A photograph of a stone wall in a rural landscape. The wall is made of stacked stones and runs across the middle ground. In the foreground, there is a large, cylindrical object, possibly a tree stump or a large log, with several white, irregular patches on its surface. The background shows rolling hills and mountains under a clear sky. The overall scene is a natural, outdoor setting.

HISTORIC PLACES

SPECIAL INVESTIGATION

SOUTH-WESTERN VICTORIA

DESCRIPTIVE REPORT

LAND CONSERVATION COUNCIL

HISTORIC PLACES

SPECIAL INVESTIGATION

SOUTH-WESTERN VICTORIA DESCRIPTIVE REPORT

JANUARY 1996

LAND CONSERVATION COUNCIL

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Cover photograph:

**Iron fluming of the Stawell water supply system,
Grampians National Park**

Photograph: Rebecca Jones

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FOREWORD

The south-west of Victoria is fertile ground for an investigation of historic places on public land, possessing, as it does, a rich heritage of *the signs of past human activity*.

The Land Conservation Council, in meeting the Government's request to carry out an investigation of historic places in south-western Victoria, is required to establish an inventory of historic places on the public land in this region and to examine the adequacy of their protection. Subsequently, the Council will make recommendations for a comprehensive and representative network of historic places in the study area. Appropriate uses of these places will also be identified.

This report provides the factual basis for the investigation. It includes an initial inventory of almost 2000 places, but it is recognised that additional places will be added to this inventory over the course of the study. The report outlines the history and the related heritage of the area, describes in some detail its biophysical attributes and introduces the natural resources and present land uses. This information provides a valuable context for understanding the origins of the historical features we observe today.

The places identified in this report vary in their significance. The Council has developed criteria for the assessment of significance and, where

sufficient information is available, levels of significance have been assigned to the places identified in the report. This is an important aspect for community feedback.

Places associated with Aboriginal culture before contact with non-aborigines are not included in the study, although sites relating to the contact and post-contact periods are included.

Council is aware that many community and industry groups and individuals have further information about the values and uses of historic places in the study area. We are therefore seeking wide public involvement in expanding the information base and identifying assessment and management issues before the Council develops its proposals.

Submissions are now invited and should be forwarded to the Secretary of the Land Conservation Council by the closing date, 12 April 1996. The Council will prepare its *Proposed Recommendations* after careful consideration of these submissions. There will be another period for public response following publication of the *Proposed Recommendations* later in 1996. Council will then make its *Final Recommendations* to the Government.

We look forward to your involvement in the study.



Don Saunders
Chairman

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Historical societies throughout South-western Victoria, other individuals, and municipal and Government employees also contributed substantially to this investigation.

Photographs:

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Photographs on pages 35, 40, 59, 74 and 106 are from the La Trobe Library collection, while those on pages 62, 67, 81, 111 and 116 are from the collection of the Historic Places Section, Department of Conservation and Natural Resources.

Other photographs were taken by S. Ransome, A. Brady, M. Summerton and R. Jones, or are from the collection of the Land Conservation Council.

PART I

1. INTRODUCTION AND METHODOLOGY

In February 1995 the Minister for Planning requested the Land Conservation Council to carry out an investigation of historic places on public land in South-western Victoria.

The investigation area contains some of the most significant places associated with the activities of sealers and whalers, sites of early pastoral settlement, much of Major Thomas Mitchell's 'Australia Felix', and the western extremes of the gold rush landscape. Agriculturally, the area includes rich pastoral land, and some of the most productive cropping land. Chapter 3, 'History and Heritage', outlines the area's fascinating history, and Chapter 4 provides a historical geography of the region.

Cultural Heritage

The human history of this area has left a rich heritage of historic places on public land. These are the relics of past human activity, reminders of where we have been and what we have done.

Some historic places manifest as subtle marks on the landscape. These may be the result of early, unsuccessful landuse practices, sites of conflict or where meetings were held, or where tracks once forged across inhospitable country. Disturbed, weed infested bushland can point to the site of abandoned agricultural selections. Severely eroded creek gullies attest to overzealous clearing of streamside vegetation. Names, such as Chinamans Track in the Grampians, or the Convincing Ground at Portland, are sometimes the only reminders of a one-off event or a significant but shortlived local episode.

Other places reflect attempts to harness nature or modify the environment for economic or other reasons. These can be large scale engineering feats, such as the network of water supply channels in the Wimmera, the breakwater at Warrnambool, or the modern harbour complex at Portland. Some, including the diversion tunnel for the Gellibrand River at Point Ronald near Princetown, were obvious failures. Others are mysteries today. What was the purpose of the large sand ridge excavation known as 'The Cutting' in the Little Desert National Park?

Grand historic places on public land proclaim the presence and role of government in early

rural Victoria. Portland's collection of bluestone public buildings attracts our attention in this way. Town and shire halls across the region are often imposing structures. Gaols, hospitals, court houses and schools, many no longer used for their original purpose, are distributed over the region. Public halls and former mechanics institutes continue to serve their communities, as meeting centres or function rooms.

Human activity in the south west has also produced roads and bridges, public parks and gardens, and avenues of trees. Memorials and monuments are the artefacts of public memory and conscience. Railway stations, in a variety of styles, materials and sizes, adjoin lines that extended across the region, many now dismantled or closed.

The public land estate reflects changes in community expectations and attitudes to the environment. While national parks and conservation reserves protect areas of outstanding scenic value, or remnants of natural vegetation and habitat, they also protect historic structures and features, such as shipwreck sites and graves in the Port Campbell National Park, or dry stone walls at Mt Eccles. Forests of the region have been heavily used for much of the past 150 years, and retain valuable evidence of this activity.

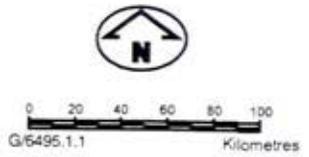
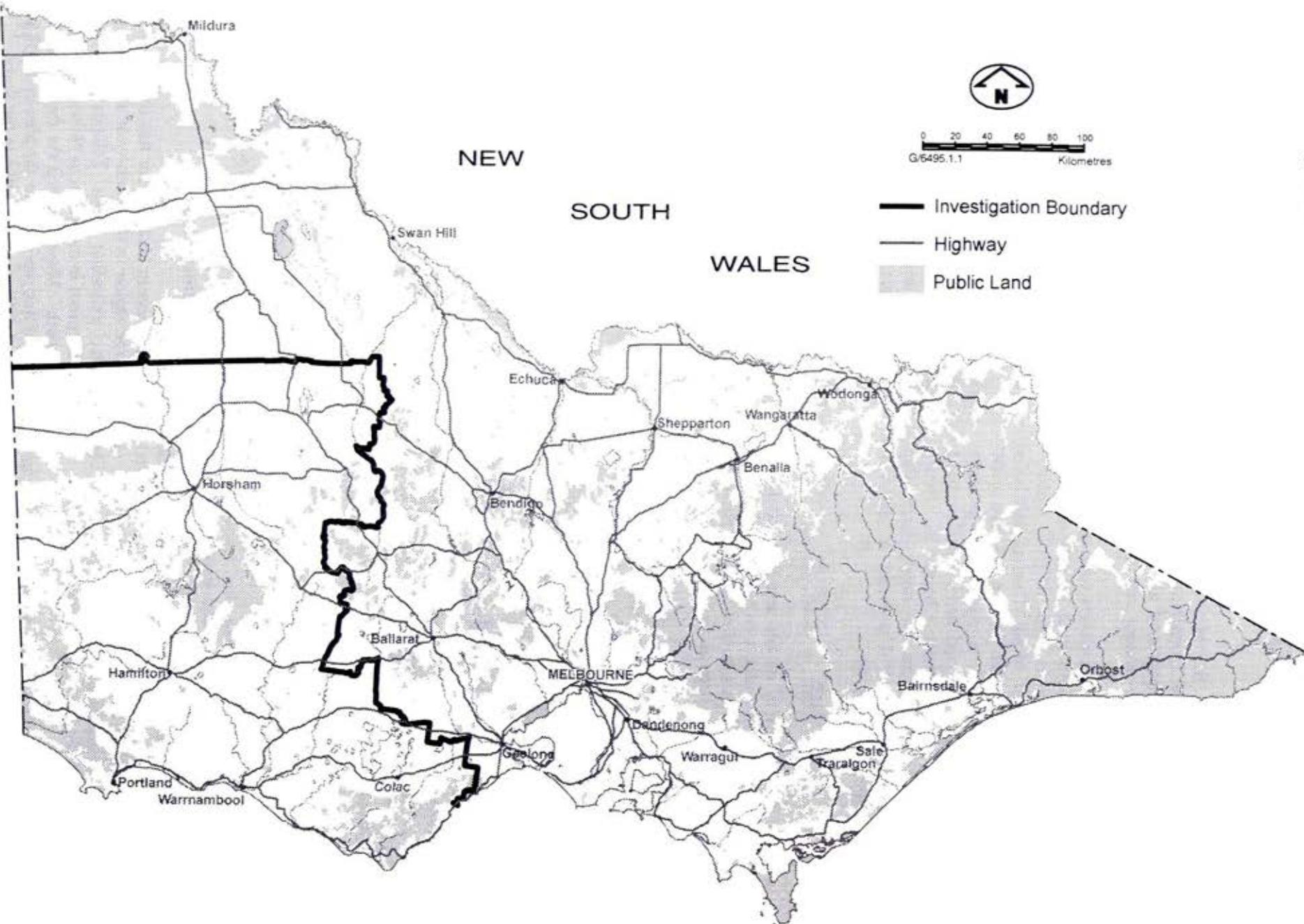
Community views on what constitutes cultural heritage, and what is significant, are changing and evolving. This poses problems for the identification of heritage. Later in this chapter the methods applied in compiling an inventory of historic places, and assessing their significance, are described.

hpframe

1.1 HISTORIC PLACES SPECIAL INVESTIGATION

Investigation Area

South-western Victoria, for this investigation, is a large region in the south-west and west of the State, extending from Telopea Downs and Wycheproof in the north, to Nelson and Lorne in the south. Maps 1 and 2 (in the pocket at the back of this report) show the area in detail, while Map 3 indicates its location in the State.



- Investigation Boundary
- Highway
- Public Land

The northern boundary is mostly along the 36th parallel of latitude, often taken to be the southern edge of the Mallee country. The South Australian border is the west boundary, while the coast from there to Eastern View near Lorne constitutes the southern boundary. Municipal boundaries make up the eastern edge, which divides but includes substantial parts of both the West Victorian Uplands and Western District volcanic plains.

The investigation area is based on the Land Conservation Council's Wimmera Area, South-western Area Districts 1 and 2 and Corangamite Area, with small parts of the North Central and Ballarat Areas included. Map 4 shows the boundaries of these areas.

For these areas, the Council has previously made recommendations which have been considered and in virtually all cases approved by the government.

Study area	Date of recommendations
Wimmera Area	Nov 1986
South-western Area District 1	April 1973; reviewed Mar 1983
South-western Area District 2	May 1982
Corangamite Area	Sept 1978
North Central Area	Feb 1981
Ballarat Area	April 1982

Public land uses in the investigation area resulting from these recommendations are shown on Maps 1 and 2.

Order in Council

The Order in Council for the investigation, approved on 14 February 1995, included the following objects:

1. to establish a comprehensive inventory of the historic places across the study area;
2. to examine the adequacy of the present LCC recommendations for the protection of historic places on public land and to recommend changes, as required; and
3. to make recommendations by 29 November 1996
 - (a) for the protection of a comprehensive and representative network of historic places in the study area, within a State-wide context covering the range of themes occurring on public land; and

- (b) to identify uses appropriate to these places.

Under the Order the investigation is to be comprehensive, requiring consideration of the range of historical themes occurring on public land. The historical themes, and the use of the Australian Heritage Commission's principal Australian historic themes framework, are discussed in Chapter 7.

The recommendations are also to be made in a State-wide context, requiring an awareness of significant sites outside the study area.

Representative approach

When considering sites of natural heritage value Council has, in previous investigations, used a representative approach. That has involved characterising a region by its land systems, habitat types or vegetation communities, and aiming to select areas for protection that, by their content and condition, represent each identified type. Areas so selected may not contain highly significant species, but these areas should be large enough to sustain their biological populations.

The Order in Council requires a representative network of historic places to be recommended. The development of a representative approach to the protection of cultural heritage on public land is a new challenge for the Council.

Land Conservation Act 1970

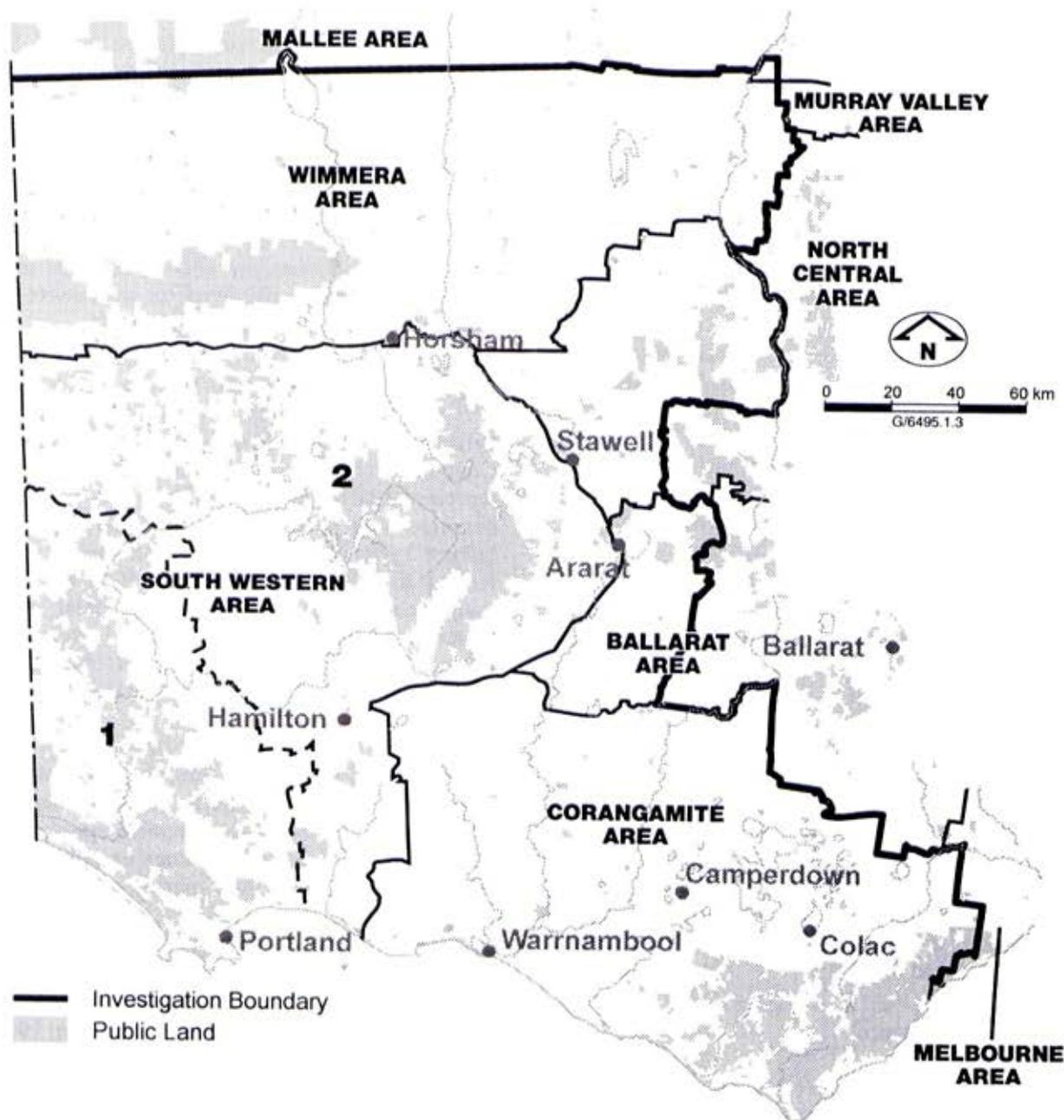
This study is a Special Investigation under Section 8 of the *Land Conservation Act 1970*, conducted under the provisions of the *Act*. The requirements for a special investigation include specification of a time limit, as included in the Order.

Limitations

This investigation has certain limitations. It is not intended that places associated with Aboriginal people before contact with non-Aborigines will be considered as part of this study, although sites relating to the contact and post-contact periods are included.

Underwater shipwrecks are not being considered, given that they are a geographically distinct group covered by specific legislation, and subject to the recommendations of the Council's Marine and Coastal Special

MAP 4: Land Conservation Council Investigation Areas



investigation. Shipwreck sites and shipwreck-related places on beaches or otherwise on land are included.

The exclusion of the City of Warrnambool and the Rural Cities of Horsham and Ararat was a serious limitation at the start of the investigation. As outlined below these areas have since been included.

Possible outcomes

Places of historic interest can be found in various existing categories of public land, including parks, State forest, historic and cultural

features reserves, and nature conservation reserves, as well as other small reserves.

It is not envisaged that Council will propose reservation of all historic places, but the recommendations will focus on those of particular significance, those representative of specific historical themes, and those of special tourism and educational value. The eventual outcome should be a network of historically significant places.

Guidelines for the conservation of places of lesser historical significance on public land are also proposed to be developed.

Where appropriate, it is intended that the investigation will provide a basis for future monitoring and management of historic places, and information of sufficient detail and scope to meet the requirements of Commonwealth agencies such as the Australian Heritage Commission, for example for National Estate listing.

Background to the Historic Places Investigation

In some previous studies, the Council commissioned consultants to identify sites of historical significance as a basis for considering recommendations for the protection and use of historical features. This resulted in the establishment of various *historic and cultural features reserves* (previously known as *historic areas and reserves*). In addition, historical features in parks or State forest were often listed for protection.

However, in investigations conducted by the Council prior to the North Central Area in the late 1970s, and for some since, no historic sites surveys were commissioned. As a result there was no systematic coverage of historic places on public land in these areas. Further, some of the consultants' reports placed too much emphasis on a single theme, for example mining.

In State-wide terms, therefore, survey coverage of significant historic sites on public land is neither consistent nor comprehensive. Surveys have not encompassed the whole range of historical themes occurring in the State, nor have they necessarily considered sites in the context of their surroundings.

Consultancies to identify historic places were carried out on behalf of the Council in the North Central and Ballarat Areas, in 1979 and 1980. Many places were identified, and some of these were subsequently recommended as historic areas and reserves by the Council. Other such reserves in the investigation area resulted from information on the historic values of particular sites being put to Council, but without systematic survey.

This investigation will reconsider such places in the investigation area, whether the present recommendations for these places are adequate and whether the recommendations applying to these areas are still appropriate.

Statewide Assessment of Public Land Use

In 1988 the Council published its Statewide Assessment report, which reviewed policies and approaches used by the Council over the previous 18 years. In relation to historic places, that report raised these issues:

- most identified sites relate to mining (that is, mining is relatively over-represented in recommendations)
- substantial gaps occur in the information base
- the whole of a study area should be considered, not just isolated sites out of context
- public land in cities and rural cities should be included
- continuing resource utilisation activities may in some cases threaten the survival of sensitive cultural heritage features
- further detailed surveys of Aboriginal archaeological sites are needed
- 'archaeological significance' needs to be more clearly defined
- systematic assessment of the State's archaeological heritage (and other heritage) is necessary
- groups of archaeological sites, outside parks and reserves, could be recommended as historic and cultural features reserves
- the effectiveness of Council's recommendations requires assessment

Uses of historic places

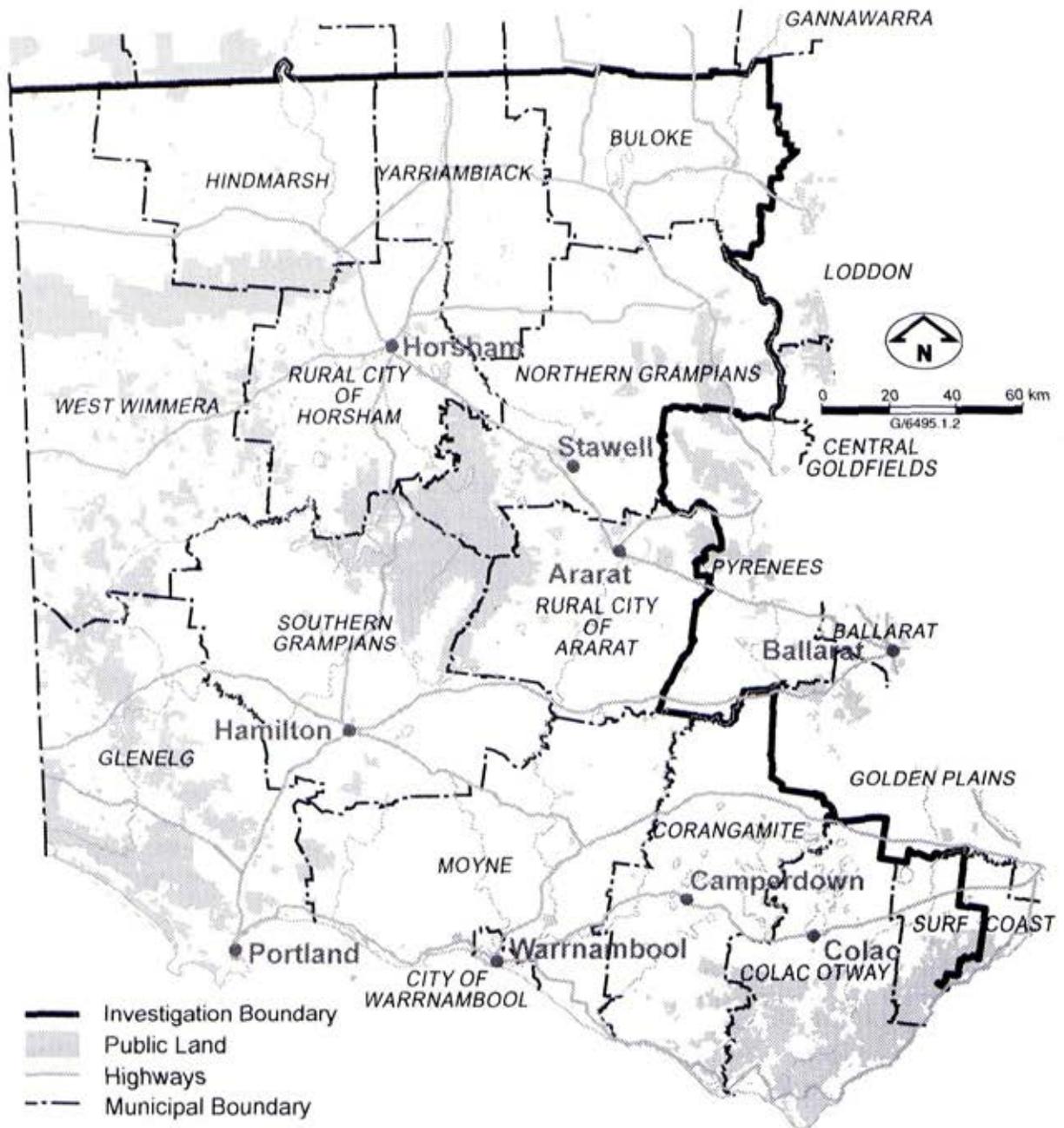
Historic places can have a range of uses, including education and interpretation, tourism, use for compatible purposes, and continuing resource use.

The Council's past recommendations provide for protection of particular elements of the remaining fabric of historic places which display the historical associations, and for recreation and education associated with the history of the area.

The recommendations also - particularly in areas with mining history - permit exploration for and extraction of gold, minerals and petroleum, and limited timber production where appropriate.

The recommended uses can vary from a high degree of protection, through the acceptance of gradual decay, to the conscious destruction of places by a new use of the area. Present-day resource uses may or may not impinge on the

MAP 5: Municipalities in the Investigation Area



protection of the historic values. One purpose of this investigation is to ensure that important places are identified and protected, while places of little importance could be modified or in some cases removed, where appropriate.

Balanced land use

Consideration of such matters requires an approach that balances the competing demands for use of an area. Under the *Act*, the Council is required to provide for the balanced use of land. These matters are discussed further in Chapter 9, which considers the uses and management of historic places.

Public Land

An important provision of the *Land Conservation Act 1970* is the definition of 'public land' which Council can investigate. Section 2(1)(a) provides that:

'Public land means

- (a) land which is not within the municipal district of a City Council or Rural City Council and is -
 - (i) unalienated land of the Crown including land permanently or temporarily reserved under Section 4 of

the *Crown Land (Reserves) Act 1978* and State forest and parks within the meaning of the *National Parks Act 1975*; or

- (ii) vested in any public authority (other than a municipal council or an Authority under the *Water Act 1989*, to the extent that the land vested in the Authority is within a sewerage district listed in column 3 of Schedule 12 of the Act); ...'

Accordingly lands in cities and rural cities, freehold (private) land, land owned by municipalities, and land vested in water authorities within sewerage districts are excluded from the Council's formal considerations, while Crown lands, State forests, *National Parks Act* parks and reserves, and lands vested in various public authorities are included in the investigation.

The above limits on 'public land' are not a substantial restriction to other Council investigations which primarily consider natural heritage outside urban areas, however they introduce serious limits for this historic places investigation. Historic places can be complex, or exist as networks of sites, and related sites may be located on different land tenures or categories of use.

Cities and rural cities

The Historic Places Study Area, as initially defined, surrounded the Rural City of Horsham and adjoined the City of Warrnambool and the Rural City of Ararat. The two rural cities are

large municipalities - Horsham includes 4 253 sq km and Ararat 3 701 sq km. They contain significant areas of public land with sites or features of historical significance, and the exclusion of this land would have resulted in an incomplete picture of the historical values of the south-west. It would also have led to inconsistent treatment of urban areas, given that the former Cities of Portland, Colac, Hamilton, Stawell, Towns of Camperdown and St Arnaud, and Borough of Port Fairy are now included in the study area, owing to the recent restructuring of Local Government.

Under Section 2(1)(b) of the *Land Conservation Act 1970* public land can include 'any other land' declared to be so under Section 2(2), notwithstanding the above limitations. Section 2(2) requires that the land to be declared public land must be vested in a Minister, or vested in a public authority.

Under that Section the Minister for Planning must consult with Ministers in whom such land is vested, or who are responsible for a public authority in which any land is vested. The Minister for Planning recently consulted with those Ministers, and the Commissioners of the municipalities of Warrnambool, Horsham and Ararat, who supported the inclusion of this land in the Council's investigation.

Subsequently the Minister recommended the inclusion of public land in the City of Warrnambool and the Rural Cities of Horsham and Ararat in the investigation, and a declaration to that effect was proclaimed in the Victorian Government Gazette on 23 November 1995.

TABLE 1.1 Municipalities, Population and Townships

Municipality	Area (sq km)	Population (estimate*)	Major townships
Ararat	3 701	11 940	Ararat, Buangor, Lake Bolac
Buloke (part)	3 520	5 580*	Charlton, Wycheproof, Donald
Colac-Otway	3 449	20 750	Colac, Gellibrand, Apollo Bay, Forrest
Corangamite	4 356	17 200	Camperdown, Terang, Cobden, Port Campbell
Glenelg	6 212	20 790	Portland, Heywood, Casterton
Hindmarsh (pt)	4 300	6 860*	Nhill, Dimboola, Jeparit
Horsham	4 253	17 870	Horsham, Natimuk
Moyne	5 853	16 500	Port Fairy, Mortlake, Koroit
Northern Grampians	5 903	13 320	Stawell, St Arnaud
Southern Grampians	6 800	18 170	Hamilton, Peshurst, Coleraine, Balmoral, Dunkeld
Surf Coast (pt)	1 020	4 900*	Winchelsea, Lorne
Warrnambool	121	25 050	Warrnambool
West Wimmera (pt)	8 120	5 160*	Edenhope, Kaniva, Goroke
Yarriambiack (pt)	3 365	7 760*	Warracknabeal

Municipalities in the South West

The investigation area includes the Shires of Colac-Otway, Corangamite, Glenelg, Moyne, Northern Grampians and Southern Grampians, and parts of the Shires of Buloke, Hindmarsh, Surf Coast, West Wimmera, and Yarriambiack (see Map 5). As described above, 'public land' in the City of Warrnambool and the Rural Cities of Ararat and Horsham is also included.

Appendix II lists these municipalities and those that formerly existed before local government restructure. Much information held by heritage organisations was collected, and in particular shire conservation studies were carried out, on the basis of the old municipal boundaries.

Land Conservation Council Processes

The conventional processes under Sections 5, 6, 9 and 10 of the *Land Conservation Act 1970* will be followed.

As outlined in Figure 1, this involves preparation and publication of a *descriptive report*, (this document) followed by the first public consultation period, which includes written submissions, briefings and discussions. The Council will then prepare its *proposed recommendations*. After they are published, a second consultation period ensues, and the outcome from that stage is considered before Council prepares its *final recommendations*.

This report includes no recommendations, but provides a factual basis on which organisations and members of the community may base their submissions to the Council during the first consultation period.

Recommendations will only be made for places on public land.

The aims of this report are to:

- describe the biophysical attributes of the area and introduce the natural resources and present land uses, in order to provide the setting for the historical features
- outline the history, and related heritage, of the area
- present an inventory of the area's historical and cultural features
- outline approaches to management of historic places and related issues

Review of categories

In its Melbourne Area, District 2 Review final recommendations (July 1994), the Council published a revised system of public land use categories. Previously Council had recommended numerous 'historic areas' and 'historic reserves'. The revised system provides for only one comparable category - 'historic and cultural features reserves' - which have a wider scope, embracing areas with significant cultural associations.

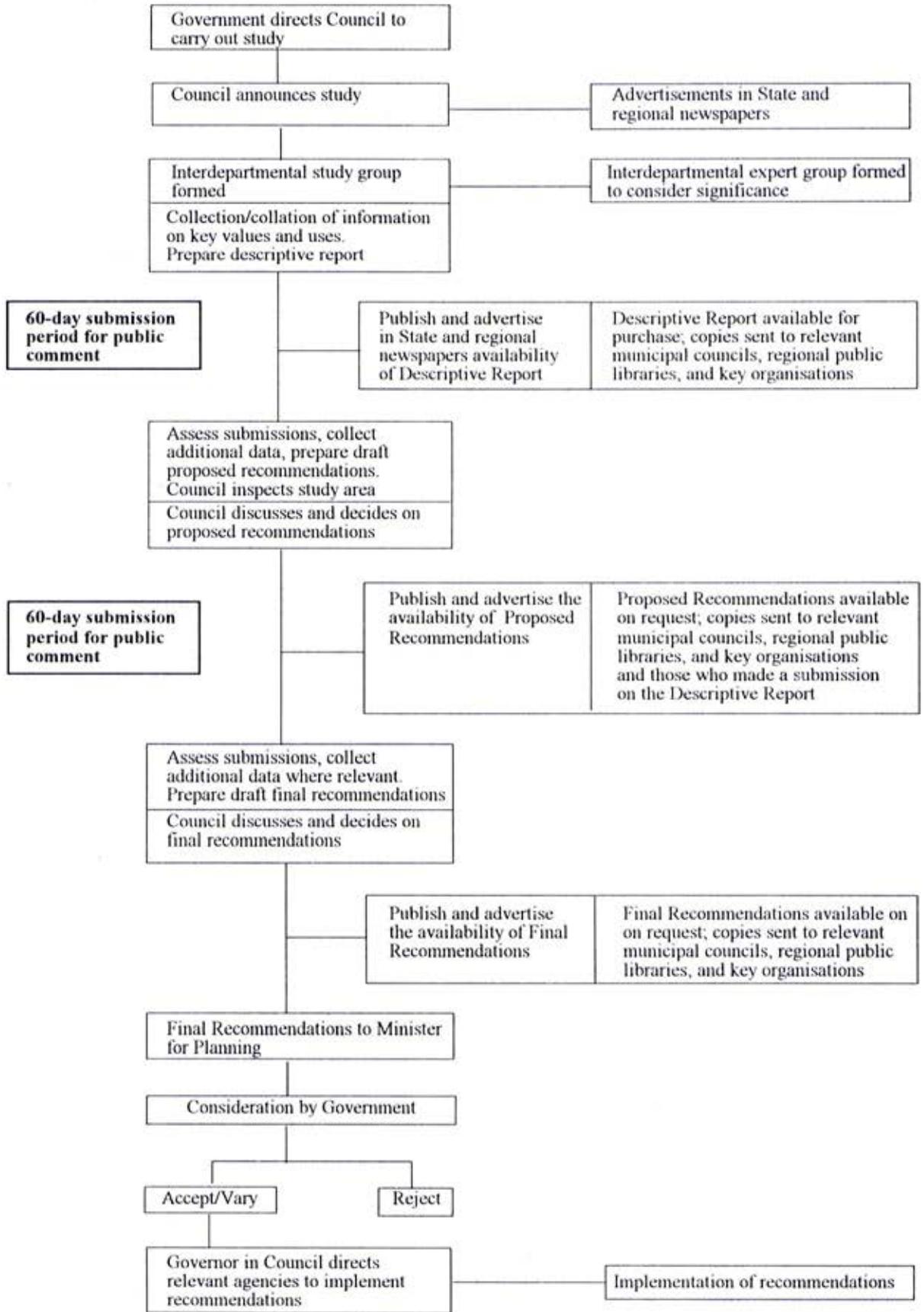
1.2 METHODOLOGY

Using previous large-scale survey work undertaken in East Gippsland and the Central Highlands of Victoria as a guide, this investigation has involved researching the history of the region, identifying and reviewing other available sources of information on historic places, identifying gaps in the range of known places in the region, consulting with local knowledgeable people, planning and undertaking field work to record historic places, and collating and condensing the information into a database format. Assessments of significance have also been made, where enough information is available.

A Study Group was formed to assist the investigation, and to provide advice on sources of information, and on the approach and progress of the study. The Study Group included Governor in Council appointees to Council and officers of the Department of Conservation and Natural Resources (including the Historic Places Section), Department of Planning and Development (Heritage Victoria), and the Department of Agriculture, Energy and Minerals. Representatives of the tourism industry, Public Land Council, Australian Heritage Commission, National Trust of Australia (Victoria), Royal Historical Society of Victoria, and Aboriginal Affairs Victoria, were also members of the Study Group. Various members of the group have contributed written material for the Descriptive Report.

An Expert Committee was also brought together, with members specifically invited for their expertise and relevant experience. The Expert Committee has provided assistance with drafting criteria for the assessment of significance, and with refining the thematic framework. The Committee has also been involved in assessing the significance of identified places, and ensuring consistency.

Figure 1: INVESTIGATION PROCESS





*Smith's Sawmill steam engine,
McKenzie River, Grampians*

Research

The Council has undertaken research into the history of South-western Victoria, to extract information about places, draw out themes for the region, identify key events and phases, and provide a context for the assessment of significance. The work of the Australian Heritage Commission on a Principal Australian Historic Themes framework has been incorporated into the study (see Chapter 7 'Themes').

Both published and unpublished sources have been consulted, including local histories and pamphlets, key secondary sources, and archival records. Files of the former Forests Commission of Victoria, and 'Rs' (reserve) files of the Department of Conservation and Natural Resources have also been consulted. The Bibliography comprises a select list of sources. A more complete list of sources on the history of the south west is available from the Council.

Data Holdings

It was recognised that other agencies hold substantial information on historic places in the region, and that much previous work had already been completed. The Council has reviewed all available historic places data to determine the nature and quality of the information, particularly in regard to location and description of extant features, and to identify both thematic and geographic gaps.

The key data holdings consulted included files, records and databases held by Heritage Victoria and the Heritage Assets Branch of the Department of Planning and Development (including the historic archaeological sites inventory), the National Trust, Australian Heritage Commission, Royal Historical Society

of Victoria, Aboriginal Affairs Victoria, and the Historic Places Section of the Department of Conservation and Natural Resources. Holdings of National Parks Service offices, local historical societies and the Geelong Historical Records Centre were also consulted. Discussions were held with the team engaged in the South West Heritage Survey, from the Geelong and Warrnambool campuses at Deakin University. Reports of conservation studies and heritage surveys were also consulted.

Individuals with specialist knowledge about places, such as staff of the former Rural Water Corporation, and members of the Light Railways Research Society of Australia (Victorian Branch) were consulted and generously gave assistance.

Field Surveys

Extensive and systematic field surveys were undertaken, with the aim of visiting places identified through research, and recording known places in their current condition. Historic places in national and other parks, reserves, forests, and parcels of public land in townships were surveyed. Local historians, members of historical societies, and Department of Conservation and Natural Resources officers were also consulted during field work, and gave much valuable assistance.

Approximately 1000 localities exist in the south west, ranging in size from larger towns and cities through to tiny hamlets and former townships. An attempt was made to survey the public land areas in most of these localities. Where this was not achieved, parish plans and maps were consulted to determine the possible existence of buildings such as schools or halls, and information on these structures was sought from local sources. Inevitably, some historic structures and features on public land have been missed.

Inventory

The Council has established an inventory which contains over 2000 places. Information has also been collected on additional places which were not entered into the database, as they were considered to have little or no cultural heritage value.

The inventory contains descriptive information about places, including their location and extant features, brief histories, themes and site types, and assessments of significance. Where

possible, the places have been mapped and precisely located, using full Australian Map Grid (AMG) coordinates. Places on the database are primarily organised on the 1:100,000 Auslig topographic mapsheet system.

Heritage Victoria has proposed the development of a comprehensive inventory of heritage assets in the State. The Council's investigation of public land will be a major input to this inventory.

Assessment of Significance

Cultural significance, as defined in *Article 1* of the Burra Charter, means 'aesthetic, historic, scientific or social value for past, present or future generations'.¹ Determining the cultural significance of a place draws out and highlights the qualities that make a place special or important.

All values are enhanced by the degree of surviving evidence, the intactness and integrity of the place or its fabric, or its ability to demonstrate the processes or events which occurred there in the past. Some rare places, however, with few or no remnant features to connect physically with their history, may still be of strategic historical importance, or retain strong historical or community associations. Occasionally a memorial or a plaque will point to the importance of a such place.

The Council has developed criteria (listed below) for the assessment of significance. They are based on established criteria, particularly those developed by the Australian Heritage Commission and Heritage Victoria.

Authors of heritage studies frequently develop their own criteria, or modify established criteria, especially when surveying places of a particular type. Examples of this include Peter Evans's 1993 study of historic sawmills and tramways in the Central Highlands of Victoria, and the criteria developed by the Historic Mining Sites Assessment Committee for the Statewide survey of historic mining sites, jointly funded by the National Estate Grants Program, the Department of Conservation and Natural Resources, Heritage Victoria, and the Department of Agriculture, Energy and Minerals.

The Council's historic places criteria are intended to provide for the assessment of a range of places, from intact buildings and structures, industrial sites and archaeological remains through to natural landscape areas, gardens, and

Criteria

A place (site, area, building, structure or feature, or group of buildings, structures or features, together with associated contents and surrounds) should meet one or more of the following criteria:

- A. Be important for its association with significant people, cultural groups, events, activities, scientific or technical endeavours, developments or cultural phases;
- B. Demonstrate an extraordinary, uncommon, endangered or comparatively old way of life, custom, land-use, technology, process, design or function;
- C. Exhibit an unusual richness or diversity of cultural features;
- D. Demonstrate innovative, influential or exceptionally fine craftsmanship, design, construction technology, decoration or use of materials;
- E. Be a representative example of type;
- F. Be an essentially intact example of type;
- G. Demonstrate a creative, innovative or influential technical or scientific philosophy, approach, method or accomplishment, including a response to site;
- H. Have had significance for the artistic, social, cultural, political or economic life of a local community, town, area, region or the State;
- I. Be significant for its demonstrated continuity of use over a long period, or for its changing sequence of styles, use, patterns of occupancy or functions over time;
- J. Be important for its potential use as a benchmark, research or teaching site;
- K. Be important for its potential use as a site for recreational interpretation, due to its ability to contribute to a wider understanding of Australian history.

historic routes. A place may be considered significant if it meets only one of the criteria, or if it is a component of a network or complex of places, the totality of which is significant. Where prior assessment of the significance of historic places in South-western Victoria has been rigorous, such as for places listed on the Victorian Heritage Register or those assessed by the Historic Mining Sites Assessment Committee, then the levels of significance already assigned will stand for this report.

Aboriginal communities will be invited to assess the significance of Aboriginal historic places. Until consultation with the relevant communities is undertaken, all contact and post-contact places listed in the inventory will be assumed to have some significance.

It should be noted that assessment of significance is not an exact science. It is frequently made in the context of imperfect knowledge, where the assessor brings his or her own judgements and interests to the task. In recognition of this, assessments should not be regarded as final, and all should be subject to review as more information becomes available. There is some inherent historic value in all places, structures and human activities. As our appreciation of heritage and our understanding of historical value is continually evolving and changing, so our view of what is significant will also evolve and change.

The Council has attempted, where sufficient information is available, to assign levels of significance (local, regional, State) to the identified places (see inventory). It should be noted that these assessments are provisional only, and may be adjusted as more information becomes available.

Social Values

Social value embraces the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group.² Individuals and communities attach special meanings to certain places. These are usually community owned or publicly accessible places, such as meeting places, commemorative places, places of entertainment and places where significant events have occurred. Social value also relates to traditions, identity and cultural aspirations. Johnston³ provides a comprehensive overview of the meaning of social value, and its implications for heritage identification and management.



Nhill courthouse, constructed 1888

The Order in Council for this study requires that places be investigated for their historical values. As such, the identification of the social value of places has not been a priority of the study. It is recognised, however, that many historic places do have special importance and associations for individuals and communities, which may not be represented by the fabric of the place. It is also recognised that conserving historic places has its own social context, which can include the involvement of the local community, as well as contributing to the social cohesion of that community.

Consultancies

A substantial part of the information contained in the inventory has been compiled by consultants. Their full reports have not been published, but are available for inspection at the Council's offices.

The Council commissioned several consultancies to prepare narrative histories, provide specialist expertise, and to fill thematic or geographic gaps in the range of known and recorded places. The consultancies include:

- Jan Critchett (July 1995), Historic Places Special Investigation, South West Victoria - A Study of Aboriginal Contact and Post-contact History and Places, Centre for Australian Studies, Deakin University, Warrnambool.

After consultation with the author, Associate Professor Critchett's narrative of Aboriginal history in the contact and post-contact period has been integrated with the rest of the narrative text in Chapter 3. Substantial elements of the original text appear in the 'Contact', 'Settling' and 'Governing and Administering' Sections.

- Andrew Story and Peter Davies (August 1995), Historic Forest and Forest-based Places in South West Victoria, Andrew Story Consultant Archaeologist, Melbourne.

The history of forest industries and activities in the south west, written by Andrew Story and Peter Davies, is reproduced in part in the 'Forests' section of Chapter 3.

- Joe Powell, Historical Geography

Professor Powell's essay on the historical geography of South-western Victoria in the post-contact period is reproduced in its entirety in Chapter 4 'Historical Geography'.

- Ian Clark, Study of Pre-Contact Aboriginal History

Dr Clark's narrative on Aboriginal history prior to the arrival of Europeans appears at the beginning of Chapter 3 'History and Heritage'.

Several other consultancies were also commissioned, to survey buildings and structures on public land in selected towns:

- Bryce Raworth (June 1995) LCC Historic Places Study South West Area - Stawell, Hall's Gap and St Arnaud, Bryce Raworth Conservation/Urban Design, Windsor.
- Graeme Butler (June 1995) LCC Historic Places Study South West Area - Cobden, Colac, Mortlake, Peshurst and Terang, Graeme Butler and Associates, Melbourne.
- Andrew Ward (June 1995) Historic Places Special Investigation, South-western Victoria, Historic Buildings and Places on

Public Land at Jeparit, Kaniva, Natimuk, Nhill and Serviceton, Andrew Ward Architectural Historian, Burwood.

- Roger Beeston (June 1995) Historic Places Special Investigation, South-western Victoria - Charlton, Warracknabeal, Wyche-proof, Donald, Casterton, Heywood, Coleraine and Edenhope, Roger Beeston Architect, Prahran.

Public Knowledge and Comment

Many individuals and organisations have an interest in historic places, and have collected much information on the places listed, and on additional places. The Council would welcome any information or advice about these places (see the inventory for a list of places identified).

The Council can only make recommendations for public land, which includes Crown land managed by, or freehold land owned by, public authorities. It does not include places on municipal-owned land.

Owing to difficulties in determining boundaries, it is possible that some parcels of private freehold land may have been inadvertently included in the inventory. The Council would welcome advice on any such places.

Notes

1. Marquis-Kyle and Walker 1992: p.69.
2. Marquis-Kyle and Walker 1992: p.73.
3. Johnston 1992: What is Social Value?

2. BIOPHYSICAL DESCRIPTION

The investigation area is very diverse, encompassing steep slopes of the Otways, rocky ridges of the Grampians, the volcanic plains and Wimmera clay plains, and sand dominated surfaces, from coastal dunes in the south to Mallee dunefields. This chapter briefly describes the major geomorphic regions.

The biophysical characteristics of the investigation area strongly influenced Aboriginal life and land use, the levels and patterns of pastoral use and selection, resource harvesting uses, and areas remaining as public land. Accordingly, they provide important context for consideration of historical usage of the area, and guidance as to the heritage that may be found.

Geomorphic Units and Land Systems

Geomorphic units in Victoria have been mapped by Jenkin and Rowan¹, as shown in Map 6. Land systems across the State were subsequently mapped by Rowan², drawing on many published and unpublished land system surveys. The first of these - for South-western Victoria, by Gibbons and Downes³ in the 1950s - was a seminal study, establishing the land system method of mapping landscapes. Geology, topography, and climate were described and integrated, identifying mappable units that had consistently repeating patterns of vegetation and soils. Such units give guidance for land use decisions for both public land and private use, and various planning needs. Land system boundaries are delineated on maps accompanying the Council's Statewide Assessment of Public Land Use report⁴.

Table W summarises the geomorphic units occurring in the investigation area, and tables explaining the symbols used in the land system codes are in Appendix III.

Vegetation Descriptions

Vegetation descriptions are drawn from a classification of Victoria's flora prepared by the Department of Conservation and Natural Resources, for a project to identify pre-European vegetation types, using the geomorphic units and land systems. The classification identifies 27 broad vegetation types across the State, containing 81 vegetation complexes. These complexes contain one or more ecological

vegetation classes, based on floristic associations of plant species. Vegetation types occurring in South-western Victoria, and some major species and associations present are noted below. The vegetation types and the geomorphic units in which they occur, are listed in Appendix IV.

GEOMORPHIC UNIT DESCRIPTIONS

2. West Victorian Uplands

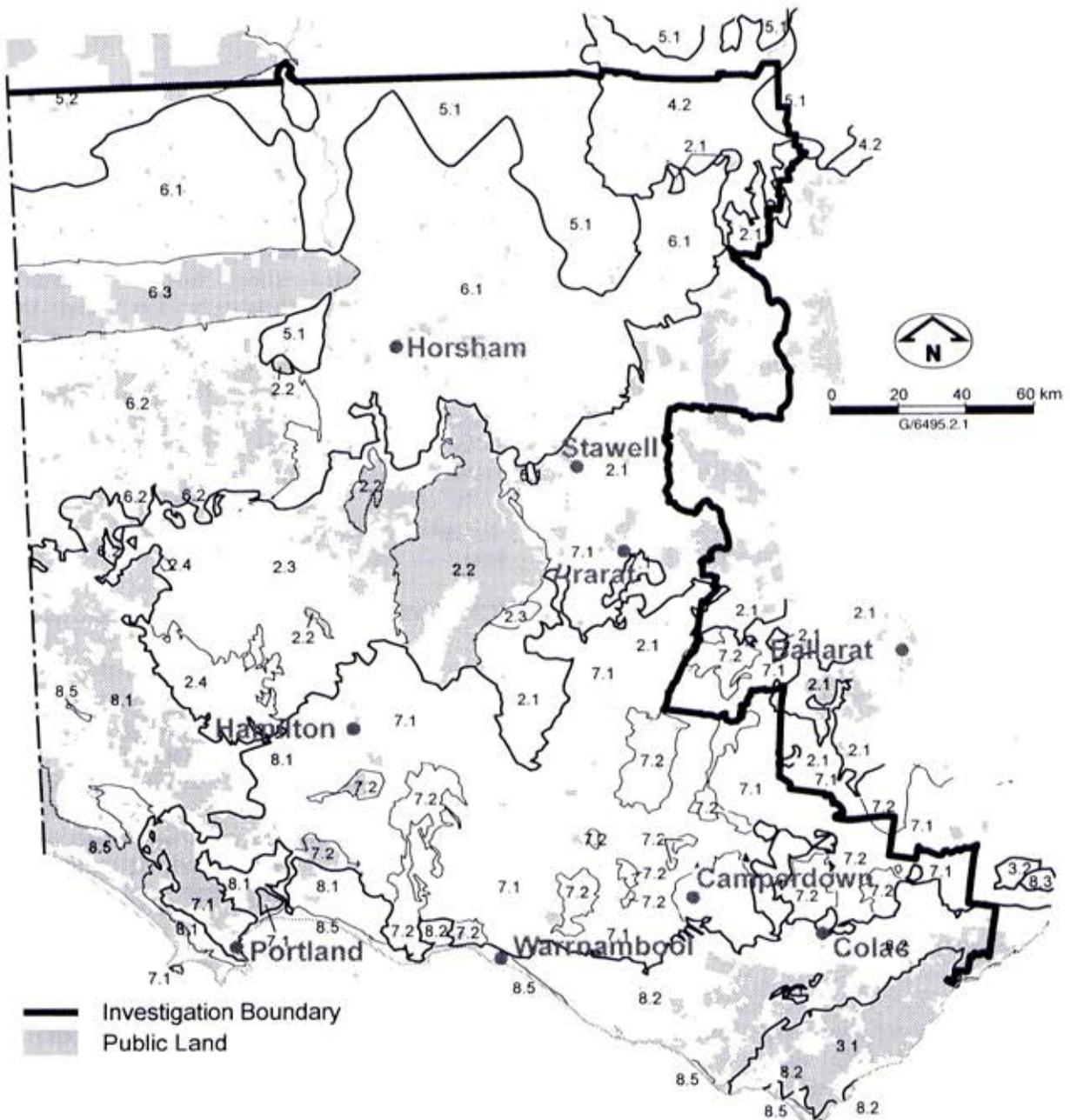
The uplands are part of the Great Dividing Range. In the investigation area, they lie in a wide band straddling the Divide from St Arnaud and Buangor, on the east boundary, to Casterton and Merino in the west. They comprise mainly Palaeozoic sediments, with granitic intrusions.

The West Victorian Uplands are divided into four units - 2.1 Dissected Uplands, 2.2 Grampians, 2.3 Dundas Tablelands, and 2.4 Casterton-Merino Hills.

2.1 Dissected Uplands

The Dissected Uplands (Midlands) form the Great Divide and associated ranges east of the Grampians, including the prominent Mt Cole, St Arnaud and (east) Black Ranges, along with an area around Glenhompson. They consist largely of unfossiliferous marine sedimentary rocks - sandstone, mudstone, shale and slate - of Lower Ordovician/Cambrian age (that is, older than about 480 million years). Within the sedimentary rocks the other main parent rock types are granitic intrusions.

The sedimentary rocks in the Dissected Uplands have been intensely deformed by folding and faulting, and show some metamorphism. Following uplift they have been strongly dissected, with the dense pattern of drainage north and south of the Divide reflecting the underlying rock structure. The surface topography of the Dissected Uplands varies from steep sideslopes with narrow ridges, as at the St Arnaud Range, to gently sloping, maturely dissected areas with low relief, such as those around Stawell. Quartz reefs in these Palaeozoic rocks were gold-bearing, leading to the intense search for reef and alluvial gold.



Number	Local name	Number	Local name
2.1	Dissected Uplands	6.1	Wimmera Clay Plains
2.2	Grampians	6.2	South West Wimmera Plains and Ridges
2.3	Dundas Tablelands	6.3	Little Desert
2.4	Casterton-Merino Hills	7.1	Volcanic Plains
3.1	Otway Ranges	7.2	Stony Rises
4.2	Older Alluvial Plain	8.1	South West Sands
5.1	Mallee Plains	8.2	Port Campbell Plains
5.2	Big Desert Dunefield	8.5	Coastal Dunefields

Lower Devonian (370–410 million years) plutons of granite, granodiorite and diorite have intruded in several places, forming the prominent massifs Mt Langi Ghiran and Mt Buangor, Black Range (east), and the landscape north-west of Chatsworth.

Mean annual rainfall (see Map 7) exceeds 800 mm at Mt Buangor, but that is localised, and from Langi Ghiran to Moyston there is 600 to 650 mm, around Wickliffe - Glenthompson 550 to 650 mm, and between St Arnaud and Joel Joel 450 to 550 mm.

All the formerly extensive occurrences of the *Box-ironbark forest complexes* broad vegetation type in the investigation area are within the Dissected Uplands geomorphic unit. Dominant species are red ironbark and grey box, with a shrubby understorey of wattles and other species. Remnants of public land within this unit in the investigation area carry grey box-yellow gum, or red ironbark-grey box-yellow gum forests. These durable-species forests provide a valuable source of dense timbers.

Another common vegetation type in this unit was *Plains grassy woodland complexes*, located between Glenthompson and the Grampians, between Stawell and Halls Gap, and on the floodplains of upper Wimmera River tributaries. Extensive native perennial grasslands characterised this type, with river red gum and yellow box trees at a low density, and some woody shrubs. On public land west of Moyston, a low shrubby woodland now occurs with river red gum, yellow gum, and scent-bark, over drooping she-oak, and native perennial grasses and herbs.

Dry foothill forest complexes occurred on the plains around Ararat, and south-west from Stawell. Forests of messmate, red stringybark and long-leaf box, over an open shrub layer of golden and hedge wattle, and heathy plants and tussock grasses, are now found on public land west of Ararat. In Dunneworthy Forest, red stringybark with red box, yellow box, long-leaf box and yellow gum dominate a sparse and open understorey of golden wattle and other shrubs.

In the wetter Mt Cole Forest, and at Langi Ghiran State Park, *Moist foothill forest complexes* occurred. These areas now have medium to tall forests of messmate, brown stringybark, blue gum, and manna gum, over blackwood, silver wattle, prickly moses, shrubs and forest wire grass. The Mt Cole forests

provided resources for mining timbers and sawmilling.

The pattern of land systems is complex, reflecting the ranges of parent material and landscape dissection.

A broad soil classification, based on soil properties affecting vegetation, has been derived by Gibbons and Rowan⁵. The most common soils in the Dissected Uplands are red duplex soils, and red or yellow bleached duplex soils. Red duplex soils have poorly structured topsoils with hard-setting surfaces, available water storage is relatively low, and they are vulnerable to sheet and gully erosion. Bleached duplex soils are prone to waterlogging in Winter, penetrability for plant roots is seasonally low for two horizons, nutrient status is low, and B-horizons of the yellow soils are dispersive, resulting in risks of sheet, tunnel and gully erosion. These limitations suit the box-ironbark forests and gum-box woodlands found here.

2.2 Grampians

The Grampians sedimentary parent rocks - marine and non-marine sandstones and mudstones - were laid down through the Middle Silurian to Lower Devonian stages (about 380–420 million years ago). The Grampians have been faulted and uplifted, forming tilted plateaus with steep escarpments or strike ridges at the fractured edges. Recent colluvial scree and outwash flanks the rocky slopes.

A majestic mountain range, the Grampians dominate the centre of the investigation area, Mt William rising to 1170 m. The primary form of the Grampians landscape directly conforms to the resistant sandstone layers, with subsequent dissection providing finer-scale landforms.

The Grampians are of great importance to Western Victoria for their rain, with 1000 mm falling each year on average at Mt William, and the area between Victoria Range, Mt Difficult and Mt William receiving over 800 mm. Map 7 illustrates the steep isohyet gradient surrounding the Grampians. The primary significance of these water resources has been recognised in the Wimmera-Mallee and urban water systems supplied from here.

Vegetation is diverse, ranging from forests dominated by messmate and brown stringybark over 20 m tall to low heaths on the rocky

plateaux, and from moist fern gullies to river red gum grassy woodlands. Broad vegetation types naturally occurring in the Grampians include *Dry foothill forest complexes*, *Inland slopes woodland complexes*, and small areas of *Herb-rich woodland complexes* and *Valley grassy forest complexes*.

The *Dry foothill forest - Grampians Ranges complex* is diverse, including *rocky outcrop shrublands*; *shrubby foothill forests* with medium height messmate and brown stringybark; low (less than 8 m) *heathy woodlands* with Grampians gum, long-leaf box and brown stringybark over a heathy understorey; sand heaths; and *montane dry woodlands* above 1000 m.

The *Inland slopes woodland* type carries *Grampians heathland - heathy woodland complexes* with prickly tea-tree, silver banksia, shining tea-tree, Grampians fringe-myrtle and a dense, diverse shrub and ground flora, and *Grampians heathy woodland - lowland forest complexes* which include brown stringybark, messmate, scent-bark and red stringybark (to 20 m tall) in various combinations, over dense heathy understoreys, and rocky outcrop scrubs.

The main land systems are 2.2/Ss7, delineating the steep rocky slopes, 2.2/Pc7 - plains of coarse-textured (sandy) material, and 2.2/Gg7 - gentle slopes on granitic rock. Soils are varied, with shallow soils over rock the most common type. The shallowness and stoniness limits water storage for plants, reflected in the heathy vegetation.

2.3 Dundas Tablelands

The Dundas Tablelands are remnants of a major plain, formed in the Pliocene stage (late Tertiary period - about 2 to 5 million years ago). This horizontal or slightly tilted surface mainly comprises unconsolidated Tertiary sands, clays and gravels, on which a lateritic layer has developed - a highly leached soil profile, formed under tropical (wet and hot), forested conditions. It typically has an iron-rich layer, which hardens into a cemented band or breaks up into ironstone gravel when exposed, overlying a red and yellow mottled clay zone, and a pallid zone largely of kaolin.

Pliocene lateritic tablelands were once widespread in western, southern and north-western Victoria. In the investigation area, the Dundas Tablelands and the following geological exposures are of about the same geological age:

Parilla Sand, in the Wimmera Clay Plains and South-west Wimmera - units 6.1 and 6.2; Dorodong Sand, in the South-west Sands - unit 8.1; and Timboon Surface, in the Port Campbell Plains - unit 8.2.

The parent material underlying the Dundas Tableland is varied, but where the Tertiary surface has been dissected, slopes composed of Ordovician granodiorite and metamorphic material, Permian glacial tillites (see unit 2.4), and Silurian-Devonian volcanic rock, Rocklands rhyolite, have been exposed. A rare outcrop of Jurassic Period (140-195 million years) volcanic trachytes occurs at Konong Wootong.

Rainfall averages from 600 mm around Harrow, increasing to the south to about 700 mm annually at Konong Wootong.

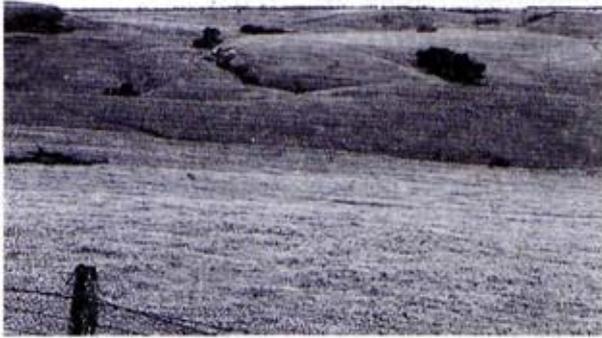
Vegetation type is almost entirely classified as *Plains grassy woodland complexes*, which have a low density cover of river red gum and some manna gum trees, originally over native shrubs and perennial grasses but now mostly exotic pasture. Vegetation complexes are *Dundas Tableland valley grassy woodland* and *Dundas Tableland granodiorite grassy woodland complexes*.

Two main land systems occur - the tableland 2.3/Pf6, and the dissected slopes 2.3/Gf6. The slopes are erodible, with widespread sheet erosion, localised severe gully and streambank erosion prevalent, and related siltation, particularly of sand-size material from the granitic rocks.

2.4 Casterton-Merino Hills

Lower Cretaceous (100-140 million years old) non-marine sandstones and mudstones of the Merino Group, Permian tillites, some Tertiary (Pliocene) remnants of the Dundas Tableland, and Recent alluvium along the Wannon River, are the main parent materials.

In the Permian Period (230-280 million years ago), with Australia linked to Antarctica as part of the great southern continent Gondwana, cold conditions allowed the development of glaciers, which formed tillite, fluvio-glacial sand, and sandstone. Deposits of these Permian sediments lie between older Palaeozoic basement, and younger Cretaceous rocks. A major phase of erosion followed, but uplift by the Coleraine Fault has elevated these deposits, now exposed around Coleraine. The Permian Period marked the end of the Palaeozoic Era.



Casterton-Merino Hills, geomorphic 2.4; skyline - Dundas Tableland, unit 2.3, Wootong Vale

The Cretaceous sedimentary rocks are relatively soft, and once the Tertiary surface was breached, they eroded easily causing deep downcutting, which continues to the present. The resulting landscape has steep escarpments immediately below tableland remnants, convex upper and concave lower slopes, with up to 150m relief.

Annual rainfall is in the range 650 to 750 mm each year.

Dundas tablelands grasslands complex is the sole native vegetation classification, having a very low density or complete absence of trees and shrubs. Original tussock grasslands commonly included wallaby and spear grasses, and *Poa* species. River red gums occurred adjacent to some drainage lines, and some dry scrubs of drooping she-oak on escarpments.

The most common soil type is a deep, uniform dark clay with high shrink-swell properties. The main land system is 2.4/Gs6, recognised as having severe hazards of deep gullying and streambank erosion in drainage lines with associated siltation of watercourses and landslips on the escarpments. This is the country described by John Robertson (see box, page 83).

3. South Victorian Uplands

3.1 Otway Ranges

The parent material of the Otway Ranges is Lower Cretaceous age non-marine sediments, comprising fine to medium grained sandstone interbedded with dark, dense mudstones and minor associated sediments. This deposition has been attributed to the presence of a landlocked basin in the Gondwana continent.

The Otways were uplifted blocks, notably between the Chapple Vale, Bamba, Johanna and other faults. The resultant ranges have flat-topped remnants of an old surface, with rounded slopes adjoining, but rapid downcutting in flanking areas has left deeply dissected steep slopes. Elevation falls from 550 m to sea level over only 8.8 km.

High rainfall is a striking feature of the Otways, demonstrated starkly by the isohyets in Map 7, and by the difficulties experienced by settlers late last century. Over 1800 mm annually is received on the main ridge from Weeaprounah to Beech Forest.

The main broad vegetation type present is *Moist foothill forest complexes*, divided into *Wet forest complex* carrying extensive, tall forests on the higher slopes, and *Moist foothill forest complex* on lower slopes. Blackwood cool temperate rainforests occur in the gullies, with myrtle beech, mainly south of the ridge.

Tall, wet forests of mountain ash, not uncommonly with messmate and mountain grey gum, dominate the upper slopes with rainfall greater than about 1500mm per annum. Trees are over 30m high, and in some places approach 100m. Understorey trees including blackwood and a significant shrub layer are present. Messmate and mountain grey gum occur in moist foothill forests in areas with about 850 to 1200mm annual rainfall.

A second broad vegetation type occurring on the lowest slopes abutting the coast from Eastern View to Apollo Bay is *Dry foothill forest complexes*. This unit includes a wide range of vegetation, but here damp forests of messmate, blue gum (eurabbie) and mountain grey gum are found on wetter sites, with blue gum or messmate-brown stringybark forests, and some red ironbark, close to the coast.

Land systems 3.1/Gs7 and Gs8 mark the gently sloping old surface around Beech Forest. Deep, fertile, well-structured brown gradational soils occur with loam or clay-loam topsoil, high available moisture and few limitations to plant growth. Most occurrences have been cleared and used for agriculture and horticulture. Land systems 3.1/Ss7₁ and Ss7₂ delineate the steep wetter slopes, and 3.1/Ss7₃ and Ss7₄ the drier slopes closer to the coast. All have brown gradational soils, shallower but otherwise similar to those above. Landslips, and sheet erosion on disturbed steep slopes, are potential hazards.

4, 5 and 6 Murray Basin Plains

4.2 Older Alluvial Plain

Around Charlton, Birchip and Wycheproof, part of the extensive high-level alluvial plain which dominates the geology of northern Victoria lies within the investigation area. River, swamp and lake deposits of the Shepparton Formation, comprising clay, silt, sand and gravel, were laid down in the Pleistocene era (0.1 to 1.8 million years ago) extending over much of the north of the area. Recent (less than 10 000 yrs) alluvium has since been deposited along present and former stream channels.

Both stages of deposits are relatively thin, and overlie Tertiary (Pliocene) surfaces. In turn, these alluvial sediments have been overlain by later wind-blown deposits in geomorphic units 5 and 6.

At Charlton average annual rainfall is about 400 mm, reducing to some 360 mm at the edge of the area.

Flat plains, originally carrying *Northern Plains grassland complexes*, with only a very low density of trees such as buloke and shrubs, over extensive kangaroo, wallaby and spear grasslands, occurred at the east and west sides of this unit.

Lake Buloke and adjoining lunettes have clay, silt and sand in the lakebed, and wind-deposits of the same materials on the east side, these form an extensive area which previously carried the *Riverine grassy woodland* broad vegetation type. River red gum woodlands occur around the main basin of Lake Buloke and along major watercourses, with black box and buloke woodlands beyond the river red gums, and slender cypress pine on the lunettes. Elsewhere in this unit grassy woodlands of grey box and buloke occur, with black box around depressions.

Black cracking clays are the most common soil type, with land systems 4.2/Pf3₁ delineating the native grassland areas, 4.2/FLf3 the area around Lake Buloke and 4.2/Pf3₂ the plains around Wycheproof.

5.1 Mallee Plains

In two broad bands, from Avon Plains to Wilkur, and along both sides of the Wimmera River downstream from Dimboola, the southern extremities of the Mallee dunefields can be

identified. These areas have weakly elongated east-west dunes of siliceous sands and calcareous clays, described as the Woorinen Formation. They are of late Pleistocene (around 30 000 yrs) to Recent (less than 10 000 yrs) geological age. In common with Units 5.2, 6.1, 6.2 and 6.3, this unit also has widely spaced ridges (see 6.2 below). Recent alluvial deposits occur along the Wimmera River floodplain.

Average annual rainfall is 450 to 500 mm near Natimuk but generally less than 400 mm elsewhere.

Natural vegetation is described as part of the *Mallee complexes* broad vegetation type. Bull and yellow mallee scrubs remain on a few parcels of public land, some carry buloke, while others have black box, river red gum or yellow gum woodlands. The latter parcels indicate that wetter depressions typically bearing these species were deliberately retained as public land, often as watering points for travelling stock. *Riverine grassy woodland complexes* dominated by river red gum woodlands are distributed along the Wimmera River.

Land systems present are 5.1/PWRf3, PWRf4, PWRfz3, and PWRfz4. These have plains with weakly elongated dunes, and widely spaced ridges. Soils are mainly fine textured (consisting of clays and silts) calcareous earths. The 'z' indicates some saline deposits are present around depressions, particularly west of the Wimmera River and around Natimuk. The soils are prone to wind erosion if left exposed.

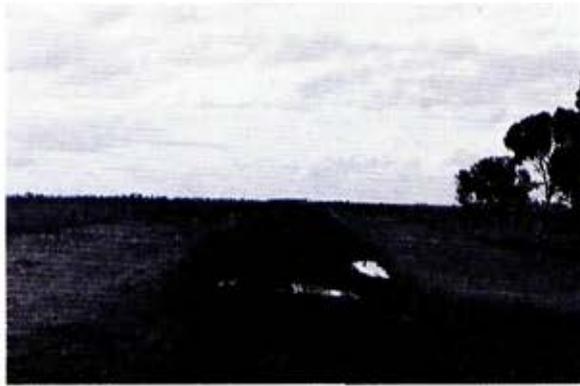
5.2 Big Desert Dunefield

This unit consists of wind-blown dunes of pale siliceous sand, of Pleistocene and Recent age, forming part of the Lowan Sand. While occurrences of the Lowan Sand and Woorinen Formation (see unit 5.1) are contemporaneous, at the margins the Lowan sand tends to move east, blanketing the Woorinen sands and clays. The pattern of dunes is generally irregular or parabolic further north in this unit, although the land system occurring in the study area - 5.2/EPRc4 - has very closely spaced east-west dunes with narrow inter-dune flats, distributed over plains and widely spaced ridges.

The sandy surface is loose, and water holding capacity and nutrient status are low. Along with the low annual rainfall of about 450 mm, these characteristics provide poor growing conditions for plants. The sands are also mobile when exposed to wind action, as after wildfire.

The native vegetation - included in the *Mallee complexes* type - was low mallee scrub, heath and in some places, broombush. The Yarrangook Flora and Fauna Reserve, at the north-west extreme of the investigation area, retains relatively undisturbed mallee-broombush interspersed with areas of open heath and brown stringybark scrub.

While the land system is dominated by sands, clay plains between the dunes were recognised in the 1950s as having potential for agriculture. The AMP Society sponsored development around the settlement of Telopea Downs, and much of this area has since been cleared, leaving little public land.



Wimmera Clay Plains, geomorphic unit 6.1, Dooen

6.1 Wimmera Clay Plains (Nhill)

Extensive plains characterising the Wimmera agricultural district have a common feature - the presence of grey cracking clay soils. They are distributed in a broad area between St Arnaud and Natimuk, north to Warracknabeal, and west to Serviceton. Parent materials vary - scattered Woorinen Formation deposits around Nhill and Kaniva, older alluvial plains south of Horsham, and exposures of the late Tertiary surface north of Horsham between the Avon and Wimmera Rivers.

The clays in the northern parts - in land systems 6.1/PRf3, PRf4 - are mainly of wind-blown origin, and a relatively low density of weakly elongated east-west dunes is also present. Further south, the plains are alluvial, the main land systems there being 6.1/Pf4₁, Pf5₁, Pf5₂ and Pf6.

Annual rainfall is between 375 and 525 mm west of the Wimmera River, 350 to 450 mm to the east, and up to 600 mm closer to the Grampians.

Plains grassy woodland complexes, including the *Wimmera grassy woodland complex*, were the original vegetation types. Buloke and black box woodlands remain on small blocks of public land around Nhill and Kaniva, and south of Warracknabeal, with yellow gum and grey box appearing as rainfall increases further south, and river red gum around depressions and along watercourses. Public land is limited to small parcels, such as those shown on Map 18, often having important remnant vegetation.

6.2 South West Wimmera Plains and Ridges (Goroke)

Situated south of the Little Desert, north of the Dundas Tablelands, and west of Natimuk, this unit has an extensive network of alluvial clay plains interspersed with ridges. The alluvial plains are mainly of Pleistocene age clays, silt, sand and gravel.

The ridges occur in several other units, but are most clearly expressed in this unit. Strongly elongated, they trend north-north-west to south-south-east. They are the surface expression of widespread underlying geological material - late Tertiary silt and siltstone, sand and sandstone, known as the Parilla Sand. This was laid down in deep beds at the ocean margin, during marine transgressions in the early Pliocene epoch. The ridges represent stranded former beach-dune systems.

The ridges have a thin veneer of pale Lowan Sand dunes, from the Recent stage. Lakes are a major feature on the clay plains between the ridges. Elevation above the plains is up to 50 m, and the ridges are several kilometres wide and recognisable for up to 90 km in length.

Rainfall reduces to the north-east, from 650 mm per year on average at Poolaijelo to less than 500 mm north of Tooran.

Plains grassy woodland complexes, with buloke and grey box were widespread on land now used for agriculture. *Herb-rich woodland complexes* variously carrying yellow gum, grey box, brown stringybark, buloke or river red gum were found east and west of Goroke. On public land, much of which occurs along the Parilla Sand ridges, *Heathy woodland complexes* occur dominated by brown stringybark over heathy shrub and ground layers, on the shallow sands. River red gum and yellow gum woodlands are found particularly around the many lakes and wetlands in this region.

The pattern of land systems is complex. Several soil types including red duplex and cracking clays are found, with bleached yellow duplex soils a common type on the plains, and red or orange sands on the rises.

6.3 Little Desert

Like the Big Desert, the Little Desert comprises irregular dunes of Recent epoch Lowan Sand. It forms a massive finger pointing east, the destination of the prevailing winds which formed it. A pale sand layer overlies deep Pliocene beds which outcrop in a few places as ridges, about 15 km apart.

Mean annual rainfall is about 420 mm at Dimboola, but it increases towards the south-west of this unit (up to about 550 mm), resulting in more varied vegetation than further north.

Mallee complexes were again the broad vegetation type, but the Little Desert displays diversity. Heath woodlands, Broombush mallees (particularly in the central block), and Yellow gum woodlands (in the west block and Wail Forest) are the main ecological vegetation types now present, and the Little Desert is also renowned for its Spring wildflowers.

Land system 6.3/EPRc4 has white or less commonly red or orange sand soils, with sandy mottled duplex soils in the interdune swales. Land system 6.3/EPRc5 has similar soils but is wetter, occurring in the south-west.

Most of the Little Desert remains public land as National Park, but Chapter 4 describes past proposals to open it for farming.

7. West Victorian Volcanic Plains

7.1 Volcanic Plains

Volcanic activity has had a major impact on the Victorian landscape, particularly in western Victoria. Eruptions in this unit continued from the late Tertiary Period (Pliocene epoch) through the Pleistocene. Extensive sheets of basalt generally less than 50 m thick, with tuff and scoria, blanket the underlying Tertiary or Palaeozoic sediments.

The resulting volcanic plain is a major feature of the investigation area, extending from Winchelsea and Wingeel in the east to the Glenelg River at Moleside Creek in the west, and from Portland, Port Fairy, Warnambool and Colac on the south edge to Ararat and Buangor

in the north. As a whole, the collection of plains, craters, cones, and lava ridges comprises one of the world's great basalt plateaus.

The elevation of the plain ranges from about 110 to 170 m above sea level. Numerous lakes have formed in depressions. Mean annual rainfall is mostly between 600 and 750 mm, although it exceeds 850 mm north and west of Heywood and along the southern edge, and is less than 600 mm east of Lismore, and between Darlington, Chatsworth and Rossbridge.



Volcanic plains and cones from Mt Leura, Camperdown

Plains grassy woodlands were the predominant natural vegetation type, with low densities of river red gum trees or drooping she-oaks over a ground layer of perennial wallaby and spear grasses. Along streams on these plains, *Riverine grassy woodland complexes* with river red gums and tussock grasses occurred in narrow strips.

Around Streatham and Cressy, the trees are either absent, or at a very low density, in *Grassland complexes*. This difference can relate to soil moisture, such that in otherwise similar conditions, grasslands occupy sites such as very flat plains with greater topographic wetness - that is, less well drained - than sites with woodlands. Another possible explanation is fire frequency.

Several land systems have been delineated, most having plains with clay soils. The most common soils are bleached dark duplex soils, the topsoil being wind-deposited sandy material, over basalt-sourced clays similar to the cracking clays mentioned above. These soils have high nutrient levels, and adequate available moisture, but may be seasonally waterlogged.

Little public land remains, as these areas were among the earliest taken up by graziers and

later, selectors, before government officials set aside reserves. Only a number of the basalt plain lakes, stone and recreation reserves now remain.

7.2 Stony Rises

Volcanic eruptions on the western plains continued until about 7200 years ago, at Mt Napier. These flows are mainly from the Recent epoch, younger than those above, and are characterised by plains of broken and fractured lava (stony rises), lava domes, valley flows, and numerous scoria cones rising 120 to 150 m above the plain. The rock types are of basalts, tuff, scoria and ash. The Mt Napier State Park and Mt Eccles National Park are based around volcanic cones, and contain diverse volcanic features.

This unit occurs across the volcanic plains, and the rainfall range is similar to unit 7.1.

Vegetation of the stony rises correlates strongly with the distribution of the *Herb-rich woodland complexes* type. This comprised open medium woodlands with few grasses and shrubs in the understorey. At Mounts Napier and Eccles, manna gum and blackwood woodlands now occur over bracken and herbs.

Land systems 7.2/Pv5₁, Pv6₁ and Pv7₁ describe most of the stony rises, the main difference being increasing rainfall.

8. South Victorian Coastal Plains

8.1 South West Sands

Deposits of sandy limestones and fossiliferous clays were laid down under shallow seas in this area in the late Tertiary Period. Two subsequent Quaternary stages of sedimentary deposition distinguish the South West sands.

Intermittent uplift of the land led to staged retreat of the sea during the Pleistocene Epoch, resulting in the development of a series of north-west-south-east trending low dune limestone ridges, delineating former shorelines, and designated the Dorodong Sands. South of Lake Mundi and around Strathdownie, these are separated by flat, poorly drained interdune corridors containing numerous lakes and swamps, aligned with the ridges. The surface is a sandy clay layer, with low sandy rises. South of Heywood and Bessiebelle, similar alluvial and windblown sand surfaces occur, with more influence of the Tertiary limestones.

