 Mount Buller
 Mount Stirling
 Mount Baw Baw
 Lake Mountain
 Mount Donna Buang
 Mount Torbreck

The last four listed fall within Melbourne Area, District 2.

Council's final recommendations for the Melbourne Study Area in 1977 included the following comment: 'The Council considers that snow sport development should be continued on Lake Mountain rather than any development take place on Mount Torbreck; and that developments on the Baw Baw plateau be confined to the vicinity of the current resort area'.

In reviewing the uses and values of the scheduled resort areas in the current study, the Council appreciates that the growth and potential of cross-country skiing and other snow activities at Lake Mountain and Mount Baw Baw since 1977 are such that they have become, in scale, virtually a new industry with a legitimate claim to the use of public land - where it can be accommodated subject to maintenance of environmental values.

In its 1983 final recommendations, following the Alpine Area Special Investigation, the Council noted that cross-country or Nordic skiing involved few facilities and had little impact on the environment. The sport then utilised either marked tracks comprising pole lines, which normally delineate the route between particular destinations and usually weave between trees, or unmarked areas in which skiing is not confined to established tracks. In some cases, small over-snow vehicles (not grooming machines) are used to compact the snow surface on marked tracks.

Cross-country skiing has changed in recent years and some new techniques, such as 'skating', require special facilities such as machine-groomed trails. To provide sufficient clearance for the grooming machine and to provide enough room for two sets of tracks for people using the traditional 'diagonal stride' method as well as a track to accommodate skiers using skating and freestyle techniques, these trails usually comprise a 4-m- to 5-m-wide corridor. Some removal of trees and some benching (earthworks) and drainage management may be necessary to achieve the required standard and provide for both user safety and the range of skiing techniques.

In view of the potential environmental impact of constructed ski trails, the Council believes that guidelines or a code of practice for the construction and maintenance of ski trails throughout the Victorian snow country, whether within the alpine resorts, parks or State forest is essential.

The *Conservation, Forests and Lands Act 1987* provides for the Department of Conservation and Natural Resources (CNR) to be directly involved in any activities affecting vegetation and soils on public land in the State's alpine areas, regardless of land status. This Act requires the submission by a public authority of a plan of works, prior to the commencement of any works involving soil and vegetation disturbance above 1220-m elevation, to the Secretary of CNR for comment on any necessary measures to be taken for the protection of land, waters and wildlife.

As the State's expert authority in the development and operation of cross-country ski trails for a

range of skiing styles, and to assist field personnel, the Commission has developed 'Field Guidelines for the Development and Maintenance of Cross Country Ski Trails' (June 1992). The guidelines recognise the significant changes in the nature of the sport and the increased patronage, complies with appropriate standards for skier safety and recognise the need to minimise environmental disturbance.

Council believes that they provide the basis for environmental protection during trail development and maintenance of cross-country ski trails and that, in accordance with the *Conservation, Forests and Lands Act 1987*, any proposed modifications to the guidelines should be referred to CNR for approval. The Council also believes that similar guidelines should apply to the construction and maintenance of down-hill ski-runs.

Guidelines for ski-trail works

Recommendation

- II** That any works for ski-trail development and maintenance be in accordance with guidelines agreed to by both the Department of Conservation and Natural Resources and the Alpine Resorts Commission and, in accordance with the requirements of the *Conservation, Forests and Lands Act 1987*, any modification to the guidelines be referred to the Department of Conservation and Natural Resources for approval.

Notes:

1. This recommendation applies to both down-hill skiing and cross-country skiing - on both groomed and ungroomed trails.
2. The *Conservation, Forests and Lands Act 1987* provides for the submission by a public authority of a plan of works, prior to the commencement of any works involving soil and vegetation disturbance above 1220-m elevation, to the Secretary of the Department of Conservation and Natural Resources for comment on any necessary measures to be taken for the protection of land, waters and wildlife.

MOUNT BAW BAW

Previous recommendations

The 1997 final recommendations in for the Baw Baw National Park included the recommendation that:

- no further villages be developed on the plateau
- no skiing facilities be developed on the Thomson side of the plateau
- the Nordic ski trails (St Phillack Loop Trail and the Tullicoutty Cup route) associated with the Baw Baw Alpine Resort be maintained

Council's 1977 recommendations for the alpine resort set aside 180 ha to include 'the land directly affected by recreation and commercial development in the Baw Baw Ski Village'. In 1980, on acceptance of the recommendation, the government revised the boundary to ensure that the resort area included the village, parking areas, ski runs, chairlifts and services (water supply and sewerage), as well as areas on which additional ski runs could be located.

The boundary between the resort and the adjoining national park in the vicinity of the Village Loop Trail remained uncertain, however. The alignment shown on the Certified Plans for the Baw Baw National Park differs from that shown for the Mount Baw Baw Alpine Resort, and both differ from the boundary utilised by both the Proposed Management Plan for the Baw Baw National Park and the draft Mount Baw Baw Resort Strategy Plan. Accordingly, as part of this

review, the Council is proposing that the boundary should follow the Village Loop Trail (see Recommendation I2 below) as well as providing for a small extension to the resort to include a proposed new ski lift.

The section of the existing Village Loop Trail in the vicinity of Pudding Basin follows a drainage line. This trail provides a summer walking route and, as a result, sphagnum areas in the drainage line are being damaged and the path is eroding. The Council is therefore recommending that this portion of the trail be re-routed to avoid the drainage line (see Recommendation I3).

Following the Wilderness Special Investigation, the Council recommended in 1991 that the identified remote and natural attributes of certain areas be 'maintained and protected to ensure that these attributes are not diminished when decisions that may affect them are being made, and in the development of management plans, while still providing for existing permitted uses'.

Council delineated an area of 6500 ha on the Baw Baw plateau - within the Baw Baw National Park - as a 'remote and natural area', for which the identified attributes are:

- absence of vehicular tracks
- virtual absence of structures
- essentially natural condition
- opportunities for self-reliant recreation, including snow-based activities

The *National Parks (Wilderness) Act 1992* has placed this area on Schedule 6 of the *National Parks Act 1975*. It surrounds the eastern part of the Mount Baw Baw Alpine Resort. Under that *Act*, the Director must ensure that, in a remote and natural area:

- (a) no new roads or tracks for vehicles are constructed
- (b) existing roads or tracks for vehicles are not widened or upgraded in any way so that they can carry increased traffic or heavier vehicles
- (c) no new structures are constructed
- (d) no new facilities are installed
- (e) no new works are carried out that will adversely affect the natural condition of appearance of the area

['Works' includes excavation and earthworks and the destruction, removal or lopping of vegetation.]

Proposals by the Alpine Resorts Commission

The ARC considers the Mount Baw Baw resort to be important for novice and intermediate skiers in the near-Melbourne area, and as having the potential to assist in spreading the peak visitor levels being experienced at Lake Mountain, which, in the 1991 winter season, amounted to 170 000 visitor-days.

In the 1991 winter season, some 50 000 visitor-days were spent at the Mount Baw Baw resort. There were about 36 000 visitor-days in the 1992 season and in 1993, a particularly poor season, about 14 000. Currently, the resort has a comfortable carrying capacity of 1960 visitors per day. Proposed development works for the resort are expected to increase this capacity to 5200 visitors, with bed capacity increasing from 695 to 945.

The ARC proposed expansion of the resort boundary and/or sought access into the Baw Baw National Park, particularly to provide for increased opportunities for cross-country skiing on prepared, machine-groomed trails. The Commission also sought expansion of the resort into the Park in the vicinity of Neulyne Plain to provide for a new ski lift for down-hill skiing.

Mount Baw Baw Alpine Resort

Recommendations

- I2** That the south-eastern boundary to the Mount Baw Baw Alpine Resort follow the Village Loop Trail, as modified. (specifically 20m from its outside edge) (added by LCC)
- I3** That the Alpine Resorts Commission and the Department of Conservation and Natural Resources, together, identify a suitable alignment for the Village Loop Trail in the vicinity of Pudding Basin, in the general vicinity of the existing trail but re-aligned to overcome the erosion and other environmental damage, and that, once that alignment is established, it become the boundary between the Resort and the Park.

Note: The boundary between the resort and the park is 20 m on the park side from the outer edge of the Village Loop Trail. This would also apply to the realigned section of the trail.

- I4** That the Mount Baw Baw Alpine Resort indicated on Map A and comprising 415 ha, including the area encompassed by Recommendations I2 and I3 above, continue to be reserved as an Alpine Resort under the *Alpine Resorts Act 1983* and managed by the Alpine Resorts Commission.

(See also Wilderness SI B10)

Addition to the Mount Baw Baw Alpine Resort

Mount Baw Baw itself falls within the alpine resort and the southern and south-eastern slopes of the mountain have high potential for development as ski-fields but have their lower slopes in the Baw Baw National Park - in the vicinity of Neulyne Plain. The ARC proposed the extension of the boundary of the Resort here to enable development of new down-hill ski runs.

The Council's recommendation is that the resort area be expanded by approximately 10 ha to provide for facilities for a new chairlift and new groomed down-hill runs near Neulyne Plain, subject to a number of conditions, including an Environmental Effects Statement (EES). The EES process would address the biological significance and other values of the area and, if necessary, indicate necessary modifications to the boundary or the project as a whole.

Addition to the Mount Baw Baw Alpine Resort

Recommendation

- I5** That the area of approximately 10 ha (indicated on Map A) be added to the Mount Baw Baw Alpine Resort to include proposed new down-hill ski run facilities near Neulyne Plain, subject to:
- (i) the preparation of an Environmental Effects Statement for the proposed chairlift and associated down-hill ski runs in accordance with the provisions of the *Environmental Effects Act 1978*, which takes into account:
 - (a) current and projected increases in visitor use of the down-hill ski runs and lifts
 - (b) the extent to which the capacity of the existing down-hill skiing facilities can be improved and the capacity of proposed facilities within the existing resort area
 - (c) a demonstrated need to expand the lifting and ski run capacity of the resort
 - (d) the formation of a consultative committee, incorporating representatives from key agencies, the proponent and interest groups from the wider community, to guide the preparation of the Environmental Effects Statement
 - (ii) concurrent with (i) above, the preparation of an amendment to the Local Chapter of the

Shire of Narracan Planning Scheme.

Note: If the Environmental Effects Statement shows that the proposal is environmentally acceptable, those downhill runs which are also acceptable would determine the limits of the extension of the resort in the vicinity of Neulyne Plain. This area would then need to be excised from the Baw Baw National Park and the 'remote natural zone' (added by LCC) and added to the Resort. The total area would be of the order of 10 ha; Map A broadly indicates its location.

Alpine Resorts Commission proposal to provide managed, groomed cross-country ski-trails within the National Park

In response to the proposed recommendations, the ARC reiterated its belief that opportunities for cross-country skiing close to Melbourne are limited and, to meet the growth in demand for this activity, additional developed ski trails should be planned in the Mount Baw Baw area. It had previously noted that the Baw Baw plateau (within the park) provides opportunity for an integrated trail network that services a variety of terrain for all skier levels, techniques and preferences. The distance from the existing resort boundary that such a trail network would extend would be dictated by the availability of suitable terrain and the economic distance (about 1 km) that the grooming machines can range from the works centre.

In order to provide for skiers wishing to experience self-reliance in undeveloped natural environments, the marked ski trails associated with the Baw Baw National Park are currently neither machine-groomed nor packed.

The Council believes that the existing resort facilities at Mount Baw Baw provide an ideal base for cross-country skiing, and this use should be encouraged. It notes that the existing Baw Baw resort offers some limited opportunity for new groomed trails, although slopes here are generally too steep.

However, the Council considers that there should be no expansion of the Baw Baw resort to provide for further machine-groomed cross-country skiing areas. Further, it has recommended that no development of machine-groomed cross-country ski-trails should occur within the Baw Baw National Park. Consideration of the need for new machine-groomed cross-country skiing areas should take account of the existing facilities and proposed developments at all resorts in the State and the intrinsic values of their environments.

This decision is based on the sensitivity to disturbance of the heathlands on the Baw Baw plateau, the need to protect the natural, scientific and educational values of the park and the fact that, regardless of where they are positioned, the trails of the dimension and alignment required for the grooming machines would require some clearing of snow gum and would involve earthworks.

Earthworks and the removal of vegetation would diminish the attributes of remoteness and naturalness of the Baw Baw plateau, which the Council recognised in its recommendations following the Wilderness Special Investigation.

Nevertheless, the Council considers that provision should be made for additional opportunities for cross-country skiing along marked tracks (including snow-packing or track-setting as required for safety) within the Baw Baw National Park in the vicinity of the resort. It notes that pole lines already exist between the Mount Baw Baw resort and Mount St Gwinear (within the park). Such tracks are compatible with Council's recommendations (in the Wilderness Special Investigation) concerning 'other areas with remote and natural attributes'.

Development outside the Mount Baw Baw resort

Recommendation

- I6** That no development of machine-groomed cross-country ski-trails be permitted outside the area of the Mount Baw Baw Alpine Resort determined by these recommendations.

LAKE MOUNTAIN

Previous recommendations

In its 1977 recommendations for the Melbourne Study Area, the Council set aside 2400 ha as the Lake Mountain State Park. The recommendation included that: 'the area continue to be developed as a day-visitor area for snow sports such as snow play, cross-country skiing and limited down-hill skiing'. Its boundary generally corresponded with the 1220-m contour and included most of a 396-ha area set aside in 1971 under the *Forests Act 1958* as an alpine reserve.

The government in 1978 approved the recommendation for the State park but action to formally reserve the area did not occur. Subsequently, the alpine reserve was expanded (to about 590 ha) and placed on the schedule to the *Alpine Resorts Act 1983*. The predecessors to CNR continued to manage and develop the reserve until 1987, when it was declared an alpine resort and transferred to the Alpine Resorts Commission. The resort includes the access road, and visitor and car-parking facilities and incorporates the Lake Mountain summit and Snowy Hill.

Most of the existing 28-km system of developed cross-country ski trails developed in association with the resort is actually located outside the resort and within the area recommended in 1977 as park. This land is managed by the Department of Conservation and Natural Resources as if it were a park, in accordance with the government's acceptance of the Council's 1977 recommendations.

Proposals for resort development

In 1990, the then Department of Conservation and Environment and the ARC jointly released for public comment a draft management and development plan that described development proposals for both the resort and the adjoining (park) land. The draft plan attempted to respond to an overcrowding situation, experienced on an average of 12 days each year, by increasing the on-mountain facilities and separating cross-country skiing and snow-play activities. The proposed developments included a new snow-play and summer picnic and walking area below the summit of Lake Mountain - which included vehicular access and parking, shelter, toilets and eating facilities, improvement of facilities at Gerratys, extension of ski trails, the establishment of a new ski trail circuit and biathlon facilities on Snowy Ridge (between Snowy Hill and Arnold Gap) and renovation of facilities at Cascades, Arnold Gap and Snowy Hill car-parks. These works would have increased the visitor capacity of the resort from 4200 to about 8000 per day.

The draft plan has not been approved, although CNR and the ARC have now reached general agreement about extensions to the ski-trail system and upgrading of car-parks and other facilities.

In its submission to the descriptive report, the ARC sought designation of the whole of the previously recommended park as a resort on the basis that management of the main visitor centre and the trail network should be with the one agency, which it believes would increase investor confidence, and that the Commission required secure tenure before it was feasible to further invest in trail development to meet demand.

Uses and values of the area

In the proposed recommendations, Council noted that the Lake Mountain area is ideally located as a day-visitor area for large numbers of people pursuing snow-play and cross-country skiing activities, especially from Melbourne. The Council also noted that demand is likely to continue to increase in the future, but that there is a limit to the ability of the area to sustain expansion of the trail network and full capacity may be reached in the next few years. The importance of the area for summer recreation was also noted.

Skiing and snow-play facilities at Lake Mountain have been significantly upgraded and the area has experienced an increase in winter visitation from 70 000 in 1982 to 145 000 in 1986 (prior to its management by the Alpine Resorts Commission), and to a high of 200 000 in 1990. In 1991, visitation was some 182 000 and 151 000 in 1992. The poor season in 1993 attracted only 35 000 visits. Excessive patronage has forced closure of the gate on four days each winter between 1989 and 1992. The ARC considers Lake Mountain to be the fastest-growing ski area in Australia. The Ski Industry Association of Australia believes that, of the 2000 or so visitors on an average day, some 40% would be classed as snow-players.

The expansion in patronage here has been accompanied by an increase in commercial activities servicing the recreational use, such as ski hire, transport, food and accommodation, a significant amount of which is located at Marysville. The local economy relies heavily on the snow-based activities at Lake Mountain.

The Lake Mountain area also has very significant nature conservation values, which are described in detail in the preamble to the recommendation for the Yarra Ash Ranges National Park. It is notable for the high diversity of plant species within a relatively small area as well as a number of significant species. Its bog and heath communities display a unique ecology associated with the successional stages. The area supports several faunal species of significance.

Lake Mountain holds much of its botanical value in common with the Baw Baw National Park, except for the apparently unique feature of the ecology of its alpine bog communities referred to above. Its geomorphology, however, and its land systems differ markedly from those of the Baw Baw plateau.

It was on the basis of values such as these along with the recreational values that the Council recommended in 1977 that the area become a State park. When preparing the proposed recommendations, the Council envisaged that Lake Mountain and the nearby Cumberland area, with its rainforests and big trees, would become a major visitor focus of the Yarra Ash Ranges National Park.

Management of the area

Since the Lake Mountain Alpine Resort was transferred to the ARC in 1987, management of the land comprising the originally proposed Lake Mountain State park has been divided between the Commission and CNR. The resort area currently includes the access road, car-parks and other visitor facilities, while most of the developed ski trails are situated outside the resort boundary and are on land managed by CNR.

Difficulties with respect to the co-ordinated management of the Lake Mountain area have arisen as a result of this division of responsibilities and differences in management philosophy. Consequently, the Council is of the opinion that both the environmental and recreational values of the area have suffered.

For this reason, Council holds firmly to the view that the area should be managed by a single authority, with a clear direction to maintain and enhance both the environmental and recreational values of the area.

Proposed recommendations

In the proposed recommendations, the Council re-affirmed its recommendations of 1977 that the whole area, which includes the current Lake Mountain Alpine Resort, should be reserved as a park, in order to provide year-round management of both the recreational use of the area (summer and winter) and its significant conservation values. On the basis of the above values, the Council proposed that the whole area should be included as part of the Yarra Ash Ranges National Park to be managed by CNR.

In recognition of the specialist skills of the ARC in ski-resort development and operation, the Council proposed that the Commission manage the winter recreation facilities and services by arrangement with the park manager. This would include the development and maintenance of the trails during the summer months. However, as the area is much more than a ski resort and the conservation significance of Lake Mountain and summer recreational values of the area also require specialist management all year round, the Council proposed that the whole area should be managed by CNR.

The proposed recommendations thus supported the continued use of the area for skiing and did not prohibit further development of ski trails or infrastructure.

Response to proposed recommendations

In its response to the proposed recommendations, the ARC proposed that, essentially, land above the 1300-m contour and encompassing the existing resort and ski-trail network at Lake Mountain (but extending north only as far as Boundary Hut), as well as further minor areas at Gerraty's and Snowy Hill car-parks, should be added to the existing alpine resort. This would encompass an area of some 1650 ha. The ARC has advised that the proposed development near the Lake Mountain summit will not be pursued at this stage and the design capacity of the area will be reduced from the previously planned 8000 to 6000 persons per day. New public and commercial facilities will be proposed for the Gerraty's area, as well as some additional car-parks at Snowy Hill if required. Further, CNR and the ARC have agreed in principle on the routes of the proposed new ski trails (totalling about 13 km), subject to on-ground evaluation and assessment of potential impacts on flora and fauna by CNR. The assessment process includes an evaluation of the capability of the soil to withstand disturbance associated with trail development and use and surveys of the flora, fauna and other natural values of the area. The ARC was also considering the provision of recreational opportunities during the summer months.

Following modification to account for the variations mentioned above, the Draft Management and Development Plan will be forwarded to the Ministers for Conservation and Environment and Natural Resources for approval.

A number of other respondents to the proposed recommendations were of the opinion that, if the Lake Mountain area became part of the park, as proposed, visitation to the area would diminish and commercial activity would be unduly constrained. On the other hand, some people believe that to enhance the status of the area to a national park would encourage greater visitation.

Final recommendations

Council is of the view that Lake Mountain and the nearby Cumberland area, with its large mountain ash trees and rainforest, provide an important recreational focus to the recommended Ash Ranges National Park and, regardless of the land status, people will continue to visit the area for snow-play, to ski, to walk, for nature study and for sightseeing, and should be encouraged to do so.

Because of the high conservation values of Lake Mountain, Council reaffirms its recommendation that those areas supporting the principal nature conservation values be incorporated into the Yarra Ash Ranges National Park (see Recommendation A12) and that the ultimate responsibility for their management should reside with the body that is responsible for park management.

However, the Council also recognises the very significant values of the Lake Mountain area for skiing and snow-play activities and that trail development and improvement have proceeded under the current tenure, accompanied by increased visitation. The Council also accepts that the area can support large numbers of skiers in winter and that, in recognition of the CNR and ARC agreement in principle over the routes of new ski trails and improved infrastructure, development of the additional machine-groomed cross-country trails in the park would be appropriate, subject to on-ground assessment of any environmental impact associated with trail alignment. This may necessitate some re-alignment.

Two of the proposed new trails fall within the recommended new park, the others are within the recommended boundary to the resort.

The Council reiterates its belief that both the winter recreation can be enhanced and the significant conservation values can be protected at Lake Mountain, provided the planning for recreational development recognises that significant and sensitive sites and off-site effects must be avoided. This can be achieved by the implementation of a management and development plan similar to that previously prepared, but with appropriate amendments following agreement between the ARC and CNR. That plan must identify a zone within the park where the ARC may undertake trail development and management, consider the siting of new ski trails and other developments and the assessment of their environmental effects and outline the application of the 'Field Guidelines for the Development and Maintenance of Cross Country Ski Trails'. Integral to the agreement should be a process of dispute resolution.

Accordingly, and to facilitate appropriate ski-related developments, the Council recommends that the existing boundary to the Lake Mountain Alpine Resort be adjusted to incorporate the existing and proposed commercial facilities and car-parks, access road and the proposed biathlon course on Snowy Ridge, and that the modified area be scheduled under the *Alpine Resorts Act 1983* as an alpine resort to be managed by the ARC. The eastern boundary should include the proposed Gerratys to Snowy Hill and proposed biathlon ski trails and is intended to exclude from the resort as many as possible of the areas containing alpine bog and rainforest communities. Also excluded is the summit of Lake Mountain. The actual boundary will be determined when the alignments of the ski trails are finalised, but would encompass an area of about 465 ha.

In this way the ARC would retain responsibility for the commercial development within the resort while CNR retains responsibility for the park, with the ARC undertaking development and management of the ski trails according to the approved plan.