The second and later type is dominated by gentle dunes and sheets of siliceous sands, either with interdune lagoon deposits west of the Kanawinka Fault, or overlying Tertiary sandy deposits and lateritic tableland remnants on higher land east of that fault. These are known as the Malanganee Sands, and are comparable with the Lowan Sands further north. They occur in a wide belt between Dergholm and Hotspur.

Mean rainfall ranges from about 625 to 775 mm annually.

Natural vegetation in this extensive area constituted Victoria's main occurrence of *Heathy woodland complexes*. These commonly have scattered overstorey trees - brown stringybark and shining peppermint - over a dense heathy understorey.

The most extensive land systems are 8.1/PCc6, PCc7₁, PCc7₂, PCc7, and Pf7. Main soils are deep white, red or orange sands, overlying clay plains.

Much of the land with low dunes was retained in or returned to public ownership. After research plots indicated that pines could be grown here, extensive areas have been planted to softwoods. The swampy areas, while initially not taken up, were later selected and drained for agricultural uses.

8.2 Port Campbell Plains

Geology provides distinct boundaries to these coastal plains, with the volcanic plains (geomorphic units 7.1 and 7.2) to the north, and Lower Cretaceous sediments of the Otways (unit 3.1) to the south. The coastal plains are characterised by three Tertiary Period phases.

The Wangerrip Group of sediments was deposited from the late Cretaceous Period through to the Lower Eocene epoch. It comprises various combinations of unconsolidated marine sands, silts, clays and gravels. A broad band of these sediments, extending from the coast at Rivernook along the Gellibrand River valley to Colac and Yeodene, is the largest in the State. Elsewhere in Victoria sediments of this age only outcrop around the margin of the Otways, as highly erodible deposits in the Parwan Valley near Rowsley (not in the investigation area), and small exposures near Hotspur and in the Glenelg Valley.

The second Tertiary stage - a marine incursion - occurred in the Miocene epoch (7 to 23 million

years ago). The sea advanced, sedimentary beds were formed, then the sea retreated. Limestone, marl, calcareous clays and some sands of the Heytesbury Group were deposited. These beds now form most of the striking coastline between Princetown and Warrnambool. The Curdies River and Coorimungle Creek catchments have extensive outcrops of this rock type.

A second marine advance and retreat, the third Tertiary stage, occurred in the early Pliocene epoch, depositing sediments that were later deeply weathered to form the extensive lateritic plateau previously described (see unit 2.3).

Rainfall varies from over 1100 mm adjoining the Otways to 750 mm near Warrnambool.

Land systems 8.2/Gc7 and Gf7₂ are most extensive on the first Tertiary group, 8.2/Pf7₄ and PGf7 in the second, and 8.2/Pfc7₁ and Pfc7₃ on the third. The Heytesbury land settlement scheme has been established on these materials.

Vegetation is predominantly *Lowland forest complexes*, in common with other Tertiary coastal plains across Victoria. Messmate, brown stringybark and swamp gum dominate shrubby or heathy understoreys.

Numerous land systems have been identified in this area. Soils also vary widely, with bleached sandy duplex soils and poorly-drained soils being most common.

8.5 Coastal Dunefields

Inland from Discovery Bay, Pleistocene wind-blown deposits of calcarenite, and calcareous and siliceous sands, have been consolidated into ridges, and overlaid by orange sand sheets.

Recent beach dunes line the present coast at Discovery Bay, Portland Bay, and the Warrnambool, Princetown, Cape Otway and Eastern View coasts.

Rainfall is relatively high, from 800 to over 900 mm per year on average.

Heathy woodland complexes are the main broad vegetation types, with heathy woodlands containing manna gum, shining peppermint, swamp gum on wetter sites, blackwood and drooping she-oak over heathy shrubs. The species-rich, 2 m high Kentbruck heath is located in the Moleside Creek catchment. Heaths of moonah also occurred on sites exposed to coastal winds. Coastal scrub and grassland complexes, and bare sand, were found on the Recent coastal dunes. These included prickly spear grass, hairy spinifex, Australian salt-grass, sedges and salt tolerant herbs. Long Swamp, lying between extended dunes, has coastal lagoon wetland vegetation.

Most of the area is in land systems 8.5/PCc7₁ along the coastal strip, and PClc7₁ behind the coast.

Public land constitutes much of this unit, in the Lower Glenelg National Park, the Discovery Bay Coastal Park, and in pine plantations.

Notes:

1. Jenkin and Rowan 1987: *Physical Resources*.
2. Rowan 1990: *Land Systems of Victoria*.
3. Gibbons and Downes 1964: *A Study of the Land in South Western Victoria*.
4. Land Conservation Council 1988: *Statewide Assessment of Public Land Use*.
5. Gibbons and Rowan 1993: *Soils in Relation to Vegetation in Victoria*.

PART II

3. HISTORY AND HERITAGE

This Chapter provides a thematic overview of the history of South-western Victoria, with an emphasis on the heritage which has resulted from the different historical processes. It also includes a narrative of Aboriginal history in the contact and post-contact periods.

3.1 PRE-CONTACT PERIOD

Aboriginal People of South-western Victoria

At the time of first contact between Europeans and Aboriginal people in the early 1800s, South-western Victoria was occupied by at least 10 Aboriginal language groups. The countries of the Dhauwurd wurrung (or Gundidjmara), Djab wurrung, Djargurd wurrung, Gadubanud, Girai wurrung, and Jardwadjali occupied the majority of the study area; along with large portions of Gulidjan and Wergaia, and smaller portions of Watha wurrung and Djadja wurrung (see Map 8). Small segments of Bindjali and Buandig were found in the far west of the study area, but as these are predominantly South Australian languages, they will not be included in this discussion.

It is possible to group these ten languages into three dialect chains, or clusters of languages, that shared a mutual intelligibility. Dhauwurd wurrung, Girai wurrung and Djargurd wurrung, commonly called the Marr or Marra dialects, were distinguished by the fact that they used this term for people. Wergaia, Jardwadjali, Djab wurrung, Djadja wurrung, and Watha wurrung, were part of the Kulin dialects who used the word Kulin for people. Gulidjan and Gadubanud shared some aspects with their Kulin and Marr neighbours, but spoke a distinct language.¹

With the exception of the Djadja wurrung and the Watha wurrung, who adhered to a system of patrilineal descent where moieties, clans and individuals were either waa (crow) or bunjil (eaglehawk), the Aboriginal peoples of South-western Victoria followed matrilineal descent, and moieties, clans and individuals were either kappatj (black cockatoo) or krukij (white cockatoo).

It is also possible to divide the Aboriginal peoples of the region into three groups on the

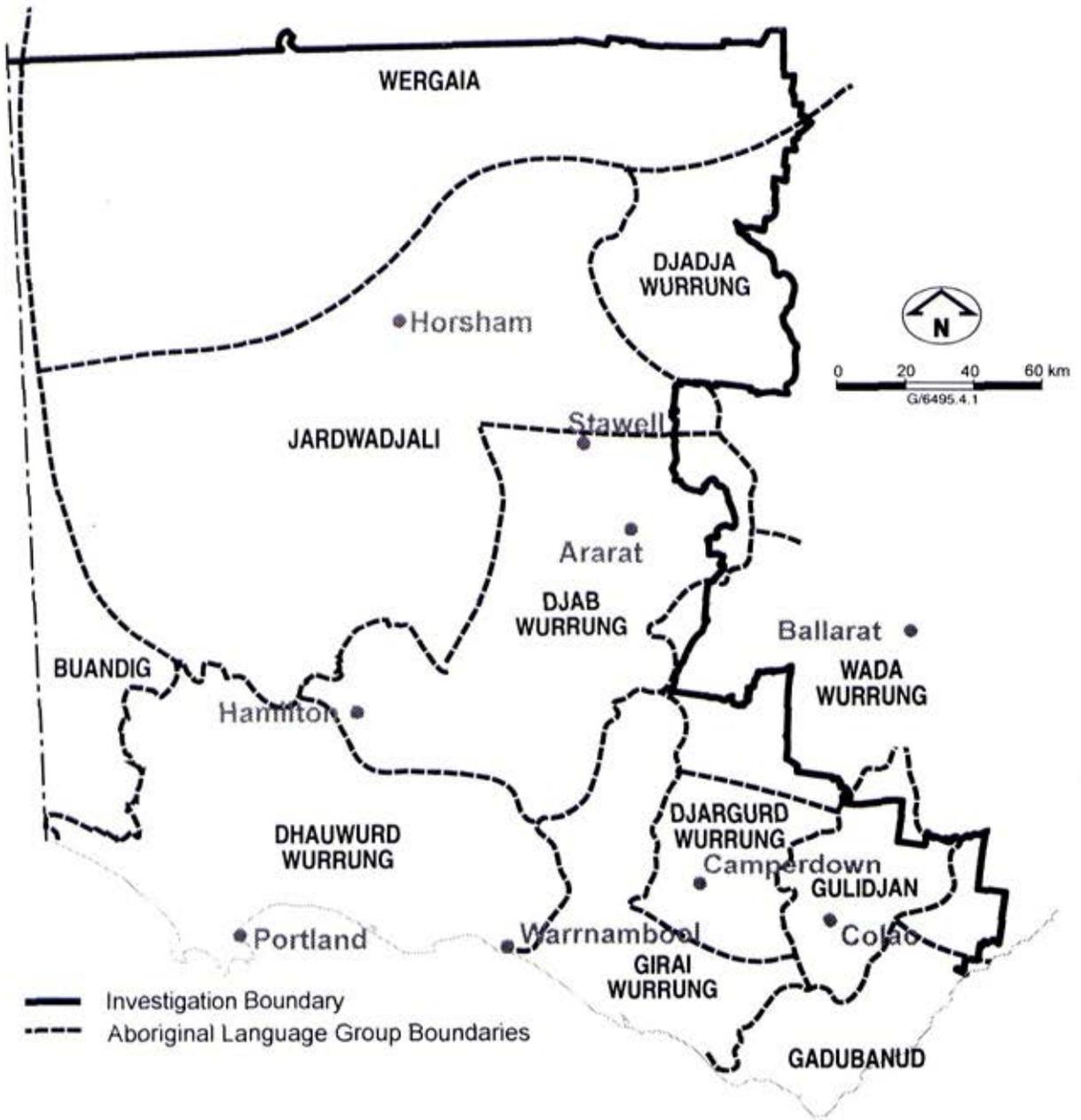
basis of environmental associations. Coastal clans were sometimes called the Ngarmutgundidj because of their association with the ocean (ngarmut). The people of the central Western District, who lived predominantly upon the basalt plain, might be called the 'plains people' or the 'mound-dwellers', as their most common form of campsite was an artificially constructed earthen mound, occupied on a seasonal basis. Clusters of mounds were usually located along the banks of streams at points with good vantage which gave easy access to plants and animals. The third division was those people belonging to the Wimmera and Mallee regions, who were often regarded as the Malligundidj because of their association with Mallee scrub.

In the summer months coastal clans were very mobile. Large numbers would occasionally congregate in the hinterland, up to ten kilometres from the shoreline, to exploit concentrations of daisy yam, kangaroo and emu. Their base camps were in coastal swamps, such as the Tower Hill and Moyne swamps, which provided easy access to nearby open forest where numerous plants and animals could be procured. Temporary camps were to be found in the dunes where seabirds, crayfish, shellfish, fish and seals were harvested. A base camp at Armstrong Bay has been dated from circa 5000 BP (before present).

In summer the plains people used fire as a hunting aid, burning dense undergrowth to keep animal tracks open and to ensure a constant supply of new food for herbivorous animals. Bird hunting and communal kangaroo hunting were important summer activities. The Malligundidj also collected lerp, an insect secretion which covers Mallee scrub in large quantities. As they moved away from riverine environments to get to the Mallee scrub, they carried water in bark and skin containers. At the conclusion of the lerp season the scrub was burned so that future abundance would be assured.

In autumn coastal clans moved to the grasslands of the hinterland, to camp beside rivers and streams, where as semi-sedentary groups they exploited the abundance of eels and other fish. Journeys were also made to the coast to take mutton birds when they were available, especially at Griffiths Island off Port Fairy.

MAP 8: Aboriginal Language Group Boundaries



Source: I.D. Clark (1990), *Aboriginal Languages and Clans*.

Eels were harvested using stone or wooden weirs (yereroc), erected across rivers and streams. Holes were left in the walls of the weirs at strategic points, into which pots or nets made from bark strips or plaited rushes (ngarraban) were inserted, to capture the eels. Stone weirs have been found in many western Victorian streams, particularly the Hopkins River. The falls on the Hopkins River was an important eel harvesting location, where clans gathered. Its importance is seen in its Aboriginal name 'Tung'ung buunart' meaning 'eels bite the stones', as the eels are found in such numbers that they are supposed to eat the stones below the falls.

Eels were also caught in traps in the Lake Condah wetlands. Like the coastal people, the mound dwellers of the plains also harvested eels in autumn, when the eels made their annual migration to the sea to breed.

During winter, coastal clans gravitated to sites with assured supplies of water, fuel and food. Occasional journeys were made to the coast to exploit stranded whales. In spring, when the coastal population was more mobile, temporary camps were located in the sand dunes. The people of the plains collected daisy yam in large quantities at this time. Egg collecting,

particularly swan and emu eggs, was another important spring activity.

At the time of European settlement in the late 1830s, some Aboriginal groups in the Western District lived in substantial settlements comprising clusters of up to 30 beehive shaped huts. These settlements, described by European observers as 'villages', were occupied on a sedentary or semi-sedentary basis and were often associated with large and complex fish-trapping systems.

Middens are the most common and visual evidence of Aboriginal occupation in Victoria, and literally thousands are located along the coastline. They are components of former camp sites, with evidence of hearthstones and discarded food refuse and cooking materials including shellfish, animal bone, charcoal and stone. A midden at Thunder Point near Warrnambool dates from 7300 BP, though most middens along the south-west coast date from 5000 BP.

Other significant places that attest to Aboriginal land use in South-western Victoria include scarred trees, stone arrangements, mounds, rock shelters, stone engraving sites, rock paintings, surface scatters, fish traps, burial places, stone house sites, quarries, and axe grinding places.

Trading and Meeting Places

Large gatherings of people occurred at localities which experienced a seasonal abundance of eels, emus and kangaroos. These localities were often situated close to clan or tribal boundaries and Williams (1987) has argued that such gatherings served to regulate the production and exchange of resources within western Victoria. These occasions were times of great ceremonial importance when trading occurred and marriages were arranged and other important business was transacted.

There were several significant trading and meeting places associated with eel harvesting in South-western Victoria. Up to one thousand people gathered at Lake Bolac during the early autumn eel harvest, along Salt Creek from its outlet at Lake Bolac to its junction with the Hopkins River. Mount William Swamp was another meeting place, and the focus of periodic inter-group meetings.² The swamp contained large clusters of mounds used as 'baking' and 'camping' places, which were associated with a substantial six hectare complex of ditches and banks used to capture eels. Mounds and

'villages' of stone-walled huts, associated with fish-trap complexes, were also found at Bessiebelle on the margins of large swamps.²

Mt Noorat near Terang, in the country of the Girai wurrung clan, and presumably named Ngoorat gundidj, was a favoured meeting place for the purpose of barter. Forest kangaroos were plentiful here, and the skins of the young animals were particularly sought after for making rugs. People from different localities brought stone for making axes, adhesive wattle gum, obsidian or volcanic glass for scraping and polishing weapons, mallee saplings for making spears, wood for bundit spears, grass tree stalks for the butt piece of light spears and for making fire, and red ochre for body painting. Marine shells from the mouth of the Hopkins River and freshwater mussel shells were also articles of exchange.³

Mirraewuae, a large marsh to the west of Caramut, and celebrated for emus and other game, was in a central location for the meeting of clans from districts as far afield as Dunkeld in the north, Hamilton and Lake Condah in the west, Lake Bolac and Skipton in the east, and Framlingham and Camperdown in the south. Coastal clans did not attend the Mirraewuae meetings through fear of being attacked.

Other important meeting places in the pre-contact period included Wirrengren Plain, Lake Keilambete, Lake Connewarren, Tarerer (a swamp near Tower Hill, to which Aboriginal people were drawn in the whaling season), Lake Buloke, and Banji bunag, later the site of the Ebenezer Mission station on the Wimmera River at Antwerp.

3.2 EUROPEAN EXPLORATION

Surveying the Coastline

At the beginning of the nineteenth century, the region of South-western Victoria was officially within the colony of New South Wales, but remote from the administrative centre of Sydney. It was unexplored by Europeans, and its coastline was uncharted.

In 1800 the brig 'Lady Nelson', under the command of Lieutenant James Grant, was dispatched from England to sail through the strait between Van Diemen's Land and Victoria, to survey and explore the southerly coastline. This expedition followed two less successful earlier attempts to navigate the strait, by George

Bass in 1797 and Matthew Flinders in 1798. Once the existence of the strait was confirmed, it would provide a more direct route to the eastern Australian seaboard for ships crossing the Indian Ocean.

Grant and his crew named features and bays as they sailed east along the coast after sighting land near Mount Gambier in the last days of 1800. Capes Bridgewater, Nelson, Otway and Patton, and Portland Bay were named at this time. Nicholas Baudin, in charge of a French scientific expedition, was also in the region in 1801–02. He explored the coastline between Cape Otway and Cape Grant in March and April 1802, on board 'Le Geographe'. Many of the names Baudin gave to features have not been retained. Reconnaissance Peak became Tower Hill, and Cap Mont Tabor is the western point of Lady Bay, Warrnambool. But Cape Duquesne and Descartes Bay have kept the names allocated during this French expedition.

In the wake of the exploration and discovery of the strait, an unsuccessful attempt was made to found a settlement of over 400 people at Sullivan's Bay, Sorrento, in 1803. South-western Victoria was largely ignored in this activity, but would soon be visited by the first European to live for a lengthy period in Victoria. William Buckley was a convict who absconded from the Sorrento settlement, and eventually found his way westwards. He lived for more than 30 years with the Wada wurrung people, whose territory encompassed today's Geelong, Ballarat, Skipton and Winchelsea districts.⁴

Another unsuccessful official attempt to settle on Victorian soil occurred in 1826, after Hume and Hovell's exploratory journey and favourable report on the quality of the country around Port Phillip. On this occasion, a group of soldiers and convicts under the command of Samuel Wright, went to Corinella in Western Port where they remained for a year before returning to Sydney. This, and the earlier settlement at Sorrento, should be seen in the context of British fear of French colonialism. While the vast region of Port Phillip remained unsettled, the presence of French ships in Bass Strait was a threat to English sovereignty.

The south-west coast remained frustratingly uncharted, despite increasing maritime activity, until the British Admiralty sent Captain Lort Stokes, in the famous 'Beagle' (of Charles Darwin fame) to survey Bass Strait and the Victorian coast in 1839–42. The 'Beagle' called

in at Portland Bay in 1842, where Captain Stokes met the Hentys and surveyor C.J. Tyers, who was then engaged in laying out the township of Portland.

Many of the features in the south-west owe their names to sailors and sea-going explorers. Matthew Flinders in the 'Investigator' in April 1802 sailed past and named Moonlight Head. Captain Loutitt in the 'Apollo' in 1846, gave us Apollo Bay, and also, it would seem, Loutitt Bay at Lorne.

Exploring Inland

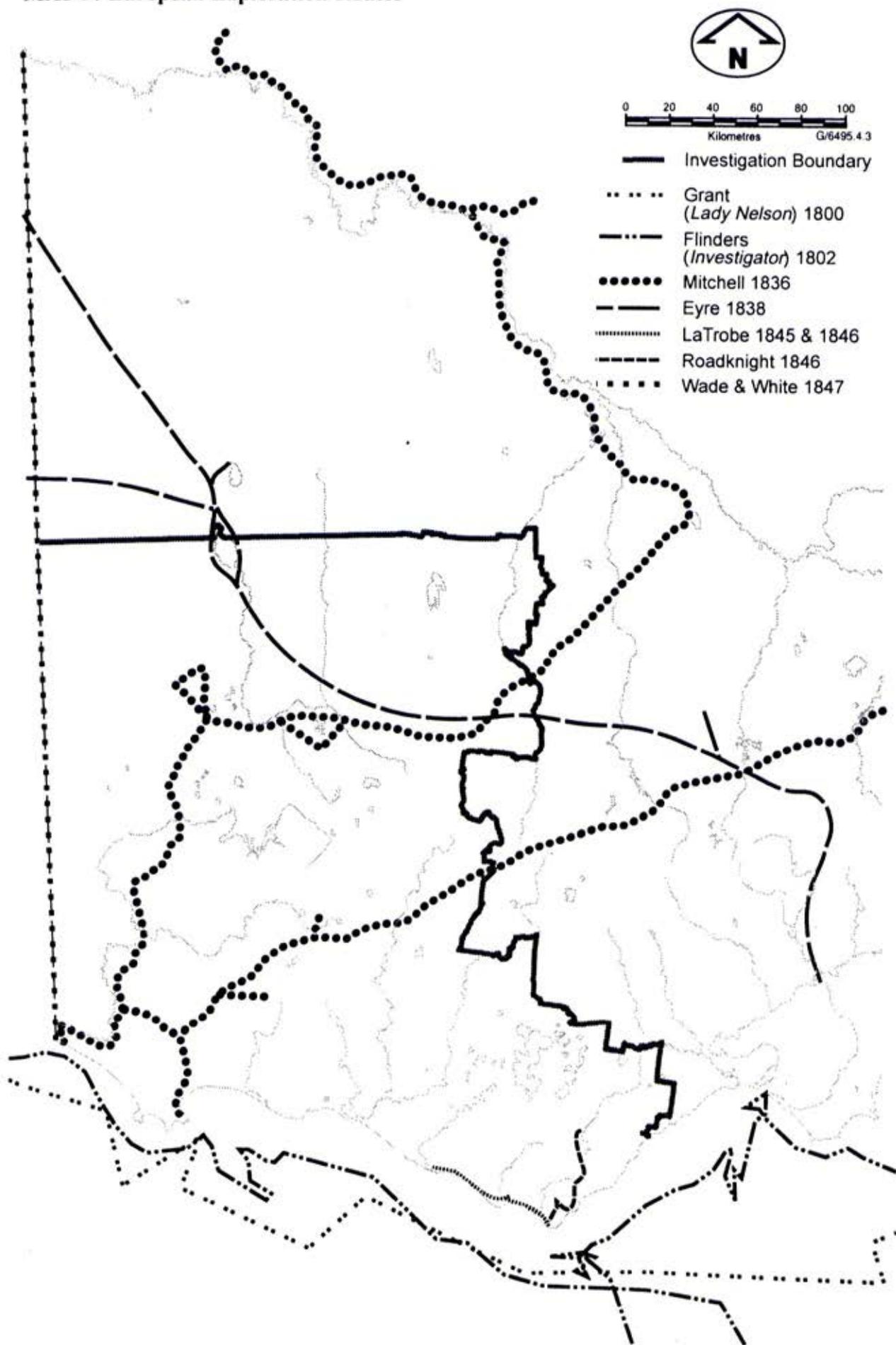
The official overland exploration of Port Phillip commenced with Hume and Hovell's trek from the Murrumbidgee down to Corio Bay in 1824. Before this, the small incursions of sealers, whalers and ships' crews, and Grimes' exploration of the country around Port Phillip Bay in 1803, had added very little to contemporary knowledge of Victoria. Hume and Hovell, like many explorers of the period, were looking for good agricultural country, and their journey to Port Phillip aroused the interests of stockowners and graziers in New South Wales and Tasmania.

Just over ten years later, Major Thomas Mitchell, Surveyor-General of New South Wales, made his famous journey across the northern and western plains of Victoria between June and October 1836. Settlement had already been established in the immediate environs of Port Phillip by this time. A community was also thriving around the whaling operations and pastoral activity of the Henty family at Portland Bay, as Mitchell found to his astonishment.

The Major found excellent pastoral country in his explorations. His glowing account of 'Australia Felix' inspired and encouraged prospective settlers for years to come. Remarkably, his journey left in its wake the very visible 'Major's line' - a track of deep ruts formed by his heavy ox carts and whaleboat carriage. This track stretched across the plains, providing direction to the settlers who soon moved out to open up South-western Victoria, particularly those who came from north of the Murray River. Mitchell also named geographical features, including the Glenelg, Surrey and Fitzroy rivers, Discovery Bay, Mount Napier and Mount Clay.⁵

One hundred years after this epic journey, a bout of centennial activity erupted in townships and

MAP 9: European Exploration Routes



localities along his route. Local groups commemorated his passing in a burst of monument and cairn building, opening ceremonies and speech making. Today, the Major Mitchell memorials are often substantial rock cairns, with arrows affixed to the top pointing the way of his journey. It is possible to follow the route by car, with the distinctive memorials appearing at key points along the way.

Other inland explorers of the south-west included J.M. Darlot, who overlanded from the Murray River to Portland in 1837, following Mitchell's rutted track through the Wimmera. Edward John Eyre also travelled through this region in 1838, and named Lake Hindmarsh. In 1845 and 1846, Governor La Trobe and a party made three attempts to reach Cape Otway by land, in order to inspect the site chosen for the first lighthouse on the Victorian coast. They travelled from the Allan brothers pastoral station near today's Allansford, and were successful on the third attempt. Thomas Roadknight, from a station near Birregurra, blazed a bullock track overland to Cape Otway in this same period (see Map 9).

In 1847 Henry Wade made a survey of the border between South Australia and Victoria, to determine the location of the interstate boundary. Wade believed his straight line followed the 141st meridian. In fact it did not, being some distance to the west of the longitudinal line. In later years the South Australian Government tried unsuccessfully to regain this thin wedge of 'lost' land in Western Victoria.

3.3 SEALING AND WHALING

The Pirates of Bass Strait

When George Bass returned to Sydney after his exploratory journey of 1797, he noted the remains of fires and carcasses on the eastern side of Wilson's Promontory, which he attributed to sealing parties from Europe and America. Sealers were almost certainly operating in the western stretches of Bass Strait by the early 1800s. They were on Kangaroo Island in South Australia in about 1803, and on Lady Julia Percy Island and Lawrence Rocks, off the coast of South-western Victoria in 1802.

The sealers were in pursuit of skins from Australian and New Zealand fur seals, which they traded with skin merchants in Sydney and Launceston. In the off-season, many remained in the region, seeking supplementary cargoes

such as kangaroo skins and wattle bark. The latter was used in the leather tanning process.

The early sealers were predominantly from England, France and the United States. The American sealers reputedly built their vessels on the islands and shores of the strait, leading to a proclamation against the practice by Governor King in 1804.⁶ After only a few short years, during which seal numbers rapidly declined, the overseas sealers abandoned Bass Strait to the colonial gangs, which often comprised former or escaped convicts from Van Diemen's Land.



The Convincing Ground - whaling station and massacre site, Allestree

The sealing gangs of Bass Strait lived and worked on the fringes of colonial society. Their contacts with the populated centres of south-eastern Australia were based on tenuous links with skin traders. They stole Aboriginal women from the mainland, and congregated on the islands. These 'Bass Strait Pirates'⁷ plundered the seal resource nearly into extinction. Such was their unregulated exploitation of the fur seal that the industry was effectively finished by 1830, although intermittent hunting continued in some areas until the mid-nineteenth century, including on Lady Julia Percy Island.

Sealers have left behind few physical traces of their activities. This, together with the very early period of their operations, has resulted in a scarcity of identifiable relics or remains. Two graves on Lady Julia Percy Island are thought to be those of sealers. They were discovered by a fisherman in 1842, who was himself engaged in a sealing expedition, and reported on by the Portland 'Mercury' newspaper. One of the graves is that of W. Hardman, who died while sailing from Hobart to the mainland coast in December 1828, on board the 'Fairy' with Captain Wishart. The other unmarked grave is thought to be that of a sealer who died in 1822.⁸

Whaling and Whaling Stations

Whaling in Bass Strait was launched from Launceston in 1831, though sperm whales had been hunted in the southern seas since the 1820s. It was soon found that shore-based whaling was the most profitable means of exploiting the great marine mammals, especially the Southern Right whales, which wintered each year in the bays of South-western Victoria. Teams of men based on shore chased their prey in small timber boats, some made from the remarkable huon pine of Tasmania. Whale blubber was boiled down for oil on the beach, and whale bone was extracted for use in women's corsets and skirt hoops. Trading vessels visited the whaling stations each season, and took away the bone and oil. Young Edward Henty first saw Portland Bay in 1833 from the deck of the 'Thistle', a trading vessel picking up a load of oil while bound for Launceston from Spencer Gulf in South Australia.

William Dutton, who had sealed at Portland in each of the seasons from 1828 to 1832, was the first to establish a shore-based whaling station on the Victorian coastline, at Double Corner, Portland, in 1833. Before this, whale blubber was taken south to Launceston or Hobart for processing. Dutton established the station on behalf of the Launceston merchant and ship owner, John Griffiths. Other stations soon followed Dutton's at Double Corner, including those of Kelly and Hewitt. The Hentys, who arrived in 1834 with pastoral ambitions, also became involved in whaling operations. Occasional whaling may have been undertaken out of Warrnambool and possibly from Apollo Bay.

Whaling was also established at Port Fairy in the 1830s. The site of what later became Belfast had been visited some years prior to this by James Wishart in the cutter 'Fairy'. In the early 1830s the Mills brothers, John and Charles, had a sealing camp on what was later known as Griffiths Island. John Griffiths moved his whaling operations from Portland Bay to the island in 1836, and by 1837 had built a home for himself and his family from prefabricated materials brought across the strait from Launceston. Charles Mills returned to the island to manage Griffiths' whaling station, which operated until the mid-1840s. Griffiths was also a master mariner and ship chandler, and for a time ran a ship building operation on the island in conjunction with his father.⁹

The importance of the whaling industry in the early economy of the south-west should not be underestimated. In 1836 there were approximately one hundred whalers operating out of Portland Bay and Port Fairy. In 1838, the peak year of production, there were at least seven whaling establishments in Portland alone.¹⁰

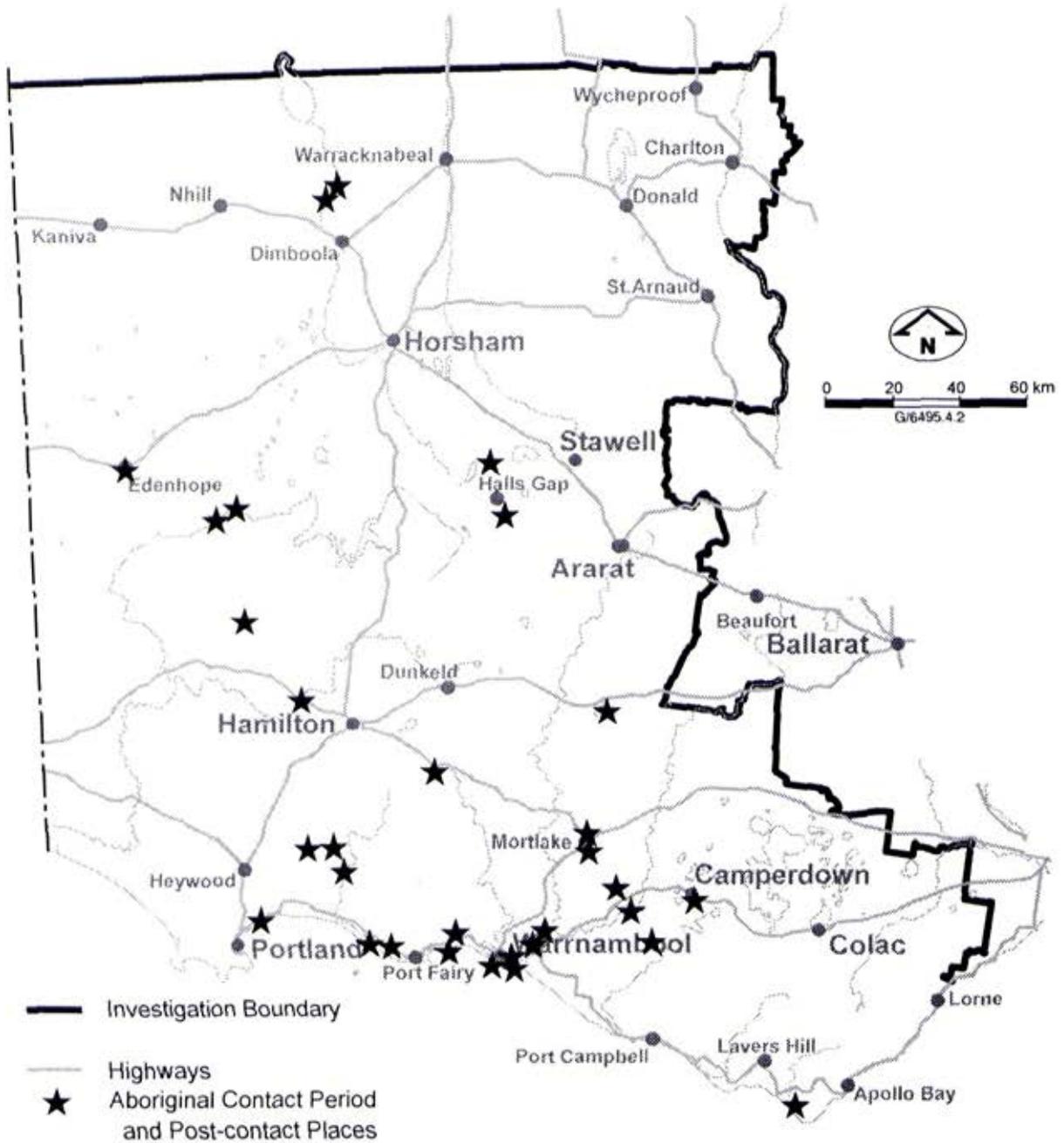
Though whaling activity was seasonal, a station was busy year-round, employing blacksmiths, coopers, shipwrights and general hands in the constant work of building and repairing. The employees required accommodation, foodstuffs and supplies. Huts, a blacksmith's shop and cooorage were necessary, as was a blubber stage and storage and loading facilities for the hundreds of tons of oil and whale produce stored and shipped out annually. Boat building was a related operation.

A well-run whaling station represented a substantial investment. James Henty has left some notes on the equipment and materials needed for a season at the Henty whaling establishment. As well as a large variety of knives and cutting equipment, irons in various sizes, casks, paint, lances, harpoons, blubber hooks, copper sheets, chains, a winch, anvil, boat anchors, cooper's and blacksmith's tools, oars and try pots (for rendering down whale oil) were needed. In addition, the station required spare boat keels, bulk sugar, flour and vegetables, clothes, blankets and cooking implements.¹¹

Despite all this activity and infrastructure, the physical heritage of whaling activity is scarce. No whaling stations have survived, though recently exposed archaeological remains at the Convincing Ground at Portland, may have been associated with this activity, or with boat building operations of the mid-1840s. The graves of several Portland whalers, including William Dutton, are located at Narrawong cemetery to the east of the town.

As the townships developed, and the whaling industry declined, many former whalers settled in Portland and Port Fairy. John Mills, who became Port Fairy's first harbour master, built the first section of his cottage in what later became Gipps Street, in the late 1830s. At that time whalers were the chief occupants of the town, and a loft area in the roof space of the cottage is believed to have slept 15 men from the local whaling station. The central and front sections of the cottage were constructed in later years.

MAP 10: Aboriginal Contact Period and Post-contact Places



Source: J. Critchett (1995), *A Study of Aboriginal Contact and Post-contact History and Places*

3.4 CONTACT

The history of contact between Aboriginal and European people in South-western Victoria is one of violence. In referring to the whole colony of New South Wales, of which the Portland Bay District was a southern frontier, R.H.W. Reece has written that between 1837 and 1846 the colony 'experienced the worst racial clashes of its history, the squatting districts of Portland Bay and Liverpool Plains being most severely affected'.¹² Despite the best of intentions neither

the British Government, nor the Governor of New South Wales, nor the local authorities were able to successfully intervene to prevent 'lawless proceedings'.

The most significant contact places reflect this history. They include the spiritual places and the long-established camping places of the Aborigines. They include new camping places moved to, owing to pressure from squatters, the attraction of European products, or the relative safety from danger provided by a

friendly squatter. Bases which the Port Phillip Protectorate established in the District, the strongholds from which the Aborigines were able to launch attacks on those who invaded their 'country', and the places where massacres occurred are also significant contact places (see Map 10).

Initially 'settlement', or European occupation of the Portland Bay District, proceeded ahead of official approval. First arrivals were untroubled by officials, whose presence would have reminded the newcomers of the British judicial system and the rights of the indigenous people. By virtue of the British Crown assuming sovereignty over 'the whole of their ancient possessions' Aboriginal people had become British subjects, with all the rights that went with this.¹³

Early Frontier Violence

While it was contact across the length and breadth of the pastoral frontier that was to lead to the destruction of Aboriginal society and the indigenous way of life, first contact occurred on the coast.

Edward Henty's Journal contains only a few references to Aborigines, but these suggest that friendly relations were unlikely. In December 1834, a party including Henty, Henry Camfield, William Dutton, five other men and one Van Diemen's Land Aboriginal woman, with 14 dogs, explored the country east of Portland. They came upon an Aborigine and 'he the Men set the Dogs on'. The same kind of treatment was meted out to Aborigines who ventured to approach the Hentys' huts and yards in this early period. Their appearance was friendly but 'one of the dogs chased them and caught one by the buttocks which drove the other away. The dogs returned covered in blood'.¹⁴

Men also went bush to look for Aboriginal women. Henty's Journal entry for 29 March 1835 reads:

Tho. Clerk — Brown — Jones and Page left the fishery without permission on the 27th inst. at daybreak with a fortnight supply of Provisions for the purpose of getting Native women...

The journal records without comment the men's return only a few days later, leaving the reader 'wondering', as Bernard Barrett states, about the fate of the Aboriginal women and of any difficult Aboriginal husbands.¹⁵

The Convincing Ground

The stretch of beach known as the Convincing Ground at Allestree, near Portland, is one of the most significant historic localities in South-western Victoria. Its importance lies in the layers of history attached to the place, in a tragic and early clash between Aboriginal people and the first Europeans in Victoria, and in the retention of a name long after its meaning has been forgotten.

The Convincing Ground is located on the north side of Portland Bay, behind the Minerva Reef. It was an excellent site for a whaling station in the 1830s, being near the mouth of a freshwater creek, with some protection and calm water afforded by the offshore reef, and a natural lookout located on Mount Clay to the north east. A whale boiler or 'try pot', for rendering down whale oil, which is now located on the foreshore at Portland was originally from the Convincing Ground.

Major Mitchell visited this location in August 1836, and was surprised to find a small but thriving community. The Hentys were also engaged in whaling at this site, and established shipbuilding operations here in the mid-1840s. Huts, yards and slips were associated with the shipbuilding activity. A map produced in 1854 clearly indicates the Convincing Ground, and annotates the structures on the shore as 'Messrs Hentys' Whaling Establishment' and 'Old Whaling Buildings'.

The strongest evidence of early violence on the coast relates to an incident at the Convincing Ground. Edward Henty recounted the story to George Augustus Robinson, Chief Protector of Aborigines, when Robinson visited the Portland area in 1841. It was also confirmed by Blair, a Police Magistrate in the district.

Henty's account was as follows:

He said that some time ago, I suppose 2 or 3 years, a whale broke from her moorings and went on shore. And the boat went to get it off, when they were attacked by natives who drove them off...the men were so enraged that they went to the head station for their firearms and then returned to the whale, when the natives again attacked them. And the whalers then let fly, to use his expression, right and left upon the natives. He said that the natives did not go away but got behind trees and threw

*spears and stones. They, however, did not much molest them after that.*¹⁶

Captured whales were often brought to the whaling stations and left moored offshore, prior to being killed and processed. On this occasion, an Aboriginal group attacked it for its flesh, as was their custom with beached whales. The violence of the Europeans amounted to 'convincing' the Aborigines of the wrongness of their actions in 'stealing' European 'property'.

There are alternative accounts for the origin of the name. One suggests that it resulted from Europeans using the site to settle their own disputes.¹⁷ Another account attributes the cause of the conflict to whalers who 'got among' the Aboriginal women.¹⁸ Yet another explanation cites Major Mitchell as being 'convinced' that the shapes he saw on the beach at his arrival were whalers' huts and not rocks.¹⁹

The incident occurred before 27 October 1835, much earlier than Robinson thought, for on that date Edward Henty in his journal was already using the name 'Convincing Ground' when referring to that section of the coast. It is more likely to have taken place in 1833 or 1834. Robinson visited Port Fairy in early 1842 and met a station headman, MacDonald, who told him that the violence had happened eight or nine years previously.²⁰

The number of Aboriginal people who died at the Convincing Ground is unknown, but Robinson had little doubt that many local people were killed. When he visited Portland, he found only one survivor of the local Eurite clan. Of the Kilkarer gundidj, whose territory was the country between Portland and the Surrey River, there were six survivors. The Borne was another group in the area, and the implication from Robinson's writing is that it too was nearly wiped out.²¹

The encounter was between whalers and Aborigines, and not with graziers or their employees as was soon to become common. There had no doubt been earlier encounters between Aborigines and the first seasonal sealers and whalers on the coast, but no record of these encounters has survived.

The incident was a metaphor for the meeting of Europeans and Aborigines in the District. In the first stand made by Aborigines to assert their rights, European arms won the day. From the European point of view the hostilities were seen as 'convincing' the Aborigines not to oppose

Europeans and their actions, whether they were the taking of whales or of Aboriginal women. But the actions went far beyond convincing the Aborigines involved. In many cases the Aborigines they sought to persuade, they killed. This was a pattern which was to be repeated time and time again throughout the district - the need to convince Aborigines not to steal European property; the use of guns; the killing of large numbers of Aborigines for what was seen as stealing sheep, cattle or horses. In some cases almost the whole male population of an Aboriginal group was massacred in the one confrontation. And in many cases Aboriginal women were at the centre of conflict between the races.

The Convincing Ground incident provides insight into the nature of very early race relations in Victoria. Those relations were often marred by misunderstanding, divergent interests, ignorance and aggression. The retention of the name 'Convincing Ground', itself a curiosity when the event has long been forgotten by most Europeans, highlights its lingering impact.

3.5 SETTLING

John Batman was living in Launceston in 1834 when he helped to form the Port Phillip Association. Batman was one of several men with an interest in taking up land in Port Phillip, particularly after the favourable account of the country given by Hume and Hovell in 1826. The Henty family, from West Tarrig in Sussex where their business interests included breeding Merino sheep, were also based in Launceston at this time. The Hentys were keen to take up sheep farming and had made several unsuccessful attempts at settling, firstly in the new colony of Western Australia and then in Tasmania, where no more 'free' pastoral land was available.

Edward Henty made his initial positive assessment of the country around Portland Bay in 1833. Following several follow up visits, a group of Hentys and their servants sailed across the strait in late 1834. The rough society of the whaling fraternity was no deterrent to this determined family, whose ambitions were amply demonstrated by their cargo of livestock, stores, farm implements, building materials, fruit trees and seeds. They pushed ahead with settlement, though their requests for land grants in Port Phillip remained unresolved with the Colonial Office in London.



Delleys Homestead near Halls Gap

The Hentys were thinking of the hinterland even before the unexpected arrival of Major Mitchell in 1836, with his enthusiastic description of 'Australia Felix'. By 1835, the brothers had explored much of their district, covering distances up to 40 miles from Portland Bay. By 1840, they occupied six stations in the region, including one at Cape Bridgewater and three inland at 'Merino Downs'. The stations, which supported more than 50 people between them, were served by Henty-built roads and bridges.²²

Before 1836, when squatting in the district was officially sanctioned, the Henty stations were illegal. The family was trespassing on land which was not available for settlement. But their success, and Major Mitchell's journey, drew attention to the pastoral riches of the region. It was land-hungry Tasmanians from across the strait who led the race to take up Western District land. Overlanders from north of the Murray, came slightly after this first wave of occupation. Chapter 4 examines the social and political processes associated with the spread of pastoral settlement over the public lands of the region.

Squatters, Sheep and Wool

Among the prominent early settlers who crossed the strait from Van Diemen's Land were Trevor and Samuel Winter, James Austin, Hugh Murray, William Carter, G.F. Read, Thomas Ricketts, Thomas Armytage and W. and A. Yuille. Many of these early Western District squatters were young single men from Scotland, some still in their twenties. They belonged to the generation of Scots who led middle-class emigration away from Britain in the aftermath of the Napoleonic Wars. It has been estimated that two thirds of the pioneer settlers of South-

western Victoria were from Scotland, and many of these were hardy Lowland farmers.²³

Men's labour was much needed on the early pastoral runs, most of which ranged in size from 8000 to 20 000 hectares. Ex-convicts from Van Diemen's Land made up a sizeable proportion of the early Western District workforce. But women and children were not so welcome in the harsh and crude conditions. The wives, sisters and daughters of station owners and workers, were often left behind in Britain or Tasmania, to make the journey at a later date. Aboriginal women, on the other hand, suffered greatly during the early pioneering period, as they were often mistreated by squatters and station hands alike.

Jane Henty was the first squatter's wife to cross Bass Strait and take up station life, when she was carried through the Portland surf in 1836. She was married to Stephen Henty, who was based in Portland running a farm, sheep station and several whaling stations. Jane was soon joined by other Henty wives, including Eliza who settled at Merino Downs. Arbella Cooke, wife of Cecil Pybus Cooke and sister of fellow squatters Trevor and Samuel Winter, was also established in the Portland district.

From about 1840 European women begin to appear more frequently in historical accounts of Western District life. Theirs was not a comfortable existence in this early period. Many squatters' wives tended stock, cultivated crops, and generally cooked and kept house for the men. They were also lonely and isolated for extensive periods of time, as husbands and men were frequently absent on the large sheep runs.

By 1841, the proportion of females to males in the Western District was only a little over 14 percent.²⁴ In this same decade, however, when immigrant families began to arrive in greater numbers in South-western Victoria, women started to move 'up-country'. Squatters also began to employ both husbands and wives, with the women working as cooks and housekeepers on the head stations. Childless couples were preferred, as children consumed rations and provided no labour. Niel Black brought out Scottish Highlander families to staff his new Glenormiston run in 1840, while at Ercildoune in this same period, the Learmonth employed 35 men and four women.²⁵ Later, with increasing affluence and growing numbers of squatters' children, governesses began to be employed on the stations.

Not all of these early women are invisible to us. Many left diaries or wrote memoirs which provide glimpses of their lives. Mrs Kirkland and her baby daughter joined her pastoralist husband at Trawalla near Buninyong in 1839, and later wrote about the experiences. Her chief early occupations included poultry raising, fattening pigs, running the dairy and selling butter and cheese for profit.²⁶ Anne Drysdale was a run-holder in her own right. She had been a farmer in Scotland before coming out to Port Phillip in about 1840, and convincing the Crown Lands Commissioner, Foster Fyans, that she was capable of running a pastoral station.



Bills Gully public sheep dip, Miram South, used from 1904

Developing an Industry

Though large profits eventually came from the sale of wool, initial expenditure could be very high. Capital went into the purchase and transport of stock and station supplies, and to the payment of wages to superintendents, shepherds and hutkeepers, as well as itinerant shearers, bullock drivers and bush carpenters. Some squatters were privately financed in their ventures, or supported by distant families. Others were involved in partnerships or in speculative companies, such as the Clyde Company.

The size of flocks on the first runs ranged between 500 and 1500, with sheep costing 20 to 35 shillings each. There was increasing demand for wool in England in this period, where the woollen industry had converted to factory production, and the price of woollen clothing had fallen. In 1820, Australia supplied just eight percent of Britain's wool imports, but by 1840 this had risen to nearly half.²⁷ Australian wool had captured the English market, and fine Western District wools were prominent in the trade.

Though shepherds were in charge of the unfenced mobs of sheep, early stock losses could be high. Many sheep were killed or stolen by Aboriginal groups, and the animals also succumbed to scab and footrot. Scab is a highly contagious parasite which lays its eggs in the skin of sheep and causes large scabs to form. It was eventually controlled with a wash made up of sulphur and tobacco. Footrot is a problem in wet, low-lying country.

In the shearing season some elaborate means were used to wash the fleece while on the sheep's back, to remove dirt, grease and other particles. Essentially it involved dunking or driving the sheep through a series of water pens, usually located on a creek or stream. Here they were soaked, lathered with soap, and finally rinsed clean. Sometimes heated water was used. The animals were then sorted into yards and eventually herded into the woolsheds for shearing. The fleece was then pressed and packed into bales, and taken to Geelong or Melbourne, or for those stations located in the far south-west, carted down to the warehouses at Portland.

Breeding programs were developed to improve sheep and fleeces, and were assisted by the introduction of fencing and the co-operative efforts of some station owners. The renowned fine wools of the Western District were also bolstered by merino stock from England and from the famous Macarthur flocks of New South Wales. Skipton's annual sheep show and ram fair was first held in 1859, and went on to win an international reputation as the showcase for Western District breeders.

Cattle were also introduced to some properties, for the profits to be made from the sale of beef and the export of hides and tallow. Cattle were hardier than sheep, and required less labour and attention. They could also be turned into the bush to graze, where they could be mustered at a later date. The best cattle raising country was eventually found to be around Colac, Camperdown, Warmambool and Port Fairy.

In the late 1840s the Australian Lands Act and subsequent Order-in-Council, gave squatters the opportunity to purchase the 'pre-emptive' right of their home stations, though the remainder of the run was still licensed from the Crown (see Chapter 4 for a more detailed overview). From this nucleus many run-holders built up a freehold estate. Competent surveying of the runs also began in this period, with more substantial improvements made after the acquisition of freehold title.

Improving Properties

Huts and homesteads

Makeshift huts were the first buildings erected on a run. Even squatters with substantial capital built very basic dwellings in the early years, as tenure was not secure and many pastoral ventures were purely speculative. Bark huts were common, with bark walls and roof, and a stamped earthen floor. Huts were also built of split stringybark slabs, and in the volcanic country around Port Fairy and Warrnambool, some sod huts were constructed from blocks of the rich black earth, and topped by thatched roofs. Elsewhere pise (rammed earth) huts, or wattle and daub huts, went up and were also covered in thatch.

Other structures began to cluster around the huts of the early head stations. These could include a store, kitchen and garden, stables, men's huts, yards and pens, blacksmith's shop, barn, woolshed and dairy.

More commodious homesteads were built with the acquisition of freehold. The new buildings were sturdy and functional, often constructed of brick or local stone, and featuring wide sheltered verandahs. They were uncompromising structures, sitting square and solid in the landscape. The first recorded use of the 'sombre grey bluestone' for residential work was in Geelong in December 1849.²⁸ As with the earlier run complexes, the new homesteads were surrounded by a variety of outbuildings and structures. Galvanised iron was also first used in this period.

The influence of women was greater in the mid-19th century, as more women were found throughout the squatting districts. Their presence often led to interior improvements in squatters' homes. Ceilings, floors and interior walls followed the arrival of wives, as did more comfortable furnishings and ornamentation. Growing numbers of children also meant that school rooms were needed, and school masters. The Learmonth established a school on their station at Ercildoune, which grew to accommodate 180 children, and eventually to gain independent government funding.²⁹

The adult children of the squatters, as inheritors of their parents' wealth, preferred to build in a grander style. They were responsible for the larger homesteads of the 1870s, which were more akin to English country houses, with libraries, billiard rooms, fine drawing rooms and

generous gardens. Many of these more substantial homes were built during a period of consolidation in the Western District, on stations which were almost exclusively freehold.

Fences

In the early years of pastoral settlement, the need for fencing was not high as shepherds attended flocks. The sheep were herded together in the evening and boxed in with movable hurdles. When the first fences were built they tended to be made of brushwood or logs, sometimes wedged into place with timber 'chocks'. As the extent of freehold spread in the late 1840s, fences were built, often following the boundaries of the newly purchased land. Fencing also became a more urgent requirement during the gold rushes, when many shepherds and farm hands deserted to the gold fields.

Wire fences became more common in the second half of last century, as did hedges of hawthorn and other exotic species. Cypress pine and sugar gum borders and shelter belts were also planted. These provided protection to pastures and grazing stock, and today are another distinctive Western District legacy.

The volcanic stones which lay on the surface of many Western District properties, could also be gathered up and used to build dry stone walls and fences. Immigrants from Great Britain in particular, adopted this practice, after the fashion of walls built by expert wallers, or 'cowans', in the Old Country over preceding centuries.³⁰ An early example of dry stone wall construction occurred in the late 1850s, when the Manifold family at Purrumbete employed Scottish labourers to build walls and fences from the plentiful basalt and tufa lying around in their paddocks.³¹

Dry stone wall construction was back-breaking and laborious. Rabbit-proof walls required foundations to be at least two feet deep. In the Corangamite district many walls are two metres high, constructed of two walls laid three feet apart, with the centre filled with smaller stones. Overhanging copstones, and wire stretched from the tops of the walls, are techniques used to keep rabbits out.³²

Numerous dry stone walls can be found on public land in the Mt Eccles area. They are believed to date from 19th century grazing leases. Their proximity to the stone structures built by Aboriginal people in the Lake Condah district reminds us of the very early use of this

construction material on the western volcanic plains.

Aboriginal/European Relations

Within a few short years of the establishment of European settlement in South-western Victoria, Aborigines and pastoralists were living in close proximity right across the region. European settlement, which Chapter 4 shows to be far from an orderly occupation, had been superimposed on a pre-existing division of land between Aboriginal clans. And during this process the Aborigines stayed where they had always been.

Clans, which were groups of closely related kin, formed the most important unit of Aboriginal society. Clan members were spiritually linked to a designated part of the land by ties that stretched back to the Dreamtime. Each clan territory had topographical features which had significance because of their association with 'mythic beings or deities, who in the Dreaming left part of themselves there'. Such sites provided access to an 'essential life-giving substance' for all members of a clan. Clan land was 'inalienable and non-transferable, held in trust for the mythic beings, and for human beings: for the dead as well as for the living, and for future generations'. The clan was therefore based on 'a religious understanding', as the anthropologist Ronald Berndt has pointed out, and had 'religious responsibilities', including the carrying out of rituals, to ensure 'the perpetuation of species associated with the particular mythic beings linked with that territory'.³³

It was impossible for Aborigines to move far when Europeans arrived. Elsewhere they were 'strangers' and in Aboriginal society a stranger coming on to the country of others, without invitation or pre-arrangement, was liable to be killed. Moreover attachment to country was strong. Jacky White, later forced to reside at the Lake Condah Aboriginal Station, expressed his feeling for his country in a letter begging squatter Samuel Winter to come and take him back to the Wannon, only a few miles away:

*...if you will write to the Government for us, and get us off here, I will do work for you and will never leave you...I always wish...to be in my country, where I was born...This country don't suit me I'm a stranger in this country I like to be in my country...*³⁴

Robinson in 1841 found Aborigines near to or on their own land despite the presence of Europeans. They were aware that the land had been taken but they had not moved away. He records for example, the depths of despair of a dispossessed family which he encountered near Frank Henty's home station. When he asked them where they belonged, the man responded with emotion and struck the ground, saying 'Here is my country, *deen deen* — here here!', and then the woman in a dejected tone also bewailed the loss of their country'.³⁵

A further factor complicated relations in the Western District. Aborigines, as hunters and gatherers, were dependent on the rivers, creeks, waterholes, swamps and marshes, as places where food could be collected. The squatters also valued the streams and waterholes, as they and their stock were dependent on fresh water. In the Western District a series of dry years occurred in the period 1837 to 1842, and many streams dried up to form water holes. Therefore in taking up runs, the squatters came into direct competition with the Aborigines. It was at places where water was usually present even in years of drought that the Aborigines would have had their fishing weirs, and their more substantial winter huts. From the beginning Aborigines and European pastoralists were brought into direct contact right across the District.

Conflict

Aboriginal attacks on Europeans, or their sheep, cattle and horses, took place from the beginning of white settlement. 'Aggression' and 'depredation' were the words often used by settlers to describe these activities. But 'outrage' captured more of the Europeans' sense of indignation at attacks on themselves or their property.

The new settlers of the south west made several appeals for Government protection against Aboriginal attacks. Foster Fyans, the Crown Lands Commissioner, toured the Western District in 1840 and reported that nearly every station had been attacked by Aboriginal people or groups. It was the stealing of sheep and cattle, however, that Europeans most complained about. The number of sheep stolen varied from one to hundreds of sheep, but how many were taken seemed not to affect the use of the word 'outrage' or the violence of the European reaction. The stealing of even one sheep was regarded as outrageous.

The length of time the outrages lasted varied across the District. They lasted longest and inflicted the greatest harm in the area west of the Hopkins River where there were strongholds to which the Aborigines could retreat, and where Europeans found it difficult to follow. Along the Glenelg River, at Mount Clay, in the stony and swampy ground around Darlot's Creek, at Lake Condah, Mount Eeles (later Eccles), from Mount Napier stretching south towards Port Fairy, and in the Grampians and around Mt Arapiles in the north, the Aborigines had clan territory which provided a refuge from the initial effects of European settlement, and a rallying place against those who had invaded their country. Across the Western District plains it was more difficult for Aborigines to protect themselves from European retaliation and outrages had virtually ceased east of the Hopkins by early 1842.

Aboriginal attacks were widespread. In the early 1840s, virtually the whole region west of the Hopkins was caught up in a wave of Aboriginal attacks. A number of districts were more seriously affected, including runs to the north, east and west of Port Fairy; around Hunter's station on the Eumeralla river; around Henty's station near Mt Eckersley, just north of Portland; in the Glenelg river area and in the north at Mt William and in the Pyrenes. In 1845, the 'Eumeralla War' broke out and continued for two years, with numerous attacks launched in the area around Mt Eeles and to the south-west and south-east of this feature.

In the long term the Aborigines had no chance against European weapons and superior numbers, but in the short term their attacks were costly. Many pastoralists were forced to abandon some land areas and outstations for a time. Aboriginal attacks and loss of sheep could also lead to ruin, and at the very least added to the cost of running a station when shepherds refused to do their duty unaccompanied.³⁶ The Government also offered little assistance against the attacks. Enforcers of law and order were scarce on the frontier, and Governor La Trobe in Melbourne lacked the necessary resources.

Records indicate that 10 Europeans were killed by Aborigines in 1842, the year of the worst inter-racial violence in the area west of the Hopkins River. From the beginning of 1842 to 1848, nineteen Europeans were killed, making a total of thirty-five since settlement. All these were adult males except for one child, and in no

case did a group of Europeans die as a direct result of a large-scale Aborigine initiated encounter. There is also no evidence to suggest indiscriminate killing by Aborigines, or attacks on individuals without a reason. It is also clear that Aborigines gave lesser punishment, such as a beating, for what was regarded as a lesser crime.³⁷

Again, it was George Augustus Robinson who noted, in 1841, the confidence of the squatters and their men in regard to their behaviour against Aborigines. Robinson met Robert Sutton, in charge of Robert Whitehead's run near Port Fairy. Sutton had an Aboriginal skull hanging in his hut and a large pack of dogs and number of firearms. 'I believe the dogs are kept as much to hunt natives as kangaroos', Robinson wrote in his journal. When he warned Sutton that he must not break the law and if he did so, he would be punished, Sutton replied, 'nobody would know about it'. Robinson received much the same reply from many others.³⁸



George Watmore's grave, near Port Fairy

Sometimes it was simply the squatters and their men who went out to deal with Aborigines guilty of an outrage. At other times they joined parties led by the Police Magistrate at The Grange or Portland, or by a local Justice of the Peace such as William Campbell of Dunmore. Foster Fyans, the Crown Lands Commissioner, also called on local men to help. At other times the task of finding the Aborigines and dealing with them was given to the Native Police.

There is evidence that at least 300–350 Aborigines were shot or poisoned before 1850, but there is no doubt that many more were killed (Critchett, p.130). Accounts of massacres, other than those in official records, live on in oral history across the region. Of the Aborigines killed of whom there are records of age and sex, ten were children and twenty-seven were women.

The careful placing of police and particularly the use of the Native Police, eventually brought peace to the Western District.

Each year, from 1842 until 1849, Native Police were stationed at well-chosen sites. In 1844 for example, six were located at the Glenelg River, four near Mt Eeles on the edge of the great swamp, four at the Police Barracks at Mt Eckersley, and two at The Grange. The police were able to follow Aborigines to their retreats and persuade them that they could not continue to cause trouble without being punished.

Farmers and Selectors

Chapter 4 examines the political and social context, and geographical expression of the introduction and spread of selection and closer settlement in the second half of last century. In that extended period of experimentation, the struggle of selectors had social consequences for many communities, particularly those of the Wimmera comprised almost wholly of small farms. Schools, government facilities, small businesses, and even the coming of the railway, required vital, thriving communities. The abandonment of a farm, or final recognition of the true agricultural worth of the land, shook the confidence of many small communities.

The remains of former properties can still be seen in national parks in the study area. In the Grampians National Park, the site of the old D'Alton family homestead, Glenbower, can be discerned near the confluence of Fyans and Glenbower creeks. Extant features include chimney bricks and poplar, oak and pine trees, the remnants of a garden planted in the late 19th century, and tended by women in the D'Alton family, one of whom was a renowned flower painter.

Agricultural colleges

The 1869 Land Act made provision for the reservation of Crown land in selection areas for experimental and agricultural college purposes. Subsequent acts ensured these reservations continued to be made, as new areas were thrown open to settlement. Many of these reserved allotments can be seen on parish plans today, though few were ever used for the purpose. In 1884 the *Agricultural Colleges Act* placed these areas under the control of the Council of Agricultural Education. Colleges were opened at Dookie in 1886, and at Longerenong in 1889. Niel Black's Glenormiston property was later purchased by the Government for an agricultural



Land sale at Hamilton

college. These institutions played an important role in the development and improvement of agricultural techniques in South-western Victoria, in areas of cereal growing, and irrigation. In 1944, a new *Agricultural Colleges Act* vested control of the institutions in the Department of Agriculture.

Immigrating to the South-west

In 1851 the population of the Western District was 24 380. By 1861, it had jumped to 138 280. This increase owes much to the influx of gold rush immigrants to Victoria. Many of these were women who arrived singly or with families, under various immigration schemes. The number of domestic servants in the District also jumped dramatically in this decade, rising from 1480 in 1851 to 6148 in 1861. This is another indication of the increasing presence of women.³⁹

South-western Victoria was settled by people from a rich variety of backgrounds. They came to a region where for many years, severe labour shortages meant that skilled rural workers and general farm hands alike were difficult to find and keep. Moreover, many new arrivals were not prepared to put up with the harsh conditions of station life, and congregated in the towns. To remedy this situation, some squatters sponsored immigration programs in the hope of staffing their pastoral stations. They brought out assisted migrants from England and the highlands of Scotland. Some even came from Malaya and Singapore. Niel Black of Glenormiston employed a number of 'Pentonvillains', ex-inmates of the model reform-style Pentonville prison in England, on his property in the late 1840s.⁴⁰ The Geelong and Portland Bay Immigration Society also operated in this period. They brought people across from

Tasmania to help lessen the chronic labour shortages.

Many new arrivals landed directly at Portland, where an Immigrant Barracks was established. Today the site of the Barracks is commemorated by a plaque. Ships also sailed direct from Britain to Port Fairy, and later to Warrnambool. The discovery of gold in the early 1850s increased this activity at the western ports. Between 1851 and 1857, nearly 11,400 immigrants landed at Portland.⁴¹

The Irish were prominent in the Port Fairy and Koroit districts, where many settled after William Rutledge first brought them out to live and work as tenant farmers on his Special Survey land. They grew potatoes, onions, oats and hay, in the rich volcanic soils. German Lutherans settled near Hamilton, and later in the Wimmera, after crossing the border from South Australia in the middle of last century. By 1858, just over 10 000 of these people had arrived in the south-west, including some who emigrated direct from Germany.⁴² They have left their mark on the region in the form of substantial church buildings and schools. The German Lutheran settlement of 'Gnadenhal' near Peshurst is now known as Tabor, while 'Hochkirch' is today's Tarrington.

Chinese mining communities also became established on the goldfields around Ararat and Stawell. Their journeys across the region, particularly the long trek from embarkation at South Australia to the goldfields, took many through the Grampians ranges. Chinamen's Track, which runs north of Cranages and Mackenzie Falls, commemorates this history. The Chinese were also skilled market gardeners and the establishment of gardens along rivers and streams of the region provided European families with a much needed supply of fresh greens and vegetables. The site of a former Chinese garden on the Wimmera River in Dimboola, is remembered by local people and commemorated through the erection of a sign. At Harrow, the old Chinese gardens were located on the Glenelg River, south-east of Johnny Mullagh Park. Water was pumped up from the river and diverted along channels to irrigate the vegetable beds.

In 1950 a migrant hostel was established in Ararat to house 400 migrants from a central camp at Bonegilla, who were destined to work in the new Prestige Mills manufacturing complex in the town. The hostel represented a post-war solution to two issues of the day - the

decentralisation of industry in Victoria, and the employment of 'New Australians'. The hostel was comprised of 37 prefabricated nissan huts, with a central kitchen-dining-recreation facility, and stores and administrative buildings. In later years the buildings were used by Telecom and the Ararat Rifle Club.⁴³

3.6 THE DEVELOPMENT OF TOWNS

Many of the early towns of South-western Victoria served as depots for the pastoral community. They were regarded as mere 'head stations' for the one enormous sheep run which stretched across the western plains.⁴⁴ Portland was a meeting place for whalers and squatters from up country, and a gateway to the pastoral lands. Very few women inhabited the towns in this early period, though Jane Henty had women's company when her first child was born in Portland in 1837.

Early Ports

The two frontier ports, Portland and Port Fairy, were outposts of civilisation in south-eastern Australia, peopled by whalers, ex-convicts from Tasmania, and increasing numbers of agents, merchants and others intent on profiting from the new pastoral industry.

The first inhabitants of Portland looked to Van Diemen's Land for nourishment and support. Launceston was the principal source of Portland's early supplies, and the destination for increasing quantities of export produce. These early connections revolved around the trade in whale products, and the supply of building materials for the new centre. James Liddell, a ship captain contracted to the Henty family, was 'constantly employed for nearly two years' between 1834 and 1836, carrying stock, stores and people from Launceston to the new settlement at Portland Bay.⁴⁵ The first clip from the Henty's Merino flock was also shipped down to Launceston.

The initial sale of Crown land in the township of Portland took place in 1840. Within three years there were more than 40 small businesses operating in the town, including coopers, butchers, blacksmiths, saddlers, bakers, merchants, and agents. A number of public buildings were constructed by the mid-1850s, including a watchhouse, customs house, court house and gaol. Portland retains a range of public and private buildings from this early

period, many of which are in a Georgian style reminiscent of similar structures in Tasmania.

After the early trade in whale produce, skins and wattle bark, wool came to dominate consignments from the young port. The first direct shipment to London occurred in December 1841, and in 1842 alone, 2050 bales of wool left the port.⁴⁶ Live sheep were also exported, and tallow produced in the sheep boiling down process. Beef, dairy produce and potatoes were other early shipments from Portland, with guano and wattle bark becoming important in later years.

The first substantial jetty was constructed in 1846. Before this produce was carried by lighters to the beach through the surf, or taken out to ships anchored beyond the breakers. A longer pier was built in 1857, and was used by immigrant ships and the new coastal steamers. The Fishermans Wharf and Breakwater were constructed in the late 1880s, to a Sir John Coode design which involved the early use of mass concrete in wharf construction. The original timber viaduct at the base of the wharf has been lost, but remnants of the spray wall remain, as do some original handrails and decking, and two early timber cranes. Other structures associated with Portland's maritime history include a collection of original stone and brick warehouses in Bentinck and Julia streets. Many of these were the repositories of early bales of Western District wool awaiting shipment.

John Griffiths' whaling station was the first permanent European settlement in the Port Fairy district. He and his family lived on Griffiths Island from 1836 until the early 1840s. Charles Mills and other whaling station employees also lived locally. By 1837, several hundred acres were under cultivation and a flour mill was operating. Griffiths also ran a fleet of ships to service the new settlement, and together with partners Connolly and Campbell, brought the first cattle and sheep to the district.

None of these settlers had a legal right to the land around Port Fairy. James Atkinson was in fact the first to obtain a land grant in the district, when he won a Special Survey of approximately 5000 acres in 1843. Atkinson renamed the town Belfast in honour of his home town, and subdivided the estate into a rough grid of small leasehold areas. William Rutledge was also granted a large survey in 1844, to the east of the port. The grants were made on the condition that the landholders import tenant farmers,

through assisted immigration, to work on the surveys. But development was held back by the special surveys, as land sales were restricted. The later collapse of the Rutledge agricultural and maritime empire also had an impact on the local economy.

Port Fairy retains many buildings and structures from its early years. The Tasmanian influence is strong, as both settlers and some building materials came from across the strait. Residences were built in limewashed brick, weatherboard or local bluestone, quarried on the Hamilton Road. Bluestone was also used in the construction of early public buildings, such as the Customs House and Court House, as well as several churches designed by the noted architect, Nathaniel Billing. The wharf complex at Port Fairy has an outstanding collection of features associated with the mid-19th century maritime activity. Remnant elements include warehouses, depot buildings, wharves, a rocket shed, an early lifeboat shed and very likely the oldest purpose-built lifeboat in the world. The battery and defence facilities across the river contribute to the importance of the complex, as does the former Customs House and Court House. The cottages of early maritime workers and sailors are also found throughout the town.

Both Portland and Port Fairy developed sizeable fishing fleets in the second half of last century. Along with Queenscliff, the two western ports featured strongly in the rise of the Victorian rock lobster fishery in the early 1900s. The barracouta industry flourished in the west, where a particular type of low freeboard style 'couth boat' emerged in the 1890s. Shark fishing also began at Port Fairy earlier this century, while offshore or deepwater trawling was launched from Portland in the 1970s. The introduction of cold storage and freezing facilities at wharves, fish processing works and fishermen's co-operatives, helped sustain the local fishing industries.

Unlike Portland and Port Fairy, Warrnambool was settled from the hinterland, and not from the sea. The first Europeans to reside in the district in the late 1830s held pastoral runs. They included the three Bolden brothers, Armyne, George and Lemuel, who established a headstation on the Merri River for their huge run, and William and John Allan with a cattle station on the banks of the Hopkins River. More pastoralists moved into the district in the early 1840s, when the Bolden brothers' grazing rights were sub-divided into smaller blocks.

The rich volcanic soils of the district supported rapid development. Wheat, barley and oats were grown, but potatoes and pigs were the chief products. Lady Bay was surveyed in 1844, and the township area in 1846. The first town allotments were sold in 1847.

Building Towns

In the hinterland of South-western Victoria, many towns developed in an unplanned and ad hoc fashion, before official town surveys could be carried out. Very often this was due to the hasty and sporadic nature of pastoral settlement (refer to Chapter 4). Hamilton, which eventually became the 'capital' of the Western District, evolved in the 1840s in the Grange Burn area near today's Digby Road. Buildings established at that time included a police station, the Grange Inn (or Blastock's Inn), Beath's Store, and a blacksmith's shop. Some of these were still standing a century later, but have since been removed. Hamilton went on to acquire substantial public buildings and institutions, as well as a number of large churches and private schools.



Aradale Asylum, Ararat

Dimboola, initially known as 'Nine Creeks', developed in the late 1850s. It began life as the location of the Nine Creeks store and wine shanty on the main road between Horsham and Nhill, at the junction of several tracks to pastoral stations and settlements at Tullyvac and Antwerp. The township grew slowly in the 1860s, then rapidly outgrew its humble beginnings in the 1870s with the coming of the selectors and the railway.

River crossing points, where fords and a supply of fresh water made natural stopping places, also evolved into towns. Winchelsea developed at a crossing on the Barwon River, and was long regarded as the 'gateway' to the Western District.

Other towns sprang up where stations were placed on railway lines. In the Otways the town of Forrest developed in the 1890s at the terminus of the railway line which ran south from Birregurra. When the line was completed the terminus was located in a 'wilderness', and the only established settlements on the line with nine stations were at Deans Marsh and Murroon.⁴⁷

Surveyors of townships also sometimes worked ahead of settlement, being sent to newly opened selection areas in anticipation of demand for land in towns, and for public services and facilities. They laid out roads and township blocks, and set aside public land areas and reserves for schools, police buildings, cemeteries, parks, and recreation grounds, and religious institutions. Sometimes community needs dictated the use of land, before an official survey was undertaken. In Cobden, the first burials were made in an unsuitable shallow and rocky area in the centre of the town. This graveyard was later replaced by a more appropriate cemetery area on the outskirts of Cobden.⁴⁸

Though many surveyed towns and settlements failed to develop, their planning is important in understanding the role of Government in encouraging rural development. The design of the townships reflected contemporary town planning concepts and particular local conditions. The plans themselves are valuable historical documents, indicating the location of the various Crown land reserves and often the names of the first settlers and purchasers of town blocks.

Some towns became 'wheat', 'timber' or 'gold' towns. Concrete and steel silos dominate the wheat towns of the Wimmera, many of which developed after the coming of closer settlement and the extension of the railway network in the 1870s and 1880s. Timber towns, such as Barramunga and Beech Forest, dot the Otway Ranges.

The mining towns of Ararat, St Arnaud and Stawell began with gold, then survived as centres of successful closer settlement districts in the second half of last century. Many significant public buildings reflect the wealthy origins of the towns. Ararat became an 'institutional' town, through acquiring a large district gaol in 1861, and Aradale, an asylum for the insane. At St Arnaud, a handsome red brick courthouse dates from 1859. Stawell also retains a brick court house from this period,

as well as a later Renaissance Revival style court house dating from 1878. These buildings emphasise Stawell's important role in the administration of law on the goldfields, and as the headquarters of the Wimmera Police District in the 19th and early 20th centuries.

Several of the older Western District towns retain the characteristic bluestone (basalt) buildings which are popularly associated with the region. At Peshurst, the former Shire of Mount Rouse Council Chambers were built in 1865 of basalt masonry, as was State School 486 which is now derelict. A complex of bluestone buildings in Shaw Street, Mortlake, dates from the 1860s and 1870s, and includes a Temperance Hall and Court House, and the former Mortlake Shire Offices and Post Office. Hexham also has distinctive stone buildings such as a Temperance Hall and a Common School built in the 1850s.

As the demographic structure changed, and populations moved on, townships flourished and contracted. There has been an ever-decreasing trend in the size of the rural workforce. In the forty year period from 1921 to 1961, the percentage of people employed in primary industries fell by over half, from 22.2 per cent to 10.9 per cent.⁴⁹ In some locations, the only reminders of once busy settlements are forlorn railway stations, or derelict public halls. School memorials are another indicator of the ebb and flow of settlement. Nearly every locality of any size has had a school at one time, and many communities have commemorated the passing of these local institutions. A drop in student numbers, ageing populations and increased mobility through the use of motor vehicles, have led to numerous school closures in South-western Victoria. Rows of sugar gums or pine plantations are indicators of a former school site.

Supplying Services

Reticulated water supply systems were installed in some towns of the south-west in the second half of last century (see Map 11). The old Koroit town water supply pump house and iron tank, dates from the 1880s. It is located on the edge of the Tower Hill volcano, in a recently harvested pine plantation. Water towers are also found in most towns. Many of these are cylindrical concrete towers of relatively recent construction. Murtoa has an historic brick tower which dates from 1886 when it was constructed by the Victorian Railways

Department. It is now used as a historical society museum.