Lake Mountain

Recommendations

- I7** That the area of the Lake Mountain Alpine Resort be amended to that indicated on Maps A and D (see Note 1) and be reserved as an alpine resort under the *Alpine Resorts Act 1983* and managed by the Alpine Resorts Commission.
- I8** That the balance of the existing Lake Mountain Alpine Resort be deleted from the Schedule to the *Alpine Resorts Act 1983* and be included in the recommended Yarra Ash Ranges National Park (see Recommendation A12), to be managed by the Department of Conservation and Natural /Resources.
- I9** That:
- (i) the Lake Mountain portion of the recommended Yarra Ash Ranges National Park that contains the existing developed ski trails and where further trail development may take place be zoned accordingly to allow for on-going management and maintenance of existing ski trails and for further trail development [see Note 2, Map D, and Recommendation A12(xiii) - Yarra Ash Ranges National Park]
 - (ii) further new major works at Lake Mountain may take place:
 - (a) following finalisation and adoption of a development and management plan for the area that is agreed to jointly by the Alpine Resorts Commission and the Department of Conservation and Natural Resources
 - (b) in the area identified in I7 above as the Lake Mountain Alpine Resort (car-parks, amenity buildings and ski trails as required)
 - (c) within the Yarra Ash Ranges National Park for ski trails only, and only within the zone identified in I9(i) above
 - (iii) the adopted development and management plan be binding on both the Department of Conservation and Natural Resources and the Alpine Resorts Commission
 - (iv) the Alpine Resorts Commission implement the skiing-oriented development and management activities in the zoned portion of the park in accordance with the agreed development and management plan
 - (v) interpretation facilities for both the park and the resort be established in the resort
- and that
- (vi) any new proposals for major developments in the Lake Mountain area, beyond those described in the approved development and management plan, should be subject to the Environmental Effects Statement process.

Notes:

1. The recommended Lake Mountain Alpine Resort covers some 465 ha. Its western boundary remains as a 100-m offset from the main entrance road except on the western sides of the Snowy Hill and Gerratys car-parks, where it follows the 1260-m contour (to permit expansion of the car-parks). Much of the boundary on the eastern side will be determined by the proposed routes of the Gerratys to Snowy Hill ski trail and the Snowy Ridge biathlon trail - the boundary being offset 20 m from the outer edge of the trails, except that a 100-m buffer is also provided around the eastern side of the Gerratys car-park and snow-play area and the Snowy Hill snow-play area (see Map D).
2. The zone within the park in which development and management of ski trails may proceed is indicated on Map D and extends north from the alpine resort to Boundary Hut and lies above the 1300-m contour [see also Recommendation A12(xiii)].

MOUNT DONNA BUANG

Mount Donna Buang is situated on the divide between Badger Creek (part of the Maroondah water supply catchment system) and the Yarra River.

It is the closest and most accessible site to Melbourne for snow-play, although snow cover in the area is unreliable and of only 60 or fewer days duration per year.

Facilities on the summit include toilets, a shelter and gas barbecues; other facilities are located on the access roads. There is no commercial development.

The area formed part of the Yarra Valley Multi-purpose Park (A29) in the Land Conservation Council's final recommendations for the Melbourne Study Area in 1977 and was zoned for intensive recreation. The recommended zoning of the Yarra Valley Multi-purpose Park, outside the water supply catchments, was approved by the government.

Mount Donna Buang forms an important recreational component of the recommended Yarra Ash Ranges National Park (see Recommendation A12). It is therefore recommended that the Mount Donna Buang area be deleted from the Schedule to the *Alpine Resorts Act 1983* and included in the recommended Yarra Ash Ranges National Park.

Mount Donna Buang

Recommendation

I10 That the Mount Donna Buang area be deleted from the Schedule to the *Alpine Resorts Act 1983*, and be included in the recommended Yarra Ash Ranges National Park (see Recommendation A12).

MOUNT TORBRECK

Council's 1977 final recommendations for hardwood production in the Melbourne Study Area provided for particular values to be protected within the areas of reserved forest by means of reserves under section 50 of the *Forests Act 1958* or by management prescription. Specifically, it recommended that 'the scenic features and environs of Mount Torbreck should be maintained' (1977 Recommendation E10 - Rubicon Forest).

Although the area is included on the schedule to the *Alpine Resorts Act 1983*, no commercial development has taken place there and its remote nature would make such development expensive.

In recognition of the intrinsic values of Mount Torbreck and, consistent with Council's recommendations for similar areas across the State, it is now proposed to set the area aside as a natural and scenic features reserve under the *Crown Land (Reserves) Act 1978* (see Recommendation G38)

Mount Torbreck

Recommendation

I11 That the Mount Torbreck area be deleted from the Schedule to the *Alpine Resorts Act 1983* and be reserved under Section 4 of the *Crown Land (Reserves) Act 1978* as a natural features reserve (see Recommendation G38).

J. COMMUNITY USE AREAS

All public land is utilised either directly or indirectly for the benefit of the community. Council has recommended that the bulk of public land be available for some form of direct use by the public, notably for education or recreation, both of which are consistent with most of Council's land use categories. The areas recommended in this chapter are those where education, recreation or other community use is the primary land use goal.

This chapter is divided into four sections - education, recreation, parkland and gardens and buildings in public use. Respectively, these areas include land used for environmental education, recreation areas such as sports grounds, local parks and formal gardens and buildings such as community halls and schools. These are discussed separately below.

COMMUNITY USE AREAS

Recommendations

J1—J29 That these areas be used for education, recreation or other community purposes

that

- (i) appropriate facilities be provided
- (ii) where relevant, and except where not compatible with the above, features of cultural significance, natural surroundings and the character and quality of the local landscape be maintained or restored
- (iii) unless specified below, harvesting of forest products, hunting and 'stone' extraction (as defined in the *Extractive Industries Act 1966*) not be permitted

and that they be permanently reserved under section 4 of the *Crown Land (Reserves) Act 1978* and managed by the Department of Conservation and Natural Resources, except where otherwise specified.

EDUCATION AREAS

Public land provides opportunities for a wide range of educational activities. Such activities include informal nature study and appreciation or more formal education programs run by schools, tertiary institutions or other educational bodies.

Environmental education is a fundamental step in the conservation of natural resources. It has become an important part of school curricula, and forms the basis of courses for tertiary and adult students.

Environmental education is necessarily linked with field studies. It is concerned with studying and appreciating all sorts of environments - natural ones undisturbed by human activities, natural ones manipulated to produce particular products such as hardwood timber or drastically altered ones such as are found in urban and agricultural areas. One of its basic requirements is access to land.

Council, realising that public land provides excellent opportunities for studies of a wide range of environments, has recommended that almost all public land (including parks, nature conservation reserves, natural features reserves and State forest) be available for educational uses. Council believes that in most situations educational studies can take place without

conflicting with the primary use for which an area is set aside. Indeed in some cases it is the manipulation of the land for the primary use that makes the area of value for environmental education.

Council believes, however, that it is necessary for some relatively undisturbed land to be set aside specifically for educational uses as, unless this is consciously done, such environments will tend to be changed by other uses. In these areas education would be the primary use and other uses would only be permitted when not in conflict with that.

Activities permitted there that may not be appropriate elsewhere would include long-term studies collection of biological material, biomass studies and the establishment of growth plots. Education areas may also provide opportunities to demonstrate techniques of erosion control and the restoration of native vegetation and stream conditions to a more natural state.

In selecting land for this use, the Council has sought to provide areas:

- giving examples of major land types
- with maximum diversity of vegetation types, soils, etc. and with natural boundaries
- located with consideration of ready access by users
- located so as to minimise the danger that wildfires present to users
- located in proximity to other land types and to a variety of other land uses
- large enough to prevent over-use and to allow for zoning to protect areas of special value
- selected so as to minimise erosion and pollution hazard

No one organisation should have the exclusive right to use a particular education area, as it is important that students have the opportunity to visit a number of education areas in various land types throughout the State. Minimum facilities such as toilets and shelters may be required at each site, and it may be desirable to have accommodation either on the area or at some nearby locality. Whether or not accommodation facilities are located on the education area will depend on its proximity to other areas of educational value in the region and also on the availability and location of existing accommodation. In forested areas accommodation and other permanent facilities should only be provided where adequate safeguards against fire can be made.

The Council believes that management plans for education areas should be prepared by the Department of Conservation and Natural Resources (CNR). Planning and implementing the education aspects together with co-ordinating the use of areas, should be done in consultation with the Directorate of School Education, with other user groups in the education system and with community bodies that have an interest in environmental education.

Some of the education areas previously recommended by Council have received little use to date. However, as knowledge of their role has expanded and interpretative material has become available, usage is increasing. A number already receive significant use, especially those closely associated with developed camps, such as the Kinglake West and Castella Education Areas. An excellent student guide has been published for the Andrews Hill Education Area (by Victoria College of Advanced Education - Rusden Campus 1979) (added by LCC)

In addition to those that have been formally designated for educational use, other areas are, or will be, used for environmental education. The most notable within State forest is the Toolangi Forest Discovery Centre (opened in February 1994). This centre provides school education programs and forest interpretation programs to allow first-hand experience of the management and use of forests. The development will include the creation of a demonstration forest in the adjacent mountain ash regrowth. Another area of State forest, at Rubicon, is used by a local Aboriginal community in conjunction with Camp Jungai - an enterprise that operates educational camps to demonstrate traditional Aboriginal culture.

Other education and interpretation facilities and programs are operated within national and State parks, Healesville Sanctuary, Snobs Creek hatchery and (by Melbourne Water) at some water catchment areas.

Education areas

Recommendations

J1—J10 That the areas listed below and shown on Map A be used in accordance with the general recommendations for Community Use Areas outlined above and to provide opportunities for students of all ages to:

- (iv) study the nature and functioning of reasonably natural ecosystems in a manner such that the integrity of those ecosystems is maintained as far as is practicable
- (v) compare the ecosystems within education areas with other nearby natural and modified systems
- (vi) observe and practise methods of environmental analysis, and the field techniques of the natural sciences
- (vii) conduct simple long-term experiments aimed at giving an understanding of the changes occurring in an area with time.

Notes:

1. The Council considers that the former Kinglake education area (previously M8 in Council's 1977 recommendations) has poor access, which causes problems with respect to visitor safety in the fire season - a factor that detracts from its value as an education area. It is recommended for incorporation into the abutting Kinglake National Park. The area receives little educational use.
2. Council notes that ecologically sensitive fire management of the vegetation communities, especially heathlands, heathy woodlands and foothill forests, will be necessary to maintain the high-quality and species-rich botanical values of the Tonimbuk Education Area (J4). Students from Deakin University, Rusden Campus, are carrying out botanical, zoological and soil surveys and compiling a geographic information system database for this area.
3. The Crossover Education Area (previously M12) is now recommended for addition to the Crossover Regional Park. While it was used for education in the past, it has not received much use in recent years, and many of its attributes are also represented in Fumina South Education Area. It will still be available for environmental education purposes within the park.
4. The former Tanjil Education Area (previously M14) is now mostly inundated by the waters of the Blue Rock Reservoir. Council, in its final recommendations for the Hill End Special Investigation (January 1983), included this area within a water production reserve (now D12).
5. Several of the above areas abutting national or State parks have been included in the *National Parks Act 1975* schedules. It is not intended that they be re-reserved under the *Crown Land (Reserves) Act 1978*.
6. Glenewart, formerly an education zone within A29 - the Yarra Valley Multi-purpose Park in Council's 1977 recommendations, is now recommended for sale - refer to Chapter O.

Existing education areas

J1 Kinglake West (280 ha)

J1 Notes:

1. Parts of this area were inadvertently included with lands vested in the Victorian Plantations Corporation. These should be divested, with public access to the area and its use for educational purposes maintained in the interim.
2. Late Silurian to Early Devonian sediments exposed in Collins' Quarry here contain a rich and abundant fossil fauna.

J2 Andrews Hill (210 ha) Note: This is within the scheduled Kinglake National Park (added by LCC)

J3 Castella (50 ha)

J4 Tonimbuk (250 ha)**J5 Fumina South (173 ha)**

J5 Note: The uncleared recreation reserve adjoining CA 20, Parish of Fumina, should be included.

J6 Boggy Creek (160 ha)**J7 Gembrook (65 ha) (formerly an education zone within recommendation A29 - Yarra Valley Multi-purpose Park)****J8 Hoddles Creek (285 ha) (as for Gembrook)****New education area****J9 Lang Lang (~~20~~ 122 ha)**

This former bushland reserve occurs on a southern Victorian coastal plains land type otherwise unrepresented in Council's education area system. It has a range of vegetation types, is readily accessible, is well located with respect to other land types, is large enough to prevent over-use and is located such that wildfire hazard, erosion and pollution are minimised. In particular, it would allow study of the composition and dynamics of the now-depleted sand heathland and coastal grassy forest communities and of the rehabilitation of adjacent degraded sand pits. The area includes a camp operated by the Scout Association of Australia with a large number of buildings and other structures. The camp - a long-standing one - is regularly used and serves a regional community.

Lang Lang Education Area**Recommendation****J9 That:**

- (viii) scouting activities be permitted, subject to
 - (a) any additional buildings being confined to the existing developed area, and
 - (b) protection of riparian areas

and that

- (ix) camping activities be strictly controlled in order to minimise disturbance to the natural environment.

Note: Those parts of the former rubbish tip and sand pits on the western edge of the reserve should be rehabilitated. Those sections west of the road should be included in the adjacent recreation reserve.

Other existing area used for educational purposes**Woorabinda****Recommendation**

J10 That the area of 49 ha indicated on Map A be used for those purposes approved by the Government following publication of the final recommendations (Recommendation H7) for the Latrobe Valley Special Investigation in October 1987

(See Order in Council 17/6/1997)

and that current tenure and management continue.

Notes:

1. This area is under lease from Generation Victoria to the adjoining Camp Woorabinda.
2. This was Final Recommendation H7 in the Latrobe Valley Special Investigation.

Additional area to be used for educational purposes

Recommendations

J11 That the area shown on Map A and described below be used for educational purposes and that current tenure and management continue.

Notes:

1. This area was formerly an education zone in A29 - the Yarra Valley Multi-purpose Park in Council's 1977 recommendations.
2. The farm is the subject of a share farming agreement.

J11 Haining Farm (65 ha)

Managed as an operating dairy farm, the area provides an educational program for school groups. The Department of Conservation and Natural Resources manages it and it is on Schedule 3 to the *National Parks Act 1975*.

RECREATION

The term recreation includes the multitude of different activities that people undertake during their leisure time, both indoors and outdoors. It is an intrinsic feature of our way of life and has numerous and diverse social benefits. Participation in recreation and the provision of opportunities for it are also of economic benefit, forming the basis of our tourist industry. With increasing population and increasing availability of leisure time, the demand for recreational venues is also increasing.

Outdoor recreation is of particular interest to Council, as the public land of the study area provides important opportunities for it. Most public land is available for recreational use of some sort and the variety of reserves recommended by the Council provides for a range of recreational opportunities. While specific reserves have not been set aside for each form of recreation, most activities can be accommodated somewhere on public land.

Throughout, these recommendations refer to the many forms of outdoor recreation in a number of ways.

- Formal recreational activities include all organised sports and other group activities, while activities such as picnicking, fishing and hiking are grouped as informal.
- Passive recreation covers situations where the individual obtains recreation through enjoying the sights, sounds and atmosphere of the surrounding environment while expending little physical effort. Examples are picnicking, nature observation and strolling.
- Active recreation covers situations where the individual must expend considerable physical effort to obtain some mastery of physical forces in order to satisfy particular recreational needs. Examples are playing organised sport, bush-walking and water-skiing.
- Open-space recreation includes all recreational activities that require spacious outdoor surroundings, whether the activities be active or passive, formal or informal.
- Intensive recreation involves large numbers of people per unit area. For example, the Port

Phillip foreshore and parts of the Dandenong Ranges would be considered to be intensively used.

In view of the sustained demand for outdoor recreation and the high capability of some public land to meet this demand, the Council, in making its recommendations, has suggested that most public land should be available for recreational uses of some sort. Council could not, however, make recommendations covering in detail all the forms of recreation currently pursued on public land. These include activities such as swimming, bush-walking, camping, orienteering and rogain, canoeing, fishing, hunting, fossicking, picnicking, horse-riding, boating, trail-bike-riding and pleasure driving. Council believes that activities such as these can be accommodated on public land, without detriment to other values, and points out that outdoor recreation in general is an acceptable primary or secondary use of much public land (except reference areas and some water storages and their buffers). It has left the details, including the appropriate zoning and level of each activity, to the land and water managers. Council has not specified whether permitted uses may be carried out by private individuals, members of organised clubs, or by participants in commercial tours; other than that managers should provide a balance between commercial tours and other recreational groups.

Recreation activities vary in their requirements for types of land, size of area and site location. They also differ in their impact on the land and on other activities (including other forms of recreation).

All recreational activities have an impact to some extent on the environment and on other people, depending on the interaction of such factors as:

- the nature of the recreational activity
- the intensity of use of an area, as measured by the number of participants, size of group and the frequency, timing and duration of the use
- the sensitivity of the environment to change
- the degree of management intervention to make the environment less sensitive to recreational impacts

Generally, any one activity pursued at a low level of intensity in appropriate conditions poses little threat to the environment and seldom conflicts with other activities. With increasing level of use, however, conflicts and problems can arise, particularly that of damage to the environment and interactions between recreational activities.

Council therefore believes that the land and water managers should aim at managing the levels and patterns of recreational use according to the capability of the area to sustain such use (without irreversible damage or significant conflict with its primary purposes), while at the same time avoiding unnecessary restrictions. Managers provide recreational opportunities, while maintaining different 'settings' where differing levels of recreational use are encountered.

Special care will be required in the location and management of areas zoned for intensive recreation, to prevent environmental damage. Thus, more stringent restrictions can be expected in areas where the vegetation and soils are sensitive to damage, where the level of use is high or where special natural and cultural features require protection.

The involvement of peak recreation groups in the planning process is likely to lead to the early identification of key issues and facilitate the development and implementation of management strategies and codes of conduct. Such groups can also assist in the systematic documentation of recreation resources and in the development of acceptable methods of identifying and evaluating these. Consideration should be given to providing the resources and infrastructure needed to enable community organisations to become active partners in the decision-making process.

Six particular forms of recreation that may require specific consideration by the land manager, whether now or in the future, are further discussed below. Alpine resorts are discussed in Chapter I.

Motorised recreation

Much outdoor recreation depends on motor vehicles or watercraft. Conventional cars, four-wheel-drive vehicles or motorcycles may be used for touring and sightseeing, as a means of obtaining access to a particular area where other forms of recreation will be undertaken or - when they are driven in competitive rallies or in adverse but challenging road conditions - as a source of recreation in themselves.

Most visitors to the area use two-wheel-drive vehicles and keep to the major through routes. Others use four-wheel-drive vehicles or motorcycles to gain access to more isolated areas via the secondary system of tracks. The track system was constructed mainly for timber harvesting, forest management and fire protection. The roads are frequently rough and sometimes steep and are seldom designed to cope with increasing use by recreation vehicles. Consequently, even legal use of roads can pose maintenance problems for the land manager. Authorities responsible for their construction and maintenance on public land may close roads temporarily or permanently when traffic exceeds their physical capacity, for safety reasons, or when use by vehicles is in conflict with the area's primary uses. Erosion hazard areas may be proclaimed according to the provisions of the *Land Conservation (Vehicle Control) Act 1972* and its regulations, enabling strict control.

If the increased recreational use of roads is to be catered for, adequate funding should be provided for road maintenance, otherwise deterioration leading to erosion is inevitable. Council notes that a levy has been placed on the registration fees of four-wheel-drive vehicles, the proceeds of which are designated for track maintenance.

A number of four-wheel-drive clubs have acknowledged the need for restrictions on motorised recreation in certain areas and during some periods of the year. Clubs are often actively involved in track clearing in remote areas, and have assisted in rubbish removal and restoration of huts and other areas. Some clubs have search and rescue units. Clubs also inform and educate participants about the proper use of four-wheel-drive vehicles and the environmental consequences of improper use. The 'Tread Lightly' program run by the Victorian Association of Four-Wheel-Drive Clubs Federation has such objects. Authorities should continue to promote responsible attitudes to the use of four-wheel-drive vehicles and trailbikes, in conjunction with user groups and the general public.

Growing numbers of people are becoming involved in recreational touring on public land. Motor vehicles, including motorcycles, may only be used by licensed drivers on public land if they are registered, and only on tracks formed for the passage of vehicles having four or more wheels. Driving off such roads or tracks is prohibited on all public land, whether in parks, State forest or other reserves. Some exceptions are provided for in the *Act*.

Forest areas are used for competitive events such as formal car rallies and motorcycle trials. These have the potential to accelerate road damage, disturb wildlife and jeopardise the enjoyment and safety of other forest users. Strict standards imposed by CNR and the regulations made by organising bodies such as the Confederation of Australian Motor Sports or the Australian Cycle Union assist in reducing their impact. They are often run at night and roads are temporarily closed to public use. The Council considers that such events could continue, subject to restriction of vehicular movement to defined tracks and to the implementation of rehabilitation works where necessary.

Another form of motorised recreation involves use of watercraft such as speed and jet boats, houseboats, dinghies, hovercraft and jet skis. They may be used to tow a water-skier, for pleasure cruising, for sightseeing and, most commonly, for fishing.

The issues of boat wakes, induced erosion, turbidity, noise and disturbance of sensitive areas require management attention to ensure the areas chosen are capable of sustaining the use of powered watercraft and to reduce conflict with other environmental and recreation values.

Marinas

The increasing use of Port Phillip Bay and Western Port for recreational boating has resulted in a corresponding demand for berth sites for watercraft.

Since Council's 1977 recommendations, the government has approved the development of a large marina at Hastings and the redevelopment of small ones at Yaringa and Newhaven and assessed Environmental Effects Statements for proposals at Sorrento and San Remo.

Council is aware of recent suggestions that additional marinas be developed, with a number of sites under consideration. Several sites involving coastal reserves and adjoining off-shore land have been identified through bay-wide planning strategies and a two-stage planning process established. Council intends to consider the issue of marinas in detail in its current Marine and Coastal Special Investigation.

Hunting and target-shooting

Public land in the study area offers opportunities for the hunting of game species, such as sambar deer, as well as for vermin such as rabbits and foxes.

Sambar deer are found throughout much of the forested lands to the east of Melbourne. Many hunters consider this - the largest deer found in Australia - to be the premier game species.

The two most common forms of deer-hunting practised are stalking, which is the most popular and hunting with hounds - both forms involving the use of firearms. Other hunters use bows and arrows. Under the *Wildlife (Game) Regulations 1976*, No. 2, hunting of Sambar is permitted year-round, although in practice most deer-hunting is undertaken during the cooler months, when the success rate is higher.