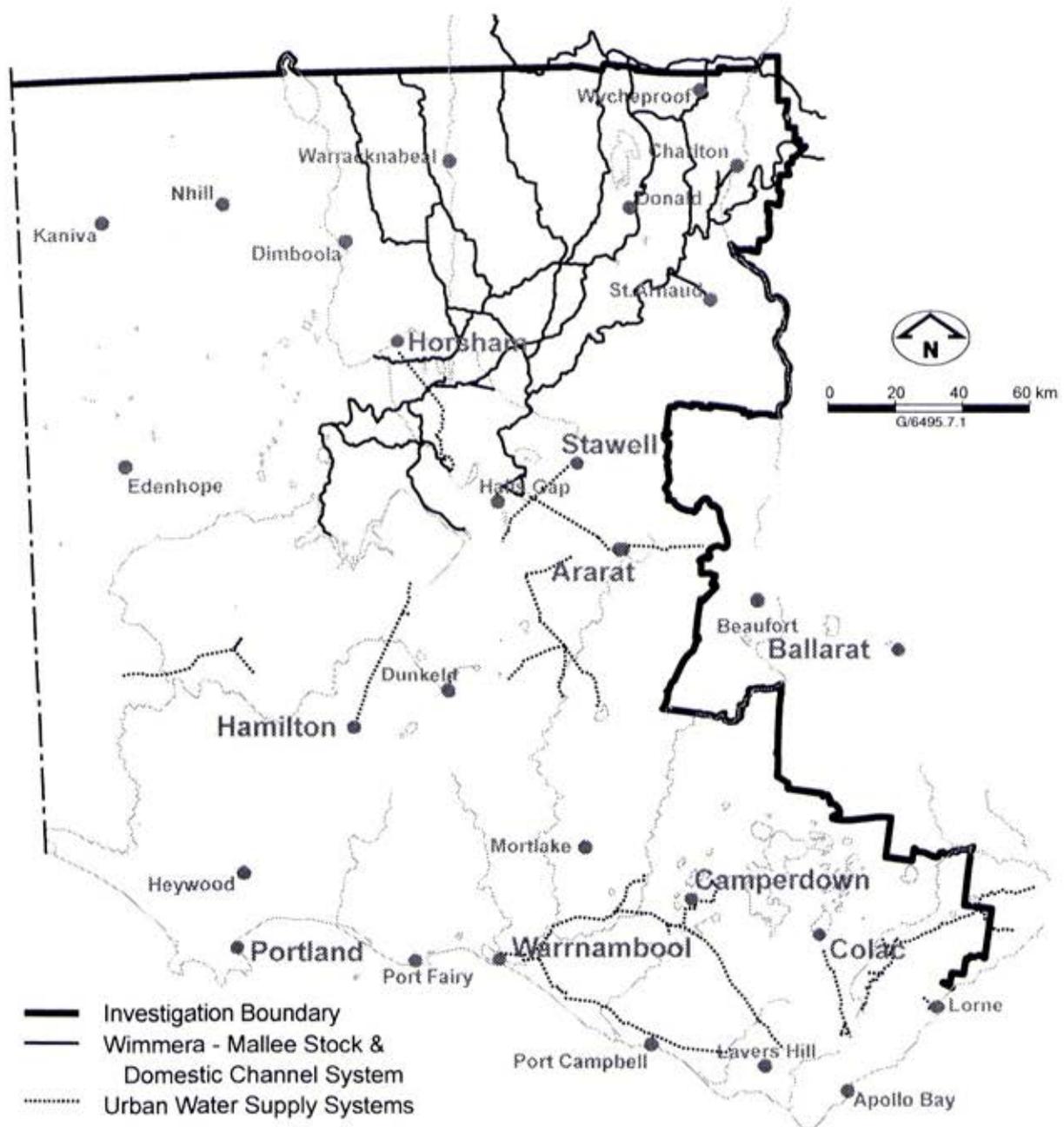
Remains of one of the earliest water supply systems in Victoria can be seen in the vicinity of Redmans Road and Lake Bellfield in the Grampians National Park. The Stawell Water Supply System was constructed in the 1870s, to a design by engineer John D'Alton. The location was such that a conventional channel was not feasible. The system carried water from Fyans Creek in the Grampians by gravity to Stawell, via open fluming, timber trestle aqueducts, a system of syphons and a kilometre-long tunnel through the Mount William Range. When opened in 1881, the system was hailed as an engineering feat. The water of a northerly flowing stream had been diverted east, and the flume line which ran along the contours of the mountains involved great planning and ingenuity. Large sections of the iron fluming can be seen today, on dry stone supports in many places. The tunnel under Mount William still carries water to Stawell.

Before the State Electricity Commission extended its distribution network to the whole State, some towns had their own generating plant. Gas supplies in some towns were generated at the local gasworks. Gas holders, or gasometers, are increasingly rare features in Victoria, though they can be found in Hamilton and Stawell. Hamilton's gasometer was built in 1877, a year before the streets of the town were first lit by gas.

Fire fighting and protection has also left a legacy of distinctive structures in some towns. The CFA building in Gray Street, Hamilton, is a brick and cement render building in a late classical style. It was built for the Hamilton Fire Brigade in 1901-02, and has since been modified to accommodate the larger modern fire-fighting vehicles.⁵⁰ Stawell also retains an unusual building associated with the town's original volunteer fire brigade. A four-storey brick tower, with decorative arches, fretwork and a fire bell, is attached to a double-storey, brick station building.

Old stone or brick storm and waste water drains have sometimes been retained in towns. A stone channel can still be seen in Austin Street, Stawell, which was constructed of local stone. An open brick drain is also located near the corner of Playford Street and the Western Highway at West Stawell.

MAP 11: Water Supply Systems



Public Parks and Gardens

Several significant botanic gardens are located in South-western Victoria. Many of them were developed under the influence of William Guilfoyle, the curator of the Melbourne Royal Botanic Gardens who was a prominent figure in the planning and design of many public gardens in 19th century Victoria.

Warrnambool, Colac, Horsham and Ararat all have important botanic gardens. Unfortunately, Port Fairy's Botanic Gardens have largely been turned over to camping purposes, though the ornamental gates, rotunda and distinctive

Curator's Cottage remains. In the 1860s, prisoners from Ararat Gaol were involved in the establishment of the Alexander Gardens. Their labour was used to clear the site, which lies below the entrance to the gaol. It was in the early 1900s, however, that the gardens began to take their present shape, under the guidance of curator, Hugh Linacre. The ornamental lake was originally a mining dam.⁵¹

The site of the Hamilton Botanic Gardens was originally set aside in the early 1850s, though the first plantings were not made until 1870. The gardens were more properly laid out in the following decade, however, using plans drawn

up by Guilfoyle. Today they retain the Curator's Cottage (c1870), rotunda (1904 and 1989), fountain (1917), and artificial lake created in 1883, French-style street gates, and many significant trees and features. They are one of the most significant provincial botanic gardens in Australia.⁵²

Street trees, avenues of honour and median strip plantations are found throughout the region, as are perimeter plantings of pine and cypress around recreation grounds and schools. Distinctive borders, trees and shrubs can also be found in cemeteries.

3.7 TRANSPORT AND COMMUNICATION

Shipping

In the first half of last century, before the advent of lighthouses, the western approach to Bass Strait was perilous for navigation. King Island splits the entrance to the strait, and ships sailing near the island or along the Victorian coast near Cape Otway, could founder on the reefs. The many shipwrecks of the south-west attest to this danger, of which more than 120 have been identified to date.

As the first Europeans settled the region from the sea, and the first towns were heavily dependent on sea trade and communication, the provision of safe harbour, navigation aids and port facilities, was an early and urgent requirement in the region.

The first lighthouse in the region was constructed at Cape Otway in 1848. Ocean lights and keepers quarters were later installed at Cape Wickham on King Island, and at Cape Nelson. Bay and harbour lights and keepers' quarters were also erected at Portland and Warrnambool, and on Griffiths Island, Port Fairy, in 1858 and 1859.

The lightstation complex at Cape Otway retains the lighthouse tower, keepers' quarters and associated buildings, and a cemetery. It was very isolated when first constructed, and only accessible from the sea. The mouth of the nearby Parker River served as an anchorage for ships unloading men and supplies, and a jetty, hut and track were constructed there. A quarry, from which stone for the lighthouse was reputedly extracted, is believed to be nearby. Blanket Bay was later used as the dropping off point, and it too had a jetty and track. In the

1850s, Cape Otway was also chosen as the site for a telegraph station, as a key site in the cable link between Launceston and Melbourne.

Coastal engineering is an ancient practice associated with the development of ports and harbours. In South-western Victoria, harbours and bays have been altered and modified to facilitate safe berthing, often where none existed before. Breakwaters have been built, sand and silt has been dredged from rivers and river mouths, and groynes and retaining walls constructed to hold back shifting sands and to keep open artificial channels. Sometimes these activities have met with little or no success.

Work on the Warrnambool breakwater began in the late 1870s, to a design by Sir John Coode, and continued intermittently through to the 1920s. Substantial funds were poured into the structure over this period, amid local accusations of wastage and bureaucratic bungling. The original structure comprised a concrete block breakwater off Breakwater Rock, with a connecting viaduct to the shore. The viaduct was later filled in, which resulted in increased and extensive siltation. Sections of the original breakwater remain today as evidence of early coastal engineering technology.

Maritime rescues have been all too common along the 'Shipwreck Coast'. For many years rockets were used in sea rescues, with the rocket launching apparatus housed in rocket sheds, of which two survive in the south-west, at Port Campbell and Port Fairy.

Coastal Trade and Travel

In the 1850s Stephen Henty pioneered the coastal steamer route between Portland and Melbourne, a decade after passenger steamers first travelled between Melbourne and Sydney. The steamer journey from Queens Wharf to Warrnambool in 1859 took 18 hours, and 24 hours to reach Portland. At this time sailing vessels could take a week or more to cover the distance. Passenger tickets on steamers were initially expensive but dropped dramatically by the 1880s, when the railways provided stiff competition.

The 'S.S. Wannon', of the Belfast and Koroit Steam Navigation Company, was the last steamer to operate on the route, before being withdrawn in 1939. A memorial at Port Fairy commemorates the steamship 'Casino', which travelled between the south-western ports from 1882 to 1932, making approximately 2500

voyages. It was wrecked, with lives lost, at Apollo Bay in July 1932.

In the second half of the 19th century, many settlements still depended on the sea trade for supplies and as an outlet for agricultural produce. The siting of a jetty or pier was no easy matter. At Apollo Bay three jetties were constructed before a satisfactory result was achieved.

The west coast was a dangerous place for ships to make landfall. Significant wrecks have included the 'Schomberg', 'Fiji' and the 'Loch Ard'. The latter was wrecked in 1878 with great loss of life, while on a voyage from Gravesend to Melbourne. The cave in which the two survivors sought shelter is in the Port Campbell National Park, as is the cemetery which contains the graves of some of the shipwreck victims. Warrnambool's Lady Bay is also the resting place of at least 12 vessels.

Railways

The first railway lines in Victoria were built with private capital. They included the Hobson's Bay (Port Melbourne) line in 1854, which was also the first railway line in Australia, and the Williamstown–Geelong line in 1857. Land was also put aside for a line between Portland and Hamilton in the 1850s, when a tramway was built from Portland to Heywood. In the 1870s, when the Portland railway was constructed, elements of the old tramway were incorporated into the new line, including sections of the original formation, embankments, and cuttings. Today, these remnant elements are among the oldest tramway features in Victoria.

The most intensive period of railway expansion in the south-west took place in the 1870s. The rail reached Ararat in 1875, Stawell in 1876, and finally Serviceton by 1887. Hamilton and Portland were joined to the Ararat line by 1877. The line from Winchelsea reached Colac in the 1870s, then eventually extended to Port Fairy by 1890. Branch lines veered off in all directions from some of these main railway arteries. From Hamilton, trains could be taken in five directions, to East Natimuk, Koroit and Coleraine, as well as Ararat and Portland. Mortlake, Timboon, Alvie, Casterton and Yanac all had their own branch lines (see Map 12).

In 1911, a railway line was built from Irrewarra, near Colac, to Crëssy, and then onto Newton,

Linton and Ballarat. It incorporated part of an earlier 1889 line which only extended as far as Crëssy. When connected with the railway to Beech Forest and Crowes, the new line could carry timber from the Otway forests to mining centres on the central goldfields. The Otway forests had been a major source of timber for mines in the Rokewood, Pitfield, Berringa, Ballarat, Creswick and Maryborough districts since the mid-1890s. Many Ballarat timber merchants and goldfields sawmillers also moved into the Otways in this period.⁵³

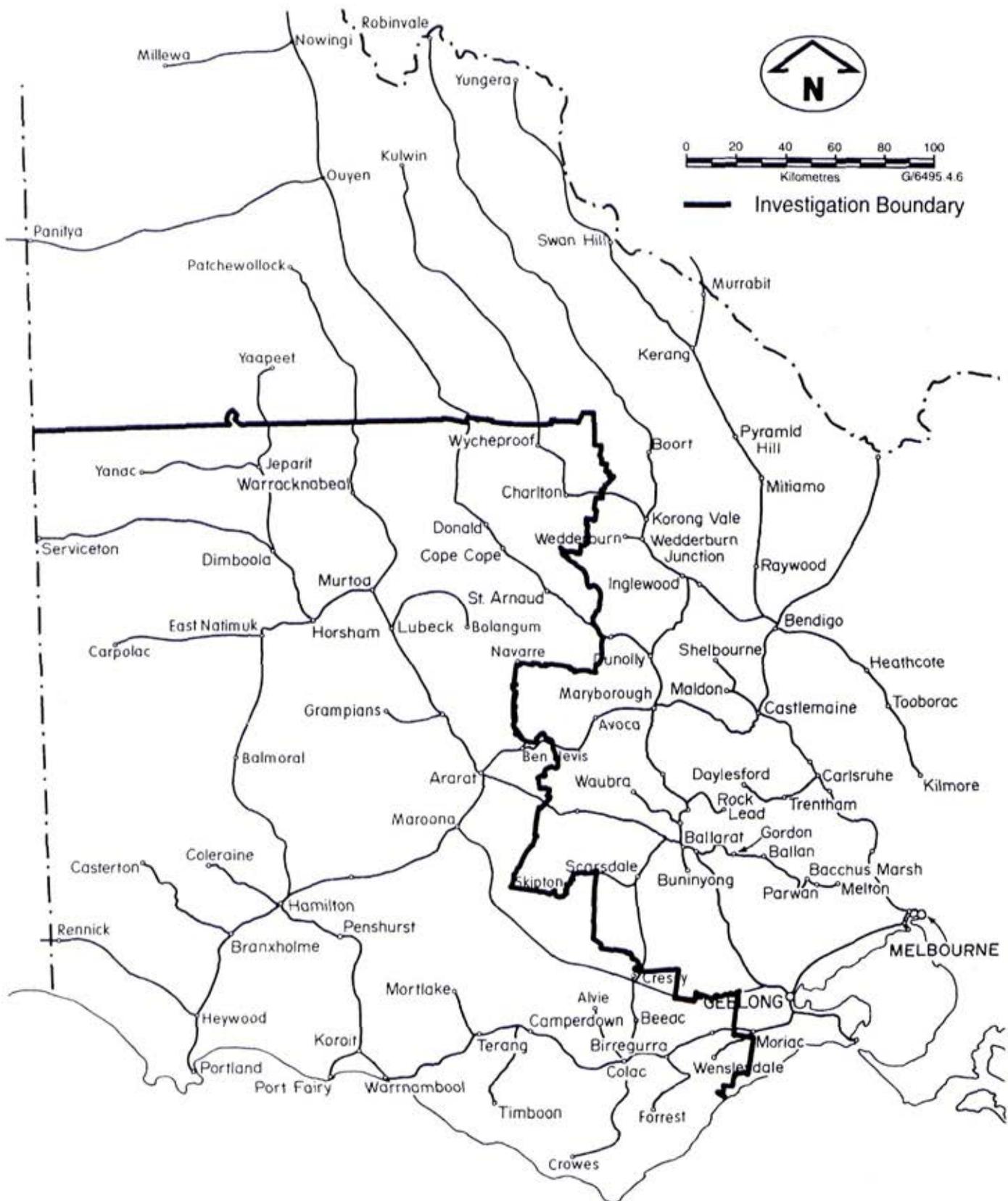
Minor lines and tramways also deviated from the regular freight and passenger lines. In the 1870s the Band of Hope gold mine was reached by a spur from the main Stawell to Horsham railway, which left the line at Deep Lead. Ballast from the mine's mullock heap was removed, and carried back to the main rail system for use in railway construction in the Wimmera. The bed of this spur line can still be seen today.



Bridge remains, Heatherlie Quarry Tramway, Grampians

One of the better known minor lines in the study area was also connected to the main railway system at Stawell. This was the Heatherlie Quarry Tramway, also known as the Grampians Railway, which was built in 1881 to the source of the famous Grampians freestone at Mount Difficult, some 30 kilometres away from Stawell. At that time construction of the west face of Parliament House was about to begin, and the tramway provided an economical means of transporting the stone. For many years after its construction, the tramway was also used by tourists and day trippers visiting the Grampians. The line was closed in 1949, and dismantled in subsequent years. Raised earthen formations are evident at several points along its former route, together with the remains of a timber trestle bridge at Back Creek, off Osleps Track in the Grampians.

MAP 12: Extent of Railways, 1939



Source: Adapted from Powell (1970), Victorian Railways map (1939).

Disused and dismantled railway lines can be found throughout the region. Their formations often appear as raised flat linear features crossing paddocks or running parallel with roads. The remains of timber trestle bridges are sometimes associated with these former lines. The railway trestle bridge over Curdies River near Timboon is one of the most spectacular. A long timber railway bridge, which formerly carried the Warrnambool train across the Merri River at Dennington, remains a distinctive local landmark feature.

Railway Stations

Railway station buildings range from simple single-room timber structures, to substantial multi-roomed brick complexes. Serviceton boasts a remarkable brick station building, which was constructed in 1888 in a Classical Revival style, and extends over several levels. It is unusually large and imposing for its location, and features many substantially intact rooms, including the former refreshment room. The Serviceton station, being close to the border between Victoria and South Australia, also housed a Colonial Customs Office until 1901.

Stawell station was built in 1875 and enlarged in 1888 to become a two-storeyed bi-chromatic brick building, with a cast iron platform verandah. It incorporated a residence, refreshment room, kitchen, and ladies' and gentlemen's waiting rooms. Pirron Yallock has a small but architecturally distinctive timber building, standing derelict and forlorn on the outskirts of the old town. It features an unusual gambrel roof and scalloped valancing on the verandah.

Victorian Railways Institute buildings are now relatively rare components of railways infrastructure. The VRI buildings were intended to provide a focus for social and leisure activities for railway workers, and in some cases provided classes on a variety of subjects. Many of the larger railway towns had them, including Dimboola and Ararat. The latter retains two of these buildings, built in 1924 and 1934 respectively. They are a reflection of the importance of railway employment in the town.

Many railway complexes retain old iron water towers, dating from last century. Standard towers can be found at Serviceton, Ararat and Birregurra, and are important remnants of railway infrastructure in the age of steam. A

disused engine turning 'Y' at Serviceton is a rare feature associated with rostering and manoeuvring locomotives, and helps to demonstrate key aspects of the workings of a large railway station in this period.

Locomotive turntables are also increasingly rare, but several operational turning circles can be found in the study area, including at Dimboola and Ararat. The turntables were a significant component of railway centres with high volumes of engine traffic. The engines were driven on to a section of track, and then rotated on the turntable to change direction. Dimboola became an important railway junction when a branch line opened to Warracknabeal in 1886, Jeparit in 1894 and extended to Rainbow in 1899. A rolling stock sub-depot provided locomotives for work on the main Ararat–Serviceton line, as well as branch lines to Yaaapeet and Yanac.

Goods sheds sometimes remain at former station sites. At Timboon, the arrival of the railway in 1892 spurred on the development of the timber and dairy industries, and relieved the farming community from its dependence on the port facilities at Port Campbell. The former goods shed remains in the old station grounds, though the station building has been removed. Poplars planted in 1899, and the footings of early railway structures, can also still be seen at the site.

Concrete and steel wheat storage silos and bulk wheat handling facilities cluster around railway reserves in many localities of the south-west, particularly in the Wimmera. In some towns these distinctive landmark features are all that remain of the original railway infrastructure. Victoria's first concrete silo was built at Rupanyup in the early 1900s. It remains today within a complex of wheat storage and processing facilities, which also includes a four-storey, corrugated galvanised iron former flour mill. At Nhill, a concrete silo built in 1919 by Noske Brothers Flour Millers, was one of the largest single bin silos of its kind in the world when constructed.

One of the most extraordinary wheat storage facilities in Australia, however, is the former Grain Elevators Board grain store at Murtoa, otherwise known as the 'Stick Shed'. This huge structure is 260 m long, with a massive hipped iron roof which rises to 19 m at its apex, and is supported internally by 560 unmilled timber poles. The Stick Shed was built in 1941, as an emergency grain storage facility. The unusual

materials and method of construction reflect wartime shortages. Amazingly, an even larger grain shed was built nearby in this same period, but has not survived.

Roads and Routes

Aboriginal Routes and Pathways

Aboriginal groups regularly crossed South-western Victoria, to trade with other groups or travel to meeting places and annual gatherings. They also moved across their territories, adjusting to seasonal changes and following food sources. We may never know how many of these original routes and tracks were later followed by explorers and early settlers.

Wirrengren Plain, at the end of the Wimmera River system, was a great meeting place frequented by Aboriginal people from the Loddon River, Grampians mountains, and the Murray River. The Djadja wurrung people, from Lakes Boga, Charm, and Bael Bael, and from Boort, Buckrabanyule, Mount Korong, and the Loddon River, travelled the trade route to attend meetings at Wirrengren Plain, and their journey has been reconstructed. Firstly they gathered at Djub-djub-galg, a meeting place and trade route junction on the Avoca River three miles to the north of Charlton. From there the Wembawemba and Djadja wurrung clans travelled along a route that involved visiting campsites at Yuanduk, Wooroomook, Mt Jeffcott, Banjigu (near Lake Buloke), Watchem, Sammy's Swamp, Areegra, Challambra, Yarriambiack Creek, Lah, Yellingip, Angip, and Barengi-djul near Jeparit, and then finally north to Wirrengren Plain.⁵⁴

The Wergaia people also had trade routes from Lake Hindmarsh through Bordertown to the Lower Murray; from Nhill to Murrayville and Pinnaroo, and on to the Upper Murray; and from Wirrengren Plain through the Pinnaroo country to the Murray Bridge area.⁵⁵

Roads and Highways

By 1845 'the relatively flat and lightly timbered plains in Victoria's south west quarter were crisscrossed by tracks...'.⁵⁶ Many of these were the rough tracks blazed by squatters to their pastoral stations. As traffic increased, to and from the developing centres, stopovers and inns sprang up on the main routes. On the old Warrnambool to Caramut Road, stone mile posts dating from last century can still be seen.

The early inn-holders were licensed by the Government, though many of their establishments were little more than crude slab and bark shanties. Punts were located at river crossings, and their operators were also licensed. Before the construction of bridges, punts carried people, stock and goods across the wide, slow flowing rivers of the region. Natural fords were used where possible, and were made more reliable, if also slippery, by the strategic placing of logs and stones. At Balmoral, the ford across the Glenelg River is still discernible, just outside the township where the Rocklands Road crosses the river. The old track leading to the ford is located on the south side of the present road. A bluestone ford still takes cars and vehicles across a dip in a road south of Buangor.

In the early 1850s, beyond the major population centres, roads in Victoria were primitive and dangerous. Though the busy Geelong to Hamilton road was sufficiently formed and bridged by 1850 to allow all-weather access, the roads between Hamilton and Warrnambool, and Hamilton and Portland, were virtually impassable in the wet months. The discovery of gold brought wealth and people to the colony, but the increased traffic also highlighted the appalling state of the roads.

In November 1851, a Select Committee of the Legislative Council in Victoria began examining the condition of the colony's roads and bridges. The Committee recommended the formation of a Central Road Board, together with district roads boards, to oversee the construction of a road network. The Central Board, which was prematurely abolished in 1857, also established standards of road building based on the principles of Telford and McAdam.⁵⁷

One of the first local roads boards formed in Victoria was at Belfast (Port Fairy) in 1853, with Warrnambool following in 1854. Throughout the 1850s and 1860s, roads boards, municipal councils and rural shires, continued to be formed. The Harrow Historical Society occupies the offices of the original North Harrow District Roads Board, which later became the Shire of Kowree. The small stone gabled building was built in 1868, and has recently been restored.

The new boards and rural shires assumed responsibility for road building and construction in their districts. They purchased steamrollers, stone crushers and graders to 'macadamize' road surfaces. Toll gates were established on main roads to collect tolls for road making and

maintenance. A former tollgate originally located on the Ararat–Stawell Road in 1868, is now in the foyer of the Mechanics Institute at Great Western. Tolls were also collected at points on the Great Ocean Road, after sections were opened up from the 1920s.

By the turn of the century, Victorian roads formed a 'cheap patchwork quilt' of sections of varying quality and design, maintained by different shires and rural councils in an uncoordinated and under-resourced fashion.⁵⁸ In 1913, when the Country Roads Board (CRB) was established, the State was divided into manageable geographic sections or districts. In South-western Victoria, the Cape Otway district (which encompassed the territory bounded by Warrnambool and Mortlake on the west, Werribee, Corio and Queencliff on the east, Skipton and Rokewood on the north, and the coast on the south) was considered to be in most urgent need of road development and upgrading.

The Princes Highway also drew the attention of the new CRB officers. The Victorian section is approximately 1000 kilometres long, and traverses the State from west to east. It is also the major access route through South-western Victoria. In 1913, substantial sections of the road between Melbourne and Geelong required reconstruction, having worn down 'to the bare foundation stones for want of maintenance'. A small length of the highway near Little River had never been constructed at all. Further west, where there was abundant basalt for road making, the road was generally in fair condition. In the agricultural districts around Warrnambool, Port Fairy and Koroit, however, the road was in poor condition again.⁵⁹ In 1961, when the Maltby Bypass opened at Werribee, Princes Highway West was the first road in Victoria to incorporate a freeway quality section.



Early photograph of the Great Ocean Road

Massive bluestone bridges and culverts were prevalent in the Western District. The stone arch road bridge over the Barwon River at Winchelsea was built in 1868, and is a fine example of its type. At Darlington, bluestone bridge abutments with decorative iron railings can be seen adjacent to the Hamilton Hwy, on either side of Mount Emu Creek. Other interesting bridges in the investigation area include an 1880 deck-type lattice truss bridge at Cressy, which incorporates bluestone abutments dating from the 1850s, and a rare timber truss bridge over the Hopkins River at Warrnambool.

Tourist roads

In 1923 a Tourist Resorts Committee was established in Victoria. Among the Committee's objectives was the provision of new or improved roads to Victorian tourist resorts. The CRB assumed responsibility for building the tourist roads on behalf of the Committee. Among the first roads constructed under the scheme were the Halls Gap–Wartook Road, between Stawell and Horsham in the Grampians, and the Lorne–Wye River section of the Great Ocean Road.

The Great Ocean Road is Victoria's most famous tourist and scenic drive. It is also an engineering feat, a soldiers' memorial and an important coastal economic route. The road was built between 1918 and 1932, employing 2000 returned soldiers in its construction. Today it extends for 320 kilometres, from Torquay in the east to Peterborough in the west.

A coast road from Geelong to Lorne was proposed in the 1880s and again in the early 1900s, but nothing came of these proposals without a central roads authority to plan and carry out such a huge undertaking. The first serious proposal to build the 'South Coast Road' was made in 1916, when the Country Roads Board was considering the construction of eight new roads in Victoria, using the labour of returned soldiers. In 1917, the *Argus* published an article on the 'Memorial Road', to be constructed from Barwon Heads to Warrnambool. The proposal received considerable press coverage, and a poster of the day called it the 'Great Ocean Road'. A Great Ocean Road Trust was formed in March 1918.

The present route had already been surveyed from Apollo Bay to Aireys Inlet in 1886. This coastal track serviced the district for many years, but needed much improvement. Construction of the new road began in August 1918. Lorne was linked with Eastern View in

March 1922, then progressively with Anglesea, Cape Patton and Apollo Bay. During construction, the solid rocky outcrops which occur frequently along the coast, were blasted through with dynamite, and horse-drawn scoops were used to shift earth and smaller rocks. Debris was dumped into the sea. The construction workers were housed in camps at Wye River, Cumberland River, Apollo Bay and Cape Patton. A powder magazine, for storing explosives used in construction, was located at a bend in the road near Anderson Creek.

The road was officially opened to traffic on 26 November 1932, though much realignment was undertaken between 1936 and 1946. Tolls were collected at Cathedral Rock, Grassy Creek and Point Castries. An arch was erected at Eastern View in 1939 to commemorate the achievement of completing the road. It has been rebuilt several times since, most recently after the 1983 fires and a severe storm in 1991. Several of the natural features along the road were named by the soldier-workers, including Artillery Rocks, Mt Defiance, Shrapnel Gully and Cinema Point.

Coaches and Coach Routes

Coaching firms were established in Victoria in the 1850s, and developed a network of coaching routes across the colony. Hewett and Company, later known as the 'Western Stage Company', started a service between Geelong and Warrnambool in this period, and remained a prominent firm in the south-west. Francis Clapp also ran a service to centres in the Western District, and on to Penola in South Australia.

The most successful coaching firm was Cobb and Company, established in Victoria by four young Americans in 1854. Though the partnership was disbanded after only two years, the name was retained by other coaching firms who took up Cobb and Co.'s lines. The company's good name was founded on a high standard of service, using comfortable American-made 'Concord' coaches which were suited to the rough Australian conditions, and their ability to cover long distances in shorter times by using fresh changes of horses.

Cobb and Co. initiated the 'Western Telegraph Line' Royal Mail coach services between Geelong, Portland and Hamilton in 1858–59. They also ran branch services from Hamilton to Casterton and Cavendish, while other companies

started similar services between Hamilton and Balmoral, Harrow, Penola, Peshurst and Mortlake. Hamilton became the coaching centre of the Western District, and the halfway station on the overland mail route between Melbourne and Adelaide. As a result, substantial inns and coaching stables were built in the town, and coach, buggy and wagon making and repair services developed into local industries. Cobb and Co. established a large manufacturing and repair centre in Thompson Street, Hamilton.⁶⁰

Inns were located at strategic points on the coach routes, to provide refreshment and rest for travellers, and fresh water and a change of horses for the coach. In the Wimmera in the 1870s, inns sprang up at coach stopping points, frequently located at ten-mile intervals. They included Hodby's Hotel at Wail, Sparks' Drung Drung Hotel, Urbahn's Hotel at Arapiles, Brilliant's Hotel at Kewell, and John's Commercial Hotel at Noradjuha.⁶¹ A substantial stone Cobb and Co. Changing Station, which was established in the 1860s at Buangor on the Western Highway between Beaufort and Ararat, remains there today.



The erosion-prone landscape around Wando Vale Ponds Creek, site of John Robertson's run

As the railway network expanded, coach firms concentrated on feeder routes to the new rail lines, and where possible coordinated their timetables with the rail services. The arrival of the rail frequently provided new opportunities for coaching firms. In 1895 Mrs E.J. Morehouse commenced a coach service from Cowleys Creek, in the Heytesbury district, to the Camperdown station via Cobden. The new service operated three days a week, and deposited travellers at Camperdown in time to catch the morning train to Melbourne.⁶² Cobden, which was on the Camperdown–Timboon line, had railway services from 1890, but local travellers still found some usefulness for coaches in this period.

Journeys Through the South-west

Between March 1852 and December 1853, the South Australian Gold Escort made 18 journeys through western Victoria, from the Mt Alexander goldfields to Adelaide. These police-escorted consignments of gold, with a total value of more than one million pounds, were made initially under the direction of Alexander Tolmer. South Australia had passed a Bullion Act, which enabled gold to be bought at a higher value in Adelaide than in Victoria. When the gold rushes commenced in Victoria, Adelaide was effectively deserted by able-bodied men, and the Act was aimed at luring them back to the colony.

The escort route passed through many pastoral stations, and early settlements and towns including Arapiles, Wyn Wyn, Horsham, Longerenong, Navarre, Glenorchy and Rose's Gap in the Grampians, where troopers were stationed to control the goldfields traffic and to keep a check on lawlessness. The route of the Gold Escort is commemorated by monuments at several locations in the south-west, including Arapiles, Kiata, Horsham and Kaniva.

In the second half of the 1850s, the inhabitants of the south-west witnessed the remarkable sight of many thousands of Chinese diggers making their way overland from Robe and Kingston in South Australia to the Victorian goldfields. They streamed across the region, passing through Casterton, Coleraine and the Grampians. The Chinese were avoiding the entry tax at Victorian ports, which was introduced with the *Passengers Act* of June 1855. The legislation restricted the landing of immigrants who were adult male natives of China, to one for every 10 tons of ship's burthen. A ten pound entry tax was imposed on all Chinese diggers, including those arriving in Victoria by an overland route.

Revenue raised in this way was intended to finance an administrative system to supervise and protect the Chinese diggers, who were subjected to derision and sometimes violence on the goldfields. In some instances they were segregated into 'mining villages', with salaried Protectors in charge, and a head man of their choosing to negotiate and liaise with Victorian officials. Such villages were set up at Bendigo and Ballarat, and in the investigation area at Ararat.

The Act and the tax failed to restrict immigration, however, as ships' masters re-routed

their vessels to places such as Guichen Bay at Robe in South Australia, and even Twofold Bay in New South Wales. The Chinese diggers then walked overland to the goldfields. In the first half of 1857 alone, 15 000 men walked from Guichen Bay, though some were jailed in Portland for avoiding the tax. South Australia also passed a restrictive Act in 1857, thus preventing entrance through Guichen. The Victorian Act was finally repealed in 1865.

3.8 THE ENVIRONMENT

When Europeans settled permanently in South-western Victoria, they attempted to create a pastoral and agricultural landscape where none had existed before. To do this, they cleared the native vegetation, introduced exotic plants and animals, modified natural watercourses, and sometimes mismanaged the soil. The physical evidence of these activities is as much a component of the cultural heritage of the south-west as are the buildings and other historic features.

Soil

Chapter 4 provides an overview of the sequence and changing distributions of settlement and land use in South-western Victoria, and the impact of that land use on the natural environment. The degrading effects of introduced hard hooved grazing animals, and the stripping of native vegetation, on soils of the south-west are also described. John Robertson's letter on the degraded landscape of the Wando Vale Ponds Creek area, which is quoted at length in the following chapter, is early evidence of soil and stream erosion. Today, at the Satimer Road Bridge which crosses the creek, on the edge of Robertson's original pre-emptive right, the results of past erosion, and some continuing soil degradation can still be observed. Though successive soil conservation and river management treatments have stabilised the creek and much of the surrounding land, the site still contains active landslips.

The problems described by Robertson were widespread in the Casterton and Coleraine area. When the Soil Conservation Board was set up in the 1940s, operations in this district were an early priority. The Board also looked at other problem areas in South-western Victoria, including the long hillslopes in cropland around Charlton, which had been affected by sheet erosion, and the steep bare hills east of Stawell, where tunnel erosion was first treated. In the

northern Wimmera and Mallee regions, wind erosion was a problem. While most of the erosion occurred on private land, public land areas were also affected in several ways. Mismanaged Crown land selections were subject to sheet and wind erosion, and sediment was deposited on roads and railways. Government maintained water channels, particularly those of the Wimmera-Mallee Stock and Domestic Water Supply System, were also blocked by drifting sand.

Pests and Weeds

Chapter 4 describes how the pastoralists of the south-west were among Victoria's prominent 'acclimatisers'. They spared little expense in recreating the environment of English country houses. Peacocks were encouraged to wander over manicured lawns, and swans were established in ornamental lakes, which also contained carp, perch and even salmon. More ominously, 'game' such as foxes, hares, deer, pheasants and rabbits were let loose for sport.

In 1859 Thomas Austin of Barwon Park near Winchelsea, liberated 24 wild British rabbits to provide sport for shooting parties. Austin's attempt to acclimatise rabbits to Australian conditions succeeded because he used wild rabbits, and not the domestic variety. The latter had been released in Australia on other occasions, but failed to thrive because they made easy prey for predators such as native cats, goannas, dingoes and hawks, which were still in sufficient numbers to combat the new arrivals.⁶³

Austin's were not the only founding population of rabbits in Western Victoria. A feral population was living in the sand dunes between Portland and Port Fairy in the 1850s, with another distinct group on Lady Julia Percy Island. Other apparently successful rabbit acclimatisations occurred near Edenhope and Birchip. Much of the Mallee region and northern Wimmera were colonised by rabbits from South Australia.⁶⁴ When Lake Buloke near Donald dried up in the late 1870s, its 14 000 acre bed was taken over by thistles and millions of rabbits.⁶⁵

Native kangaroo grass, broadleaf succulents and annual herbs died out when the Western District plains were turned over to the hard hooved and close-grazing introduced animals. These plants were initially outcompeted by species that were resistant to, and unproductive for, grazing. Robertson, of Wando Vale, referred to 'silk

grass' taking over his paddocks. The removal of nutrients through cropping and grazing, without the addition of fertilisers, resulted in bare soil which was quickly colonised by low-fertility weeds. Later, introduced European pasture species such as rye-grass, clover and lucerne, increased production.

Weeds and thistles appeared in the early decades after European settlement. Patterson's Curse, and Bathurst Burr, particularly in the north of the investigation area, were among the unwanted arrivals. Some species, such as the Scotch Thistle, may have been deliberately introduced as an ornamental plant.⁶⁶ Their proliferation led to the first Victorian *Thistles Act* 1856, when five plants were officially singled out for eradication. The 1890 *Thistles Act* (amended 1891) allowed the Governor in Council to name plants for addition to the proscribed list. Horehound was first proclaimed a noxious weed around Warrnambool in 1906. Sand rocket, which is thought to have been introduced to Victoria in the ballast of ships, also first became established in the Warrnambool district, where it was declared a noxious weed in 1919. Tutsan, a perennial flowering shrub, was noted to be a problem around Apollo Bay in 1909, while Slender Thistle and Variegated Thistle were proclaimed as weeds at Colac in the 1920s.⁶⁷

Problems confronting wheat farmers of the Wimmera in the 1870s and 1880s included caterpillars and kangaroos eating the tender grain shoots. Plagues of locusts also threatened wheat crops in the 1880s. In 1917, a plague of introduced house mice overran hundreds of farms in the wheat growing districts. In one week on a farm at Jeparit East, 70 000 mice drowned in a water tank. Pits and fences were erected around wheat stacks at railway stations in an attempt to protect the grain from the mice.⁶⁸

Water

The efforts of squatters to ensure a continuing supply, and the impact of the presence or otherwise of water on the shape and spread of settlement, will be examined in Chapter 4. Lack of a reliable water supply in some districts of South-western Victoria was met with a variety of solutions by farmers and townspeople. The great significance of the high-rainfall Grampians (see Map 7) as a water source was recognised.

In the Wimmera, the Wilson Brothers who leased Longerenong, Ashens and Kewell Stations, and neighbouring pastoralists built an

earth dam on the Wimmera River in 1856, diverting water into the effluent streams Ashens and Yarriambiack Creeks, for use on their runs. Others had built their own water supply schemes, by deepening ponds in creeks or constructing channels, and also carried water long distances for stock and domestic use. Shires provided some water sources at tanks, dams and wells, particularly west of the Wimmera River. Dunmunkle and St Arnaud Shires built a wooden weir on the Wimmera and a cutting upstream of Glenorchy in 1878, diverting flows down Swedes and Dunmunkle Creeks to the Richardson and Avon Rivers.

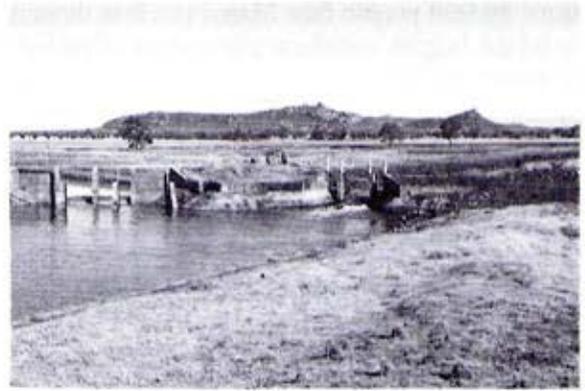
Hardship and disease resulting from droughts in 1865, 1869 and especially 1877 to 1881 when small farms were beginning to proliferate, increased pressure for government action. A Water Conservancy Board was established in Victoria in 1880. Drinking water, for stock and people, was a priority for the Board, which initially recommended the construction of modest engineering works to conserve the winter flow of rivers, outlining the basis for the later Wimmera-Mallee stock and domestic water supply system. The report also recommended that the waters of the rivers should only be utilised in their own basins.

Local waterworks trusts were established under the *Water Conservation Act* 1881. They borrowed funds from Government to construct water works, and raised money to support the works from levies on water users.

In this same period, Alfred Deakin chaired a Royal Commission on Water Supply in Victoria, which recommended the use of irrigated water in large areas of unproductive land. The *Irrigation Act* 1886 followed the Commission, and with it the establishment of local irrigation trusts. Again, these trusts could borrow to build irrigation systems and levy water rates on users to cover loan repayments and costs. Wimmera Shire initiated construction of Wartook Reservoir in 1885, and the Wimmera United Waterworks Trust established irrigation and stock supply weirs on the Mackenzie and Burnt Creeks, channels to Natimuk and Arapiles, more substantial Wimmera River weirs, and pumps at Doon to supply higher areas. The Western and Eastern Wimmera Irrigation Trusts took over or reconstructed existing weirs, together with a network of water supply channels.

The Department of Water Supply administered loans to the Trusts, and provided engineering expertise. Various schemes were proposed to

get water for irrigation, as well as stock and domestic supply, to the northern plains. Enlargement of Lonsdale Swamp and Black Swamp (later Lake Fyans), damsites on the upper Wimmera River at Eversley and Fyans Creek at Halls Gap were investigated in the 1890s.



Pine and Taylors Lakes Inlet Channel, Wimmera-Mallee system, Drung South

Proposals confronting the tenet of only using water within a river's own basin were also considered. The Glenelg River drains about half the Grampians, but flows south. A dam at Victoria Gap could divert water across the Divide, as could the Rifle Butts damsite near Balmoral, but it would be over 60 years before the Rocklands Reservoir supplied the northern plains. However since the early 1930s the Moora Moora channel has diverted upper Glenelg water north, and a more recent small-scale pipeline diverts upper Wannon River tributaries to Lake Bellfield.

Engineer John McGregor reported in 1889 on a scheme requiring the Rifle Butts, Taylors Lake and Moora Moora Dams, and distributary channels to the western and northern Wimmera. Three years later he designed a system of high-pressure spiral-welded steel pipes to convey Grampians water to the Mallee for stock and domestic purposes. His scheme was criticised and shelved by the Department, but in the 1990s, the leaky Mallee channels are being replaced by pipes.

Such proposals were beyond the resources of the trusts. Some of their systems were poorly designed and maintained, their debts mounted, and when farmers had little or no need for the water in good years, levies were not paid. There was also some opposition to the use of water for irrigation, and an unrealised expectation that new farmers would flock to the irrigated areas, raising land prices.

The near-collapse of the Wimmera area trusts contributed to the establishment of the State Rivers and Water Supply Commission, which took over the existing headworks, weirs and channels in 1906, and greatly extended them to the present 772 000 ML of storage and 16 000 km of channels, supplying 145 000 ML annually on average to 28 500 sq.km of farmland and some 80 000 people (see Map 11). It is thought to be the largest water supply system of its kind in the world.⁶⁹



Dry stone wall, Floating Islands Nature Reserve

Managing Public Land

Early Reserves

Some of the earliest Crown land reservations in Victoria were Aboriginal protectorates or missions (see this chapter, 3.10 'Aboriginal Administration'). Buntingdale Wesleyan Mission was established in 1838, near today's Birregurra. In the late 1830s and early 1840s, surveyor Robert Hoddle also began marking out areas of Crown land for public purposes. His early reservations included 23 acres on the south bank of the Yarra River for quarrying and brickmaking purposes, and 5000 acres at Point Nepean for the protection of limestone deposits. By 1853, there were 250 Crown land reserves in Victoria, including timber, water and Aboriginal reserves. The Portland Bay district (as much of South-western Victoria was then known) had 82 reserves, with 31 located in the Wimmera. By 1874, the number of reserves in Victoria had risen to 1601.⁷⁰

Many old reservations are anachronistic today, representing outdated attempts at urban planning or the protection of features and resources. As such they have interesting historical associations. For example, camping and water reserves were set aside in the 19th century for

the use of drovers and their stock. Temperance Society reserves were established in many towns, even while hotels and inns flourished. Several Temperance Halls survive in the investigation area.

Other reservations had unplanned results. Railway reserve land has sometimes protected endangered flora, including grassland communities on the plains of the Western District. Some early forest reservations, made to ensure a continuing supply of timber for the mining industry, have formed the nucleus of today's high conservation areas. Many reserves set aside for their natural values or resources contain historic or cultural features. Bats Ridge Faunal Reserve near Portland features two brick-lined lime kilns, constructed in natural sink holes, and the remnants of a hut. A significant collection of dry stone walls and structures can be found in the Floating Islands Reserve near Camperdown. This reserve was established on a former pastoral property to protect the natural features and wildlife habitat associated with its wetlands, lagoons and unusual floating peat 'islands'.

The act of managing public land has also resulted in a distinct physical heritage. This can include the buildings, structures and other features associated with the administration and servicing of visitors in parks and reserves. It can also include the infrastructure of forest and fire management, such as dugouts, fire tracks and fire spotting towers. Where an essentially natural area, such as a State forest, has been managed over many decades through silvicultural treatment, thinning and perhaps selective logging, then this area bears the imprint of its management.

National Parks

In the 19th century, a growing belief that wild and natural areas should be preserved for posterity and for the enjoyment of the community, led to the development of a worldwide national parks movement. Yellowstone National Park in the United States was declared in 1872, and is generally regarded as the first of the modern national parks. Royal National Park in New South Wales was not far behind, when it was established in 1879.

The movement also gathered momentum in Victoria in the second half of last century. Naturalists and scientists drew attention to the importance of native flora and fauna, and areas of great scenic beauty were also increasingly

appreciated. The impact of more widely available leisure time, the expansion of the railway network, the formation of field naturalists' and bush walking clubs, and the work of landscape photographers, all helped to popularise the bush for many people, particularly city dwellers. Campaigns for wildlife sanctuaries also arose out of the realisation that natural areas were disappearing quickly. One of the earliest reservations in recognition of outstanding scenic values was made in South-western Victoria in 1873, when a 60 mile coastal strip between the Warrnambool and Gellibrand rivers was set aside for its great natural beauty.⁷¹ This area is now included in the Port Campbell National Park and Bay of Islands Coastal Park.

The first national park in Victoria, however, was not a national park in the modern sense. In the mid-19th century, Tower Hill was renowned for its natural beauty, abundant birdlife and lush vegetation. In recognition of this, the area incorporating the island, lake and banks of the volcano was temporarily reserved for public purposes in 1866, and permanently reserved in 1873. Tower Hill was finally declared a national park in 1892, but by that time it was infested with rabbits, weeds, thistles and bracken. Throughout the preceding years, successive committees of management had allowed timber cutting, quarrying, grazing and cultivation in the reserve. In the 1860s the local Acclimatisation Society had introduced goats, jungle fowl, pheasants and rabbits, and planted exotic trees at Tower Hill. Rehabilitation began in the 1960s, when the site was declared a State Game Reserve and a replanting program was commenced.

Wilson's Promontory and Mount Buffalo were the first of the modern national parks in Victoria, when they were set aside in 1898. In 1952, an amalgam of voluntary groups and individuals with an interest in improved park management and the expansion of the parks and reserves system in the State, formed the Victorian National Parks Association. Pressure from this group, and the findings of the National Parks and National Monuments Standing Committee of the 1940s, eventually led to the *National Parks Act* 1956 and the formation of a National Parks Authority. In South-western Victoria, new parks created after the passing of the Act and the establishment of the Authority, included Mount Richmond and Mount Eccles (1960), Port Campbell (1964), Little Desert (1968) and Lower Glenelg (1969).

3.9 EXPLOITING NATURAL RESOURCES

Gold

Between 1851 and 1880, Victoria supported one of the richest goldfields in the world. In the early period, most of the mining was concentrated on the more easily won alluvial gold, which was found in stream beds and in cement gravels near the ground surface. This was the period of the independent and itinerant digger, who moved from field to field. In the late 1850s, when most of the alluvial grounds of the major fields were becoming exhausted, miners began to tap gold in the generally deeper quartz reefs or underground leads.

This ushered in a more capital-intensive period of mining, when companies were formed and many diggers became salaried workers. Deeper shafts were required to get at the gold. Water also had to be pumped from the shafts, and this was an expensive process. Drills and explosives removed the quartz rock, and poppet heads with winding gear brought it up to the surface, where steam-operated stamper batteries crushed and broke up the ore. Increasingly sophisticated chemical processes were also used to refine the gold.

The diggers transformed the landscape of the goldfields. On the surface, vegetation and topsoil were stripped away, and steep gullies were created where hydraulic sluicing carved up the earth. Elaborate water race systems were constructed, which were linked by dams and fed into water wheels or hoses for sluicing. Rivers and streams were diverted, sometimes through tunnels, to allow access to gold-rich river beds. Goldfields reservoirs also proliferated, particularly in the 1860s when the Government started funding their construction.

Huge piles of mullock appeared on the surface, thrown up from the quartz mining operations in the deep shafts. Tailings, left over from the crushing of gold-bearing ores, were tipped in to streams or left in dumps on the ground. Sludge, generated by washing and processing gold dirt, poured out across the landscape, coating ground and filling creeks. The forests were also plundered, for fuel and mining props. Stringybark was found to be particularly useful, splitting easily into planks and posts, with its bark used for roofing and offcuts for fuel.

New fields continued to be discovered in remote parts of Victoria until the turn of the century. These finds could still attract rushes and diggers chasing their dreams. One such rush occurred in 1900 in the Grampians, with the discovery of gold in gullies at Mount William. This became known as the Mafeking Rush, but it was shortlived and within a brief time the mining population was much reduced. At the peak of the mining activity, however, there were hotels, churches, business houses, cottages and even a Miners' Club at Mount William. Mafeking also had a brief resurgence in the 1930s when a sawmill was established there.⁷²

Stawell Mining Division⁷³

The Stawell or Pleasant Creek goldfield was discovered in 1853. It was an unusual field in that the alluvial deposits were mainly found under the existing hills and elevated surfaces, while the more recent valleys and flats were generally non-auriferous or too poor to be worked profitably.

The first rush to the Stawell field took place in the winter of 1854. The diggers obtained alluvial gold from an outcropping on Big or Waterloo Hill, about two kilometres north-east of the first alluvial workings on Pleasant Creek.

The mining population of the Stawell field was relatively small (averaging 200 or less) until the late 1850s when there was a series of new discoveries and rushes, including a rush to Great Western in 1858 which was attended by 9000 diggers.

Unlike many Victorian goldfields, puddlers were not widely used in the Stawell Division when miners reworked abandoned alluvial ground. Sluicing was more widespread though seasonal, and favoured sluicing localities included Church Hill, Taylor's Gully, Cooper's Hill and Forty-Foot Hill. Sluicing along the Commercial Street lead appears to have been monopolised by Chinese miners, who tended monopolise shallow alluvial mining throughout the division.

The mining of auriferous ground commenced on several hills in the Stawell district in the early 1860s. The cement raised proved to be quite rich and large quantities were taken to public crushing works for treatment. Deep lead mining was also undertaken in the division in the 1860s and 1870s, but with mixed results as some of the leads were soon lost. Quartz reef mining at Stawell can be traced back to the first gold discoveries in 1853, but it was in the 1860s

that quartz mining developed into a major industry.

There are several distinctive aspects associated with quartz reef mining at Stawell. The reefs were exceedingly rich and appeared to get richer the deeper they were worked. Deep sinking was therefore a feature of the field, but the richness of the ore made the owners of claims unwilling to amalgamate into companies (as was the tendency on other quartz reef fields). The smallness of the claims therefore resulted in a focus on public crushing works and pumping companies, who crushed ore and removed water from the shafts for the owners. There was also a reliance on roasting quartz in kilns (to soften it before crushing), in order to maximise yields from the small tonnages.

The richest of the Stawell reefs proved to be Scotchmans Reef, and an extensive system comprising North Cross, Flat and Sloan's reefs. The North Cross Company, and to a lesser extent the Oriental Company, dominated the field's gold production throughout the 1870s. In the 1880s, the Magdala Company (later the Moonlight Company) emerged and became very successful, and continued to dominate mining operations in the division through to 1917. During these years the Magdala Mine produced 315 467 ounces of gold worth approximately £1 261 868.

Other successful goldfields in the Stawell mining division included Bald Hills (Concongella Run); Church Hill, near Stawell; Glen Dhu Reef at Crowlands; Elizabeth Creek (five miles north of Stawell); and the eastern slopes of the Ironbark Ranges.

Today, a narrow band of sink holes and mounds can be observed in the Great Western Lead Historic Reserve, where the Great Western Lead Company operated. A dam, tailings, and battery foundations remain at the Welshman's Crushing Works site at Deep Lead. The former Moonlight-cum-Magdala mine near Stawell features a 700 metre shaft, while the Oriental Company Mine, also near Stawell, retains a shaft, and the foundations and base of a battery, engine and pumping plant.

Ararat Mining Division

Two hundred diggers were working the Mount William field (later known as Ararat) in June 1854, a small rush that stemmed from an initial discovery at Pinky Point. More rushes followed in 1855, leading to the development of the

Cathcart and Armstrong's diggings. Between 1856 and 1858, a number of auriferous creeks and gullies were opened up in quick succession, resulting in one of the largest mining populations on any Victorian goldfield in that period. The peak of the Ararat rush came in 1857, however, when Chinese miners discovered the Canton Lead. A party of European miners also opened Campbell's Diggings, the site of Moyston today.

In the 1860s, when there were few new discoveries, the bulk of the division's mining population (of around 1500) were still involved in mining alluvial gold in the main localities of Moyston, Rocky Point, Ararat, Opossum Gully and Armstrong's diggings. Tunnelling companies were also at work on the Canton Lead and at Opossum Gully. A drought in the mid-1860s, and the exhaustion of the easily won alluvial gold, eventually put an end to this activity.



Mining at Stawell, about 1880

The Ararat division was also considered to have a very extensive system of deep leads and auriferous cement deposits. In the mid-1860s, local miners began to take an interest in prospecting for the deep leads. Large prospecting claims were taken up, and new mining companies were registered including the Ararat Black Lead Company, which had the most impressive machinery and plant on the field, and the Duke of Edinburgh, Cathcart Freehold, Cathcart, and Canton companies. Despite the machinery and capital investment, and considerable prospecting work, none of these large deep lead companies mined profitably.

Quartz reef mining was focused on Campbell's Reef at Moyston, with the North Star Company prominent in local activity. Plant and equipment installed on the Moyston field included kilns,

pumping machinery, steam-powered crushing mills and machinery for the treatment of refuse tailings. In 1868, the Rhydney Reef was opened up, about ten miles north-west of Ararat, and produced good quantities of gold throughout the 1870s. A resurgence in quartz reef mining in the 1880s met with little success.

During the 1870s, sluicing received the greatest attention of any of the branches of alluvial mining on the Ararat goldfields. Miners constructed reservoirs and races at elevations which enabled them to work the relatively untouched ground of the higher sections of the leads, gullies and hills. The Port Curtis Sluicing Company constructed an expensive aqueduct from a reservoir in Opossum Gully to Port Curtis Hill.

In the 1880s, the Grand Junction Company, on Black Lead, and the Heather Bell Company at Burrumbeep, were very successful at deep sinking alluvial mining. There was very little of this activity in the 1890s and early 1900s, although the Cathcart Proprietary mine at Denicull Creek employed 105 men and won 2236 ounces of gold in 1905. In 1909, Cathcart Proprietary obtained some sensational returns from a lead which was worked in a south-easterly direction to meet with the main Langi Logan Lead.

Between 1909 and 1915, new mines trying to work this rich lead included the Cathcart North, British Queen, Cathcart Victory, Cathcart Central, New Langi Logan, Langi Logan Extended, Langi Logan North, Langi Logan West, Great Langi Logan and Upper Langi Logan. Water was always a problem, however, and required expensive machinery to remove it from the deep leads. The most successful companies were Cathcart Central (2159 kg of gold), New Langi Logan (1113 kg) and the Cathcart Company (1766 kg). The New Langi Logan and Langi Logan South companies were the last to work on the field. The former closed down in 1925, the latter around 1922.

On the west side of the Ararat-Hamilton railway line in the Ararat district, are the remains of the New Langi Logan No. 2 Mine, which was the last deep lead mine in the Ararat division. The site features a large mullock heap, a pebble/wash dump with the remains of supports for aerial puddlers, an intact slum pond, and an extensive arrangement of brick pumping and winding machinery beds. Evidence of extensive alluvial workings at Glenpatrick Creek include open shafts and associated heaps,

water races, bank sluicing, stone retaining work and diversion sluices, pebble dumps and hut sites with stone fireplaces.

St Arnaud Mining Division⁷⁴

The St Arnaud goldfield opened in 1855, with a rush of about 3000 diggers to the New Bendigo Gully. Some gold had been found at Carapooec in 1854, but was located on the tops of a chain of low hills which were the eroded remains of an ancient river bed. The hills were formed of pebbles cemented together into a conglomerate of extraordinary hardness, and the gold was not easily worked. Gold was also found at Stuart Mill in 1856, and at Rostron's, but the biggest of the early rushes occurred on the rich Jericho field (later known as Wehla) when 5000 miners flocked to the discovery in 1857.

By the beginning of 1860, however, attention was focused on Stuart Mill where some spectacular gold finds were made. These led to the establishment of a more permanent mining community. At this time, more goldfields were discovered and opened up in gullies at the foot of the Pyrenees, and around a series of conglomerate hilltops, known as Hard Hills, where deeply buried gold bearing leads were found on the flat country.

In this same period, the bulk of the alluvial miners had left the St Arnaud division. Some of those left behind, however, were mining the hard conglomerate deposits near Bald and Erivan hills, while European and Chinese miners were re-working the New Bendigo Gully with puddlers. In the mid-1860s, mining of the conglomerate hilltops became more capitalised, when crushing batteries were erected.

St Arnaud developed into a major quartz mining centre with the discovery of rich quartz reefs. Many local quartz miners combined this activity with farming. Bristol Reef was a particularly long line of reef which supported six main mining locations. The St Arnaud Gold Mining Company was one of the first large companies to work the reef. At Stuart Mill, quartz mining operations were centred on the Eureka and Greenock reefs. There was also similar activity on the Emu goldfield.

Throughout the 1870s local quartz mining activity was subdued. In the early 1880s, however, the Lord Nelson Company on Chrysolite Hill (on the old Bristol Reef) became particularly successful and continued mining through to the First World War.

'Cyaniding', or the processing of low-grade tailings through the use of cyanide, commenced on the St Arnaud field in the 1890s. Disputes over the ownership of tailings dumps were common, as some proved to have a high gold content. The new industry prospered until the First World War, when the cost of cyanide became prohibitive, then peaked again in the 1930s when the value of gold soared.

Today, cement lead diggings off the Sunraysia Highway near Stuart Mill, feature a 400 metre long band of approximately 80 shafts and small mounds of mullock. The shafts are located ten to 15 m apart, are mostly rectangular in shape, and approximately 5 to 10 m deep. Some still retain traces of wooden collars. The remains of cyanide works in the Stuart Mill Historic Reserve include a raised treated tailings dump, 30 m wide, three buried galvanised iron cyanide vats, a small water dam and a dump of treated tailings.

Brown Coal

Brown coal was discovered along the Wormbet Creek, south of Winchelsea, in 1914. No large-scale mining was attempted until the 1920s, however, when Western District Coal Mines Pty Ltd started working the deposit.

One of the unusual features associated with the activity of this mine was an aerial tramway, constructed in 1923–24, which ran from the open cut to the Wensleydale railway station about seven kilometres away to the east. The tramway was carried on steel pylons set in concrete, the tallest of which was more than 25 metres high, with a cable tension station located at the half-way point. A hundred buckets of slightly more than 500 kilograms capacity were suspended from the rope, and carried the coal to the tramway terminus where it was loaded into railway trucks.⁷⁵ Coal trains ran regularly to Geelong, Melbourne, Ballarat, and the main Western District centres.

The mining activity ceased in 1932, but was revived in 1943 by Wensley Bray Coal Mine Pty Ltd (formerly the Otway Coal Company Ltd). Motor trucks were used to cart the coal from the mine as the aerial tramway had been damaged by a fire in 1939. In 1951, the mine was purchased by the State Government, and managed by Roche Brothers Pty Ltd. At that time the remains of the old tramway were dismantled.⁷⁶ Today, the open cut is filled with water and is used as a water-ski training facility.

Lime

In the 19th century, powder produced through the burning of lime was used in the making of builders' mortar, stucco and whitewash for walls. It was also used in various manufacturing processes such as sugar refining and paper making, and later as a fertiliser. Lime burning operations have occurred at many locations in the investigation area.

Lime extraction and processing was a significant industry in the Heytesbury district early this century, after rich surface limestone deposits were discovered. The first successful commercial attempt to extract and process the lime began in 1910, when the Bulldog Limeworks started operations. Limestone was quarried and cut into blocks and taken to the top of the kiln, which was built into the hillside. The stones were then 'knapped' to a smooth, roundish shape to fit into the kiln without jamming. The kiln was then filled with alternate layers of wood and limestone and fired at the bottom. If stacked properly the stones took a week to fall to the bottom of the hot kiln, while the layers of wood and stone were continually replenished from above. The burnt, powdery lime was raked out below.

The limeworks operations at Curdies River provided employment for settlers from miles around. A tent township was initially established by the river, but was later replaced by a boarding house and cottages for the workers. The small settlement acquired a school and a branchline from the main Timboon railway line. After this the limeworks community became known as Curdies Siding.⁷⁷ Today, the ruins of the siding platform can still be seen, but no other structures associated with the limeburning activity remain on public land.

Forests

Early timber getting and the use of forest resources in South-western Victoria were linked with pastoral and agricultural expansion, the development of towns and industry, and to a lesser extent, gold mining. Forests were cleared to create pasture and land for cultivation, and trees were felled for fencing and building materials, and for domestic and industrial fuels (see Map 13). From the mid-1850s, there was increased demand for timber for use in the props and shafts of gold mines, and in mine boilers. The demand for sleepers also grew in the second half of the century, as the railway network spread.



Lime kiln remains, Timboon Township

Forest management for most of the nineteenth century was almost non-existent. The activities of palings splitters, pit sawers, miners, and later sleeper hewers, were largely unregulated, and huge quantities of timber were wasted. Frequently only the best parts of logs were utilised in these operations, with the rest of the timber discarded. Left-over timber on the forest floor acted as fuel for wildfire. Standing trees were also damaged by careless felling practices, and there was no attempt at regeneration.

Many holders of licences had the privilege of removing the timber for virtually any purpose. Ringbarking and burning were commonly used to clear forests for agricultural development. From the 1860s, small selectors were required to carry out these practices by the conditions of their Department of Crown Lands and Survey purchase leases. Further, successive governments continued to open up areas of Crown land for agricultural development, without setting aside adequate areas for the protection of forests.

This extraordinary waste of timber and damage to forests drew some criticism in the second half of last century but effectively went unchecked by consecutive governments. Timber licence regulations were not supported by enforcement, funds or personnel. Responsibility for forests came under the Department of Crown Lands and Survey, the agency charged with encouraging and administering settlement on Crown land. Hence management and protection of Victoria's forests was not a priority for this agency. An amendment to the *Land Act* 1862, however, provided for the withholding from selection of Crown land, albeit sometimes temporarily, for the protection and growth of timber. The 1869 *Land Act* further enhanced the power of the Government in this regard. Ironically, it was

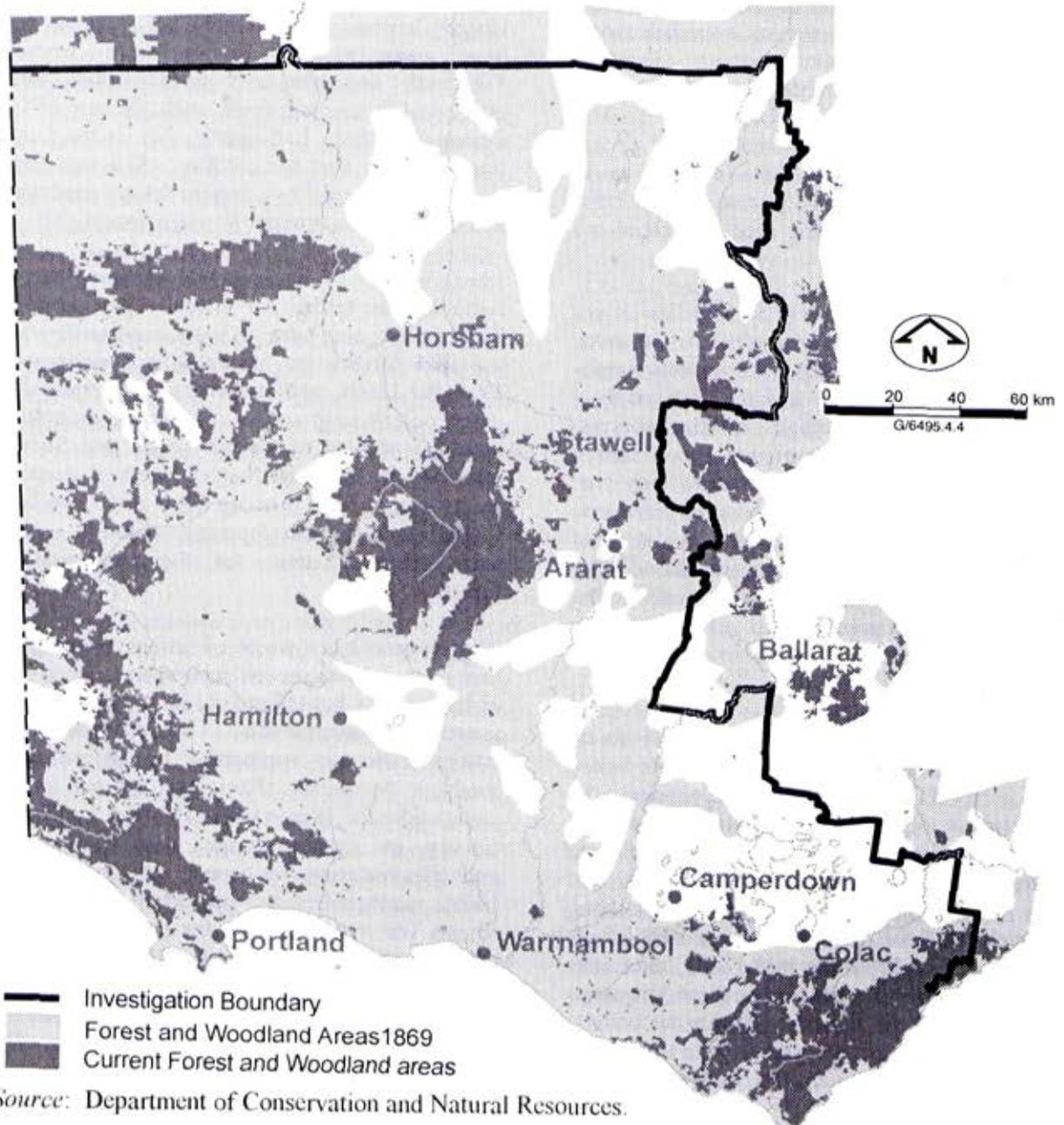
the all-consuming fuel needs of the mining industry that led to the setting aside of these forest areas, to ensure a continuing supply of timber.

A Royal Commission in 1897 comprehensively examined the state of the forest resource in Victoria. The findings eventually resulted in the *Forests Act* 1907, which created an independent State Forests Department. The *Forests Act* 1918 established the Forests Commission of Victoria (FCV). Both management of the resource, and the utilisation of forests on sound forestry principles, began to improve in Victoria from this period. The opening of the Creswick School of Forestry in 1910 also assisted the cause of forest management by

providing a pool of professionally trained officers.

The new Forests Commission engaged in research and experimental work in Victorian forests, and began establishing plantations of exotic softwood species. In the 1930s, using thousands of men available through unemployment relief schemes, the FCV expanded its plantation activity, and silviculturally treated and 'thinned' extensive areas of native forest. Radiata pine plantations were established near Mt Difficult in the Grampians in the late 1920s, and extended in the 1930s using unemployment relief workers. The men were housed in temporary camps, many of which were located deep in the bush.

MAP 13: Forest and Woodland Areas, 1869 and current



Manpower shortages during the Second World War were partially alleviated by the FCV using alien internee and prisoner-of-war labour, again based in forest camps. One of their main tasks was the cutting of firewood for domestic use in Melbourne. An enemy alien camp holding Italian internees was located at Glynwylln, east of Glenorchy. In late 1942 the camp consisted of approximately 40 tents, a mess hut, and a rough sawn timber kitchen. Today, remains include fireplace bricks, wooden floor joists, pits, a trench and other artefacts.

Just after the war, the Forests Commission planted radiata pines at Rennick, on the South Australian border. Planting continued at Kentbruck in the 1950s. The plantations of the Aire Valley in the Otways are another distinctive feature of the region. Douglas fir, Californian redwood, western yellow pine, bishop pine and radiata pine, were first planted in the 1930s, on the site of abandoned agricultural selections. Harvesting of these plantations commenced in the 1960s, with radiata pine planted in replacement.

Sawmilling

Prior to the introduction of steam-powered sawmills in South-western Victoria in the 1860s, logs were felled and manually cut, very often by pitsaws which were a modified form of crosscut saw operated by two men working over a pit. 'Spot mills', a primitive form of sawmill employing a single belt-driven saw bench, were also common in the south west. They had the advantage of being portable, and were relatively easily moved about the forest. Hewers and splitters used axes, mauls and wedges to produce split shingles, palings, slabs and sleepers.

The extension of the railway network generated a huge demand for precisely cut sleepers made of durable timbers. In many districts of the south-west, the coming of the railway stimulated the local timber industry, both by requiring huge volumes of timber, and by providing transportation for local timber products.

In Victoria, from the 1860s until the catastrophic fires of 1939, the main infrastructure of sawmills was located in forests, under licence to the Forests Commission. Sawmills sometimes had quite extensive tramway networks, as well as associated settlements including single men's and family quarters, boarding houses, a blacksmith's shop and recreation facilities. Machinery and equipment included steam

engines, boilers, mechanical frame saws, circular saws, and breaking-down trolleys and saws.

The timber tramways, horse-drawn and later locomotive-powered, carried logs out of the forest to the mills, and sawn timber products away from the mills to the ports or railways. In steep terrain, tramways were located on ridges or along creek valleys, to minimise gradients wherever possible. The tramways often ran for many kilometres, and required heavy earthworks and timber trestle bridges. On sharp grades, 'zigzag' lines were laid down, or balanced incline tramways were used. By the turn of the century in the Otways, most tramways were built with wooden rails over a continuous decking of 300 mm wide slabs. Wooden rails were sometimes replaced with steel rails recycled from Victorian railway lines or Melbourne tramways. This was often the case with curved sections, where timber rails quickly wore out, though wooden rails provided better traction on steep inclines.⁷⁸

Log hauling, or 'snigging', was done with horses or bullocks, and after the turn of the century, with steam winches where possible. Tractors later assumed this role. The first steam winches in the Otway forests were used at the McDevitt mill in 1907, then at Dinmont in 1909, and Stalker in 1910.⁷⁹ Elaborate wooden chutes and slide bridges were sometimes constructed where snig lines crossed gullies and creeks.

In the disastrous January 1939 fires, when 71 people lost their lives, forest settlements were wiped out, dozens of sawmills were destroyed, and countless numbers of native and domestic animals were killed. Nearly one and a half million hectares of State forest were destroyed or damaged in the fires, including extensive areas of mountain ash. This resulted in a huge salvage logging operation that continued in places into the 1950s. After the fires the FCV encouraged the sawmilling industry to relocate from forests to local town centres. This restructuring of the industry was helped by the spread of the electricity network to country Victoria. Tractors and motorised trucks were also more widely available and affordable after the war, and contributed to the modernisation of the industry.

The industry began to change and adapt in this period. Many smaller mills closed or amalgamated, and larger more up-to-date operations emerged in the new timber conversion centres, mostly on freehold land. In the forests today, depending on subsequent fire history, evidence of their former operations includes

sawdust heaps, tree stumps, log landings, domestic artefact scatters and rubbish dumps, as well as tramway, building and machinery remnants.

Regional Profiles

In the Wimmera, much of the natural flora consisted of scrub and heaths, and over large areas the main tree species tend to be stunted eucalypts such as mallees and brown stringybark. Scattered stands of yellow gum and river red gum were used by the early settlers for fencing materials and firewood. Early this century native timber plantations were trialed at Wail near Dimboola, where sugar gum, black box, yellow gum and swamp yate plantations were successfully established. Since the 1950s, other mixed eucalypt plantations have also been established in the district. The Wail State Nursery was founded in 1946, to propagate both native and introduced species for use in erosion control and as shelter trees on farms in the Wimmera and Mallee.

The goldrush made significant inroads into the forests of the Northern Pyrenees near St Arnaud in the mid-nineteenth century. In the 1880s, demand for sleepers for the Mallee railway extensions further depleted local timber reserves. In the 1930s and 1940s, unemployment relief workers and later alien internees, were used for silvicultural work in the Carapooce forests. Both groups were housed in camps in the forests, of which there are some remains.

The first State Forest in the Grampians, of just over 5000 hectares, was set aside in 1872, and substantially added to in subsequent years. Gold mining activity around Ararat and Stawell put heavy demands on Grampians timber, where sawmills were established at Fyans Creek, Stony Creek, Borough Huts, Zumstein, Wartook, Cranages, Ledcourt and Halls Gap. These were mostly mobile steam-powered operations, though in the 1860s John Childe erected a waterwheel-powered sawmill on his property near Fyans Creek, one of a very few in South-western Victoria. Before the 1920s, there were few roads in the Grampians, and horse or bullock-drawn tramways were used to transport the timber. In the 1940s, many sawmills moved out of the Grampians to the nearby centres of Ararat, Dunkeld, Hamilton, Horsham and Stawell. The forests, however, continued to be logged, particularly in the post-war building boom. In 1984, with the declaration of the Grampians National Park, timber production

within the Park boundary was gradually phased out.

The timber industry boomed in the Balmoral district in the early 20th century, in response to the needs of the expanding railway network. Most mills were located on private properties, particularly those blocks containing high quality river red gum. A State Government mill operated in Balmoral between 1922 and 1927, producing railway sleepers and red gum paving blocks for Melbourne streets. After World War Two, the Rose family took over a sawmill on railway land at Balmoral, and built a kiln to experiment with drying red gum timbers. This concrete 'bunker-style' structure remains on the site today.

Forests in the Portland district were exploited from the time of the earliest European settlement. A sawpit, reputedly dating from the 1830s, has been restored on Mt Clay near Narrawong. In the 1840s, local stringybark was used in cask-making for whaling operations. Sawmilling was active in the Heywood district in the 1860s, and boomed in the following decades with the rapid spread of settlement and the coming of the railway to Portland in 1877.



Henry's No. 2 Mill near Mt Sabine, Otway Ranges, about 1912

The forests of the Otway region have been subjected to intensive exploitation of any in the south-west. Since the middle of last century, when blue gum stands in the Apollo Bay and Lorne districts were first commercially harvested, over 200 sawmills have operated in the Otways, with many located in areas which are relatively inaccessible today.

The blue gum on the coast was destined for use in wharf, bridge and ship building, and later for sleepers on the Geelong and Ballarat railways.⁸⁰ Before the first jetty was built at Apollo Bay in 1852, logs and sawn timber were floated out to

boats anchored beyond the surf. In the 1880s, construction of a new jetty at Apollo Bay helped the resurgence of the local timber industry, and sawmills were established at Wild Dog Creek, and on the Barham and Elliott rivers. The formation of a tramway, which ran from Elliott River to Marengo in the late 19th century, can still be seen today in the vicinity of the Marengo Cemetery.

Agricultural selection activity in the Otways in the 1870s and 1880s destroyed large forested areas. Though many of the selections were in unsuitable country and ultimately failed, much valuable timber was still wasted. The Government eventually acted in 1897 and reserved 64 000 hectares of State Forest. In this same period the railway network began to make inroads into the Otways. While the rail assisted and encouraged selectors, it also opened up, through the provision of access to markets, huge areas of potential timber production forest. By the early 20th century, sawmilling was booming at Forrest, Barongarook, Birregurra, Beech Forest, Barramunga, Barwon Downs, Gellibrand, Lorne and elsewhere.

One of the largest sawmills in the region was Henry's No.1 mill, east of Barramunga, which operated from 1901 until 1927, when it was destroyed by fire. The sawmill was serviced by tramlines incorporating two of only three tunnels built on Victorian sawmill tramway networks, one of which was 440 metres long. About 100 people lived at the mill settlement, which featured a general store, post office, school, baker, billiard room and boarding house.⁸¹

Minor Forest Production

Charcoal burning was particularly common in the Wimmera region between 1880 and 1910, but continued through to the 1940s. Blacksmiths were major consumers of charcoal in the early period, though the industry revived in the Second World War when petrol was rationed and charcoal was used to make 'producer gas' for internal combustion engines. Charcoal is produced by the slow controlled burning of durable timbers such as red gum, in earthen, brick or metal kilns. In the south-west one of the more common methods employed involved the excavation of a shallow rectangular or oval pit, about one metre deep, into which the timber was placed and then covered with turf or clay. On rare occasions, pits were lined with metal or brick. Cylindrical metal kilns, where they were used, were very often recycled boilers or drums. They were stacked with

timber and set alight, with the fire regulated by small vents.

The Forests Commission became involved in charcoal production in the Second World War, when it established charcoal kilns at several locations in South-western Victoria, including Heywood, and Borough Huts and Woohlpooer in the Grampians. Three well preserved cylindrical iron kilns remain at Borough Huts, at the south end of the camping ground.

Wattle bark stripping was one of the first industries of the south-west. Victoria or late black wattle is a small tree which grows prolifically in an arc from Portland through to Ararat and Stawell. In the nineteenth century, the bark of the black wattle, and of other Acacias such as the golden and silver wattles, was acknowledged as one of the world's most powerful tanning agents. The tannin liquid was produced by chopping or grinding the bark in a mill, soaking or leaching the pulp in water, and using the liquid to impregnate hides.