Neither hunting nor the use of firearms, other than in a few specific instances, is permitted in national parks. Nor are they permitted in most State parks, nature conservation reserves, reference areas, education areas, licensed water frontages, a number of minor reserves or land in and around built-up areas (see Note 4 to recommendation F1 - Walhalla).

Deer-hunting is also currently forbidden in the Central Highlands Sanctuary, an extensive area - some 223 000 ha - between Healesville and Eildon. Like all of the sanctuaries originally declared prior to the *Wildlife Act 1975*, this provides protection for 'game' (including deer) as well as 'native game' (such as certain native ducks).

Council does not believe that it is still necessary, or desirable, to set aside areas of public land for the protection of sambar deer. With respect to the provision of sanctuaries for other game species, some 36% of the current Central Highlands Sanctuary has been recommended by Council for inclusion in parks or nature conservation reserves where hunting is not permitted. Accordingly, the Council recommends revocation of the Sanctuary (see Chapter E).

In effect, that recommendation will mean that an additional 146 500 ha of public land will become legally available for the hunting of deer.

The use of firearms for non-hunting purposes, such as target-shooting, is permitted in formal rifle and pistol-shooting ranges. Rifle ranges are controlled by the Commonwealth government. An inspector of rifle ranges operating from the Defence Department inspects and licenses Victorian ranges and establishes their safety requirements. Full-bore ranges are generally established on Crown land under permissive occupancy to the Commonwealth.

While Queen's/King's Shoots and other competitions have been held since last century, from the late 1950s the emphasis changed from military training to international competitive sport and full-bore and small-bore disciplines were developed for competition in world championship and Olympic events.

Some 28 shooting ranges currently exist within the Melbourne Area, District 2, or in nearby areas. These comprise 9 full-bore, 6 small-bore, 8 gun club and 5 pistol club ranges. A further 4 small-bore, 2 gun club and 3 pistol ranges are located in the metropolitan area.

The former Merrett (Williamstown) Rifle Range was used by 14 shooting clubs, military forces and police. There is substantial demand for a large full-bore range to replace Merrett and provide for target-shooting sports. In a 1984 report, 18 sites for such a range (on public and private land) were considered and three are real possibilities. Most were on the plains west and north of Melbourne. The strict criteria, and planning and amenity factors, make the search difficult.

A new full-bore range opened last year on private land at Bacchus Marsh, catering for some of the demand.

Council has recommended that existing ranges on public land continue to be available for shooting sports. In addition, subject to the provisions of the *Firearms Act 1958*, State forest is also available for shooting.

Horse-riding

No estimates are currently available on the numbers of horse-riders using public land in the study area, as many of the activities are undertaken by individuals and small groups with no club or commercial associations.

It is a popular activity throughout the area and involves day trips and overnight trips with camping. Bunyip State Park and the recommended Kurth Kiln regional park are heavily used for horse-riding and specific tracks are used in the Kinglake and Dandenong Ranges National Parks and the Cathedral State Park.

Council believes that the use of horses could be permitted within appropriate parts of the park system, but that the details should remain with the land manager.

It may be necessary to place conditions on the time, location and the manner in which horse-riding can be undertaken in order to minimise conflicts with other park users, to prevent the spread of weeds and to protect environmental values. It may also be necessary to prohibit this activity in particularly sensitive areas.

Overseas research and local evidence have identified environmental effects of horses that include

the spread of weeds track erosion, overgrazing at specific sites and trampling of vegetation.

The Bicentennial National Trail - a horse-riding trail between Healesville and Cooktown (Queensland) - traverses the Central Highlands.

Recreational fossicking

Most commonly, recreational fossicking involves metal-detecting and gold-panning and is a popular recreational activity in parts of the study area. Most fossickers seek gold, but there is also interest in gemstones. Fossicking is often focused in and along creeks and rivers, as their alluvial processes concentrate the heavy gold and gemstones and the running water assists fossicking by allowing wet panning and sieving and removing mud that may obscure the colour of precious and semi-precious gems.

To fossick or search for gold and gemstones, participants require a Miner's Right or Tourist Fossicking Authority under the *Mineral Resources Development Act 1990*. It entitles the holder - and in the case of a Tourist Fossicking Authority, those accompanied by the holder - to search for minerals on both Crown land and (with the owner's permission) private land. Specific conditions apply to the search for minerals on land held under a mining licence. In common with other exploration and mining activities, fossicking is excluded by legislation from reference and wilderness areas, and in general from national and State parks.

Activities under a Tourist Fossicking Authority or Miner's Right are restricted to the use of non-mechanical hand tools. The use of explosives, the removal or damage of any trees or shrubs and the disturbance of an Aboriginal place or object are prohibited.

Eductor dredges are portable, floating devices used for dredging the gravel of watercourses for gold and tin. Since November 1990, their use has not been permitted in Victoria. The Parliamentary Environment and Natural Resources Committee has completed an inquiry into eductor dredging, and its report recommended that such dredging continue to be prohibited in Victoria.

Long-distance trails

Over the past decade, the development of long-distance trails has attracted increasing interest. These cater for walkers only, for horse-riders and walkers or for vehicle-based users. Some have a historical basis, coinciding with the route of an early European explorer or early transport route. Others provide a convenient route connecting places, or through areas of landscape interest.

Trails have usually been established in response to proposals put forward by an enthusiastic interest group. Such groups may work with the relevant land managers to develop and maintain the trail. The tracks are based, to some extent, on existing access.

Within the study area a number of trails have been established. The first and perhaps most well-known is the Alpine Walking Track, developed by the Federation of Victorian Walking Clubs in partnership with the former Forests Commission. It is now maintained and managed by CNR and provides a marked trail from Walhalla, across Mount Baw Baw and the Thomson River catchment, then over the Victorian Alps to the New South Wales border. Most of the trail is designed for experienced and well-equipped bush-walkers, as it crosses some of Victoria's most rugged and exposed country and is comparatively remote from main roads and habitation. 'Link tracks' connect to Woods Point (via McMillan's Track), to Lake Eildon (via the Howqua Track) and to Warburton (via the Upper Yarra Track). Appendix VI specifies guidelines for

management of public land adjoining the Alpine Walking Track.

Other tracks in the study area include: part (from Healesville via Marysville and Mount Bullfight to Knockwood) of the Bicentennial National Horse-riding Trail between Melbourne and Cooktown in Queensland; Upper Yarra Track linking Warburton to Mount Whitelaw; Two Bays walking track across Mornington Peninsula; Coppin's Track along Sorrento back beach and its extension towards Cape Schanck; the Walk Into History track in the Yarra Forest between Powelltown and Warburton (see Recommendation F15); and Wirilda Track along Tyers River from Tyers West to Moondarra Reservoir.

Tracks proposed in submissions include a coastal walking track between San Remo and Cape Paterson, tracks around Wonthaggi and the establishment of a Victorian sector of a Hume and Hovell trail.

Hume and Hovell trail proposal

In late 1824 Hamilton Hume and William Hovell travelled through this region in the final stages of their journey from Sydney towards Western Port, with six men, horses and bullocks. Their route through the study area started on 2 December 1824 near Merton. They walked over Puzzle Range and camped on Home Creek between Merton and Kanumbra. Following Home Creek downstream, they crossed the Goulburn River near Molesworth. On 4 December they went across the Yea River south of Yea, followed Boundary Creek to Scotts Creek, then along the ridge south-west from Junction Hill before camping, probably on Break O'Day Creek. After the next night on King Parrot Creek they attempted to find a route through the upper Wallaby Creek catchment. They failed owing to the steep, stony ground and thick brush, naming Mount Disappointment as it did not offer passage or give them a view of the south coast. After returning to King Parrot Creek they travelled north, to near Strath Creek, then west towards Mount Piper, camping on Sunday Creek at Broadford. They continued upstream along Sunday Creek then south down Merri Creek Valley, reaching the coast at Corio Bay on 16 December.

Their trip has had several enduring characteristics. Firstly, their glowing reports of 'excellent land' having 'the best soil' differed from Surveyor-General John Oxley's views that the land around Western Port was 'useless for all the purposes of civilised man', and encouraged the establishment of the Port Phillip Association. The colony later established (1835) by that Association became Melbourne.

Secondly, various features named by Hume and Hovell, including Goulburn River, King Parrot Creek, Mount Disappointment, Sunday Creek and Mount Piper, are still associated with their trip.

Thirdly, their route across the Great Dividing Range near Wallan is basically that now followed by the Hume Freeway, the current main link between Sydney and Melbourne.

In New South Wales their route has been recognised by the development of the Hume and Hovell Walking Track traversing 372 km from Yass to Woomargama. Investigation of a similar concept is now proposed for Victoria. This would involve both densely forested public land and substantially cleared open farmland. The trail would primarily be a walking route, with appropriate overnight camp-sites, although several of the historical camp-sites would be accessible by vehicle. Existing public land along the general route includes a section of the disused Tallarook to Mansfield Railway (Merton to Yea), road reserves, river and stream frontage reserves, Kinglake and Mount Disappointment State forest and a Melbourne Water catchment (Wallaby Creek). At the time of the centenary of their trip, in 1924, a network of commemorative cairns was established. These could be included along a trail route.

The long-distance trails referred to above are compatible with a range of land use categories and can facilitate appropriate use and appreciation of public land. There is a need to ensure that they avoid environmentally sensitive and unsafe areas, and that the responsibility for their maintenance is well defined. Ongoing monitoring is also required as to their compatibility with other public land values. Separate trails, where possible, may be necessary to avoid incompatible uses on a single trail. Where trails are re-routed, adequate information should be provided to prospective users, including on-ground temporary signs.

Recreational use by organised groups

Organisations such as schools, clubs, youth groups and private companies involved in outdoor recreation have a valuable role in improving community access to public land and they may also contribute to the economy of the local region. Moreover, they may provide hire equipment, transport, skilled instruction and interpretation of the environment in which the activity takes place and set models for appropriate codes of conduct.

Organised activities may involve frequent use, or large numbers of people - both participants and, for competitive events, spectators. This may lead to overcrowding of some areas, localised environmental impacts at regularly used sites and demands for exclusive access to particular venues - a demand Council believes in general to be inappropriate.

Several operators have been granted permits for commercial adventure tours within the public land of Melbourne Area, District 2. The tours offered cover a wide range of activity and may last for one day, a week-end or up to a week.

The impact of commercial tours or similarly structured activities on natural systems and their compatibility with other user groups do not necessarily differ from those of any other forms of similar recreational use. Impacts are associated rather with the size of the groups, frequency of use and the behaviour of individuals.

Codes of practice for recreational activities

Many recreational organisations have developed, and encouraged their members to follow, voluntary codes of practice. Codes outline socially and environmentally responsible behaviour, beyond that simply required by regulations. Codes provide for the maintenance of the resource on which the recreational activity depends, and harmony with those following the same or different recreational activities or with other users of the area. They also assist other users to understand the way some recreational activities are pursued. Their success is measured by the extent to which they are followed, so they need to be regularly promoted. In general, only a small proportion of the people engaging in a recreational activity belong to a formal recreational organisation, so codes need to be widely promoted to ensure that they reach all participants.

Providing for a range of recreational experiences

Outdoor recreation activities are undertaken in a variety of settings, which vary according to the level of access, facilities, use and management. Settings reflect the physical, biological, social and management features of an area. Camping, for example, takes different forms in various settings, from readily accessible highly developed camp-grounds accommodating large numbers of people, through designated camp-sites with few facilities to remote areas without facilities. Some activities - such as swimming, caving and skiing - may also have specific physical or environmental, including seasonal, requirements. Few forms of recreational activity are totally dependent on a single setting, although many are considerably enhanced by a particular one.

The factors interacting to form the settings for recreation experiences in turn determine the range of recreation opportunities available. These concepts have led to the planning method known as the 'Recreation Opportunity Spectrum', which managers use, together with other recreation planning techniques, to help them identify and manage impacts of proposals.

Although it may be desirable to provide for all appropriate recreation activities across the full range of settings, the nature of the land and population of a region mean that not all settings can be provided in all areas. Developed settings providing large camping or picnic areas and catering for high levels of use often occupy municipal or private land. Few areas contain remote recreation settings, even on public land and there is a trend for activities to encroach into them.

In some cases recreation may be a primary use of public land; where it is a subsidiary use then it should be allowed where it can be accommodated without detriment to the other values, in accordance with the following recommendations.

Recreation Recommendations

J12 That:

- (i) public land continue to be available for a wide range of recreational uses
 - (ii) the type, intensity and patterns of recreational use:
 - (a) not exceed the capability of particular areas to sustain that use
 - (b) not conflict with the primary management aim of the respective area
 - (iii) planning ensure:
 - (a) a range of recreational settings is maintained
 - (b) special attention is given to the cumulative impact of small changes that may affect recreational settings
 - (c) compatibility of recreational activities is considered
 - (d) that use by large groups, whether private, commercial, or institutional, is consistent with (i), (ii), and (iii) (a) to (c) above
 - (iv) codes of practice be developed by the management authority in conjunction with appropriate groups, and that they be widely distributed and promoted to encourage responsible recreational use
 - (v) to facilitate planning, key recreational groups be encouraged to assist the development of methods that identify:
 - (a) the significance of recreational resources
 - (b) the impacts that may result from the use of that resource
 - (c) the management options that reduce these impacts
 - (vi) community awareness and appropriate use of recreational resources be encouraged through the preparation and publication of information about these resources
 - (vii) vehicular use of roads within the meaning of the *Land Conservation (Vehicle Control) Regulations 1972* continue to be permitted on public land except where closure is necessary because of erodible soils, seasonal conditions, excessive maintenance or conflict with the primary use of the area
- and that
- (viii) land managers endeavour to provide some areas (for example disused gravel pits) for off-road vehicular use and instruction on land under their control.

Notes:

1. Relevant peak recreation groups and the Department of Arts, Sport and Tourism should be involved in the planning process, in the preparation of codes of practice and in the dissemination of educational material.
2. The development of codes is not considered a substitute for the routine enforcement of existing regulations controlling (for example) littering, firearm use, pets or unseemly behaviour.

Recreation areas

J13 That the areas listed in Appendix VII (some of which are indicated on the maps) be used in accordance with the general recommendations for Community Use Areas outlined above (See Order in Council 17/6/1997)

and

(iv) for organised sports (team sports, horse-racing, golf etc.) and informal recreation (picnicking, camping, etc.) as permitted by the land manager

and that

(v) existing use as a rifle, pistol or clay target range, or for other shooting sport, may continue

(vi) indigenous vegetation be conserved where possible

(vii) grazing be permitted at the discretion of the land manager.

Note: In particular, native vegetation in the south part of the Noojee recreation reserve, and the Dromana recreation area's wildflower reserve, should be protected.

Recreation trails

J14 That the recreation trails referred to above be used in accordance with the general recommendations for Community Use Areas outlined above

and

(iv) for walking, horse-riding and cycling as appropriate and as permitted by the land manager

that

(v) the guidelines in Appendix VI for management of areas adjoining the Alpine Walking Track be applied (See Order in Council 17/6/1997)

and that

(vi) (a) the Department of Conservation and Natural Resources investigate and determine the feasibility of a Hume and Hovell trail, to eventually link with the New South Wales section

(b) the most appropriate route and associated stopping points be determined following consultation with interested groups, including local municipalities and adjoining land-owners (see Note).

Note: The identified Hume and Hovell trail need not follow the exact route taken by the explorers. Instead, nearby road reserves, stream frontages and other public land could be used.

Disused railways with recreational value

Several disused railway lines in this region have high capability for recreation - for bicycle or walking tracks, linear parks, or nature trails - and for conservation of remnant vegetation.

Of particular note is the Lilydale to Warburton railway reserve, with recreation use also being a primary value of the Erica section of the Moe to Walhalla railway and, in a special sense, the Baxter to Mornington and Coldstream to Healesville lines. Another disused railway, the Bittern

to Red Hill South branch line, has been mostly purchased by the Shire of Hastings, which manages it primarily for passive forms of recreation. Other disused railways may also have recreational value, including those recommended as historical and cultural features reserves (see Chapter F) and some of those recommended as uncategorised public land pending the application of a detailed public planning process (see Chapter N).

Disused railways with recreational value

Recommendations

J15—J18 That the areas described below be used in accordance with the general recommendations for Community Use Areas outlined above

and

(iv) for informal recreation (walking, cycling, horse-riding, etc.) as permitted by the land manager and/or for use as a recreational railway

that

(v) the track formation, embankments, bridges and other remnant features of the former railway be retained wherever possible

(vi) indigenous vegetation be conserved where possible

(vii) grazing be permitted at the discretion of the land manager and, where relevant, appropriate access across the reserve be provided for movement of stock

and that they be retained as public land.

J15 Lilydale to Warburton railway reserve (185 ha)

This railway was declared surplus to operational needs in 1984 (having been closed in 1964) and, following strong community representations, it was agreed that those parts required for recreational use and development be transferred to and managed by CNR. A planning process was subsequently established, which involved extensive public consultation and culminated in the approval of a management plan in 1988. This provides for recreational use to be the primary purpose of the reserve.

The reserve has high capability for walking, cycling and horse-riding. Its average width is 40 m and it extends some 38 km. The line passes through the rapidly developing townships of the Upper Yarra Valley as well as tracts of undulating and floodplain farmland. Some sections of the reserve retain indigenous vegetation in good condition.

J15 Notes:

1. The reserve contains a number of sections of native grassland communities that will require active management.
2. The former Yarra Junction railway station has been included in a separate historic and cultural features reserve - (see Chapter F).

J16 Erica section of the Moe to Walhalla line

The few remaining parts of this railway reserve, together with adjoining public land, provide a link between the Erica town centre and the railway corridor through adjoining State forest to the Thomson River and the Walhalla Historic Area and township. These more easterly sections of the former line have, in parts, been developed for walking access and already receive a significant level of use.

J17 Baxter to Mornington branch line

The Mornington Station ground was sold after this branch line was closed. The remainder of the line is being developed by the Mornington Preservation Society, a community-based group that operates from a station yard and workshop at the former Moorooduc Station. It is proposed for use as a tourist railway.

J18 Coldstream to Healesville line

Although closed to service, this line retains its track and has been redeveloped as the Yarra Valley Tourist Railway. The community-based group running this railway operates a motorised trolley service between Healesville and Yarra Glen and is based at the former Healesville Station ground.

Note: Yering Station grounds contain remnant Kangaroo Grass community with Swamp Gum and various wattles. (added by LCC)

Emerald (Puffing Billy) Railway (see Recommendation F4)

PARKLANDS AND GARDENS

Victoria has a long tradition of establishing parklands and gardens. Many have been developed by local communities who have strong attachments to such areas. Some have been developed as formal botanical gardens, while others are private gardens that have been acquired by the Crown. Ornamental plantations and arboreta have also been developed.

Community parks offer a place for children to play, and for adults to relax or walk. All the parklands and gardens provide opportunities for informal and passive forms of recreation, while many also have important landscape, historical and aesthetic values.

The Dandenong Ranges include a number of gardens and arboreta of particular interest. By the turn of the century the area had become a place the wealthy retreated to, to escape the summer heat of the Melbourne plains. Formal gardens were often an integral part of the grounds, but they were very expensive to maintain and many have now been subdivided and replaced by urban development, or burnt out in bushfires. Remnants of this era continue, however, and smaller gardens have been established.

Several of these gardens are now within the public land estate - in particular, the George Tindale Memorial, Pirianda, National Rhododendron and Alfred Nicholas Memorial Gardens and Ferny Creek Horticultural Society Reserve - and are open to the public.

Parklands and gardens

Recommendations

- J19** That the areas listed in Table 20 below (some of which are indicated on the maps), be used in accordance with the general recommendations for Community Use Areas outlined above
- and
 - (iv) as gardens, community parkland or ornamental plantations
 - that
 - (v) the conservation, scientific, educational and historical values of botanic gardens be protected
 - and that

- (vi) they be available for public use for passive open space recreation, appreciation and education, as determined by the land manager.

Note: Where these retain indigenous vegetation it should be protected.

Additional recommendation (See Order in Council 17/6/1997)

The area on the western side of R J Hamer Arboretum (previously part of A6 Addition to Dandenong Ranges National Park) to become J19 parklands and gardens; this area is to be managed by Parks Victoria.

Note: The stands of indigenous vegetation on the western edge of the arboretum should be conserved, and pedestrian access through this section of the Arboretum, to the Olinda block of the adjoining Dandenong Ranges National Park should be maintained.

Table 20: Parklands and Gardens

Parish or Township	Description	Area (ha)	Parish or Township	Description	Area (ha)
T. Alexandra	CA 3 Sec 21A	6.48	P. Monbulk	CA 33 Sec G	3.89
T. Alexandra	CA 5A Sec 65A	0.73	<u>George Tindale Memorial Gardens</u>		
T. Alexandra	CA 8C Sec 65A	0.08	P. Monbulk	CA 3, 8, 9 , 10 Sec O	36.31
T. Crib Point	Part Sec 6	0.01	<u>National Rhododendron Gardens</u>		
	(added by LCC)		(added by LCC)		
T. Diamond Creek	Part CA 2 Sec 10	0.09	P. Monbulk	CA 2B, 2C Sec G	11.92
T. Diamond Creek	Adj. CA 1 Sec 1	0.05	Ferny Creek Horticultural Society Reserve		
T. Dromana	CA 1, 3 Sec 1A	1.08			
T. Drouin	CA 22, 23, 24 Sec 12	0.50	P. Monbulk	CA 38, 39 Sec C	7.97
T. Drouin	CA 17, Sec 8	0.55	Piranda Gardens		
	(added by LCC)				
P. Drouin West	CA 86A	0.31	T. Mornington	CA 2A, 2B Sec 5	0.41
P. Eildon	CA 5F	1.28	T. Mornington	Part CA 8A Sec 1	
P. Eildon	CA 5D	2.66	<u>Mornington Park</u>		(added by LCC)
T. Eltham	Adj CA 9-15 No Sec	4.86	P. Neerim	CA 175C	0.10
T. Healesville	CA 2 Sec 7	3.81	T. Noojee	CA 17, 18 Sec 3; CA 24, 25 Sec 1	2.05
T. Jamieson	CA 1A Sec 11	0.06	P. Scoresby	Part CA 72F	0.09
P. Keelbundora	CA 16G	2.51	T. Seville	CA 30A	0.56
T. Korumburra	Adj CA 25 Sec 3	0.34			
	(added by LCC)				
T. Korumburra	CA 6 Sec L	0.10	T. Sorrento	CA 10, 11 Sec 2	4.35
T. Korumburra	Part CA 49, 49A Sec 6	6.00	<u>Sorrento Park</u>		(added by LCC)
T. Korumburra	CA 26 Sec Q	1.00	T. Trafalgar	CA 16 Sec 11	0.98
	(deleted by LCC)				
T. Korumburra	Part CA 45 Sec R	7.76	T. Wonthaggi	CA 4A Sec 117	0.30
	(deleted by LCC)				
T. Korumburra	CA 6 Sec L (duplicate)	0.10	T. Wonthaggi	CA 36 Sec 117	1.95
T. Lilydale	CA 3 Sec 13	0.60	T. Wonthaggi	CA 19, 20 Sec 66	0.49
P. Moe	CA 138L (Thorpdale)	0.28	T. Wonthaggi	CA 17 Sec 47	0.55
	(added by LCC)				
P. Monbulk	CA 14B Sec G	13.30	T. Wonthaggi	CA 5A Sec 20	0.34
Alfred Nicholas Memorial Gardens			T. Wonthaggi	CA 3 Sec 7	0.31
Note: The indigenous vegetation of this area and its value as a wildlife link should be maintained.			T. Wonthaggi	CA 19 Sec 9	0.25
			T. Wonthaggi	CA 10 Sec 3B	3.97
P. Monbulk	R J Hamer Arboretum		T. Wonthaggi	CA 6, 7, 8 Sec 32	0.32
Note: This area has important scenic values			T. Wonthaggi	Part CA 5 Sec 3C	8.00
			(added by LCC)		
P. Monbulk	CA 33 Sec G	3.89	T. Wonthaggi	CA 5 Sec 86	1.91
George Tindale Memorial Gardens			(added by LCC)		
			T. Yarragon	CA 26 Sec 10	0.49
			T. Yea	CA 12, 12A Sec 14	0.43

William Ricketts Sanctuary

P. Mooroolbark CA 6A, 15B, 5C Sec 2 10.20

Notes:

1. This area has indigenous vegetation that is of value as a wildlife habitat link to adjoining areas, and should be protected.
2. The Victorian Conservation Trust is the committee of management for these area. If in future management responsibility reverts to the crown, consideration should be given to adding the area to the adjoining Dandenong Ranges National Park.