Black wattle was first harvested by sealers, working seasonally along the south-west coast in the early 1800s. Later, in the 1830s and 1840s, the bark was shipped out of Port Fairy and Portland, as one of the first export products of those centres. By the 1870s, when there were approximately 90 tanneries operating in Victoria, Portland was known colloquially as 'Barkopolis'.⁸² Local merchants controlled most of the shipping and marketing of the bark, which together with wool, were Portland's main export items. Wattle bark was also harvested in the Grampians from the earliest days of settlement. Localities involved in the harvesting of wattle included Phillips Island on the Glenelg River Road, and Zumsteins.

Bark stripping methods were very wasteful. Saplings were commonly killed for their bark, and frequently only the trunks of larger trees were stripped, leaving mature trees to die without utilising the bark of branches. Whole stands of black wattle were wiped out in some areas. In 1878 it was estimated that no trees had been left unstripped in the Hotspur, Crawford and Kangaroo districts of South-western Victoria. A Board of Inquiry in this period criticised the reckless activity, and recommended the conservation of wattle trees on Crown land, and the introduction of a restricted stripping season. Several Government wattle plantations were established in South-western Victoria early this century, in the Victoria Valley in the Grampians and at Kentbruck. Wattle research

plots were established at Stawell and Beech Forest in the 1930s, but were largely unsuccessful.⁸³

Despite being a major industry in the south west over a long period, wattle barking operations have left few identifiable remains. The stripped trees have long since disappeared, and the camps used by men engaged in the stripping were temporary at best. None of the mills or tanneries has survived. The bark industry, however, may have been responsible for planting a New South Wales species, known as early black wattle, for its tanning qualities. This species, also known as early black wattle, has naturalised in many parts of Victoria and is now considered an environmental weed.

Eucalyptus oil has also been produced in South-western Victoria, particularly in a narrow band north of the Little Desert between Nhill and Dimboola, and in the St Arnaud district. The oil was a popular remedy for coughs and colds, and a by-product known as 'red oil' was used in paint manufacture. Joseph Bosisto introduced the industry to the Wimmera in 1882, when he and partners Felton, Grimwade, Smith and Francis, formed the Mallee Eucalyptus Company and established a still at Antwerp to produce the 'Emu' brand of oil.

Eucalyptus oil was generally produced by packing leaves (various mallee species were particularly suitable) tightly into vats and then steaming them to release the oils. The oil was then cooled in a condenser. A typical eucalyptus distillery site featured a bricked-in boiler, vats set in the ground (frequently recycled boiler shells), copper tubing, a steam engine, water pumps, and a hand winch or steam crane to remove the spent leaves.

By 1897, Bosisto's plant, then known as the Antwerp Mallee Oil Distillery, consisted of four large stills and employed 70 men, many of whom lived in tents or makeshift huts on the site. The lease eventually expired in 1903, and in 1905 the plant was removed to Euston in New South Wales. Very little remains of the operation today, except for an upright boiler on a concrete base (to which a commemorative plaque is attached), scatters of stone and brick fragments, and assorted metal and machinery pieces.

Brown stringybark and messmate stringybark trees have attracted apiarists to many parts of the study area. Yellow gum, yellow box, red box, ironbark and desert banksia are other important species for apiculture. The

Grampians provide an ideal environment for beekeeping, with a mild climate, ample water and a diverse flora. Local products have included honey, beeswax and royal jelly.⁸⁴ Beehive Falls, near Roses Gap, was very likely the site of an apiary run by D.M. Morgan in the 1890s. As with other minor forest industries, beekeeping activity has left few identifiable remains, though some huts have been attributed to beekeepers, including several dating from the 1920s and 1930s which were constructed out of pressed kerosene tins.⁸⁵

3.10 GOVERNING AND ADMINISTERING

Aboriginal Administration

The Port Phillip Protectorate

The establishment of the Port Phillip Aboriginal Protectorate in 1838 was intended to be a means of cushioning the meeting of the two races. George Augustus Robinson, known for his success in bringing in the Van Diemen's Land Aborigines, was appointed Chief Protector, and four Assistant Protectors were appointed in England. When they arrived in Port Phillip they were given only the most general instructions, which exhorted them to watch over the 'rights and interests of the natives', to gain their 'respect and confidence', and to protect them from 'cruelty, oppression and injustice'.⁸⁶

In early 1839 Robinson appointed the Assistants to their various districts and ordered them into the field. Charles Wightman Sievwright was assigned to the Western District, but remained in Geelong until early 1841. In that same year, Robinson made a tour of the Portland Bay District to take a census of the Aboriginal people and assemble details about their way of life. In a journey lasting from May to August, Robinson travelled around the District officially introducing himself as a representative of the Government, and trying to meet all the clans.

Siewwright initially occupied two sites in the District, which were vociferously objected to by squatters John Thomson and Niel Black. He eventually settled on a station at Mt Rouse in February 1842, which is today partly occupied by the town of Peshurst.

In the beginning the station attracted between 200 and 300 people, and over time large numbers of Aborigines came and went at Mt Rouse, but the Protectorate station was a

failure. Sievwright, and his replacement Watton, were not provided with the necessary assistance and supplies, and with virtually no stores being distributed the number of Aborigines calling at the station dwindled. The average attendance in 1845 was 33, and in 1848 the station closed.

Protectorate officials were meant to provide protection for Aboriginal people against European violence. This as it turned out was virtually impossible. Neither Sievwright nor Watton were able to successfully bring to justice men who committed crimes against the Aborigines. Nor were they able to intervene or successfully prevent Aboriginal people from practising the customs of revenge killing and killing a stranger.

By 1848 the frontier period had passed. Following the abandonment of the Port Phillip Protectorate in 1849, both expenditure and interest in Aboriginal welfare declined. Throughout most of the colony, Aboriginal administration amounted to the distribution of an occasional blanket.⁸⁷



Unloading leaf at Kiata Eucalyptus Distillery, 1931

Missions

The Buntingdale Methodist Mission at Birregurra was another foray into Aboriginal protection which, while not a government initiative, had government financial support. In the late 1830s, the Mission occupied Crown land temporarily reserved for Aboriginal use, where it was proposed to 'civilise and Christianise' the Aborigines by encouraging them to come on to the reserve, settle down and learn European ways. The site chosen brought together Aborigines from four different groups and hostilities broke out between them. In the end there were no Aborigines at the Mission. The missionaries failed to convert even one Aborigine to

Christianity. Nor were any Aborigines persuaded to adopt a 'civilised' lifestyle.

In 1851, a Moravian Mission was temporarily established in South-western Victoria at Lake Boga. It met with little success, but was followed in the late 1850s by a Mission at Antwerp in the Wimmera, which became known as 'Ebenezer'. The Mission was located at Bunyo Budnutt, an outstation of pastoralist Horatio Ellerman. It was also a favourite camping place and corroboree ground of the Aborigines. The missionaries began work on the site on 10 January 1859, and by late 1860 had established a school and church. Today this significant historic place retains several original mission buildings and a cemetery.

Aboriginal Stations and Reserves

In the second half of the nineteenth century, the Victorian Government introduced a policy which required the remnant Aboriginal population to reside on land temporarily reserved for their use. There was a belief at the time that much was owed to the Aborigines, and that they would benefit from being helped to live as part of the European population.

Where there were large numbers of Aborigines, a Local Guardian was appointed and given supplies to distribute to the displaced groups. Aboriginal stations were also established on selected sites, and Aborigines were required to move to them, where their liberty was greatly restricted. In South-western Victoria, Ebenezer, Framlingham and Lake Condah stations were established.

There were, however, some Aborigines who refused to move to the stations. In some cases these people received supplies from a Local Guardian, while in others a small area of reserved land was set aside for them and they were put under the care of a local person. Many of them were 'fringe dwellers' who scraped together a living on the outskirts of settlements.

In the late 1850s, a Select Committee was appointed to enquire into the condition of the Aboriginal population. The Committee found that of the six to seven thousand Aborigines in Victoria at the time of European settlement (as it estimated), not more than a few hundred remained and most were in a state of want. The Committee recommended the establishment of reservations for these dispossessed people, on which they could achieve a measure of self-support through combining agricultural and



Framlingham Mission

gardening operations with the keeping of sheep and cattle. Aborigines on reserves were also to be taught the principles of Christianity and to be given a rudimentary education.⁸⁸

To help implement these recommendations, the Victorian Government established a Central Board to watch over the interests of Aborigines and to deal specifically with Aboriginal affairs. The Board held its first meeting on the 7 June 1860, and appointed 'Honorary Correspondents' to distribute stores to Aborigines, and to collect information about Aborigines. Honorary Correspondents' depots in South-western Victoria were located at Birregurra, Camperdown, Hamilton, Belfast, and in the Charlton district.

The Central Board also oversaw the establishment of the new station reserves. The reservation of land for Aboriginal purposes on the Hopkins River and at Lake Hindmarsh was announced in the Government Gazette of 17 September 1861. At this time, one third of the Victorian Aboriginal population (654 out of 1908) was located in South-western Victoria.

A Church of England Mission was established at Framlingham in 1865 on the land reserved on the Hopkins River. After a troubled beginning, and despite the existence of a large number of local Aborigines (73 on the station in April 1867), the Central Board resolved to move the Aborigines from Framlingham to Lake Condah, where a new Aboriginal station was to be opened, again as a Church of England Mission. The Framlingham station closed on 15 November 1867 and the Aborigines from the area were escorted to the new station. They, however, quarrelled with those at Condah and returned home again. In 1869 Framlingham station was re-opened.

The 1870s and 1880s were the 'hey day' of stations, when three were operating in the investigation area - Ebenezer, Lake Condah and Framlingham. Funding provided for Aborigines at this time was comparatively generous, income from station produce was increasing, and the numbers living on the stations were high. But once there, Aboriginal people lost their freedom, and were unable to leave a station without permission. Furthermore, any one seeking to move on to a station, even to visit relatives, had to gain permission. Alcohol was prohibited and Aboriginal languages and customs were discouraged, if not banned. Men were given training in agricultural pursuits and women in sewing and cooking. The men were also allowed to leave the station for an agreed period to work on nearby properties, and many took this opportunity in the shearing season. Children were taught reading and writing, and all were encouraged to attend church services.

Framlingham closed in 1889, when local interests pressurised the Government into making some of the land available for an experimental farm. Able-bodied 'half casts' were also turned away from the reserves in this period, under a policy implemented by the Central Board. The other stations were closed in the early years of this century. Some of the inhabitants were persuaded to move to Lake Tyers, but more stayed in the vicinity of the stations. At Framlingham a small group had permission to remain on the reserve while many others camped illegally in the Framlingham Forest. Four families from Lake Condah who refused to move to Lake Tyers were allowed to remain in the district under the care of a local guardian. When Ebenezer Mission closed in 1904, some of the Aboriginal families displaced from the Mission moved to a site in the township of Antwerp. Today the Goolum Goolum Aboriginal Co-operative Ltd owns land at the former Ebenezer Mission.

Both Framlingham and Lake Condah also retain structures associated with their early history. Ownership of the land originally set aside for Aboriginal use on the Hopkins River, has been restored to the Framlingham Koori community. The Kerrup jmara Elders Aboriginal Corporation have title to the former Lake Condah Mission and adjoining freehold land. They are named after the Dhauwurd wurrung clans who were based around Lake Condah. The name literally means 'lake people' or 'people of the lake'.

Defending the South-west

The fear of invasion from the sea, by potentially hostile French or Russian naval ships, and the perceived need to defend Victoria in the pre-Federation period, was very keenly felt by nineteenth century colonists. The heavy dependence of Victoria on its maritime trade, and the huge quantities of gold produced and then shipped out of the colony, added to the sense of vulnerability. When, in the 1860s, the British Government began to withdraw its regular troops and naval forces from Australia, the colonies were forced to meet their own defence needs, and ports were considered to be in the front line of defence.

British Royal Engineers were influential in the design and construction of coastal fortifications in Victoria in the 1870s and 1880s.⁸⁹ *Fortifications and gun batteries were installed in the principal ports of the south-west, at Portland, Port Fairy and Warrnambool. The battery at Warrnambool is now within the Flagstaff Hill museum complex, and retains guns and concrete breastworks. At Port Fairy, two 68 pound guns were initially installed, which were later upgraded to 80 pound guns. The battery was restored in the 1970s.*

Throughout the history of white settlement in Australia, groups of volunteer citizen forces have regularly been formed, often during periods of overseas tension. In Victoria, the first formation of citizen forces occurred in 1854, when Britain was involved in the Crimean War against Russia. Such groups have variously been known as loyal associations, volunteers, militia, yeomanry, citizens military forces, army or ready reserves. The buildings in which they met have also had various names, specifically orderly rooms (1854–1901), drill halls (1901–1950) and training depots (1950 to present).⁹⁰ In South-western Victoria, a number of these buildings are still owned and managed by the Commonwealth Department of Defence. Others have been sold to local councils, or are in private hands.

In 1859, volunteer military corps were raised at Warrnambool, Port Fairy and Portland. The corps practised drilling and exercises, sometimes under the command of a salaried instructor, in drill halls built through subscription or debentures, on land donated by Government or philanthropic citizens. Warrnambool retains the only purpose built, masonry, early colonial orderly room remaining in the State. It was constructed in 1868 and today is incorporated

into the TAFE college complex.⁹¹ Another orderly room from the early colonial period is located in Port Fairy, and was used by citizen forces until the 1930s.

The establishment of volunteer rifle clubs was also encouraged by Government, to provide a body of partially trained men in the event of invasion or war. The first were formed in Melbourne and Geelong in the 1850s, again during the Crimean War. Rifle clubs practised their skills on butts located on rifle range reserves. The Port Campbell Rifle Club was established in the mid-1880s, during a period of Russian invasion paranoia. Their practice range was located just to the west of the township, across Campbell's Creek.

World War Two

During the Second World War, the Commonwealth Government built or upgraded a number of airfields in South-western Victoria, many of which passed into civil use after the war. The airport at Warrnambool retains some Bellman-type hangars, constructed by the RAAF during the 1940s.

At Nhill, the airfield in Aerodrome Road was built before the war but enlarged by the RAAF during the 1940s, when an air navigation school was established there. From this base, the RAAF flew practice operations over a bombing range in today's Little Desert National Park. Concrete observation enclosures remain in the Park, as relics of this activity. Nhill is one of the major points on the Melbourne/Adelaide air route, and one of the first radio beacons in Victoria was installed there in the late 1930s.

The lakes around Cressy were also used by the RAAF for bombing practice during the war. In 1944, the Airforce compulsorily acquired land in the district for the establishment of an Armament Training School. The site has since returned to private hands, but remains of the school include the former tarmac, concrete building foundations, and aprons, roads and gutters.⁹²

Building for the Public

Public buildings reserves in towns of the south-west often contain significant collections of public buildings. Portland has a notable precinct of this type, with several of the oldest public buildings in Victoria, including a Customs House built in 1849 and a Police office and Watchhouse built in 1850. The hard local basalt building material was quarried at West and

North Portland. John Jones was a prominent Portland stonemason, who was involved in the construction of many of these early stone structures.

Locally quarried basalt, sandstone and limestone were also used in buildings in Port Fairy and Warrnambool, including a particularly hard stone from Mount Sturgeon. Tufa or ashstone, quarried near the Merri River at Warrnambool, was used for cornerstones and door and window facings. Local artist, Walter McGill, carved the ashstone into external and porch decorations for several historic churches in Port Fairy.⁹³

Schools

The Irish National System of education, which allowed students of all denominations to attend the National Schools, was introduced to Australia in the late 1840s. By 1850 there were several of these schools operating in South-western Victoria, including at Colac and Warrnambool. The Tower Hill National School, also known as the Koroit Common School, was built in 1857–58. It is one of the best surviving examples of a National School in Victoria. Based on the Irish principle, a central headmaster's residence is flanked on either side by a classroom.

Under the *Common Schools Act* 1862, a new Board of Education in Victoria assumed control of over 600 schools, including existing National and Denominational (church) schools⁹⁴. Hexham has a bluestone Common School, in the Gothic Revival style, which was originally constructed in 1858 as a National School. When completed in March 1866, Stawell Common School 502 was the largest of the vested Common schools ever built in Victoria, and featured the longest schoolroom in the State, at 29.8 metres. Another substantial school building was added in 1875. Both are retained in the Stawell primary school complex of today. State schools were established by the *Education Act* 1872, along with the Education Department of Victoria.

Consolidated schools were first formed in the 1940s, as a means of consolidating groups of low-enrolment schools in rural areas. Balmoral's consolidated school was established in the 1950s, when buildings from closed schools in outlying centres such as Kanagulk, Brit Brit, Pigeon Ponds and Gringegalgona, were brought to the site. Buses travelled a total of 310 miles each day in bringing the children to school.⁹⁵



Warracknabeal High School

State secondary education began in the 1900s, after the *Education Act* of 1910 allowed for higher elementary, district high, and technical schools. Timboon High School opened in 1960 in a distinctive Moderne style 1948 red brick building which was formerly the Higher Elementary School. When built, the school building was described in the Victorian Parliament as a 'mediaeval castle in the forest'.⁹⁶

Hospitals

Hospital complexes very often represent significant collections of public buildings in towns, which because of their function tend to be regularly upgraded. Hamilton Base Hospital, on the corner of Tyers and Kitchener Streets, was originally built in 1862, and subsequently altered and extended in 1888, 1897, and in the 1940s.⁹⁷ It has played an important role in health care in the Western District. For example, as a major wool centre, Hamilton is also a centre for the hydatid parasite, which can be passed to humans. The Base Hospital has developed leading expertise in the treatment of this problem.

The Chalet in Tyers Street is part of the Hamilton hospital complex. It was formerly a tuberculosis sanatorium which was custom built by the Public Works Department in the 1940s, during an Australia-wide campaign to eradicate the disease. The Chalet was one of several sanatoria built in Victoria in this period, though similar structures at Horsham and Warrnambool are no longer extant. Its extraordinary Expressionist style reflects that of sanatoria in Europe in the 1920s, and contemporary practice in the treatment of tuberculosis.⁹⁸ It survives today in another role, but reminds us of the speed of change in medical practice and

community health in the second half of this century.

Aradale, the former Ararat Mental Hospital, was built between 1864 and 1867. It was one of three lunatic asylums in the State, the others being at Kew and Beechworth. The original buildings in this complex were designed and built by the Public Works Department, which at that time was headed by William Wardell. G.M. Vivian was the supervising architect on the project. The main asylum building is in an elaborate Italianate style, and dominates the complex with its wings and towers. When completed, it incorporated 700 metres of verandahs, for the patients' enjoyment of fresh air.⁹⁹ The grounds were landscaped early this century by Hugh Linacre. Other structures in the complex include an Italianate style gatehouse, a row of former residences, outdoor fever house, moat and substantial remnant sections of the surrounding brick and stone fence.

Public Housing and Government Residences

Post-war decentralisation in Victoria provided successive governments with an opportunity to be active in many country areas. As industries were encouraged to set up in rural towns and districts, Government endeavoured to provide the infrastructure necessary for such expansion. This included the provision of public housing for new workers and in some cases, the leasing of public land to industry.

Government has also provided housing for its own workers in country areas. Teachers' residences, very often adjacent to schools, are an obvious example of this. Several significant residences are located in the south-west, though many such houses have been sold in recent decades. The Rossbridge teacher's house was built in 1874–75, and is a typical, though rare example of a 19th century teacher's residence. It is a simple, single-storey bluestone cottage, with a gabled iron roof. At Lorne in 1905–06, the Public Works Department built an unusual two-storey, Swiss Chalet style house for the primary school Principal. It features stained glass and leadlight windows, and a recessed balcony with views out to sea. The external walls of the first floor were originally clad with mock half-timbered panels.

Railway workers' housing is another component of public housing, often found in the vicinity of railway reserve areas. In some large railway centres such as Dimboola and Horsham, the

railway workers' residences were quite numerous. Nhill also retains several significant railway employees' houses, including two intact standard 19th century residences.

The former police residence at Stawell was constructed in 1869 to house the Police Superintendent of the Wimmera. It is believed to be the only purpose-built superintendent's residence in the State. As with many other public buildings on the goldfields, its construction reflects the importance of goldfields' administration in the context of Government in 19th century Victoria. The Wimmera District Police Headquarters was located in Stawell until 1928, while the Superintendent's residence was occupied by a local officer until 1969. The State Emergency Services have since occupied the building, which is a single storey brick villa with return verandah.

Mechanics' Institutes and Public Halls

The Mechanic's Institute movement began in Britain in the early 19th century. Its aim was the education and enlightenment of 'mechanics', or workers caught up in the new industrial processes. The first Australian institute was founded in Hobart in 1827. Port Phillip had an institute by 1839, and the first purpose-built building by 1842.¹⁰⁰

The institutes appealed to all classes of people in Victoria. They offered lectures for adults, concerts, entertainment, reading rooms and free libraries. They also helped to nurture community spirit, and were commonly used as a public facility. In many cases, a local mechanic's institute was established before a building was available. When they were constructed, rural institute buildings tended to be simple rectangular structures, of brick or timber, with gabled iron roofs. They consisted of one or two small rooms, a larger hall and possibly a kitchen. A supper room, stage, or toilet facilities were sometimes added later.

After Melbourne, Geelong and Portland were the next towns in Victoria to establish mechanic's institutes. Warrnambool and Hamilton followed in the 1850s, and Port Fairy in 1865. Charlton's institute was founded in 1879, reflecting the spread of the movement into the new closer settlement districts.¹⁰¹

The acquisition of a mechanic's institute or public hall was much welcomed in a locality of any size. After schools, they were frequently the

most eagerly awaited public facility, and communities expended much effort on raising funds and canvassing support for their construction.

In the former Shire of Heytesbury, a spate of hall building began late last century. The Cobden Mechanics' Institute was built in the early 1880s, Scotts Creek hall was opened in 1888, Naroghid followed in 1890, with North Ecklin in 1897, and Cobrico's public hall in 1907.¹⁰² The halls were put to a range of uses, in conjunction with the free lending library service, where it was available. Public functions were popular, and in the First World War, fund raising activities and send-offs for local soldiers were commonplace. In 1917 and 1918, wartime honour boards were also unveiled in many public halls.

The Mechanics' Institute building in Barkly Street, Ararat, dates from 1908, though the movement began locally in 1859. Today the institute retains aspects of its original function, including a free library and reading room. Internally, the layout of the building is typical of the larger rural mechanics institutes, with rooms, shops and offices on either side of a central entrance and hallway. Upstairs, the various rooms are leased out to clubs and societies.

Local Government

Local government halls and municipal complexes are found throughout the study area, though many occur on municipal-owned land. Some of these are also historic buildings which no longer serve their original purpose. 'History House' in Charles Street, Portland, is the old Town Hall which was built in 1863/64. The former Portland Shire Hall in Cashmore Road is also extant. It was built of stone in the mid-19th century, from materials taken from the 1850s stockade and police barracks which had formerly occupied its site. The former Mount Rouse Shire Hall is also from this period, and constructed of the hard volcanic plains basalt.

Law and Order

The first court house in Victoria is still extant. It was built at Portland in 1853. The courthouse had the only stocks used in rural Victoria, which restrained prisoners on the slope outside the building. James Blair was the first resident Police Magistrate.

The court house in Ararat was completed in 1867. At the time it was thought to be the finest

building in Ararat, and represented the Government's commitment to law and order on the goldfields. It is a fine example of the Romanesque Revival style, featuring patterned brickwork and an unusual semi-circular enclosed porch. Though altered and extended over the years, the building remains largely intact and continues to be used as a magistrate's court.¹⁰³

The old Ararat Gaol predated the court house by several years. It operated as a goldfields gaol until taken over as an asylum for the criminally insane, or as 'J Ward' of the Ararat Mental Hospital, in 1886. Its imposing presence and gloomy entrance was intended to be intimidating, after the fashion of Newgate Prison in London. The use of dark rockface bluestone in construction of the walls also emphasised the punitive purpose of the building. 'J Ward' remained open until 1991, and today can be visited as a tourist attraction.

Miscreants in the south-west have also spent cold nights in small police lockups all over the region. Some of the earlier bluestone or log lock-ups survive, including a rough-hewn log structure in Harrow which was constructed in 1859. Another timber lock-up is located at Great Western, which was originally built in the 1860s at the Concongella Creek Police Camp. At Balmoral, an 1861 two-celled, bluestone lock-up remains within the current police complex.

Coorimungle Prison Farm, originally known as the Coorimungle Forest Prison Camp, was set up in the Cobden district in 1939. It followed the establishment of the McLeod Prison on French Island in 1915, the first low-security prison farm in Victoria. The objective of these new-style prisons was to rehabilitate inmates through the teaching of farming or related skills. At Coorimungle, the prisoners were engaged in forest plantation and silvicultural work. The design of the new prisons also represented a break from that of the large 19th century gaol complexes. The layout of Coorimungle, with its semi-circular grouping of cells around a central administrative and facilities block, was similar to that of McLeod Prison, except that each cell was a separate timber building. Twenty-six of the original 60 cells remain at the former prison, which is now used as a recreation camp.

Cemeteries and Lone Graves

Some of Victoria's oldest and more interesting cemeteries are located in the south-west. Portland has three historic cemeteries in addition

to the whalers' cemetery at Narrawong. The first local cemetery, or 'Old Cemetery', in Fern Street dates from the period of the earliest European settlement in the district. It was closed in 1848, however, when 47 bodies were interred and removed to a new cemetery at Portland North. The Portland South cemetery was opened in a slightly later period, in 1863.



Hugh McEachern's grave, McEachern Family Cemetery, Heathfield

Darlington's cemetery features a timber grave marker dating from the 1840s. The cemetery at Tower Hill has the graves of W.J. McLean who was shot in the Shearer's Strike of 1894, and Walter Lindsay Richardson, father of Henry Handel Richardson and the model for the principal character in *The Fortunes of Richard Mahoney*. Port Fairy's first cemetery is almost buried in the sand dunes.

Lone graves of the region include that of shepherd George Watmore, speared by Aborigines in 1846, and located on the north side of the Princes Highway near Yambuk. A child's grave in the Halls Gap camping ground is that of Agnes Folkes who died in 1870, aged three months. Her family were involved in sawmilling operations and the peak behind the camping ground, now known as Mackey's Peak, was for a time named Cherub's Peak in her honour.

Another lone grave in the Ironbark Forest near Stawell is marked by a small hand-carved stone which reads 'U.O. DIED 1854 4'. This may be the grave of a four year old child travelling in a family from Adelaide to the goldfields.¹⁰⁴ More children are buried adjacent to the Great Ocean Road, approaching Lorne. They were the sons of a timber splitter who worked in the forests around Loutitt Bay. The boys drowned in 1850.

3.11 CULTURAL INSTITUTIONS AND WAYS OF LIFE

Tourism

In the second half of last century, when leisure time allowed, Victorians began to take some pleasure in the natural landscape around them. This, together with the spread of the railways westward and the later ownership of cars, facilitated the growth and development of tourism in South-western Victoria.

Tourists sought out picturesque and remarkable scenery. They were drawn to the rugged coastline of the south-west, and to the waterfalls and fern gullies. The spectacular scenery of the Grampians was also an attraction. As the natural features became popular, cultural features developed to meet the needs of the tourists. Roads, walks, camping areas and lookouts were constructed, and hotels, guesthouses, kiosks, tearooms and boathouses capitalised commercially on the tourist influx.

From the 1850s, wealthy Western District families visited the coast in summer for the 'sea change'. They would have patronised Portland's first enclosed sea-baths, which were constructed in 1858. Two more bathing complexes followed, the last of which was built in 1890, and were eventually demolished in the 1960s to make way for the harbour development. Historically, tourism was important in some areas which are not recognised as resorts today. Nelson, on the Glenelg River, was popular with professional and recreational fisherman in the mid-19th century. They camped on the river, and later boarded at the hotel or one of the guesthouses.

Holidays at the seaside became increasingly popular in the latter decades of the 19th century. The attraction of the Port Campbell, Peterborough and Princetown districts centred on the spectacular coastal scenery. Bridgewater Bay and Cape Bridgewater were also popular resorts in the 19th century. A hotel and guesthouse operated at the Cape from the 1870s to the 1920s.

Other popular 19th and early 20th century attractions included Wannon Falls east of Coleraine, and Hopkins Falls and the Hopkins River, at Warrnambool. Sightseers climbed or took a coach to the summit of Mount Leura near Camperdown, for extensive views of the surrounding plains. Despite the distance from

population centres, the Princess Margaret Rose Caves attracted tourists after their discovery and development in the late 1930s. In the 1960s, the conservation controversy over the Little Desert drew attention to the unique environment of that region. Also in this period, rock climbers discovered Mt Arapiles and Mitre Rock, which are now considered world class rock climbing sites.

Lorne is the premier tourist resort of the south-west coast. From the last decades of the 19th century, bathing, angling and walking in the forests have been popular there. Swimming won increasing acceptance after beachside bathing houses were established in the 1880s. Erskine Falls, above all waterfalls in the region, have inspired and attracted visitors.

Erskine House at Lorne is one of the finest extant guest houses in Victoria. For more than a century, it has been a social and recreational focus for visitors to the district. It was built in stages beginning in the late 1860s, with the most recent concentrated phase of redevelopment occurring in the 1930s. The numerous modifications and extensions to the complex document and reflect changing visitor expectations and standards. After starting out as a two-roomed dwelling in 1869, Erskine House was described as a 'large house' in 1871, and was extended again by 1873 to accommodate 50 people. The South Wing was constructed in the late 1870s, a ballroom was added in the 1880s, and beach dressing sheds and a boathouse were built for guests' use in the late 19th century. In the early 20th century, several of the current meeting rooms were constructed as a dining room and cafeteria. A recreation hall was added in about 1930, and motel-style units in the 1950s. The grounds have been developed to incorporate extensive landscaped areas and gardens, as well as tennis courts and croquet lawns.¹⁰⁵

Local groups such as progress or tourist associations, have often taken an active role in tourist promotion and the establishment or improvement of tourist facilities. The Public Improvement Association of Lorne (later the Lorne Progress Association), was formed in 1891 and joined with the Government and Shire in developing various 'beauty spots' in the district. This involved maintaining and signposting tracks, bridges and crossings.¹⁰⁶

Adventurers began exploring the Grampians in the 1860s, but it wasn't until walking tracks were defined in the late 19th century that the

area began to attract more visitors. In the 1920s and 1930s, when outdoor recreation won wider appeal, the Government's Tourists Resorts Committee funded projects designed to improve visitor access and facilities. In the Grampians, tourist roads such as the Mount Victory and Silverband roads were constructed with Committee funds, helping to open up more of the region to increasing numbers of tourists.

The Picnic Reserve at Halls Gap was popular with visitors. From here campers embarked on long hikes to peaks such as Mount Rosea and Chatauqua, visited the features at Wonderland and local waterfalls such as Silverband and Clematis. Chatauqua was named after an American movement of the late 19th century, which encouraged outdoor education, recreation and entertainment. Chatauquan picnics were held in the Grampians in the 1890s.¹⁰⁷

Tourist Facilities

Holiday settlements were also established in the Grampians in the 1920s and 1930s, when visitor demand increased. Cranage's tourist accommodation was developed near Mackenzie Falls in the Central Northern Grampians. Walter and Jean Zumstein's pisé tourist cottages were also built on the Mackenzie River in this period. They represent a rare form of vernacular construction, where the builder was forced to use local materials owing to the unavailability of traditional materials and the cost of transportation.



The 880 yards finalists, Central Park, Stawell, 1899

Other distinctive visitor facilities were built in public land camping areas in the middle of this century. They include picnic shelters, campers' kitchens and kiosks, in a rustic log cabin-style, with walls constructed of stone, logs or undressed timber, and small-paned timber windows. At Lorne, the Kiosk on the foreshore

is in a similar style, as are several buildings in the Queens Park caravan park. Lorne also retains a 1920s stone and concrete picnic shelter, with a stone seat overlooking the ocean, at Teddy's Lookout on Mount George.

Of the more recent visitor facilities constructed in the south-west, the Natural History Centre at Tower Hill is a notable example. It was designed by Robin Boyd in the 1960s, and opened to the public in 1971. The building is constructed of two concentric circular stone walls, one of which forms the outer wall while the other forms the central internal support for the structure. Laminated timber beams radiate out from the central stone circle, and hold up the curved roof which is covered externally in bitumen set with local scoria stones. The circular building sits beautifully in the landscape of the volcano.

The observation room and toilet block at Lake Bellfield in the Grampians is another interesting 1960s structure, built by the former State Rivers and Water Supply Commission. A light steel-framed and glazed observation deck sits on top of a Grampians freestone-faced toilet block. The convex curved steel roof and floating appearance of the deck was intended to give the structure 'boating' characteristics, at a time when Lake Bellfield was being touted as a boating venue.

The 1990 Brambuk Living Cultural Centre at Halls Gap is an outstanding example of a modern visitor facility. It was designed by architect Greg Burgess, in conjunction with five Koori communities from the Wimmera and south-west Victoria. It offers displays, cultural talks, art, craft and indigenous foods to visitors. The building has won awards for its design and craftsmanship, and use of materials such as stone and timber. The roof, which is in undulating two-toned corrugated iron, covers five internal circles, representing the Koori communities. Totems are also featured in many of the building's features. When viewed from a distance, Brambuk looks like the outstretched wings of a bird. Brambuk takes its name from the buledji brambimbula, the two Bram brothers, ancestral beings responsible for the creation and naming of many landscape features in western Victoria.

Recreation

Public recreation areas were usually set aside when townships and settlements were surveyed, reflecting the importance of leisure and sporting

activities in Australian society. Most towns have had a recreation reserve, although many have fallen into disrepair as rural populations have declined. Organised sports and regular sports meetings provided an opportunity for dispersed farming populations to come together and participate in social activities.

Club rooms, assorted sheds, grandstands and viewing areas, are all features of country sports grounds. Plantations around the perimeter of ovals serve as wind breaks and define the grounds within the landscape. They are commonly of pine or cypress trees in the south of the study area, while eucalyptus, particularly sugar gums, thrive in the north. Entrance gates are also often distinctive and ornamental elements of sports grounds.

At Stawell the first organised running carnival was held at Easter in 1878. At that time fifty men competed for the Stawell Gift prize of twenty sovereigns, which was won by a runner from Hamilton. Central Park is the home of the Stawell Easter Gift. It features an ornate 1899 timber grandstand, which has recently been restored, and iron memorial entrance gates which were built in 1903 to commemorate the Boer War. Central Park also retains a memorial stone seat and sun dial, and several monuments to individual runners.

River sports were popular activities on the Hopkins River near Warrnambool and the Glenelg River at Nelson. Many small boatsheds are still found along the banks of the Glenelg. Patterson's Canoe Camp was possibly the first of the boating and angling camps along river, before the establishment of the Lower Glenelg National Park.

Proudfoots Boathouse on the Hopkins River at Warrnambool was constructed in the 1890s. It became a focus for tourism and river recreation in the district, providing afternoon teas and boats for excursionists. The journey from Warrnambool to Jubilee Park near Allansford on the 'Lady Loch' steamer was popular. Bluestone boating and swimming structures still remain along the river bank at Jubilee Park.

Beaches and Foreshores

Beaches and foreshore areas feature prominently in public recreation in coastal towns of the south-west. Foreshore reserves frequently display a variety of landscaping and recreational features, as well as historic structures associated with their use and development.

At Lorne in the 1890s, the Public Improvement Association was involved in improving the foreshore reserve area. They erected fencing and attempted to retard the encroachment of sand on the reserve by planting marram grass. The development of the foreshore at Port Campbell began in the 1880s. Bathing boxes were first erected in this period, including a box placed on the rocky ledge on the eastern side of the bay. Fishermen's steps were cut into the face of the cliff near the bay entrance, and a walking track was constructed along the western cliffs to Two Mile Bay. The local Tourist and Progress Association planted Norfolk Island pines on the foreshore in 1911, 1912 and 1915. Paths, seats and signposts were installed for the benefit of tourists, and a rotunda was constructed in 1919.¹⁰⁸ Norfolk Island pines are also characteristic landmark features in Warmambool and Port Fairy.

Lack of access to the beach along the steep coastal cliffs of the Port Campbell and Peterborough districts was an issue for the early tourist promoters. The Port Campbell Progress Association was also active in this field in the early 1900s, building and maintaining steps at various points along the coast. Gibson's steps and tunnel through the cliff in the Port Campbell National Park, were built late last century for fishing access, by a member of a local landowning family. They have recently been upgraded.

The original steps down to the Loch Ard Gorge were constructed in 1888, when visitors were already making a pilgrimage to the site of the famous 'Loch Ard' shipwreck. Port Campbell tourist promoters capitalised on the popularity of the wreck site, by holding public picnics and erecting displays at the Gorge.¹⁰⁹

Horse Racing

Horse racing was popular in Western Victoria from the early years of European settlement. Early race meetings were held at Portland, Port Fairy and Colac, while in later years both Coleraine and Casterton were popular horse racing towns. In the late 1840s, when Warmambool was barely a few years old, local people conducted horse races on the beach. Warmambool later developed into a major horse racing destination. Other social activities usually accompanied race meetings, including concerts and dances in the evenings.

Racecourse reserves were common in South-western Victoria, even in some of the smallest

towns. In the mid-19th century they were often used as camps or refuge areas by fringe dwellers, particularly displaced Aboriginal groups. The tiny Moonlight Head settlement, in the Cape Otway district, boasted a racecourse, as did nearby Rivernook and Princetown. Rivernook township was in the Wattle Hill area, on the edge of today's Otway National Park. As well the racecourse, Rivernook featured an inn and guesthouse popular in the late nineteenth and early twentieth centuries. Today only a few farms survive, along with the road into the settlement and the ruins of the guest house.

Religious Institutions

The spiritual wellbeing of the settlers of South-western Victoria was recognised by town surveyors, who commonly set aside Crown land reserves for Church purposes. Almost every locality had at least one church. Bluestone was a popular construction material, though timber churches dominate the region. Of the many churches originally built on Crown land, the titles of most have been handed over to the occupants, following passage of the *Abolition of State Aid to Religion Act* 1871.

Christ Church Co-Cathedral in Hamilton, was built of stone on a Church of England Reserve, in two stages beginning in 1878. It was constructed on the site of an older church called St Botolph's. Christ Church has been a focus for Anglicanism in the region for more than a century. Like many churches in South-western Victoria, it is complemented by plantings, memorials and associated buildings. Its spire is also a Hamilton landmark.

St Aiden's Church in Apollo Bay has a small graveyard on the church land. This is a comparatively rare feature in the region. Many churches and church buildings have been demolished in the investigation area, and the sites used for other purposes. At Dimboola, the 1861 Presbyterian log cabin church no longer exists, but a small piece of the original land has been excised and now contains a memorial to the church and two 1860s headstones.

Memorials and Monuments

Almost every town of any size in South-western Victoria has a war memorial. They are dedicated to local men and women who died or were engaged principally in the two world wars, but occasionally other conflicts such as the Boer, Korean or Vietnam wars.



*Memorial to Johnny Mullagh,
Aboriginal cricketer*

The memorials range from obelisks, cairns and ornamental fountains, to plaques, tablets and statues of soldiers. Some stand in median strips, on prominent corners, at the centre of civic squares or in small public gardens. Local heroes are also remembered in avenues of honour and memorial gates and halls. Ararat has a cenotaph in the Town Hall square, which commemorates both world wars, and the Korea, Malaya, Borneo and Vietnam wars. Charlton features an Honour Board outside the Shire Offices. Digby has a stone memorial wall, while Dimboola High School has a Memorial Hall. The 20 metre high granite obelisk in Terang is the tallest memorial of its type in Victoria. It was unveiled in 1923, by General Sir Harry Chauvel.

Stawell celebrates its gold mining origins with several monuments, including a memorial at Big Hill with sculpted bas-relief diggers, and another at Deep Lead with a bas-relief motif of miners at work over a sluice box. This motif is repeated in bronze figures on the facade of the Stawell Town Hall.

At the nearby former goldfield of Pleasant Creek, a plaque at Doctor's Hill commemorates the site of the first hospital in the region, which operated from 1859 to 1861. Its inscription reminds us of the primitive conditions of the day: 'There not being anything else of the kind further towards the interior of the colony'.

Notes:

- 1 Clark 1990: *Aboriginal Languages and Clans*.
- 2 Williams 1987: 'Complex hunter-gatherers'.
- 3 Dawson 1881: *Australian Aborigines*, p.78.
- 4 Clark 1990: p.277.
- 5 Eccleston 1985: *Major Mitchell's 1836 Australia Felix Expedition*.

- 6 Learmonth 1934/1983: *Portland Bay Settlement*, p.27.
- 7 Wiltshire 1976: *A People's History of Portland*, p.10.
- 8 Wiltshire 1976: p.11 and p.13.
- 9 Mackenzie 1976: *Sealing, Sailing and Settling*, p.7.
- 10 Wiltshire 1976: p.22
- 11 Learmonth 1934/83: pp.50-53.
- 12 Reece 1974: *Aborigines and Colonists*, p.23.
- 13 Lord Glenelg's memo to Governor Bourke, 26 July 1837.
- 14 Henty: *Daily journal*, 1834-39.
- 15 Barrett 1984: '150th Anniversary', pp.3-9.
- 16 Presland 1980: 'Journals of G.A. Robinson', pp.2-3.
- 17 Presland 1980.
- 18 Clark (ed.) 1988: *Journals of George Augustus Robinson*, p.22.
- 19 Wiltshire 1976: p.26.
- 20 Clark (ed.) 1988: p.22.
- 21 Kenyon 1928: 'Aboriginal Protectorate of Port Phillip', p.150.
- 22 Learmonth 1934/83: pp.73-5.
- 23 Kiddle 1961/67: *Men of Yesteryear*, p.14 and pp.36-39.
- 24 Kiddle 1961/67: p.53.
- 25 Kiddle 1961/67: p.58 and p.67.
- 26 Anderson 1969: *Flowers of the Field*.
- 27 Dingle 1984: *Settling*, p.23.
- 28 Willingham 1983: 'Architectural Traditions in Western Victoria', p.64.
- 29 Kiddle 1961/67: p.173.
- 30 Black and Miller 1995: *If These Walls Could Talk*.
- 31 Kiddle 1961/67: p.200.
- 32 Black and Miller 1995.
- 33 Berndt (ed.) 1982: *Aboriginal Sites, Rights and Resource Development*, p.4.
- 34 Winter Cooke Papers, Jacky White to Mr Winter, 7 January 1877, Item 2.3.19.
- 35 Presland 1980: pp.65-6.
- 36 Critchett 1990: *A Distant Field of Murder*, pp.187-188.
- 37 Critchett 1990: pp.90-96.
- 38 Presland 1980: p.73.
- 39 Kiddle 1961/67: p.203 and p.206.
- 40 Kiddle 1961/67: pp.152-153.
- 41 Wilson Sayer et al. 1981: *Portland Conservation Study*, p.21.
- 42 Kiddle 1961/67.
- 43 Hubbard 1994: *Ararat Conservation Study*.
- 44 Kiddle 1961/67: p.45.
- 45 Learmonth 1934/83: p.32
- 46 Harvey and Learmonth 1966: *Portland 1800 to 1920*, p.11.
- 47 Houghton 1975: *Sawdust and Steam*, p.6.
- 48 Fletcher 1985: *The Infiltrators*.
- 49 Williams (ed.) 1967: *Agriculture in the Australian Economy*, p.26.
- 50 Hubbard 1991: *Hamilton Conservation Study*.
- 51 Hubbard 1994.
- 52 Hubbard 1991, vol.1, p.32, pp.76-77.

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- 53 Houghton 1975: p.51,
54 Massola 1973: 'Avoca River - Wirrengren Plain', p.127.
55 Kimber 1969: 'Ngarkat'.
56 Priestly 1984: Making Their Mark, p.48.
57 Anderson 1994: Roads for the People, p. 16.
58 Anderson 1994: p.22.
59 Anderson 1994: pp.72-73.
60 Hubbard vol. 1, pp.41-42.
61 Blake and Lovett 1962: Wimmera Shire Centenary, p.52.
62 Fletcher 1985: p.98.
63 See Rolls 1969/77: They All Ran Wild, pp.6-7 and notes by John Edmonds.
64 Edmond's notes.
65 Dingle 1984: p.72.
66 Parsons 1973: Noxious Weeds of Victoria, p.74.
67 Parsons 1973.
68 Longmire 1985: Nine Creeks to Albacutya, p.129.
69 Water Victoria 1989: A Resource Handbook.
70 Wright 1989: The Bureaucrats' Domain, p.56 and p.111.
71 Wright 1989: p.160.
72 Calder 1987: The Grampians.
73 The following information on the Stawell and Ararat Goldfields has been taken from Bannear 1995: Historic Mining Sites in Stawell and Ararat. See that report for full references.
74 The following information has been taken from Bannear 1994: Historic Mining Sites in St Arnaud. See that report for full references.
75 Houghton 1982: The Saddle Line, pp.39-41.
76 Houghton 1982: p.42
77 Duruz 1974: Death of a Forest, pp.37-38.
78 Houghton 1992: The Beechy, p.34 and pp.46-47.
- 79 Houghton 1992.
80 Priestly 1984: p.99.
81 Houghton 1975.
82 Searle 1991: 'Black wattle bark industry', p.22.
83 Priestly 1984: p.96.
84 Calder 1987: pp.113-4.
85 Story and Davies 1995: Historic Forest Places in S.W. Victoria, p.17.
86 Quoted in Critchett 1990: p.142
87 Rowley 1972: Destruction of Aboriginal Society, p.63.
88 Report of the 1858-9 Select Committee on Aborigines, pp.iv-v.
89 Miller 1994: Defence in Victoria, vol.1, p.16.
90 Miller 1994: vol.1, p.10.
91 Miller 1994: vol.1, p.25.
92 Miller 1994: vol.2.
93 Priestly 1984: p.67.
94 Blake (ed.) 1973: Vision and Realisation, vol.1, p.91.
95 Blake (ed.) 1973: vol.2, pp.15-16.
96 Blake (ed.) 1973: vol.2, p.984.
97 Hubbard 1991: vol 1, pp.60-62.
98 Hubbard 1991.
99 Hubbard 1994.
100 Jones 1994: Mechanic's Institute Movement in Victoria, pp.10-11.
101 Jones 1994.
102 Fletcher 1995.
103 Hubbard 1994.
104 Stawell and Halls Gap Historical Societies 1990: Historical Survey.
105 Sheehan 1991, notes on Erskine House.
106 Gregory 1985: Coast to Country, p.83.
107 Calder 1987: p.138.
108 Fletcher 1985: pp.259-272.
109 Fletcher 1985: pp.260-266.

4. HISTORICAL GEOGRAPHY

J.M. Powell

Victoria's historical geographers have concentrated on the era of rapid European occupation following the early incursions of whalers and sealers. Their researches have reconstructed the sequences of pastoral and farming settlement which developed independently and as a result of apparently idealistic government policies to dispose of the public land. They demonstrate that the public lands of the study region have occupied centre-stage in searching debates over complex, reciprocal relationships between land and society.

4.1 The Squatting Frontier, 1834-60

Long-term European occupation commenced with the movement of the Hentys to Portland Bay in 1834 and the arrival of vanguards of the 'Port Phillip Association' at Port Phillip Bay during the following year. In each case, Van Diemen's Land (Tasmania) was the initial source of livestock and commercially minded frontiersmen. Settlers moved quickly into the study region from these points of entry and from Geelong, but also very purposefully from across the Murray - partly in response to explorer Thomas Mitchell's rapturous descriptions of his discovery of a veritable 'Australia Felix' offering extensive grasslands and open savannah landscapes for immediate use by land-hungry graziers.¹

Pattern and Process

This pastoral frontier was essentially the product of a host of independent decisions which owed little or nothing to government policy. These first settlers were indeed 'squatters' in the old English sense, for they neither sought nor enjoyed legal recognition - they had no 'security of tenure'. Apparent differences in land capability were defined by the observable results of their livestock farming practices rather than by the application of any sophisticated government expertise. The phenomenal rapidity of the advance of settlement is otherwise the most obvious characteristic of this stage, but broad processes may be distilled from the patterns represented in Map 14, showing the expansion of pastoral occupation from 1834. By 1843 the best

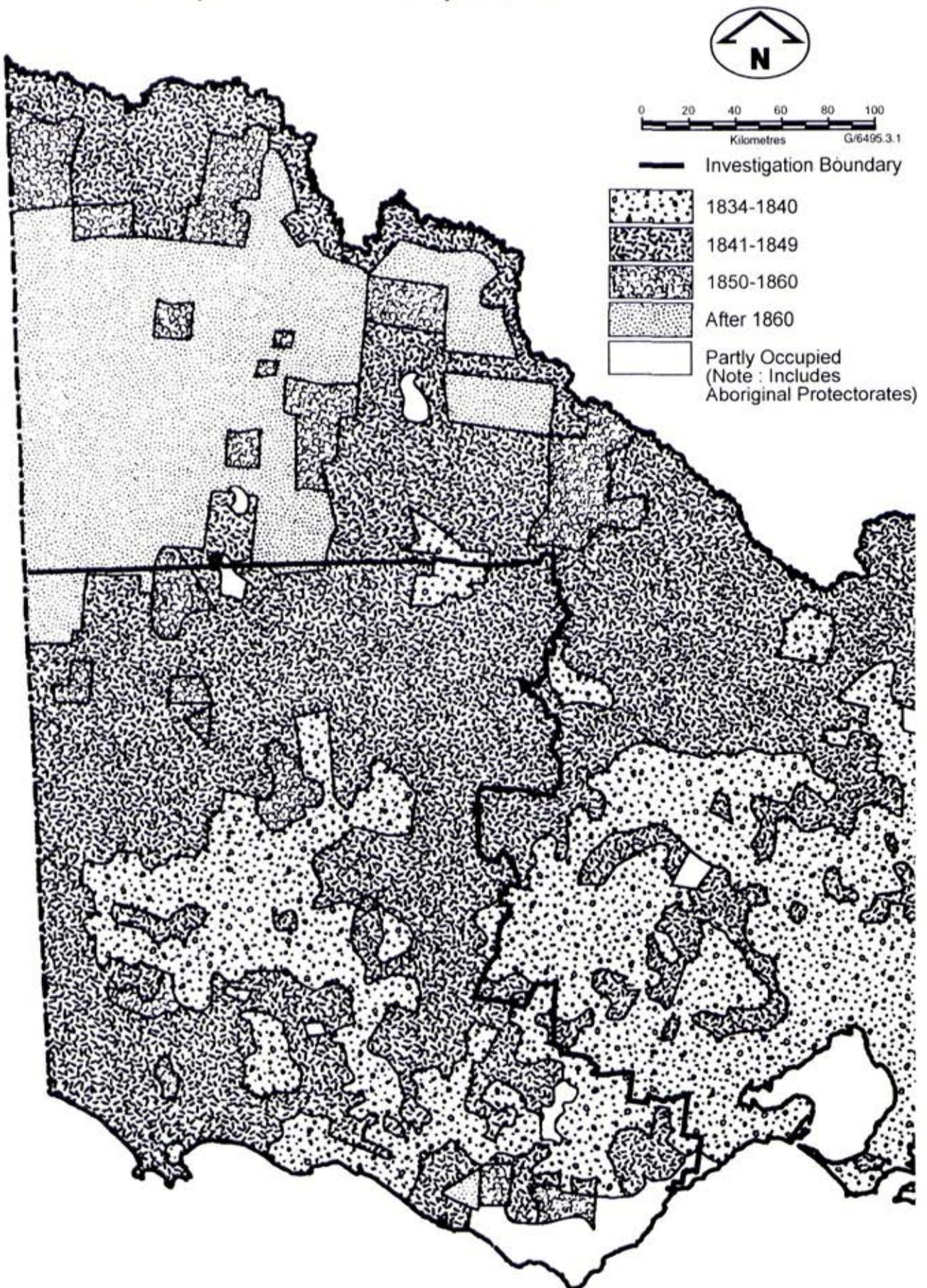
available natural grasses on the volcanic plains (geomorphic units 7.1 and 7.2) had been taken up and were at least lightly grazed; gaps in the patchy occupation of the public lands mainly indicate less accessible, heavily wooded, sandy, streamless and swampy localities. These included the more difficult and poorer country of the Otway Ranges (geomorphic unit 3.1), Wimmera and Mallee (geomorphic units 5 and 6) and south-west sands (8.1). But that same patchiness also reflects the speed of the invasion and the fact that it was usually the result of highly individualistic exercises - the advance was the very opposite of a 'concerted' or organised thrust into new territory.

Documentary evidence, though incomplete, gives some insight into the internal structure of this mode of occupation.² Firstly, the study region was almost entirely encompassed within two Squatting Districts, Portland Bay and the Wimmera, the latter then including the vast Mallee scrubland. Secondly, these subdivisions differed in terms of their physical environments and relative proximities to the initial nuclei and paths of expansion, and therefore in terms of the pace and texture of the occupation. The older district of Portland Bay experienced sharp rises in the territory occupied until the mid-1840s and then levelled out. After a few surges during the early and later 1840s, expansion in the Wimmera slowed during the 1850s. In terms of the sizes of operating units, runs were characteristically smaller in Portland Bay, but both Districts recorded declines in the average operating sizes over the main period of frontier expansion.

Regional and Intra-regional Appraisals

By painstaking trial and error, the squatting mode of occupation soon sketched out a number of the primary differences in land quality within the study region. That considerable achievement is made clear in any detailed cross-sections based on the only credible measure available to the pioneers, the proven capacity of the land to support commercial livestock farming. Reconstructions are best attempted, however, for the later 1840s after the first phase was finished, and before the gold-mining boom brought revolutionary transformations. The

MAP 14: The Expansion of Pastoral Occupation, from 1834



Source: Adapted from Powell (1970)

data processed in Map 15, showing regional assessments under the 1848 Orders in Council, were derived from official estimates of allegedly established 'carrying capacities' for each run reported. Runholders had an input and the published results include strongly argued revisions. On this (time and function-specific) assessment, the Portland Bay District received a very high rating - in fact it was outstanding, compared with all other Districts - and that is the most important finding of the exercise. Intricate local variations may be deceptive. If the map does not show strong correlations with land systems that may be because the contemporary pattern also incorporated the effects of the distinctive process of expansion already outlined. Similarly, several associated factors - for instance, duration and stability of occupation, financial resources, the demands of family circumstances, personal attitudes to frontiering in general and to life in Australia in particular - were probably as influential as real and perceived environmental considerations.³

It is vital to absorb these fundamental points. Squatting had been founded, after all, on an opportunistic system which still permitted only minimal security of tenure. Moreover, this 1848 appraisal related strictly to extensive livestock production, predominantly for the export wool trade, and certainly the map itself was not the outcome of a conscious desire to guide future land use planning. Nevertheless it does offer invaluable insights into a huge inventory which had no competitors and was soon to be subsumed into government policy frameworks. The companion map shows Wright's⁴ reconstruction of the results of the policy of land 'reservation' - that is, the withholding of land from occupation - introduced by Superintendent La Trobe and his senior land managers (Map 16). It provides a priceless benchmark in the history of the public lands.

Map 15 is entirely mute on the complex matter of micro-evaluations. Pastoral pioneering was not only characterised by extraordinary regional and local mobility. There were also frequent deployments of stock to declare the right of occupancy, and to test the potentials of every portion of a squatter's claim in a direct and practical fashion. And the squatters may be credited with establishing the elementary geography of another essential natural resource. Consistently, their choice of homestead sites favoured water frontage locations - necessarily so, in the driest of the inhabited continents - and

ultimately these preferences served to define the major and minor river systems in advance of any officially endorsed cartography. Despite local inaccuracies, Thomas Ham's early maps⁵ provide a splendid record of this remarkable collective contribution.

This recognition of the key significance of water resources can be traced in other aspects of the process of pastoral pioneering. For instance, while it is true that chronic uncertainty usually discouraged heavy investment in clearing, fencing, cultivation and buildings, many squatters were more or less obliged to take steps to safeguard or improve their natural water supplies. They did so by sinking wells and constructing dams, and by using inexpensive methods to deepen the beds of seasonal watercourses in an effort to ensure the benefit of chains of ponds over summer and autumn.⁶ La Trobe's reserve policy also emphasised the water factor (Map 16).

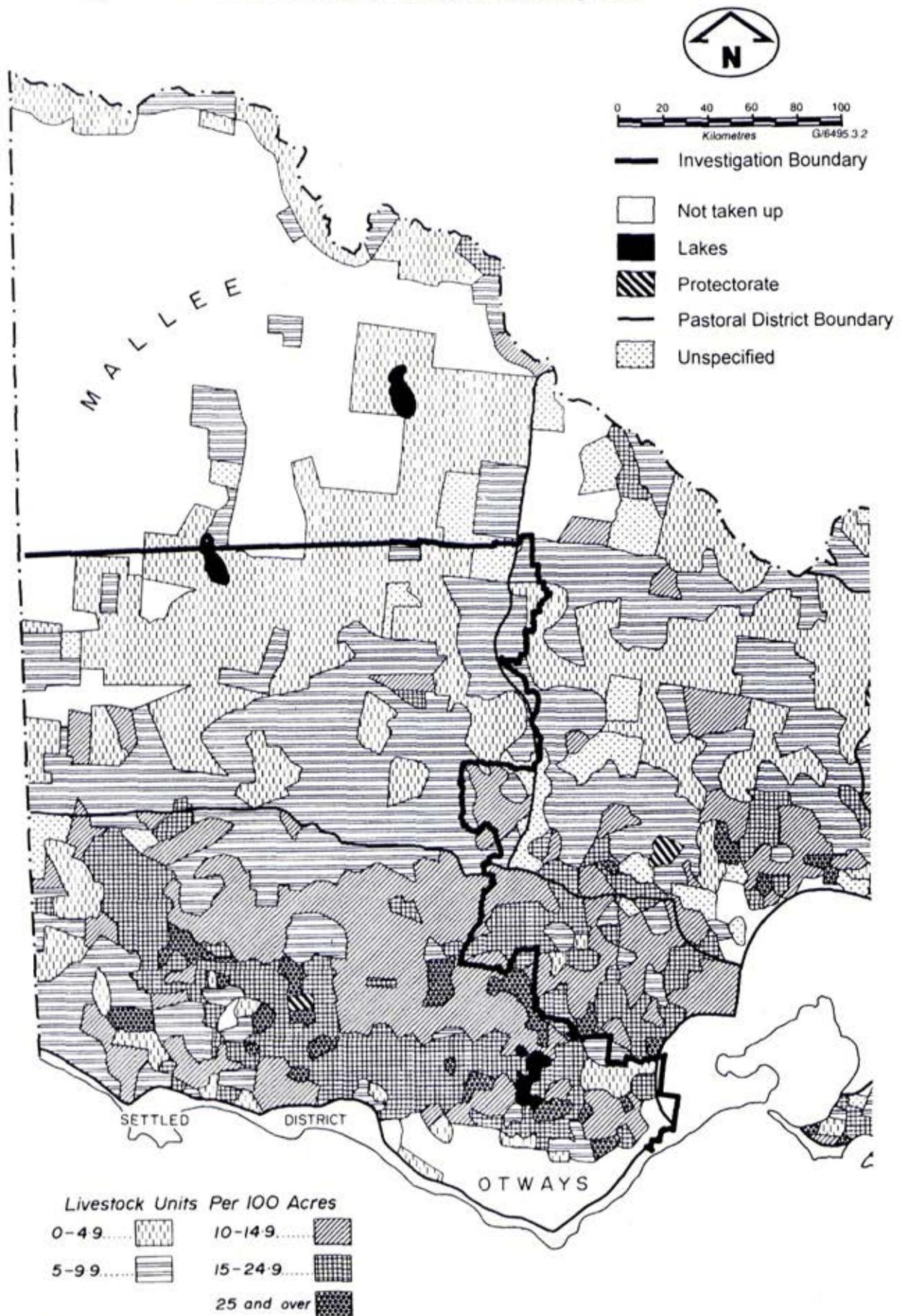


*Wheat harvest, near Horsham
Note horse-treadmill thresher*

Environmental Impacts

As in other parts of Australia, these interventions were not without hazard. The provision of more reliable water placed an increased grazing burden (from indigenous and introduced species) on a vegetation cover that was still little understood. Again, if some 'overgrazing' was inescapable in the trial-and-error circumstances of the frontier, the increased concentrations of stock around improved watering sites may have produced severe local aggravations, to the extent that long-term ecological damage was caused. The rapid introduction of millions of selective grazers equipped with cloven hooves meant that both the vegetation cover and the physical and chemical properties of the upper strata of local soils would be transformed. In the case of a number of the more vulnerable land systems the

MAP 15: Regional Assessments under the Orders in Council, 1848



Source: Powell (1970)

speed of change stunned the more perceptive newcomers. John G. Robertson's lament⁷ (see boxed quotation) now regularly offered as a classic in contemporary observation, described the deterioration over much of the south-west, and especially on the Casterton-Merino Hills and Dundas Tablelands (referring to geomorphic units 2.4 and 2.3).

**John G. Robertson's letter to Lt.-Governor
C.J. La Trobe, 26 September 1853**

...the long deep-rooted grasses that held our strong clay hill together have died out; the ground is now exposed to the sun, and it has cracked in all directions, and the clay hills are slipping in all directions; also the sides of precipitous creeks - long slips taking trees and all with them A rather strange thing is going on now. One day all the creeks and little watercourses were covered with a large tussocky grass, with other grasses and plants, to the middle of every watercourse but the Glenelg and Wannon, and in many places of these rivers; now that the only soil is getting trodden hard with stock, springs of salt water are bursting out in every hollow or watercourse, and as it trickles down the watercourses in summer, the strong tussocky grasses die before it with all others. The clay is left perfectly bare in summer. The strong clay cracks; the winter rain washes out the clay; now mostly every little gully has a deep rut; when the rain falls it runs off the hard ground, rushes down these ruts, runs into the larger creeks, and is carrying earth, trees and all before it ...

None of this jettisons the assumption that shaky tenure provided a measure of environmental protection, but it cautions against any casual reliance on that notion. Similarly, most squatters cultivated fragments of their runs to furnish basic rations for their families, employees and working livestock, and some tried to grow supplementary fodder. Those inclinations would be encouraged as small areas of freehold were legitimately purchased. Undoubtedly, too, there were experiments with introduced British and European grasses, but again the changes were more widespread in the 1850s and 1860s when freeholding proliferated.

During the same period, pastoralists were listed among Victoria's prominent 'acclimatisers' - inevitably, by virtue of their investment in a commercial enterprise based on introductions,

and also by an uncommon financial capacity to indulge in British tastes and sensitivities. It is reasonably argued that they did more than most Victorians to establish the fox, deer and rabbit, yet they may have received more than their share of criticism on each of these counts. Even their interest in 'game' shooting may have been less significant, ultimately, than the habitat destruction launched by parliamentarians who wanted to create new frontiers for small-scale farmers. On the other hand, the huge extent of many properties meant that managers must have found it impossible to monitor, let alone eradicate, the growing influx of pests and weeds.

4.2 Miners, Farmers and Whistle-blowers, to 1890

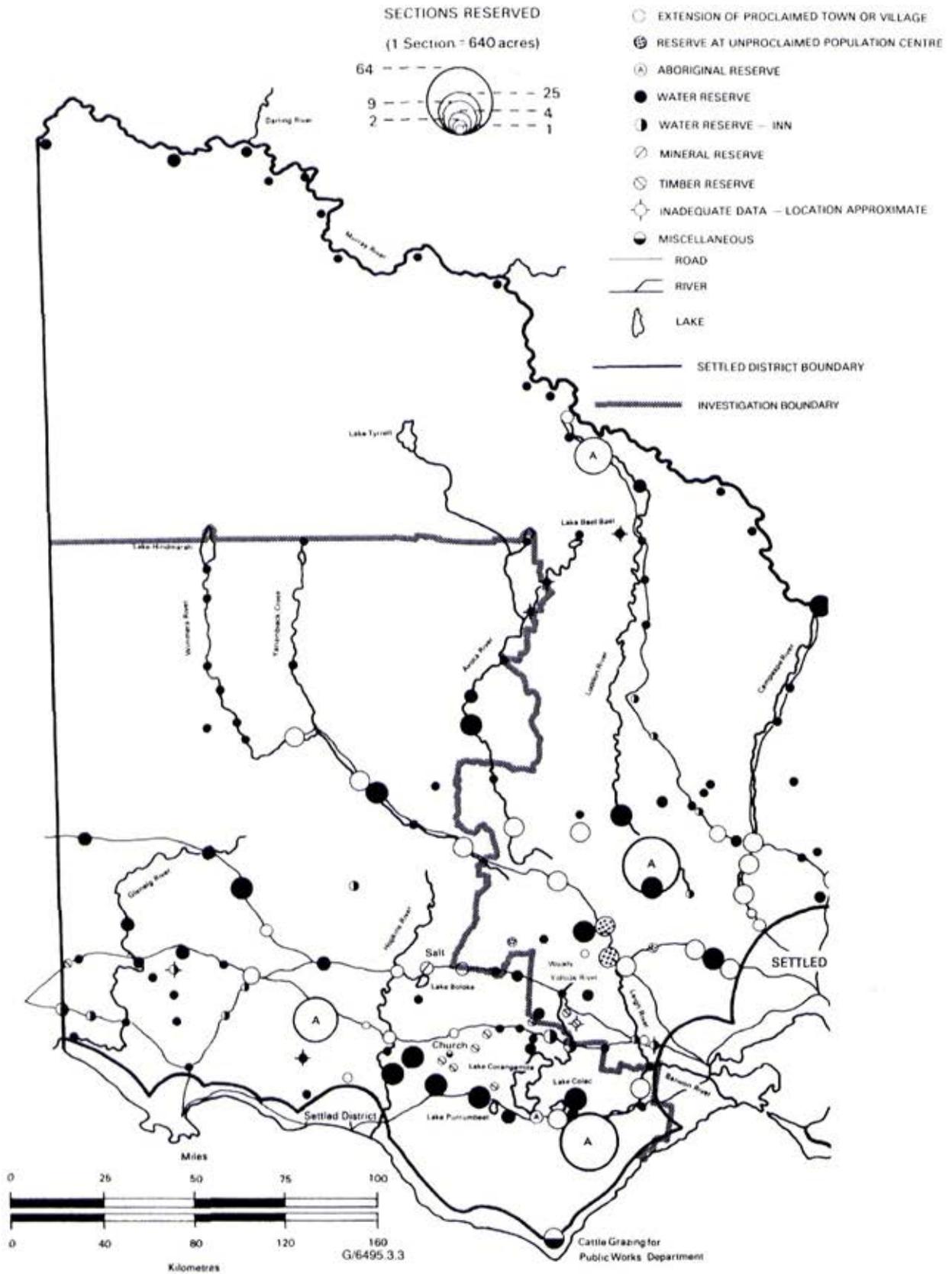
Positives and Negatives

It has been well acknowledged that Victoria's goldminers played a central role in Australia's social and political history after the early 1850s, but their place in an equally complex environmental history also merits close inspection. Their industry's persistent demands for water publicised the need for new legislation to safeguard the public interest from private opportunism, and that positive contribution is not fully appreciated. Nor are the large negatives: a voracious appetite for timber; reckless clearing of hillsides and valley slopes which proved susceptible to erosion; disruptions of streamflows and perhaps some accumulating effects on local water tables.

Recent studies have suggested specific connections between former goldmining activities and the incidence of savage 'tunnel gulying' and other forms of water erosion, notably in the dissected uplands, but the allocation of blame is still unclear. For example, after some political manoeuvring, struggling miners were permitted to farm undersized blocks to supplement their precarious incomes, and the combination of marginal mining and marginal farming may well have triggered severe erosion on sloping land with sodic duplex soils. There are many examples throughout the State. Within the study region, the experiences of disturbed areas in the Ararat - Stawell district (geomorphic unit 2.1 dissected uplands) are not unrelated to those noted by the squatter J.G. Robertson for the south-west.^{8,9,10}

Mining certainly injected a more radical spirit into Victorian politics and encouraged the

MAP 16: Reservations made by 1853 under the Orders in Council of 1848



Source: From Wright (1989). Adapted by courtesy of Dr R. Wright. Note that the base map is Thomas Ham's 1851 Squatting Map of Victoria.

'unlocking' of the public lands for 'Selection' by small-scale settlers. A series of *Selection Acts*, each purportedly improving on the previous effort, promoted the ideal of the creation of a new rural society in which the squatters would have to give way to an 'industrious yeomanry' of freeholders. In the rhetoric of the day the new frontier type would concentrate honourably on supporting a family by diligently cultivating a small block and dutifully bequeathing it, like a cherished heirloom.

A 'Little England' in Western Victoria

High-toned idealism was so patently incongruous with local realities that it now seems remarkable that it exercised such abiding influence on the 'alienation' of the public lands - that is, their passing into private ownership and control. At first, the legislation attempted to base most of the new pioneers in the Western District, which had apparently received the seal of approval after the first great European appraisals - no matter that the best of the more practical evaluations had been made by and for extensive livestock enterprises, and did not address the issue of intensive farming run by small-scale operators. A succession of Victorian governments seemed seduced by the image of a coming 'Little England in Australia' conjured by settlement theorists in imperialist circles. Colonial administrators had inherited and elaborated upon attractive survey frameworks designed to direct the pace and pattern of settlement expansion. The Victorian blueprints set out a bold chequerboarded hierarchy: its progressively larger internal components were the allotment, section, parish and county. Although there was clearly some borrowing from ancient English usage, in the antipodean setting these divisions did not accrue administrative or political status.

In fact, the system was another New World mongrel. There was a definite regard for uniformity, speed of implementation and cost minimisation, and in these respects the current United States 'Rectangular Grid' system appealed. The Victorian preference for even-sized counties and parishes also broadly reproduced the American format, though not its full terminology. Yet as we have seen, the local surveyors did not have the luxury of a clean slate. Unavoidably, some of their parish plans were superimposed on landscapes that had already been broadly fashioned by the actions of pastoralists, and it made good sense to incorporate that prior experience. Thus, a homestead site and its adjacent cultivation

paddock might become the core of a newly surveyed township at the heart of a parish or a group of parishes, and where the crude tracks radiating from the homestead were also adapted, they might be preserved as surveyed roads - cutting across the fresh straight lines which were brusquely orientated to the chief cardinal points - for example, Merino.¹

Parish plans were not always so rigidly organised as the ideal demanded. Detailed alignments in the far south-west of the region retain the chequerboard frame, but because surveyors used the variable magnetic north instead of 'true' north, simple projections of major roads and boundary lines between individual parishes pick up as many subtle redirections as continuities. Another interesting local variant was the insertion of 'parkland' townships, or at least of some features borrowed from that pleasing format, which had been best represented in the Adelaide model and was repeatedly reproduced during extensions of South Australia's settlement frontiers. Mortlake offered a good example, though its arrested growth meant that the formal plan is now most evident from the air. A number of other townships merely sampled from the model - for instance, the separation of commercial cores and suburban allotments by intervening reserves is shown in early surveys of Warrnambool. But Victorian imitations were less numerous than the South Australian prototypes¹¹ and far less sacrosanct. In a sense, neglect or want of development was the best preservative.

Squatters Versus Selectors

Lands Minister Gavan Duffy's highly publicised map of the ten million acres thrown open for selection maintained the government's preoccupation with the public lands of the Western District. But many of the squatters survived the siege of the 1860s mainly by the skilled use of wallets and social and political influence, aided by flaws in the legislation and an understandable reluctance on the part of the target population to enter the land lottery.¹²¹ Judiciously purchasing key sectors of their runs, partly by hiring others to 'dummy' for them (that is, as bogus selectors), the squatters became freeholding pastoralists and proceeded to consolidate their gains by investing in stock, landscaping and building improvements, and the letting of small tenancies. The 1871 census recorded that approximately 13 per cent of the occupied land in the Western District taken as a whole was rented from private individuals, and

TABLE 4.1: Characteristics of Rural Holdings, 1871

	Av. size (ha)	% Occupied area cultivated	% Cultivators	Av. cultivated area (ha)
Western	235	3.3	70.0	5.2
Wimmera	2088	0.33	75.0	9.2

Note: Estimated livestock totals for 1871 from the same source: Western, 3.3 million sheep, 208 000 cattle; Wimmera, 2.2 million sheep, 19 000 cattle. Changes in the statistical base permit only broad comparisons between the years selected for the tabulations used in this chapter.

Source: Census of Victoria, 1871, *Victorian Parliamentary Papers* 1872 (2), No.7.

that the proportion was unusually high in Grenville, Hampden, Ripon and Villiers counties. So the government's Western District policy had collapsed, notoriously.

Often, well-intentioned selectors sold to neighbours, including the incumbent pastoralists, before moving to begin again. Indeed there was brisk business in land transfers - if land could not yet be envisaged as an heirloom, it was patently a marketable commodity which might be used to prepare for a more profitable future in other locations. Hamilton, with its unusually active lands office and high quality newspaper, was frequently centre-stage for these transactions, and it strengthened its reputation as the hub of a premier wool-growing locality. The surveyors' blueprints were condemned throughout the west as paper tigers; triumphant pastoralists were even enclosing hundreds of surveyed 'roads'.

Landholding Strategies and 'Family Farming'

Fresh legislation came into force in the 1870s. It provided opportunities throughout Victoria, including the newly opened Wimmera. Demands on pioneer selectors were gradually relaxed over the next decade: for instance, in practice if not in the letter of the law the regulations specifying mandatory cultivation and residence were somewhat eased. Yet far too little was done to provide the kinds of assistance needed to pioneer the expansive Wimmera plains - generous credit facilities, research and marketing expertise, transport improvements and so on.^{1,13}

A complex mixture of financial, political and social considerations influenced the very rapidly evolving context within which prospective selectors had to make their decisions. It is difficult, therefore, to offer confident

Characteristics of Selections

Inspections have been made of the surviving manuscript evidence for a sample of the initial application forms and related official records for 1327 pioneer selections.¹ They identified the following size characteristics, which have been correlated broadly with land systems¹⁴ for the purposes of this report. For the volcanic and coastal plains between Belfast (Port Fairy) and Portland (geomorphic units 7.1 - land systems Pvf7₁, Pv7₁; 7.2 - Pv7₁; 8.1 - PCc7₁, Pfc17; 8.2 - Ff7₂, Pfc7₂, Pfc7₃; 8.5 - PCc7₁, Pf7₄), craftsmen and labourers took up an average of 30-32 ha each, whereas the blocks of those registered as farmers and carriers averaged 49-55 ha. In a variety of small pockets of selection on the volcanic plains (geomorphic units 7.1 - land systems Pf6₁, Pf6₂, Pf6₃, Pvf7, Pvf7₁, Pvf7₂; 7.2 - Pf6₁, Pf6₂, Pf6₃, Pvf7₁; 8.2 - Pf6₃, PGf7, Pv7₁), the averages were smaller again (22-51 ha, mostly below 32). On and around the Ararat - Stawell goldfields (sampled between and around those townships in various land systems within geomorphic unit 2.1 dissected uplands) miners selected around 34 ha each, whereas farmers, labourers, craftsmen and carriers took up approximately 12-20 ha more. In patches of the southern fringes of the western tablelands below Casterton and Coleraine (geomorphic units 2.4 - land systems Gf₆, Gs₆, Pf₆; 7.1 - Pvf7₁; 8.1 - Gf7₁, Gf7₂, Pf6₁, Pvf6₃, Pvf6₄), averages ranged from 38 to 110 ha, with farmers taking the largest blocks. In the more comprehensive Wimmera samples on the clay plains around Horsham and Mallee plains to the west (geomorphic units 6.1 - land systems EPRc₄, IPRc₄, Pc4, Pc5, Pf3₁, Pf4, Pf4₁, Pf4₂, Pf5, Pf5₂, PRf₃, PRf₄, PRf₅; 5.1 - PWRf₃, PWRf₄), the approximate range was 80-120 ha.

observations on the relationships between the characteristics of initial or *pioneer* holdings and the land systems with which they were associated. More detailed local studies would disclose the extent to which those relationships became sharper after a number of years of farming operations. The environmental, size and locational data noted in the adjoining box were not originally researched with land systems in mind, but may encourage those further studies. Intriguingly, the samples suggest that, despite repeated complaints against government policies, many original selections were a good deal smaller, on average, than a supposedly restrictive law allowed. Furthermore that generalisation is more or less applicable regardless of the selectors' stated occupations, a coarse categorisation which may be accepted as some indicator of financial status and prior experience on the land. Yet the data do not address the sociological and economic workings of intricate landholding strategies designed to improve on government policy - especially in the Wimmera, to which we now turn.

Cast again as 'Gamblers by Act of Parliament', the selectors showed considerable ingenuity in developing intricate networks of intra-family and inter-family co-operation which had the effect of producing larger and better serviced operating units. This was the foundation of an Australian version of 'family farming'. Rather than struggling on discrete single blocks brothers, fathers and sons, cousins, uncles and nephews, even prospective husbands and wives, took up land as and where they could in whatever close proximity to one another. Inter- and intra-family transfers were part and parcel of this search for viability. While the system was seldom tightly formalised, it brought a degree of interdependency which extended to some pooling of labour, equipment, finances and stock. Individuals enjoying such support were generally more likely to endure the hazards of frontiers than isolated homesteaders. Ethnic and religious cohesiveness also fostered these pivotal co-operative instincts. The finest example in the region may be the experience of the German Lutheran groups; they had migrated from South Australia and remained prominent, notably in the Horsham-Murtoa district but also in other pockets.^{1,13}

At any time during the height of pioneering activity (say, in the later 1870s and 1880s), official records would have shown a surprising spectrum of landholding patterns that was at

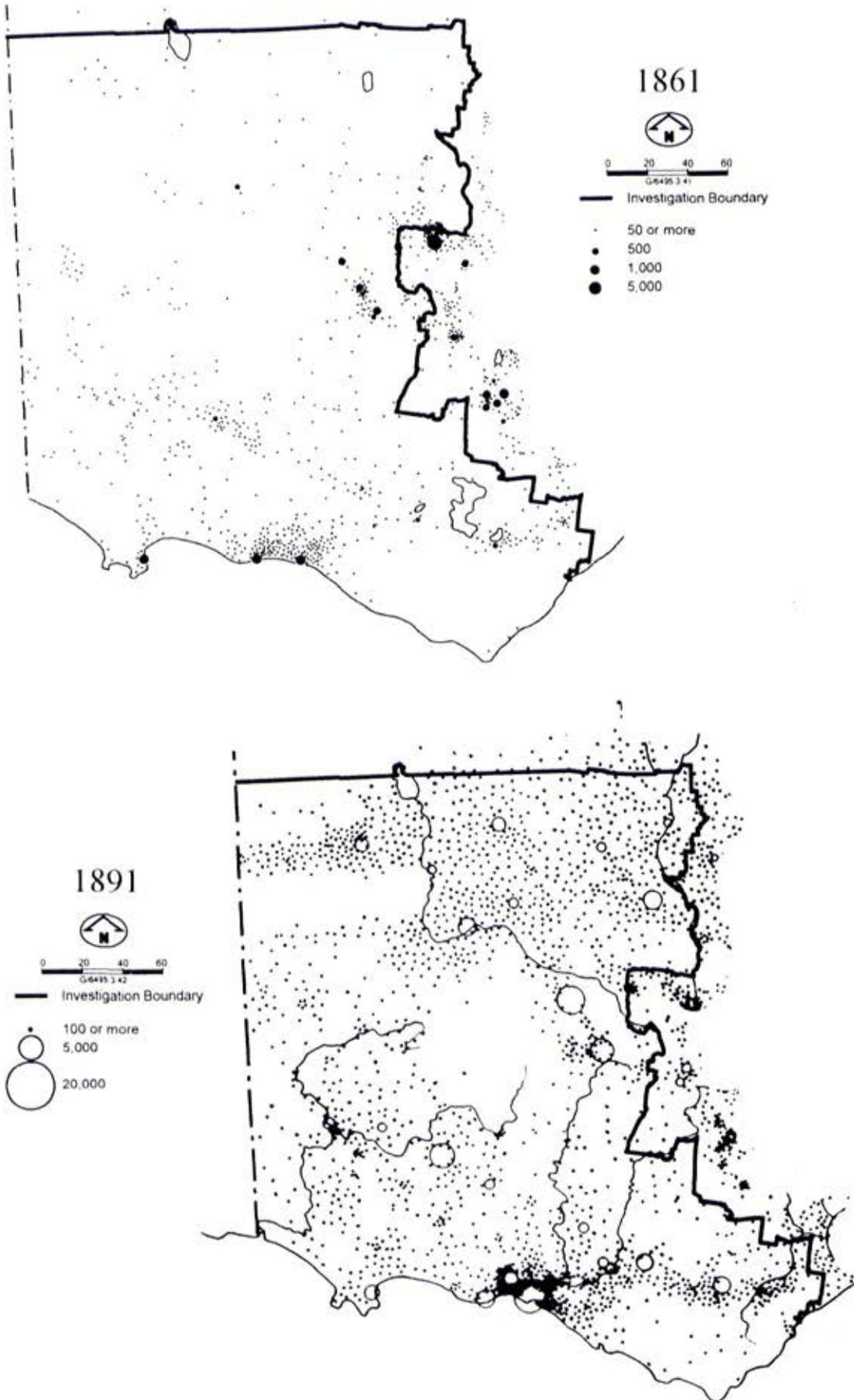
odds with the uniformity promised in the official designs. In addition to the declared maximum of 320 acres, the common range extended from one-third to more than twice that standard. Careful checking of the names inserted on early parish allotments discloses the re-sorting function of family-based co-operative endeavour. As in the Western District, the government openly admitted failure but its data were usually wide of the mark. The pioneers had sought their own solutions. 'Selection' implied choice, after all, and like the squatters who preceded them the new farmers had opted for local and regional mobility combined with a determination to overcome administrative and legalistic structures.

These comments hint at the economic, social, and psychological aspects of family farming, but the environmental implications were no less significant. It is perfectly feasible to argue that two adjacent small properties, essentially identical in size, soils, topography, water supplies and climatic characteristics, might have experienced completely contrasting environmental impacts according to their locations on the life-paths of the landholders. This hypothetical situation would be deeply influenced by the complex web of decision-making and the intense mobility sketched above. For example, one of the farms might be managed far more conservatively than its neighbour because it was considered a destination, whereas the other might be more rudely handled so as to finance a quick departure for a different site - a move from the old frontier of the Western District to the Wimmera, perhaps, or simply a change of scene within the latter.

Regional Change and Environmental Impact

The litany of failings - curiously sieve-like legislation, all the charges of high- and low-level corruption - can drown out the definite achievements of this tumultuous period. The changing population distributions from the 1861 and 1891 censuses, shown in Map 17, largely resulted from the migrations of pioneer families, the associated geographical shift in wheat-farming, and the emergence of new landscapes of wheat-sheep farming in the Wimmera. Extravagant plans were mooted for selection in the Otway Forests, especially from enthusiasts in the small townships of Colac and Cobden, but equally committed views to the contrary emanated from the same locations. Farmers and graziers did make a few minor

MAP 17: Distribution of Population 1861 and 1891, from the Censuses of those Years



Source: After Powell (1970, 1982).

incursions into the forests, and it was reported that timber interests associated with the mining industry had become quite active.

These developments owed a good deal to a continuing capacity for simple technological innovation - new methods for clearing and ploughing, drought-evading strains of wheat - which augmented the social adaptations noted in our last section. Somewhat inflated claims are made for the pioneering role of government-sponsored railway construction; more often than not the rail followed in the wake of the first settlers. Undoubtedly, however, all of these technical improvements had a bearing on levels of productivity and affected the density and complexity of rural settlement distributions.

Gradually, in the midst of this busy experimentation, more credence was given to those who had queried the pioneers' methods, and had had the temerity to challenge the ruling development imperative which they believed was responsible for a blinkered approach to resource appraisal and environmental management. The west maintained its visibility throughout the ensuing debates. Bardwell's¹⁵ survey describes how the study region supplied non-metropolitan Victoria's first significant 'park' reservation, Tower Hill, in 1866. Elsewhere, responsibility for the articulation of a conservation argument mainly rested with eminent scientists and technologists in the public service. Baron Sir Ferdinand von Mueller (1825-96), Victoria's Government Botanist, was highly regarded in the west for applied research focusing on agricultural pests and diseases, the safe commercial use of native forests, and the introduction of marram grass to control the movement of coastal dunes. Mueller and his successor in Melbourne's Royal Botanic Gardens, William Guilfoyle, also advised on the planning of botanical gardens in country districts. In an astonishingly productive career the engagingly eccentric Baron also found time to protest against forest exploitation, simultaneously anticipating the aesthetic and ecological preoccupations of late twentieth century conservationists.¹⁶

He found allies in the most unlikely places - not least in the headquarters of the very Lands Department which had been charged with overseeing the great adventure of settlement expansion. As Wright⁴ has shown so well, Clement Hodgkinson (1818-93), Assistant Commissioner of Crown Lands and Survey, built impressively on the work of earlier land managers, particularly Surveyors-General

Robert Hoddle and Andrew Clarke, Port Phillip Superintendent C.J. La Trobe and a number of Lands Ministers.

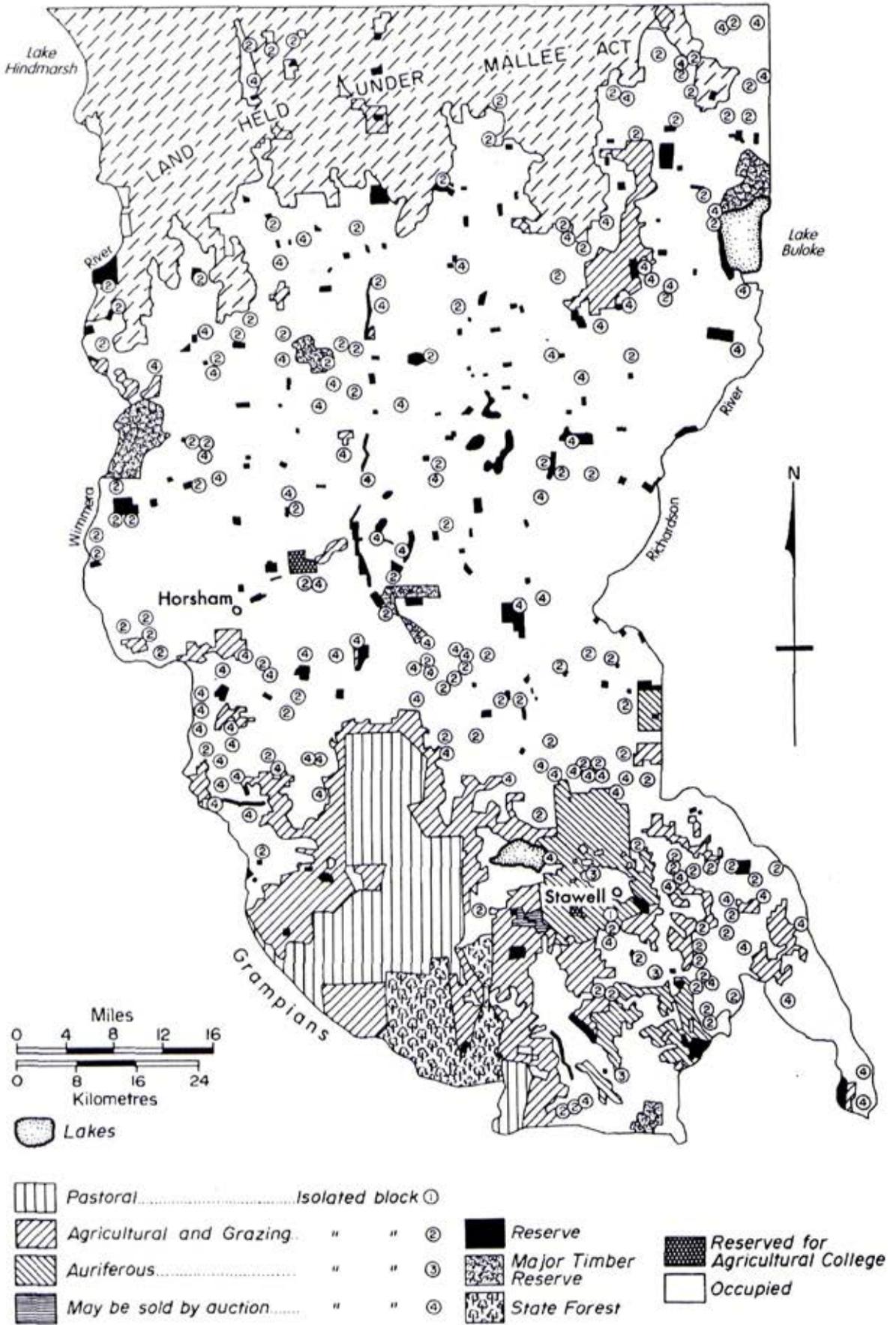
Hodgkinson's influence on the Victorian landscape was arguably more comprehensive and more durable than the efforts of any of these better-known figures. He inherited a nascent reserve system, and through great personal application during a frenzied burst of frontier expansion ensured that consideration was given to present and future 'public interest'. Parishes throughout the study region were studded with water, timber, recreational, mineral and other reserves precisely on his authoritative if occasionally idiosyncratic recommendation. With Mueller and a few other luminaries, he successfully lobbied for the proclamation of State forest reserves, a move which mainly reflected contemporary concerns about the depletion of timber. But leading advocates also emphasised the ecological importance of retaining tree cover in the Otway forests and elsewhere for 'climatic' purposes and for the maintenance of water supply and quality, noting *en route* the need for greatly improved supervision under qualified personnel.

By the mid-1880s, the hallowed status of the small 'yeoman' freehold seemed jeopardised and the leasing of larger blocks was considered quite appropriate for the Mallee fringe and other difficult country. The revisionist spirit also encouraged plans for an investigative mapping of each county, paying special attention to the classification of the remaining public lands and plotting the various types of reserves; Map 18, showing the County of Borung, is an adaptation of one of these large maps. This Victoria-wide task carried over into the 1890s, setting a number of useful benchmarks for comparisons with the present day. The same trend questioned the monolithic rule of the Lands Department, suggesting devolutions of responsibilities to more 'expert' bodies with jurisdiction over the management of other basic natural resources.

4.3 'Closer Settlement', 1890-1950

In spite of bizarre lapses in the Selection legislation, the resilient yeoman imagery continued to work its magic on the minds of populist politicians. Portrayals of 'vast empty spaces' repeatedly challenged the moral right of a comparatively small society to occupy an entire continent. Of course there were other motivations. Unlike Homesteading and its

MAP 18: Land Classification in the County of Borung, 1886



Source: Powell (1970).

variants in the United States, which allowed prodigious areas of public lands to pass into private hands for nominal sums, Australia's colonial governments had not been prepared to relinquish an unequalled source of funds for their infant treasuries. As one of the better-known political clichés put it, the public lands could not be 'given away for a song'. And yet, according to some reckonings in the late nineteenth century, that is precisely what had happened in Western Victoria. These claims were frequently aired in the 1890s, as urban and rural communities tried to come to terms with recurrent droughts and a deep economic depression.

A commentary in *The Age* (23 June 1893) exposed the impotence of the current land tax legislation designed to 'burst up' the great estates. It had done nothing of the sort, and indeed aggregation was continuing. The newspaper's detailed list showed that fewer than 150 landholders controlled 2.7 million acres (about 1.1 million ha) between them. The study region not only had the dubious distinction of providing 63 of Victoria's larger proprietors - those holding more than 20 000 acres - but that same group included 16 with more than 50 000 acres (over 20 000 ha) each. In fact the average size of large western properties with a minimum of 10 000 acres (over 4000 ha) was 43 000 acres (roughly 17 400 ha), but that is slightly overblown by the inclusion of a few extreme cases and the listing of properties extending over more than one district: 34 ranged from 30 000 to 70 000 acres (12 000 to 28 000 ha).

Aggregation in the West

Our generation has become properly sensitised to the 'dispossession' of indigenous Australians, and that may equip us to appreciate the rising level of anxiety in non-metropolitan Victoria towards the end of the century. It was protested that the very birthright of ordinary colonists - what the old reformers had called 'the patrimony of the people' - had passed into the hands of a small number of families because of the chronic weaknesses in government policy and administration. Young people were leaving to try their luck in other parts of Australia. According to the 1891 census, properties exceeding 5000 acres (over 2400 ha) comprised only about one per cent of the total number of rural properties (of over one acre in extent), yet

they controlled 45 per cent of the total occupied area. And the wheel had turned full circle: nowhere was this scandal more vexatious than in the west, where government after government had disappointed since the first big plans to knock the squatters off their perches in the 1860s.^{17,18}

A 'Greater Western District'

Such 'revelations' as that of the *Melbourne Age* (see box left) merely gave statistical expression to the complaints of a generation of western residents. Transport had improved, dairying was becoming quite successful, and agricultural research and education had taken off at last (with the establishment of Longerenong College near Horsham in 1889). And since several of the larger owners had been taking on tenant farmers, there seemed to be a growing argument for the government to take the cue - to intervene with a new plan for the promotion of small-scale farming.¹⁹ As the depression lifted, the emergence of ambitious Liberal administrations promised a commitment to a bold revision. Over the first two decades of the present century, nationalist and imperialist inclinations bolstered the idea of a greatly revived (and indisputably white) rural Australia enjoying special trading privileges within a rejuvenated British Empire. In this context, Victoria's land administrators were advised to concentrate on 'Closer Settlement'. State and local government representatives were attracted by the prospects of federal and British funding, and roguish Premier Tommy Bent floated a 'Greater Western District' project (see box below).

Upon increased population will depend the revenue and security of our national debt. The government of 15 millions of people would add very little to the present cost of administration... The sturdy yeomanry, which has been the backbone of England in every time of stress in the centuries that have gone, is likely, in an agricultural state like Victoria, to be the staple portion of our population. It is, therefore, essential that the difficulty which at present exists in obtaining suitable land for cultivation must be removed, and the anxiety of our growing rural population in this direction, met by easy methods of establishing farms... (*Victorian Year Book*, 1903)

Although that daring scheme was aborted, it helped to stimulate further speculative activity

TABLE 4.2: Characteristics of Rural Holdings, 1901

	Av. size (ha)	% total area per land use category			
		Agricultural	Sown grasses	Natural grasses	Unproductive
Western	257	2.1	3.1	93.1	1.7
Wimmera	338	18.2	0.3	76.0	5.6

Notes:

1. In the contemporary statistical records used for each of the tables in this chapter the data refer to all holdings greater than one acre (0.405 ha) in extent, which is an unsatisfactory standard; 'Agricultural' was usually considered synonymous with 'farming' and implied reliance on comparatively small scale operations including cultivation; 'Unproductive' normally included unused land; and the data have been slightly rounded for convenient representation. These calculations should therefore be accepted with caution; furthermore, changing bases do not permit direct comparisons between the tables.

2. Livestock totals for 1901: Western statistical district, 4.3 million sheep, 316 000 cattle; Wimmera, 1.9 million sheep, 58 000 cattle (*Victorian Parliamentary Papers*, 1902 (2), No. 3).

Source : Victorian Year Book, 1903.

at all social levels across the region. Astute financial managers saw a chance to unburden themselves and their clients of oversized and demanding properties, but they were not alone; few western residents were immune to the recurrent fever of 'land business'. Much of the wider Victorian effort was directed at irrigation farming, principally in the northern and north-western regions, but the study region featured prominently in the repurchase and subdivision of great estates for dry farming.

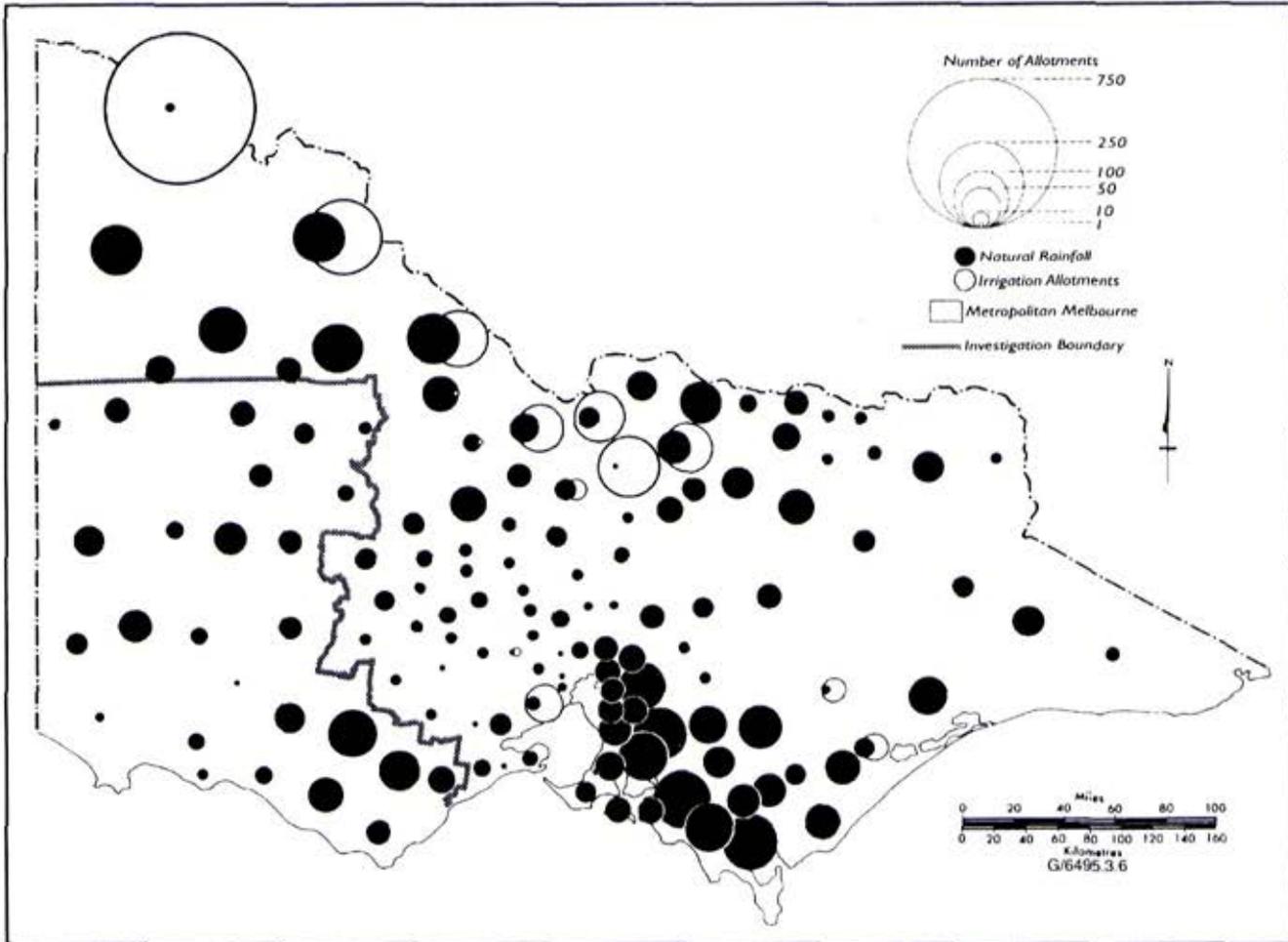
A total area of 144 540 acres (58 493 ha), involving 20 purchases, had been acquired by the Government for resubdivision in the west by the end of June, 1917. That was only the equivalent of one of the west's larger squatting runs in the 1840s, but in each case there had been a very noticeable increase in the resident population and in all the new subdivisions accommodated approximately 2500 people. Closer Settlement affected most parts of the State and there was really no return to a concentration on the Western District itself. Even so, several of the earliest experiments were located in the study region (e.g. 'Wando Vale' and 'Walmer', both purchased in 1900, and 'Eurack', bought in the following year) and a few of them were proudly cited in the Victorian parliament as the finest exemplars of an exciting new approach. In truth, botches were common and in the interwar period many settlers claimed that they would have done better to have dealt directly with private owners. While the authorities tried rather too hard to deflect the criticism, it is fair to say that a number of the purchases were as much the

product of inherently local blends of naive enthusiasm and instinctual speculation, mixed with thoroughly honest anxieties to ensure decent long-term living standards. Country town communities were sometimes extraordinarily active, even assertive, lobbyists. Great vigour was shown at times in Casterton, Coleraine and Hamilton, but most western towns had some involvement in the choice and subsequent progress of neighbouring estates.

Soldier Settlement

Orthodox Closer Settlement came to be overshadowed during World War I by the arrangements made for returned service personnel seeking land of their own. This 'Soldier Settlement' is nonetheless best seen as a special type of Closer Settlement with a number of the characteristics, including many of the faults, of the existing project. Yeoman symbolism was back with a vengeance. Urged on by its patriotic associations, each municipality seemed anxious to create distinctly local rewards for its own returning sons - no matter that at least two generations of hard experience had amply demonstrated the inadvisability of small-scale farming in precisely those areas. In an atmosphere charged with deep emotion, the need for speedy resolutions seemed to over-ride all other considerations. Certainly, far too little attention was paid to the utility of prior land classification and the availability of improved environmental knowledge in lay and scientific circles.²⁰ Local demand and local political

MAP 19: Soldier Settlement Allotments in 1927



Source: Powell (1981, 1991)

influence were patently the strongest controls in the distribution of soldiers' allotments, whether they were offered as individual blocks or in still more new estates on repurchased property or Crown Land. In the process, even the Otway Forests accommodated a small but noticeable expansion of mixed farming and dairying. Map 19 shows the State-wide distribution of Soldier Settlement allotments in 1927.

If the 'debt of honour' was to be repaid with this geography of hope, the currency was counterfeit. Over 11 000 returned men were assisted in the main Victorian scheme, initiated in wartime conditions; 17 per cent had left their allotments by 1929, and many of those remaining were battling hard. In 1942 more than £19 million of debt was written off from the accounts of Victoria's soldier settlers.^{21, 22} It was protested that public land had been squandered once more and that the literal going-over of old ground had produced minimal satisfaction.

Progress to 1930

A colder view would find that these Victorian results were arithmetically superior to the experiences of other states, and that the episode probably served as another practical test of marginal localities. On the latter count the evidence for the study area is equivocal. If genuine positives are to be found they are in the lessons bequeathed to the administrators of the more successful scheme for the settlement of veterans of World War 2. In more general terms, there was a significant reduction in the average size of Western District holdings over the three decades to 1930, but that was balanced by an increase in the average for the Wimmera (Table 4.3). The various types of Closer Settlement may have contributed to that trend in the south, but it was also the product of more powerful tendencies towards intensification, especially in mixed farming, dairying and meat production, in older-settled and better-favoured country.

TABLE 4.3: Characteristics of Rural Holdings, 1930

	Av. size (ha)	% total area per land use category			
		Agricultural	Sown grasses	Natural grasses	Unproductive
Western	230	7.0	5.3	78.5	9.2
Wimmera	400	37.0	0.32	54.2	8.6

Note: Livestock totals: Western statistical district, 5.2 million sheep, 354 000 cattle; Wimmera, 2.3 million sheep, 33 000 cattle.

Source: Victorian Year Book, 1930-31.

Interwar Conservationism

In the interwar years a brand of 'wise-use' conservationism, for the most part championed by scientists and technologists in the Victorian public service, marginally loosened the grip of the development imperative. The example of American federal investments in resource management, especially the planning work of F.D. Roosevelt's 'New Deal' administration, was avidly scrutinised for useful leads.^{6,23} Victoria's water and forest resources were now supervised by trained 'experts' who did not have to kow-tow to an all-conquering Lands Department. Water managers understood and promoted the importance of recognising the superiority of river basin units in regional planning, a more sophisticated network of forest reserves was created, and supplementations to the scattered distribution of reserves hinted at the possibility of a nascent system which recognised the need for wildlife sanctuaries in the west. Map 20 locates Tower Hill National Park, and the game sanctuaries and acclimatisation reserves present in 1916; reserved forest areas in 1928 are indicated on Map 21.

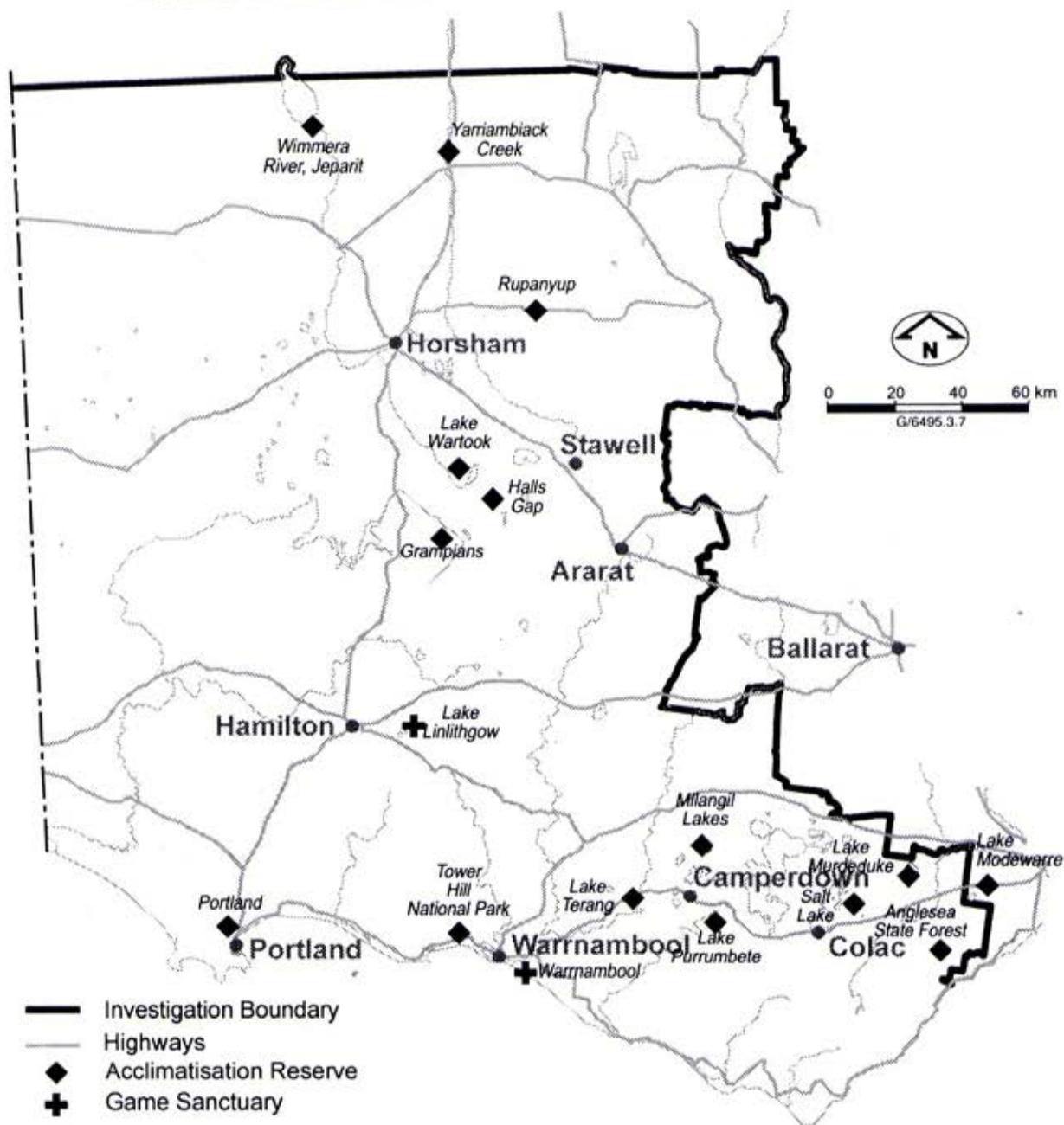
Major episodes of soil and water erosion captured wide publicity and the relevant agencies co-operated in recommending forceful government intervention. At the end of the 1930s an Erosion Investigation Committee produced an insightful report which was promptly shelved, and the Victorian Institute of Surveyors, following the lead of one of its councillors, G.T. Thompson, convened inter-departmental symposia on the same question. At first the scientists and technologists were not able to rouse their political masters, but the State Rivers and Water Supply Commission (SRWSC) had a few local successes and the Wimmera featured quite significantly. The SRWSC's timely appointment of Harold Hanslow, a practical farmer, as one of its

Commissioners, brought the issue of soil conservation squarely before many rural communities in the west. Hanslow's special sympathy for the embattled farming families of the Wimmera was balanced by his open frustration over their dangerously repetitive rotations which had allowed the soil to 'blow'. He persuaded the SRWSC to sponsor annual Soil Drift Control competitions which gradually promoted longer and more complex rotations, some stubble retention and the use of superphosphate.^{6,24}

Hanslow also convinced an uninspiring State government that it should intervene, if only to protect its electoral support base, and a *Soil Conservation Act* was introduced in 1940. Endorsing the administrative decisions of the previous two decades, the resulting Soil Conservation Board included representatives from the Forests Commission and from Agriculture, Lands, Mines and the SRWSC. Later, it was arranged that the Board would draw upon eight regional committees and on the expertise of the CSIRO. In this promising context, the innovative Victorian researches of a young soil scientist, R.G. Downes, were to prove enduringly influential.

In the immediate postwar years, official inquiries into the relationship between unsuitable land use practices, accelerated soil erosion and reduced catchment efficiencies trumpeted the need for more vigorous 'land protection' measures. With the support of a future State Premier, Western District farmer Henry Bolte, the agitation at last produced the *Soil Conservation and Land Utilisation Act* of 1949. This legislation gave rise to the formation of a Soil Conservation Authority and a novel Land Utilisation Advisory Council which included executive officers of the main resource management agencies. The same G.T. Thompson chaired both bodies, which were expected to build on

MAP 20: Tower Hill National Park, and Sanctuaries and Acclimatisation Reserves Present in 1916



Source: Adapted from Bardwell (1974)

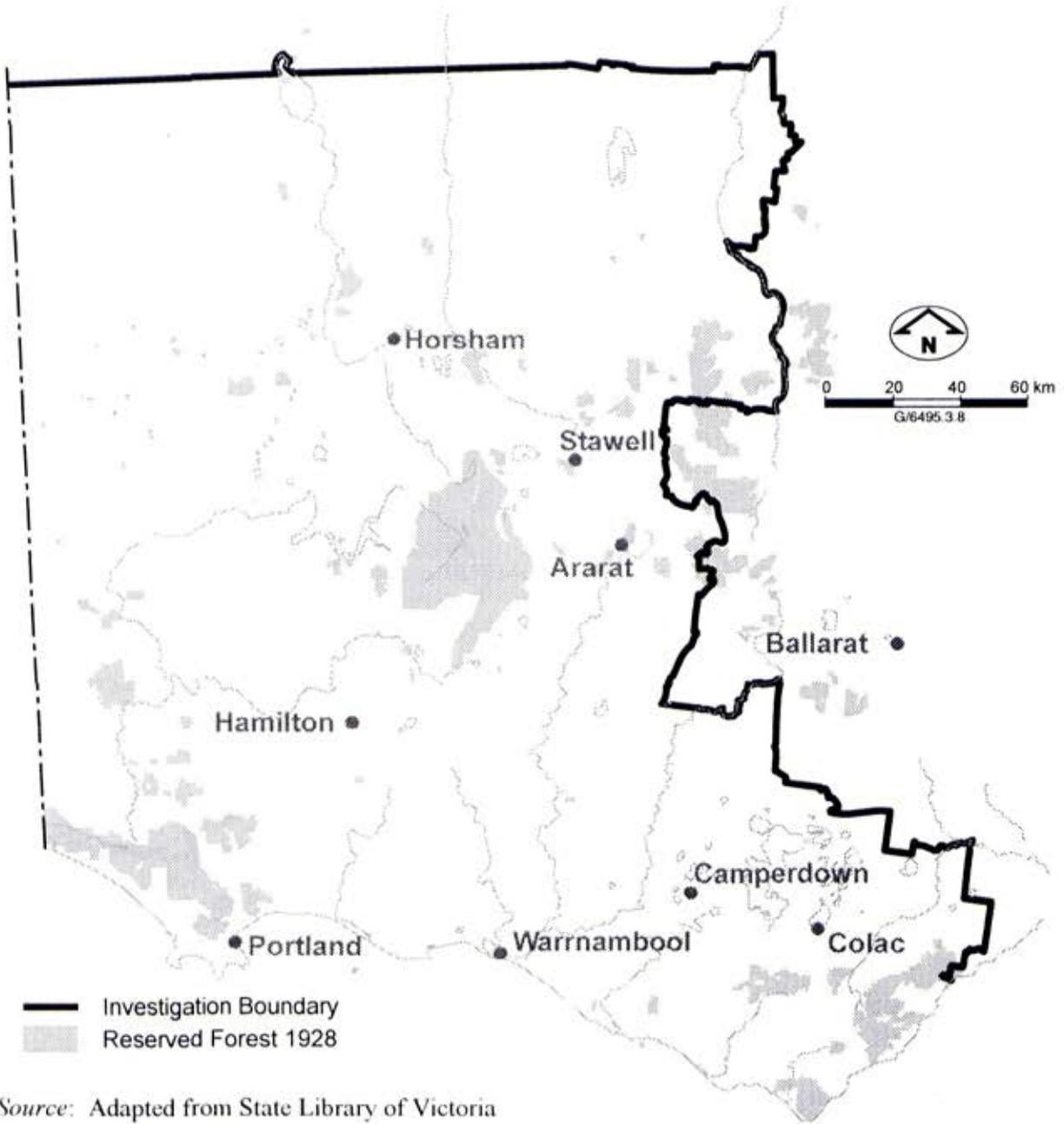
the more fruitful organisational arrangements of the past decade, and Bolte became the State's first Minister for Conservation.²⁵

4.4 Developmentalism and Environmentalism, 1950–1970

The 1950s and 1960s were on the whole politically stable and prosperous decades for the west. Mixed wheat-and-sheep farming was well entrenched in the Wimmera, and in 1953 the completion of the Rocklands reservoir in the Grampians almost doubled the capacity of the domestic and stock supply system. In the

Western District property sizes were falling in tandem with increased productivity. Grazing, dairying and mixed farming had gained from the relentless application of superphosphate to introduced grasses (by that time the district included over 40 per cent of the state's acreage of 'improved pasture'), and a range of other fertilisers was being used in crop production. The light and sandy soils of the south-west sands and coastal dunefields (geomorphic units 8.1, 8.5) had responded to the addition of copper, zinc and other trace elements. In addition, over the past century there had been dramatic increases in the total number of

MAP 21: Reserved Forest Areas, 1928



Source: Adapted from State Library of Victoria

livestock carried in the west - arguably a plain endorsement of the first robust European appraisals of the public lands - and numerous properties had become noted nationally and internationally for the breeding of stud livestock²⁶ (see Tables 4.1 to 4.4).

A new Soldier Settlement Commission was very active in the west. At first it became best known for its 'repurchase' of portions of the old freehold estates for dairying. Its early targeting of public land in the higher rainfall areas of the Otways was shelved in favour of these surer returns, but the giant Heytesbury project started to take shape in the forests after the mid-fifties. Under the guidance of the charismatic Les

Simpson, the project was characterised from the outset by aggressive large-scale clearing of massive areas, accompanied by generously comprehensive pre-settlement preparations. That innovative planning extended to corrections of trace element deficiencies and the provision of water and housing. The district would survive the early criticisms of economists and conservationists to become a national showpiece for modern dairying, a tribute to civilian pioneers as well as to soldier settlers.

In severe contrast to the late nineteenth century situation, during the 1960s holdings of over 5000 acres constituted approximately 0.7 per cent of the total number of properties in the

TABLE 4.4: Characteristics of Rural Holdings, 1970

	Av. size (ha)	% total area per land use category			
		Agricultural	Sown grasses	Natural grasses	Unproductive
Western	215	7.1	75.7	13.0	4.1
Wimmera	418	32.3	46.6	15.5	5.2

Note: livestock totals for the year 1970-71: Western statistical district, 12.3 million sheep, 1.2 million cattle; Wimmera, 5.3 million sheep, 141 000 cattle (Victorian Year Book, 1973).

Source : Victorian Year Book, 1972.

State, and comprised less than 18 per cent of the occupied area. Further Closer Settlement had occurred on public and repurchased land, and included a vastly improved Soldier Settlement program which had even begun to tackle the 'marginal' Otways. On the issue of major land use changes the government could call upon both a Central Planning Authority and the Land Utilisation Advisory Council mentioned in our previous section. Victorians were guided by the publication of regional inventories termed 'Resources Surveys', and those useful overviews were prepared in close collaboration with regional committees comprising government appointees and representatives of municipal councils.²⁷ While Victorian society remained in thrall to the development imperative, this democratic planning structure usually functioned with minimum publicity. All of that would begin to change in the late 1960s. In the past, the occupation of the public land of the west had supplied a primary source of tension between governments and people, and had often produced indicators of changing values and aspirations which influenced the State's land use management policy. Although the public domain was very much reduced in the west, intense controversy over its use would continue to serve the same historical purpose - in a new age of dissent which brought demands for the explicit inclusion of ecological and aesthetic appraisals.

The Little Desert Affair

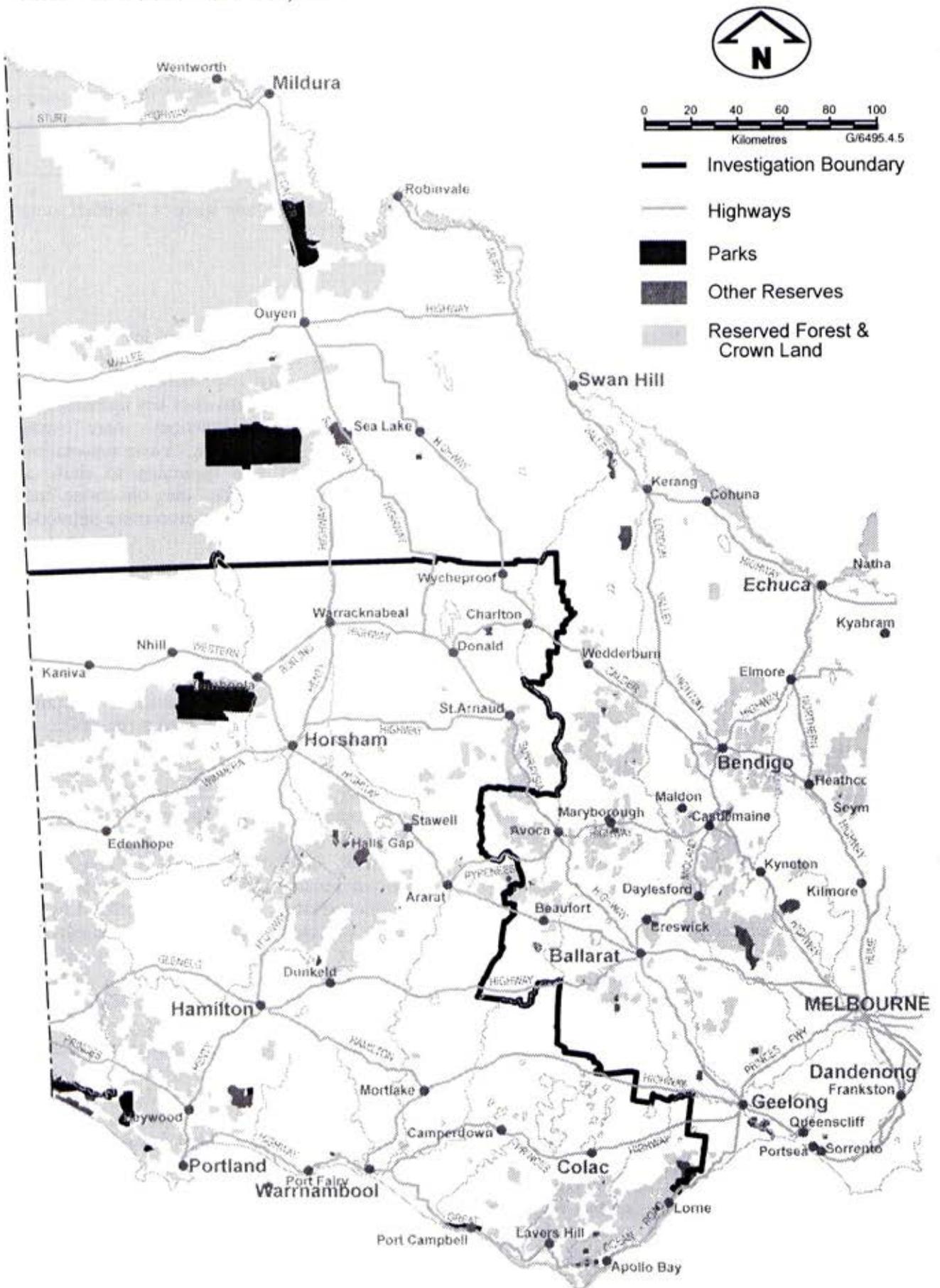
Sizeable areas of Crown Land had been 'remaindered' after more than a century of settlement expansion. That had been the case with the light and sandy soils of the Little Desert, on the western fringe of the Wimmera (geomorphic unit 6.3, land systems EPRc4, EPRc5, IPRc4, IPRc5). Just as well. It was later shown that it accommodated over 670 species of native plants representing about 20 per cent of the State's indigenous flora. When

conflict erupted over the fate of the area, it was influenced by less quantifiable perceptions of natural values; by expressions of righteous indignation from executives of key agencies who considered their jurisdictions were being usurped; and by a rising 'environmentalism' movement which was beginning to show as much hostility towards the old wise use conservationism as for the even more outmoded faith in 'development'.^{28, 29}

In 1963 the AMP Society dusted off some abandoned ideas for the opening up of 100 000 acres (40 000 ha) of the Little Desert for farming purposes. Neither the Lands Department, nor Agriculture, nor even the Wimmera Regional Committee, seemed impressed. Subsequent media coverage of historic public meetings appeared to have knocked the proposal on the head, without necessarily questioning the galvanising goal of development *per se*. The AMP withdrew in 1967 but a new Lands Minister, W.J.F. McDonald, introduced another version of the plan and proceeded to ignore the best of the available expertise, including that offered by the Land Utilisation Advisory Council. If subsequent media-saturated coverage of big public meetings - some in the very heart of Melbourne - was perceived to signal a novel threat by leading members of the government, it also ventilated an emerging 'ecological' viewpoint in engaging style.²⁹

So the dispute over the public lands of the Little Desert proved an electoral liability for the State's conservative government. The issue was finally defused by the abandonment of the proposal, extensions to the original reserved area and its upgrading to National Park status - and by guarantees of improved machinery for public consultation. The affair signalled the beginning of a new era of 'environmental' politics in Australia.

MAP 21: Public Land Use, 1970



Source: Land Conservation Council (1988)

Public Lands and 'Balanced' Land Use

Another product of the Little Desert dispute was the *Land Conservation Act 1970*. It ushered in a newly-focused body to investigate and make recommendations on the future employment of the State's remaining Crown and other public lands 'in order to provide for the balanced use of land in Victoria', and to advise and recommend on soil conservation policies for land use management in water catchments. Map 22 provides an overview of the distribution of public lands at this historic juncture. A Land Conservation Council was established with 12 members, including eight executive heads of natural resource management agencies or departments and National Parks, and three non-public service appointees: two to represent conservation expertise and one with proven experience in conservation techniques used in primary production.

Sceptics complained that it was unreasonable to expect the Council to serve as product and precursor alike of changing times, but managerial adaptability had become the watchword and critics would find that rather more of the Council's large field would be defined by actual experience. Above all, its charter emphasised a central need to explore and articulate conservation values; development and conservation imperatives had to be 'balanced'. Succeeding decades would show that appraisals

of the public lands of Western Victoria remained pivotal to the construction of defining management challenges.

Historical Geography - Put very simply, historical geography is the human geography of the past. It provides historical perspectives on all of the major interests pursued by those branches of the subject which concentrate on current circumstances, and is more inclined towards the 'human' rather than the 'physical' subdivisions of geography. As a distinctive sub-discipline it has been well established internationally since the 1930s, but only became prominent in Australia after the expansion of the university system in the 1960s. Its practitioners may specialise in one or more of a wide range of fields of enquiry with counterparts in present-orientated studies in geography, and various national and regional schools of thought are differentiated according to their preferences for particular themes. In Australia, the interests of the group are mainly unified by a focus on documentary and landscape evidence of changing distributions of settlement and land use, and especially on the extent to which those distributions reflect changing relationships between human societies and the natural environment.

Notes

1. Powell, J.M., 1970: The Public Lands of Australia Felix; Mortlake, p.42, Merino, p.47, Regional Migrations and German Lutheran groups. pp.224-257.
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PART III

5. LAND AND RESOURCE USES

5.1 FOREST USE

'State forest', for the purposes of the Council, incorporates both reserved forest (as defined under the *Forests Act 1958*) and larger areas of unoccupied or unreserved Crown land, previously designated 'uncommitted land'.

Council's recommendations for State forest, and earlier for hardwood production and uncommitted land, require that forests produce hardwood timber and other forest products, while conserving native plants and animals, and providing opportunities for open-space recreation and education.

State forests are managed under the Timber Industry Strategy (1986) and associated policies, which provide for:

- public forests to be managed on the basis of sustainable sawlog yields, legislated under the *Forests (Timber Harvesting) Act 1990*, and reviewed every five years (commencing 1 July 1991);
- the Code of Forest Practices, which lays down standards for forest operations;
- the preparation of forest management plans;
- management to safeguard all forest values and uses, including the protection of significant historic places (see Chapter 6); and
- implementation of policies to ensure regeneration of logged areas, encourage further processing and value-adding for timber products.

Fourteen Forest Management Areas (FMA) across the State provide geographic units for planning, sawlog supply and administration. The Historic Places investigation area encompasses the Otway, Portland and Horsham FMAs and portions of the Midlands and Bendigo FMAs, as shown on Map 23. Forest management plans (FMP) for these areas seek to integrate and balance the commercial uses of State forest with conservation of natural and historical values. To date, a plan has been prepared for the Otways FMA and is in preparation for Midlands.

Each FMP subdivides State forest into management units or zones which recognise resource

values and uses and for which specific management actions are identified.

Plantations form part of Victoria's forest estate, and contribute to sawlog and pulpwood resources. Public softwood plantation areas in the south west are managed by the Victorian Plantations Corporation.

Otway Forest Management Area

Almost all the forested public land within the Otway Forest Management Area is south of the Princes Highway, in the foothills and mountains of the Otway Ranges. The FMA covers 876 000 ha; 199 880 ha is public land, 78% (155 910 ha) of which is forested.

A plan for the management of State forest in this FMA was published in 1992.

Under the plan the gross State forest area includes forests that are unsuitable for sawlog production (particularly low foothill forests), and other areas excluded from logging by prescriptions, including streamside reserves and areas of excessive slope. Domestic water supply catchments areas are subject to catchment prescriptions. Conservation zones recognise rainforest communities, wildlife corridors, significant floristic areas and geological conservation areas, and exclude timber harvesting. Nearly 33% of the gross area of State forest is not available for harvesting.

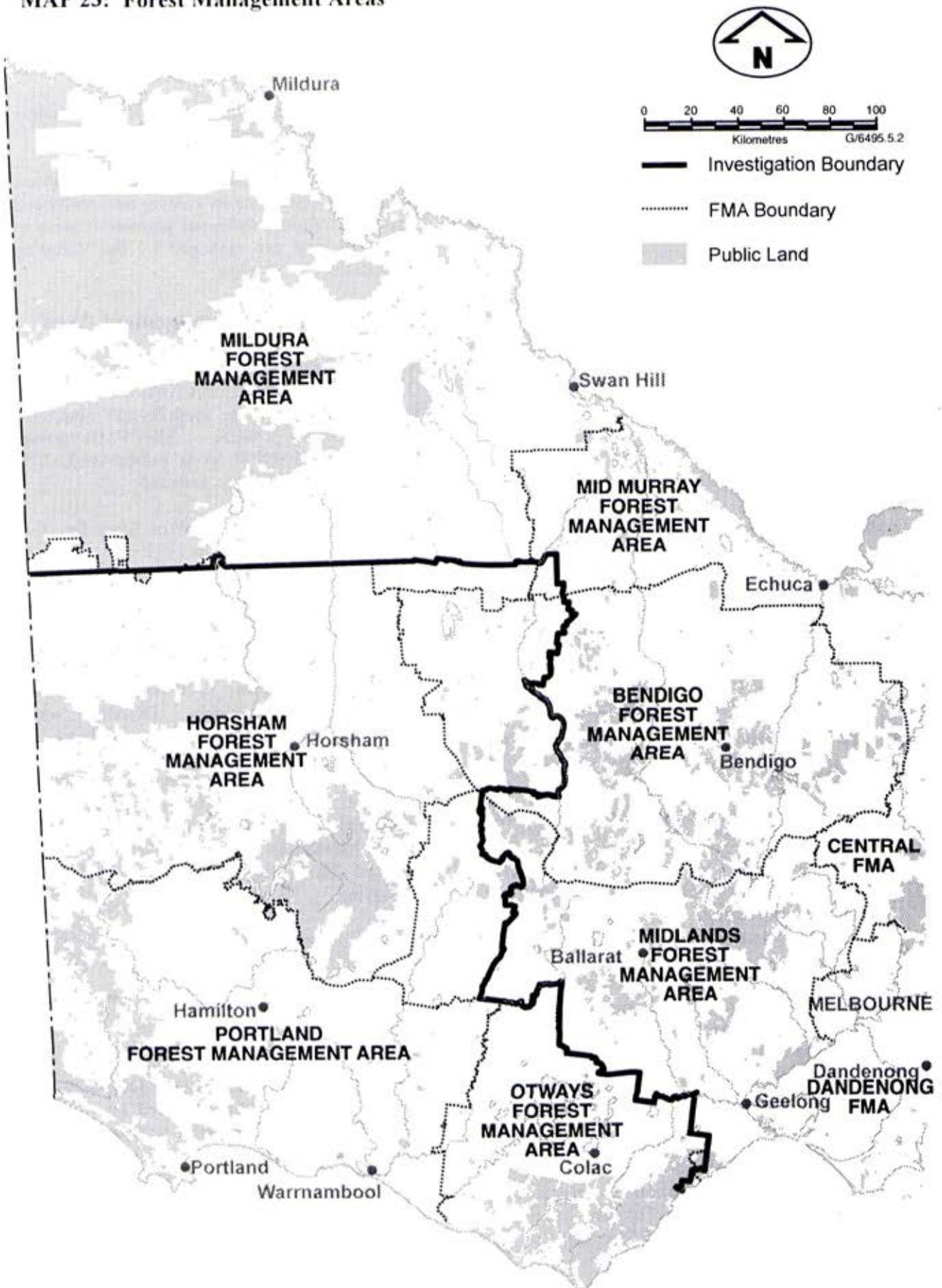
Similar exclusions, prescriptions and zoning will apply to other FMAs as plans are prepared.

Forest Types

The present Otways hardwood forests are the remnants of forests that covered an estimated 350 000 ha prior to European settlement.

The gross area of State forest is 94 810 ha, which is 61% of the total area of public forested land in the Otways FMA. The remainder comprises parks and reserves. In relation to timber production, the area can be broadly categorised as being either mountain forests, foothill forests or low foothill forests.

MAP 23: Forest Management Areas



Source: Department of Conservation and Natural Resources

Mountain forests

Mountain forests, corresponding to the *wet forest complex* and wetter parts of the *moist foothill forest complex* vegetation types are the most productive hardwood forest type in the Otways. They provide timber for house framing, furniture, and general construction.

In the forest production zone, 20 990 ha carry mature and regrowth eucalypt forests, and 5780 ha on sites suitable for tall forests carry blackwood or other non-eucalypts.

Foothill forests

Foothill forests consist of the drier parts of the *moist foothill forest complex*, and the *dry foothill forest complex* vegetation types. They are less productive in terms of sawlog yield and slower growing than mountain forests, and are frequently uneven-aged. Foothill forests produce strong and durable timber suitable for bridge construction, house framing, furniture and general construction.

In forest production zone, foothill forests cover some 22 490 ha. Wildfires in 1939, the 1950s and 1983, and 1950s silviculture, produced even-aged regrowth stands on some 30% of this area. The lower forests, on drier sites, provide an important supply of minor forest produce such as posts, poles and firewood.

Low foothill forests

Low foothill forests include *lowland forest complex* and *heathy woodland complex* vegetation types. They are unsuitable for sawlog production.

Hardwood reforestation

Reforestation of potentially productive but understocked areas of Crown land, mainly abandoned farmland or areas with dense blackwood, is a major project. Reforestation of about 800 ha since 1969 has been by hand planting of tubed mountain ash and messmate seedlings and direct seeding. A further 800 ha is planned to be completed before 2002.

Forest Production

The forests of the Otway Ranges have been an important source of timber since late last century. Residues from sawlog production are processed into woodchips and mostly

exported. Otway sawmills are investing in drying kilns and moulding plants, to develop more specialised, higher value products.

Production is directly related to legislated sustainable yield. The hardwood sawlog supply level is to be within 2% of the sustainable yield rate (in 1990) of 38 000 cu.m/yr of A, B and C grade sawlogs, for 15 years from 1 July 1991. During preparation of the FMA plan, the sustainable level of sawlog availability was re-evaluated, and including D grade timber, is estimated to be 44 400 cu.m/yr. The area harvested each year is slightly less than 1% of the net available forest area.

Four sawmilling companies obtain up to 41 000 cu.m/yr net of sawlogs, and another licensee cuts 2000 cu.m/yr gross of D grade logs. Following clear-felling or group-selection operations, five mills in the area and an additional mill outside saw Otways timber. Some 110 people are directly employed in these mills, while about 35 more are involved in harvesting and transport in the forests seasonally.

Residual wood from sawlog operations, and from harvesting degraded sites prior to reforestation, is harvested for small-dimension sawn products, or chipped for further processing or export. This timber is too short or defective for sawlog specifications and, if not harvested, would be left on site or burnt. An estimated 80 000 cu.m. is available annually. Five processors draw about 61 000 cu.m from the Otways. A South Australian company takes about 44 000 tonnes, three other outside processors take 16 000 cu.m., and 1000 cu.m. is used in the area.

Six full-time and 15 part-time firewood cutters operate in the Otway forests. Three part-time cutters harvest tea-tree stakes and some fencing timber is also cut. Quantity figures are not available. Some 15 000 cu.m of road gravel is extracted each year on average under extractive industry leases issued by the Department of Agriculture, Energy and Minerals.

Portland Forest Management Area

The Forest Management Area has a total area of 1 864 100 ha, of which 206 290 ha is forested public land. The forest estate is fragmented into small parcels, the Annya, Cobboboonee, Homerton, Hotspur, Milltown, Narrawong, Strathdownie, Tyrendarra, and

Wataepoolan Forest hardwood production areas, and uncommitted land near Casterton, Chetwynd, Dergholm, Digby, Lower Crawford and Rennick. Extensive areas of softwood plantation are managed by the Victorian Plantations Corporation.

Forest Types

The hardwood forests available for timber production in this FMA total some 38 600 ha.

Messmate is the main forest tree, particularly in the Cobboboonee, Annya and Hotspur Forests managed primary for hardwood production. It usually occurs in pure stands, or in mixtures with shining peppermint, swamp gum, manna gum or brown stringybark.

North of the Digby - Dartmoor Road and between Nelson and Rennick, extensive *heathy woodland complex* vegetation types contain brown stringybark, generally from 15–20 m in height.

There are only limited occurrences of river red gum woodlands in this FMA. Other gums, such as manna gum, swamp gum, and yellow gum may be present. Woodlands dominated by yellow gum occur in the north of the FMA.



Red gum drying kiln, Balmoral station ground

Forest Production

These forests have been used as a source of wood since early settlement. The most important timber species - messmate and brown stringybark - produce a strong, moderately durable timber used for general construction purposes. In the north of the study area, small pockets of river red gum and yellow gum on public land produce durable timber suitable

for heavy construction works, sleepers and fencing.

Legislated sustainable yield for this area is 14 000 cu.m/yr (A, B and C grades). Currently the study area supplies about 14 000 cu.m of sawlogs annually. These forests are important locally for general construction timber supplies, as the next closest forests are the Grampians and Otways. Three sawmills draw supplies here, harvesting by group selection.

The Council's 1973 and 1983 (Review) recommendations for South Western Area District 1 allocated some 50 750 ha for hardwood production. The brown stringybark forests mentioned above were largely recommended as Uncommitted Land, except for certain parks, reserves and softwood plantations. The uncommitted land areas are also used for hardwood production.

Council recommended that here, as in other forests, significant water production, landscape, conservation, recreational and apicultural values should be protected when management plans are prepared.

Poles, fencing materials, firewood, sleepers and road gravel are obtained from the hardwood forests of the study area. These products are important for servicing local demand.

Midlands and Bendigo Forest Management Areas

Limited parts of the Midlands and Bendigo forest management areas totalling 849 300 ha are within the investigation area, and these are combined below. They comprise small areas: parts of the Mt Cole and St Arnaud Range Forests, and the Jalluka, Dunneworthy, Big and Little Tottington, and Dalynong Forests.

Forest Types

Moist foothill forest complexes at Mt Cole have medium to tall messmate forests with associated candlebark, narrow-leaf peppermint, brown stringybark and blue gum. Similar, lower forests occur on isolated ridgetops in the south St Arnaud Range.

Red ironbark - grey box - yellow gum and on drier sites red ironbark - red stringybark - red box occur in the St Arnaud Range; various associations of yellow gum, grey box, yellow box and long-leaf box occur in the north of the

St Arnaud Range, at Dalyenong and Tottington Forests, and in Jallukar Forest; at Dunneworthy forests of red, yellow and long-leaf box occur with red stringybark. These represent the *box-ironbark forest complex* vegetation type.

Forest Production

About 25 530 ha (gross) in these forests are available for timber production, subject to exclusions and prescriptions.

Prior to the 1850s, virgin stands of the red ironbark - grey box - yellow gum associations comprised open grassy forests with a small number of large trees per hectare, the diameters of such trees reaching 120–150cm.

These forests have a moderate to low capacity for the production of hardwood timber, having inherently low rates of growth, and being constrained by site conditions. Most of these forests were heavily cut during the gold and settlement eras. Virtually all the productive forest area has had silvicultural treatment for rehabilitation.

Durable, high density timber-producing species such as red ironbark, grey box, and yellow gum are eagerly sought for railway sleepers and farm fencing, because of their strength, hardness, and toughness, and their resistance to termites, insects and decay. Their high kilojoule value means they are also a major source of firewood. Small quantities are obtained under a licence, while larger volumes are available from timber utilisation operations, stand-improvement treatments and regeneration fallings.

More productive forests of messmate, manna gum and blue gum - at Mt Cole Plateau, and parts of the St Arnaud Range, Big Tottington and Dunneworthy Forests - provide sawn timber used for house-framing and a wide range of general construction purposes.

Two sawmills draw supplies from these forests, taking some 5900 cu.m each year of mixed species, and employing 12 people. A small amount of residual wood - about 1000 cu.m/yr - is taken from these forests and processed outside the investigation area.

These forests are important in continuing to supply sleepers and other durable, high-density timbers. Production of minor products is relatively substantial, with the following quantities produced each year:

Product type	Quantities	
firewood	2 300	cu.m
wattle bark	1 298	kg
posts and poles	25 200	pieces
gum tips	30	cu.m
woodchop logs	1 500	m
red gum sleepers	700	pieces
granitic sand	13 000	cu.m

Eucalyptus oil is produced from the blue mallee stand near St Arnaud.

Horsham Forest Management Area

Horsham is the largest of the FMAs in the investigation area, at 2 507 900 ha. Public land includes the Grampians State Forest and the Barrabool, Barrett, Bellellen, Bringalbert, Brynterion, Connewirrecoo, Glenelg River, Glenlee, Glynwylln, Goroke, Gymbowen, Illawarra, Kadnook, Kalingur, Ledcourt, Marma, Meereek, Morea, Morri Morri, Stawell, Tallageira, Toolongrook, Toolondo, Wail and Wartook Forests, which total 102 700 ha.

Forest Types

Heathy woodland complexes are widespread in this FMA, dominated by brown stringybark with messmate, shining peppermint, swamp gum, manna gum, scent-bark and long-leaf box. The sandy ridges of the south-western Wimmera plains, from Toolondo to Tallageira, carry this association.

Woodlands of river red gum, yellow gum and yellow box occur extensively in the Grampians, particularly in the forests around Rocklands Reservoir. River red gum grows in pure stands at lower elevations, while yellow gum and yellow box occupy higher sites.

River red gum woodlands are widespread in the study area, but they occur in small patches, often on the edge of the public land. Such woodlands, which originally covered vast areas of western Victoria, grow on land that is, in general, well suited to agriculture. The large areas of river red gum and yellow gum around Woolpooper and the red gum stands at Kadnook and Connewirrecoo are on land that was selected and cleared for agriculture, but has since reverted or been bought back into public ownership.

Gum - box - buloke woodlands occur in the Barrabool, Marma and Brynterion forests and

in the Barrett Timber Reserve, as relict populations on small areas of public land and roadsides on the Wimmera plains, and scattered through the public land of the south-western Wimmera plains. In the west block of the Little Desert, yellow gum woodland occupies interdune depressions.

Other vegetation units of some commercial interest include the mallee-broombush and mallee scrub associations. Mallee-broombush occurs particularly in the Central block of the Little Desert, and on the margin of the Big Desert at the investigation area boundary.

Mallee scrub, of yellow, bull or dumosa mallee, are found in small occurrences around Dimboola, at Gerang Gerang, in Glenlee Reserve, near Ellam, and roadside remnants.

Forest Production

The stringybark and durable-species (gum and box eucalypt) forests have been supplying timber for heavy construction, farms and house construction since the 1830s. Small quantities have been kiln dried for flooring.

Although not large by State standards, the wood-based industries make an important contribution to employment in the region. They supply sawn-timber products, railway sleepers, transmission and building poles, and fence posts.

The available forest for timber production is 24 900 ha. Stringybark forests of commercial quality are located near Connawirrecoo, Bringalbert and Telangatuk. Merchantable quality durable-species forests are located in the Grampians State forest, and in silviculturally treated areas at Woohlooper, Kadnook and Connawirrecoo. Small areas at Goroke and Marma Forest have sawlog-size durable species.

Harvesting operations in mixed species forests involve felling all sawlog-quality trees in patches of 10–20 ha, and treating the remaining trees to ensure regeneration. Harvesting in the durable species forests is by selection of single trees.

Mixed species stands in the Grampians at Mafeking, Wartook, Borough Huts, Mt Victory Road and Stony Creek had silvicultural thinning and liberation treatments in the 1920s and 1930s. These and other stands were available for limited timber harvesting until 1994

under Council's recommendations and subsequent *National Parks Act 1975* amendment. Harvesting of durable species from three areas in the Moora Moora valley ceased in 1987.



Steam-powered sawmill near Fyans Bridge, Halls Gap, about 1900

Sugar gum plantations in the Wail Forest have produced sawlogs, and small plantations of yellow gum, black box and swamp yate were established at Barrett and Glenlee Forests.

The legislated sustainable yield volume is 800 cu.m/yr (all grades). At present four sawmills draw supplies from this area, taking durable species by selection. The mills employ 10 people, and the total volume cut is 920 cu.m/yr. No residual roundwood is harvested in this Forest Management Area.

Firewood is a substantial product from this area, with 5000 cu.m/yr being taken. Seven commercial fencing timber supplies cut 2500 pieces each year. Some 130 000 cu.m of road gravel is extracted.

5.2 NATIONAL PARKS AND OTHER PARKS AND RESERVES

Public land across Victoria contains many places with outstanding scenery, natural or cultural features, or examples of the State's diverse land and vegetation types, that are protected in parks and reserves. Increasing numbers of visitors are enjoying and learning about these places.

The LCC has defined a park as 'an area of land in a natural or mostly natural condition reserved because of its scenery, floral and faunal content, historical interest, or other features,

TABLE 5.1 Reserve Land Use Categories in South-western Victoria

LCC category	LCC sub-category	Former LCC category	Number; and area (ha) in south-west
Reference Area	-	Reference Area	21; 21 655
Nature Conservation Reserve	-	Flora Reserve	40; 11 393
	-	Flora and Fauna Reserve	25; 25 195
Coasts	Coastal Reserve	Coastal Reserve	6; 3 300
Regional Park		Regional Park	4; 4 580
Historic and Cultural Features Reserve	-	Historic Area	1; 2 550
	-	Historic Reserve	4; 67
Community Use Area	Education Area	Education Area	12; 4 182
Natural Features Reserve	Natural and Scenic Features Area	Scenic Reserve	24; 2 334
	Geological and Geomorphological Features Area	Geological Reserve or Monument	2; 80
	Wildlife Area	Wildlife Reserve (hunting - State Game Reserve)	43 42 195
	Streamside Area	Streamside Reserve	62; 3 358
	Bushland Area	Bushland Reserve	367; 13 384
	Lake	Lake Reserve	112; 58 913
	Highway Park	Highway Park	6; 261

which is used by the public primarily for open-space recreation and education¹.

This definition encompasses several different categories of park other than urban parkland. Definitions of national parks, State parks, coastal parks and regional parks are included in Council's publications.

The Parks and Reserves System

Across Victoria, 3 046 510 ha are included in parks under the National Parks Act. These comprise national parks - 2 438 380 ha, State parks - 202 930 ha, wilderness parks - 202 050 ha, and other parks and certain reserves - 100 310 ha. Also included are 102 840 ha of scheduled parks that have not yet been proclaimed. In addition, certain conservation reserves that are the responsibility of the Department of Conservation and Natural Resources are managed by the National Parks Service.

Reserve categories are listed in Table 5.1. Note that the Council's revised and former land use category names are used; that many reference areas and some individual flora and fauna reserves and regional parks are included on *National Parks Act* schedules; that Historic and

Cultural Features Reserves are included; and that not all of those reserves are managed by the National Parks Service.

The parks and reserves together contain public land with ranges in size, degree of protection applied, level of conservation, cultural and recreation values, and extent of use. They constitute a parks and reserves system which retains representative examples of land types and biological communities, conserves rare or endangered plant and animal populations, protects important cultural heritage features and, importantly, provides the community with many opportunities for enjoyment, recreation, tourism, education and research.

Some parks are centred around a prominent topographic or scenic feature, while others contribute to completing the parks system by containing extensive examples of particular land types with their associated vegetation communities and animal populations.

Parks and Reserves in South-western Victoria

As recommended by the LCC, there are 5 national parks, 11 State parks, 3 regional parks, 1 coastal park, and many reserves.

An overview of the major parks and reserves follows, to provide context for the discussion of historic use of the South-western Area, and to indicate their current status.

Grampians National Park

Victoria's fourth largest national park is the 167 000 ha Grampians National Park. Its series of parallel sandstone ranges provide a striking landscape visible in the centre of the study area. Some 900 native plant species including over 20 endemics can be found in the diverse range of vegetation communities present. Nearly 200 bird species have been recorded and 31 native mammals.

Walking is the most popular activity in the park, with 180 km of walking tracks providing opportunities for visitors of varying mobility and experience. Car touring, camping, picnicking, and rock climbing are other popular pursuits. The net addition to economic activity in Victoria has been estimated to be about \$100 million per annum, with some 1270 jobs associated with park use.

The Grampians area is of spiritual significance to Aboriginal people. The park holds many Aboriginal rock art sites, signifying its importance. The Brambuk Living Cultural Centre south of Halls Gap brings to life the history and culture of the Aboriginal communities of South-western Victoria.

The park contains highly significant water catchments, supplying water to 51 townships and 15 000 farms in the Wimmera - Mallee.

Little Desert National Park

This 132 000 ha park protects vegetation and habitats characteristic of relatively low rainfall and soils of low natural fertility.

Following the first reservation of an area to protect the endangered mallee fowl, expansion to the present area took place in stages, including significant additions in 1968 and 1969, bringing the total to 35 160 ha, and in 1988, to the present area.

The park is well known for its bird populations (over 220 species), diverse vegetation and Spring wildflower displays. Visitor facilities include campgrounds and day visitor areas, nature walks, a long distance walking track and a network of four-wheel-drive tracks.

Lower Glenelg National Park

The 27 300 ha Lower Glenelg National Park is centred on the Glenelg River, which rises in the Grampians and winds 400 km through western Victoria to the sea at Nelson. Major Thomas Mitchell named the river and with part of his exploring party rowed down the Glenelg from Fort O'Hare at present-day Dartmoor to the sea in 1835.

Its most spectacular feature is the Glenelg River Gorge. This is cut in places more than 50 m deep into Miocene limestone, for 15 km along the river's lower reaches. Water percolating through and dissolving the limestone has formed caves, which are nursery or roosting caves for bats, and contain the remains of some extinct marsupials. The Princess Margaret Rose Caves in particular are noted for their beautiful and delicate limestone formations. The caves, natural history, boating and walking tracks have long been popular recreation destinations.

About 700 species of native plants can be found in the Lower Glenelg National Park, where western Victorian plant types combine with those that are more characteristic of eastern communities. Heath and forest areas in the park are very rich in orchids, with more than 50 species found, and the tributaries of Moleside Creek include the most westerly tree-fern gullies in Australia. Over 60 species reach their westernmost occurrence here.

Otway National Park

Including much of the Cape Otway peninsula, this 12 750 ha park extends along the scenic Otway Coast from Shelley Beach near Apollo Bay to Princetown. It contains parts of the Aire and Gellibrand River estuaries, the upper catchments of the Calder and Parker Rivers, most of the Elliott River catchment, the outlets of these rivers and several creeks.

The park has extensive areas of Otways very tall wet forest on the higher slopes, and tall moist foothill forests on lower slopes, with cool temperate rainforest and treeferns in the gullies. Dry foothill forests are found at lower elevation, and a range of coastal communities in the western section.

The historic Cape Otway lighthouse, constructed in 1848, abuts the national park. It has recently been transferred from the Commonwealth to Victorian control, and temporarily reserved under the *Crown Land*

(Reserves) Act 1978. It is required to be permanently reserved under the terms of the hand-over.

Port Campbell National Park

The linear park of 1750 ha is located along the spectacular Port Campbell coast. For millions of years the soft Tertiary limestone of the cliffs has been weathered and worn by the stormy Southern Ocean, leaving a series of gorges, arches, rock stacks and blowholes. The best known features are London Bridge, the Twelve Apostles, Loch Ard Gorge and the Arch, but there are many other natural sculptures created by the sea. The Great Ocean Road is located within or on the edge of the park.

This coast is treacherous to shipping, and many ships were wrecked here last century. The best known is probably the *Loch Ard*. The park's range of coastal vegetation provides habitats for many different birds. More than 150 species have been recorded in the park.

State Parks

Also located on a section of the Great Ocean Road, between Eastern View and Cape Patton, the 21 000 ha **Angahook-Lorne State Park** contains much of the coastal fall of the eastern Otway Ranges. It consists mainly of steeply dissected slopes with *dry foothill forest complexes*, small areas of *wet forest complex* on wetter slopes, and at the east end, gently undulating hills with heathy woodlands.

The park is accessible from the Great Ocean Road and roads linking it to the east Otway ridge, and the tall forests, scenic drives, numerous waterfalls, lookouts over the coast, and fern gullies have attracted many visitors over a long period.

Black Range State Park, an 11 700 ha western outlier of the Grampians Ranges consists of a similar sandstone ridge and associated colluvium, and an outcrop of Cambrian greenstones.

The park contains much of the Mouchong Creek catchment, and the upper catchment to Mt Talbot Creek. It abuts the Rocklands Reservoir, popular for fishing and boating, and is accessible from the Rocklands - Cherrypool Road. Black Range has high rock cliffs, extensive views, Aboriginal rockart, and provides opportunities for bushwalking and nature study in little-disturbed areas.

The 5600 ha **Carlisle State Park** forms a contrast with the Otway and Angahook-Lorne parks referred to above. It is located largely on sandy Tertiary age sediments and is hilly but of lower relief than the Otway Ranges. Three main plant complexes are present - *heathy woodland*, *lowland forest*, and *moist foothill forest*.

The major feature of **Dergholm State Park**, located north of the township of Dergholm, is the diversity of vegetation communities present. These include *heathy woodland complexes* with extensive areas of relatively undisturbed heath, and swamp communities, and *plains grassy woodland complexes*.

The main recreational attraction of the 10 400 ha park is around Bailey's Rock, which consist of a number of large pink granite tors, on the hillside and along Rocky Creek. Remnants of the Bailey family homestead are visible in the picnic area adjoining the rocks. Edwin Woodlands held a sawmill licence in this park in 1882-83.

The 3840 ha **Kara Kara State Park** is situated in the southern portion of the St Arnaud range and includes land types typical of the Cambrian-Ordovician sediments in the dissected uplands. A smaller area of gently undulating Tertiary sediments adjoins the North-western Highway.

Vegetation types represented include *box ironbark woodland complexes* on the steeper slopes, with *inland slopes woodland complexes* on gentler topography. This park's forests are relatively undisturbed, as much of it has never been cut for timber. The Teddington Reservoirs in the park supply Stuart Mill township.

Mounts Langi Ghiran and Gorrin and the linking saddle comprise a distinctive landscape feature seen from many roads and vantage points in the Beaufort - Ararat area. The landforms include granite peaks, giant tors, and broad rock sheets. Elevated gullies and saddles support *moist foothill forest complexes* while the western slopes fan out to an occurrence of *plains grassy woodland complex* of river red gum and yellow box. The 2695 ha **Langi Ghiran State Park** contains few tracks and no logging has occurred for more than 50 years. Features include the rugged mountain summits, a diverse and abundant population of native birds and mammals, Aboriginal cave paintings, and the bluestone Ararat Reservoir wall.

Mount Arapiles is an outstanding landscape feature. It is an outlier of the Grampians sandstones, rising abruptly from the flat Wimmera plains. The 5060 ha **Mount Arapiles-Tooan State Park** includes part of a Parilla sandstone ridge with sand, silt and clay corridors. It carries *heathy woodland* and *plains grassy woodland complexes*, with remnants of the original gum, buloke and box stands of the district which have largely been cleared for agriculture.