Reservoir parks

Several formal picnic areas have been developed over the years by Melbourne Water at water storages constructed as part of Melbourne's water supply system. Most are located adjacent to the storage but outside the relevant catchment, and provide for an intensity of recreational use not permitted in the catchments or in conservation reserves. They include formal lawns and plantings, picnic and toilet facilities, walking tracks and lookouts. Some have native bushland areas. Following a restructure of Melbourne Water, these areas are to be managed separately by Melbourne Parks and Waterways.

Reservoir parks

Recommendations

J20—J27 That the following reservoir parks be used in accordance with the general recommendations for parklands and gardens above and that they continue to be managed by Melbourne Parks and Waterways.

J20 Sugarloaf (456 ha)

Most of the immediate catchment to this storage is included, for recreational purposes only. Sailing is permitted on much of the reservoir via Gate 11, and other access points lead to Ridge and Saddle Dam picnic areas. Water from Sugarloaf is fully treated, and the whole catchment is part of Melbourne Water's water supply responsibilities.

J21 Maroondah (126 ha)

The Maroondah Reserve parkland, picnic and barbecue areas and adjoining bushland towards Sawpit Creek, containing walking tracks, are included.

J22 Upper Yarra (70 ha)

This park includes the area west of the dam spillway, between the Yarra River and the Upper Yarra aqueduct.

J23 Silvan (30 ha)

Picnic and barbecue areas adjoin Stonyford Road.

J24 Thomson (12 ha)

The area has fireplaces, picnic tables and toilets and an outlook over the dam wall and storage.

J25 Cardinia (247 ha)

Sailing is permitted on Aura Vale Lake, and the park includes Bob's, Henley and Crystal Brook picnic areas and Duffy's Lookout.

J26 Tarago (29 ha)

The park comprises the picnic area beside the wall, and bushland adjoining the Tarago River downstream from the reservoir.

J27 Devilbend (5 ha)

Picnic tables and barbecues have been established on both sides of Graydens Road.

Healesville Sanctuary (31 ha)

The Sir Colin MacKenzie Zoological Park - Healesville Sanctuary - has an important and established role in providing the opportunity to view Australia's unique fauna, for Victorians and for many visitors. It also provides major educational and recreational services associated with the faunal displays, and carries out research and conservation programs - in particular, the captive breeding programs for several endangered species.

Healesville Sanctuary

Recommendation

J28 That the Healesville Sanctuary be used in accordance with the general recommendations for Community Use Areas above

that

(iv) it be available for public use for passive recreation, appreciation and education, where appropriate and as determined by the managers

and that it continue to be managed by the Zoological Board of Victoria.

Note: This area includes Lake Corranderrk and the adjoining plantations of trees used to feed the Sanctuary's koala population.

BUILDINGS IN PUBLIC USE

Public buildings are used for a wide range of community uses, including education, recreation and tourism. They may have a single purpose, such as for museums or libraries, or multi-purposes such as public halls and schools, which have various associated facilities and are increasingly used by the community. These buildings are distinguished from those used as public offices (and categorised as Services and Utilities) by their use by a cross-section of the community, whereas public offices are largely used by the employees of departments or authorities.

Many older public buildings constructed as Mechanics Institutes and court houses may now be utilised for other public uses. They may provide a focus for community activities, such as shows, dances and markets. Many such buildings, in addition to having value as venues for other activities, have historical or aesthetic values in their own right. Those with the most significant historical values have been included as historic and cultural features reserves - (see Chapter F).

Shire Councils are often appointed as committees of management for Crown reserves and buildings under the *Crown Land (Reserves) Act 1978*. This delegation of management is a common and appropriate procedure, unless sensitive environmental or community values require direct departmental management. CNR remains as the general manager in most cases and it is that role the management recommendations refer to.

Public buildings may be sub-let to particular groups on a commercial or semi-commercial basis. As community needs change over time, buildings or sites no longer used for their original primary purpose should be assessed for their cultural heritage values and capabilities for other community or public uses. In some instances it may be appropriate to consider their reclassification.

Buildings in public use

Recommendation

J29 That the buildings listed in Appendix VII (some of which are indicated on the maps) and their surrounding sites be used in accordance with the general recommendations for Community Use Areas outlined above

and

(iv) for schools, public halls, kindergartens, libraries, museums, galleries, war memorials, tourist facilities or other public uses

that

(v) should a building or site no longer be required for its primary designated use, it be assessed for its cultural heritage values and capability for other public uses, as part of the process of consideration for re-classification outlined in Chapter N

and that they continue to be managed by the relevant department or agency.

Additional Recommendation tourist facilities in public use (See Order in Council 17/6/1997)

That the Mount Dandenong Observatory Reserve (previously part of A6 Addition to Dandenong Ranges National Park) be added to J29

K. PLANTATIONS

PLANTATION PLANTING GUIDELINES

In its final recommendations for the Melbourne Study Area in 1977, the Council provided a set of guidelines for the establishment of softwood plantations. These guidelines were based on the principle that the impact that large plantations of softwood have on the natural environment can be reduced by retaining selected areas of native vegetation and by adhering to catchment prescriptions.

Most of these principles are now incorporated in the Code of Forest Practices for Timber Production (CFP) which was ratified by Parliament in May 1989 and applied to all Crown land.

In recent years controls have been put in place to encourage the retention of native vegetation in the State. Further, as a result of ratification in October 1993 of Amendment S13 to the *Planning and Environment Act 1987*, which is applicable to all planning schemes in Victoria, the CFP now applies to all private land used for commercial timber production, including the establishment of plantations.

Whereas the Code states that native forest must not be cleared to provide land for State softwood plantations, Amendment S13 limits the degree to which native vegetation may be removed for the establishment of plantations on private land. It specifies that the provisions of the Amendment do not apply if the native vegetation comprises regeneration less than 10 years old on previously cleared land, is a proclaimed noxious weed (or bracken) or if the extent of non-native species (as ground cover or numbers of species) exceeds that of native species.

The CFP specifies that plantation design must take into account the following principles.

- Existing riparian and other native vegetation within a minimum distance of 20 m from permanent streams, swamps and bodies of standing water must be retained. Where previous clearing has extended to the banks of permanent streams, a strip of species native to the area should be established (taking care to minimise land disturbance) or allowed to regenerate to ensure adequate stream protection, except where the Forest Management Plan allows alternative species to be planted.
- New plantations must be confined to areas with ground slopes generally less than 30°, with lower slope limits being applied in areas of high erosion hazard. Where existing plantations are growing on slopes greater than 30° they may be replanted with commercial plantation species where soils are stable and erosion hazard is low.
- Sites on public land known to contain significant populations of rare or endangered species or vegetation types, and other areas of conservation significance, together with an appropriate reserved strip around the site, must be excluded from planting.
- Strategic areas may be designated to be maintained as cleared fire-breaks.
- Boundary margins must be retained as prescribed for State forest by the Department of Conservation and Natural Resources (CNR) or by planning provisions for other land.
- Landscape values must be maintained on public land where careful assessment and planning has identified areas of high landscape sensitivity.

Other sections of the CFP provide for environmental protection during harvesting operations.

Provided the provisions now in place in Victoria for retention and protection of native vegetation remain, the Council endorses the provisions of the Code of Forest Practices for Timber Production as it applies to hardwood and softwood plantations.

In addition, the consent of National Electricity should be sought before establishing a plantation within 20 m of a power line.

VICTORIAN PLANTATIONS CORPORATION

The Victorian Plantations Corporation was established under the *State Owned Enterprises Act 1992*. Through additional powers conferred under the *Victorian Plantations Corporation Act 1993*, the Corporation is responsible for the establishment, maintenance and management of timber plantations on land managed by or vested in it. It became operational on July 1st, 1993.

Public land vested in the Corporation is listed on a schedule to the 1993 Act. The Corporation may also purchase land in its own right. The majority of the lands vested in or managed by the Corporation support softwood plantations, although the schedule also includes hardwood plantations in the Strzelecki Ranges in South Gippsland. All the plantation areas were previously the responsibility of CNR.

Portions of the vested lands include remnant native forest - generally along streams, on steeper slopes or along plantation margins, although some of the vested lands may also include larger blocks of native vegetation that may have nature conservation or landscape value. It is important that these areas are protected and the Council considers that such protection can be achieved through the CFP. The Council therefore believes that the VPC should be treated as any other landholder with respect to the establishment and maintenance of plantations.

Tracks through some of the vested lands may be used to gain access to adjoining areas for recreation or may themselves be used for pleasure driving. Opportunities for such recreation should continue to be provided.

HARDWOOD PLANTATIONS

The Timber Industry Strategy (TIS) in 1986 discussed the environmental value of reforestation programs. The Strategy noted that the establishment of native hardwood plantations on cleared land in strategic locations by both the government and private industry was of particular interest. Management of the plantations would be for intensive wood production, with the purpose of relieving pressure on native forests for wood production.

Whereas the Council maintains that the production of pulpwood from State forests should (with the exception of silvicultural or salvage works) be tied to the harvesting of sawlogs in integrated operations (see Recommendation E2), it is of the view that harvesting of plantations need not necessarily be sawlog-driven.

Victoria's State hardwood plantation estate currently totals about 10 840 ha, of which a net area of about 7500 ha is in the Strzelecki Ranges. Few such plantations occur on public land in the study area, although small areas at Childers and Allambee - on the western edge of the Strzelecki Ranges - were planted with mountain ash in the 1940s and additional areas of former softwood plantations here are being planted or seeded with hardwood species.

APM Forests Pty Ltd (a subsidiary of Australian Paper - which was recently formed by the merger of Australian Paper Mills and Australian Pulp and Paper Manufacturers) owns and leases extensive areas for hardwood plantations outside the study area in the Strzelecki Ranges and near Maryvale. The company also recently established blue gum plantations on Generation Victoria land in the catchment to Anderson Creek, north of Yallourn.

Some people have suggested that greater emphasis should be placed on creating ash eucalypt plantations to reduce the need for harvesting native forests. Australian Paper considers that few additional areas of freehold land that are technically suitable for ash eucalypt plantations can be found in Victoria. Most of the suitable land in the State is public land, where restrictions on the clearing of native vegetation inhibit the development of plantations.

SOFTWOOD PLANTATIONS

Victoria's softwood plantation estate covers some 226 400 ha, comprising about 109 400 ha of State plantations and some 117 000 ha of private. About 1800 ha of the State softwood plantations were established under the School Endowment Plantation Scheme.

Victoria has the highest level of private investment in plantations in Australia, representing about 48% of the total area, compared with the national average of 28% under private ownership. About 72% of the private plantations in the State are owned by three companies. The largest holding - by APM Forests Pty Ltd in central and south Gippsland - amounts to some 42 000 ha.

Sawlog supplies from State plantations are expected to double in the next 10 years and to treble within 30 years.

Chapter E - Timber Production and State Forest - discusses the expansion of softwood timbers into the traditional markets of hardwood sawn timber and the respective roles of both hardwoods and softwoods in the future of the timber industry in general.

Eight softwood sawlog management areas have been identified in the State. Three - Latrobe, Benalla/Mansfield and Central - overlap with the study area.

On the basis that there are insufficient resources to enable the expansion of all plantation areas to sizes sufficient for each to support large integrated industries, the TIS identified plantation establishment targets for each of the softwood management areas. The aim was to concentrate plantation establishment in areas where a minimum of planting would support large-scale integrated industries and where the government has commitments to supply wood under legislative agreements, and to consolidate smaller-scale plantation projects to a size suitable to supply a viable sawmilling and timber-preservation industry. The impact of that strategy was to consolidate future plantation establishment in the north-east of the State and the Latrobe Valley.

Table 21 indicates the extent of softwood plantations in the study area.

Table 21: Softwood Plantation Areas (Melbourne Area, District 2)

Location	Gross area (ha)	Net area (ha)	Period planted	Management area
Eildon (Delatite Arm)	2 780	1 932	1959–1968	Benalla/Mansfield
Kinglake West	1 440	1 116	1970s	Central
Buxton, Taggerty and Narbethong	4 360	3 714	1970s	Central
Loch Valley	1 360	989	1960–present	LaTrobe
Neerim East and Shady Creek	1 500	1 202	1972–1985	LaTrobe
Moondarra	790	621	1969–1973	LaTrobe
Allambee and Childers	1 310	568	1975–present	LaTrobe
Total	13 540	10 142		

Notes:

1. These areas represent 14%, 100% and 13% of the government's target plantation area for the Latrobe, Central and Benalla/Mansfield Management Areas, respectively.
2. The figures refer only to those plantations within the study area and do not include plantations under the control of authorities other than the Victorian Plantations Corporation and CNR.
3. Not included in the figures is a small plantation at Narbethong, which will be returned to native vegetation following harvesting of the pines.

Source: Gross areas measured from VPC schedule maps; balance derived from Forest Resources Information and Yield Regulation, No. 10 - Plantation Area Statement; CNR

Under the TIS, the plantations in the Central Management Area would remain at the current area of about 4900 ha for the supply of sawlogs. On its own, this area is insufficient for a large-scale sawmilling industry.

Similarly, the plantations beside the Delatite Arm of Lake Eildon, now controlled by the Victorian Plantations Corporation, were not to be expanded. They form part of the consolidated Benalla/Mansfield-Ovens-Upper Murray Management Areas.

The major industries currently based on this resource include an integrated pulp mill and sawmilling complex at Myrtleford (Australian Forest Industries - a division of Bowater-Scott Australia Ltd) a pulp mill at Albury (Australian Newsprint Mills Ltd) and a particle-board plant at Benalla (Monsbent Pty Ltd). Supplies of materials to these companies are by long-term agreement. The complex at Myrtleford draws some softwood sawlogs and veneer logs from the Delatite area.

Additional areas of softwood plantation in the Latrobe Management Area will provide part of the raw material for a major expansion of pulp- and paper-making by Australian Paper and the sawmilling industry in the Latrobe Valley. The *Forests (Wood Pulp Agreements) Act 1974* guarantees Australian Paper (previously APM) increasing supplies, reaching 100 000 cu.m per year in 1999/2000, and 200 000 in 2004.

In the 1991/92 period, State plantations supplied some 69 000 cu.m of the total of 695 000 cu.m of pine pulpwood received by the Maryvale pulpmill.

The State's plantation resource is intended to complement the large private plantation resources in the Latrobe Valley so that these together ensure wood flows to allow the integrated industries to operate at internationally competitive levels.

The State softwood plantation resource in the study area contributes to the sustainable yield of softwood timber from the Latrobe and Benalla/Mansfield Management Areas.

Periodic thinning of plantations to remove weaker and poorly formed trees maximises the production of veneer logs and sawlogs. Trees felled in the thinning operations may be used to produce small sawlogs, fencing timbers (and other products that utilise roundwood) and pulpwood.

As well as timber production, many plantations have other important uses.

- A substantial part of the Narbethong plantation is managed to demonstrate the growth potential of a range of exotic coniferous species. This plantation also includes popular picnic sites.
- Many camping facilities have been provided throughout the plantation beside the Delatite Arm of Lake Eildon and are in very heavy demand through out summer. This plantation and the adjacent native forests of Eildon State Park provide settings for considerable recreational

opportunities, mostly water-based.

- Some of the plantations are heavily used for such activities as trail-bike-riding along roads and formed tracks.

A few timber-processors use softwood timber produced within the study area and have processing plants located within it. The sawmills located at Narbethong and Crossover are examples.

Plantations within the study area provide a small proportion of the requirements for large industrial developments producing a wide range of timber products at locations that include Benalla, Myrtleford, Albury and the Latrobe Valley.

Some areas recommended by the Council for softwood plantation establishment in 1977 were not planted. These are located at Mount Robertson (Kinglake), in the Acheron Valley and at Mount Carmel near Moe. More recent information indicates that the land at Mount Robertson is, at best, marginal for softwood production and should not be used for that purpose. It now appears that the additional softwood plantations in the Acheron Valley are no longer required.

In 1982, at the request of the government, the Council conducted a special investigation of the Hill End area in order to make recommendations on the best use of the land, including the extent to which it might be used to fulfil the government's commitments to increased softwood establishment and to replacement of land acquired from APM.

Subsequently, in 1983, the Council recommended that some 1410 ha net at Harold Creek, 1480 ha net at Good Hope Creek and 780 ha net at Serpentine Creek could be used for softwood plantation establishment if the government decided that forested public land should be available for that purpose.

Following the change of government in 1982, the policy with respect to using forested public land for softwood plantations was changed so that no further areas of public land carrying native forest were available for softwood production. The result was that the Council's recommendations for additional plantations on public land in the Hill End area were not accepted and the land still remains under native forest.

As an alternative to using forested public land, the government was exploring strategies whereby softwood supply commitments may be met by plantations developed by private companies on freehold land, private farm forestry (through the introduction of a plantation sharefarming scheme) and the purchase of suitable land by the State for plantation purposes. The Council supports such proposals in appropriate areas.

In the years following those recommendations, emphasis on the establishment of new plantations, particularly in the Latrobe Region, has changed from softwood to hardwood. This has occurred largely because APM is using an increasing amount of hardwood pulp in its paper-making processes.

Forest areas

In its recommendations in 1977, the Council noted that the establishment of softwood plantations constitutes a major change from any natural ecosystem that they replace.

Adjacent areas of vegetated public land that have nature conservation and/or landscape values therefore play an important role in maintaining local balance in land use. These areas are also important for protecting the softwood resource from fire. Accordingly, the Council designated

these areas as 'forest area'.

Forest areas could be used for:

- conservation of fauna and flora and the preservation of scenic values
- protection of the adjacent area of softwood plantation
- low-intensity hardwood production, recreation, education, forest grazing, honey production and mining, where these activities do not conflict with conservation and preservation of natural and scenic values
- protection of water supply and catchment areas

The uses of forest areas differ little from those of State forest in general, particularly those areas of State forest that are not highly timber-productive. Accordingly, in these recommendations, the Council has included the previously recommended forest areas within the broader category of State forest (see Chapter E) and has referred to the need to protect landscape values in the near vicinity of plantations.

PLANTATIONS

Recommendations

Plantations vested in the Victorian Plantations Corporation

K1 That:

- (i) the existing plantations, indicated on Map A, be used to produce forest products and to provide other goods and services and opportunities for education and recreation where appropriate and compatible with the primary use
 - (ii) assessment of proposals for the establishment, tending and harvesting of plantations on land vested or owned by the Victorian Plantations Corporation be based on the same definitions and principles that apply to private landholders under Amendment S13 to the *Planning and Environment Act 1987*, which applies to all planning schemes in Victoria
 - (iii) wood production from plantations not be constrained by the necessity to produce sawlogs
- and that
- (iv) the habitat of the Narracan burrowing crayfish be protected (see Note 8).

Notes:

1. These areas have been vested in and are managed by the Victorian Plantations Corporation and total about 10 760 ha.
2. The total area of plantations stated in Note 1 above includes about 70 ha (net) of hardwood plantations. These are not identified separately from softwood plantations on the map.
3. Council is aware that it may be necessary to amend the *Victorian Plantations Corporation Act 1993* to ensure the provision and management of non-plantation values, such as recreation.
4. Where parcels of native vegetation (as defined in Amendment S13 to the *Planning and Environment Act 1987*) have been included within the boundaries of land vested in the Victorian Plantations Corporation, these and any special floral, faunal or landscape values they contain would be retained and protected under the provisions of the Code of Forest Practices for Timber Production.
5. The above recommendation excludes the part of the West Kinglake Education Area that has been vested in the VPC. Council considers that this area should be removed from the Schedule to the *Plantations Corporation Act 1993* and reserved under the *Crown Land (Reserves) Act 1978* as a Community Use (Education Area) Reserve; see also Chapter J.
6. The recommendation also excludes a small area of existing softwood plantation at Narbethong (not indicated on the map), which is to be returned to native vegetation following harvesting.
7. The recommendation does not refer to the Australian Paper's hardwood plantations in the Anderson Creek catchment (see Recommendation K5 below). Nor does it refer to the 420 ha of softwoods established by Australian Paper on land owned by the Latrobe Region Water Authority (Gippsland Water) in the catchment to the Moondarra Reservoir (see Recommendation E8).

8. The watercourses and adjoining slopes within the Childers and Allambee plantations provide habitat for the Narracan burrowing crayfish, which is of limited distribution in south Gippsland. Council notes that protection of this species is required under the provisions of the *Flora and Fauna Guarantee Act 1988*.

Delatite plantation

K2 That the softwood plantations at the Delatite Arm of Lake Eildon, indicated on Map A and totalling about 2780 ha, be used to produce forest products and to provide other goods and services and opportunities for education and recreation where appropriate and compatible with the primary use.

Note: Excluded from the above recommendation is the Delatite Arm Reserve - a popular camping area along the shores of Lake Eildon - for which separate regulations apply.

Planned plantations no longer required

K3 That the land at Mount Robertson and in the Acheron Valley (Central Management Area) and at Mount Carmel (Latrobe Management Area), recommended for softwood production in 1977 in the final recommendations for the Melbourne Area but not planted, be State forest and not be used for softwood production.

K4 That the land at Harold Creek, Good Hope Creek and Serpentine Creek (Latrobe Management Area), recommended for softwood production in 1983 in the Council's final recommendations following the Hill End Special Investigation but not planted, be State forest and not be used for softwood production.