The rugged cliffs of Mount Arapiles are known internationally for their rock-climbing opportunities. The camping and picnic facilities are heavily used by both tourists and local residents. Mitre Rock provides extensive views and is also popular for rock-climbing.

Mount Buangor State Park, of 2400 ha, is situated on the southern edge of a large granitic plateau, and the north-western parts including the high rock faces of Mount Buangor, are in the investigation area. The vegetation is diverse, with snow gum on the most elevated areas, and dry foothill forest complexes on the west side. Walking tracks provide access to waterfalls, 'The Cave', and fern gullies. A concrete arch dam at Mount Buangor is a component of the Ararat water supply system.

Mount Eccles National Park consists of the partly quarried scoria cone and maar flooded by Lake Surprise, and stony rises country extending towards Lake Condah. Geological features include the mountain and lake, lines of volcanic vents with shafts, lava canals, and lava blisters at Lake Condah. Vegetation is mainly *herb-rich woodland complexes* dominated by manna gum and blackwood. Dry stone walls and other basalt rock structures in this park and Mt Napier indicate use of local resources in the later settlement era.

Mount Napier State Park's intact volcanic cone, its dry crater, scoria slopes, adjoining plains of broken and fractured lava ('stony rises'), other eruption points, scoria cones, lava barriers, and lava caves, provide a fascinating exposition of natural history. The Harmans Valley lava flow, some 7000 years ago, is the youngest in the south-east of the continent. The Byaduk lava caves are the largest in Australia. Manna gum and blackwood dominate the *herb-rich woodland complexes* in this park.

Mt Richmond Park is on a tuff and scoria volcanic cone, located near the coast, and partially covered by wind-blown white siliceous

sand. The 1733 ha park was named after Richmond Henty, one of the first white children born in the Portland area. Vegetation is diverse with more than 450 plant species recorded.

Regional Parks

The Ararat Hills Regional Park (1000 ha) west of Ararat, Crawford River Regional Park (1910 ha) north-west from Heywood, and Kawarren Regional Park (650 ha) south of Colac provide a range of opportunities for recreation. Ararat Hills contains Pioneer Memorial Lookout, McDonald Wildflower Reserve, and numerous mine shafts, a dam and water races that are relics of the area's gold-mining history.

Crawford River Regional Park is centred on the attractive forested Crawford River valley, and is used for picnicking, fishing, pleasure driving and nature study. Kawarren Regional Park contains a section of the dismantled Beech Forest Railway where it descended into the Gellibrand River valley.

5.3 PREVIOUS RECOMMENDATIONS FOR HISTORIC PLACES

The Council made specific recommendations for a historic area and several historic reserves in its past Area recommendations. These are as follows:

- North Central Area, 1981:
 - Stuart Mill Historic Area, 2550 ha
 - New Bendigo Historic Reserve, 24 ha
- South-western Area, District 2, 1982:
 - Hand in Hand Company Mine Historic Reserve, 8 ha
 - Deep Lead Historic Reserve, 4 ha
- Wimmera Area, 1986:
 - Serviceton Railway Station Historic Reserve
 - Mooree Historic Reserve, 55 ha

These will be considered in the light of new information collected in this investigation, as required by the Order in Council.

5.4 TOURISM AND RECREATION

The South-western area contains several of the best known and most visited public land tourism destinations in the State. The national parks and State forests of the Great Ocean Road; foreshore reserves and beaches along the Surf Coast and in towns such as Lorne, Apollo Bay and Warrnambool; the Shipwreck Coast; and the Grampians National Park in particular are important resources for local and State-wide recreation, and major 'products' and promotional icons for Victoria's tourism industry.

The region provides notable opportunities, and in some cases the most important resources in the State, for a number of specific activities:

- coastal and surf fishing
- scenic driving
- rockclimbing (Grampians, Mt Arapiles)
- bushwalking (Grampians, Great South West Walk near Portland, other parks)
- bird observation (Tower Hill and many other parks and reserves)
- bush camping (Grampians, Otways, Lower Glenelg, Little Desert)
- canoeing (Glenelg River)



Ferry, about 1920, in the present-day Lower Glenelg National Park

There are important sites and themes for cultural tourism on public land in the region, including Aboriginal culture and art sites in the Grampians, timber milling sites in the Grampians and Otways, settlement history, and shipwrecks, lighthouses and other maritime history sites along the coast.

Parks

Data on recreational visits to major South-western Victorian parks is summarised in Appendix V. This outlines total visitor days to particular parks for the years 1987/88 to 1993/94.

Forest Recreation

Recent data on recreational visits to State forests in the South-western Area, showing numbers of day visitors and camper nights, is contained in Appendix VI. Usage of forests for dispersed forms of recreation, including forest driving, car rallies, four-wheel-driving, horse riding, walking, rogaining/orienteering, scout camps, yabbying, hunting, archery, fossicking, picnicking, and boating, have been summarised as follows:

Forest management area	Dispersed recreational use
Otways	16 000
Portland	32 750
Horsham	2 000
Midlands	65 000 + 160 000*

* Whole FMAs - not known how many of these are to forests in the South-western Area.

5.5 WATER SUPPLY SYSTEMS

Seven Water Authorities currently provide domestic water and sewerage services to the investigation area. They are as follows:

1. The Barwon Region Water Authority provides water and sewerage services to 200 000 customers in Greater Geelong, the Bellarine Peninsula, and parts of the Golden Plains and Surf Coast Shires. It is the largest urban water authority outside Melbourne. Headworks on the upper Barwon River are within the South-western Area.
2. The Colac Region Water Authority serves Colac and surrounding towns, plus Lorne and Apollo Bay. Its Olangolah and West Gellibrand catchments are closed to public access, and the Olangolah Reservoir is of some historical interest.
3. The South West Water Authority is based in and supplies Warrnambool, and also provides services to Camperdown, Cobden,

Mortlake, Terang, Lismore and Port Campbell, plus other smaller towns and a rural area.

4. The Portland Coast Region Water Authority provides water and sewerage services to Portland, Heywood and Port Fairy, mainly from groundwater sources.
5. The Glenelg Water Authority, based in Hamilton, also supplies Dunkeld, Glenthompson, Peshurst, Coleraine, Casterton and other small towns. The multiple Hamilton offtakes in the Grampians, and Coleraine's Konong Wootong storage, are of particular interest.
6. The Aireys Inlet Water Board provides water to Aireys Inlet.
7. The Grampians Region Water Authority provides domestic water and sewerage services to an area stretching from Lake Bolac to Ouyen, and from Charlton to the South Australian border. This Authority, based in Horsham, was formed in February 1995 from 19 prior water authorities. Stawell's town supply system from Fyans Creek, with its tunnel and iron fluming in the Grampians, the Ararat system, and Horsham's supply from the Mount Zero channel, are of historical interest.



Rocklands Reservoir

Major water supply systems are shown on Map 11.

In addition to the seven Authorities above, two Rural Water Authorities operate in the area. These are successors to the Rural Water Corporation, formerly the State Rivers and Water Supply Commission. The background to the establishment of the Commission is of historical note, deriving in part from the failure

of earlier private and local government supply systems in the Wimmera.

The **Gippsland and Southern Rural Water Authority** provides waterway and groundwater management, diversions and licensing activities in the southern part of the Investigation area, although it operates no pipelines or channels. The **Wimmera-Mallee Rural Water Authority** provides the above services, as well as storing water and maintaining the channel system. The Authority also sells bulk water to the Grampians Region Water Authority.

Most of the towns have self-contained supply systems (either from surface or, in some cases, groundwater) although there are three large supply systems in the area:

1. The Barwon River System, which includes the major West Barwon Reservoir and associated offtakes and channels feeding to a major storage and treatment plant at Wurdee Boluc. It supplies more than 60% of the water used in Geelong. The West Barwon to East Barwon tunnel, and Wurdee Boluc Channel in particular are of historical interest.
2. The Otway System, owned and managed by the Rural Water Corporation prior to July 1994, is now operated by the South Western Water Authority. It is dominated by two major pipelines, both of which commence in the Otways and end in Warrnambool. The North Otway pipeline was constructed in 1939 to serve Cobden, Terang, Camperdown and Warrnambool, as well as 3000 rural customers. Growth in Warrnambool required a second pipeline and the South Otway Pipeline was completed in 1975 to provide a 'dedicated' treated supply to Warrnambool. These pipelines are notable for their length.

The Wimmera-Mallee Stock and Domestic Water Supply System services a population of around 70 000, across some 28 500 sq.km of farmland. It has a total system capacity of 780 000 ML, almost half of which is in Rocklands Reservoir. The open, earthen channel system is very inefficient however, particularly in the Mallee, and almost two-thirds of the water supplied is lost to evaporation and seepage. This system includes several major storages (see Table 5.2) and about 16 000 km of channels, and is thought to be the largest of its kind in the World.

TABLE 5.2: Major Storages

Storage	Capacity (ml)	Year	Use
Lake Wartook	29 500	1887	WMS; Urban Horsham
Lake Lonsdale	65 500	1903	WMS
Lake Batyo Catyo	4 800	1916	WMS; Urban Donald
Lake Fyans	21 000	1916	WMS; Urban Ararat and Stawell
Taylors Lake	36 000	1923	WMS
Pine Lake	64 000	1923	WMS
Wurdee Boluc Reservoir	19 100	1928	Urban Geelong
Moora Moora Reservoir	6 300	1934	WMS
Dock Lake	5 900	1935	WMS
Green Lake	5 600	1935	WMS
Rocklands Reservoir	348 000	1954	WMS
Toolondo Reservoir	106 500	1954	WMS
West Barwon Reservoir	20 900	1965	Urban Geelong
Lake Bellfield	78 500	1966	WMS

Note: WMS: Wimmera - Mallee Stock and Domestic Water Supply System

5.6 CATCHMENT AND LAND MANAGEMENT

Soil conservation and pest plant and animal control programs in the South West are reflected in the 1993 Corangamite, Glenelg and Wimmera Landcare Region plans. A small part of the Loddon - Avoca - Campaspe region is also in the investigation area.

Controlling land degradation requires landholder, municipal and water authority involvement, in pursuit of integrated catchment management and sustainable agriculture.

Agricultural pest plants compete with pasture and crops, contaminate produce, and may poison stock. On public land, infestations of pest plants can adversely affect recreational, environmental and water quality values. Some common weeds were deliberately introduced, for example furze as an ornamental, early black wattle for tanbark production, and radiata pine for timber.

Localised feral pig and goat populations are spreading in the Otways, Grampians and South West Sands. Table 5.3 summarises priority programs.

Catchment and Land Protection Act 1994

This legislation establishes a framework for integrated soil and water resource management and protection, and control of noxious weeds

and pest animals. It replaced the *Soil Conservation and Land Utilisation Act 1958* and *Vermin and Noxious Weeds Act 1958*.

The Act establishes the Victorian Catchment and Land Protection Council, and ten Regional Catchment and Land Protection Boards.

The Corangamite, Glenelg, Wimmera and part of the North Central Land Protection Board areas lie substantially in the investigation area.

The State Council advises government on the condition of the State's natural resources and priorities for allocation of funds, and coordinates the activities of certain other bodies, initiates studies of natural resources, promotes community awareness, and supports and monitors the operations of the Regional Boards.

The Regional Boards:

- are preparing regional catchment strategies and special area plans (eg. water supply catchment plans);
- encourage cooperation of those involved;
- advise Ministers on priorities, guidelines and operation of the Act;
- promote community awareness; and
- recommend measures on Crown land to prevent land degradation.

TABLE 5.3 Landcare Priority Programs

Land-care region	Land degradation	Pest plants	Pest animals
Corangamite	Dissected Uplands (increasing tree cover, sheet erosion, dryland salinity); Volcanic Plains (increasing tree cover, sustainable cropping, reducing unsustainable practices, dryland salinity); Coastal Dunefields (sustainable use); Port Campbell Plains (reducing unsustainable practices, controlling landslips); Otway Ranges (controlling landslips)	Agricultural pests: ragwort, cape tulip, bent grass, cape weed; furze and blackberry; Environmental weeds: Spanish heath, early black wattle, wild radiata pine, blue periwinkle in forests; phalaris and bent grass in native grasslands; broom on the coast.	Rabbits throughout the region, especially in the Stony Rises and Dissected Uplands; foxes and feral cats are widespread and increasing
Glenelg	Dissected Uplands (gully, sheet, streambank erosion; dryland salinity; off-site effects); Dundas Tablelands (gully erosion, dryland salinity, waterlogging, acidification); Casterton - Merino Hills (landslips, gully, tunnel, streambank erosion, dryland salinity, waterlogging, acidification, off-site effects); Grampians (recreation damage to roads and tracks; dryland salinity in Victoria Valley)	Dissected Uplands and Dundas Tablelands (furze, bent grass, cape tulip); South West Sands (cape tulip, bent grass, African feather grass, Bathurst burr, onion grass, blackberry); Port Campbell Plains (bent grass, ragwort, thistles); Coastal Dunefields (coast wattle, polygala, boxthorn, wild pines)	Dissected Uplands, Stony Rises and Coastal Dunefields (rabbits, foxes, feral cats); Grampians and South West Sands (goats); kangaroos, emus, corellas seen as agricultural pests in some areas
Wimmera	Dissected Uplands (water erosion, dryland salinity, water quality); Older Alluvial Plains (stream erosion, dryland salinity, water quality, waterlogging); Mallee Plains (wind erosion, structure and fertility decline); Big Desert and Little Desert Dunefields (wind erosion, fertility decline); Wimmera Clay Plains - West Wimmera (water erosion, soil structure decline, fertility decline, water quality), - McKenzie River-Toolondo (fertility decline, water quality); South West Wimmera Plains (soil fertility, waterlogging)	Agricultural pests: skeleton weed, African lovegrass, horehound, boneseed, spiny burr grass, cape tulip, wild garlic, caltrop; Environmental weeds: smilax, sweet pittosporum, olive, Cootamundra wattle, veldt grass. Highest priority units are Big Desert Dunefields, West Wimmera Clay Plains and Grampians	Rabbits, foxes, mice (in paddock and stored crops), white snails and feral cats. Highest priority units are Big Desert Dunefields, Dissected Uplands, Grampians, South West Wimmera Plains, and McKenzie River - Toolondo area

The Council and Board members, between them, have experience and knowledge of land protection, water resource management, primary industry, conservation and local Government. The majority are primary producers. Relevant Departments are represented.

Under the *Act*, private land owners and public land managers are to take all reasonable steps to avoid causing or contributing to land degradation that may damage land owned by another party. Land should be managed to conserve soil, protect water quality and control pest plants and animals.

5.7 EARTH RESOURCES

Minerals and Extractive Industry

This section outlines the current use of earth resources in south-west Victoria and briefly presents current data. As at May 1995 there were 288 tenements in the investigation area (see Table 5.4). Some 156 were held under, or subject to provisions of, the *Mineral Resources Development Act* (MRDA) 1990 and *Mines Act* 1958, while 132 were under the *Extractive Industries Act* (EIA) 1966. These occur on both public and private

land covering an area of approximately 16 000 sq.km.

Mineral exploration

Seventy-five Exploration Licences have been granted, covering about 15 000 sq.km, most around outcropping Paleozoic bedrock. For the period 1/4/94 to 31/3/95 a total of \$2.81 million was spent on exploration in the study area. Current mineral exploration is aimed at primary and secondary gold, base metals, heavy mineral sands, peat and gypsum.

Minerals

Mineral and economic rock occurrences in the area include gold, copper, lead, zinc, silver, bismuth, tungsten, molybdenum, cobalt, iron, platinum group metals, heavy mineral sands, gypsum, phosphate, peat, limestone, dimension stone, gemstones, wollastonite, kaolin, silica, bentonite, talc and salt. Relevant locations are listed in Appendix VII. Ararat, Stawell and St Arnaud have been major historical goldfields, producing over 4.3 million oz of gold.

Stone

'Stone' - basalt, limestone, scoria, tuff, sandstone, hornfels, porphyry, sand, and gravel and clay - is extracted for use in agriculture, building and road construction. Commercial extraction of stone is controlled by the EIA and production is summarised in Appendix VIII. Stone extraction is also possible under the *Local Government Act 1989*, *Forests Act 1958*,

Lands Act 1958, *Catchment and Land Protection Act 1994* and *Transport Act 1983*. Production statistics for stone obtained under those Acts are not covered in this section.

Production

Minerals that are being produced from the study area include Kaolin from Pittong, dimension stone from the Otways, gypsum from Horsham, silver and gold from Stawell, with gold alone mined at Carapooee, St Arnaud and Amphitheatre. The actual production originates from a handful of tenements. Victoria's largest producing gold mine is located at Stawell, accounting for the investigation area's large gold production.

For the financial year ending June 1994 a total of \$41.7 million of minerals and stone was produced (see Table 5.5). Production statistics were derived from the Department of Agriculture, Energy and Minerals.

Petroleum Exploration Activity

The investigation area includes parts of two* sedimentary basins - the Otway Basin and the Murray Basin.

The Otway Basin is currently being explored under sixteen petroleum exploration permits. The Basin has a high exploration profile with recent shows of onshore oil in test bores, and commercial discovery of natural gas offshore. Three production leases supply natural gas to Portland, Warrnambool, Hamilton, Cobden and

TABLE 5.4 Number of Tenements and Total Area held under the *Mineral Resources Development Act 1990* and the *Extractive Industries Act 1966*

Type of tenement	No of tenements	Area
<i>Exploration Licence</i>	76	15 000 sq.km
<i>Mining Titles</i>		
Mining Licence	55	5 421 ha
Mining Lease	11	1 517 ha
Mining Area Licence	1	135 ha
Miners Right Claim	8	31 ha
Development Lease	1	112 ha
Tailings Removal Licence	4	63 ha
Total	80	7 280 ha
<i>Extractive Industries</i>		
Extractive Industry Licence	111	2 865 ha
Extractive Industry Lease	21	216 ha
Total	132	3 081 ha

TABLE 5.5 Mineral and Stone Production in the South-western Area for the Financial Year 1993/94.

Commodity	Annual production	Estimated value (\$)
<i>Metallics</i>		
Gold	23 833 kg	29 872 900
Silver	318 kg	61 400
Total		29 934 300
<i>Non-metallics</i>		
Gypsum	10 650 tonne	106 500
Kaolin	31 871 tonne	8 649 000
Dimension stone	512 cu.m	11 910
Total		8 767 410
<i>Stone</i>	1 146 947 tonne	10 761 700
TOTAL:		41 679 310

other centres, as well as carbon dioxide. Natural gas is distributed by high pressure transmission pipelines operated by the Gas Transmission Corporation.

The Murray Basin is being explored under one petroleum exploration permit and investigated as part of the Victorian Initiative for Minerals and Petroleum.



Cheese being loaded for transport on the Lower Gellibrand River to the Ocean Road

Geothermal energy

Low-temperature (30°C to 80°C) geothermal resources are located in Otway Basin aquifers. Wangerrip Group sediments west of the Otway Ranges contain quality groundwater in excess of 35°C, mainly where major sags or troughs occur in the sub-surface rock. Geothermal resources have greatly reduced energy costs for direct heating of municipal buildings and

swimming pools at Portland, and for private purposes at Port Fairy and Narrawong. Additional horticultural and agricultural applications are being investigated.

Geological Features

Geological features considered significant components of the natural or cultural environment of Australia with specific aesthetic, historic, scientific or social values, have been recorded and assessed by the Geological Survey of Victoria and the Geological Heritage Sub Committee of the Geological Society of Australia. Sites of international and national significance identified in several studies are listed in Appendix IX.

5.8 AGRICULTURE AND APICULTURE

Agriculture

The investigation area supports a diverse range of agricultural enterprises including, sheep, beef, milk, vegetables, oilseeds and cereal production. The area is one of the most productive areas in Victoria, producing approximately 25% of Victoria's annual gross value of agricultural production, estimated to be worth \$1.2 billion. This comprises crop products (\$270 million), livestock slaughter (\$300 million) and livestock production (\$650 million). These are produced on 7550 establishments which utilise 3.3 million hectares, some 27% of Victoria's agricultural land.

Most of the cereal cropping occurs in the north of the study area with sheep and cattle grazing evenly spread. Dairying is concentrated in the higher rainfall districts to the south. The region also has substantial agricultural processing operations in meat, dairy products, wool, potatoes, grain and wine.

The relative areas of production in the study area summarised below:

	Area (ha)	% Victorian area
Cropped area	452 000	20
Sown pasture	1 903 000	35
Native pasture	599 000	26
Vegetables	3 250	2
Cereals	300 000	18
Grapes	340	2

Agricultural use of public land is limited to grazing of small areas under licence. After declaration of the various national and State parks in the area following Land Conservation Council investigations, grazing on the larger parcels of public land has ceased. Grazing continues on small areas, particularly on the gum - box woodlands with a grassy ground cover.

Apiculture

Apiculture is a small industry producing honey, beeswax, and some other minor products. It

makes a significant contribution to other primary industries through pollination of agricultural and horticultural crops. The species used in apiculture is the European honey bee.

Public land in the investigation area includes some of the most important parts of the State for the industry, owing to its diversity of suitable eucalypt and non-eucalypt species, the long flowering period, the intensity and dependability of flowering and the generally favourable climatic conditions.

The most important eucalypts for honey production in the investigation area are yellow box, yellow gum, and red gum. Grey box, black box and, where it occurs, pink gum are notable, as are messmate, brown stringybark and long-leaf box as pollen producers. Desert banksia found in the Little Desert is also important for its winter flowering.

Permits to use public land for beekeeping are required from the relevant land managers. Reference areas, wilderness areas, and essentially natural catchments are not available for beekeeping, and in national parks, State parks and nature conservation reserves, apiculture is only permitted on traditionally licensed sites, and subject to the outcome of research into ecological impacts, and management requirements.

6. PROTECTION AND MANAGEMENT

The protection and management of historic places on public land in Victoria are key factors in retaining Victoria's heritage for present and future generations. Historic places are an irreplaceable resource and prominent elements of our State and national identities.

This chapter outlines the various agencies and groups involved in the identification, assessment, management and registration of places of historic and cultural significance in Victoria. It examines the levels of protection afforded to historic places, including statutory protection, and the methods undertaken to ensure this. Management techniques and practices are described.

Some issues associated with the management, conservation and re-use of historic places on public land in Victoria are also identified. They will be considered during this investigation. An outline of the relevant legislation is provided in Appendix X.

6.1 RESPONSIBLE AGENCIES

In Victoria, there is no single group or organisation with sole responsibility for historic places on public land. Rather, the responsibility is shared by a range of organisations and groups, with roles in protection and management. The agencies outlined below are involved to some degree in the identification, assessment, conservation and protection of places. Some are also involved in compiling inventories of places, and the statutory registration of places. Other bodies manage historic places in a delegated capacity.

Table 6.1 provides a quick reference to the roles and responsibilities of the key heritage organisations. Table 6.2 provides a more detailed outline of their functions.

Heritage Victoria

Heritage Victoria is an administrative unit within the Office of Planning and Heritage, Department of Planning and Development. The branch is responsible for the identification, assessment and preservation of Victoria's most significant non-Aboriginal cultural heritage.

This responsibility embraces historic buildings and structures, historic archaeological land and marine sites, and other material remains associated with previous human activities within the landscape.

Heritage Victoria provides administrative support for the Historic Buildings Council, which is a statutory body responsible to the Minister for Planning. Under the new *Heritage Act* 1995, which is expected to be proclaimed in 1996, the Historic Buildings Council will be replaced by the Heritage Council. Throughout the remainder of this Chapter the term Heritage Council will be used in anticipation of proclamation of the new Act.

Heritage Victoria also maintains the Victorian Heritage Register and the Government Buildings Register (closed since 1989). The Victorian Heritage Register incorporates historic shipwrecks, which were formerly on the Historic Shipwrecks Register. Under the *Heritage Act* the Victorian Heritage Register differs from its predecessor, the Historic Buildings Register, in that its scope has been broadened to include non-Aboriginal objects, gardens, trees and archaeological sites. The Government Buildings Register is also to be phased out as Government buildings are gradually re-assessed for transferral to the new Victorian Heritage Register.

The Heritage Council

The Heritage Council makes recommendations to the Minister for Planning on a variety of matters affecting heritage buildings and sites in Victoria. Specifically, the Council makes recommendations on buildings and structures of State significance which should be added to the Victorian Heritage Register. This affords them the highest level of protection available to historic places in Victoria. The Heritage Council also recommends alterations to the Register, including the removal of listed buildings and structures, and advises on matters affecting buildings or land on the Register. The Council also provides information about heritage to the public, and promotes interest in the conservation of buildings and sites of heritage significance.

TABLE 6.1: Agencies or Groups with Responsibility for Historic Places

Agencies/groups with responsibility for historic places	Owner or delegated manager	Maintains a statutory register*	Maintains inventories of places	Determines significance	Provides conservation advice to owners and managers	Provides advice on statutory obligations	Can arrange for or provide financial assistance	Assesses and grants permits for works on registered places
Heritage Victoria	X	✓	✓	✓	✓	✓	✓	✓
National Trust	✓	X+	✓	✓	✓	✓	X	X
Australian Heritage Commission	X	✓	✓	✓	✓#	✓#	✓	X
Aboriginal Affairs Victoria	✓	✓	✓	✓	✓	✓	✓	✓
DCNR	✓	X	✓	✓	✓	✓@	✓	X
Local government	✓	X	✓	X	✓	✓	✓	✓
State government departments/statutory authorities	✓	X	X	X	X	X	X	X
Delegated managers	✓	X	X	X	X	X	X	X

Legend:

- # Applies to Commonwealth agencies only.
- @ For obligations under the *National Parks Act 1975*
- + The National Trust Register is not statutory, but some obligations apply to municipalities (see text)

Note:

- * Meaning a register established under legislation, which ensures statutory protection for places listed on the register. The register of the Australian Heritage Commission (Register of the National Estate) ensures protection for listed places on Commonwealth land, or for listed places subject to Commonwealth Government actions.

TABLE 6.2: Heritage Organisations

Name of Organisation	Relevant Legislation	Responsibilities	Statutory Provisions	Types of Places	Levels of Significance
Government Organisations					
Heritage Council	<i>Heritage Act 1995</i>	Identification and control of historic places of State significance. Administration of financial assistance program.	Permit required to alter or demolish registered structures, or to redevelop or subdivide site.	Buildings, works, objects, gardens, trees, non-Aboriginal archaeological places and relics, and shipwrecks and their materials.	State
Heritage Victoria, Department of Planning and Development	<i>Planning and Environment Act 1987</i> <i>Heritage Act 1995</i> <i>Historic Shipwrecks Act 1976</i> (Commonwealth) <i>Archaeological and Aboriginal Relics Preservation Act 1972</i> (non-Aboriginal component only)	Identification and control of Victoria's post-contact cultural heritage, administrative support for the Heritage Council, assistance to Government departments, local councils and the community.	For non-Aboriginal archaeological places, surveys must be undertaken prior to any works or other damaging activity in an area containing archaeological places. Heritage Victoria must be notified of any newly discovered places. Permit required to remove relics from registered shipwrecks, or to be on or near a wreck in a protected zone.	Buildings, works, objects, gardens, trees, non-Aboriginal archaeological places and relics, and shipwrecks and their materials.	State, Regional, Local.
Heritage Services Branch, Aboriginal Affairs Victoria (AAV)	<i>Aboriginal and Torres Strait Islanders Heritage Protection Act 1987</i> (Commonwealth) <i>Archaeological and Aboriginal Relics Preservation Act 1972</i>	Victoria's Aboriginal (Koorie) cultural heritage.	Permits required prior to any excavation or potentially damaging activity on or near registered places. Surveys must also be undertaken prior to any works in an area containing Aboriginal archaeological places. AAV must be notified of any newly discovered places.	Aboriginal archaeological and historic sites, relics, places and objects.	Registration by location, not levels of significance.
Australian Heritage Commission (AHC)	<i>Australian Heritage Commission Act 1975</i> (Commonwealth)	Identification of places of cultural heritage on the Register of the National Estate, Administration of National Estate Grants Program.	Commonwealth Government agencies must consult with AHC prior to any action which may have an adverse impact on registered places.	Natural and built places, archaeological sites and relics, Aboriginal sites.	National, State, Regional, Local.

Name of Organisation	Relevant Legislation	Responsibilities	Statutory Provisions	Types of Places	Levels of Significance
Historic Places Section, Department of Conservation and Natural Resources	<i>Crown Land (Reserves) Act</i> 1978 <i>National Parks Act</i> 1975 <i>Forests Act</i> 1958	Management of places on public land including those under control of Committees of Management, in national parks or other reserves.		Buildings, places, objects, archaeological sites and relics.	State, Regional, Local.
Heritage Assets Branch, Office of Building, Department of Planning and Development	<i>Heritage Act</i> 1995 <i>Planning and Environment</i> <i>Act</i> 1987	Provides conservation services for historic buildings, including those owned and used by the Victorian Government.		Buildings.	State, Regional, Local
Local Municipal Councils (shires and cities)	<i>Planning and Environment</i> <i>Act</i> 1987	Administration of local planning schemes which are the primary source of statutory protection for heritage places.	Permit required from local council prior to any alteration, demolition or removal of structure, construction of new buildings or subdivision of land listed in a planning scheme with heritage requirements.	Buildings, structures, landscapes, trees and conservation areas.	
Non-Government Organisations					
Australian International Council on Monuments and Sites (ICOMOS)	Although not legislation, the Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter) is widely accepted as the basis for heritage conservation in Australia.	Australia ICOMOS is an independent national committee of the international body which is affiliated with UNESCO. It is involved in World Heritage listings.		Built places and objects.	International, National, State
National Trust of Australia (includes local and State branches)	The Trust is a community organisation with no direct statutory power but an interest in the State's heritage.	The Trust keeps its own list of classifications and lobbies other conservation organisations. It also owns and manages a range of historic places and has special privileges and rights under the <i>Heritage Act</i> 1995.	Municipalities must notify the Trust of any application relating to council-owned places on the National Trust Register.	Natural and cultural places, including buildings, gardens, trees, landscapes and other structures.	National, State, Regional, Local.
Royal Historical Society of Victoria	The RHSV is an umbrella organisation for Victoria's historical societies and promotes an understanding of history in the community.				

Historic shipwrecks

Historic shipwrecks are also a responsibility of Heritage Victoria. The two pieces of legislation which protect shipwrecks in Victoria's inland and coastal waters are the Commonwealth *Historic Shipwrecks Act 1976* and the Victorian *Historic Shipwrecks Act 1981* (to be repealed after proclamation of the *Heritage Act 1995*). The Historic Shipwrecks Advisory Committee advises the Minister for Planning on all matters relating to historic shipwrecks and their remains, and recommends the registration of shipwrecks and associated artefacts for inclusion on the Victorian Heritage Register.

Identification of places

Buildings and sites of heritage significance come to the attention of Heritage Victoria by several means. Any person can nominate a place to the Victorian Heritage Register, provided they supply sufficient information for assessment. Alternatively, places come under notice through heritage studies, which are generally focused on municipal areas or cities, or through typological or thematic studies, which focus on a particular type or style of heritage place. Historic archaeological sites are identified and assessed through archaeological surveys, often in response to a development proposal. Historic buildings at risk are also brought to the attention of the Heritage Council, very often by members of the public or by a group aware of the significance of the place. If under threat of destruction, these places are assessed and an interim preservation order is issued if necessary. This affords protection prior to consideration for registration.

Significance assessment

Heritage Victoria has developed guidelines for the assessment of significance against standard criteria. In deciding whether a building or a structure is of State significance, the Heritage Council considers its aesthetic, scientific, architectural, historic and social values. On registration, the building and associated land are identified through the *Statement of significance and extent of registration*. These key aspects are also considered when applications are made to alter the registered buildings or structures.

Places on the Historical Archaeological Sites Inventory are not assigned levels of significance. Historical archaeological places recommended to the new Victorian Heritage

Register, however, are assessed against the criteria currently used by the Heritage Council.

Up until 1993, shipwrecks placed on *Shiplist*, the Historic Shipwrecks Register, were assessed on an individual basis using criteria developed by the Commonwealth Government, and based on historic, scientific, aesthetic, technical, educational and recreational values. In 1993, a 'rolling date' system was implemented, so that all shipwrecks 75 years old or more are automatically listed. For management purposes, however, the values of individual shipwrecks are still important in terms of allocating resources and making decisions about recreational use.



Memorial to the Gold Escort Route, Western Highway near Horsham

Protection

Buildings and structures on the Victorian Heritage Register cannot be altered, subdivided, developed or demolished without a permit from the Heritage Council. Buildings listed on the Government Buildings Register require approval from the Minister for Planning for any proposal for alteration or demolition. In both instances alterations may include structural works, non-structural works, and changes to decorative schemes. Repair and maintenance which involves replacing like with like does not constitute an alteration. Prior to a change of ownership or sale, a registered government building must be re-assessed for transfer from the Government Buildings Register to the Victorian Heritage Register.

In assessing a permit application the Heritage Council takes into account the effect of the proposal on the significance of the building; the reasonable or economic use of the building; and whether refusal would cause the owner undue financial hardship. Under the new Act, places on the Victorian Heritage Register are identified

in planning schemes to give the public a single point of reference for places of heritage significance. Permits to demolish or alter any place on the Register are still required. The Heritage Council can also consider permit exemptions for all places prior to registration, and local authorities are able to determine permit applications under delegated authority.

In regard to historical archaeological places, any person wishing to undertake activities in the landscape which are likely to impact on such a place is required to apply to Heritage Victoria for permission to disturb the relics or remains. Any activity which involves disturbance of the subsurface, such as road building, mining or construction of buildings or structures in a known heritage area, is likely to disturb the archaeological deposit. Prior to such impacts, Heritage Victoria requires that an archaeological survey be undertaken and that notification of such a survey is recorded with Heritage Victoria. Historical archaeological sites found during surveys should be registered with Heritage Victoria.

Unless a permit is obtained, it is an offence to remove any article from a registered shipwreck, to be near or on such a wreck, or within protected zones. The latter are implemented to further reduce uncontrolled activities which may impact on shipwreck sites. Any person who finds the remains of a ship or associated article is required to notify Heritage Victoria in writing within seven days.

Listings

Heritage Victoria maintains a number of listings or databases, apart from the Victorian Heritage Register and Government Buildings Register. For instance, the Historic Buildings System is a database of all buildings and sites of historic note which have been referred to Heritage Victoria (or its predecessors), including places unsuccessfully nominated to the Victorian Heritage Register. The inventory of Historical Archaeological Sites comprises all non-Aboriginal archaeological sites that have been identified in Victoria. There are also databases for artefacts relating to registered historic buildings, artefacts which have originated from historic archaeological land sites, and artefacts from historic shipwrecks.

National Trust

The National Trust of Australia (Victoria) is a non-profit community organisation which is

committed to the conservation of Victoria's heritage, and to the education and involvement of the community in the appreciation of heritage. It is a non-government body which is not State-funded, other than through grants for specific projects. The Trust is dependent on the annual subscriptions of its 30,000 members, and on money raised through the operation of its museum houses, sponsorships and donations. It presently manages over 60 properties in Victoria, many of which are regularly open to the public. Some National Trust managed places are also on public land.

National Trust Register

After its formation in Victoria in 1956, the National Trust began compiling a list or register of significant places and objects. As of June 1994, there were 3883 'classified' places on the Trust register, including buildings, gardens, trees and landscapes. There are also 'recorded' category places, which signify a lesser ranking than 'classified', though this category is currently under review.

As the Trust does not have statutory powers, listing on its register generally affords no legal protection, though the Trust pursues protection for places on its register. Consequently, many National Trust registered places are also found on the statutory registers, including those of Heritage Victoria. Further, under Section 2.4.2 of the State Section of the Planning Scheme, municipalities that own land on which a classified building or structure stands are required to notify the National Trust of any application relating to that land.

The Trust's Register, which combines significant natural and cultural places and objects, formed the basis of the initial Victorian cultural heritage listings for both the Register of the National Estate (see below), and the Victorian Heritage Register. The Trust's expertise and records, including nearly 7000 files on places and objects nominated to or listed in the Trust register, remain an important referral and source of information for places nominated to both these registers. Within Victoria, the Trust is also an important advocate for the listing of buildings at Heritage Council hearings.

Expert committees and significance assessment

Over 100 voluntary committees work for the Trust. Expert Committee members provide free specialist assistance and advice. The main

conservation committees cover buildings, including a committee which focuses on 20th century buildings, industrial history, public art, landscape, gardens, significant trees and cemeteries. The committees also make recommendations on adding places to the Trust register based on aesthetic, historic, social and scientific criteria. The four levels of national, State, regional and local significance are applied.

Procedures

Anyone can nominate a place to the National Trust register, using a data form and supporting material such as photographs and plans. These are submitted to the expert committees for assessment, and a classification report is prepared. The statement of significance is the most important component of the report. Where there is insufficient information, a place or object may be classified at 'interim' level, pending a fuller assessment at a later date. Interim classifications thus give places under threat quicker heritage recognition.

Aboriginal Affairs Victoria

Aboriginal Affairs Victoria (AAV), through its Heritage Services Branch, has responsibility for the investigation, interpretation, protection and management of Victoria's Aboriginal cultural and archaeological heritage. The legislative framework for this is provided by the *Archaeological and Aboriginal Relics Preservation Act 1972*, which is administered by AAV, and by Part 2A of the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*. Part 2A applies to Victoria only, and is administered on a day to day basis by AAV.

Site Register

The AAV Site Register contains more than 17,000 Aboriginal sites, places, artefacts or objects. These include individual artefacts and private collections of artefacts, stone tool scatters, rock art sites, ancient camp sites such as shell middens or oven mounds, human burials, scarred trees with slabs of bark removed, Aboriginal missions or reserves, protectorate stations, massacre sites, ceremonial sites, and other places and objects of significance to Aboriginal communities

The Aboriginal Historic Places and Sites component of the Site Register is discussed in detail below. AAV has ongoing programs for

the location and documentation of Aboriginal sites and places and approximately 1,000 sites and places are added to the Register each year.

Management and protection

Management and protection of Aboriginal sites and places is a high priority for AAV and resources are allocated for the development of management plans and for some works. Management of Aboriginal sites and places on public land is the responsibility of the Department of Conservation and Natural Resources, in conjunction with AAV and relevant local Aboriginal communities.

Five Aboriginal Site Officers provide AAV with a regional focus and links with Aboriginal communities, Government departments, local Government and the wider community. AAV also funds the employment of Aboriginal Cultural Officers by Aboriginal communities throughout the State. Cultural Officers play a major role in Aboriginal cultural heritage matters and should be the first point of contact with Aboriginal communities. Most Site Officers and Cultural Officers are inspectors under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* and are authorised to make emergency declarations to prevent disturbance of Aboriginal places.

AAV also has a legislative responsibility under the *Mineral Resources Development Act 1990* which requires that exploration and mining licence applications are referred to AAV. Mining works are prohibited within 100 metres of any Aboriginal archaeological site on the AAV Site Register, and on land that is declared an archaeological area under the *Archaeological and Aboriginal Relics Preservation Act 1972*, or a declared Aboriginal place under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

Aboriginal Historic Places and Sites Program

Aboriginal Affairs Victoria is also engaged in an Aboriginal Historic Places and Sites Program, which is concerned with places and sites which date from the first contacts between Aboriginal and non-Aboriginal people through to the present. Separate databases are maintained for Aboriginal historic places and historic sites, and more than 1,000 places have been documented since the program commenced in 1992.

The Aboriginal Historic Places database houses information on Aboriginal peoples' associations with places which date from contact between Aboriginal and non-Aboriginal people. These associations do not necessarily manifest in tangible remains (for example, spiritual places). Information on the Register is derived from historical texts (primary and secondary), from oral sources and archaeological investigation. The database is divided into 13 main themes which are listed below:

- Associations with pastoralism/farming/rural industry
- Associations with settlements/towns
- Associations with forests (not known if the association originates in the pre-contact period)
- Places where people independently congregated/frequented/travelled (not known if the association originates in the pre-contact period)
- Government administration of resources for Aboriginal people
- Associations with the Church
- Land reserved for Aboriginal people
- Places of conflict
- Places where people have died or been buried since contact
- Places linked to significant people
- Attachments to/associations with places which are known to precede contact
- Places relating to self determination

Many places on this database are protected under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

The Aboriginal Historic Sites database documents Aboriginal sites which date to the period after contact in Victoria. This database differs from the Aboriginal Historic Places database in that it deals specifically with those localities where there are archaeological remains. Sites on this database are also Aboriginal places and therefore are included on the places database. Aboriginal historic sites are protected under the *State Archaeological and Aboriginal Relics Preservation Act 1972* and the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

Australian Heritage Commission

The Australian Heritage Commission is a Commonwealth Government statutory authority, established in 1975. The Commission comprises a part-time Chairman and six part-time Commissioners, who are supported by

specialist staff based in Canberra. The Commission's main responsibilities are to advise the Commonwealth Government on National Estate conservation issues; to compile an inventory of National Estate places throughout Australia (the Register of the National Estate); to coordinate the National Estate Grants Program and administer the program's national component (see 'Financial assistance for heritage properties' later in this Chapter); and to encourage community appreciation of and concern for the National Estate through information, education and training.



Band Rotunda, Lake Marma, Murtoa

Register of the National Estate

The Register of the National Estate (RNE) is a national inventory of natural and cultural heritage places on public and private land, which alerts governments, planners, researchers and the community to the heritage value of listed places. It currently contains nearly 11,000 registered places. Anyone can nominate a place for registration, but places are increasingly being assessed on a thematic or regional basis. Prior to full registration, places are put on an Interim List, at which time any person can object to or make comment on the listing, for a period of three months. All owners are notified by the Commission of its intention to register places.

Listing is not a land management decision and the Commission does not own or manage any National Estate places. Entry in the Register does not give the Commonwealth Government any rights to acquire, manage or enter places which are private property. Further, listing does not directly affect the way in which private owners administer their properties. There is no legal obligation on them to alter the way in which they manage or dispose of their

properties, nor are they obliged to grant public access.

Only Commonwealth Government actions are constrained as a result of National Estate listing. The registration of a place must be taken into account by the Commonwealth Government when making decisions on management or disposal. Listing can also affect decisions relating to foreign investment in Australia, the granting of export licences for products from natural areas, international treaties signed by Australia, and the provision of Commonwealth funds for programs undertaken by other bodies. The Australian Heritage Commission, however, has no power of veto over a Commonwealth action which might damage a registered place. It can only advise on the potential impacts on National Estate values.

Significance assessment

All places on the Register of the National Estate are assessed against a set of criteria which take into account the aesthetic, historic, creative, technical, scientific and social values of a place, and weigh up its rarity, representativeness, or research potential. Places do not have to be of National significance to be listed on the Register. Assessments are made by referral to an expert panel, Government or voluntary expert bodies, or through a review of existing information by Commission technical staff with possible assistance from independent experts. Once assessment is complete, the Commission's technical staff make a recommendation to the Commissioners who decide on Register entries.

Department of Conservation and Natural Resources

The Department of Conservation and Natural Resources (CNR) is responsible for managing the enormous range of relics and structures relating to past human activity which are found in the national and other parks, State forests and reserved and unreserved Crown land areas, which constitute most of Victoria's public lands. CNR's responsibilities include former Government buildings, such as closed court houses, schools and police residences; some community buildings such as public halls and mechanics' institutes; and buildings re-purchased by the Government for heritage conservation. Other structures or works originally built for public or private use, in association with Crown land tenures or resource utilisation activities, are also managed by CNR

and include cattlemen's huts, bathing boxes and former sawmill sites.

Parks and reserves

The National Parks Service of CNR is responsible for all areas managed under the *National Parks Act 1975*, and for certain reserves which are not subject to the Act, including wildlife, nature conservation, scenic and bushland reserves. Management strategies for historic places in these areas are directed by the 'Guidelines and Procedures' documents produced by the National Parks Service. Management is also guided by park and reserve management plans.

For historic places, management plans can specify what is significant about a place and set strategies for protecting those significant features. The plans can describe conservation measures, recommend interpretation programs and appropriate recreational uses, or further research and monitoring of places. Some Historic Reserves and Areas also have specific management plans.

Within parks, management zones identify places and areas, including historic places, which require special conservation actions and the implementation of specific management objectives. Zoning also establishes the intensity and types of use appropriate to different areas. If necessary, management actions can restrict or discourage recreation or other activities which may have an adverse impact on historic places. Where sites are too small to warrant zoning, special management prescriptions can also be put in place.



Courthouse, Mortlake, constructed 1864

Management of historic places in historic and cultural features reserves is also guided by management plans, where they exist, or by

National Parks Service guidelines. A range of historic places has also been reserved under Section 4 of the *Crown Land (Reserves) Act* 1978. Many of these reserves are small areas of land, very often in or near townships, which have been set aside at the request of local communities. Others have been re-reserved for historical purposes after they ceased in their original function, and include some significant former schools and other public buildings. Management of these places is directed by management plans or guidelines, and often carried out by a committee of management.

Forests

'State forest', for the purposes of the Land Conservation Council, incorporates both reserved forest (as defined under the *Forests Act* 1958) and larger areas of unoccupied or unreserved Crown land, previously designated 'Uncommitted Land'. Under current administrative arrangements within the Department of Conservation and Natural Resources, the Forests Service manages historic places within State forest, and areas reserved for their historic values under Section 50 of the *Forests Act*.

Forest management plans (FMP) establish strategies for integrating and balancing commercial uses of State forest, with the conservation of natural and cultural values. Although chiefly aimed at planning for State forest areas, forest management plans also take account of the uses and degree of representation and protection of values on other public land, including parks and reserves.

Each FMP subdivides State forest into management units or zones, which recognise specific resource values and uses, and for which specific management actions apply. Historic places may be located in either the general management, special management, or special protection (conservation) zones. Where the information is available, decisions on zoning are based on levels of significance as well as specific attributes of the sites.

While timber production has a high priority in the general management zone, historic places can be protected through their identification on coupe plans and, if necessary, exclusion from timber harvesting operations. Timber production is also permitted in the special management zone, but only to the extent that it does not conflict with conservation of the

identified features within the zone. Protection can be achieved through the provision of a buffer, or the prohibition or regulation of machinery movement and other kinds of activity such as the construction of access tracks and loading areas. Alternatively, the alignments of historic timber tramways, for example, may be treated in the same way as filter strips along water courses. The tramways can be identified on coupe plans, and trees may be felled out of the strips but no machinery movement be permitted within them. For the most significant historic places, special protection zones are more appropriate. These zones are managed for conservation, and timber harvesting or other non-conforming uses are excluded.

Historic Places Section

The Historic Places Section is the expert cultural heritage group in the Department of Conservation and Natural Resources. Though located within the National Parks Service, the Section has a department-wide role in providing advice and technical support to managers of historic places on all public land under the control of CNR. Through large regional studies of historic places, such as those undertaken in the East Gippsland and Central Highlands regions of Victoria, the Historic Places Section has developed particular expertise in regard to those places most commonly found on public land.

The Section maintains a resource collection and an inventory of historic places, undertakes research into and identification of historic places, and makes assessments of significance. The Section also assists with site interpretation, participates in the preparation of management and conservation plans, and provides staff training, expert advice and supervision for conservation actions.

Since 1989, the Section has been involved in a Statewide survey of historic mining sites, under the guidance of the Historic Mining Sites Assessment Committee. The Committee draws membership from Government and non-Government organisations and individuals. Its terms of reference require the establishment of a Statewide register of historic mining sites, which sets standards for recording and assessment, and indicates appropriate levels of protection. The Committee also has a role in reviewing specific proposals or legislation which might affect historic mining sites. When completed at the end of 1995, the survey will

permit the broadest possible view to be taken in the management of historic mining sites, as the values of each place have been identified and can be assessed in a comprehensive Statewide context.

Heritage Assets Branch

Heritage Assets Branch is a small group located within the Office of Building, Department of Planning and Development. The Branch specialises in the provision of technical and design services, and in the repair and restoration of historic buildings. Victorian Government departments and statutory authorities are the principal clients of the Branch. Heritage Assets also undertakes historical research, prepares conservation analyses and plans, maintains a database and a valuable collection of records on historic Government buildings, including typological studies of court houses, schools, police buildings, prisons, hospitals and residences.

Other Government Departments and Authorities

State Government departments and statutory authorities are responsible for a range of historic buildings and structures in Victoria, including many functioning Government buildings. Many are located on Crown land vested in or managed by a State agency, or on land purchased by public authorities, which is public land under the *Land Conservation Act* 1970.

Former hospital complexes such as Aradale in Ararat, managed by the Department of Health and Community Services, retain outstanding buildings and historic features. Numerous structures along operating and closed railway lines are managed by the Public Transport Corporation. Many schools and other Education Department institutions are distributed across the region. The Department of Treasury and Finance in Victoria manages the accommodation of Government agencies, and oversees leases on properties such as Erskine House at Lorne. This Department is also responsible for basic maintenance works on buildings declared surplus by various Government departments. The Office of Building provides design, construction and asset management services, primarily for Government agencies. The Justice Department has a role in the operation of buildings such as courts, police stations and gaols, and those used for emergency service functions.

Heritage Assets Branch provides expert advice on the management of Government-owned historic buildings. Where these buildings are on the Victorian Heritage Register or Government Buildings Register, then statutory restrictions apply to their management in terms of proposals to alter, demolish or dispose of these properties. The issue of redundant public buildings is addressed in the section on 'Issues' at the end of this Chapter.

Many townships and outlying rural areas have public buildings, and reserved and unreserved public land, which may contain historic structures or features. These include public utilities, bridges, monuments, public gardens, recreation grounds, and features in road stream, gravel and water reserves, as well as cemeteries. Various government or local government organisations are responsible for managing places which retain their official functions, while maintaining the historic features of the place. CNR is also responsible for some of these reserves.

Municipal buildings on Crown land are included in this investigation, but not where they occur on municipally-owned land.

Local Government

The implementation of statutory heritage planning controls is one of the principal roles of local Government in regard to cultural heritage. Local planning schemes are primary sources of statutory protection for historic places in Victoria. For places listed in the schemes, a permit from the council is required prior to works involving external alterations, demolition or removal of a historic building or structure, construction of a new building, or subdivision of the land.

Non-statutory functions of councils include provision of advice to owners of historic properties, and development of detailed policies and guidelines to assist implementation of planning controls. Some local councils have established Heritage Advisory Committees, and appointed Heritage Advisers, for this purpose. The committees also advise councils on planning and heritage matters, and make recommendations on the provision of funds for owners of historic properties, very often from local revolving restoration funds. Heritage Advisers provide basic advice to the community on a range of conservation issues, including structural or maintenance problems associated with historic properties. Councils also hold

information on places identified in local heritage studies, where they have been undertaken.

Some councils have tapped into the National Estate Grants Program (NEGP) to undertake the identification and assessment of local heritage. NEGP funds are supplemented by the councils' own contributions. Heritage Victoria is generally involved when proposals for NEGP funding are being developed.



Disused timber trestle railway bridge, Wimmera River, Quantong

Delegated Managers

Historic places on public land in Victoria are also managed by voluntary groups, such as committees of management or individuals, under the provisions of the *Crown Land (Reserves) Act 1978*. Delegated management is often directed by a management plan or a strategy for conservation and future use. Grants may also be provided for works or development projects. The National Trust of Australia (Victoria) acts as Committee of Management for a number of historic places on public land in South-western Victoria, including Captain Mills Cottage and the Powder Magazine on Battery Hill at Port Fairy.

The Historic Buildings Management Committee Inc. (HBMC) is also delegated by CNR to manage historic places in Victoria. The HBMC was established in 1986 to assist with management of surplus or redundant historic buildings on public land. The Committee makes recommendations to the Minister for Conservation and Environment on the use of these buildings, approves management plans, provides technical advice and financial assistance for the conservation of structures, and arranges for viable, long-term management of buildings under its control. It also assumes direct management of some places, as an

interim measure. In South-western Victoria, the HBMC has been involved with the old Yambuk and Hexham schools, and former court houses at Terang, Camperdown and Casterton.

Historical societies

Historical societies operate as centres of information on local history, and provide resource material for researchers. Some also operate museums, and conduct lectures and seminars on matters of local historical interest.

The Royal Historical Society of Victoria manages a valuable research collection, publishes resource material, runs a yearly *program of lectures*, and coordinates an affiliated group of historical societies around Victoria.

6.2 MANAGEMENT PRINCIPLES

Nationally accepted principles for the management of historic places in Australia are outlined in the Charter for the Conservation of Places of Cultural Significance (Burra Charter), which was adopted by the International Council for Monuments and Sites (ICOMOS) in Australia in 1979. The Charter embodies seven basic tenets:

- The place itself is important, and places are worth keeping because they provide evidence of past processes and conditions, enrich our understanding and appreciation of history, and focus community sentiment.
- Consider the significance of a place, as cultural significance relates to the qualities that make a place important, and is best understood through knowing the history of a place, and expressed by the materials and fabric of the place.
- The fabric is important, and sound conservation requires a knowledge of the fabric of a place, and an awareness of its significance for the place as a whole.
- Let significance guide decisions about management, conservation actions, and the allocation of resources.
- Let the fabric of the place tell its own story, by retaining as much of the original fabric as possible, and keeping changes to a minimum.

- Leave evidence for future managers by documenting the condition of a place before any actions are taken, and recording all subsequent conservation measures.
- Follow a logical order in caring for places. Collect information, assess significance, develop a management and conservation strategy, and carry out the conservation actions.

Historic places management in Victoria aims to conserve places *in situ*. Put simply, this means that physical remains and relics are left in place, and if resources allow, secured and stabilised. This is the preferred management action in many cases. Doing nothing and monitoring the condition of a place is preferable to unplanned work which can seriously damage or destroy the integrity of a place, or preclude future management options.

Sometimes conservation involves the retention of associated features such as remnant fences or exotic plantings, if they are not invasive and can be controlled. This recognises the surroundings and physical context of the place, which can be geographically extensive. Where places are important for what they demonstrate about past land use practices and human activities in the landscape, then it can be useful to monitor continuing changes to the environment. Complex historic places, or those with a rich variety of features and structures set in a cultural landscape, may require complicated management prescriptions.

Management should also recognise that historical processes continue at some places. For instance, stone is still occasionally extracted from the historic Mount Difficult Quarry in the Grampians for use in the conservation of stonework on significant public buildings in Melbourne and elsewhere. Places subject to past mining activity can also attract renewed mining or mineral exploration interest, as technology advances and markets change. In the past, the Land Conservation Council has recommended that mining and mineral exploration be permitted in historic reserves, where appropriate. In some cases, the historic features can be fully documented and recorded prior to the new resource use activity. Planning should ensure minimal damage to those features.

For many historic structures on public land in Victoria, however, there has been little or no



Remains of stone cottage, Heatherlie (Mt Difficult) Quarry, Grampians

basic conservation action. The assessments of significance made in this investigation should help to guide decisions, direct management actions and influence the allocation of funds.

Monitoring

Monitoring is an essential component of any management regime. It can identify threats and risks to sites, draw attention to places which require conservation, and alert managers to highly degraded sites which, after consideration of their significance, may no longer warrant resources. Management strategies and actions can also be followed up and reviewed through the monitoring process.

Recreation and Tourism

Historic places management in Victoria aims to provide for the appropriate use of places, and to maximise community understanding and appreciation of cultural heritage. Encouraging tourism and recreational activities in areas with historic features is one way of gaining community benefit from the retention and conservation of historic places. Visitor guides, on-site interpretation, and the publication and distribution of informative and educational material, enhance visitor experience of these places.

Interpretation can draw attention to the subtle values of historic places, which are not always obvious to visitors. Environmental history also has much to offer tourists, through an explanation of past land use practices and their impact on natural areas. Organised activities, and guided walks or demonstrations by rangers or trained volunteers, are another means of bringing to life the messages and stories associated with historic places. The retention

of original fabric and relies in situ contributes to a richer and more enlightening visitor experience. People appreciate authenticity, and experience a sense of 'discovery' when viewing structures and relics which have been sensitively conserved.

6.3 FINANCIAL ASSISTANCE FOR HERITAGE PROPERTIES

Several programs are available to assist with the conservation of heritage buildings and places in Victoria. Programs managed by Heritage Victoria include the Government Heritage Restoration Program, designed to assist with the urgent repair and conservation of historic buildings and structures; the Victorian Heritage Restoration Fund, which provides low interest loans for restoration and enhancement of historic buildings, places and gardens throughout Victoria; and the Historic Buildings Financial Assistance Program, available for properties listed on the Victorian Heritage Register, which provides grants and low interest loans for repairs and restoration works.

The Department of Conservation and Natural Resources' Historic Buildings Management Committee provides financial assistance for conservation of structures on public land under its control. Community Conservation Grants are also administered by CNR for works on historic buildings under the care of committees of management.

Funding for restoration of historic properties is available through some local councils. Private philanthropic trusts are occasionally another source of funding for historic properties.

National Estate Grants Program

The National Estate Grants Program (NEGP) is the Commonwealth Government's major heritage funding program, for Aboriginal and Torres Strait Islander, and natural and cultural heritage places and projects. It is coordinated by the Australian Heritage Commission in cooperation with state and territory governments. Grants are made available for the conservation of places listed on the Register of the National Estate, for education and promotional projects relating to the National Estate, and for the identification of places for nomination to the Register.

Non-profit bodies such as state and territory departments, community organisations,

professional, academic, and state and local government bodies are all eligible to apply for grants. Applications are assessed by expert committees in each state in consultation with the Australian Heritage Commission. The national component of the NEGP includes projects which span several states, research with Australia-wide benefits, and projects in Commonwealth territories.

For private owners of places listed on the Register, tax rebates are available through a scheme administered by the Australian Cultural Development Office of the Commonwealth Department of Communication and the Arts.

6.4. MANAGEMENT ISSUES

The following points draw attention to some of the issues associated with the management and protection of historic places on public land in Victoria. They will be considered during the course of this investigation.

- Some historic places managed by State Government departments and authorities are afforded protection where they are on the statutory Victorian Heritage Register, the Government Buildings Register, the Register of Aboriginal Affairs Victoria, listed in local planning schemes, reserved for historic purposes or identified in management plans. Many historic places on public land, however, have not been assessed and have no statutory or other formal protection, and there is little or no coordinated management of their historic values. Further, some levels of protection do not relate to the level of significance, or to current or proposed use of the place.
- Not all Land Conservation Council-recommended reserves in Victoria have been formally reserved. This is primarily an administrative resources issue, as the reserves are generally managed by CNR to protect their historic values. However, lack of formal reservation may be an issue for historic mining sites, if destruction of significant historic features results from subsequent use. Lack of formal reservation also impedes the enforcement of regulations.
- The recent CNR Statewide Assessment of Historic Mining Sites in Victoria has found that some historic reserves, originally set aside to protect mining heritage, do not always contain the most significant historic

features on public land in their districts. In such cases in the south-west, adjusting reserve boundaries, rationalisation or revocation of the reserve, or creation of new reserves could be considered. The mining sites survey authors have suggested that some reserve areas are too large for cost-effective management, and could be reduced without endangering historic features.

- Striking a balance between visitor demands and the protection of heritage values can pose problems in areas of heavy visitor use. The fabric of many places may be too fragile to withstand recreational use, or the provision of visitor facilities can pose problems of siting and maintenance for managers. Visitor structures, and measures undertaken to protect historic features, can also detract from the special qualities of the site, and the resultant visitor experience. Where management resources do not allow for a ranger to control visitation, or for stabilisation of the remnant features, then unregulated access may not be an option.
- In South-western Victoria, as a result of local government restructuring, 39 former local government bodies have been reduced to 14 municipalities. Accordingly, many structures including town halls and municipal offices, some with possible historic values, may no longer be required. Other Government buildings, including railway stations, hospitals and schools, have also been decommissioned and rendered surplus. Issues relating to redundant public buildings include property disposal, and the capacity of agencies to manage their own property needs; the exploration of valid options for re-use of structures, including private or community re-development; the identification of significant values, including historic or social values, prior to the sale or leasing of properties; and recognition that historical significance need not block or preclude the sale or transfer of properties, provided that proper planning and consultation is carried out.
- Determining an appropriate re-use for historic places can be problematic. Some buildings and structures are purely of

historical or cultural interest, without having an obvious present-day functional role. Further, not all places lend themselves to interpretation, nor can they all become museums or outdoor tourist attractions. However, many redundant public buildings, including disused railway stations, have been successfully taken over by local groups and historical societies. Municipalities have also been involved in purchasing or leasing redundant public buildings which they have earmarked for appropriate re-use.

- Many historic places on public land have strong connections with places on private land. To understand and appreciate their history it is necessary to see them as part of an original complex or network of places. Management of places which cross boundaries can therefore be fragmented, and appropriate levels and forms of protection difficult to implement.
- The conservation of places of cultural significance for Aboriginal people may require a different approach from that outlined in the Burra Charter. This issue has recently been explored in a discussion paper on the ethics of conservation practice, in the context of cultural diversity and conflicting values, prepared by Domicelj and Marshall. The Burra Charter's emphasis on retaining significance through the conservation of original fabric, for example, may not be appropriate conservation practice for places associated with living cultural traditions. In the Kimberley region of Western Australia, a rock art site has been 'spiritually recharged and freshened' by having the images repainted. If the place is primarily seen as historic, then such an action may go against the usual prescriptions of the Burra Charter. But for indigenous people, and other cultural groups in comparable situations, cultural significance may not be limited to historical value and does not necessarily reside in the fabric of a place. Where an Aboriginal group or community has been involved in the assessment of significance for an Aboriginal historic place, and has demonstrated links with that historic place, then that group should participate in the conservation process.

PART IV

7. THEMES

Using a thematic approach

The principle of linking sites to historic themes is well established in Australian cultural heritage practice. It has been used by the Australian Heritage Commission since its inception, and by heritage agencies around Australia since the 1970s. Historic places evolve out of historical processes. The identification of those processes should point to the existence of places, and help to explain their origins and functions.

A thematic approach allows researchers to identify gaps in the range of known places in large regions, and to seek out places that may have been missed in earlier work. As themes broaden the direction of research and investigation, places can be identified which demonstrate a greater range of activities and experiences of people living in the Australian environment. The inclusion of themes in the inventory also helps with analysis of historic places data.

Themes can assist with the interpretation of heritage, by enriching our 'reading' of places, drawing attention to the layers of history associated with a place, and highlighting connections with other places and themes. While themes are not criteria by which places are assessed, they provide a contextual framework for assessment through the identification of historical values. They also allow for the comparison of similar places.

A thematic framework is not intended to be a hierarchy or checklist. There is no 'weighting' attached to individual themes. A framework of themes can also be used in conjunction with types of places. For example, themes associated with mining have a range of related site types such as mines, water races, sluiced areas and miners' huts.

The Principal Australian Historic Themes Project

In 1993 the Australian Heritage Commission launched a three-stage project to develop a nationally applicable framework of principal historic themes for use in the identification, assessment, interpretation and management of cultural heritage in Australia. At that time the Commission hoped to develop a thematic framework which would comprehend 'the

totality of natural and human history of this continent from earliest times to the present day'. (Etherington *et al.*, 1995a).

After two years of consultation, debate, and some testing, the Principal Australian Historic Themes Project has developed a framework which is intended to help us in our understanding and appreciation of the complexity of the historic environment. The framework is not meant to be regarded and used as a rigid structure. Rather, it is intended for use as an analytical tool, as a pointer to the rich themes of Australian history. The authors of the framework also recognise that historical processes vary from region to region, and manifest themselves in different ways in different localities.



*Public Hall, Western Highway,
Dadswells Bridge*

A practical, comprehensive and consistent framework will provide a better interface between work undertaken at federal and state or territory levels. It will provide a connection between the diverse thematic frameworks which are already used by various agencies throughout Australia, and go some way towards achieving a standardised approach to the identification and documentation of places. A national thematic framework will also help to redress gaps and imbalances in heritage registers, including the Register of the National Estate.

The approach recognises recent advances in historical research and analysis, and ways of looking at cultural heritage. Movements in historical research and writing, growing and evolving public awareness of what constitutes cultural heritage, and concepts of what is 'historically important', have broadened and

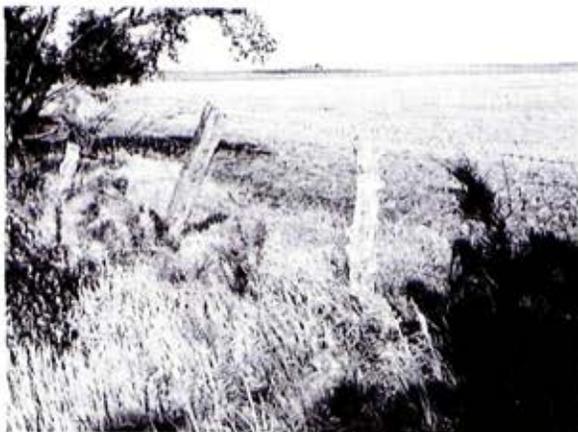
deepened in recent decades (Etherington *et al.*, 1995a). Further, themes stated in the active tense (using words and phrases which suggest action) emphasise the dynamic processes that have created our heritage, and the enduring nature of the themes.

The Principal Australian Historic Themes project is in its third and final stage, which incorporates a nationwide trialing period. After this stage the themes may be further adjusted and refined. The Land Conservation Council is using the framework (see Table 7.1) in its present state for this Special Investigation of Historic Places in South-western Victoria.

Applying the framework to South-western Victoria

The Council recognises that the Principal Australian Historic themes are intended to be a guide only, and not a checklist against which places must be found and allocated. Though all the listed themes have relevance to the history of the south-west, some may have no physical manifestation on public land in the region.

The first of the Principal Australian Historic Themes is concerned with *Tracing the evolution of special environments*. This theme recognises the interaction between people and their environment, particularly the role of science in expanding our knowledge and appreciation of the environment. In South-western Victoria, scientists have been drawn to sites of geological, biological and other scientific significance. They have also established experimental areas to study soils and vegetation, and human impacts upon them. Meteorological sites and fossil excavation sites are examples of scientific interest in the environment of the region.



Netting Fence along the 36th Parallel, Perenna, originally built for rabbit control in 1885-6

The *Peopling the continent* theme is concerned with the arrival and settling of people in Australia, from Aboriginal times through to more recent migration. The Historic Places investigation is concerned only with places dating from the period of European occupation, and not those which demonstrate Aboriginal experience before that time. The history of fighting for the land, and of Aboriginal resistance to European settlement, can be demonstrated through conflict sites, and places where Aboriginal people congregated and regrouped as European settlement spread. The sub-themes of migrating to seek opportunity and organised colonisation, are also relevant. Among the first Europeans in the region were many immigrants who were seeking material improvement through sealing, whaling and taking up new country. Some later groups were brought out through organised colonisation, and congregated in distinct communities, naming places and setting up their own religious and social institutions. Immigrants have changed the face of South-western Victoria through building in traditional styles, planting familiar trees and shrubs, and introducing their preferred farming methods.

The comprehensive theme of *Developing local, regional and national economies* recognises that much of our heritage has evolved out of activity undertaken for economic gain, and that this includes many places in South-western Victoria. The sub-themes of exploration, exploiting natural resources, and moving goods and people have obvious relevance. Places named by explorers, survey markers, sites of whaling activity, timber production, mineral extraction, and transport routes and features demonstrate these themes. The development of primary production and agriculture has resulted in a rich heritage of pastoral stations and properties, dry stone walls, grain stores, wool stores, sale yards, sheep washes, flour mills and showgrounds, some of which are found on public land.

The natural environment of the south-west has also been significantly altered for economic development. Harbours and river mouths have been modified, softwood plantations established, forests and woodlands cleared for pasture, streams and creeks diverted and dammed, and pipelines, aqueducts and channels constructed. People have frequently struggled with remoteness and failure in the south-west. Failed farms and settlements dot the region, from the Little Desert through to the Otway

Ranges, where people have gambled on uncertain climatic and soil conditions.

Building settlements, towns and cities is concerned with the planning and development of towns and urban areas. In the south west, this theme can be demonstrated through the growth of rural centres, the establishment of services and public institutions, and the various uses of township public land areas. Related places include public buildings and reserves in towns, the infrastructure associated with power and water supply, and areas set aside for public recreation and leisure.

The *Working* theme recognises the importance of this activity in our lives, and is demonstrated through the many places where people have been employed - on farms, in homes, in forests and mines, and in industrial or manufacturing environments.

Educating has a rich heritage of schools, teaching institutions, and related places such as mechanics' institutes and libraries.

Governing is evidenced through the structures and mechanisms of Government and administration, such as the courts, gaols, local Government buildings, public offices, and defence utilities. Governments also attempted

to provide for displaced Aboriginal people through the establishment of Protectorates and reserves, and the organised distribution of rations. Natural and cultural resources require management and conservation, as do public land areas such as State forests and national parks. Government and administrative infrastructure accompanied these.

The theme of *Developing cultural institutions and ways of life*, recognises the heritage related to our non-working lives. The sub-themes of organised recreation, going on holidays, and worshipping, are represented by many facets of the heritage of South-western Victoria. Sports grounds, grandstands, clubrooms, racecourses, public baths, and fishing and boating facilities demonstrate some aspects of this theme. Kiosks, walking tracks, camping areas and guest houses relate to tourism. Remembering and commemorating significant events, achievements and people, has resulted in an extraordinary number and range of public monuments and memorials.

Marking the phases of life has its physical manifestations in the infrastructure associated with caring for people at different stages of life. Cemeteries are perhaps the most widespread and obvious demonstration of our need to mark the final phase.

TABLE 7.1: The Principal Australian Historic Themes

The framework comprises principal themes and sub-themes. Below the sub-themes are some examples (italics) of aspects of these themes which have particular relevance for public land places in South-western Victoria.

1. Tracing the evolution of a continent's special environments
 - 1.1 Tracing climatic and topographical change
 - 1.2 Tracing the emergence of and development of Australian plants and animals
 - 1.3 Assessing scientifically diverse environments
 - 1.4 Appreciating the natural wonders of Australia
2. Peopling the continent
 - 2.1 Recovering the experience of Australia's earliest inhabitants
 - 2.2 Appreciating how Aboriginal people adapted themselves to diverse regions before regular contact with other parts of the world
 - 2.3 Coming to Australia as a punishment
 - 2.4 Migrating
Seeking opportunity; establishing communities and institutions; organised colonisation
 - 2.5 Promoting settlement on the land through selection and group settlement
 - 2.6 Fighting for the land
Resisting European expansion; displacing Aboriginal people
3. Developing local, regional and national economies
 - 3.1 Exploring the coastline
Naming coastal features; looking for safe passage and harbours

-
- 3.2 Surveying the continent and assessing its potential
Looking for pastoral and agricultural country; blazing overland stock routes; prospecting for precious metals; laying out boundaries
 - 3.3 Exploiting natural resources
Hunting; fishing and whaling; mining for alluvial, quartz and deep lead gold; mining for silver, copper and other minerals; establishing mining communities and settlements; extracting and processing limestone; extracting stone for buildings and roads; exploiting forests for logs, sawn timber and minor forest produce; establishing communities for forest production; tapping natural energy sources
 - 3.4 Developing primary production
Grazing stock; breeding animals; developing agricultural industries; building and improving pastoral properties; developing transport, storage and the infrastructure of pastoralism
 - 3.5 Recruiting labour
Providing housing and other services
 - 3.6 Establishing lines and networks of communication
Mail services; electronic communication
 - 3.7 Moving goods and people
Shipping and coastal trade; ports and harbours; inland waterways; railways and railway infrastructure; roads; fords and bridges; air travel
 - 3.8 Farming for export under Australian conditions
Developing agricultural techniques; building and improving farms; experimenting with crops and farm management; developing the infrastructure of agriculture
 - 3.9 Integrating Aboriginal people into the cash economy
Employing and housing Aboriginal people on pastoral stations; establishing Aboriginal missions as experimental farms
 - 3.10 Altering the environment for economic development
Regulating waterways; building dams, channels and aqueducts; irrigating land; coastal engineering; clearing vegetation; damaging soils; draining swamps
 - 3.11 Feeding people
Producing, storing, transporting and distributing foodstuffs
 - 3.12 Developing an Australian manufacturing capacity
 - 3.13 Developing an Australian engineering and construction industry
Building to suit Australian conditions; using Australian materials in construction
 - 3.14 Developing economic links to the rest of the world
 - 3.15 Struggling with remoteness, hardship and failure
Gambling on uncertain climatic conditions and soils; dealing with hazards and disasters
 - 3.16 Inventing devices to cope with special Australian problems
 - 3.17 Financing Australia
 - 3.18 Marketing and retailing
 - 3.19 Informing Australians
 - 3.20 Entertaining for profit
 - 3.21 Lodging people
 - 3.22 Catering for tourists
Building the infrastructure of tourism
 - 3.23 Selling companionship and sexual services
 - 3.24 Adorning Australians
 - 3.25 Treating what ails Australians
Health care; infant welfare; hospital services
- 4. Building settlements, towns and cities
 - 4.1 Planning urban settlement
Selecting township sites; setting aside land for public facilities
 - 4.2 Supplying services - water, power and gas
 - 4.3 Developing urban institutions
Parks and gardens
 - 4.4 Living with slums, homelessness and as outcasts
 - 4.5 Making towns to serve rural Australia
Providing public housing; leasing public land to industry
-

4.6 Remembering significant phases in the development of towns and suburbs

5. Working

- 5.1 Working in harsh conditions
- 5.2 Organising workers and work places
- 5.3 Caring for workers' dependent children
- 5.4 Working in offices
- 5.5 Trying to make crime pay
- 5.6 Working in the home
- 5.7 Surviving as Aboriginal people in a white-dominated economy

6. Educating

- 6.1 Forming associations, libraries and institutes for self-education
- 6.2 Establishing schools
- 6.3 Training people for workplace skills
- 6.4 Building a system of higher education
- 6.5 Educating people in remote locations
- 6.6 Educating people in two cultures

7. Governing

- 7.1 Governing Australia as a province of the British Empire
- 7.2 Developing institutions of self-government and democracy
- 7.3 Federating Australia
- 7.4 Governing Australia's colonial possessions
- 7.5 Developing administrative structures and authorities
Local government; defending Australia; preparing for invasion; policing Australia; dispensing justice; incarcerating criminals; providing services and welfare; administering Aboriginal affairs; managing and conserving Australian resources; managing and conserving the natural environment; managing and conserving Australia's cultural heritage

8. Developing cultural institutions and ways of life

- 8.1 Organising recreation
- 8.2 Going to the beach
- 8.3 Going on holiday
- 8.4 Eating and drinking
- 8.5 Forming associations
- 8.6 Worshipping
Religious institutions; places of worship; founding missions for displaced Aboriginal people
- 8.7 Honouring achievement
- 8.8 Remembering the fallen
- 8.9 Commemorating significant events and people
- 8.10 Pursuing excellence in the arts and sciences
- 8.11 Making Australian folklore
- 8.12 Living in and around Australian homes

9. Marking the phases of life

- 9.1 Bringing babies into the world
Health services for mothers and babies
- 9.2 Bringing up children
- 9.3 Growing up
- 9.4 Forming families and partnerships
- 9.5 Growing old
Looking after the infirm and the aged
- 9.6 Mourning the dead
- 9.7 Disposing of dead bodies

8. INVENTORY OF HISTORIC PLACES

A major component of this investigation has been the compilation of an inventory of historic places on public land. This now holds over almost 2000 places, stored on an 'Access' database at the Council's offices.

The database has 59 fields for information about each place, and while it is comprehensive in scope and in the range of historical themes, it should not be viewed as finalised. Not all fields are complete, although a site sheet has been compiled for each place.

The inventory is simply a list; it does not impose any requirements on land managers; it contains information that will be used by the Council when preparing its proposed and final recommendations.

This investigation, and the inventory, are limited to public land, including land held by public authorities, as explained in Chapter 1. Some places located on freehold land may have been included inadvertently in the inventory. The Council can make no recommendations for such places.

Certain Aboriginal historical places from the contact and post-contact periods are included in the Table, but are not shown on Maps 1 and 2.

The inventory extract printed in Table 8.2 below includes the following fields:

Site ID [Site identification number] - this combines a two-letter code, for example **AR** for Ararat, based on the 1:100 000 scale Auslig topographic mapsheets. The locations of the mapsheets are shown in Map 24. Mapsheet names and the two-letter codes used in the inventory, are listed in Table 8.1. The historic places in the inventory (Table 8.2) are listed alphabetically by mapsheet code, then numerically by the ID number;

Site Name - this gives a name to each historic place in the inventory, including an indication as to what, and where it is.

Themes - these columns contain the theme numbers drawn from the AHC's Principal Australian Historic Themes, as discussed in Chapter 7 and listed on pages 135-7. Some listed places have multiple themes.

Significance - the significance assessments in this column are provisional. They were determined by historians on the Council's staff, in accordance with the criteria listed on page 11, and guided by the Expert Committee (see 'Methodology' section, Chapter 1). As more information is obtained on particular sites, these assessments will be refined.

Key to significance symbols:

L	Local
R	Regional
S	State
NA	Not enough information to assess
BL	below local significance
-	Aboriginal places

How to Use the Inventory

Most of the historic places in the inventory are located on Maps 1 and 2, the large colour maps in the pocket at the back of this report. They are depicted by a small black dot, and the Site ID number, as listed in the inventory. In townships where there are numerous historic places, they are not located accurately. Instead they are listed beside a larger black dot.