Anderson Creek - land for agriculture or forestry

In August 1986, the Council was directed to investigate land surplus to the requirements of the former State Electricity Commission (SEC) and certain areas of uncommitted public land in the Latrobe Valley. Part of the area covered by that Latrobe Valley Special Investigation now falls within the Melbourne Area, District 2.

The ensuing final recommendations (published in October 1987) included provision for possible plantations on some 1470 ha of land at Anderson Creek within the Parish of Tanjil East, which the SEC identified as not required at that time, but which will be required for coal-related development, principally the dumping of overburden, in the future.

Council's recommendation for this area, accepted by the government, included that:

- it be available for agriculture or forestry under lease from the SEC until required for coal-related development softwood plantations not be established on the land unless there is a reasonable expectation that it will not be required for coal-related development for at least 15 years following expiration of then-existing leases
- the land not be considered for softwood plantations until following expiration of the then-existing leases.'

The successor to the SEC, Generation Victoria (see Chapter M), has indicated that the Anderson Creek area may be required for the dumping of overburden from open-cut mining operations some 30 years from now, at the earliest. Accordingly, APM Forests Pty Ltd has been permitted to establish hardwood (blue gum) plantations over much of this land as part of the electricity industry's contribution to greenhouse 'credits' and as a source of wood fibre for Australian Paper.

Generation Victoria has sought flexibility in the future use and tenure of the Anderson Creek land, including the ability to sell it to a private (or privatised) body.

Anderson Creek

Recommendation

K5 That the area of 1470 ha at Anderson Creek, indicated on Map A be available for agriculture or forestry until required for coal-related development.

Notes:

1. See also Recommendation O3.
2. This recommendation would not preclude the sale of this land to a privatised government body or a private body.
3. In the event that softwoods are planted here, Generation Victoria will determine the appropriate fire protection measures in consultation with the Department of Conservation and Natural Resources.
1. Plantations should not be established on land overlying the Esso—BHP oil pipelines and the Gas and Fuel Corporation natural gas pipeline, which pass through here.

SCHOOL PLANTATIONS

Throughout the study area, numerous small areas of public land have been set aside for school endowment plantations as part of various schools' educational resources.

The plantations were initially established to instil, through community involvement, a love of forests and an appreciation of their value. Many of them are well suited for regular use as a teaching resource of this nature. It is expected that this use will increase as courses embracing various aspects of environmental science are developed.

Many school plantations are of radiata pine, and are used by the schools to provide amenities through revenue raised from the sale of produce. In some cases these plantations have not been very successful in providing revenue, as the sites proved unsuitable for economic growth, the plantations were too small, or the location too far from processing centres to allow economic harvesting. In some instances, radiata pine plantations have failed because of poor management.

Council believes that all the existing school plantations should be assessed in order to establish their value as a teaching resource.

Those that are not now needed or that are unsuitable for teaching purposes for some reason, such as their location, should be terminated. Those planted to radiata pine that have limited value as a teaching resource although satisfactory for wood production may continue to be used for such production, but should be reviewed when the pines are harvested.

Unused sand or gravel pits, or cleared areas such as former school sites, require rehabilitation or revegetation. Council considers that, in some instances, such areas could be used as school plantations.

Their rehabilitation not only could be used to demonstrate various aspects of environmental science but also could provide an opportunity to involve pupils in projects that are clearly in the public interest.

School plantations

Recommendations

K6 That areas set aside for school plantations be primarily used as a teaching resource and utilised to foster awareness and knowledge of the trees and other living organisms that comprise a forest.

Note: This recommendation does not exclude the use of school plantations as a means of raising revenue for schools. Such use, however, should be secondary to the educational use.

K7 That the value of each existing school plantation as a teaching resource or for revenue production be assessed by the Department of Education - in consultation with the Department of Conservation and Natural Resources

and that the use of those considered unsuitable or no longer required be terminated.

K8 That new school plantations be established on public land only for educational purposes and where their establishment allows the rehabilitation or reforestation of cleared or eroded areas.

L. EARTH RESOURCES

During the development of its recommendations for the Wilderness Special Investigation (published in November 1991), the Council undertook a major review of its policy relating to the exploration and extraction of minerals, petroleum and groundwater. Given that the revised policy concentrated on wilderness areas, it considered that a wider-ranging review of its policy was timely, given the development of new legislation, changes to exploration and mining techniques and changed community perceptions regarding the protection of significant conservation values. Accordingly, Council developed a provisional revised policy, which it published for comment in the proposed recommendations for Melbourne Area, District 2. A range of views was put forward in submissions and discussions. Council has subsequently considered further revisions to its policy, but is yet to resolve some issues of detail. In the interim, the provisions relating to exploration and extraction of earth resources, as set out in existing State legislation, prevail.

Exploration and extraction of stone

Materials covered by the definition of 'stone' in the *Extractive Industries Act 1966* (including rock, gravel, clay, sand and soil) are widespread in the State. There is a strong community demand for new and better roads and buildings, and so for the materials necessary for their construction. Most of these materials are provided from private land, but public land is also an important source - particularly for road-making material - and industry believes it could become more important in the future.

Council is concerned by the complexity of legislation and procedures governing extraction of stone. (For example, the Roads Corporation and municipal councils are not bound by many provisions of the *Extractive Industries Act 1966*.) It maintains that a number of problems need to be addressed.

- A review of existing legislation and procedures should be carried out to enable more rational use of the stone resources of the State.
- The government should provide adequate resources for the reclamation of old extraction sites on public land.

Principles and Guidelines

Poorly planned and located excavations can affect surrounding lands through noise, dust, unsightliness, and erosion and can diminish the value of the land. With care, however, these effects can be avoided or minimised. In this context, Council believes that the following principles and guidelines should be taken into account:

1. Consultation should continue between the land manager, the Department of Energy and Minerals and the other relevant authorities with respect to the procedures to be adopted for the exploration and extraction of stone on public land. Any operations on public land should continue to be subject to the approval of the land manager. In all cases, the procedures that are established should apply to municipal councils, the Roads Corporation and other public authorities as well as to commercial operators. To ensure this, the relevant Acts may have to be amended.

The Council endorses the system established under the *Extractive Industries Act 1966* that seeks to ensure that, before work commences, funds are available for progressive and final reclamation of any excavation or operation.

2. Provision should be made to enable acceleration of the rehabilitation of all existing extraction areas on public land.
3. Royalties for materials extracted from public land, including site rental when appropriate, must be more closely related to the market value of the material. This would eliminate any temptation to use public land purely on the grounds of the nominal royalties sometimes levied in the past.
4. No sites for the extraction of stone should be opened in areas that the land manager, in consultation with the Department of Energy and Minerals, considers to be of greater value for other uses, including aesthetic or nature conservation values. The advice of the Department should also be sought as to the desirability of proposed excavations, having regard to alternative sources of stone.
5. Extraction of stone should generally be concentrated on the fewest possible sites in an area, recognising the need for appropriate competition between suppliers. Depending on the quality and type of material, any one site should be substantially worked out and where possible reclamation ensured before work at a new site commences. The type of excavation to be carried out should be that with the lowest environmental impact consistent with the effective use of the resource. In general, and where the nature of the resource permits, excavations for stone should be deep and limited in area in preference to shallow excavations over a wide area. The extraction of granite sand occurring as shallow deposits in the weathered profile should be discouraged unless it has been established that no suitable alternatives are available. In the special circumstances where approval is given for this form of extraction, particular attention should be given to the prevention of soil erosion.
6. Where an application for the removal of stone from a stream-bed is considered, the land manager should take particular care to ensure that the operations will not directly or indirectly cause erosion of the bed or banks, or undue pollution of the stream. In addition to the arrangements outlined above for extraction of stone, the land manager should also consult with the relevant water supply and conservation authorities, and should consider the scenic and recreation values of the area. Alternative sources with a lower environmental impact should be used where they are available. The environmental effect of extraction may be reduced if alluvial stone is obtained from properly managed quarries on the river terraces, rather than from the present stream-bed.
7. All extraction sites should be fully reclaimed where possible. Reclamation should follow extraction progressively when possible, but otherwise should begin immediately extraction is completed. The requirements for reclamation should continue to be included in the conditions of the lease or licence before any approval to extract is granted. The reclamation may include, for example, replacing topsoil, revegetating the site with plantation forest, allowing a quarry to fill with water and developing the site as a park, using a gravel pit for off-road vehicles, using a quarry for garbage disposal prior to reclamation or restoring the site as closely as possible to its original topography and revegetating it with species native to the site.

Sand

For many years, Melbourne's principal source of building sand has been the Heatherton/Dingley area, but this resource is nearing exhaustion. More recent supplies have come from the Cranbourne and Langwarrin areas and these, although also being depleted, are likely to last for about 10 years.

Most of the current supplies are derived from freehold land, but some areas have become unavailable not necessarily due to exhaustion of the resource but due to urban development of the supply area or restrictions arising from planning controls.

As transport costs form a significant component of the delivered price of the sand, a resource relatively close to the Melbourne market is sought. New resources are therefore likely to be sought from further east and south-east of greater Melbourne. Consequently, the southern part of the study area is becoming the focus of interest and four main areas of potential supply have been identified - Gurdies/Grantville/Lang Lang, Inverloch/Ellerside and sites north of both Yarragon and Yallourn.

Although these areas of interest encompass both public and freehold land, current tenements and applications focus on Crown land, probably because public land is considered to be more readily accessible than freehold land.

The Gurdies/Grantville/Lang Lang area covers some 18 400 ha, about 10% of which is public land. It is the closest to Melbourne and is subject to the most detailed resource assessments. The total resource is estimated at 330 million tonnes, equivalent to between 35 and 50 years' supply. Use of the resource here is constrained to some extent by planning controls, problems with a high water table and conflict with flora and fauna values.

Recommended by the Council in 1977 and ratified in these recommendations, The Gurdies and Grantville Nature Conservation Reserves (see Recommendations C15 and C14 respectively), together with the adjoining stone reserves (Recommendation L1) cover the bulk of the public land in this vicinity.

Current extractive industry leases and/or applications exist at Grantville, The Gurdies and Lang Lang. Most of the applications and existing extraction operations are located on freehold land. The stone reserve in the Gurdies area is currently held under extractive industry licences; the upper batter slopes here are highly visible and require rehabilitation. The northern portion of the stone reserve at Grantville is now included in a services and utilities reserve (see Chapter M). For a parcel of public land overlying the sand resource between Lang Lang and Nyora, however, the Council in 1977 set aside portion as a stone reserve and the balance as 'uncommitted land' - land to be retained as public land and maintained to meet future demands. Following review of the values of the public land at Lang Lang, including the location, nature and extent of the sand resource, the Council proposed that the western part of the area be reserved as a nature conservation reserve and the balance as an earth resources reserve. Part of this area now falls within the recently declared City of Cranbourne and is therefore no longer within the Council's jurisdiction (see Appendix II).

Land for coal-related development

The Council's Final Recommendations for the South Gippsland Area District 2 (1982) identified extensive areas to be managed by the former State Electricity Commission (SEC) for the production of brown coal and associated necessary developments. Where the land was not immediately required, the Council recommended that it be used to:

- provide for existing uses and produce those goods and services required by the community, including agriculture and forestry, where this can be done without seriously reducing the long-term ability of the land to meet future demands for coal production and associated developments
- maintain natural features of the land, where appropriate, until such time as it is required for the winning of brown coal and related activities
- provide sand and gravels where such deposits are located within coal-production areas, prior

to development of the coalfields, in view of the shortage of deposits of sand and gravels suitable for road-making and general construction purposes in the Latrobe Valley.

This recommendation was approved by the government. A small portion of such land in the vicinity of Yallourn North extends into Melbourne Area, District 2 (see Recommendation L2 below).

In 1986 the Land Conservation Council was requested to undertake a special investigation into the future use of certain lands in the Latrobe Valley. These areas included some owned by the former SEC within Melbourne Area, District 2, in the vicinity of Anderson Creek.

In its final recommendations following the Latrobe Valley Special Investigation, published in October 1987, the Council recommended that most of the land owned by the former SEC and required for the Anderson Creek overburden dump be available for agriculture or forestry under lease until required for coal-related development.

This matter is discussed in Chapters K, Plantations, and O, Land Not Required for Public Purposes.

EARTH RESOURCES

Recommendations

Stone reserves

L1 That the areas listed in Table 22, totalling 208 ha and shown on Map A, continue to be used for the extraction of stone in accordance with the principles and guidelines outlined in this chapter and, if not already reserved for this purpose, be temporarily reserved under section 4 of the *Crown Land (Reserves) Act 1978*, with management plans prepared by the Department of Conservation and Natural Resources.

Notes:

1. Road-making materials are extracted from many other areas of public land through the study area. As they are usually short-term surface workings they have not been indicated on the map accompanying these recommendations. However, such sites should be subject to the principles and guidelines outlined in this chapter, especially in relation to their rehabilitation.
2. Materials covered by the definition of 'stone' in the *Extractive Industries Act 1966* include rock, gravel, sand, clay and soil.

Table 22: Stone Reserves

Parish (P) or Township (T)	Description	Area (ha)
P Corinella	CA 97B, 97D	23.04
P Corinella	Part CA 187B	100.00
P Howqua West	CA 99G	0.50
P Howqua West	CA 99E	10.54
P Jindivick	CA 111F	24.50
P Kangerong	CA 7D	11.76
P Loyola	Part CA 76C, 76D	12.63
Note: The pistol club may continue to use part of this area.		
P Maintongoon	CA 14B Sec A	10.52
P Neerim East	CA 47E	1.57
P Wonthaggi	Part CA 26H, and adjacent land in the Township of Wonthaggi	6.90
Note: This area, located within the land subject to recommendation F20(c), may be used as a temporary stone reserve, and following rehabilitation it could be considered for addition to the adjoining reserve.		
P Woolamai	CA 27M	5.89

Land for coal-related development

L2 That the area of 15 ha indicated on Map A continue to be used for those purposes approved by the government following publication of the final recommendations for the South Gippsland Area, District 2, in November 1982.

Lang Lang

The resource here comprises a fine, high-quality silica sand used for glass-making. The area has been worked continuously since 1952 and an estimated 15 years' supply remains. The site includes buildings and a number of facilities for processing the sand. Stands of native vegetation have been retained within the area under extractive industry tenements, principally in the north. The land is being progressively rehabilitated and planted with indigenous species following extraction.

Lang Lang Sand Extraction

Recommendation

L3 That the area of 250 ha shown on Map A continue to be used for the extraction of sand in accordance with the principles and guidelines outlined in this chapter and be temporarily reserved under Section 4 of the *Crown Land (Reserves) Act 1978*, with management plans prepared by the Department of Conservation and Natural Resources and that riparian and wetland plant communities be protected.

M. SERVICES AND UTILITIES

Many services are provided on, and many utilities occupy, public land. They include: transport - roads, railways and ports; electricity and gas installations; communications and survey fixtures; municipal buildings and services; public offices, hospitals, police stations and courthouses; water supply and sewerage services; cemeteries; and other services and utilities.

These recommendations and the maps do not specifically identify many of the small areas used for these purposes, as no change of use is proposed. It is intended that for such areas existing legal uses and tenure should continue.

In past investigations, Council has recommended several different categories for areas used for the services and utilities now referred to in this chapter. Recommendations for roads were contained in 'Roadside Conservation'. Public land used for other services and utility purposes and reserved was in the 'Utilities and Survey' category; if in townships but unreserved it was recommended as 'Township Land'; outside townships, unreserved land used for these purposes was categorised as 'Other Reserves and Public Land; and water supply pipelines, aqueducts, treatment works etc. were included under 'Water Production' recommendations. This chapter aims at simplifying that complexity.

In the absence of firm planning proposals, accompanied by the necessary detailed information, it is not possible for the Council to provide for future requirements of land for services and utilities. The use of land for these purposes will be considered when the need arises.

Agencies concerned with provision and installation of facilities such as communications equipment, transmission lines, ports, pipelines, major water-supply projects or roads are requested to submit proposals - involving occupation agreements or the setting aside of sites on public land - to the appropriate land managers at an early planning stage. Indeed, many agencies are doing this. It assists in achieving co-ordinated planning, and perhaps avoids the necessity for costly resurveys.

Many public land areas used for services and utilities are reserved for their specific purpose, often temporarily, under the *Crown Land (Reserves) Act 1978*. In the following recommendations it is not proposed that these areas be permanently reserved, in contrast with other categories earlier in these recommendations. The nature of some of the services and utility uses is that they are temporary. In such cases, the recommendations below provide for each area's values to be assessed, prior to reclassification.

SERVICES AND UTILITIES

Recommendations

M1, M3, M4, M6—M19, M21 That, subject to any specific additional recommendations below:

- (i) existing reserves and easements used for public services and utilities continue to be used for those purposes
- (ii) new services or utility sites and easements or lines not be sited in or across reference or wilderness areas, and wherever possible not in or across national, State, regional or marine parks, marine reserves or nature conservation reserves

and that

- (iii) should a public land area or building and site used for service or utility purposes no longer be required for its primary designated use, it be assessed for its natural, recreational and cultural heritage values, and capability for other public uses, as part of

the process of consideration for reclassification outlined in Chapter N.

Note: Recommendation **M1, M3, M4, M6—M19, M21(iii)** does not apply to road reserves in the following subdivisions:

<u>Volume</u>	<u>Folio</u>	<u>CA</u>	<u>Parish</u>
<u>6469</u>	<u>693</u>	<u>pt CA 13A sec C</u>	<u>Tanjil East</u>
<u>8331</u>	<u>459</u>	<u>pt CA 7F sec C</u>	<u>Tanjil East</u>
<u>8331</u>	<u>460</u>	<u>pt CA 7G sec C</u>	<u>Tanjil East</u>
<u>8331</u>	<u>461</u>	<u>pt CA 18G sec A</u>	<u>Tanjil East</u>
<u>8331</u>	<u>463</u>	<u>(part title only) pt CA 30E sec A</u>	<u>Tanjil East</u>
<u>8646</u>	<u>277</u>	<u>pt CA 17 sec D</u>	<u>Tanjil</u>

(See Order in Council 17/6/1997)

TRANSPORT

Roadside conservation

The primary purpose of road reserves is obviously to provide for communication, transport and access. However, vegetation along the road verges can have particularly high conservation, recreation and landscape values, especially in agricultural districts where most of the native vegetation has been cleared. Geological features exposed in roadside cuttings are a useful adjunct to more detailed work involved in mapping the geology of an area and are often used as an educational resource.

Nature conservation

Vegetation on roads is important for nature conservation because in some parts of the State it often contains the only remnants of the region's indigenous plant associations. Such remnants are valuable for preserving species with restricted distribution and genetically interesting variants of more wide-spread species. They are often useful in land studies as they may permit the original pattern of the vegetation to be pieced together. They also provide valuable habitat - particularly in tree hollows - for some native animals. In particular, certain road reserves in the north-west of the study area provide habitat for the rare squirrel glider, and the vulnerable grey-crowned babbler is found in several Mornington Peninsula road reserves.

Remnant vegetation along road reserves also has special significance as corridors permitting birds to move through the countryside on annual migration, or in search of food or nesting sites. While some roads retain wide strips of native vegetation, many are mostly cleared or otherwise greatly altered. Valuable remnants of vegetation growing on the verges of some roads should be protected where possible. Of particular note is the vegetation along roadsides in the Seymour—Goulburn Valley, middle Yarra Valley and Mornington Peninsula areas. Often these open roads and road reserves contain the great majority of trees in the landscape.

The *Arthur Rylah Institute for Environmental Research, Technical Report Series* No. 11, September 1984, 'Conservation of Roadsides and Roadside Vegetation', gives a comprehensive review of values, methods of assessment and management of roadsides for the purposes of nature conservation. A Roadside Assessment Manual (Scott 1990) explaining how to carry out roadside assessments has been prepared for the Roadsides Conservation Committee, which comprises representatives from various interest groups and government departments.

Eight municipalities in the study area are presently assessing the conservation values of roadsides within their respective shires, under the auspices of the Roadsides Conservation Committee.

These assessments use a three-tiered classification system (high/medium/low conservation value), forming the basis of a municipality-wide roadside management plan. Only one formal assessment, for the Shire of Hastings, has reached draft form. Where such assessments designate roadsides to be of high conservation value, agencies managing roads should recognise these. In addition, many vegetated roadsides make a contribution to the local scenic landscape and provide some habitat.

Accumulation of fuel along roadsides is a fire hazard of concern to fire-control authorities and in some areas is reduced by burning off during cool weather. This burning off sometimes conflicts with scenic and conservation values and the Council believes that it should be restricted to strategically important areas and kept to the minimum consistent with efficient fire protection. The Roadsides Conservation Committee has prepared a set of guidelines that provide for both conservation and fire protection.

Roadside trees can also play an important role in mitigating the effects and extent of dryland salting. These trees, the only ones remaining in some areas, play a vital part in the interception of saline subsurface moisture.

Recreation and landscape

In rural districts, vegetation along roads is often a major component of the landscape, breaking the monotony of cleared paddocks and accentuating the contours of the land. It provides a pleasant, variable environment for driving, and shady areas for rest and relaxation. The Council believes that as much of this vegetation as possible should be retained when roads are being upgraded. Planning for a major upgrading should consider the feasibility of purchasing a strip of private land in order to preserve good stands of roadside vegetation.

Management

Responsibility for the management of roadside vegetation is vested in various authorities, depending on the status of the road. The most important roads of the State (highways, tourist and forest roads and freeways) declared under the *Transport Act 1983* are completely under the control of the Roads Corporation (9000 km). Main roads (14 500 km) are also declared, but are controlled jointly by the Roads Corporation and local municipal councils. Vegetation on unclassified roads (about 98 000 km of mostly minor roads) is under the care and management of municipal councils, although it is owned by the Crown. The Department of Conservation and Natural Resources (CNR) has the control of vegetation on unclassified roads that pass through or adjoin State forests. (Note: these figures are for all Victoria.)

Back roads

With increasing population and use of cars, a tendency has developed for through-roads in the study area to be continually upgraded. Tree-lined back roads with gravel surfaces on narrow alignments are becoming increasingly uncommon. Yet for many people such roads best fulfil their need for contact with rural environments. The Council believes that a conscious effort must be made to maintain the character of these roads, particularly when upgrading or realignment is being considered.

Road reserve management guidelines

Landscape, recreation and conservation values can best be protected by observing the following guidelines. The Council recognises that the bodies responsible for the construction and maintenance of roads are already implementing many of these. The Roads Corporation, for

example, plants large numbers of trees adjoining their major works.