If you wish to know what historic places the Council has described at a particular location, find the location on Maps 1 or 2, read the relevant historic place numbers from the maps, then find those numbers in the inventory (Table 8.2). Alternatively, if you wish to see all those sites in a particular district, the mapsheet code groups all the places within a map rectangle, and these are listed together in the inventory.

Development of the Database

It is intended that the database will continue to be developed, by completing descriptive and historical information on places already included, and adding extra places from information in submissions or further research, at least until the Council's Proposed Recommendations are completed. The revised inventory will be re-published in that report.

The Council is investigating a means of making the database publicly available.

MAP 24: 1:100 000 Mapsheets and Numbers

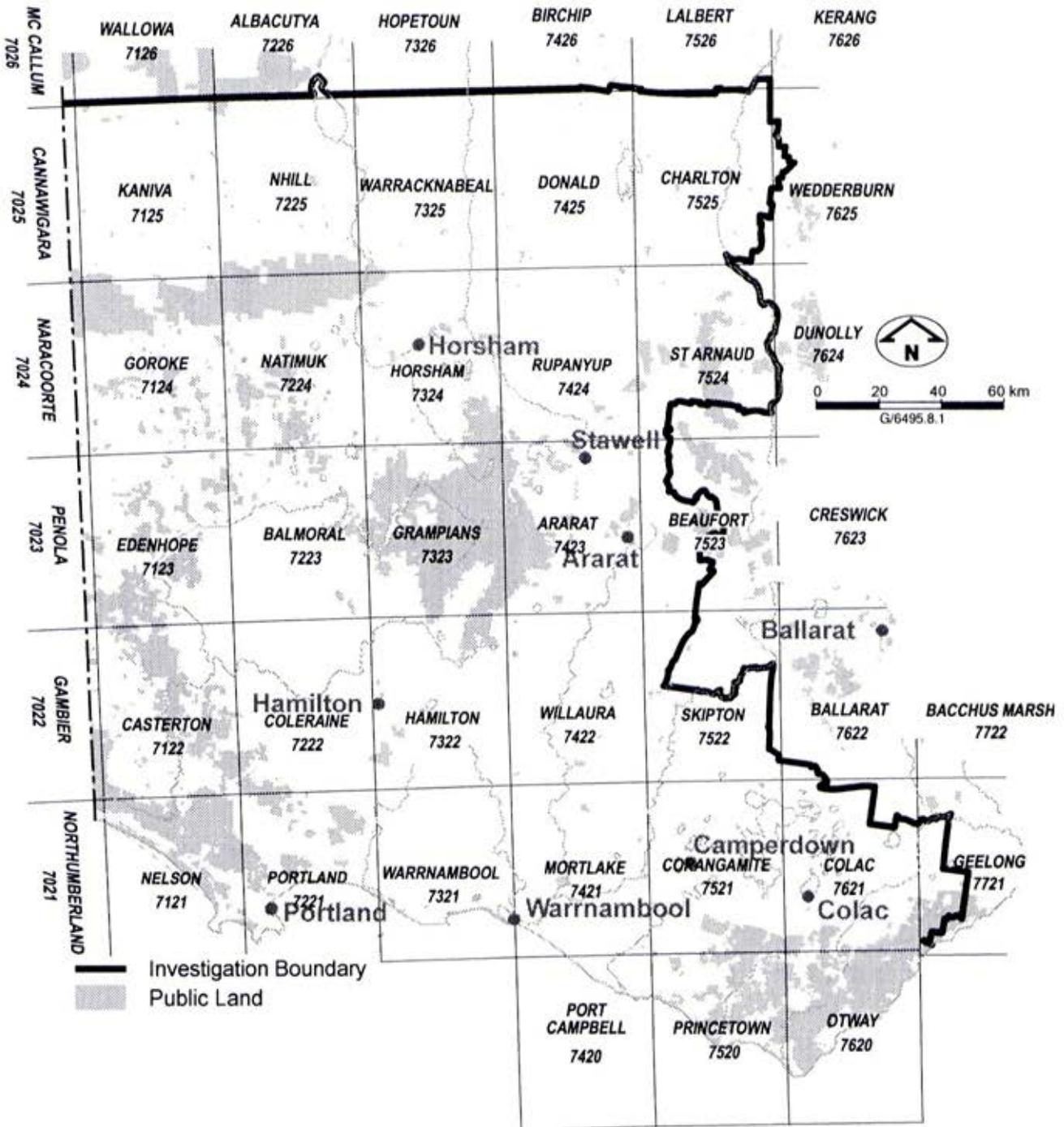


TABLE 8.1: 1:100 000 Mapsheets and Historic Places Site ID Codes

Code	Mapsheet
AR	ARARAT
BA	BALMORAL
BE	BEAUFORT
BL	BALLARAT
CA	CASTERTON
CH	CHARLTON
CL	COLAC
CO	COLERAINE
CR	CORANGAMITE
DO	DONALD
ED	EDENHOPE

Code	Mapsheet
GE	GEELONG
GO	GOROKE
GR	GRAMPIANS
HA	HAMILTON
HO	HORSHAM
KA	KANIVA
MO	MORTLAKE
NA	NATIMUK
NE	NELSON
NH	NHILL
OT	OTWAY

Code	Mapsheet
PC	PORT CAMPBELL
PO	PORTLAND
PR	PRINCETOWN
RU	RUPANYUP
SK	SKIPTON
ST	ST ARNAUD
WA	WARRACKNABEAL
WE	WEDDERBURN
WI	WILLAURA
WR	WARRNAMBOOL

TABLE 8.2: Historic Places Inventory

Site ID	Site name	Themes	Significance
AR0001	BALLAST LINE, DEEP LEAD	3.3 3.7	L
AR0002	CEMETERY, DEEP LEAD	9.7	L
AR0003	MEMORIAL, DEEP LEAD	8.9 3.3	L
AR0004	STATE SCHOOL, DEEP LEAD	6.2	L
AR0005	MEMORIAL, DOCTOR'S HILL, STAWELL DISTRICT	8.9	L
AR0006	MAJOR MITCHELL MONUMENT, STAWELL	8.9 3.2 8.7	R
AR0007	MEMORIAL, PLEASANT CREEK	8.9	L
AR0008	RAILWAY LINE, STAWELL TO HEATHERLIE QUARRY	3.3 3.7	R/S
AR0009	SISTERS ROCKS GRAFFITI SITE, NEAR STAWELL	8.1	NA
AR0010	MECHANICS' INSTITUTE, ARARAT	6.1	S
AR0011	DRILL HALL, ARARAT	7.5 8.5	BL
AR0012	GOLD DISCOVERY CAIRN, ARARAT AREA	8.9 3.3	L
AR0013	QUARRY, LANGI LOGAN AREA	3.3 3.7	NA
AR0014	TOWNSHIP SITE AND MEMORIAL, CATHCART	8.9 3.3	L
AR0016	LEVIATHAN DAM, STAWELL DISTRICT	3.3	R
AR0017	MIGRANT HOSTEL (FORMER), ARARAT	2.4 3.5	L
AR0018	RAILWAY WORKER'S COTTAGE, ARARAT	3.5 4.5	L
AR0019	LOCOMOTIVE TURNTABLE & SHED, ARARAT	3.7 3.16	R
AR0020	POST OFFICE, SUB-TREASURY AND ASSAY OFFICE, ARARAT	7.5 3.6 3.3	S
AR0021	TOWN HALL, ARARAT	7.2	S
AR0022	BOER WAR MEMORIAL FOUNTAIN, ARARAT	8.8 8.9	L
AR0023	CENOTAPH (MUNICIPAL RESERVE), ARARAT	8.8 8.9	L
AR0024	SHIRE HALL (MUNICIPAL RESERVE), ARARAT	7.2	S
AR0025	MUNICIPAL LIBRARY, ARARAT	7.2 6.1	R
AR0028	BRIGIDINE CONVENT OF THE SACRED HEART, ARARAT	6.2	L
AR0029	CATHOLIC PRESBYTERY, ARARAT	8.6	L
AR0030	RAILWAY STATION, ARARAT	3.7	R
AR0031	ALEXANDRA HALL, ARARAT	7.5 8.5	L
AR0032	GAOL (FORMER) J WARD, ARARAT	7.5 3.25	S
AR0033	ARARAT & DISTRICT HOSPITAL, ARARAT	7.5 3.25	R
AR0034	PYRENEES HOUSE, ARARAT	7.5 3.25	S
AR0035	RAILWAY WATER TANKS, ARARAT	3.7	L
AR0036	LANGI LOGAN MINE, ARARAT	3.3	L
AR0038	HOLY TRINITY RECTORY, ARARAT	8.6	L
AR0039	POLICE SERGEANT'S RESIDENCE (FORMER), ARARAT	7.5 3.5	L
AR0041	OPHIR MASONIC LODGE # 27 VC, ARARAT	8.5	L
AR0042	LANGI MORGALA MUSEUM, ARARAT	3.4	S
AR0044	VICTORIAN RAILWAYS INSTITUTE HALL, ARARAT	3.7	R

Site ID	Site name	Themes	Significance
AR0045	VICTORIAN RAILWAYS INSTITUTE BUILDING, ARARAT	3.7	R
AR0046	A & J McDONALD COMMUNITY CENTRE, ARARAT	4.3	L
AR0047	CANTON LEAD MEMORIAL PARK, ARARAT	8.9	L
AR0048	STATE SCHOOL # 800, ARARAT	6.2	L
AR0049	ST MARY'S SCHOOL (FORMER), ARARAT	6.2	L
AR0050	PRESTIGE LTD MILLS (FORMER), ARARAT	3.12	R
AR0051	METHODIST MANSE, ARARAT	8.6	L
AR0052	COMMON SCHOOL (FORMER), ARARAT	6.2	S
AR0053	POLICE STATION, ARARAT	7.5	S
AR0054	COURTHOUSE (FORMER), ARARAT	7.5	S
AR0056	POLICE RESIDENCE, STAWELL WEST	7.5 3.5	S
AR0057	PLEASANT CREEK COURTHOUSE, STAWELL WEST	7.5	S
AR0058	COURTHOUSE, STAWELL	7.5	R
AR0059	LITERARY AND SCIENTIFIC INSTITUTE (FORMER), STAWELL WEST	6.1	S
AR0061	SHIRE HALL (FORMER), STAWELL WEST	7.2	L/R
AR0062	TECHNICAL SCHOOL, STAWELL	6.3	R
AR0063	SECONDARY COLLEGE, STAWELL	6.2	R
AR0064	PRIMARY SCHOOL, STAWELL	6.2	S
AR0065	RAILWAY STATION COMPLEX, STAWELL	3.7	S
AR0068	CENTRAL PARK, STAWELL	8.1	S
AR0069	RACECOURSE, STAWELL	8.1	NA
AR0070	CARAVAN PARK AND CAMPING RESERVE, STAWELL	8.3	NA
AR0071	STONE CHANNEL, STAWELL	4.2	NA
AR0072	PLEASANT CREEK CENTRE, STAWELL	3.25	R/S
AR0073	CEMETERY, STAWELL	9.7	L/R
AR0074	CONGELLA CEMETERY, EAST OF STAWELL	9.7	L
AR0075	CATO PARK, STAWELL	8.1	BL
AR0076	HOUSING COMMISSION ESTATE, STAWELL	4.5	NA
AR0077	TROTTER TRACK AND SHOWGROUND, STAWELL	8.1	BL
AR0078	COUNTRY FIRE AUTHORITY STATION AND TOWER, STAWELL	4.2	NA
AR0079	TOWN HALL, STAWELL	7.2	R
AR0081	PUBLIC PURPOSES RESERVE AND MONUMENTS, BIG HILL, STAWELL	8.9 3.3	L/R
AR0082	CHILD'S GRAVE, HALLS GAP	9.7	L
AR0083	STATE SCHOOL, HALLS GAP	6.2	L
AR0084	CARAVAN PARK, HALLS GAP	8.3	L/R
AR0085	VENUS BATHS, NEAR HALLS GAP	8.3	L
AR0087	DELLEY'S BRIDGE OVER FYANS CREEK, HALLS GAP	3.7	L/R
AR0088	ARADALE, ARARAT	3.25	S

Site ID	Site name	Themes	Significance
AR0089	BRAMBUK, HALLS GAP	2.1 2.2	S
AR0090	CHINESE CAMP AND DIGGINGS, HARD HILL, GREAT WESTERN DISTRICT	3.3 2.4	R
AR0093	MÉCHANICS INSTITUTE, GREAT WESTERN	6.1	L
AR0096	MONUMENT TO FEDERATION, STAWELL	8.9 7.3	NA
AR0097	OPEN BRICK DRAIN, STAWELL	4.2	L
AR0098	MÉMOIRIAL TO FIRST PLEASANT CREEK CEMETERY, STAWELL	8.9 9.7	L
AR0099	CONCRETE WATER TOWER, STAWELL	4.2	BL
AR0100	WATER TANKS, STAWELL	4.2	BL
AR0101	GASOMETER, ARARAT	4.2	R
AR0102	PRIMARY SCHOOL # 860, GREAT WESTERN	6.2	L
AR0103	PINKEY POINT GOLD MEMORIAL AND RESERVE, CATHCART	8.9 3.3	L
AR0104	OBSERVATION ROOM AND TOILETS, GRAMPIANS	8.1 7.5	R/S
AR0105	BURMA TRACK SURVIVAL HUT, MOUNT ROSEA, GRAMPIANS	8.1	L
AR0106	MONUMENT, MAFEKING, GRAMPIANS	8.9 3.3	L
AR0107	BRIDGE ABUTMENTS, SPEARS CREEK, WEST OF CATHCART	3.7	L
AR0108	MÉMOIRIAL, LAKE BELLFIELD, GRAMPIANS	8.9	L
AR0109	BELLFIELD SETTLEMENT, GRAMPIANS	3.5 4.2	NA
AR0110	GLENBOWER HOMESTEAD SITE # 1, GRAMPIANS	2.5 3.15	L
AR0111	GLENBOWER HOMESTEAD SITE # 2, GRAMPIANS	2.5 3.15	L
AR0112	IRON-RAILED ROAD BRIDGE, HALLS GAP	3.7	L
AR0113	DELACOMBE MEMORIAL, LAKE BELLFIELD, GRAMPIANS	8.9	BL
AR0114	BRIDGE ABUTMENTS, FYANS CREEK, GRAMPIANS	3.7	NA
AR0115	MAJOR MITCHELL CAIRN, MT WILLIAM, GRAMPIANS	8.9 3.2 8.7	R
AR0116	DEVILS GAP, GRAMPIANS NATIONAL PARK	8.1 3.7	L
AR0117	NATIONAL PARK INTERPRETATION SIGNBOARD, GRAMPIANS	8.1	BL
AR0118	GRAND CANYON, GRAMPIANS NATIONAL PARK	8.1 1.4	L/R
AR0119	WONDERLAND TURNTABLE, GRAMPIANS NATIONAL PARK	8.1	L
AR0120	FOOTBRIDGE, WONDERLAND, GRAMPIANS	8.1	L
AR0121	MT ROSEA, GRAMPIANS NATIONAL PARK	1.4	NA
AR0122	SILVERBEND FALLS, DAIRY CREEK, GRAMPIANS	1.4 8.1	L
AR0123	SUNDIAL PEAK, GRAMPIANS NATIONAL PARK	1.4	NA
AR0124	BRANDIT'S PLOUGH MEMORIAL, GREAT WESTERN	8.7	NA
AR0125	RAILWAY BRIDGE, GREAT WESTERN	3.7	NA
AR0126	WEIGHBRIDGE, GREAT WESTERN	3.7	NA
AR0127	CEMETERY, SALT CREEK	9.7	L
AR0128	LOCK-UP (FORMER), GREAT WESTERN	7.5	L/R
AR0129	SLATE QUARRIES, OVERDALE	3.3	NA
AR0130	WAR MEMORIAL, CONGONGELLA	8.8	L

Site ID	Site name	Themes	Significance
AR0131	CEMETERY, GREAT WESTERN	9.7	L
AR0132	CEMETERY, CONGONGELLA	9.7	L
AR0133	LONE GRAVE, IRONBARK FOREST, STAWELL	9.7	L
AR0134	ALEXANDRA PARK, ARARAT	8.1	L
AR0135	ALEXANDRA GARDENS, ARARAT	4.3 8.1	L
AR0136	PRIMARY SCHOOL 1136, CONGONGELLA	6.2	NA
AR0137	PRIMARY SCHOOL 860, GREAT WESTERN	6.2	NA
AR0138	SCHOOL SITE, WATTA WELLA	6.2	BL
AR0139	RAILWAY BRIDGE, BETWEEN ARARAT AND GREAT WESTERN	3.7	NA
AR0140	WALTER'S SAWMILL & TRAMWAY, NEAR MAFEKING	3.3	NA
AR0141	CAMP, MT DIFFICULT, GRAMPIANS	3.3 7.5	L
AR0142	SAWMILL, THE BASIN, GRAMPIANS	3.3	NA
AR0143	SAWMILL 2, MIDDLETON CREEK, GRAMPIANS	3.3	NA
AR0144	SAWMILL, MT WILLIAM PICNIC GROUND	3.3	L
AR0145	SAWMILL, MT WILLIAM	3.3	L
AR0146	SAWMILL & TRAMWAY, MAFEKING	3.3	NA
AR0147	SAWMILL, BARNEYS CREEK, GRAMPIANS	3.3	L
AR0148	CHARCOAL KILNS, BOROUGHS HUTS, GRAMPIANS	3.3	S
AR0149	TRACK, SANDERSONS GAP, GRAMPIANS	3.3	NA
AR0150	CHILDE'S SAWMILL, GRAMPIANS NATIONAL PARK	3.3	NA
AR0151	TRAMWAY, STONY CREEK, GRAMPIANS	3.3	L
AR0152	TANDURRUM CEREMONY SITE, GRAMPIANS	2.1	
AR0153	BUNJIL'S SHELTER, GREAT WESTERN	2.1	
AR0154	GOLD DISCOVERY MONUMENT, MOYSTON	8.9 3.3	L
AR0155	PUBLIC HALL, MOYSTON	4.3	NA
AR0156	RAILWAY STATION, MAROONA	3.7	NA
AR0157	TATYOON CEMETERY, TATYOON NORTH	9.7	L
AR0158	SCHOOL CENTENARY BRIDGE MONUMENT, NEAR ROSSBRIDGE	8.7 6.2	L
AR0159	ROSSBRIDGE SCHOOL RESIDENCE, ROSSBRIDGE	6.2 3.5	S
AR0160	PRIMARY SCHOOL MONUMENT, ROSSBRIDGE	8.7 6.2	L
AR0161	PRIMARY SCHOOL # 1069 (FORMER), ROSSBRIDGE	6.2	S
AR0162	PRIMARY SCHOOL # 2859, POMONAL	6.2	L
AR0163	PICNIC RESERVE, HALLS GAP	8.1 8.3	L
AR0164	CEMETERY, ARMSTRONG	9.7	L
AR0165	PRIMARY SCHOOL # 1943, MAROONA	6.2	BL
AR0166	PLAQUE, SUMMIT MT CASSELL, GRAMPIANS	9.6	BL
AR0167	CEMETERY, MOYSTON	9.7	NA
AR0168	CEMETERY, CATHCART	9.7	L
AR0169	CEMETERY, SPRINGLEAD	9.7	NA

Site ID	Site name	Themes	Significance
AR0170	CLEMATIS FALLS, NEAR HALLS GAP	1.4	L
AR0173	WATER RESERVE, MOYSTON	4.2 3.3	NA
AR0174	TEACHERS RESIDENCE (FORMER?), MOYSTON	6.2 3.5	BL
AR0175	PRIMARY SCHOOL # 1263, MOYSTON	6.2	L
AR0176	WAR MEMORIAL WORLD WAR II, MOYSTON	8.8	L
AR0177	MCDONALDS PARK MEMORIAL & FIREPLACE, ARARAT	8.7	L
AR0178	DANIEL SULLIVAN MEMORIAL SEAT, HALLS GAP	8.7	L
AR0179	STAWELL WATER SUPPLY FLUMING, GRAMPIANS NATIONAL PARK	4.2	S
AR0180	STAWELL WATER SUPPLY SYSTEM, GRAMPIANS NATIONAL PARK	4.2	S
AR0181	STAWELL WATER SUPPLY FLUMING, EAST OF LAKE BELLFIELD	4.2	S
AR0182	STAWELL WATER SUPPLY TUNNEL, WESTERN ENTRANCE, EAST OF LAKE BELLFIELD	4.2	S
AR0183	STAWELL WATER SUPPLY RAISED PIPELINE, EAST OF LAKE BELLFIELD	4.2	S
AR0184	STAWELL WATER SUPPLY CONTROL BUILDING, POMONAL	4.2	S
AR0185	STAWELL WEIR, FYANS CREEK	4.2	S
AR0186	STAWELL WATER SUPPLY TUNNEL, EASTERN ENTRANCE, NEAR POMONAL	4.2	S
AR0187	RECREATION GROUND, MOYSTON	8.1	BL
AR0188	AVENUE OF HONOUR, MOYSTON	8.8	L
AR0189	MEMORIAL LOOKOUT, ONE TREE HILL, ARARAT	8.7 8.1	NA
AR0190	LAKE BELLFIELD, SOUTH OF HALLS GAP	4.2	R
AR0191	FYANS CREEK, HALLS GAP	3.4	NA
AR0192	NEWINGTON CRUSHING WORKS, STAWELL DISTRICT	3.3	L
AR0193	HARD HILL MINE WORKINGS, ARMSTRONG DISTRICT	3.3	S
AR0194	CAHILLS REWARD MINE, COMMERCIAL FLAT LEAD, STAWELL DISTRICT	3.3	L
AR0195	CATHCART VICTORY NO. 2 MINE, LANGI LOGAN	3.3	L
AR0196	CATHCART NO. 2 MINE, LANGI LOGAN	3.3	L
AR0197	JUNCTION CO MINE, WELSHMANS FLAT LEAD, DEEPLD	3.3	L
AR0198	KEMPSONS FREEHOLD MINE, COMMERCIAL FLAT LEAD, STAWELL DISTRICT	3.3	L
AR0199	HAND IN HAND CO MINE, WELSHMANS FLAT LEAD, DDEP LEAD	3.3	L
AR0200	LANGI LOGAN SOUTH, DEEP LEAD MINE	3.3	R
AR0202	NEW LANGI LOGAN 1 MINE, DEEP LEAD	3.3	S
AR0203	NEW LANGI LOGAN 2 MINE, DEEP LEAD	3.3	R
AR0204	MARTINS DAM EUCY DISTILLERY MARTINS SAND RESERVE, DEEP LEAD	3.3	R
AR0206	GRANTS CRUSHING WORKS, STAWELL DISTRICT	3.3	L
AR0207	ORIENTAL CO MINE, STAWELL DISTRICT	3.3	NA

Site ID	Site name	Themes	Significance
AR0208	WELSHMANS CRUSHING WORKS, MARTINS SAND RESERVE, DEEP LEAD	3.3	L
AR0209	BIG HILL MINE, BIG HILL, STAWELL DISTRICT	3.3	NA
AR0210	COSMOPOLITAN COMPANY MINE, STAWELL	3.3	NA
AR0211	DARLINGTON CO MINE, STAWELL	3.3	L
AR0212	NORTH MAGDALA CO MINE, STAWELL DISTRICT	3.3	NA
AR0213	EAGLEHAWK CO MINE, MURPHY HILL, ARMSTRONG	3.3	R
AR0214	THREE JACK CO MINE, STAWELL DISTRICT	3.3	R
AR0215	ALLANS OPEN CUT, BIG HILL, STAWELL DISTRICT	3.3	L
AR0216	MOONLIGHT CUM MAGDALA MINE, STUART MILL	3.3	L
AR0217	SCOTTS OPEN CUT MINE, BIG HILL, STAWELL DISTRICT	3.3	L
AR0218	MAFEKING GOLDFIELD, MAFEKING	3.3	S
AR0219	HISTORIC RESERVE, DEEP LEAD	3.3	L
AR0220	HARD HILL WORKINGS, HARD HILL, ARMSTRONG	3.3	NA
AR0221	GREAT WESTERN LEAD MINE, ARMSTRONG	3.3	R
AR0222	FOUR POST DIGGINGS, FOUR POST LEAD, DEEP LEAD	3.3	S
AR0223	SIMS AND PARTY MINE, STAWELL	3.3	L
AR0224	LAKE LONSDALE, WIMMERA-MALLEE SYSTEM	4.2	R
AR0225	LAKE FYANS, WIMMERA-MALLEE SYSTEM	4.2	L
AR0226	TRUDGEONS WEIR, WIMMERA-MALLEE SYSTEM, WEST OF STAWELL	4.2	NA
AR0227	OLIVERS GULLY RESERVOIR, ARARAT WATER SUPPLY, ARARAT	4.2	L
AR0228	RESERVOIR CREEK AND MASON CREEK WEIRS, MAFEKING AREA	4.2	NA
AR0229	UPPER WANNON RIVER DIVERSION, GRAMPIANS	4.2	L
BA0001	CHARCOAL KILNS, POT BROOK, EDENHOPE DISTRICT	3.3	L
BA0002	WHITE ELEPHANT BRIDGE POST, GRAMPIANS	3.3	L
BA0003	JOHNNY MULLAGH'S GRAVE, HARROW CEMETERY	9.7	
BA0004	JOHNNY MULLAGH MEMORIAL PARK AND MONUMENT, HARROW	8.7	
BA0005	SAWMILL HUT & SCHOOL SITE (FORMER), ENGLEFIELD	3.3 6.2	L
BA0006	COURTHOUSE (FORMER), BALMORAL	7.5	S
BA0007	POLICE STATION & LOCK-UP, BALMORAL	7.5	R/S
BA0010	WWI & WWII MEMORIAL OBELISK, BALMORAL	8.8	L
BA0011	SWIMMING POOL, BALMORAL	8.1	BL
BA0012	SWIMMING HOLE, GLENELG RIVER, BALMORAL	8.1	NA
BA0013	FORD OVER GLENELG RIVER, BALMORAL	3.7	L
BA0014	SHOWGROUNDS, BALMORAL	8.1 3.4	NA
BA0015	SAWMILL SITE & BALMORAL STATION, BALMORAL	3.3	R/S
BA0016	CEMETERY, BALMORAL	9.7	L
BA0018	CONSOLIDATED SCHOOL, BALMORAL	6.2	L

Site ID	Site name	Themes	Significance
BA0019	MEMORIAL HALL, BALMORAL	4.3 8.8	BL
BA0020	HIGH SCHOOL, BALMORAL	6.2	BL
BA0021	ROCKLANDS RESERVOIR, VIA BALMORAL	4.2	R/S
BA0022	HALL, TELANGATUK EAST	4.3	NA
BA0023	HOBBS SELECTION MEMORIAL, WHITE LAKE	2.5	BL
BA0025	MEMORIAL HALL, DOUGLAS	4.3 8.8	BL
BA0026	MEMORIAL HALL & PARK, KANAGULK	4.3 8.1 8.8	BL
BA0027	PRIMARY SCHOOL # 2049, HARROW	6.2	L
BA0028	CULVERT, HARROW	3.7	NA
BA0029	MEMORIAL LAMP, HARROW	4.2	NA
BA0030	MAJOR MITCHELL OBELISK, HARROW	8.9 3.2 8.7	R
BA0031	CEMETERY, HARROW	9.7	R
BA0032	BRIDGE OVER GLENELG RIVER, HARROW	3.7	BL
BA0034	MAJOR MITCHELL MONUMENT, SOUTH-EAST OF HARROW	8.9 3.2 8.7	R
BA0035	KOWREE ROADS BOARD OFFICES (FORMER), HARROW	7.2	R/S
BA0036	WWI & WWII MONUMENT & RSL ROOMS, HARROW	8.8 7.5	L/R
BA0037	SITE OF FORMER ROAD BRIDGE & CHINESE GARDENS, HARROW	2.4 3.7	BL
BA0038	STEPS, HARROW	4.3	NA
BA0039	LOG LOCK-UP PRECINCT (FORMER), HARROW	7.5	S
BA0040	SATIMER ROAD LANDSLIP, NORTH OF CASTERTON	3.4 3.10	L/R
BA0041	ROWES SLIP, BETWEEN COLERAINE AND BALMORAL	3.4 3.10	R
BA0042	KONONG WOOTONG RESERVOIR, COLERAINE WATER SUPPLY	4.2	L
BA0043	RIFLE BUTTS PROPOSED RESERVOIR SITE, BALMORAL	4.2	NA
BA0044	GOVERNMENT SAWMILL, ROCKLANDS RESERVOIR	3.3	NA
BE0001	COBB & CO CHANGING STATION, BUANGOR	3.7	S
BE0002	MAJOR MITCHELL CAIRN, BUANGOR AREA	8.9 3.2 8.7	R
BE0003	BLUESTONE FORD, BUANGOR AREA	3.7	L
BE0004	LANGI GHIRAN RESERVOIR, MT LANGI GHIRAN	4.2	R
BE0005	ARARAT RESERVOIR, NW OF MT BUANGOR	4.2	R
BE0006	WATER RACE, MT COLE STATE FOREST	4.2	NA
BE0007	COLVILLE'S MILL SITE, MT COLE STATE FOREST	3.3	NA
BE0008	LOG CHUTE, MT COLE AREA	3.3	NA
BE0009	TUNBRIDGE'S MILL SITE, MT COLE AREA	3.3	NA
BE0010	RAILWAY STATION, BUANGOR	3.7	L
BE0013	CEMETERY, BUANGOR	9.7	L
BE0014	PRIMARY SCHOOL # 2072, BUANGOR	6.2	L
BE0015	PUBLIC HALL/MECHANICS INSTITUTE, ELMHURST	4.3	NA
BE0016	PRIMARY SCHOOL, ELMHURST	6.2	NA
BE0017	RECREATION GROUND, ELMHURST	8.1	BL

Site ID	Site name	Themes	Significance
BE0018	RECREATION GROUND, WARRAK	8.1	NA
BE0019	MUGWAMP HUT, MT COLE/BUANGOR	8.1	L
BE0020	CEMETERY, WARRAK	9.7	L
BE0021	WATER RACE, LANGI GHIRAN STATE PARK	4.2	NA
BE0022	LOOKOUT, LANGI GHIRAN STATE PARK	8.1 1.4	L
BE0023	PUBLIC HALL, WARRAK	4.3	NA
BE0024	WAR MEMORIAL, WARRAK	8.8	L
BE0025	CO-OPERATIVE PROJECT, BUANGOR	3.10	L
BE0026	CAMP HILL RESERVOIR AND WATER RACE, MOUNT COLE	4.2	NA
BE0027	EMERY SAWMILL # 1, MOUNT COLE STATE FOREST	3.3	NA
BE0028	EMERY SAWMILL # 2, MOUNT COLE STATE FOREST	3.3	NA
BE0029	MCKENZIE SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0030	SANDERSON SAWMILL # 1, MOUNT COLE STATE FOREST	3.3	NA
BE0031	MCGUINNESS SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0032	CLUNAS SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0033	WOODS SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0034	ORD SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0035	EMERY SAWMILL # 3, MOUNT COLE STATE FOREST	3.3	NA
BE0036	SANDERSON SAWMILL # 2, MOUNT COLE STATE FOREST	3.3	NA
BE0037	ALBION (PHILLIPSON) SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0038	MCGIE SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0039	WALL (LEWIN) SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0040	JUNCTION (SANDERSON) SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0041	FORBES AND LEWIN SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0042	VICTORIA (LEWIN) SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0043	BURNT (ORD) SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0044	VERTICAL (ORD) SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0045	SAPLING BRIDGE (LEWIN AND FORBES) SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0046	BROWN SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0047	FREEMAN'S SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0048	EMERY SAWMILL # 4, MOUNT BUANGOR STATE PARK	3.3	NA
BE0049	LEWIN SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0050	EMERY SAWMILL # 5, MOUNT COLE STATE FOREST	3.3	NA
BE0051	FLYN AND WILKINSON SAWMILL, MOUNT COLE STATE FOREST	3.3	NA
BE0052	LOG CHUTE, MOUNT COLE STATE FOREST	3.3	NA
CA0001	COURTHOUSE, CASTERTON	7.5	R
CA0002	POLICE RESERVE LAND, CASTERTON	7.5	L
CA0003	OLD CEMETERY, CASTERTON	9.7	L

Site ID	Site name	Themes	Significance
CA0004	NEW CEMETERY, CASTERTON	9.7	L
CA0005	RAILWAY STATION, CASTERTON	3.7	S
CA0006	RSL CLUBROOMS, CASTERTON	7.2 8.5	S
CA0007	TOWN HALL, CASTERTON	7.2	NA
CA0008	BRIDGE OVER GLENELG RIVER, CASTERTON	3.7	L
CA0009	PARKLAND BESIDE BRIDGE OVER GLENELG RIVER, CASTERTON	4.3	BL
CA0010	SALE / STOCK YARDS, CASTERTON	3.4	L
CA0011	SHOWYARDS RESERVE, CASTERTON	8.1 3.4	NA
CA0012	FIRE STATION, CASTERTON	4.2	L
CA0013	FIRE BELL TOWER, CASTERTON	4.2	BL
CA0014	ISLAND PARK, CASTERTON	8.1	BL
CA0015	RACECOURSE, CASTERTON	8.1	R
CA0017	PLANTATION RESERVE, CASTERTON	8.8	L
CA0018	WATER TOWER, CASTERTON	4.2	BL
CA0019	GATEWAY TO PARK, CASTERTON	8.1	BL
CA0020	CONCRETE CULVERT OVER MAJOR'S CREEK, NORTH OF CASTERTON	4.2	BL
CA0021	MCEACHERN GRAVE, DRAJURK STATE FOREST	9.7	L
CA0022	COACH CHANGING STATION, BETWEEN CASTERTON AND PENOLA	3.7	L/R
CA0023	SCHOOL (SITE), CORNDALE	6.2	L
CA0024	WANDO VALE PONDS CREEK, NORTH WEST OF CASTERTON	3.4 3.8 3.10	R/S
CA0025	CAWKER CREEK COACH CHANGING STATION, CAWKER CREEK	3.7	L/R
CA0026	BUCKELL'S GRAVE, BETWEEN MERINO AND DIGBY	9.7	L
CA0027	PUNT TRACK SAWMILL, RENNICK STATE FOREST	3.3	L/R
CA0028	BOYDS HUT, WEECURRA STATE FOREST	3.3	L
CA0029	BRIDGES OVER WANDO RIVER AT RETREAT ESTATE, RETREAT	3.7	NA
CA0030	SECTION BRIDGE, OVER GLENELG RIVER, DUNROBIN	3.7	NA
CA0031	FLEUR-DE-LIS (SCOUT) MARKER, CASTERTON	8.5	NA
CA0032	MEMORIAL HALL, WANDO VALE	4.3 8.8	BL
CA0033	WAR MEMORIAL, SANDFORD	8.8	L
CA0034	PUBLIC HALL, DUNROBIN	4.3	NA
CA0035	SCHOOL RESERVE, DRIK DRIK	6.2 4.3	NA
CA0036	CEMETERY, DRIK DRIK	9.7	L
CA0037	MOCAMBORO BORE, MERINO WATER SUPPLY	4.2	L
CA0038	TULLICH BORES, CASTERTON WATER SUPPLY	4.2	NA
CA0039	MAJOR MITCHELL CAMP SITE, DARTMOOR	3.2	NA
CA0040	RAILWAY STATION COMPLEX, DARTMOOR	3.7	NA
CA0041	CEMETERY, DARTMOOR	9.7	L
CH0002	COURTHOUSE, CHARLTON	7.5	S

Site ID	Site name	Themes	Significance
CH0003	MECHANICS INSTITUTE, CHARLTON	6.1	L
CH0004	GOVERNMENT BUILDINGS RESERVE, CHARLTON	7.5	NA
CH0005	STATE SCHOOL, CHARLTON	6.2	L
CH0006	RAILWAY STATION COMPLEX, CHARLTON	3.7	BL
CH0007	RECREATION / SHOWGROUNDS, CHARLTON	8.1 3.4	NA
CH0008	CEMETERY, CHARLTON	9.7	L
CH0009	FIRE STATION, CHARLTON	4.2	L
CH0010	WAR MEMORIAL, CHARLTON	8.8	L
CH0011	COURTHOUSE, WYCHEPROOF	7.5	S
CH0012	RAILWAY STATION COMPLEX, WYCHEPROOF	3.7	S
CH0013	STATE SCHOOL, WYCHEPROOF	6.2	L
CH0014	SHOWGROUNDS, WYCHEPROOF	3.4	L
CH0015	HOUSING COMMISSION ESTATE, WYCHEPROOF	4.5	NA
CH0016	CEMETERY, WYCHEPROOF	9.7	L
CH0017	CENTENARY PARK, WYCHEPROOF	8.7 8.8	L
CH0018	POLICE RESERVE BUILDINGS, CHARLTON	7.5	NA
CH0019	WAR MEMORIAL CENOTAPH, COONOOER	8.8	L
CH0020	SHEEP DIP, BUCKRABANYULE	3.4	L
CH0021	SILOS AND STATION, BARRAKEE	3.4	L
CH0022	WILLIAM WILLIAMS CAIRN, CHARLTON	8.7	BL
CH0023	FLOUR MILL AND SILOS, CHARLTON	3.4	R
CH0024	JACK UNWIN HOCKING MEMORIAL, CHARLTON	8.7	BL
CH0025	HALL, YEUNGROON	4.3	L
CH0026	FORMER METHODIST CHURCH SITE, YEUNGROON	8.6 8.9	L
CH0027	HALL, GLENLOTH	4.3	NA
CH0028	PUBLIC HALL, JEFFCOTT	4.3	L
CH0029	MEMORIAL HALL, GLENLOTH EAST	4.3 8.8	BL
CH0030	SHEEP DIP RESERVE, NEAR WYCHEPROOF	3.4	L
CH0031	SILOS AND STATION, TEDDYWADDY	3.4	BL
CH0032	PUBLIC HALL AND WAR MEMORIAL, CORACK	4.3 8.8	L
CH0033	SIR ALFRED DUNSTAN MEMORIAL, COPE COPE	8.9	L
CH0034	STATION, SILOS AND FORMER RAIL PLATFORM, COPE COPE	3.4	BL
CH0035	SCHOOL # 1754 MONUMENT, GOOROC	6.2 8.7	L
CH0036	SCHOOL # 2865, TEDDYWADDY WEST	6.2	L
CH0037	SCHOOL # 1942 (SITE), YEUNGROON	6.2 8.7	L
CH0038	SCHOOL # 3706 (SITE), COONOOER WEST	6.2 8.7	L
CH0039	SCHOOL # 4432 MONUMENT, GLENLOTH EAST	6.2 8.7	L
CH0040	STATE SCHOOL (FORMER) AND MONUMENT, GLENLOTH	6.2 8.7	L
CH0041	SCHOOL # 1966 (SITE), WOOSANG	6.2 8.7	L

Site ID	Site name	Themes	Significance
CH0042	MT JEFFCOTT CROWN LAND RESERVE AND JEFFCOTT CROWN LAND RESERVE	3.10	L
CH0043	SOIL CONSERVATION PROJECT, BUCKRABANYULE HILLS	3.10	L
CH0044	CROWN LAND RESERVE, CHARLTON WEST	3.10	L
CH0045	COSSARS CROSSING (YEUNGROON CREEK), SE OF CHARLTON	3.10	NA
CL0001	WESLEYAN MISSION, SOUTH OF BIRREGURRA	8.6 7.5	
CL0002	BUNTINGDALE MISSION CAIRN, BIRREGURRA	8.9	
CL0003	FREE LIBRARY, WINCHELSEA	6.1	L
CL0004	MECHANICS' INSTITUTE, BIRREGURRA	6.1	NA
CL0005	MECHANICS' INSTITUTE, DEANS MARSH	6.1	NA
CL0006	RAILWAY STATION, WINCHELSEA	3.7	R
CL0007	WATER TOWER, WINCHELSEA	4.2	L
CL0009	RIVER RED GUM, WINCHELSEA	1.4	L
CL0010	BARWON RIVER BRIDGE, WINCHELSEA	3.7	S
CL0011	MEMORIAL GATES, WINCHELSEA	8.8	NA
CL0012	FORREST RAILWAY REMAINS, WHOOREL	3.7	BL
CL0013	WENSLEY BRAY COAL MINE, WINCHELSEA DISTRICT	3.3	L/R
CL0014	STREET CLOCK AND MONUMENT, WINCHELSEA	8.7	BL
CL0015	BARWON RIVER RESERVE, WINCHELSEA	4.1 4.3 8.1	L
CL0016	RAILWAY STATION SITE, DEANS MARSH	3.7	BL
CL0017	RAILWAY CUTTING, DEANS MARSH	3.7	BL
CL0018	WURDEE BOLUC INLET CHANNEL, BARWON DOWNS DISTRICT	4.2	R
CL0019	RAILWAY STATION SITE, BARWON DOWNS	3.7	BL
CL0020	FAIRHOLM STATE SCHOOL # 3972 (SITE), SOUTH OF BIRREGURRA	6.2	L
CL0021	STATE SCHOOL # 2028, ELLIMINYT	6.2	L
CL0022	RACING CLUB AND GEM CLUB, ELLIMINYT	8.1	NA
CL0023	CEMETERY, WARNCOORT	9.7	L
CL0026	HOSPITAL COMPLEX, COLAC	3.25	L
CL0027	BOTANIC GARDENS, COLAC	4.3	S
CL0028	CARAVAN PARK, COLAC	8.3	L
CL0030	RECREATION & PUBLIC PURPOSES RESERVE, LAKE COLAC	8.1	BL
CL0031	RAILWAY STATION & VR INSTITUTE, COLAC	3.7	R/S
CL0032	CEMETERY, COLAC	9.7	R
CL0035	MEMORIAL SQUARE, COLAC	8.8 8.7 4.3	R
CL0036	SHIRE HALL, COLAC	7.2	S
CL0037	BARONGAROOK CREEK RESERVE SCULPTURE PARK & LOG CABIN, COLAC	4.3 8.10	L
CL0038	HIGH SCHOOL, COLAC	6.2	R
CL0039	COURTHOUSE & POLICE STATION, COLAC	7.5	R
CL0040	BONLAC BUTTER FACTORY COMPLEX, COLAC	3.11	NA

Site ID	Site name	Themes	Significance
CL0041	BEECH FOREST RAILWAY LINE REMNANTS, BARONGAROOK	3.7	BL
CL0042	BEECH FOREST RAILWAY LINE REMNANTS, KAWARREN	3.7	L
CL0043	COLAC-BALLARAT RAILWAY LINE REMNANTS, IRREWARRA	3.7	BL
CL0047	COMMON SCHOOL, (FORMER) BEEAC	6.2	L/R
CL0048	PRIMARY SCHOOL # 482, BEEAC	6.2	L/R
CL0049	CEMETERY, BIRREGURRA	9.7	L
CL0050	RAILWAY STATION COMPLEX, BIRREGURRA	3.7	S
CL0052	DRY STONE WALLS, WARRION	3.8	L
CL0053	PUBLIC HALL, WARRION	4.3	BL
CL0054	RECREATION RESERVE, IRREWARRA	8.1	L
CL0056	PRIMARY SCHOOL # 2866, BARWON DOWNS	6.2	BL
CL0057	STATE SCHOOL # 1243, GERANGAMETE	6.2	BL
CL0059	CEMETERY, YAUGHER	9.7 8.9	L
CL0060	BARONGAROOK PRIMARY SCHOOL # 2210, SOUTH OF COLAC	6.2	R
CL0064	GOLF LINKS AND GARDENS, BIRREGURRA	8.1 4.3	NA
CL0065	STATE SCHOOL # 2015, WINCHELSEA	6.2	L
CL0066	SHIRE HALL, WINCHELSEA	7.2	R
CL0070	HOUSING COMMISSION PRECINCT, WINCHELSEA	4.5	L
CL0071	CONSOLIDATED SCHOOL # 6210 (?), ALVIE	6.2	NA
CL0072	RED ROCK PICNIC RESERVE, NEAR ALVIE	8.1	L
CL0073	RED ROCK RESERVE PLAQUE, NEAR ALVIE	4.1 8.1	L
CL0074	RED ROCK WAR MEMORIAL, NEAR ALVIE	8.8	L
CL0075	RED ROCK LOOKOUT, NEAR ALVIE	8.1	L
CL0076	WOADY YALLOCK RIVER BRIDGE, CRESSY	3.7	R/S
CL0078	MEMORIAL GRANDSTAND, WINCHELSEA	8.1 8.8	NA
CL0079	RAILWAY STATION, CRESSY	3.7	NA
CL0080	WATSON AND FACEY SAWMILL, BARONGAROOK DISTRICT	3.3	NA
CL0081	BENALLACK SAWMILL, BARONGAROOK DISTRICT	3.3	NA
CL0082	CONDON SAWMILL, KAWARREN	3.3	NA
CL0083	COPPOCK SAWMILL, KAWARREN DISTRICT	3.3	NA
CL0084	BENALLACK SAWMILL, KAWARREN DISTRICT	3.3	NA
CL0085	WESTWOOD SAWMILL, BARONGAROOK DISTRICT	3.3	NA
CL0086	DEVITT SAWMILL, BARONGAROOK DISTRICT	3.3	NA
CL0087	BARONGAROOK SAWMILLING CO. SAWMILL, BARONGAROOK	3.3	NA
CL0088	BARONGAROOK SAWMILLING CO. SAWMILL, KAWARREN DISTRICT	3.3	NA
CL0089	MCGIE SAWMILL, BARONGAROOK DISTRICT	3.3	NA
CL0090	ROYLE SAWMILL, BARWON DOWNS DISTRICT	3.3	L
CL0091	? SAWMILL # 1, BARWON DOWNS DISTRICT	3.3	NA

Site ID	Site name	Themes	Significance
CL0092	? SAWMILL # 2, BARWON DOWNS DISTRICT	3.3	NA
CL0093	KIDDY SAWMILL, BARWON DOWNS DISTRICT	3.3	NA
CL0094	ACA SAWMILL, LORNE DISTRICT	3.3	R
CL0095	? SAWMILL, BENWERRIN	3.3	NA
CL0096	SILK SAWMILL, LORNE DISTRICT	3.3	NA
CL0097	CONDON BROS SAWMILL, BENWERRIN DISTRICT	3.3	NA
CL0098	HAYDEN # 1 SAWMILL, BARWON DOWNS	3.3	NA
CL0099	BARWON DOWNS WELLFIELD, GEELONG WATER SUPPLY	4.2	L
CO0001	COURTHOUSE, COLERAINE	7.5	S
CO0002	RACECOURSE, COLERAINE	8.1	L
CO0003	QUEENS PARK, COLERAINE	8.1	NA
CO0006	WANNON SHIRE OFFICES (FORMER), COLERAINE	7.2	L
CO0007	SHIRE HALL, COLERAINE	7.2	NA
CO0008	HISTORIC INTEREST RESERVE, COLERAINE	4.3	BL
CO0009	MECHANICS INSTITUTE, COLERAINE	6.1	S
CO0010	RAILWAY STATION, COLERAINE	3.7	R
CO0012	STATE SCHOOL, COLERAINE	6.2	BL
CO0013	RECREATION RESERVE / SHOWGROUNDS, COLERAINE	8.1	NA
CO0014	CEMETERY, COLERAINE	9.7	L
CO0015	WAR MEMORIAL, COLERAINE	8.8	L
CO0016	FIRE STATION, COLERAINE	4.2	L
CO0017	MAJOR MITCHELL MONUMENT AND PARK, COLERAINE	8.9 3.2 8.7	R
CO0018	HISTORIC MARKER, COLERAINE	8.9	L
CO0019	BUTTER FACTORY, MERINO	3.11	NA
CO0020	PETERSONS SLIP, KONONG WOOTONG	3.10	NA
CO0021	PUBLIC HALL, MERINO	4.3	L
CO0022	WAR MEMORIAL, MERINO	8.8	L
CO0023	MEMORIAL AVENUE, DIGBY	8.8	L
CO0024	MECHANICS INSTITUTE, DIGBY	6.1	NA
CO0025	MEMORIAL HALL, DIGBY	4.3 8.8	BL
CO0026	S LOOKOUT, BETWEEN COLERAINE AND EDENHOPE	3.10	R
CO0027	*ITALIAN* SOIL CONSERVATION STRUCTURES # 1	3.10	L/R
CO0028	*ITALIAN* SOIL CONSERVATION STRUCTURES # 2	3.10	L/R
CO0029	BELLWYN GULLY, BETWEEN COLERAINE AND BALMORAL	3.10	NA
CO0030	ERODED UNNAMED GULLY, SOUTH OF COLERAINE	3.10	BL
CO0031	KONONG WOOTONG CREEK, NORTH OF COLERAINE	3.10	L/R
CO0033	NIGRETTA FALLS, WANNON RIVER	8.1 1.4	L
CO0034	MAIN ROAD BRIDGE, WANNON RIVER	3.7	NA
CO0035	OLD WANNON INN, WANNON	8.4	NA

Site ID	Site name	Themes	Significance
CO0036	HAMILTON - COLERAINE RAILWAY LINE	3.7	NA
CO0037	CRAWFORD RIVER BRIDGE, HOTSPUR	3.7	NA
CO0038	WANNON FALLS RESERVE, WEST OF HAMILTON	1.4 8.1	R
CO0039	KONONGWOOTONG RESERVOIR	2.6 4.2	
CO0040	STATE SCHOOL # 4415, MELVILLE FOREST	6.2	L
CO0041	BRIDGE, BULART	3.7	BL
CO0042	*JENNINGS* SAND EXTRACTION SITE, COLERAINE	3.3	L
CO0043	BRYANS CREEK, COLERAINE	3.10	L/R
CO0044	PUBLIC HALL, KONONG WOOTONG	4.2	BL
CO0045	MEMORIAL RECREATION CENTRE, HENTY	4.3 8.8	BL
CO0046	LANDSLIP, FORMER HAMILTON-COLERAINE RAILWAY LINE	3.7	NA
CO0047	SCOTT CREEK BRIDGE, BYADUK	3.7	S
CR0001	STATE SCHOOL # 3578, LAKE BOOKAR	6.2	L
CR0003	STATE SCHOOL & SHELTER, ELINGAMITE	6.2	BL
CR0004	RAILWAY STATION SITE, ELINGAMITE	3.7	BL
CR0005	PRIMARY SCHOOL # 2357 (AND TREE), IRREWILLIPE EAST	6.2 1.4	R
CR0006	BOSTOCKS HALL, BOSTOCKS CREEK	4.3	L/R
CR0007	CEMETERY, COBDEN	9.7	L
CR0008	TECHNICAL SCHOOL & RELOCATED STATE SCHOOLS, COBDEN	6.2 6.3	L
CR0009	RAILWAY RESERVE & TREES, COBDEN	3.7	L
CR0010	PUBLIC PURPOSES RESERVE & BATHS, COBDEN	4.3	BL
CR0011	STATE SCHOOL # 864, COBDEN	6.2	R
CR0012	HEYTESBURY SHIRE OFFICES (FORMER), COBDEN	7.2	R
CR0013	WAR MEMORIAL, COBDEN	8.8	L
CR0014	PRIMARY SCHOOL # 3421, TANDAROOK	6.2	NA
CR0015	PRIMARY SCHOOL # 7, CARPENDEIT	6.2	L
CR0017	PUBLIC HALL SITE, POMBORNEIT	8.9	L
CR0019	PUBLIC HALL, POMBORNEIT NORTH	4.3	NA
CR0021	PUBLIC HALL, PURUMBETE SOUTH	4.3	NA
CR0023	RAILWAY CULVERTS, PIRRON YALLOCK	3.7	BL
CR0025	DRY STONE WALLS, STONEYFORD	3.8	L
CR0026	PRIMARY SCHOOL # 3475, LARPENT	6.2	BL
CR0027	PUBLIC HALL AND PIONEER MEMORIAL, STONEYFORD	4.3 8.7	L
CR0028	RAILWAY STATION, PIRRON YALLOCK	3.7	S
CR0031	MT LEURA LOOKOUT, CAMPERDOWN DISTRICT	8.1	R
CR0032	CEMETERY, DARLINGTON	9.7	L/R
CR0033	CEMETERY, KILNOORAT	9.7	NA
CR0034	CHARCOAL KILNS, TOMAHAWK CREEK	3.3	NA
CR0035	CAMPERDOWN GEORGE MEMORIAL, CAMPERDOWN	8.9	

Site ID	Site name	Themes	Significance
CR0036	SCOTTS CREEK AND COWLEYS CREEK PUBLIC HALL	4.3	BL
CR0037	CEMETERY, SCOTTS CREEK	9.7	L
CR0038	STONE CAUSEWAY, STONEYFORD	3.7	L/R
CR0039	STONE WALL, NEAR FLOATING ISLANDS NATURE RESERVE	3.8	L/R
CR0040	MACHINERY STORAGE SHED (FORMER), FLOATING ISLANDS NATURE RESERVE	3.8	NA
CR0041	FORMER PIGGERY, FLOATING ISLANDS NATURE RESERVE	3.8	NA
CR0042	TANK STAND, FLOATING ISLANDS NATURE RESERVE	3.8	NA
CR0043	HOUSE FOUNDATIONS, FLOATING ISLANDS NATURE RESERVE	3.8	NA
CR0044	FORMER RAILWAY BRIDGE, NORTH OF NAROGHID	3.7	NA
CR0046	120 MILE POST, CAMPERDOWN	3.7	L
CR0047	GAS LIGHT STANDARDS CAMPERDOWN	4.2	L
CR0048	CAST IRON FIRE HYDRANT CAMPERDOWN	4.2	L
CR0049	DANIEL CURDIE MONUMENT IN FINLAY AVENUE	8.9	L
CR0050	J.C. MANIFOLD MONUMENT IN THE FINLAY AVENUE, CAMPERDOWN	8.9	L
CR0051	FORMER POWER STATION, CAMPERDOWN	4.2	L
CR0052	HOSPITAL, CAMPERDOWN	3.25	L
CR0053	RAILWAY STATION, CAMPERDOWN	3.7	L
CR0054	SIEVEWRIGHT GRAVE, CAMPERDOWN	9.7	S
CR0055	RACECOURSE AND GRANDSTAND, CAMPERDOWN	8.1	L
CR0056	ALBERT CRESENT AND VICTORIA SQUARE CAMPERDOWN	4.3	L
CR0057	QUEEN'S PARK RESERVE, CAMPERDOWN	8.1	L
CR0058	LEURA OVAL RESERVE, CAMPERDOWN	8.1	L
CR0059	PASTORAL AND AGRICULTURAL SOCIETY RESERVE (SHOWGROUNDS)	8.1 3.4	L
CR0060	CURDIE STREET PLANTATION, CAMPERDOWN	4.3	L
CR0061	LEURA STREET PLANTATION, CAMPERDOWN	4.3	L
CR0062	CRESSY ROAD PLANTATION, CAMPERDOWN	4.3	L
CR0063	BROOKE STREET PLANTATION, CAMPERDOWN	4.3	L
CR0064	SHIRE OF HAMPDEN MUNICIPAL OFFICES AND SHIRE HALL, CAMPERDOWN	7.2	S
CR0065	FORMER SCORIA QUARRY CAMPERDOWN	3.3	BL
CR0066	QUARRY (IN SHIRE OF HAMPDEN), CAMPERDOWN	3.3	BL
CR0067	WATER TROUGH IN OWER STREET, CAMPERDOWN	4.3	BL
CR0068	CORONATION AVENUES, CAMPERDOWN	4.3 8.9	NA
CR0069	STATE PUBLIC OFFICES AND POLICE RESERVE, CAMPERDOWN	7.5	BL
CR0070	HIGH SCHOOL, CAMPERDOWN	6.2	BL
CR0071	SCOUT HALL, CAMPERDOWN	4.3	BL
CR0072	RUSSELL MOCKING PARK, CAMPERDOWN	4.3	NA

Site ID	Site name	Themes	Significance
CR0073	BOTANIC GARDENS AND ARBORETUM CAMPERDOWN	4.3	S
CR0074	MOUNT LEURA RESERVE CAMPERDOWN	1.4 8.1	R
CR0075	MANIFOLD MEMORIAL CLOCK TOWER CAMPERDOWN	8.9	S
CR0076	FINLAY AVENUE CAMPERDOWN	4.3	S
CR0077	SOLDIERS MEMORIAL CAMPERDOWN	8.8	S
CR0078	MECHANIC'S INSTITUTE CAMPERDOWN	6.1	S
CR0079	COURT HOUSE (FORMER), CAMPERDOWN	7.5	S
CR0080	EMPIRE WAR MEMORIAL CAMPERDOWN	8.8	S
CR0081	RECREATION GROUND, COBRICO	8.1	NA
CR0082	PUBLIC HALL, GNOTUK	4.3	NA
CR0083	SETTLEMENT HISTORICAL PARK, HEYTESBURY	8.7 8.1	NA
CR0084	PUBLIC HALL, NAROGHID	4.3	NA
CR0085	CEMETERY, CAMPERDOWN	9.7	NA
CR0086	HITT SAWMILL, LOVAT DISTRICT	3.3	NA
CR0087	PUBLIC HALL, COBRICO	4.3	NA
DO0001	OLD POLICE STATION, DONALD	7.5 8.9	R
DO0002	RAILWAY STATION COMPLEX, DONALD	3.7	S
DO0003	SHOWGROUNDS, DONALD	3.4	L
DO0004	STATE SCHOOL, DONALD	6.2	L
DO0005	SCILLEYS ISLAND RESERVE, DONALD	4.3 8.1	NA
DO0006	PUBLIC PARK AND MEMORIALS, DONALD	4.3 8.8	L
DO0008	COURTHOUSE, DONALD	7.5	NA
DO0009	HOSPITAL RESERVE, DONALD	3.25	NA
DO0010	WATER TOWER, DONALD	4.2	NA
DO0011	SHIRE OFFICES, DONALD	7.2	NA
DO0012	CEMETERY, DONALD	9.7	L
DO0013	WATER TOWER, MINYIP	4.2	NA
DO0014	CEMETERY, SHEEP HILL	9.7	L
DO0015	WAR MEMORIAL, SHEEP HILL	8.8	L
DO0016	MECHANICS INSTITUTE, SHEEP HILL	6.1	BL
DO0017	PIONEER MONUMENT, NW OF MINYIP	8.9	L
DO0019	RECREATION RESERVE AND MEMORIALS, MINYIP	8.8	L
DO0020	DUNMUNKLE LODGE HOMES FOR THE AGED, DUNMUNKLE	9.5	BL
DO0021	BANDSTAND ROTUNDA, MINYIP	4.3	NA
DO0022	SCHOOL # 2170 (SITE), BOOLITE	6.2 8.7	L
DO0023	STATE SCHOOL # 4010 (SITE), WILKUR SOUTH	6.2 8.7	L
DO0024	PRIMARY SCHOOL SITE AND CENTENARY MONUMENT, LAEN	6.2 8.7	L
DO0025	SCHOOL # 1934 (SITE), SHEEP HILLS	6.2 8.7	L
DO0026	SCHOOL # 2314 SITE, AREEGRA	6.2 8.7	L

Site ID	Site name	Themes	Significance
DO0027	SCHOOL # 3224, WATCHEM	6 2	NA
DO0028	CEMETERY, CORACK EAST	9.7	L
DO0029	LITCHFIELD RECREATION RESERVE CLUBROOMS, LITCHFIELD	8.1 6.2	NA
DO0030	LAKE AND RECREATION AREA, WATCHEM	8.1	BL
DO0031	WW I AND WW II MEMORIAL AND PLANTATION, WATCHEM	8.8	L
DO0033	PIONEER MONUMENT, WILKUR	8.9	BL
DO0034	HALL AND COMMEMORATIVE SITES, BANGERANG	4.3 4.1	L
DO0036	MEMORIAL HALL, MINYIP	4.3 8.8	L
DO0037	RECREATION OVAL, MONUMENT AND HALL, BOOLITE	8.1 8.7	BL
DO0038	METHODIST CHURCH (MONUMENT/SITE), EAST LAEN	8.6 8.7	L
DO0039	CEMETERY, LAEN NORTH	9.7	L
DO0040	RECREATION RESERVE, WATCHEM	8.1	BL
DO0041	CEMETERY, WATCHEM	9.7	L
DO0042	COMMUNITY PARK WITH MEMORIAL AND CLOCK, MINYIP	4.3	BL
DO0043	SITE OF ZION LUTHERAN CHURCH, BANGERANG	8.6 8.7	L
DO0044	CEMETERY, MINYIP	9.7	L/R
DO0045	RAILWAY STATION, MINYIP	3.7	S
ED0001	MECHANICS INSTITUTE, EDENHOPE	6.1	BL
ED0002	COURTHOUSE, EDENHOPE	7.5	L/R
ED0003	RACECOURSE, EDENHOPE	8.1	NA
ED0004	CEMETERY, EDENHOPE	9.7	L
ED0005	STATE SCHOOL AND HIGH SCHOOL, EDENHOPE	6.2	BL
ED0006	HOUSING COMMISSION ESTATE, EDENHOPE	4.5	NA
ED0007	SHOWYARDS, EDENHOPE	3.4	NA
ED0009	WAR MEMORIAL, EDENHOPE	8.8	L
ED0010	ABORIGINAL CRICKET TEAM MEMORIAL, EDENHOPE	8.9	
ED0011	BILSTON'S TREE, DERGHOLM STATE FOREST	1.4	L
ED0012	PRIMARY SCHOOL # 17297 (FORMER), DERGHOLM	6.2	NA
ED0013	BAILEY'S ROCKS, DERGHOLM STATE PARK	1.4 8.1	L
ED0014	BAILEY'S ROCKS HOMESTEAD, DERGHOLM STATE PARK	2.5 3.8	L
ED0015	ROSENEATH FLORA RESERVE, WEST OF DERGHOLM	1.2	BL
ED0016	MEMORIAL TREE, EDENHOPE	8.9	BL
ED0017	SAWMILL, COLLINS LAKE	3.3	R
ED0018	SAWMILL, CONTENT TRACK	3.3	L
ED0019	CHARCOAL KILN, POOLAJELO	3.3	L
ED0020	HETHERINGTON'S SAWMILL, MEERAK STATE FOREST	3.3	L/R
ED0021	MEMORIAL HALL, LANGKOOOP	4.3 8.8	NA
ED0022	MEMORIAL HALL, POOLAJELO	4.3 8.8	NA
ED0023	STATE SCHOOL # 2633 (SITE), LANGKOOOP	6.2	BL

Site ID	Site name	Themes	Significance
ED0024	STATE SCHOOL # 2978, POOLAJELO	6.2	BL
ED0025	HALL, DORODONG	4.3	BL
ED0026	CEMETERY, DERGHOLM	9.7	L
ED0027	HALL, DERGHOLM	4.3	BL
ED0029	TIMBER BRIDGE OVER SALT CREEK, SALT CREEK	3.7	NA
ED0030	BRIDGE OVER GLENELG RIVER, ROSENEATH	3.7	NA
ED0031	BOURKES BRIDGES OVER GLENELG RIVER, BURKE BRIDGE	3.7	L/R
ED0032	CEMETERY, CHETWYND	9.7	L
ED0033	STATE SCHOOL (SITE), CHETWYND	6.2 8.7	L
ED0034	BRIDGE OVER CHETWYND RIVER, CHETWYND	3.7	L
ED0035	WINDMILL & CONCRETE WATER TANK, NEAR CHETWYND	3.8	BL
ED0036	HALL AND MEMORIAL, CHETWYND	4.3 8.8	L
ED0037	PUBLIC HALL, NANGEELA	4.3	NA
ED0038	PIGEON PONDS CREEK, MOOREE PARISH	3.10	L/R
ED0039	CHETWYND RIVER, CHETWYND EAST	3.10	L/R
GA0001	PRINCESS MARGARET ROSE CAVES, LOWER GLENELG NATIONAL PARK	8.1 1.4	R
GE0001	MEMORIAL ARCH, GREAT OCEAN ROAD, EASTERN VIEW	3.7 8.8 3.22	R/S
GE0002	CEMETERY, WINCHELSEA	9.7	NA
GE0003	MORJAC TO WENSLEYDALE RAILWAY LINE REMNANTS, S E OF WINCHELSEA	3.7	NA
GE0004	COAL LOADING REMNANTS, WENSLEYDALE RAILWAY STATION	3.3 3.7	NA
GE0005	GRAVEL CONFERENCE TRAMWAY FORMATION, GHERANG	3.3 3.7	NA
GO0001	SAWMILL, MOREA	3.3	BL
GO0002	RACECOURSE & RECREATION RESERVE, APSLEY	8.1	NA
GO0004	HALL, APSLEY	4.3	BL
GO0005	WWII, KOREA & VIETNAM WAR MEMORIAL & GUMS, APSLEY	8.8	L
GO0006	WWI MEMORIAL, APSLEY	8.8	L
GO0007	RECREATION RESERVE, APSLEY	8.1	BL
GO0008	STATE SCHOOL # 1208, APSLEY	6.2	L
GO0009	CEMETERY, APSLEY	9.7	L
GO0010	LAKE CHARLEGRARK & RECREATION RESERVE FACILITIES, BOOROOKPI	8.1	BL
GO0011	FIRE STATION & FORMER SCHOOL BUILDING, PATYA	4.2 6.2	BL
GO0013	HALL, ULLSWATER	4.3	NA
GO0014	RECREATION RESERVE, GOROKE	8.1	NA
GO0015	BROUGHTONS WATER HOLE, LITTLE DESERT NATIONAL PARK	1.3 3.15	L/R
GO0016	CEMETERY, GOROKE	9.7	L
GO0017	SHOWGROUNDS, GOROKE	3.4	NA
GO0018	CEMETERY, MINIMAY	9.7	L
GO0019	PUBLIC HALL, GOROKE	7.2	BL

Site ID	Site name	Themes	Significance
GO0020	MEMORIAL GATE, NEUARPUR	8 8	L
GO0021	PUBLIC HALL, PERONNE	4.3	BL
GO0022	PRIMARY SCHOOL # 2600 (SITE), MINDMAY	6.2	BL
GO0023	THREE SISTERS RESERVE, LITTLE DESERT NATIONAL PARK	1.2	NA
GO0024	SOUTH AUSTRALIA BORDER RESERVE, LITTLE DESERT NATIONAL PARK	1.2 3.2	NA
GO0026	SILOS, GOROKE	3.4	NA
GR0001	SHEPHERD'S GRAVE, BRIM SPRINGS	3.8 3.15	L/R
GR0002	HEATHERLIE QUARRY, MT DIFFICULT	3.3	S
GR0003	GERANIUM SPRINGS, GRAMPIANS DISTRICT	3.8 3.15	L
GR0004	REIDS LOOKOUT, GRAMPIANS AREA	1.4 8.1	R
GR0005	FALLS ON ROSES CREEK, GRAMPIANS	3.8 3.15	L
GR0006	MOORA MOORA SETTLEMENT SITE, GRAMPIANS NATIONAL PARK	2.5 3.8 3.15	L/R
GR0007	WILDMAN CAVES, BLACK RANGE	3.15	L
GR0008	CHILDREN'S GRAVES, GRAMPIANS	9.7	L
GR0009	OLD ADELAIDE ROAD, GRAMPIANS	3.7	R
GR0010	OLD ADELAIDE ROAD MONUMENT	3.7 8.9	R
GR0011	CARETAKERS COTTAGE AND GARDEN, LAKE WARTOOK	3.5 4.2	L/R
GR0012	HORSHAM ANGLING CLUB, LAKE WARTOOK	8.1	R
GR0013	LOWERY LODGE, LAKE WARTOOK	3.21 8.3	NA
GR0014	PUMPING INSTALLATIONS, LAKE WARTOOK	4.2	NA
GR0015	STONE COTTAGE, LAKE WARTOOK	3.21 8.1	L
GR0016	BRIDGE OVER MOORA CHANNEL, GRAMPIANS NATIONAL PARK	3.7 4.2	NA
GR0017	REID'S PICNIC AREA, GRAMPIANS	3.22	NA
GR0018	LARGE CULVERT OVER GULF STREAM, GRAMPIANS	3.7 3.22	L
GR0019	STEPS TO EPARCRIS FALLS, GRAMPIANS NATIONAL PARK	1.4 3.22	L
GR0020	BROKEN FALLS, GRAMPIANS NATIONAL PARK	1.4 3.22	L
GR0021	MACKENZIE FALLS, MACKENZIE RIVER, GRAMPIANS	1.4 3.22	L/R
GR0022	CRANAGES COTTAGES, GRAMPIANS	3.21 3.22	R
GR0023	FORMER ROAD BRIDGE, NEAR CRANAGES, GRAMPIANS	3.7	BL
GR0024	PICNIC SHELTER / KITCHEN, CRANAGES, GRAMPIANS	3.22	NA
GR0025	TELEPHONE LINE REMNANTS, WARTOOK	3.6	NA
GR0026	LOWER FOREST LODGE, VICTORIA VALLEY, GRAMPIANS DISTRICT	7.5	NA
GR0027	MCDONALD'S CHARCOAL KILNS, WOOLPOOER STATE FOREST	3.3	NA
GR0028	SERRA ROAD HUT, GRAMPIANS	3.3	NA
GR0029	CAMP, WOOLPOOER	3.3 7.5	L/R
GR0030	CHARCOAL KILNS, BEPCHA	3.3	NA
GR0031	RED GUM WALK SAWMILL, OFF GLENELG RIVER ROAD	3.3	BL

Site ID	Site name	Themes	Significance
GR0032	SAWMILL 2, STONY CREEK	3.3	R
GR0033	VILLAGE SETTLEMENT, MOORA MOORA	2.5 3.3	NA
GR0034	WATTLE PLANTATION, VICTORIA VALLEY	3.3	NA
GR0035	SAWMILL, DWYER CREEK	3.3	L
GR0036	STRACHAN'S MILL & HUTS, VICTORIA VALLEY	3.3	L/R
GR0037	SERRA ROAD CAMP, GRAMPIANS	3.3	NA
GR0038	FITZPATRICK'S SAWMILL 1, VICTORIA VALLEY	3.3	NA
GR0039	FITZPATRICK'S SAWMILL 3, VICTORIA VALLEY	3.3	NA
GR0040	GREEN CREEK ROAD SAWMILL, GRAMPIANS	3.3	L/R
GR0041	SMITH MILL, GRAMPIANS NATIONAL PARK	3.3	L
GR0042	STONE STEPS & BBQ, MIRRANATWA GAP	3.22	NA
GR0044	PICNIC GROUND, WANNON	3.22 8.1	NA
GR0045	PICNIC SHELTER / COMMUNITY KITCHEN, ZUMSTEINS, GRAMPIANS	3.22 8.1	L
GR0046	SMALL TIMBER ROADBRIDGE, OVER DWYER CREEK TRIBUTARY, DWYER	3.7	BL
GR0047	DISUSED TELEPHONE LINE, GRAMPIANS NATIONAL PARK	3.6	NA
GR0048	EXOTIC TREES, NEAR ZUMSTEINS, GRAMPIANS	3.22	L
GR0049	RSL COTTAGE, ZUMSTEINS, GRAMPIANS	3.22	NA
GR0050	SECOND RSL COTTAGE, ZUMSTEINS, GRAMPIANS	3.22	NA
GR0051	MONUMENT, ZUMSTEINS, GRAMPIANS	8.9	L
GR0052	GLENELG RIVER EARTHEN BANK, GRAMPIANS NATIONAL PARK	3.7 3.10	NA
GR0053	COTTAGES & SURROUNDS, ZUMSTEINS, GRAMPIANS	3.22 8.1	S
GR0054	HENHAM CHALET SITE & HENHAM SUBDIVISION, MIRRANATWA	3.22	NA
GR0056	CEMETERY, BRIMPAEN	9.7	L
GR0057	PUBLIC HALL, RECREATION RESERVE & MEMORIAL GATES, BRIMPAEN	4.3 8.8	L
GR0058	SITE OF CATHOLIC CHURCH, GLENISLA	8.6 8.7	L
GR0059	SITE OF CIVIC BUILDINGS, MOORALLA	8.9	L
GR0060	PICNIC GROUND, ZUMSTEINS, GRAMPIANS	3.22	L
GR0061	LAKE WARTOOK, GRAMPIANS	4.2	S
GR0062	MOORA MOORA RESERVOIR AND CHANNEL, W-M SYSTEM, GRAMPIANS	4.2	R
GR0063	MOUNT ZERO CHANNEL SYSTEM, HORSHAM WATER SUPPLY, WARTOOK	4.2	NA
GR0064	HAMILTON WATER SUPPLY GRAMPIANS HEADWORKS SYSTEM	4.2	R
GR0065	ROWE'S LOGGERS' HUTS, VICTORIA VALLEY	3.3	NA
GR0066	WALTER SAWMILL, VICTORIA VALLEY	3.3	NA
GR0067	ROWE'S FALLERS AND LOGGERS HUTS, VICTORIA VALLEY	3.3	NA
GR0068	INGLETON SPRING LOGGERS AND FALLERS HUTS, VICTORIA VALLEY	3.3	NA

Site ID	Site name	Themes	Significance
GR0069	STEAM ENGINE, INGLETON SPRINGS, VICTORIA VALLEY	3.3	NA
GR0070	SITE OF FORESTS COMMISSION HUTS, BIG CORD AREA, VICTORIA VALLEY	3.3 7.5	NA
GR0071	FITZPATRICK'S PARROT CREEK SAWMILL, VICTORIA VALLEY	3.3	NA
GR0072	TOM DARK'S SHINGLE CUTTING CAMP, VICTORIA VALLEY	3.3	NA
GR0073	WALTER SAWMILL, MIRRANATWA DISTRICT	3.3	NA
GR0075	WALTER'S OLD SAWMILL SITE, VICTORIA VALLEY	3.3	NA
GR0076	CHANDLER SAWMILL, NEAR MOUNT FREDERICK, GRAMPIANS	3.3	NA
HA0001	TOWN HALL, HAMILTON	7.2	NA
HA0002	DUNDAS SHIRE OFFICES AND HALL, HAMILTON	7.2	R
HA0003	BASE HOSPITAL, HAMILTON	3.25	R
HA0004	MCKELLAR WING (MATERNITY), HAMILTON HOSPITAL	3.25 9.1	R
HA0005	GRANGE HOSTEL, HAMILTON	9.5	NA
HA0006	FORMER FEVER WARD, HAMILTON BASE HOSPITAL	3.25	R
HA0007	'THE CHALET', HAMILTON	3.25	S
HA0008	MECHANICS' INSTITUTE (FORMER), HAMILTON	6.1	S
HA0009	POLICEMAN'S RESIDENCE, HAMILTON	7.5 3.5	L
HA0010	NEW POLICE STATION, HAMILTON	7.5 3.5	R
HA0011	PRIMARY SCHOOL, HAMILTON NORTH	6.2	NA
HA0012	STATE SCHOOL # 295, HAMILTON	6.2	R
HA0013	HIGH SCHOOL, HAMILTON	6.2	L
HA0014	MUNICIPAL SALE YARDS, HAMILTON	3.4	NA
HA0015	REG ANSETT'S HANGER, HAMILTON	3.7	NA
HA0016	PEDRINA PARK, HAMILTON	3.7	NA
HA0017	RADIO TRANSMITTER, MT BAINBRIDGE, N OF HAMILTON	3.6	NA
HA0018	RAILWAY GOODS SHEDS (FORMER), HAMILTON	3.7	NA
HA0019	RAILWAY STATION, HAMILTON	3.7	L
HA0020	BOTANIC GARDENS, HAMILTON	4.3	S
HA0021	SINGLE TREE, EUC. GLOBULUS SUB BICOSTATA (EURABBIE), HAMILTON	4.3	L
HA0022	ENGLISH OAK TREE, LAKE HAMILTON CARAVAN PARK	4.3	L
HA0023	ENGLISH OAK TREE AVENUE, HAMILTON	4.3	NA
HA0024	ROW OF WASHINGTON PALM TREES, HAMILTON	4.3	NA
HA0026	GAS HOLDER, HAMILTON	4.2	S
HA0027	GRANDSTAND, MELVILLE OVAL, HAMILTON	8.1	L/R
HA0030	ST ANDREWS SUNDAY SCHOOL AND PEACE MEMORIAL HALL, HAMILTON	8.6	L
HA0032	GRANGE BURN AREA, HAMILTON	3.15 3.8	L
HA0033	CEMETERY, BORAM BORAM, PENSHURST	9.7	L
HA0035	PUBLIC GARDENS RESERVE, PENSHURST	4.3	L