- When improvements to a road are being carried out, trees and shrubs on the road reserve should be disturbed to the minimum extent consistent with the safe and efficient design and use of the road.
- Major works to realign minor roads carrying trees and shrubs should not be undertaken unless clearly warranted by the nature and volume of the traffic carried and the managers of adjacent public land should be consulted regarding such works.
- Where realignment of a road results in a section of the old road being cut off, wherever possible that section should not be sold, but used as a recreation and rest area or incorporated into an adjacent appropriate reserve.
- Where pipelines or overhead wires are to follow a road carrying trees and shrubs in a rural district, every effort should be made to locate the easements on private land alongside the road if this is already cleared, rather than clearing roadside vegetation to accommodate them.
- Council recognises the need for clearing or pruning vegetation close to power lines to reduce the associated fire risk, but recommends that Electricity Services Victoria consult CNR regarding the manner in which it can reduce the risk posed by vegetation, while at the same time reducing the environmental impact to a minimum.
- Road-making materials should not be taken from road reserves unless no suitable alternative sources are available. Any such removal should be done so as to ensure a minimum disturbance of the native vegetation and the disturbed area should be rehabilitated - where possible with vegetation indigenous to the area.
- Burning off, slashing or clearing of roadside vegetation should be kept to a minimum consistent with providing adequate fire protection. In many cases appropriate works on adjoining freehold land can achieve the desired level of protection.
- Weeds and vermin on roads should be controlled by means that do not conflict with the uses given above.
- The various road management authorities, when planning to upgrade roads that have heavy recreational use, should give due consideration to recreational requirements and give priority along such roads, when funds are available, to the development of roadside recreational facilities.
- Gravelled and unsurfaced roads can be key contributors to erosion and stream pollution. The managers of such roads should maintain a crowned surface and place culverts with stable outlets at regular intervals.
- On soils of moderate to high erosion hazard, road management authorities should ensure that pre-planning, design, construction and funding of roads cater adequately for erosion prevention and control. Advice should be sought from CNR.
- The purchase of cleared freehold land for road construction purposes should be considered as an alternative to clearing stands of native vegetation in the road reserve.

Roads

Recommendation

M1 That road reserves throughout the study area be used in accordance with the general recommendations for Services and Utilities outlined above for transport, communications, access, surveys and utilities

that the guidelines above be observed in order to protect roadside landscape, recreation and conservation values

and that, where roadside conservation assessments have been carried out, the results be recognised and applied by municipalities and government agencies managing roads.

Specific roadside conservation sites

Recommendation

M2 That when widening or realignment of roads is proposed, sites of geological, archaeological, historical, habitat or botanical significance that may be affected be investigated and every effort made to retain and preserve them.

Note: Sites are listed in the schedule at the end of this chapter.

Unused roads

When the State was being surveyed, a Crown road reserve provided access to each block. Many of these reserves have never been used as roads, and they are usually held by the occupiers of the adjoining land under an unused-road licence, often for grazing.

Guidelines for unused road reserves

- The clearing of native trees and shrubs other than noxious weeds should continue to be clearly prohibited in the conditions of unused-road leases or licences.
- A condition permitting public use of leased or licensed unused roads should be written into the leases or licences where necessary to provide practical access to public land.
- Unused roads or easements should not be alienated if there is any likelihood that they will have value for future traffic, nature or landscape conservation, recreation or other public use.

In November 1993 the government announced a changed policy in relation to use of unused road reserves. Under the new policy farmers may be able to enter into long-term leases for or purchase of unused roads within their properties. Council considers that the above guidelines should continue to apply. In some cases it may be appropriate for road reserves to be sold subject to conservation covenants.

Unused roads

Recommendation

M3 That unused road reserves be used in accordance with the general recommendations for Services and Utilities outlined above

and that the above guidelines for unused-road reserves continue to apply.

Railways

Railways played a major role in the economic and social development of the Melbourne Area, District 2, but now only the high-usage lines remain open. The District contains sections of the passenger and freight lines - North Eastern (Wodonga), Gippsland (Sale) and South Gippsland (Leongatha) Railways - as well as the suburban lines from Watsonia to Hurstbridge, Mooroolbark to Coldstream, Upper Ferntree Gully to Belgrave and Baxter to Stony Point.

Various former railway lines have been closed, and these are referred to in Chapters N - Uncategorised Public Land, F - Historic and Cultural Features Reserves and J - Community Use Areas.

Railways can also have other important values, and the following guidelines aim in particular at protecting native vegetation present.

- Where isolated remnants of the original vegetation remain on land associated with railways, every effort should be made to protect that vegetation consistent with management practices.
- While Council recognises the need for clearing or pruning vegetation close to railway lines for reasons of safety and fire prevention, the Public Transport Corporation should consult CNR regarding the manner in which it can reduce the risk posed while at the same time reducing the environmental impact to a minimum.
- Burning off, slashing or clearing of railside vegetation should be kept to a minimum consistent with providing adequate safety and fire protection. Particular care should be taken with the use of herbicides.
- Weeds and vermin on land associated with railways should be controlled by means that do not affect non-target species.

Railways

Recommendation

M4 That railways continue to be used in accordance with the general recommendations for Services and Utilities outlined above

and that landscape and conservation values of railway alignments be protected by observation of the above guidelines.

Significant sites along railways

Strips of vegetation along railway lines can have particularly high conservation and landscape values, especially in agricultural districts where most of the vegetation has been cleared. They often contain remnants of the original vegetation and can serve as habitat corridors for native fauna. It is proposed that sites with significant stands of remnant vegetation be protected under public authority management agreements between the Public Transport Corporation and CNR. Railway structures can also have historical significance. Although the places listed below are still in use, they should be managed in a way that does not compromise their historical integrity.

Geological features exposed in railway cuttings are a useful adjunct to more detailed work involved in mapping the geology of an area and are often used as an educational resource.

Significant sites along railways

Recommendation

M5 That, wherever possible, important sites along railway lines be protected.

Note: Sites are listed in the schedule at the end of this chapter.

Ports

Western Port has high value for port purposes. Its deep water in the western entrance and North Arm (minimum depth 14.3 metres) is highly significant in a State and national context for deep-draught shipping. Hastings has considerable areas of flat land suitable for port and port-related industrial development. These values have been recognised and protected in the government's Statement of Planning Policy No. 1, and subsequent reports and are discussed in the draft of the 'Hastings Port Industrial Area - Land Use Structure Plan', released in February 1994. These documents also state the need for port development to be linked to protection and

maintenance of the sensitive ecosystem of Western Port, reflecting the conclusions of the Western Port Bay Environmental Study and State Environment Protection Policy No. W28.

The existing channel provides deep-water access to wharves at Crib Point and Long Island jetties and at the Broken Hill Proprietary Co Ltd (BHP) facility, formerly Lysaghts, all of which adjoin extensive areas of land zoned for port-related use. BHP has rights to reclaim areas of sea-bed to the north of its existing wharf (shown on Map A as not being public land) and the government has the option to purchase 50% of it (see Note 2 to Recommendation M6). Two on-shore areas, between Stony Point and Crib Point and between the BHP area and the Yaringa Boat Harbour, are zoned as proposed port-purposes reserve under the Shire of Hastings' Planning Scheme. Parts not already in public ownership have been subject to re-purchase.

Since Council's 1977 recommendations, the Western Port Bay Environmental Study sites of significance documents and the Victorian Ports Land Use Plan (draft final report 1991) have contributed to knowledge of the values and uses of this area.

About 90% of the Port of Hastings' cargo is presently bulk liquids and the Ports Land Use Plan does not expect this to change over the next 20 years. It is proposed to re-commission the Crib Point jetty for use for unloading imported crude oil. The government recently approved a Shell-Mobil oil storage plant on the site of the former British Petroleum refinery. This will use the Crib Point jetty.

The Ports Land Use Plan suggests that options be kept open for future general cargo facilities. It also concludes that the Long Island Point and Crib Point Jetties should be used for handling crude oil, gas and petroleum products, with an option of a Bass Strait single-point mooring to be investigated if very large crude-oil carriers are proposed for the port, and that the steel trade should continue to operate from the two BHP jetties.

With respect to future general cargo port needs, the report describes three possible sites - Old Tyabb, Tyabb and Crib Point - but argues that it is difficult to justify the retention of all three in view of the 20-year trade outlook. It concludes that the Crib Point site is the least attractive, mainly because of the traffic impact on residential areas; the Tyabb site has long-term strategic importance for large-scale port development beyond the next 20 years; and the Old Tyabb site is the best site for initial development, being cheapest to develop and least environmentally sensitive. However, it may be restricted by risks associated with the adjacent fractionation plant. The report states that the last two sites should be retained for potential port development; its preferred port boundary includes undefined land areas at Long Island Point, Crib Point, Stony Point and the Old Tyabb site; and it recommends that the government should continue to purchase land adjacent to the Tyabb site as this becomes available. The Tyabb site is mainly within the BHP reclamation area.

The proposed emphasis of future port needs will generally avoid environmental values at Hastings Bight, including Sandstone Island and the 'Heritage Cove' foreshore, Woolleys Beach, Crib Point foreshore and north of Yaringa. However, the site retained at Tyabb for possible long-term development is associated with a range of high conservation values, as follows:

- botanical values: valuable stands of sand heathland, swamp scrub and coastal salt-marsh remain, and a diverse ground flora
- zoological values: the manna gum open forests and woodlands, swamp paperbark and saltmarsh/mangrove zone provide habitat for 11 native mammal species (including one of few sites in the State where the New Holland mouse has been recorded), 127 native bird species (including the uncommon southern emu-wren), and 8 reptile and 7 amphibian species (although it has been classified as a site of State significance, about half of it is in private ownership)

- geological/geomorphological values: the coastline, with its broad saltmarsh zone and variable mangrove fringe, is of State geomorphological significance as a major site for the study of the role of mangroves in coastal sedimentation

The Western Port Bay Strategy (WRPCC 1991) recommends that any future major port works within the declared 'reclamation area' be subject to environmental assessment under the *Environmental Effects Act 1978*, and that the foreshore areas north of The Bluff be considered for conservation and passive recreation, rather than port purposes. A review of the Hastings Port Industrial Land Use Plan is expected to consider this.

After considering the above, and to ensure flexibility for the future, Council proposes that the harbour depot area at Stony Point, the Jetty easement at Crib Point, the Long Island Point Jetty and Old Tyabb foreshores be recommended for port purposes, and that the Tyabb foreshore south of Iluka Road, Yaringa, be retained within the Coastal Reserve, although Council recognises its value for future port development in the longer term. Should a major port development option be pursued, the area between Stony Point and Crib Point should also be considered, in the light of the environmental sensitivity of the Tyabb foreshore.

Ports

Recommendation

M6 That the following areas be used in accordance with the general recommendations for Services and Utilities above, and be available for port development:

- (a) the harbour depot area at Stony Point
- (b) the Jetty easement at Crib Point
- (c) the Long Island Point Jetty
- (d) Old Tyabb foreshore

Notes:

1. In the long term, if there is a need for additional port land, Council considers that the Tyabb foreshore south of Iluka Road and the less environmentally sensitive area between Stony and Crib Points should be considered as possible sites. Any proposed port development should be subject to Environment Effects Act procedures. (See Order in Council 17/6/1997)
2. Council is aware that the government has an option to purchase 50% of the 'reclamation area' and believes that it should take up that option.

ELECTRICITY AND GAS

Various electricity and gas installations are located on public land, including the fringes of the Yallourn/Yallourn North power station and open cuts, transmission lines, terminal stations, gas pipelines etc. In particular, the identified future overburden dump at Anderson Creek north of Yallourn lies in the Melbourne Area, District 2. Recommendations for this area were made in the Council's 1987 Latrobe Valley Special Investigation report. Refer also to Recommendation F7 for the Rubicon Valley historic and cultural features reserve, which includes the operating Rubicon-Royston hydro-electricity generation stations, and to Recommendations G96, J11, J15, K5, N1 and O3 in this report.

In May 1994, the government announced the restructure of the electricity supply industry in which Generation Victoria will move towards operating as a holding company as successor to the SEC in electricity production. Another body, National Electricity, is now responsible for

high-voltage distribution. Recommendations M7 and M8 apply to both organisations, and to Gas and Fuel Corporation installations, as appropriate. Distribution of 'domestic' level power, at voltages less than 60kv, is the responsibility of Electricity Services, Victoria.

Electricity and gas

Recommendations

Note: Many existing installations are too small to show on Map A.

M7 That existing easements and installations be used in accordance with the general recommendations for Services and Utilities outlined above, and for their designed purpose.

M8 That new power lines, pipelines and other electricity and gas installations be planned in accordance with the general recommendations for Services and Utilities outlined above

and that

- (iv) they be planned to minimise disturbance to public land and protect the values associated with that land
- (v) they not be sited on public land without the agreement of the land manager
- (vi) new pipelines and power lines follow existing easements wherever possible (this may require widening of some easements)
- (vii) utilities such as power lines and pipelines, wherever possible, not be located alongside waterbodies or wetlands.

Notes:

1. National Electricity holds a block at Coldstream for a future terminal station. This 30-ha site has relatively intact cover of red stringybark and messmate shrubby foothill forest with a shrub and native grass understorey. It is of regional botanical significance, being in an area with little remnant vegetation, and is also part of a larger site of regional zoological significance, with the eastern small-eyed snake, delicate skink, swamp wallaby and a diverse variety of bird species recorded. The Council considers that this block should be managed as a natural features reserve until required as a terminal station; and that if part of the block is not required for the terminal station, it should be retained as a natural features reserve.

2. Another National Electricity block is held at North East Tyabb for the proposed Pearcedale terminal station. Council proposes that, north of Bungower Road, part of the area should be included as a services and utilities area for this purpose, while that part retaining native vegetation be added to the adjacent nature conservation reserve (Recommendation C40). Most of the east part is recommended as land not required for public purposes (O1), and the area south of Bungower Road is also recommended for addition to the nature conservation reserve.

3. The Gas and Fuel Corporation holds land at Bittern between Stony Point Road and the coastal reserve. Council proposes that the strip of remnant vegetation on the east side should be added to the coastal reserve (see Recommendation H2), while the remainder is recommended as a services and utilities area. Council considers that the two areas of remnant vegetation on the west boundary should also be retained.

4. A proposed 300-MW undersea power interconnection between Tasmania and the mainland - Basslink - has been proposed for construction at the turn of the millennium. Six possible cable landing sites have been identified, including four in the Melbourne Area, District 2 - west of Wonthaggi, north of Flinders, the south-east end of French Island and near Tyabb. No decision on the route has been made, although sites west of Wonthaggi and around Cape Liptrap (not in the Melbourne Area, District 2), were considered preferable to others in feasibility studies.

COMMUNICATIONS, SURVEY AND NAVIGATION

Telecommunications

Communications installations include underground conventional and optical fibre cables, towers with microwave dishes, mobile-telephone receiving and transmitting structures, various radio masts and satellite dishes.

Telecommunications installations

Recommendations

M9, M10 That existing or proposed communications installations on public land be used or planned in accordance with the general recommendations for Services and Utilities outlined above.

M9 Existing installations

M10 That, in relation to proposed installations,

- (iv) where public land is proposed to be used for new Australian and Overseas Telecommunications Corporation Ltd (AOTC) towers and cable alignments, these be planned and sited to minimise disturbance to that land and to protect the values associated with the land
- (v) the agreement between the Commonwealth and State governments - that AOTC will consult with State agencies and act in accordance with State planning processes - be implemented in relation to proposals affecting public land
- (vi) the minimum area necessary for access to and maintenance of communications installations be temporarily reserved or remain as unreserved Crown land with appropriate lease or licence arrangements
- (vii) where other forms of public land tenure apply, the utility involved has the right to occupy a minimum area around the installation and provide lines of sight, and the right to obtain access to the area

and that

- (viii) (a) communications towers and installations proposed by other agencies (for example CNR, National Electricity, Police and Emergency Services) be located at existing sites and on existing structures wherever possible, to minimise the number of separate hilltop clearings, intrusive structures and access tracks
- (b) AOTC and other users permit access to all new facilities by other users on a co-tenancy or sub-tenancy basis.

Survey stations and navigation aids

Permanent survey marks and trigonometric stations form part of Victoria's geodetic reference system. They are numerous and widespread. Navigation structures on the coast and in navigable waters are crucial for safe shipping and recreational boating.

Survey stations and navigation aids

Recommendation

M11 That survey stations and navigation aids be used in accordance with the general recommendations for Services and Utilities outlined above

that

- (iv) the minimum area necessary for
 - (a) survey purposes around trigonometrical/geodetic stations; and
 - (b) access to and maintenance of navigation aids

be temporarily reserved on public land where it would otherwise remain as unreserved Crown land

- (v) where other forms of public land tenure apply, the appropriate government agency has the right to occupy a minimum area around the station or aid and provide lines of sight, and the right to obtain access to the area

and that

- (vi) where new technology (such as the global positioning system) renders existing survey or navigation installations obsolete, such structures, unless of historical significance, be removed and sites, access tracks and lines of sight be restored with indigenous vegetation.

MUNICIPAL BUILDINGS AND SERVICES

Shire offices and other municipal buildings providing services, such as infant welfare and kindergartens, are often located on public land, as are municipal depots and tips.

Municipal Buildings

Recommendation

M12 That existing legal use and tenure continue for areas that are at present reserved and used for municipal buildings, services and operations such as offices, depots, infant welfare centres, or kindergartens

and that they be used in accordance with the general recommendations for Services and Utilities outlined above.

Rubbish tips

Refuse-disposal sites are scheduled premises under regulations of the *Environment Protection Act 1970*, and thus are subject to the requirement for Environment Protection Authority (EPA) Works Approvals and Licences. Management of such sites should be in accordance with the EPA's 'Siting and Management of Landfills Receiving Municipal Wastes' policy.

Recommendation

M13 That areas authorised for use as tips be used in accordance with the general recommendations for Services and Utilities outlined above

that

- (iv) existing legal rubbish tips (including those approved by the relevant authorities but not yet operating) continue to be available for disposal of rubbish
- (v) areas used on a temporary basis for rubbish disposal or sanitary depots, whether legal or illegal, be fully rehabilitated, at the expense of the users, where known

and that

- (vi) within areas reserved as rubbish tips, disposal of waste be confined to small sections of the site at any one time, and that steps be taken to prevent the dumping of garbage other than in the designated areas.

Notes:

1. Alexandra Tip is located on an area of 3.08 ha abutting (on 3 sides) the Alexandra Bushland Reserve, now natural features reserve G56, and the McKenzie Nature Conservation Reserve (C7). In its 1977 recommendations Council noted that the tip was not to be expanded, and that the area should be eventually rehabilitated. This recommendation was approved. The tip is still in use although it only has about 12 months' space remaining. A rehabilitation plan has been prepared. The Alexandra Shire Council would still prefer to expand the tip into the natural features reserve, but it has also been assessing several alternative sites. The Land Conservation Council's view remains the same as in 1977, but in addition there would be no objection to the establishment of a rubbish transfer station at the present site.

2. French Island Tip - this area is also a source for road-making materials. The Council considers that the extraction of road-making materials should be permitted, but should be integrated with planning for rubbish disposal.

Grantville regional refuse-disposal area

The Shire of Bass has operated gravel pits in the northern part of the Grantville gravel reserve for a number of years. Most of these pits are worked out, although additional resources occur. In recent years the Shire has established a landfill operation as part of the rehabilitation of former pits. The landfill has been based on the disposal of refuse from the Grantville area. Recently the Shire of Phillip Island and Borough of Wonthaggi have, together with CNR, proposed that the northern half of this reserve be made available for refuse disposal, providing for an estimated 19-year life, with new sites to be investigated elsewhere to service needs in the longer term. The sand and gravel reserves of the existing pit in this area are considered to have a life of about 3 years.

Grantville refuse area

Recommendation

M14 That the northern part of the Grantville gravel reserve be used in accordance with the general recommendations for Services and Utilities outlined above and as a regional refuse-disposal site

that

- (iv) further extraction of sand and gravel resources be permitted
- (v) extraction be integrated with planning for future refuse disposal
- (vi) stands of remnant vegetation be retained, especially in areas forming a buffer to adjoining land uses

and that the area be temporarily reserved, and the landfill and extraction operations managed in a unified manner under the direction of the Department of Conservation and Natural Resources and the Environment Protection Authority.

Note: There is a need to rehabilitate the highly visible upper batter slopes.

HOSPITALS, PUBLIC OFFICES AND JUSTICE

Public offices and other buildings under the following recommendation are those that provide the base for provision of services to the public and a workplace for public sector employees. However, they are not widely used for community activities, as distinct from the buildings in public use (see Recommendation J24).

Hospitals, public offices and justice

Recommendation

M15 That existing legal use and tenure continue for areas and buildings as listed in Appendix VIII that are at present reserved and used for hospitals, other institutions, public offices, court houses, police stations or prisons

and that they be used in accordance with the general recommendations for Services and Utilities outlined above.

Note: The following buildings in particular are of historical interest: Mansfield Court House; Lilydale Court House; Wonthaggi State Public Offices; and Wonthaggi Court House.

WATER AND SEWERAGE SERVICES

The following recommendations apply to public land areas with: water or sewerage pipes, channels, structures etc. used to convey water or sewage; storages that are part of the reticulation system; storages of water not used for domestic consumption; drainage or flood-protection structures; watering points; or sewage treatment and disposal. Areas used for water-harvesting and associated bulk storage are referred to in Chapter D - Water Production.

Water and sewerage services

Recommendation

M16 That the following areas, as listed in Appendix VIII

- (a) off-river water storages, service basins, water towers, water treatment and other water supply installations and channels
- (b) storages not used for domestic or industrial consumption
- (c) areas used as watering points for travelling stock, or for fire-fighting, roadworks or other purposes requiring access to water
- (d) areas used for sewage treatment or disposal

be used in accordance with the general recommendations for Services and Utilities outlined above

that

- (iv) where they have nature conservation, recreation or cultural heritage values, these be protected where this does not conflict with the primary use

and that these and their associated reserves remain under existing tenure and control unless otherwise stated.

Note: Council supports a proposed land exchange at Marysville to provide an area for establishment of sewage treatment works (see Recommendations E1 note 3 and 01).

Melbourne Water pipelines/aqueducts

Olinda Creek pipeline

North of the Silvan Reservoir, Melbourne Water holds land along Olinda Creek for the purposes of the Silvan to Preston main, Silvan to Olinda conduit and Silvan to Mount Waverley main. The underground pipelines replace a now-disused aqueduct. While most of the corridors of both pipelines are cleared, their margins retain stands of natural vegetation. The existing pipelines lie between the Olinda Creek water frontage and the recommended addition to the Dandenong Ranges National Park.

O'Shannassy Aqueduct

The Silvan Reservoir is linked to the O'Shannassy and Upper Yarra reservoirs, the latter by pipe but the former still partly by open aqueduct. Sections of the aqueduct may be replaced by pipelines along alternative routes, and may be declared surplus to Melbourne Water's requirements. Parts retain native vegetation and, if surplus, would contribute to park accessibility, recreational and historic values, if the section from Cement Creek to the Don Valley Road were added to the Yarra Ash-Ranges National Park (see Recommendation A12). The section west of Don Valley Road to the Coranderrk Aqueduct junction would not be required for public purposes, in the Council's view, and it would be for Melbourne Water to decide its future use.

Between Wandin Yallock and Silvan Reservoir, parts of the aqueduct have important remnants of native vegetation within the adjacent semi-cleared farmland. Parts of the aqueduct there could provide a habitat corridor and opportunities for recreational activities.

While these areas are required for water supply, they should continue to be used as recommended below.

Melbourne Water pipelines/aqueducts

Recommendation

M17 That the above pipelines and aqueducts be used in accordance with the recommendations for Water and Sewerage Services outlined above

and that

- (v) remnant vegetation be protected
- (vi) the Olinda Creek pipeline section adjoining the Dandenong Ranges National Park be managed in consultation with the managers of that park
- (vii) should the O'Shannassy aqueduct be decommissioned as a water supply facility, that section abutting and linking elements of the Yarra Ash-Ranges National Park and extending to Don Road be added to the park. (recommendations for certain Melbourne Water lands not approved at this stage, Order in Council 17/6/1997)

Notes:

1. Melbourne Water should decide the future of the remainder of the aqueduct.
2. Between Wandin Yallock and Silvan Reservoir, sections of the aqueduct could provide a habitat corridor and recreation opportunities.

Drains and retarding basins

Some waterways such as those around Koo-Wee-Rup have been built as drains, and several retarding basins have been constructed in the study area to provide for flood protection in regional drainage.

Recommendation

M18 That drains and retarding basins be used in accordance with the recommendations for Water and Sewerage Services outlined above

and

- (v) (a) to facilitate regional drainage and flood protection
- (b) for grazing or recreation at the discretion of the managing authority, where appropriate.

CEMETERIES

The following recommendations apply to cemeteries in current use that may also have other particular values. Infrequently used cemeteries often contain relatively undisturbed native vegetation, and old cemeteries may have cultural or historical values. Refer also to Recommendations F36 and F37. Not all cemeteries have been assessed for their historical significance.

Recommendation

M19 That the areas reserved and used for cemetery purposes listed in Appendix VIII be used in accordance with the general recommendations for Services and Utilities outlined above

and that

- (iv) where part of a cemetery reserve is unused, indigenous vegetation be retained and protected
- (v) cemetery managers seek the advice of the Department of Conservation and Natural Resources as to the appropriate management of the values referred to in (iv) above.

Notes:

1. Council considers that cemeteries that have not been assessed for their historical significance should be so assessed.
2. Gembrook Cemetery - part of this cemetery reserve carrying native vegetation has now been recommended as a natural features reserve (G205). Limited expansion of the existing cemetery area would be permitted. Further expansion should be on freehold land.

Significant sites in cemeteries

M20 That the historical values of the following cemeteries be protected

Aberfeldy	Ferntree Gully	Korumburra	Matlock	Tyaak
Allambee	Gaffney Creek	Lilydale	Narracan	Woods Point

OTHER UTILITY USES

Recommendation

M21 That other public land areas used for depots of public authorities, Country Fire Authority stations, markets, abattoirs, saleyards or other services and utility uses not specified in previous recommendations, whether reserved for that purpose or unreserved, continue to provide these uses in accordance with the general recommendations for Services and Utilities outlined above.

Notes:

1. The Shire of Alexandra requires a depot site at Marysville. The existing Department of Conservation and Natural Resources depot site may have sufficient space to accommodate the Shire's needs.
2. Snobs Creek previously had a wildlife reserve along the stream for several kilometres upstream from the Departmental fish hatchery. The section in State forest has now been recommended as a river zone (see Chapter E). The Council resolved that the downstream area including the hatchery should be a Services and Utilities area.
3. This recommendation includes the Department of Agriculture's Institute of Plant Sciences - potato research station at Toolangi.

SCHEDULE OF VALUES TO BE PROTECTED

Sources of the following include the unpublished 'Survey of the Relic Vegetation of Victorian Railway Reserves' by Frood (1985), 'Register of Australian Historic Bridges' by O'Connor (1983), 'Historic Sites in the Melbourne East Study Area' - report by Supple *et al.* (1989), 'Sites of Botanical Significance in the Land Conservation Council Melbourne District 2 Study Area' - report by Moorrees and Molnar (1992), 'Sites of High Conservation Value for Fauna within the Melbourne 2 Study Area' - report by Lumsden (1992) and the Melbourne Study Area Final Recommendations (LCC 1977), 'An Assessment of Geological Sites of Natural Estate Significance in the Central Highlands of Victoria' - report by Cochrane and Shaw (1993).

Kilmore, Broadford, Yea, Alexandra and Mansfield areas

Historical site

- Marysville Road - historical timber-girder bridge over Wilks Creek, with stone abutments, built about 1900

Nature conservation

- North Eastern Railway between Donnybrook and Beveridge - only known occurrence of the endangered small pepper-cress (*Lepidium hyssopifolium*)
- North Eastern Railway between Beveridge and Wandong - *Themeda* and associated *Danthonia*, *Poa* and *Phragmites* grassland communities, herbs and shrubs, including a number of significant species; also the swamp habitat in good condition, including a recorded site of the vulnerable striped legless lizard (*Delma impar*) and the suspected rare Australasian bittern (*Botaurus poiciloptilus*)
- Strath Creek--Broadford Road reserve west of Tyaak township - rich ground flora
- Graptolite fossil site on Dairy Creek Road
- Cuttings and quarries along the Warburton--Woods Point Road (Yarra Track) between Fifteen Mile and McAdam Hill expose a series of Palaeozoic rocks and provide insight into the diverse stratigraphy and palaeontology.
- Road cuttings along the Marysville--Cambarville Road expose a series of sections of strata providing the most complete geological picture of the Acheron Cauldron.

Recreation sites and landscape

- Molesworth lagoon - roadside picnic spot

Diamond Valley, Eltham, Healesville, Lilydale, Sherbrooke and Upper Yarra areas

Historical sites

- Yarra Junction to Powelltown Road - remnant embankments, cuttings and track formation of the former tramway
- Bridge over Yarra River at Woori Yallock - built in 1927, this 120-metre-long bridge is concrete with timber supports and buttresses
- Hurstbridge to Arthurs Creek Road - historical concrete arch bridge over Diamond Creek built in 1917 (known as 'Monash Bridge')
- Eltham to Yarra Glen Road - historical brick arch bridge built about 1890 over the Maroondah Aqueduct at Yarra Glen

Nature conservation

- Rodger Road reserve, Panton Hill - stand of grassy dry forest that includes several regionally significant species
- Road reserves in the Coldstream to Yarra Glen district - eight sites containing the rare Yarra gum (*Eucalyptus yarraensis*)
- Yering disused rail reserve - a remnant kangaroo grass (*Themeda triandra*) community with swamp gum (*Eucalyptus ovata*) and various wattles
- Tarrawarra Road reserve - remnant stand of the lowland form of snow gum (*Eucalyptus pauciflora*)
- Warburton Highway/Old Gippsland Road - good-quality, undisturbed stand of heathy foothill forest/heathy woodland
- Road reserve at Kilsyth South - relatively intact remnants of heathy forest as well as examples of swampy riparian forest and swamp scrub

Recreation sites and landscape

- Mount Dandenong Tourist Road

Pakenham, Buln Buln and Narracan areas

Historical sites

- The railway stations at Trafalgar and Yarragon have been assessed as architecturally important

Nature conservation

- Gippsland line between Beaconsfield and Pakenham - remnant native vegetation, including kangaroo grass communities
- Gippsland line between Pakenham and Tynong - kangaroo grass communities, some with melaleucas
- Gippsland line between Trafalgar and Yallourn - communities of *Themeda/Leptospermum/Lomandra* spp.
- Erica—Walhalla Road at Coopers Creek - exposure of the Early Devonian Boola Formation of sandstone containing fragments of Cambrian rocks and revealing contacts with underlying and overlying stratigraphic units.

Flinders, Mornington, Hastings and Cranbourne areas

Historical sites

- Stony Point Railway station - assessed as important architecturally
- Old Mornington Road - historical stone arch bridge built in 1865 over Kackeraboite Creek at Mount Eliza

Nature conservation

- South Gippsland Railway between Clyde and Tooradin - kangaroo grass communities and the rare daisy *Helichrysum* sp. aff. *acuminatum*
- Browns Road/Jetty Road, Rosebud South; Humphries Road, Mt Eliza; Cannons Creek Road, Cannons Creek - populations of the vulnerable grey-crowned babbler
- Crib Point- Stoney Point railway reserve- important remnant ground flora (added by LCC)

Recreation sites and landscape

- Gembrook to Pakenham roadside environs

Phillip Island, French Island, Bass, Wonthaggi and Korumburra areas

Historical sites

- Lang Lang, Loch and Korumburra Railway Stations

Nature Conservation

- Roadside between Rhyll Swamp and Ventnor Koala Sanctuary - roadside vegetation is an important Koala habitat link (added by LCC)

Recreation sites and landscape

- Phillip Island Road - roadside environs
-

N. UNCATEGORISED PUBLIC LAND

Some small areas of public land in the study area that are used for grazing, camping and other purposes have not been specifically mentioned in these recommendations. Others, both reserved and unreserved, receive little active use at present, even though they might once have been reserved for some specific purpose.

These areas may not have outstanding values; however, they have potential for public or departmental use, or uses that would complement other areas. Accordingly, they should remain in the public land estate, and are recommended below as uncategorised public land.

In townships, public land is currently used for a wide range of purposes. In the same way as it has dealt with land outside townships, Council has made specific recommendations for township land to be set aside for natural features reserves, community use reserves (particularly recreation areas, parkland and gardens and buildings in public use) or services and utilities. Those recommendations are included in the appropriate chapters.

Other areas of public land in townships should remain as uncategorised public land - to be used, if required, for township purposes in the future.

Council intends that existing legal uses and tenure of these small areas of public land should continue, and that those not currently used for any particular purpose should be used in a way that will not preclude their future commitment to some specific public use.

The area between Koo-Wee-Rup and Pakenham contains very little public land, and some of the largest parcels are recreation reserves. Roadsides are commonly bare and, given that this was formerly swampland, the surrounding landscape has few trees in general. Several of the recreation reserves have become disused, and now consist of grazed paddocks bounded by rows of trees. These may have community uses, or could be considered for revegetation, perhaps as part of regional revegetation schemes. Council considers that at present they should be recommended as uncategorised public land, to allow assessment by the Department of Conservation and Natural Resources (CNR) as to whether they should be retained or ultimately sold.

Substantial landholdings were purchased by Melbourne Water for the Watsons Creek dam scheme. Much of this land is now surplus to Melbourne Water's requirements. Recommendations C48 and C49 apply to parts of the land. Map F shows these areas, and other Melbourne Water land for which no specific recommendations are made.

UNCATEGORISED PUBLIC LAND

Recommendations

N1 That

- (i) public land other than that recommended for specific uses, and listed in Appendix IX, be uncategorised public land to meet future public purpose requirements

and that

- (ii) existing legal use and tenure continue except where such use will preclude the future use of these areas for public purposes.

Notes:

1. Recommendation N1 also applies to other areas for which there is no specific recommendation, but not listed in Appendix IX.
2. This recommendation includes the Wallaby Creek Lodge and farms within land managed by Melbourne Water which forms a buffer to the Wallaby Creek water supply catchment.

Crib Point

The coastal foreshore reserve between Stony and Crib Points was included in Council's 1977 recommendations jointly as Coastal Reserve and Utility Reserve. Since those recommendations, the former Public Works Department purchased numerous blocks abutting the reserve. Under planning scheme controls, the area is zoned 'Proposed Port Purposes Reserve'. Although 14 small lots remain in private ownership, most of it is now public land. As is discussed in Chapter M, this area is subject to a continuing port land use planning process ~~may become surplus to future port requirements (changed by LCC)~~. It may also in the future be part of a buffer zone to possible industry on the former BP refinery site immediately to the north. That site has been sold and may be used for storage of imported crude oil, with deep-water access from the existing jetty to the north.

Virtually all of the area north of Governors Road has been disturbed by development works, and is subject to regular slashing; however, it retains areas with weed-free heathy and grassy woodlands with some important ground flora species. A large block of weed-free heathland occurs south of Governors Road (added by LCC). This land is now proposed to be recommended as uncategorised public land.

Crib Point

Recommendation

N2 That the land at Crib Point shown on Map G be used in accordance with the general recommendations outlined above for uncategorised public land ~~not required for public purposes. (See Order in Council 17/6/1997)~~
Part CA 131 P Bittern; CA 5,6,7,7A, 19 and adjoining road reserve, 19A Sec 3, T Crib Point (added by LCC)

Notes:

1. This area is subject to a continuing port land use planning process.
2. Where possible, the botanical values of the heathland should be maintained.

Revegetation

The reduction and deterioration of tree cover in some rural areas of the State is causing increasing and widespread concern. Clearing - to establish pasture and crop lands - has been the initial cause of this reduction. The gradual decline and ultimate death of remaining trees, however, is emerging as a major problem in some areas.

Soil compaction by stock, excessive use for timber, attacks by insects, parasites and other pathogens, exposure to winds, salting of the soil, erosion and natural senescence among ageing trees are all possible causes of the decline. The prevention of natural regeneration by grazing or other practices exacerbates the problem.

Increasing soil salinity (resulting in the degradation of grazing and crop country), loss of shelter for stock and for wildlife and diminished aesthetic value are all consequences of this decline. Although difficult to express in monetary terms, it results in economic loss.

The large numbers of landholders joining Landcare and other programs involving tree-planting show that these issues are recognised and are being addressed.

In parts of the study area, several small parcels of public land carry little or no natural vegetation. In many cases they have been reserved for specific purposes, although not used for them, and have been continuously licensed to the adjoining landholders. Over time they have been cleared and integrated with the surrounding farmlands. In other cases the reserves can still be recognised by the native vegetation, but, for a number of reasons, the tree cover has declined.

Where tree decline is becoming a problem or where native trees are greatly reduced in number, Council recommends that some small areas of public land be used for the re-establishment of locally indigenous tree species.

Following successful revegetation, some of these areas could serve as examples to the rural community of the effectiveness of such vegetation schemes.

Revegetation areas

Recommendation

N3 That

- (i) the areas indicated on Map A and listed in Table 23 below be used to foster the re-establishment of locally indigenous tree species

and that

- (ii) when revegetation is complete, they be considered for reservation as natural features reserves.

Table 23: Areas for Revegetation

Parish or Township	Description	Area (ha)
P Alexandra	CA 36D	1.25
P Alexandra	CA 91C	2.51
P Broadford	CA 141K	4.01
P Darnum	CA 88J	4.10
P Doolam	CA 36J, 36H	2.51
P Fingal	Adj CA 6	1.92
P Ghin Ghin	CA 53B	0.50
P Kobyboyn	CA 11A Sec C	3.26
P Kongwak	CA 25P	4.00
P Merton	CA 77A, 77B, 77C, 83D	9.62
P Whanregarwen	CA 14C	1.00
P Woori Yallock	CA 42C	4.50
T Yea	CA 6A, 6B, Sec A	4.02
P Yea	CA 52G	1.00

Crown land assessment and classification process

In the mid 1980s, the Government initiated a process of Crown land assessment (external to the Land Conservation Council process) to classify Crown land across the State as either 'public' land or 'government' land. 'Public' land in this classification is broadly similar but not identical to public land under the *Land Conservation Act 1970*; for example, it can include Crown land in cities and rural cities.

'Public' land is managed by CNR. It is characterised by its use for public benefit and for the protection of its intrinsic values, including conservation, historical, recreation, resource production, community or strategic values. The principal direction of management is to conserve these values.

'Government' land is managed by the Department of Finance, and includes land leased for commercial purposes or for departmental operational use, and land that could be sold into freehold ownership.

The process involved identification of values - both 'public' land and dollar values, followed by review by an interdepartmental committee. Land in some of the Council's public land use categories was automatically classified as either 'public' land - such as parks and conservation reserves - or 'government' land - such as land for agriculture - while other categories required full assessment.

The assessment procedure (since 1991) involves government agencies and statutory authorities identifying land surplus to operational requirements, after consulting with municipalities. The Department of Finance then inserts advertisements in the *Government Gazette* and newspapers listing these properties.

Council, as the public land planning body, considers that the process for identification and disposal of Crown land should involve adequate consultation with municipalities and local interest groups (for example, community, recreation and conservation groups) and include an opportunity for public comment. Further, if Council's recommendations, following its full statutory process, provide for retention of a block as public land or for alienation (sale), then it is inappropriate for a subsequent process to reverse this, unless specifically provided for by the Council.

These recommendations contain provisions in several land use categories for such subsequent processes to be applied - under Community Use Areas (buildings in public use), Services and Utilities and Uncategorised Public Land.

In the future, land in certain categories may no longer be required for public purposes or public uses and values may still be able to be maintained if the parcel is sold. Such decisions should be made on a case-by-case basis, and with the involvement of CNR (or other land manager), the local municipality and the community.

Proposals to sell public land currently recommended as Uncategorised Public Land, Services and Utilities and Community Use Areas (buildings in public use) should be considered under the following process.

- Land that is identified as not being required for the purpose for which it was set aside, or for which no obvious use exists, should be assessed for its public land values.
- If significant public land values exist it should be considered for re-categorisation by CNR, and reserved appropriately.
- CNR should either directly manage the land or seek expressions of interest from the community and the local municipality for use of the land and protection of the identified values.
- Alternatively, the land could be sold subject to protection of the public land values - for example, listing on the Historic Buildings Register, or application of conservation covenants. Such action may be appropriate where the values are of local or regional significance.
- Where relevant, the Department should investigate the feasibility of a land exchange with adjoining land-owners and the municipality.
- If it is decided to dispose of the land, CNR and the Department of Finance should advertise

the intention to dispose of the land, both locally and State-wide, identifying the parcel concerned, its values and the mechanism for protection of those values.

- The community should have 30 days in which to comment on the proposal, and any comments should be considered before any decision is made to proceed with the disposal.
- Sale of land should be discussed with the local municipality to ensure that planning provisions are met and orderly marketing of land is achieved.

In most previous Council investigations, provision has been made for the sale of Crown land. In this investigation numerous small land parcels have been recommended for sale or exchange in Chapter O - Land Not Required for Public Purposes.

Crown land assessment and classification

Recommendation

~~N4 That, in relation to land classified as Uncategorised Public Land, Services and Utilities and Community Use Areas (buildings in public use) that is apparently surplus to requirements, an assessment of public land values be undertaken by the Department of Conservation and Natural Resources and, following full consultation (in accordance with the procedure outlined above) with the relevant municipal council, the community in general and other relevant land managing agencies, these areas be considered for re-categorisation, exchange or disposal.~~

That, in relation to land classified as Uncategorised Public Land, Services and Utilities and Community Use Areas (buildings in public use) that is apparently surplus to requirements, an assessment of public land values be undertaken and, following appropriate consultation, these areas be considered for recategorization by LCC, land exchange or disposal.

Note: It is intended that this recommendation apply to the whole State, not just this study area.

(See Order in Council 17/6/1997)

Disused railways

The first railways in Victoria were built in the 1850s, with the first in the Melbourne Area, District 2, being the north-eastern line to Wodonga - begun in 1867. In 1877-88 a Gippsland trunk line was built to Moe. An 'octopus' of new lines was built across the State in the 1880s, including the South Gippsland Railway, lines on the Mornington Peninsula and the Thorpdale, Tallarook to Mansfield and Warragul to Neerim South Lines.

After 1892 coal railway lines were constructed, the most notable being the Nyora to Wonthaggi line. In the early 1900s lines were extended into the higher country including, in response to the expense of broad-gauge lines, a number of narrow-gauge lines. With the advent of road transport, and declines in rural population and rural industry, the extension of the railway network ceased in the study area by 1922. Railway lines then entered a period of closures, particularly after World War II.

Council does not believe it is necessary for all disused railway reserves to be retained in the public domain to reflect their historical values and their role in the development of the State.

Some disused railway lines have been declared 'surplus to transport requirements' (added by LCC). Sections of the surplus railway lines and structures have significant historical values and these have been recommended as 'historic and cultural features reserves' (see Chapter F). Others have particular recreation values, and these are referred to in Chapter J - Community Use Areas.

The remaining sections of the surplus lines have a range of values, including less-significant historical, recreation and nature conservation values, and capability for pastoral land use. They have been recommended as 'uncategorised public land' and are subject to the following planning process agreed to by the former Ministers for Conservation and Environment and Transport.

This process involves the setting up of local advisory committees who make recommendations, in the form of management plans, to the Ministers for endorsement. The committees are required to seek expressions of interest from agencies, groups and persons as to the future use of these lines. Such future use could involve retention of the lines in public ownership or the sale of all or part.

Planning has been completed for the Lilydale to Warburton line. It is nearing completion for the Nyora to Wonthaggi line and has begun for some of the lines in the north of the study area.

Railways in current use are included in the Services and Utilities category (see Chapter M).

Most disused railway lines within the study area have in recent times been declared surplus by the Public Transport Corporation. They are as follows.

Tallarook to Mansfield, and Alexandra

This line has a range of historical, recreational and conservation values, some of which are subject to other recommendations (see Chapter F and J). The section from Yea to Cathkin and on to Alexandra is of particular note. The planning process (see above) has started for this line, and expressions of interest have been received. Conservation and recreation values of the line have been highlighted in that process, and use of part for a 'Hume and Hovell' walking track is supported.

Moe to Thorpdale

Most of the line has been sold, except where it coincides with or abuts the public land water frontage reserve on Narracan Creek.

Coldstream to Healesville

This line is operated as a tourist railway and has been recommended as a community use area - see Chapter J.

Baxter to Mornington

Except for the Mornington station ground, which has been sold, the line is operated as a tourist railway and has been recommended as a community use area - see Chapter J.

Bittern to Red Hill South

The line has been sold. Most has been acquired by the Shire of Hastings, which is progressively developing it as a linear park for walkers and horse-riders.

Korumburra to Outtrim, and Koo-Wee-Rup to Strzelecki

Most of these lines has been sold, other than three isolated sections, none of which is known to have any special historical, recreational or nature conservation values.

Nyora to Wonthaggi

The section between Anderson and Wonthaggi has been recommended as part of a historic and cultural features reserve - see Recommendation F20. A management plan process is in progress.

Belgrave to Gembrook

The Puffing Billy railway has been recommended as a historic and cultural features reserve - see Recommendation F4.

Lilydale to Warburton

A government-supported planning process has culminated in the approval of a management plan, which proposes that most of the railway be used for recreation purposes. It has been recommended as a community use area - see Recommendation J15.

Warragul to Noojee

This disused railway has been mostly sold. The remaining public land sections are included in a historic and cultural features reserve (Noojee trestle bridge - Recommendation F16) and a community use area (Noojee station ground - Recommendation J19).

Moe—Walhalla line

Part of the line traverses State forest and most of the remainder is sold. That section in public ownership near Erica, together with nearby Crown land, provides opportunities for a recreation access route from that town to the Thomson River and Walhalla. Council has recommended that the Erica section of the line be classified as a 'community use area'.

Disused railways

Recommendation

N5 That disused railways be used in accordance with the general recommendations for Uncategorised Public Land, until completion of the planning process outlined above.

Note: This recommendation does not apply to those disused railways or those sections of disused railways for which Council has made a specific recommendation.

(See Order in Council 17/6/1997)

Inappropriate townships

Some townships, although gazetted, either have never been settled or have been largely abandoned. These include former mining or milling townships in State forest, and townships in agricultural areas where the main settlement site has shifted. Council considers that some such townships are no longer appropriate.

Crown land in some of these townships supports native vegetation in either an undisturbed condition or, in the case of partially developed and subsequently abandoned townships, as regrowth. In other cases they exist as cleared paddocks.

It would be preferable for such former townships to be assessed by the land managers, and the following guidelines considered:

- where a former township is entirely public land, it be rescinded and included with the surrounding public land or as per specific LCC recommendations (added by LCC)
- where a former township is largely public land, and freehold land parcels have been effectively abandoned, the township be rescinded and public land blocks included with the surrounding public land or as per specific LCC recommendations (added by LCC)
- where a former township is largely freehold land but is clearly not a township according to current land use, the township be considered for annulment. Landowners should be consulted
- sites with features of potential historical significance should be assessed. Former township names can be retained as localities on maps, and with signposts on site. Former townships on public land with strong historical associations could be retained, but be subject to regulation that prevents re-establishment of settlement
- in all cases, local government should be consulted.

O. LAND NOT REQUIRED FOR PUBLIC PURPOSES

The era of large-scale alienations of Crown land for agriculture is past. The Council recommends that no additional large areas of public land be developed for agriculture in the study area. However, in reviewing public land for this investigation, and as a result of Crown land assessments carried out by the Department of Conservation and Natural Resources (CNR) (see Chapter N), some areas have been provisionally identified by Council as not being required for public purposes. They could be considered for alienation, subject to an appropriate process, as outlined in Chapter N, involving the relevant municipalities.

Council believes that, where possible, land available for alienation should be exchanged for parcels of freehold land that contain important values, in order to bring that land into public ownership or to add to the integrity, viability or ease of management of reserves.

Council's criteria for assessing land exchanges (see Appendix X) provide that a proposed land exchange, for it to be recommended, must result in the enhancement of the public land estate's value to the community.

Some of the areas listed in Table 24 are in agricultural areas. It is intended that this land, if alienated, should form additions to present farms, rather than be developed as new units. Other areas are in townships, and would be available for urban purposes.

LAND NOT REQUIRED FOR PUBLIC PURPOSES

Recommendations

01,03,04 (deleted by LCC)

That the areas listed in Table 24 be considered for alienation or for exchange for freehold land, subject to the guidelines specified in Appendix X.

Table 24: Land Not Required for Public Purposes (Recommendation 01)

Parish or Township	Description	Area (ha)	Parish or Township	Description	Area (ha)
P Acheron	CA 43D3	0.50	P Neerim	CA 162B	1.00
T Alexandra	CA 10, 10A Sec 33	0.07	P Neerim	CA 164R	3.10
P Alexandra	CA 56F 56K	0.50	P Neerim	CA 164L	0.20
T Alexandra	Part CA 5 Sec 47	0.16	P Neerim	CA 36H	0.07
P Alexandra	CA 30V, <u>CA 30 U</u>	<u>0.70</u>	P Neerim	CA 82E	1.00
T Alexandra	CA 6 Sec 49	0.08	P Neerim	CA 86C, 86D	0.20
T Alexandra	CA 2A Sec 51	0.22	P Neerim	CA 87A	0.10
P Alexandra	CA 51A	1.00	P Neerim	CA 98A1	1.00
P Beenak	CA 63F	2.89	<u>P Neerim</u>	<u>Part CA 8C, 8A, 8D, Sec B (added by LCC)</u>	
P Boorolite	CA 10C Sec A	2.01	P Neerim	South of CA 89	0.20
P Brankeet	CA 49C	1.25	<u>(duplicate- see O1 exchange, deleted by LCC)</u>		
P Broadford	CA 155E	0.81	P Nillumbik	Within CA 16 Sec 2	0.81
P Bunyip	CA 85B	0.20	P Nillumbik	Adj CA 1 Sec 2	0.75
T Coalville	CA 16-19 Sec 3	0.34	P Nillumbik	NW of CA 2 Sec 2	0.81
T Coalville	CA 3,4, 5, 7,10-13 Sec 2	0.56	T Noojee	CA 7 Sec 7	1.00
T Coalville	CA 16 Sec 1	0.06	T Noojee	CA 9 Sec 3	0.10

Parish or Township	Description	Area (ha)	Parish or Township	Description	Area (ha)
T Cora Lynn	CA 16A Sec 1; CA 10L Sec T	0.27	T Noojee	Part CA 19 Sec 3	0.50
T Coral Lyn	CA 14F Sec F	0.32	P Phillip Island	CA 72A	1.21
T Crib Point	CA 22-25 Sec 4	1.13	P Poowong East	CA 29D	0.51
T Crib Point	CA 20 Sec 2	0.12	T Reedy Creek	CA 1B Sec 1	0.45
T Crossover	<u>Gunn Road</u>	<u>1.9</u>	<u>(deleted by LCC --Sold)</u>		
	<u>Consequence of A3, variation.</u> <u>(Order in Council 17/6/1997)</u>		T Reedy Creek	CA 2B, 2C, 2D Sec 1	0.45
P Doolam	CA 27D	0.75	P Scoresby	Part CA 15A, <u>Part CA 21, Sec A</u>	~1.20
P Doolam	CA 40A	0.75	P Switzerland	CA 2B	1.00
P Doolam	CA 36F	2.48	T Taggerty	CA 2B Sec 13	0.20
P Dropmore	CA 6, 7 Sec B	<u>10.45</u>	T Taggerty	<u>Part CA 28A, parts CAs 1, 2, 15, 16 Sec 8</u> <u>(Order in Council 17/6/1997)</u>	<u>11.5</u>
P Fingal	CA 29A	0.81	P Tanjil	CA 34A, 34B	7.42
T Flinders	Part CA 43	0.20	P Tanjil East	<u>CAs 11E,13C Sec C</u> <u>(Order in Council 17/6/1997)</u>	<u>120.6</u>
P French Island	Parts CA 13, 14B	63.00	P Tanjil East	Part CA 18K Sec A	26.00
	<u>Now part of A11 French Island National Park.</u> <u>(Order in Council 17/6/1997)</u>		P Tanjil East	CA 18H, 18J Sec A	30.00
			P Tonimbuk East	Part CA 12A Sec C	8.00
P Fumina North	T. Tanjil Bren	4.10	P Tonimbuk East	Part CA 6A Sec C	2.80
T Garfield	CA 15B, 15C , 15C	0.25	P Tonimbuk East	Part CA 89 No Sec	1.20
P Gracedale	CA 37B	0.33	P Tonimbuk East	Part CA 10 Sec B	1.20
P Gracedale	CA 128B	0.10	T Trafalgar	CA 16B Sec 11	0.12
P Gracedale	CA 54D Sec B	0.19	T Trafalgar	CA 6A Sec 5	0.24
P Jeetho West	CA 48D 48E	0.82	P Tyabb	Parts CA 28H, 28J, 28P	26.00
P Jindivick	CA 59H	0.30	T Ventor	<u>Sec 4 (added by LCC)</u>	<u>3.04</u>
T Kinglake East	Part CA 6A	0.01	P Wandin Yallock	CA 22A	0.95
P Koo-Wee-Rup	CA IG, IF Sec H	1.11	T Wandin Yallock	<u>CA 1,2, Sec 28, CA8</u> <u>(added by LCC)</u>	<u>0.23</u>
P Koo-Wee-Rup East	CA 26B sec M	0.85	P Wannaeue	Part CA A	8.27
P Koo-Wee-Rup East	CA 48A Sec R	0.35	T Wesburn	CA 36 Sec A	0.39
T Korumburra	CA 5 Sec G	0.78	T Westbury	CA 1D Sec 3	0.21
T Korumburra	CA 1A Sec 4	0.09	T Westbury	CA 1C Sec 3	0.18
	<u>Transferred to M15 App VIII</u> <u>(See Order in Council 17/6/1997)</u>		P Whanregarwen	<u>CA 75C</u> <u>(added by LCC)</u>	<u>1.51</u>
T Korumburra	CA 2 Sec 4	0.36	P Whanregarwen	CA 44E	3.26
P Loyola	CA 79B	0.50	P Windham	CA 21K No Sec	0.25
T Maindample	CA 14 Sec 12	0.04	P Windham	CA 21G No Sec	0.25
T Maindample	CA 1 Sec 5	0.20	P Yarck	CA 64G	0.50
T Mansfield	CA Sec 1H 32	0.09	P Yarck	<u>CA 64H</u> <u>(added by LCC)</u>	<u>2.26</u>
T Mansfield	CA 9A No Sec	0.07			
T Marysville	CA 25 Sec 1	4.00	T Yarragon	CA 8, 9 Sec 5	2.11
P Merton	CA 41C	3.40	P Yea	CA 52H	0.25
P Nangana	CA 43K	0.07	P Yea	CA 214D	0.75
P Nar Nar Goon	CA 12A, 12B No Sec	1.74	P Yea	CA 258A	6.27
P Narracan	Pt CA 4S No Sec	39.06	T Yea	CA 12 Sec 28	0.78
P Narracan South	CA 13A	<u>0.40</u>	T Yea	CA 1, 2A Sec 8	0.18
P Narree Worrان	CA 35H	<u>11.66</u>	<u>Kallista NRE Works Depot complex; consequence of variation to A6(ix). (Order in Council 17/6/1997)</u>		

Glenewart

In 1974, the government purchased this area from the prominent conservationist Dr A.G. Scholes and vested it in the Victorian Conservation Trust, with the intention that it would be used for environmental education. A residential field studies centre was planned to be built and operated by the (then) Environmental Studies Association of Victoria. In 1980 financial considerations led to that plan being abandoned, and the area was transferred to the former Lands Department (now CNR) for management. It now receives very little use, and it is considered not to have sufficient conservation or community values to justify continued public ownership.

Given this and the proximity of other areas available for environmental education (see chapter J), Council considered that Glenewart could be either sold, subject to conservation covenants, or exchanged for other land. It would be appropriate if the proceeds from any sale were used for environmental education purposes or for improvements to other properties formerly owned by Dr Scholes and now held by the Victorian Conservation Trust.

Parish of Gracedale CA 4 SEC C 130 ha 'Glenewart'

Notes:

1. This area may be either sold subject to conservation covenants or exchanged for other land.
2. Proceeds from the sale of Glenewart could be used for environmental education or improvements to other former Scholes properties.

Former McLeod Prison Farm

This site was previously included in the French Island State Park. Council now recommends that the former prison and surrounding cleared farmland could be alienated. Because it abuts the area now recommended as a national park, however, Council considers the land should not be subdivided, that covenants on title or other instruments should be put in place to make this clear, and that the preferred uses are largely for agriculture and tourist-related development.

As outlined in the proposed recommendations, the former prison buildings have been assessed as being of State historical significance. The key historic elements of the buildings should be protected by covenants. (LCC note)

Parish of French Island, part ~~CA 33 SEC O (274 ha)~~ CA 2E of O (222.6 ha) (added by LCC)

Land exchanges

Township of Marysville PART CA 13 NO SEC (27 ha)

Notes:

1. Council intends that the area should be made available for the proposed Marysville sewerage works (see recommendation M16) and that an equivalent area of freehold land should be transferred to the Crown in exchange.
2. Due to the urgency of this proposal, implementation of the exchange is being carried out by revocation of the existing approved recommendation for the area.

Parish of Warburton CA 20B (13.4 ha)

Note: Council intends that this land should be made available in exchange for at least an equivalent area of freehold land, which is to be added to State forest.

Parish of Wandin Yallock CA 62A (3.6 ha)

Note: Council intends that this area be considered for exchange for freehold land adjoining Woori Yallock Creek to provide potential habitat for helmeted honeyeaters.

~~Parish of Kangerong CA 1, PARTS CAs 3B AND 8A, SEC 3 (57.5 ha)~~

~~(See Order in Council 17/6/1997)~~

~~Note: Council intends that this area be considered for exchange for land owned by the Shire of Flinders adjoining the Arthurs Seat State Park.~~

~~(See Order in Council 17/6/1997)~~

Parish of Nepean Part CA 42A (0.4 ha)

Note: These areas of public land, containing refuse hoppers managed by the Shire of Flinders, could be considered for exchange for other municipal land to assist in the consolidation of the boundaries of parks in the Shire.

Silvan No. 2 Reservoir Site

Melbourne Water purchased the land as a part of a possible reservoir site, but it is now surplus to Melbourne Water's requirements. One section has been recommended for addition to the Dandenong Ranges National Park (see Recommendation A6) while others have been modified, including an area leased for many years for flower production. It is proposed that the modified areas be included with land not required for public purposes, with a setback from Olinda Creek. Legal access to areas north of the creek would be required to be established. The forested parts of the Melbourne Water land should be retained and added to the adjoining park.

Recommendation

O2 Silvan No. 2 Reservoir Site

Melbourne Water land not approved at this stage (See Order in Council 17/6/1997)

That

- (i) the area of 31 ha shown on Maps A and B be available for alienation
- (ii) land within ~~50~~ 20 m of the north bank of Olinda Creek be retained and included in the Dandenong Ranges National Park

(See Order in Council 17/6/1997)

and that

- (iii) legal access be provided to land to be alienated north of Olinda Creek.

Anderson Creek

In the recommendations of the Council's Latrobe Valley Special Investigation (October 1987), the former State Electricity Commission identified several areas that were not currently required, but which will be required for coal-related development in the future. One of these is a large parcel (1470 ha) on Anderson Creek, which includes the site of a dump for overburden resulting from open-cut development.

The Council's recommendations in 1987 provided that this area be available under lease for use for agriculture or forestry, until required for coal-related development. The successor to the SEC, Generation Victoria, has sought flexibility in the future use and tenure of the Anderson Creek land, including the ability to sell it to a private (or privatised) body.

Anderson Creek

Recommendation

O3 That the area of 1470 ha at Anderson Creek, indicated on Map A, be available for agriculture or forestry until required for coal-related development.

Notes:

1. See also Recommendations K5 and G87.
2. This recommendation would not preclude the sale of this land to a privatised government body or a private body.
3. A substantial part of this area has recently been established as hardwood plantation.

Wonthaggi

The township area of the Borough of Wonthaggi contains extensive areas of public land. Much of this falls into three groups:

- public purposes
- open space/recreation
- other uses, including dwellings, car-parks, business premises and vacant blocks

In these recommendations Council has allocated land primarily on the basis of existing use. Land has been classified as not required for public purposes where it is presently used for private purposes, has no obvious public use or is particularly suitable for urban or agricultural development.

A list of these blocks follows. Of particular interest is a large block, CA 1, Sec 75, on the eastern edge of the township, which has the potential to be subdivided to provide a substantial supply of residential land.

From a town planning perspective, a 10- to 15-year land bank of suitably zoned land, based on current building permits or lot sales, would be considered desirable. Such a land bank exists at Wonthaggi at present. The majority of land being made available to date is freehold. Although the public land's unavailability has not inhibited development of the town, it has caused it to grow in a particular direction. The most recent subdivision has been to the north, with the development of areas in the east, closer to the town centre, restricted. While the land bank is presently adequate, the Crown land at the east of the town will have an important part to play in its future development.

Those areas at Wonthaggi with public land values - carrying historical sites or remnant vegetation, or used for formal recreation or municipal purposes - have been referred to in separate recommendations elsewhere in this report. The land referred to below could be made available for urban use, and in a few cases for industrial or commercial subdivision. The Borough Council has commented that, in the disposal of public lands, options for future green belts and public open-space requirements should be retained.

Wonthaggi

Recommendation

O4 That the areas at Wonthaggi listed in Table 25, and shown on Map C, be made available for alienation subject to:

- (i) liaison with the Borough of Wonthaggi (responsible for the detailed planning for future

land use in the areas)

(ii) liaison with the Department of Planning and Development (with respect to possible public housing opportunities)

(iii) release of the land being ordered, with priority given to land within or contiguous with the existing urban area

and

(iv) the guidelines below.

- All plans are to be consistent with any strategic plans for the township.
- Remnant vegetation is to be retained.
- Areas subject to subsidence hazard are not to be intensively developed.
- Public access links should be provided between the main blocks of retained public land (where appropriate, utilising unused roads with remnant vegetation).
- Provision is to be made for local amenity open-space areas.

Table 25: Land At Wonthaggi for Alienation

Description	Area (ha)	Description	Area (ha)	Description	Area (ha)
Land in the Parish of Wonthaggi		CA 7 SEC 56B	0.10	CA 3 SEC 70	0.10
CA 26F	29.89	CA 28 SEC 56B	0.10	CA 4 SEC 70	0.10
CA 26G	25.00	CA 29 SEC 56B	1.00	CA 5 SEC 70	0.10
West Part CA 34C	3.00	CA 30 SEC 56B	0.10	CA 17 SEC 70	0.10
Land in the Township of Wonthaggi		CA 31 SEC 56B	0.10	CA 18 SEC 70	0.10
CA 30 SEC 2	0.09	CA 32 SEC 56B	0.10	CA 19 SEC 70	0.10
CA 3 SEC 3C	6.01	CA 33 SEC 56B	0.10	CA 20 SEC 70	0.10
Part CA 7 SEC 3C	3.80	CA 34 SEC 56B	0.10	CA 6-27 SEC 72	3.00
Part CA 2 SEC 4 (added by LCC)		CA 16 SEC 60	0.08	CA 1-12 SEC 74	3.00
CA 14A SEC 5	0.13	CA 3 SEC 63	0.25	Part CA 1 SEC 75	77.66
CA 7 SEC 31	0.18	CA 4 SEC 63	0.36	CA 1,3,4 SEC 86	1.14
CA 10 SEC 31	0.18	CA 5 SEC 63	0.25	CA 6A,11 SEC 86	1.21
CA 11 SEC 31	0.18	CA 6 SEC 63	0.20	Part CA 8 SEC 86	11.42
CA 12 SEC 31	0.18	CA 7 SEC 63	0.20	CA 15 SEC 86	1.80
CA 13 SEC 31	0.18	CA 8 SEC 63	0.20	CA 1 SEC 89	0.81
CA 14 SEC 31	0.18	CA 9 SEC 63	0.20	CA2 SEC 89	0.94
CA 1 SEC 33	0.26	CA 10 SEC 63	0.20	CA 2 SEC 70 (added by LCC)	0.10
CA 2 SEC 33	0.10	CA 11 SEC 63	0.20	CA 7 SEC 98	0.08
CA 3 SEC 33	0.10	CA 12 SEC 63	0.20	CA 8 SEC 98	0.08
CA 4 SEC 33	0.10	CA 12 SEC 64	0.10	CA 52 SEC 98	0.09
CA 5 SEC 33	0.10	CA 13 SEC 64	0.10	CA 53 SEC 98	0.09
CA 6 SEC 33	0.10	CA 14 SEC 64	0.10	CA 72 SEC 98	0.65
CA 7 SEC 33	0.10	CA 15 SEC 64	0.10	CA 73 SEC 98	0.03
CA 30 SEC 49	0.03	CA 16 SEC 64	0.10	CA 74 SEC 98	0.03
CA 31 SEC 49	0.10	CA 17 SEC 64	0.10	CA 6 SEC 100	0.09
CA 36 SEC 54A	0.07	CA 1 SEC 69	0.10	CA 20K, J, H, D, G, Q, R SEC 100	5.67
CA 28 SEC 55	0.20	CA 2 SEC 69	0.10	CA23 SEC 100	0.33
CA 27 SEC 56A	0.11	CA 3 SEC 69	0.10	CA 25 SEC 100	0.33
CA 28 SEC 56A	0.11	CA 17 SEC 69	0.10	CA 14A SEC 107	0.56
CA 3 SEC 56B	0.10	CA 18 SEC 69	0.10	CA4H SEC 117	0.30
CA 4 SEC 56B	0.10	CA 19 SEC 69	0.10	CA 4J SEC 117	0.21
CA 5 SEC 56B	0.10	CA 20 SEC 69	0.10	CA 4K SEC 117	0.19
CA 6 SEC 56B	0.10	CA 1 SEC 70	0.10	CA 39-43 SEC 117	0.45

P. DEFENCE FORCE AND OTHER TRAINING

Council believes that defence military training is a legitimate use of public land, but is aware of the possibility of conflict arising with some forms of recreation and the protection of natural values. It is Council's view that military training should not occur in reference areas or wilderness areas, and only under special circumstances in parks and other areas of recreation and conservation significance.

Under the regulations to the *Defence Act 1903*, the Minister for Defence may declare an area of public land to be a defence military training area, but only with the consent of the State authority responsible for the management of the land. The managing authority may also impose conditions of use on particular areas and these must be observed. Provisions for compensation for damage to assets or land also exist. No public land in Victoria is currently designated for military training purposes, however.

Exercises involving navigation and training with conventionally tyred vehicles and on foot conflict little with land management aims and may even be permitted in some parks and other reserves. However, strict controls must be imposed on the use of heavy vehicles. Such controls may concern the area used and/or the nature of the use.

The Australian Army has conducted military training exercises in State forest and parks in an area extending from the Big River catchment to Cathedral State Park, in the Murrindindi River catchment, in the Kinglake National Park and in the Tallarook State Forest. Activities undertaken included adventure training, navigation, bushcraft, communications and infantry exercises. Vehicular use involved three to five four-wheel-drive vehicles and two to three 2.5- or 5-tonne trucks. Pyrotechnics and blank ammunition may be used in specific areas.

Many organisations, including the Victoria Police, the State Emergency Service, Outward Bound, cadet groups, outdoor adventure operators and some community groups, also provide training programs in search and rescue, survival and outdoor skill techniques. Where such an exercise is proposed, it should be undertaken in a manner consistent with the requirements placed on other users. That is, it should be subject to compatibility with the management aim of the respective areas.

DEFENCE FORCE AND OTHER TRAINING

Recommendation

P1 That public land continue to be available for training in search and rescue, survival techniques, outdoor skills and similar activities, at the discretion of the land manager, to the extent consistent with the management aims of the respective area.

P2 That, where defence military training is conducted on public land:

- (i) the type of activities, and their timing and location, be subject to agreement between the Department of Defence and the Department of Conservation and Natural Resources, and rehabilitation of areas damaged by military exercises be undertaken at the expense of the Department of Defence to the satisfaction of the Department of Conservation and Natural Resources
- (ii) the Department of Conservation and Natural Resources be consulted (for fire-protection purposes) with respect to training activities in protected public land

and that

- (iii) the activities be excluded from reference areas, wilderness areas and, except where it does not conflict with the purpose of the reserve, from parks and other areas of recreation and conservation significance.