Site ID	Site name	Themes	Significance
HA0036	POLICE RESIDENCE?, PENSHURST	7.5	L
HA0037	COURTHOUSE, PENSHURST	7.5	R
HA0038	SHIRE OF MT ROUSE COUNCIL CHAMBERS, PENSHURST	7.2	R
HA0040	WAR MEMORIAL, PENSHURST	8.8	L
HA0042	STREET TREES, PENSHURST	4.3	L
HA0043	MT ROUSE QUARRY, PENSHURST	3.3	L
HA0044	NAPIER WALLER MEMORIAL, PENSHURST	8.9 8.10	L
HA0045	MT ROUSE & CRATER, PENSHURST	1.4 8.1	L
HA0046	RAILWAY STATION RESERVE, PENSHURST	3.7	BL
HA0047	BULK FERTILISER CENTRE, PENSHURST	3.4	BL
HA0048	PENSHURST RACING CLUB COURSE & GRANDSTAND, PENSHURST	8.1	R
HA0049	STATE SCHOOL # 486, PENSHURST	6.2	L
HA0050	BILLS HORSE TROUGH, PENSHURST	4.3	L
HA0051	PATTERSON PARK, HAMILTON	4.3	L
HA0052	COMMUNITY PARKLANDS, HAMILTON	4.2 4.3	L
HA0053	APEX DRIVE RECREATION PARK, HAMILTON	4.3 8.1	L
HA0054	POLICE PADDOCK, HAMILTON	7.5	BL
HA0055	VICTORIA PARK, HAMILTON	4.3	L
HA0056	CEMETERY, HAMILTON	9.7	NA
HA0057	BREE PARK, HAMILTON	4.3	L
HA0058	FRIENDLIES RECREATION RESERVE, HAMILTON	8.1	NA
HA0059	WATER SUPPLY RESERVE (FORMER), HAMILTON	4.2	NA
HA0060	WATER TOWER, TARRINGTON	4.2	NA
HA0061	DRY STONE WALLS, MT STURGEON	3.8	NA
HA0062	STATE PUBLIC OFFICES COMPLEX, HAMILTON	7.5	L/R
HA0063	MINHAMITE - BALMORAL RAILWAY LINE	3.7	NA
HA0064	CEMETERY, GNADENTHAL	9.7	NA
HA0065	MAJOR MITCHELL MEMORIAL, HAMILTON	8.9 3.2 8.7	R
HA0066	BOER WAR MEMORIAL, HAMILTON	8.8	L
HA0070	SPRING, PENSHURST	7.5	
HA0071	WAR MEMORIAL, DUNKELD	8.8	L
HA0072	MAJOR MITCHELL MONUMENT & WATER TROUGH, DUNKELD	8.9 3.2 8.7	R
HA0073	PRIMARY SCHOOL & MEMORIAL GATE, CAVENDISH	6.2	NA
HA0075	RAIL LINE FEATURES, CAVENDISH	3.7	L
HA0078	BRIDGE OVER WANNON RIVER, CAVENDISH	3.7	NA
HA0079	CEMETERY, CAVENDISH	9.7	L
HA0080	OLD CEMETERY, CAVENDISH	9.7	L
HA0081	POLICE STATION, LOCK-UP & RESIDENCE, CAVENDISH	7.5	L/R
HA0083	RECREATION & MEMORIAL RESERVE, CAVENDISH	8.1 8.8	L

Site ID	Site name	Themes	Significance
HA0084	SOLDIERS' MEMORIAL HALL, CAVENDISH	4.3 8.8	L
HA0085	PUBLIC HALL, VICTORIA VALLEY	4.3	BL
HA0086	POLICE LOCK-UP, DUNKELD	7.5	S
HA0087	CFA BUILDING, HAMILTON	4.2	R
HA0088	COURT HOUSE, HAMILTON	7.5	R
HA0089	MAJOR MITCHELL MONUMENT, HAMILTON	8.9 3.2 8.7	R
HA0090	PLAQUE, SUMMIT MT NAPIER	8.9 3.2 8.7	R
HA0091	BOER WAR MEMORIAL, HAMILTON	8.8	L
HA0092	STONE WALLS, MT NAPIER	3.8	NA
HA0093	KINGS SAWMILL SITE, DUNKELD	3.3	NA
HA0094	A.T. FITZPATRICK SAWMILL, DUNKELD	3.3	NA
HA0095	KINGS SAWMILL, CAVENDISH	3.3	NA
HA0096	DISHENS SAWMILL, CAVENDISH	3.3	NA
HO0001	TREE BLAZE, LITTLE DESERT NATIONAL PARK	3.2	NA
HO0002	CHARCOAL PIT, DAGO FLAT, LITTLE DESERT NATIONAL PARK	3.3	L
HO0003	CHARCOAL PIT # 1, CHARCOAL FLAT, LITTLE DESERT NATIONAL PARK	3.3	L
HO0004	CHARCOAL PIT #2, CHARCOAL FLAT, LITTLE DESERT NATIONAL PARK	3.3	NA
HO0005	CROWHURST HOMESTEAD #1, LITTLE DESERT NATIONAL PARK	3.8 3.15	L
HO0006	CROWHURST HOMESTEAD #2, LITTLE DESERT NATIONAL PARK	3.8 3.15	L
HO0007	CROWHURST CROSSING/FORD, LITTLE DESERT NATIONAL PARK	3.7 3.8	L
HO0008	GOLD ESCORT ROUTE MEMORIAL, NORTH OF HORSHAM	8.9 3.3	R
HO0009	GREEN LAKE RESERVOIR, NORTH OF HORSHAM	4.2	NA
HO0010	LUTHERAN CHURCH MARKER, GREEN LAKE	8.6 8.7	L
HO0011	MAJOR MITCHELL MEMORIAL, GREEN LAKE	8.9 3.2 8.7	R
HO0012	PUBLIC HALL, PIMPINIO	4.3	NA
HO0013	PINE-TAYLORS INLET CHANNEL, GREEN LAKE	4.2	NA
HO0014	RED GUM SWAMP STOCK WATERING HOLE, VECTIS EAST	3.8	NA
HO0015	SCHOOL RESERVE, VECTIS EAST	6.2	BL
HO0016	CHURCH MONUMENT, WAIL	8.6 8.7	L
HO0017	PUBLIC WEIGHBRIDGE, WAIL	3.7	NA
HO0018	AGRICULTURAL COLLEGE, LONGERENONG	3.8 6.4	R/S
HO0019	TUBERCULOSIS CHALET, HORSHAM	3.25	NA
HO0020	RADIO TRANSMITTER, DOOEN DISTRICT	3.6	NA
HO0021	MOUNT ZERO QUARRY AND TRAMWAY, GRAMPPIANS NATIONAL PARK	3.3	R
HO0022	CEMETERY, GREEN LAKE	9.7	L
HO0023	MAJOR MITCHELL CAIRN, MT ZERO, GRAMPPIANS	8.9 3.2 8.7	R
HO0024	HOUSING COMMISSION ESTATE, HORSHAM	4.5	NA

Site ID	Site name	Themes	Significance
HO0025	ROW OF SUGAR GUMS, HORSHAM	4.3	L
HO0026	RAILWAY LINE REMNANTS, HORSHAM-CARPOLAC LINE, HORSHAM	3.7	NA
HO0027	CLUBROOM, HORSHAM HIGH SCHOOL, HORSHAM	6.2 8.5	BL
HO0029	VICROADS DEPOT, HORSHAM	7.5 3.7	NA
HO0030	CENTRAL PARK RACECOURSE, HORSHAM	8.1	L
HO0031	CEMETERY, HORSHAM	9.7	R
HO0032	RAILWAY RESERVE COMPLEX, HORSHAM	3.7	R
HO0033	MAY PARK, HORSHAM	4.3	L
HO0034	SEWERAGE PUMPING STATION, HORSHAM	4.2	NA
HO0035	WATER TOWER, HORSHAM	4.2	L
HO0038	McKENZIE QUARRY TRAMWAY, HORSHAM	3.3 3.7	NA
HO0039	MEMORIAL, LUTHERAN CHURCH, KORNHEIM	8.6 8.7	L
HO0040	RIVER TRACK CHARCOAL PITS, DAGO FLAT, LITTLE DESERT NATIONAL PARK	3.3	L
HO0041	CAMP, DAGO FLAT, LITTLE DESERT NATIONAL PARK	3.3	L
HO0043	PRIMARY SCHOOL # 2805, LAR-ARUM	6.2	BL
HO0044	CAVE OF GHOSTS, GRAMPPIANS NATIONAL PARK	3.22	
HO0045	GOLD ESCORT MONUMENT, BETWEEN HORSHAM & DOOEN	8.9	R
HO0046	WIMMERA PIONEERS MONUMENT, DOOEN	8.9	L
HO0047	WONDWONDAH EAST SETTLEMENT SITE, NEAR BURNT CREEK	2.5	NA
HO0048	AGRICULTURAL RESEARCH STATION, DOOEN	6.4	NA
HO0050	RAIL STATION & SILOS, DOOEN	3.7 3.11	NA
HO0051	SALEYARDS, HORSHAM	3.4	R
HO0052	PIPE BAND HALL, HORSHAM	4.3 8.5	NA
HO0053	HORSHAM BOTANIC GARDENS	4.3	NA
HO0054	MECHANICS INSTITUTE, HORSHAM	6.1	L
HO0055	DARLOT STREET DRAIN, HORSHAM	4.2	NA
HO0056	BOLTON PARK WAR MEMORIAL SWIMMING POOL, HORSHAM	8.1	BL
HO0060	SHOWGROUNDS, HORSHAM	3.4	L
HO0061	HORSHAM & DISTRICT AMBULANCE SERVICE, HORSHAM	3.25	L
HO0062	TOWN HALL (FORMER), HORSHAM	7.2	R
HO0063	GAS WORKS, HORSHAM	4.2	L
HO0064	HORSHAM POLICE STATION (FORMER), HORSHAM	7.5	L/R
HO0065	WIMMERA BASE HOSPITAL, HORSHAM	3.25	NA
HO0066	FIRE STATION, HORSHAM	4.2	L
HO0067	BOLTON PARK WAR MEMORIAL, HORSHAM	8.8	L
HO0068	FORMER HORSE BAZAAR, HORSHAM	3.8	NA
HO0069	VETA LANDT FOUNTAIN, HORSHAM	8.9	BL

Site ID	Site name	Themes	Significance
HO0070	TIMBER WEIR SITE OF OLD TIMBER WEIR ON WIMMERA RIVER, HORSHAM	4.2	NA
HO0071	HORSHAM & DISTRICT WWI MEMORIAL DRIVE MONUMENT, HORSHAM	8.8	L
HO0072	HORSHAM & DISTRICT WWII MEMORIAL DRIVE MONUMENT, HORSHAM	8.8	L
HO0073	SCHOOL # 2934 (SITE), CONNANGORACH	6.2	BL
HO0074	CEMETERY, NURRABIEL	9.7	L
HO0075	PIONEERS MONUMENT, NURRABIEL	8.9	L
HO0076	PIONEERS MONUMENT, LOWER NORTON	8.9	L
HO0077	SITE OF PRIMARY SCHOOL # 3451, WONWONDAH NORTH	6.2	L
HO0078	SCHOOL # 2430 (MONUMENT), LOWER NORTON	6.2 8.8	L
HO0079	TOOLONDO CONSTRUCTION CAMP MONUMENT, WONWONDAH NORTH	4.2	L
HO0080	PRIMARY SCHOOL (FORMER?), NURRABIEL	6.2	NA
HO0081	CHURCH (DECONSECRATED) & SUGAR GUMS, NURRABIEL	8.6	BL
HO0082	HALL & GATES, QUANTONG	4.3	BL
HO0083	HORSHAM - CARPORAC RAIL LINE (FORMER), WEST OF HORSHAM	3.7	NA
HO0084	CEMETERY, QUANTONG	9.7	NA
HO0085	STATE SCHOOL # 1781 (SITE), VECTIS EAST	6.2	L
HO0089	PRIMARY SCHOOL # 3765, HAVEN	6.2	L
HO0090	PRIMARY SCHOOL # 1782, DOOEN	6.2	BL
HO0091	HALL, DOOEN	4.3	BL
HO0092	IRRIGATION COLONY, QUANTONG	2.5	NA
HO0093	HAVEN SETTLEMENT SITE, NEAR HORSHAM	2.5	NA
HO0094	IRRIGATION COLONY, VECTIS	2.5	NA
HO0095	SUNNYSIDE VILLAGE SETTLEMENT (IRRIGATION), HORSHAM	2.5	NA
HO0096	IRRIGATION COLONY, BURNLEA, NEAR HORSHAM	2.5	NA
HO0097	HOUSING COMMISSION HOUSES, MURTOA	4.5	NA
HO0098	GIRL GUIDES AND SCOUT HALL, MURTOA	8.5	NA
HO0099	LAKE MARMA PUBLIC PARK AND GARDEN, MURTOA	4.3	L/R
HO0100	AVENUE OF TREES, MURTOA	4.3	BL
HO0101	RACECOURSE GRANDSTAND, MURTOA	8.1	NA
HO0102	SHOWGROUNDS, MURTOA	3.4	NA
HO0103	WATER TOWER, MURTOA	4.2	R/S
HO0104	POLICE STATION COMPLEX, MURTOA	7.5	NA
HO0105	RAILWAY STATION COMPLEX, MURTOA	3.7	NA
HO0106	CEMETERY, MURTOA	9.7	L
HO0107	CFA SHED, MURTOA	4.2	BL
HO0108	SOLDIERS' AVENUE OF TREES, MURTOA	4.3 8.8	L

Site ID	Site name	Themes	Significance
HO0109	MILL AND SILOS, MURTOA	3.11	NA
HO0110	PRIMARY SCHOOL, MURTOA	6.2	NA
HO0111	SECONDARY COLLEGE, MURTOA	6.2	NA
HO0112	GRAIN STORE AND SILOS, MURTOA	3.4 3.11	S
HO0113	CEMETERY, JUNG	9.7	L
HO0114	PUBLIC HALL, JUNG	4.3	NA
HO0115	STATE SCHOOL, JUNG/JUNG NORTH	6.2	L
HO0116	NURSERY AND ARBORETUM, WAIL	3.8 7.5	R
HO0117	WIMMERA-MALLEE STOCK & DOMESTIC WATER SUPPLY SYSTEM	4.2	S
HO0118	NATIMUK AND ARAPILES CHANNELS	4.2	R
HO0119	BURNT CREEK-MACKENZIE RIVER DIVERSIONS	4.2	R
HO0120	TAYLORS LAKE, WIMMERA-MALLEE SYSTEM	4.2	R
HO0121	PINE LAKE, WIMMERA-MALLEE SYSTEM	4.2	R
HO0122	ASHENS CREEK DIVERSION, WIMMERA RIVER	4.2	R
HO0123	LONGERENONG DIVERSION, WIMMERA RIVER	4.2	R
HO0124	SHEEP RACE AND YARD, MAJOR'S HOLE, LITTLE DESERT NATIONAL PARK	3.8 3.15	NA
KA0001	STATE EMERGENCY SERVICE BUILDING, KANIVA	4.2	L
KA0002	SHOW GROUNDS, KANIVA	3.4	L
KA0003	CIVIC CENTRE, KANIVA	7.2	L
KA0004	RAILWAY STATION, KANIVA	3.7	S
KA0005	MEMORIAL HALL AND CANNON, KANIVA	4.3	L
KA0006	WATER TOWER, KANIVA	4.2	BL
KA0007	BORE WINDMILL, KANIVA	4.2	L
KA0008	POLICE STATION CELL, KANIVA	7.5	BL
KA0009	TURNING Y - SERVICETON RAILWAY STATION, SERVICETON	3.7	S
KA0010	PUBLIC TANK & SITE OF LEEOR NORTH STATE SCHOOL, STH OF LEEOR	4.2	L
KA0011	COACH CHANGING POINT, MOOREE RESERVE, SOUTH OF LEEOR	3.7	S
KA0012	STREET BLOCK OF DEPARTMENTAL HOUSES, SERVICETON	3.5	NA
KA0013	RAILWAY STATION, SERVICETON	3.7	S
KA0014	LOCOMOTIVE SERVICING AREA - SERVICETON RAILWAY STATION, SERVICETON	3.7	L
KA0015	PUBLIC HALL, SERVICETON	4.3	BL
KA0016	KANIVA BUS SERVICE STATION, SERVICETON	3.7	L
KA0017	KANIVA VILLAGE SETTLEMENT, KANIVA	2.5	NA
KA0018	MEMORIAL, PETER AMAD, KANIVA	8.9	L
KA0019	MEMORIAL, GOLD ESCORT, KANIVA	8.9	R
KA0020	PUBLIC HALL, LAWLOT	4.3	BL
KA0021	CEMETERY, MIRAM	9.7	L

Site ID	Site name	Themes	Significance
KA0022	PRIMARY SCHOOL # 2456 (SITE) BLEAK HOUSE	6.2	L
KA0023	PUBLIC HALL, YANAC	4.3	BL
KA0024	PUBLIC HALL, BROUGHTON	4.3	BL
KA0025	PUBLIC HALL, DIAPUR	4.3	BL
KA0026	CEMETERY, DIAPUR	9.7	L
KA0027	TANK STAND, LILLIMUR	3.8	BL
KA0028	LILLIMUR AND KANIVA CEMETERY, WEST OF KANIVA	9.7	L
KA0029	WATER TANKS AND WINDMILL, WEST OF KANIVA	3.8	BL
KA0030	AVENUE OF HONOUR, LILLIMUR SOUTH	4.3 8.8	L
KA0031	LILLIMUR PUBLIC HALL	4.3	L
KA0032	PRIMARY SCHOOL # 2826, DIAPUR	6.2	BL
KA0033	RAILWAY STATION, DIAPUR	3.7	S
KA0034	PRIMARY SCHOOL # 3094 (SITE), BROUGHTON	6.2	L
KA0035	PRIMARY SCHOOL # 2400 (SITE), LILLIMUR	6.2	L
KA0036	PRIMARY SCHOOL # 2886, YANAC	6.2	L
KA0037	PRIMARY SCHOOL # 2292 (SITE), YANAC SOUTH	6.2	L
KA0038	PRIMARY SCHOOL # 2983 (SITE), MIRAM	6.2	L
KA0039	SHEEP DIP, BILLS GULLY/MIRAM SOUTH	3.8	L/R
KA0040	PUBLIC HALL, BILLS GULLY/MIRAM SOUTH	4.3	L
KA0041	PRIMARY SCHOOL # 2706 (SITE), YEARINGA	6.2	L
KA0042	PUBLIC HALL (SITE), MIRAM	4.3	L
KA0043	FORMER COURT HOUSE AND POST OFFICE, LILLIMUR	7.5 3.6	NA
KA0044	FORMER PUBLIC HALL, DIAPUR	4.3	NA
KA0045	PUBLIC HALL, LILLIMUR SOUTH	4.3	NA
MO0001	RSL (FORMER DRILL HALL) HALL, TERANG	8.5 7.5	L
MO0002	SHIRE DEPOT & STORE, TERANG	4.2	NA
MO0004	POLICE STATION RESIDENCE, TERANG	7.5	L
MO0005	COURTHOUSE, TERANG	7.5	R/S
MO0006	WAR MEMORIAL, TERANG	8.8	S
MO0007	AGNES BLACK MEMORIAL GATEWAY, TERANG	8.9	L
MO0008	OAK AVENUE & MEDIAN, TERANG	4.3	L/R
MO0010	SHIRE OF HAMPDEN OFFICES, THE CIVIC HALL, TERANG	7.2	L/R
MO0011	TERANG & DISTRICT RACING CLUB GRANDSTAND & RESERVE, TERANG	8.1	L/R
MO0015	BOTANICAL GARDENS RESERVE, TERANG	4.3	L/R
MO0016	PRIMARY SCHOOL COMPLEX, TERANG	6.2	L/R
MO0017	CEMETERY, TERANG	9.7	R/S
MO0018	RECREATION RESERVE & TREES, TERANG	8.1 4.3	L
MO0019	SECONDARY COLLEGE, TERANG	6.2	L

Site ID	Site name	Themes	Significance
MO0020	RAILWAY STATION & YARD, TERANG	3.7	S
MO0021	STREET TREES, TERANG	4.3	L
MO0022	PARK & PAVILION, MORTLAKE	4.3	NA
MO0023	SHIRE DEPOT, SILO & OFFICE, MORTLAKE	4.3	NA
MO0024	CEMETERY, MORTLAKE	9.7	L
MO0025	PRIMARY SCHOOL # 397, MORTLAKE	6.2	R
MO0027	AVENUE OF HONOUR, MORTLAKE	4.3 8.8	R
MO0028	RAILWAY RESERVE & RESIDENCE, MORTLAKE	3.7 3.5	L
MO0029	OLD MILL, MORTLAKE	3.11	S
MO0030	SALT LAKE RESERVE, MORTLAKE	4.1	NA
MO0031	BUTTER FACTORY, MORTLAKE	3.11	L
MO0032	PUBLIC RESERVE, MORTLAKE	4.3	L
MO0033	WAR MEMORIAL, MORTLAKE	8.8	L
MO0034	TEMPERANCE HALL & MEMORIAL HALL, MORTLAKE	4.3	L/R
MO0035	FREEMASONS HALL, MORTLAKE	8.5	L
MO0039	MEDIAN PLANTING, MORTLAKE	4.3	L
MO0040	ABBNEYFIELD HOUSE (FORMER SHIRE OFFICE), MORTLAKE	7.2	R/S
MO0041	COURTHOUSE, MORTLAKE	7.5	S
MO0042	POST OFFICE (FORMER), MORTLAKE	3.6	R
MO0043	OLD MUSEUM, MORTLAKE	4.3	R
MO0044	SWIMMING BATHS, MORTLAKE	8.1	L
MO0045	DC FARRAN OVAL & TREES, MORTLAKE	8.1	L
MO0046	POWERS CREEK RESERVE, TIMBOON	4.3	L
MO0047	RAILWAY STATION SITE, TIMBOON	3.7	L
MO0048	RAILWAY TRESTLE BRIDGE, CURDIES RIVER	3.7	S
MO0049	HOPKINS RIVER BRIDGE, WARRNAMBOOL	3.7	S
MO0050	RAILWAY STATION, GLENFYNE	3.7	BL
MO0051	PRIMARY SCHOOL # 1411, LAANG	6.2	NA
MO0052	PUBLIC HALL, LAANG	4.3	BL
MO0054	PRIMARY SCHOOL # 3, ALLANSFORD	6.2	S
MO0055	GRANDSTAND, RECREATION OVAL, ALLANSFORD	8.1	L
MO0056	CEMETERY, PANMURE	9.7	L
MO0057	PRIMARY SCHOOL # 1079, PANMURE	6.2	L/R
MO0059	HALL / FORMER CHURCH (?), PANMURE	4.3 8.6	L/R
MO0060	FOOTBALL CLUBROOMS, PANMURE	8.1 8.5	L
MO0061	PATHWAY, HOPKINS BRIDGE TO POINT RITCHIE, HOPKINS RIVER, WARRNAMBOOL	8.1 3.22	NA
MO0062	HOPKINS FALLS, HOPKINS RIVER	2.1 2.2	
MO0063	JUBILEE PARK, HOPKINS RIVER	4.3 8.1	L/R

Site ID	Site name	Themes	Significance
MO0064	S.W. TAPE/ RURAL & HORTICULTURAL CENTRE, WANGOOM	6.3	NA
MO0065	GRANNY'S GRAVE, WARRNAMBOOL	9.7	L
MO0066	'ANTARES' WRECK SITE, NULLAWARRE	3.7	NA
MO0067	POLO HILL, MORTLAKE	3.9 7.5	
MO0068	LAKE ELINGAMITE, SW OF COBDEN	3.9	
MO0069	NELSON'S PADDOCK, SE OF MORTLAKE	2.1	
MO0070	LAKE KEILAMBETE, NW OF TERANG	3.9 7.5	
MO0071	LAKE TERANG, TERANG	3.9 7.5	
MO0072	RAILWAY STATION RESERVE, MORTLAKE	3.9	
MO0073	GRAVE OF ELIZABETH AND HENRY McCRAE, WARRNAMBOOL	9.7	
MO0074	WILMOT'S GRAVE, WARRNAMBOOL	9.7	
MO0075	HOPKINS MOUTH, WARRNAMBOOL	2.1 2.2	
MO0076	FRAMLINGHAM EEL TRAP, HOPKINS RIVER	2.1 2.2	
MO0077	POST OFFICE, TERANG	3.6	S
MO0078	AGRICULTURE COLLEGE, GLENORMISTON	6.4	S
MO0079	BOATSHED (LYNDOCH), WARRNAMBOOL	8.1 3.22	L
MO0080	RACECOURSE, WARRNAMBOOL	8.1	S
MO0081	CEMETERY, WARRNAMBOOL	9.7	R
MO0082	OLD ELLERSLIE BRIDGE, ELLERSLIE	3.7	S
MO0083	FORMER PRIMARY SCHOOL # 1118, WARRNAMBOOL	6.2	L/R
MO0084	PUBLIC HALL, PURNIM	4.3	NA
MO0085	ROAD BRIDGE, SOUTH OF ELLERSLIE	3.7	NA
MO0086	WAR MEMORIAL, FRAMLINGHAM	8.8	L
MO0087	CEMETERY, ELLERSLIE	9.7	L
MO0088	CEMETERY, BALLANGEICH	9.7	L
MO0089	RAILWAY SIDING, CURDIES	3.7 4.1	L
MO0092	PUBLIC HALL, ELLERSLIE	4.3	NA
MO0093	MEMORIAL GATES AND MONUMENT, PUBLIC HALL, NARINGAL	4.3 8.8	L
MO0094	GLENFYNE, PUBLIC HALL	4.3	NA
MO0095	PUBLIC HALL, GLENORMISTON SOUTH	4.3	BL
MO0096	PUBLIC HALL, THE SISTERS	4.3	NA
MO0097	PRIMARY SCHOOL # 1082	6.2	BL
MO0098	WAR MEMORIAL, MOYNE	8.8	L
MO0099	PRIMARY SCHOOL # 2475	6.2	L
MO0100	PRIMARY SCHOOL # 1127 AND # 1416 (FORMER), ELLERSLIE	6.2	NA
MO0101	HIGH SCHOOL, TIMBOON	6.2	L/R
MO0102	PRIMARY SCHOOL # 1178, NOORAT	6.2	L/R
MO0104	FORMER LIME KILNS, TIMBOON	3.3	NA
MO0106	PUBLIC HALL, KOLORA	4.3	BL

Site ID	Site name	Themes	Significance
NA0001	LEARS WELL, LITTLE DESERT NATIONAL PARK	3.8 3.15	NA
NA0002	SCHMIDT STREET PLANTATION, NATIMUK	4.3	L
NA0003	HISTORICAL MUSEUM (FORMER COURTHOUSE), NATIMUK	7.5	S
NA0004	NATIMUK AND DISTRICT SOLDIERS MEMORIAL HALL, NATIMUK	4.3 8.8	L
NA0005	POLICE STATION LOCK-UP, NATIMUK	7.5	BL
NA0007	RAILWAY RESERVE COMPLEX (& TIMBER WEIGHBRIDGE), NATIMUK	3.7	L/R
NA0008	STATE SCHOOL ARBORETUM AND PLANTATION, NATIMUK	1.2 6.2 7.5	NA
NA0009	RAILWAY STATION GROUND, EAST NATIMUK	3.7	BL
NA0010	CEMETERY, NORTH OF NATIMUK	9.7	L
NA0011	MEMORIAL, GOLD ESCORT, ARAPILES	8.9 3.3	R
NA0012	MAJOR MITCHELL OBELISK, MIGA LAKE	8.9 3.2 8.7	R
NA0013	SCHOOL # 4463, MIGA LAKE	6.2	NA
NA0014	HALL & TENNIS CLUB, CHARAM	4.3 8.1 8.5	BL
NA0015	SITE OF STATE SCHOOL # 3051, TOOLONDO	6.2	L
NA0016	RESERVOIR, TOOLONDO	4.2	R
NA0017	DISMANTLED RAIL LINE, FROM EAST NATIMUK TO HAMILTON	3.7	L
NA0018	CEMETERY, NORADJUHA	9.7	NA
NA0019	MEMORIAL HALL, NORADJUHA	4.3 8.8	NA
NA0020	SCHOOL # 1930, NORADJUHA	6.2	BL
NA0022	MT ARAPILES IRRIGATION COLONY SITE, WEST OF NATIMUK	2.5	NA
NA0023	RECREATION RESERVE, LAKE NATIMUK	8.1	NA
NA0024	JANE DUFF MEMORIAL PARK (& SHEEP DIP?), NURCOUNG DISTRICT	4.3 8.8	L
NA0025	PUBLIC HALL, GYMBOWEN	4.3	NA
NA0026	PUBLIC HALL, MITRE	4.3	L
NA0027	MAJOR MITCHELL CAIRN, MT ARAPILES	8.9 3.2 8.7	R
NA0028	MAJOR MITCHELL MEMORIAL PLAQUES, MT ARAPILES	8.9 3.2 8.7	R
NA0029	CENTENARY (MEMORIAL) PARK, MT ARAPILES	8.9 8.1	R
NA0030	MCDONALD HIGHWAY, LITTLE DESERT NATIONAL PARK	7.5	R/S
NA0031	UTHMEYER'S MILL, LITTLE DESERT NATIONAL PARK	3.8 3.15	NA
NA0032	STANS CAMP OUTSTATION (FORMER), LITTLE DESERT NATIONAL PARK	3.8 3.15	NA
NE0001	NATIONAL SCHOOL # 32 (FORMER), LOWER CAPE BRIDGEWATER	6.2	NA
NE0002	SALE YARDS (FORMER), LOWER CAPE BRIDGEWATER	3.8	L
NE0003	ROAD CUT IN CLIFF, CAPE BRIDGEWATER AREA	3.7	L
NE0004	COAST RD TO CAPE NELSON, BRIDGEWATER LAKES AREA	3.7	L
NE0005	LIME KILNS (3), BATS RIDGE FAUNAL RESERVE, PORTLAND AREA	3.3	NA
NE0006	METHODIST CHURCH, LOWER CAPE BRIDGEWATER	8.6	L

Site ID	Site name	Themes	Significance
NE0008	CLIFF PATH TO FRESHWATER SPRINGS, W SIDE OF CAPE BRIDGEWATER	3.8	L
NE0009	BRIDGE OVER GLENELG RIVER, NELSON	3.7	NA
NE0010	BOILER SWAMP SAWMILL, COBBOBOONEE FOREST	3.3	L
NE0011	PIPE CLAY SAWMILL, COBBOBOONEE FOREST	3.3	BL
NE0012	JACKASS SAWMILL, COBBOBOONEE FOREST	3.3	BL
NE0013	SAWMILL, KINGS WELL, COBBOBOONEE FOREST	3.3	L
NE0014	WATTLE PLANTATION, KENTBRUCK	1.2 7.5	R
NE0015	KENTBRUCK HEATH, LOWER GLENELG NATIONAL PARK	1.2	NA
NE0016	MARRAM GRASS NURSERY, DISCOVERY BAY	3.8 3.10	NA
NE0017	PRESBYTERIAN CHURCH (FORMER), CAPE BRIDGEWATER	8.6	L
NE0018	CHURCH OF ENGLAND, BRIDGEWATER	8.6	R
NE0019	ST PETER'S CHURCH, BRIDGEWATER	8.6	L/R
NH0001	CUTTING, LITTLE DESERT NATIONAL PARK	3.10	NA
NH0002	DAHLENBURGS MILL, LITTLE DESERT NATIONAL PARK	3.8 3.15	NA
NH0003	THE SANCTUARY, LITTLE DESERT NATIONAL PARK	1.2	L/R
NH0005	MEMORIAL AVENUE PLANTATION, JEPARIT	4.3	L
NH0006	THE CFA BUILDING, JEPARIT	4.2	L
NH0007	MECHANICS INSTITUTE (FORMER SHIRE OFFICES), JEPARIT	6.1	L/R
NH0008	RAILWAY STATION (& RESIDENCE), JEPARIT	3.7	L
NH0009	SIR ROBERT MENZIES PARK, JEPARIT	4.3 8.9	L
NH0010	OLD WIMMERA RIVER BRIDGE AND WEIR, JEPARIT	3.7 4.2	NA
NH0011	WIMMERA MALLEE PIONEERS MUSEUM & APEX PARK, JEPARIT	8.9 4.3	R/S
NH0012	TULLYVEA STATION GROUND, JEPARIT	3.7	BL
NH0013	CEMETERY, NE OF JEPARIT	9.7	L
NH0014	WATER RESERVE (35D OF 35), SE OF ELLAM	4.2	NA
NH0015	HIGH SCHOOL, NHILL	6.2	NA
NH0016	COURTHOUSE, NHILL	7.5	S
NH0017	NEILSON MEMORIAL AND APEX PARK, NHILL	8.9 4.3 8.10	L/R
NH0018	DAVIS PARK, NHILL	4.3	L
NH0019	C.F.A. BUILDING AND MEMORIAL GATES, NHILL	4.2	L
NH0020	RAILWAY RESERVE COMPLEX, NHILL	3.7	R
NH0021	GOLDSWORTHY PARK, NHILL	4.3	R
NH0022	FORMER LOWAN SHIRE HALL AND OFFICES, NHILL	7.2	R
NH0023	SHOWGROUNDS, NHILL	3.4	L
NH0024	AERODROME, NHILL	3.7	R
NH0025	CEMETERY, NHILL	9.7	L
NH0026	MEMORIAL, JOHN SHAW NEILSON, NEAR NHILL	8.9	NA
NH0027	MEMORIAL, GOLD ESCORT, WINIAM EAST	8.9 3.3	R

Site ID	Site name	Themes	Significance
NH0028	EUCALYPTUS DISTILLERY, KIATA SOUTH	3.3	L
NH0029	EUCALYPTUS DISTILLERY, GERANG GERUNG	3.3	L
NH0030	JUNCTION DAM DUMP, SE OF GERANG GERUNG	3.15	L
NH0031	EBENEZER MISSION COMPLEX, ANTWERP	7.5 8.6	
NH0032	PRIMARY SCHOOL # 2896 (SITE), HARDINGS	6.2	L
NH0033	RESIDENTS PLANTATION (FORMER), BOYEO	3.8 3.10	NA
NH0034	PUBLIC HALL, BOYEO	4.3	NA
NH0035	CEMETERY, WOORAIC	9.7	L
NH0036	LOWAN MALLEE FOWL SCULPTURE, NHILL	8.9	L
NH0037	RECREATION RESERVE, KIATA	8.1	BL
NH0038	PUBLIC HALL, WINIAM	4.3	L
NH0039	PUBLIC HALL, GERANG GERUNG	4.3	BL
NH0040	CEMETERY, KIATA	9.7	L
NH0041	CEMETERY, NETHERBY	9.7	L
NH0042	PUBLIC HALL, LORQUON	4.3	NA
NH0043	PRIMARY SCHOOL # 2200 (SITE), SALISBURY	6.2	L
NH0044	PRIMARY SCHOOL # 4091 (SITE), PERENNA	6.2	L
NH0045	PUBLIC HALL, KIATA	4.3	L
NH0046	PRIMARY SCHOOL # 2879 (SITE), WEST OF LAKE HINDMARSH	6.2	L
NH0047	PRIMARY SCHOOL # 2769, KIATA	6.2	NA
NH0048	NETTING FENCE, NORTH OF PERENNA	3.8	R
NH0049	STATE SCHOOL # 2618 (FORMER), GERANG GERUNG	6.2	L
NH0050	STATE SCHOOL (SITE), WOORAK	6.2	NA
NH0051	LOCHIEL CEMETERY	9.7	L
NH0052	KIATA RESERVE	8.3	NA
NH0053	STATE SCHOOL # 2619 (FORMER), WORAIGWORM	6.2	L
NH0054	MC CABES HUT, LITTLE DESERT NATIONAL PARK	3.15 3.8	L
NH0055	CEMETERY, WINIAM	9.7	L
NH0056	RECREATION GROUND, NETHERBY	8.1	BL
NH0057	SWIMMING BATHS, NHILL	4.3	BL
NH0058	WATER TOWER, NHILL	4.2	BL
NH0059	CEMETERY, LORQUON	9.7	L
NH0060	PUBLIC HALL, WOORAK	4.3	NA
NH0061	MEMORIAL, DIMBOOLA	8.8	L
NH0062	RAILWAY (FORMER), JEPARIT	3.7	NA
NH0063	ALBRECHT'S MILL, LITTLE DESERT NATIONAL PARK	3.8 3.15	NA
OT0003	PRIMARY SCHOOL # 2162, LORNE	6.2	S
OT0004	PRINCIPAL'S RESIDENCE, LORNE SCHOOL, LORNE	3.5 6.2	S
OT0005	ERSKINE HOUSE, LORNE	3.21 3.22	S

Site ID	Site name	Themes	Significance
OT0006	LIGHTHOUSE COMPLEX, CAPE OTWAY	3.7	S
OT0007	BARRAMUNGA EDUCATION CENTRE, BARRAMUNGA	6.2	NA
OT0008	JETTY REMAINS, WYE RIVER, GREAT OCEAN ROAD	3.3	L
OT0009	SPLITTERS CHILDREN'S GRAVES, LORNE	9.7	L
OT0010	GRAVES, GODFREY CREEK, GREAT OCEAN ROAD	9.7	L
OT0011	MOUNT DEFIANCE LOOKOUT, GREAT OCEAN ROAD	3.22	R
OT0012	OLD SPRINGS SITE, GREAT OCEAN ROAD	3.22	L
OT0013	BIRREGURRA-FORREST RAILWAY LINE REMAINS, FORREST DISTRICT	3.7	L
OT0014	BEACON POINT LIGHT, NORTH OF SKENES CREEK	3.7	NA
OT0015	EVANS LOOKOUT AND PLAQUE, NORTH OF SKENES CREEK	3.22	L
OT0016	REMAINS OF JETTY, APOLLO BAY	3.7	NA
OT0017	ANCHOR REMAINS, APOLLO BAY FORESHORE	3.7	NA
OT0018	ELLIOT RIVER TRAMWAY REMAINS, APOLLO BAY AREA	3.3	NA
OT0019	BEECH FOREST RAILWAY LINE REMNANTS, GELLIBRAND	3.7	NA
OT0020	GRANDSTAND, DITCHLEY PARK, BEECH FOREST	8.1	NA
OT0021	WWII MONUMENT & ROW OF SPRUCE TREES, BEECH FOREST	8.8	L
OT0022	BEECH FOREST STATION SITE, BEECH FOREST	3.7	NA
OT0023	TURTONS TRACK, EAST OF BEECH FOREST	3.7 3.22	L/R
OT0027	AIRE VALLEY PLANTATION, SOUTH OF BEECH FOREST	7.5	R/S
OT0030	GOLF LINKS AND CLUBHOUSE, APOLLO BAY	8.1 8.5	NA
OT0032	OLD AIRE VALLEY CAMP, SOUTH OF BEECH FOREST	3.3	R
OT0033	MAITTS REST, GREAT OCEAN ROAD, OTWAY RANGES	3.3 7.5	L
OT0034	POLICE STATION COMPLEX, FORREST	7.5	L
OT0035	PRIMARY SCHOOL # 2708, FORREST	6.2	L
OT0037	FOOTBRIDGE, LORNE	8.1 3.22	NA
OT0038	OUTLET PIPE AND STRUCTURES, APOLLO BAY	4.2	NA
OT0039	FORESHORE AND BREAKWATER, APOLLO BAY	3.10 4.1	R
OT0040	FORESHORE RESERVE, LORNE	4.1	R
OT0041	SWIMMING POOL AND KIOSK, LORNE	4.3 8.1	NA
OT0042	QUEENS PARK CAMPING GROUND, LORNE	8.3	NA
OT0043	PIER COMPLEX, LORNE	3.7	NA
OT0044	CEMETERY, MARENGO	9.7	L
OT0045	ERSKINE FALLS, ERSKINE RIVER	1.4 3.22	R
OT0046	THE RAPIDS, ERSKINE RIVER	1.4 3.22	L
OT0047	STRAW FALLS, ERSKINE RIVER	1.4 3.22	L
OT0048	STONE WALL, ERSKINE RIVER BANKS	4.2	NA
OT0049	CUMBERLAND RIVER RESERVE, CUMBERLAND RIVER	8.3 3.22	R
OT0050	PHANTOM FALLS, ST GEORGE RIVER	1.4	L

Site ID	Site name	Themes	Significance
OT0051	TEDDY'S LOOKOUT, MT GEORGE AREA, LORNE	3.22 8.1	L
OT0052	THE SANCTUARY, ERSKINE RIVER	8.6	L
OT0053	LANDSLIP, LORNE	3.10	NA
OT0054	'SPECULENT' ANCHOR, APOLLO BAY	3.7	NA
OT0055	TELEGRAPH LINE TEST HOUSE, PARKER RIVER, OTWAY NATIONAL PARK	3.6	NA
OT0056	PARKER RIVER TRACK, OTWAY NATIONAL PARK	3.15 3.7	L
OT0057	RIFLE BUTTS, MARENGO	7.5	NA
OT0058	QUARRY, MARENGO	3.3	L
OT0059	'LADY LOCK' WRECK SITE, BLANKET BAY, OTWAY NATIONAL PARK	3.7	NA
OT0060	'ERIC THE RED' ANCHOR, POINT FRANKLIN AREA, OTWAY NATIONAL PARK	3.7	NA
OT0061	'MARTHA' WRECK SITE, PARKER RIVER, OTWAY NATIONAL PARK	3.7	NA
OT0062	'ROVER' STRANDING SITE, BLANKET BAY, OTWAY NATIONAL PARK	3.7	NA
OT0063	TELEGRAPH STATION, CAPE OTWAY, OTWAY NATIONAL PARK	3.6	S
OT0064	CEMETERY, CAPE OTWAY	9.7	R
OT0065	'SS CASINO' WRECK SITE, APOLLO BAY	3.7	NA
OT0066	'W.B. GODFREY' WRECK SITE, GODFREY CREEK, LORNE-ANGAHOOK STATE PARK	3.7	NA
OT0067	LANDING SITE, BLANKET BAY, OTWAY NATIONAL PARK	3.15	NA
OT0068	'ELIZABETH' STRANDING SITE, CAPE OTWAY AREA	3.7	NA
OT0069	'MILANESIA' STRANDING SITE, MILANESIA BEACH, OTWAY NATIONAL PARK	3.7	NA
OT0070	CAMP, BLACKWOOD CREEK	3.3	L
OT0071	CAMP, AIRE RIVER, OTWAYS	3.3	L
OT0072	HAYLEY POINT, APOLLO BAY	3.3	L
OT0073	IRON PIPING, ERSKINE RIVER	4.2	NA
OT0074	CARISBROOK FALLS, NEAR APOLLO BAY	1.4	L
OT0075	GREY RIVER ROAD DUGOUT, ANGAHOOK-LORNE STATE PARK	3.3	NA
OT0076	GREY RIVER ROAD WINCH SITE, ANGAHOOK-LORNE STATE PARK	3.3	NA
OT0077	HAY'S SAWMILL, WYE RIVER	3.3	S
OT0078	MAHONEY SAWMILL, FORREST DISTRICT	3.3	NA
OT0079	COWLEY SAWMILL, MOUNT COWLEY DISTRICT	3.3	NA
OT0080	MACKIE/KINCAID # 6 SAWMILL, MOUNT COWLEY DISTRICT	3.3	L
OT0081	HAYDEN/GALES SAWMILL, MOUNT COWLEY DISTRICT	3.3	R
OT0082	MACKIE # 5 SAWMILL, MOUNT COWLEY DISTRICT	3.3	R
OT0083	HAYDEN # 2 SAWMILL (DELANEY'S RD), FORREST DISTRICT	3.3	R
OT0084	HAYDEN/CURTIS SAWMILL, BARRAMUNGA DISTRICT	3.3	L
OT0085	HAYDEN SAWMILL (KING CREEK), FORREST DISTRICT	3.3	NA

Site ID	Site name	Themes	Significance
OT0086	MACKIE # 1 SAWMILL, FORREST DISTRICT	3.3	L
OT0087	MACKIE # 4 SAWMILL, FORREST DISTRICT	3.3	L
OT0088	HAYDEN # 3 SAWMILL (CALLAHAN CREEK), FORREST DISTRICT	3.3	R
OT0089	MACKIE # 3 SAWMILL, FORREST DISTRICT	3.3	L
OT0090	MACKIE # 2 SAWMILL, FORREST DISTRICT	3.3	L/R
OT0091	HENRY # 2 SAWMILL, BARRAMUNGA DISTRICT	3.3	L/R
OT0092	HENRY BUFFALO SAWMILL, BARRAMUNGA DISTRICT	3.3	NA
OT0093	HENRY # 1 SAWMILL, BARRAMUNGA DISTRICT	3.3	S
OT0094	TUNNEL, HENRY'S TRAMWAY, BARRAMUNGA DISTRICT	3.3	S
OT0095	SANDERSON (BARWON RIVER WEST) SAWMILL, BARRAMUNGA DISTRICT	3.3	NA
OT0096	HENRY (NOONDAY CREEK) SAWMILL, BARRAMUNGA DISTRICT	3.3	R
OT0097	SANDERSON (NOONDAY CREEK) SAWMILL, BARRAMUNGA DISTRICT	3.3	NA
OT0098	ROBINS (BARRAMUNGA CREEK) SAWMILL, BARRAMUNGA	3.3	NA
OT0099	ROBINS (GELLIBRAND RD) SAWMILL, BARRAMUNGA	3.3	NA
OT0100	GRANT (BARRAMUNGA CREEK) SAWMILL, BARRAMUNGA	3.3	NA
OT0101	HENRY SAWMILL, BARRAMUNGA	3.3	NA
OT0102	JACKSON SAWMILL, BARRAMUNGA	3.3	NA
OT0103	SANDERSON SAWMILL, BARRAMUNGA	3.3	L
OT0104	HENRY SAWMILL, SOUTH-WEST OF FORREST	3.3	NA
OT0105	SEEBECK/HENRY SAWMILL, FORREST	3.3	NA
OT0106	CLOSE AND SCHULTZ SAWMILL, BEECH FOREST	3.3	NA
OT0107	MARCHBANK SAWMILL, OLANGOLAH	3.3	R
OT0108	ENTERPRISE SAWMILL, OLANGOLAH	3.3	NA
OT0109	BEECH FOREST SAWMILLING CO. SAWMILL, GELLIBRAND DISTRICT	3.3	NA
OT0110	MCGREGOR SAWMILL, GELLIBRAND DISTRICT	3.3	NA
OT0111	BEATTIE SAWMILL, GELLIBRAND DISTRICT	3.3	NA
OT0112	NORMAN SAWMILL, GELLIBRAND DISTRICT	3.3	NA
OT0113	SURTEES SAWMILL, GELLIBRAND	3.3	NA
OT0114	HITT SAWMILL, GELLIBRAND	3.3	NA
OT0115	HITT SAWMILL, LARDNER CREEK	3.3	NA
OT0116	HITT # 4 SAWMILL, LARDNER CREEK EAST	3.3	R
OT0117	ARMISTEAD SAWMILL, GELLIBRAND DISTRICT	3.3	NA
OT0118	ARMISTEAD SAWMILL, GELLIBRAND RIVER	3.3	NA
OT0119	FACEY AND CASHIN SAWMILL, FERGUSON DISTRICT	3.3	NA
OT0120	DENNING SAWMILL, FERGUSON DISTRICT	3.3	NA
OT0121	EATON SAWMILL, FERGUSON DISTRICT	3.3	NA
OT0122	GARD SAWMILL, FERGUSON DISTRICT	3.3	NA

Site ID	Site name	Themes	Significance
OT0123	GARD AND CHESSUM SAWMILL, FERGUSON DISTRICT	3.3	NA
OT0124	MAHONEY SAWMILL, LORNE DISTRICT	3.3	NA
OT0125	WYE RIVER SAWMILL CO. # 2 SAWMILL, WYE RIVER	3.3	NA
OT0126	ARMISTEAD SAWMILL, KENNETT RIVER	3.3	L
OT0127	HENRY NETTLE SAWMILL, KENNETT RIVER DISTRICT	3.3	R
OT0128	HENRY CARISBROOK SAWMILL, KENNETT RIVER DISTRICT	3.3	R
OT0129	SHARP SAWMILL, LORNE	3.3	NA
OT0130	SHARP SAWMILL, LORNE DISTRICT	3.3	NA
OT0131	ST GEORGE # 1 SAWMILL, LORNE DISTRICT	3.3	R
OT0132	ST GEORGE # 2 SAWMILL, LORNE DISTRICT	3.3	R
OT0133	SHARP (CORALYNN CREEK) SAWMILL, LORNE DISTRICT	3.3	NA
OT0134	FISHER SAWMILL, SKENES CREEK DISTRICT	3.3	NA
OT0135	HENRY SAWMILL, SKENES CREEK DISTRICT	3.3	NA
OT0136	CASPER TOWERS SAWMILL, SKENES CREEK DISTRICT	3.3	NA
OT0137	ARMISTEAD SAWMILL, SKENES CREEK DISTRICT	3.3	NA
OT0138	SHARP # 2 SAWMILL, SKENES CREEK DISTRICT	3.3	R/S
OT0139	CASPER TOWERS (WILD DOG CREEK) SAWMILL, SKENES CREEK DISTRICT	3.3	NA
OT0140	SHARP # 1 SAWMILL, SKENES CREEK DISTRICT	3.3	L
OT0141	SHARP # 3 SAWMILL, SKENES CREEK DISTRICT	3.3	L
OT0142	JOHNSTON BROS. SAWMILL AND CHUTE, APOLLO BAY	3.3	NA
OT0143	APOLLO BAY TIMBER CO. (ELLIOTT RIVER) SAWMILL, OTWAY NATIONAL PARK	3.3	L
OT0144	MARTIN SAWMILL, OTWAY NATIONAL PARK	3.3	L
OT0145	STONE SAWMILL, APOLLO BAY DISTRICT	3.3	NA
OT0146	SEAL SAWMILL, OTWAY NATIONAL PARK	3.3	NA
OT0147	APOLLO BAY TIMBER CO. (PARKER RIVER) SAWMILL, OTWAY NATIONAL PARK	3.3	NA
OT0148	BORCH SAWMILL, OTWAY NATIONAL PARK	3.3	NA
OT0149	ERSKINE RIVER WEIR, LORNE WATER SUPPLY	4.2	NA
OT0150	ALLENVALE RESERVOIR, ST GEORGE RIVER, LORNE WATER SUPPLY	4.2	NA
OT0151	OLANGOLAH WEIR, COLAC WATER SUPPLY SYSTEM	4.2	R
OT0152	WEST GELLIBRAND RESERVOIR, COLAC WATER SUPPLY SYSTEM	4.2	L
OT0153	WEST BARWON RESERVOIR, GEELONG WATER SUPPLY SYSTEM	4.2	L/R
OT0154	BARRAMUNGA CREEK WEIR, PIPELINE, GEELONG WATER SUPPLY SYSTEM	4.2	L
OT0155	ANDERSONS CREEK RESERVOIR, APOLLO BAY WATER SUPPLY SYSTEM	4.2	NA
PC0001	HEYTESBURY AGRICULTURAL SHOW (FORMER SITE), HEYTESBURY	3.4	NA

Site ID	Site name	Themes	Significance
PC0002	WATER TOWER, PORT CAMPBELL	4.2	L
PC0003	CEMETERY, PORT CAMPBELL	9.7	L
PC0004	PUBLIC PURPOSES RESERVE (HISTORICAL), PORT CAMPBELL	4.3	L
PC0005	FORESHORE, PORT CAMPBELL	8.1 3.22	R
PC0006	ROCKET SHED, PORT CAMPBELL	3.7	L
PC0007	DEANY STEPS, PORT CAMPBELL DISTRICT	8.1	NA
PC0008	SUSPENSION BRIDGE REMAINS, PORT CAMPBELL	4.3 8.1	BL
PC0009	BEACON STEPS, PORT CAMPBELL	8.1	NA
PC0010	JETTY & CUTTING, PORT CAMPBELL	3.7	L/R
PC0011	JAMES IRVINE MONUMENT AND SEATS, PETERBOROUGH	8.9	L
PC0012	STEPS (EARTHEN), PORT CAMPBELL BAY	8.1	L
PC0013	BRICK WELL, PETERBOROUGH	4.2	NA
PC0014	'CHILDREN' WRECK SITE, CHILDREN'S COVE	3.7	NA
PC0015	'SCHOMBERG' STRANDING SITE, SCHOMBERG ROCKS	3.7	NA
PC0016	'NEWFIELD' GROUNDING SITE, PETERBOROUGH	3.7	NA
PC0017	'FALLS OF HALLADALE' WRECK SITE, PETERBOROUGH	3.7	NA
PC0018	HALLADALE POINT, PETERBOROUGH	2.6	
PC0019	NIRRANDA PUBLIC HALL	4.3	BL
PC0020	CEMETERY, NIRRANDA	9.7	L
PC0021	CURDIES RIVER PIPE BRIDGE	4.2	NA
PO0001	HISTORY HOUSE, PORTLAND	7.2	S
PO0002	OLD SHIRE HALL, PORTLAND	7.2	S
PO0003	COURTHOUSE, PORTLAND	7.5	S
PO0004	FORMER GAOL SITE, PORTLAND	7.5	NA
PO0005	TOURIST INFORMATION CENTRE, PORTLAND	7.5	S
PO0006	COTTAGE, POLICE QUARTERS, PORTLAND	3.5 7.5	NA
PO0007	COUNCIL OFFICES, PORTLAND	7.2 3.6	R
PO0008	STATE (FORMER NATIONAL) SCHOOL, PORTLAND	6.2	S
PO0009	FORMER SCHOOL, PORTLAND	6.2	NA
PO0011	CEMETERY, PORTLAND SOUTH	9.7	L/R
PO0012	OLD CEMETERY, PORTLAND	9.7	R
PO0013	CEMETERY, NARRAWONG	9.7	R
PO0014	EARLY TRAMWAY, PORTLAND TO HEYWOOD	3.7	R/S
PO0015	AIRFIELD (FORMER), PORTLAND	3.7	NA
PO0016	OLD COAST ROAD, FITZROY RIVER AREA	3.7	NA
PO0017	'REGIA' SHIPWRECK SITE, FORESHORE, PORTLAND BAY	3.7	NA
PO0018	BATTERY, PORTLAND	7.5	R
PO0019	BOTANIC GARDENS, PORTLAND	4.3	S
PO0020	CROQUET CLUB PAVILION, BOTANIC GARDENS, PORTLAND	8.1 8.5	NA

Site ID	Site name	Themes	Significance
PO0021	IMMIGRATION BARRACKS SITE, ALMOND TREE RESERVE, PORTLAND	2.4 7.5	NA
PO0022	TANNERY SITE, PORTLAND	3.12	NA
PO0023	MONUMENT, PORTLAND FORESHORE, PORTLAND	8.7	NA
PO0024	QUARRY, BLUESTONE, PORTLAND	3.3	L/R
PO0025	QUARRY, CAPE NELSON	3.3	L
PO0026	BRIDGEWATER POUND SITE, WEST OF PORTLAND	4.1	NA
PO0027	SHELLGRIT EXTRACTION SITE, MURRELL'S BEACH, PORTLAND AREA	3.3	NA
PO0028	'WINDSOR COTTAGE', PORTLAND	7.5	S
PO0029	CUSTOMS HOUSE, PORTLAND	7.5	S
PO0030	ROCKET SHED, PORTLAND	3.7	NA
PO0031	LIFEBOAT, PORTLAND	3.7	S
PO0032	DEEP-WATER PIER, PORTLAND	3.7	R
PO0033	LIGHTHOUSE, PORTLAND	3.7 7.5	S
PO0034	LIGHTHOUSE COMPLEX, CAPE NELSON	3.7 7.5	S
PO0035	WILLIAM DUTTON'S LANDING SITE, BLACKNOSE POINT, PORTLAND	3.14 3.15 3.3	NA
PO0036	CONVINCING GROUND, ALLESTREE	2.6 3.3	
PO0037	DOUBLE CORNER, PORTLAND	3.14 3.15 3.3	NA
PO0038	SEALING CAMP, ON THE 'PENINSULA', PORTLAND	3.14 3.15 3.3	NA
PO0039	WHALERS' LOOKOUT, MT CLAY AREA	3.3	NA
PO0040	FURROWS SITE, PORTLAND	3.8 8.9	NA
PO0041	'WAY STATION', MT ECCLES NATIONAL PARK	3.8 3.15	R
PO0042	SITE OF BRICK AND STONE WELL AND SPRINGS, PORTLAND	4.2	NA
PO0043	RECREATION RESERVE, HEYWOOD	8.1	NA
PO0044	STATE SCHOOL, HEYWOOD	6.2	NA
PO0045	WATER TOWER, HEYWOOD	4.2	BL
PO0046	RAILWAY STATION, HEYWOOD	3.7	L
PO0047	PUBLIC GARDENS AND PUBLIC LAND ALONG FITZROY RIVER, HEYWOOD	4.3 4.1	L
PO0052	CEMETERY, HEYWOOD	9.7	L
PO0053	WAR MEMORIALS, HEYWOOD	8.8	L
PO0054	FISH FARM, PORTLAND	3.4	NA
PO0055	'ADMELLA' WRECK SITE, PORTLAND AREA	3.7	NA
PO0056	CHARCOAL KILNS, NARRAWONG	3.3	NA
PO0057	SAWPIT, NARRAWONG	3.3	R
PO0058	ANNYA CAMP, NEAR HEYWOOD	3.3 7.5	L
PO0059	TIMBUCTOO SAWMILL, NEAR HEYWOOD	3.3	NA
PO0060	CONVINCING GROUND, BETWEEN NARRAWONG AND ALLESTREE BEACH	2.6 3.3 3.15	

Site ID	Site name	Themes	Significance
PO0061	MT EELES (ECCLES), MT ECCLES NATIONAL PARK	2.6	
PO0062	LAKE CONDAH, HEYWOOD DISTRICT	2.1 2.2	
PO0063	LAKE GORRIE AND TWO PARCELS OF CROWN LAND, SE OF MT ECCLES	2.6	
PO0064	WALKING TRACK, MT ECCLES NATIONAL PARK	8.1	NA
PO0065	DRY STONE WALLS, MT ECCLES	3.8	NA
PO0066	DRY STONE STRUCTURES, LAKE CONDAH	3.8	NA
PO0067	POST AND WIRE FENCE, LAKE CONDAH	3.8	NA
PO0068	DRY STONE WALL, LAKE CONDAH AREA	3.8	NA
PO0069	DRY STONE WALL, ALLAMBIE	3.8	NA
PO0070	MURPHYS HUT, LAKE CONDAH AREA	3.8 3.15	NA
PO0071	STOCK YARD COMPLEX, LAKE CONDAH	3.8	NA
PO0072	BRIDGE REMNANTS DARLOT CREEK, CONDAH	3.7	BL
PO0073	DRY STONE WALL BASE, LAKE CONDAH	3.8	NA
PO0074	DRY STONE WALL BUILDING, LAKE CONDAH	3.8	NA
PO0075	STONE CHIMNEY WALL ENCLOSURE, LAKE CONDAH	3.8	NA
PO0076	CEMETERY, PORTLAND NORTH	9.7	S
PO0077	FISHERMEN'S WHARF AND BREAKWATER COMPLEX, PORTLAND	3.10 3.4 3.7	R/S
PO0078	FORESHORE, PORTLAND	8.1 4.1	R
PO0079	LIGHTHOUSE KEEPER'S QUARTERS, PORTLAND	3.5 3.7	S
PO0080	BLUESTONE GUTTERS, PORTLAND	4.2	L
PO0081	COURTHOUSE, MACARTHUR	7.5	S
PR0001	CAMP COORIEMUNGLE, COBDEN AREA	7.5	R
PR0002	ROAD CUT THROUGH HEYTESBURY FOREST, SIMPSON-PRINCETOWN	3.7	NA
PR0003	DINOSAUR COVE, GLENAIRE DISTRICT	1.2	NA
PR0004	OLD OCEAN ROAD, BETWEEN PRINCETOWN & MOONLIGHT HEAD	3.7 3.22	R
PR0005	RIFLE RANGE, MOONLIGHT HEAD, OTWAY NATIONAL PARK	7.5	NA
PR0006	'MARIE GABRIELLE' ANCHORS, MOONLIGHT HEAD, OTWAY NATIONAL PARK	3.7	NA
PR0007	'FIJI' GRAVESTONE & MEMORIAL, MOONLIGHT HEAD, OTWAY NATIONAL PARK	3.7	NA
PR0008	'FIJI' ANCHOR, MOONLIGHT HEAD, OTWAY NATIONAL PARK	3.7	NA
PR0009	RIVERNOOK RACECOURSE, PRINCETOWN DISTRICT	8.1	NA
PR0010	POINT RONALD TUNNEL & BREAKWATER, PRINCETOWN	3.10	S
PR0011	TRESTLE ROAD BRIDGE, PRINCETOWN	3.7	L
PR0012	GIBSON STEPS & TUNNEL, PORT CAMPBELL NATIONAL PARK	8.1 3.22	L
PR0013	CROWES BUFFER STOP, GREAT OCEAN ROAD	3.7	L
PR0014	PUBLIC HALL, YUULONG	4.3	NA
PR0017	CEMETERY AND ASSOCIATED FEATURES, LOCH ARD GORGE	9.7	S

Site ID	Site name	Themes	Significance
PR0018	RIVERNOOK TOWNSHIP SITE, OTWAY NATIONAL PARK	4.1	NA
PR0019	RIVERNOOK HOUSE SITE, PRINCETOWN DISTRICT	3.22	NA
PR0020	RACECOURSE SITE, MOONLIGHT HEAD, OTWAY NATIONAL PARK	8.1	NA
PR0021	CEMETERY, MOONLIGHT HEAD, OTWAY NATIONAL PARK	9.7	L/R
PR0022	OLD COAST ROAD, BETWEEN PRINCETOWN & MOONLIGHT HEAD	3.7	L
PR0023	MELBA GULLY, NEAR LAVERS HILL	3.22	R
PR0024	INSCRIBED STONES AT HIDER'S BEACH, OTWAY NATIONAL PARK	3.15	NA
PR0025	'SS INNAMINKA' GROUNDING SITE, GLEN AIRE	3.7	NA
PR0026	'LOCH ARD' WRECK SITE, PORT CAMPBELL N.P.	3.7	NA
PR0027	'JENNY' ANCHOR, CAPE VOLNEY	3.7	NA
PR0028	AIRE RIVER, NEAR GLENAIRE	2.6	
PR0029	PUBLIC HALL, KENNEDY CREEK	4.3	NA
PR0030	PUBLIC HALL, CHAPPLE VALE	4.3	NA
PR0031	? STAVE SAWMILL, CROWES BUFFER STOP	3.3	NA
PR0032	ROBINS SAWMILL, CROWES	3.3	NA
PR0033	ENTERPRISE (ANGLISS) SAWMILL, CROWES DISTRICT	3.3	NA
PR0034	NORTHERN TIMBER CO. SAWMILL, CROWES DISTRICT	3.3	NA
PR0035	ROBINS (STALKER) SAWMILL, CROWES DISTRICT	3.3	NA
PR0036	KINCAID (CHAPPLE CREEK) SAWMILL, CROWES DISTRICT	3.3	NA
PR0037	BACHELOR AND O'SHAUNESSY SAWMILL, CROWES DISTRICT	3.3	NA
PR0038	KINCAID (SANDY CREEK) SAWMILL, CROWES DISTRICT	3.3	NA
PR0039	SMITH AND PETTIT SAWMILL, CROWES DISTRICT	3.3	NA
PR0040	PETTIT SAWMILL, CROWES DISTRICT	3.3	NA
PR0041	BRIAR HILL TIMBER CO., CROWES DISTRICT	3.3	NA
PR0042	KNOTT SAWMILL, CROWES DISTRICT	3.3	L/R
PR0043	MCCRICKARD SAWMILL, LOVAT DISTRICT	3.3	NA
PR0044	MARCHBANK SAWMILL, WEEAPROINA DISTRICT	3.3	NA
PR0045	MARCHBANK ZIGZAG TRAMWAY, WEEAPROINAH DISTRICT	3.3	S
PR0046	O'BRIEN SAWMILL, WEEAPROINAH DISTRICT	3.3	NA
PR0047	PETTIT SAWMILL, WEEAPROINAH DISTRICT	3.3	NA
PR0048	DEWE SAWMILL, WYELANGTA DISTRICT	3.3	NA
PR0049	SPRAGUE AND SMITH SAWMILL, WYELANGTA	3.3	NA
PR0050	KINCAID SAWMILL, WYELANGTA DISTRICT	3.3	NA
PR0051	CLYDESDALE SAWMILL, WYELANGTA	3.3	NA
PR0052	KNOTT # 3 SAWMILL, WYELANGTA DISTRICT	3.3	S
PR0053	KNOTT # 2 SAWMILL, WYELANGTA DISTRICT	3.3	NA
PR0054	BROWN SAWMILL, WYELANGTA DISTRICT	3.3	NA
PR0055	KNOTT # 1 SAWMILL, TRIPLET FALLS	3.3	R
PR0056	DRIVER SAWMILL, WEEAPROINAH DISTRICT	3.3	NA

Site ID	Site name	Themes	Significance
PR0057	ARKINS CREEK WEIRS, WYELANGTA	4.2	R
PR0058	NORTH OTWAY PIPELINE, CARLISLE RIVER	4.2	R
PR0059	SOUTH OTWAY PIPELINE, KENNEDYS CREEK	4.2	L/R
RU0001	PUBLIC HALL, DADSWELL BRIDGE	4.3	NA
RU0003	CEMETERY, GRAY'S BRIDGE	9.7	R
RU0004	CRESWICK'S WELL, MARNOO	3.8 3.15	L
RU0005	PLANTATION, MARNOO	3.8 3.10	BL
RU0006	CROSSING, RICHARDSON RIVER	3.7	NA
RU0007	HARRIET HOLMES GRAVE, KANYA	9.7	L
RU0008	RAILWAY TROLLEY, MARNOO	3.7	NA
RU0009	NEWINGTON BRIDGE, GLENORCHY DISTRICT	3.7	NA
RU0010	WALLALLOO SETTLEMENT, NORTH OF MARNOO	2.5	NA
RU0011	SCHOOL (SITE), CALLAWADDA	6.2	L
RU0012	GLENORCHY WEIR, SE OF GLENORCHY	4.2	L
RU0013	ALIEN CAMP, GLYNWYLLN	3.3 7.5	R
RU0014	TRAMWAY, WARRANOOK	3.3	L
RU0015	RAILWAY STATION COMPLEX, RUPANYUP	3.7	S
RU0016	BRASS BAND HALL AND TENNIS COURTS, COROMBY	8.5	BL
RU0017	WATER TOWER AND OFFICE, RUPANYUP	4.2	NA
RU0018	RAIL RESERVE AND CRANE, RUPANYUP	3.7	NA
RU0019	MILL AND SILOS, RUPANYUP	3.11	S
RU0020	GOODS SHED PLATFORM AND GRAIN SHED, MARNOO	3.7 3.11	NA
RU0021	RECREATION GROUND AND MEMORIAL GATES, MARNOO	8.1 8.8	NA
RU0022	STATE SCHOOL, MARNOO	6.2	L
RU0023	STATE SCHOOL, RUPANYUP	6.2	L
RU0024	CEMETERY, RUPANYUP	9.7	L
RU0025	CO-OPERATIVE PROJECT, LEDCOURT	3.10	NA
RU0026	MERRI KINDERGAREN, PURNIM WEST	6.2	NA
RU0027	THE CRATER AREA, LITTLE DESERT NATIONAL PARK	1.2	NA
RU0028	GLENORCHY WEIR, WIMMERA-MALLEE SYSTEM	4.2	L/R
RU0029	SWEDES CREEK CUTTING, WIMMERA RIVER	4.2	R
RU0030	HUDDLESTONES WEIR, WIMMERA RIVER, W-M SYSTEM	4.2	NA
RU0031	LAKE BATYO CATYO, AVON PLAINS	4.2 8.1	L
RU0032	FORD OVER WIMMERA RIVER, GLENORCHY DISTRICT	3.7	
SK0001	WEIR, STREATHAM STREAMSIDE RESERVE 'J15', STREATHAM	4.2	NA
SK0004	CEMETERY, SKIPTON	9.7	L
SK0005	TRESTLE BRIDGE REMNANTS, SKIPTON	3.7	BL
SK0006	FOOTBRIDGE OVER MT EMU CREEK, SKIPTON	4.3	L
SK0007	BRIDGE OVER MT EMU CREEK, SKIPTON	3.7	L

Site ID	Site name	Themes	Significance
SK0008	JUBILEE PARK, SKIPTON	4.3 8.1	NA
SK0010	BLUESTONE GUTTERS, SKIPTON	4.2	L
SK0011	MECHANICS INSTITUTE, SKIPTON	6.1	L
SK0012	RAILWAY RESERVE SILOS, SKIPTON	3.7	NA
SK0013	AVENUE OF HONOUR AND WAR MEMORIAL, SKIPTON	4.3 8.8	L
SK0014	MASONIC HALL, SKIPTON	8.5	R/S
SK0015	PRIMARY SCHOOL, # 582, SKIPTON	6.2	L/R
SK0016	RSL HALL, SKIPTON	8.5	NA
SK0017	COURTHOUSE, SKIPTON	7.5	S
SK0018	CEMETERY, STREATHAM	9.7	L
SK0019	RAILWAY COMPLEX, LISMORE	3.7	BL
SK0020	RECREATION RESERVE, LISMORE	8.1	L
SK0021	PUBLIC HALL, LISMORE	4.3	NA
SK0022	PUBLIC CONVENIENCES, LISMORE	4.2	NA
SK0023	SWIMMING POOL BUILDING, LISMORE	8.1	L
SK0024	WAR MEMORIAL, LISMORE	8.8	L
SK0026	LISMORE AND DISTRICT HOSPITAL, LISMORE	3.25	NA
SK0027	CEMETERY, DERRINALLUM	9.7	L
SK0028	RAILWAY COMPLEX, DERRINALLUM	3.7	L
SK0029	HIGH SCHOOL (FORMER), DERRINALLUM	6.2	NA
SK0031	AVENUE OF TREES, DERRINALLUM	4.3	L
SK0032	1977 FIRE MEMORIAL, DERRINALLUM	8.9	L
SK0033	WAR MEMORIAL, DERRINALLUM	8.8	L
SK0034	PUBLIC HALL, DERRINALLUM	4.3	NA
SK0035	WAR MEMORIAL, DARLINGTON	8.8	L
SK0036	PRESBYTERIAN CHURCH MEMORIAL, DARLINGTON	8.6 8.7	L/R
SK0037	PUBLIC HALL, DARLINGTON	4.3	NA
SK0038	BRIDGE ABUTMENTS, DARLINGTON	3.7	S
SK0045	PRIMARY SCHOOL # 4576, YALL-Y-POORA	6.2	BL
SK0046	CEMETERY, LISMORE	9.7	NA
ST0001	RAILTON TUNNEL, NW OF STUART MILL	3.3	NA
ST0002	MUD BRICK STRUCTURE, STUART MILL	3.3	R
ST0003	GREENOCK MINE, NW OF STUART MILL	3.3	NA
ST0004	MUD WALL DAM, , NW OF STUART MILL	3.3	NA
ST0005	WATER RACE AND DAM, WEST OF CLOVER VALLEY	3.3	NA
ST0006	CHARCOAL KILN, BOOLA BOLOKE	3.3	L
ST0007	UNEMPLOYED WORKERS CAMP, WEST OF CLOVER VALLEY	3.3 7.5	NA
ST0008	BEEKEEPER'S HUTT, WEST OF STUART MILL	3.3	NA
ST0009	MURRAY'S PUDDLER, CARAPOOEE WEST	3.3	NA

Site ID	Site name	Themes	Significance	Site ID	Site name	Themes	Significance
ST0010	PUDDLER, CARAPOOEE WEST	3.3	NA	ST0051	SHEARING SHED ROAD DUMP # 2, SOUTH OF ST ARNAUD	3.3 7.5	L
ST0011	CHARCOAL KILN, CARAPOOEE	3.3	L	ST0052	PRINCE OF WALES EUICAL YPTUS DISTILLERY, NEAR ST ARNAUD	3.3	L
ST0012	COLLISONS GULLY MINE, SOUTH OF ST ARNAUD	3.3	NA	ST0053	ALIEN CAMP, CARAPOOEE WEST	3.3 7.5	L
ST0013	FISHHOOK MINE, NE OF ROSTRON	3.3	NA	ST0054	BOYS' CAMP, CARAPOOEE WEST	3.3 7.5	R
ST0014	NEW BENDIGO MINE, NW OF ST ARNAUD	3.3	NA	ST0055	KERSHAW'S CHARCOAL PITS, CARAPOOEE WEST	3.3	NA
ST0015	KOORHEH DIGGINGS, SOUTH OF KOORHEH	3.3	NA	ST0056	KERSHAW'S CHARCOAL KILNS, CARAPOOEE WEST	3.3	NA
ST0016	CARAPOOEE GOLDFIELD, SSW OF CARAPOOEE	3.3	NA	ST0057	SAWMILL, CARAPOOEE WEST	3.3	R
ST0017	QUEEN MARY MINE, SW OF ST ARNAUD	3.3	NA	ST0058	CHARCOAL PITS, CLOVER VALLEY	3.3	L
ST0018	RESERVOIR, ST ARNAUD AREA	4.2	L	ST0059	MEN'S CAMP, CARAPOOEE WEST	3.3 7.5	L
ST0019	EUICAL YPTUS DISTILLERY, NE OF ST ARNAUD	3.3	NA	ST0060	CHARCOAL PITS, THE GAP	3.3	R
ST0020	CHINESE SETTLEMENT, ST ARNAUD	2.4 3.3	NA	ST0061	PRIMARY SCHOOL # 762 (SITE), CARAPOOEE	6.2	L
ST0021	CENETERY, ST ARNAUD	9.7	NA	ST0062	PRIMARY SCHOOL # 2127 (FORMER), SLATY CREEK	6.2	NA
ST0022	PRINCE OF WALES MINE, NW OF ST ARNAUD	3.3	NA	ST0063	SCHOOL RESERVE, BEASLEY'S BRIDGE	6.2	L
ST0023	CROWN LAND OFFICE, ST ARNAUD	7.5	S	ST0064	PRIMARY SCHOOL # 2622 (SITE), ST ARNAUD NORTH	6.2	L
ST0024	TOWN HALL, ST ARNAUD	7.2	R/S	ST0065	GOLD PROSPECTOR'S MONUMENT, ST ARNAUD EAST	8.9	L
ST0025	COURTHOUSE, ST ARNAUD	7.5	S	ST0066	WVU AND WV2 CENOTAPH MONUMENT, STUART MILL	8.9	L
ST0026	POLICE LOCK-UP, RESIDENCE AND STATION, ST ARNAUD	7.5	S	ST0067	MEMORIAL HALL, KOORHEH	4.3 8.8	NA
ST0029	QUEEN MARY GARDENS, LAKE AND BRICK DRAIN, ST ARNAUD	4.3 8.1	R	ST0068	MAJOR MITCHELL CABIN, KOORHEH	8.9 3.2 8.7	R
ST0030	KARA KARA SHIRE HALL (FORMER), ST ARNAUD	7.2	R/S	ST0070	MEMORIAL HALL, EMU	4.3 8.8	L
ST0031	OLD GAS LAMP REMAINS, ST ARNAUD	4.2	L	ST0073	RAIL WAY STATION, EMU	3.7	BL
ST0032	TOWN HALL GARDENS AND MEMORALS, ST ARNAUD	4.3 8.8	L	ST0074	PRIMARY SCHOOL # 2011 (FORMER), EMU	6.2	NA
ST0033	AVENUES OF TREES, ST ARNAUD	4.3	NA	ST0075	PRIMARY SCHOOL # 1024, STUART MILL (SITE)	6.2	L
ST0034	TURNCOCK'S RESIDENCE AND FIRE STATION (FORMER), ST ARNAUD	4.2	S	ST0077	CENETERY, STUART MILL	9.7	L/R
ST0035	MECHANICS INSTITUTE (FORMER), ST ARNAUD	6.1	NA	ST0078	CENETERY, NAVARRE	9.7	L
ST0036	PRIMARY SCHOOL, # 1646, ST ARNAUD	6.2	R	ST0079	HALL AND MEMORIAL ARCH, NAVARRE	4.3 8.8	NA
ST0037	HIGH SCHOOL, ST ARNAUD	6.2	R	ST0080	STATION AND SILO (FORMER), NAVARRE	3.7 3.11	NA
ST0038	HOSPITAL RESERVE, ST ARNAUD	3.25	NA	ST0081	RECREATION OVAL AND GRANDSTAND, NAVARRE	8.1	NA
ST0039	DENOMINATIONAL SCHOOL (FORMER), ST ARNAUD	6.2	NA	ST0083	MEMORIAL HALL (SITE), WINALLOCK	4.3 8.8	L
ST0040	CENETERY, ST ARNAUD	9.7	L/R	ST0084	CENETERY, TOTTINGTON	9.7	NA
ST0042	RAIL WAY STATION NORTH-WEST OF ST ARNAUD	3.7	NA	ST0085	PUBLIC HALL AND MEMORIAL GATES, BEASLEY'S BRIDGE	4.3 8.8	NA
ST0043	RECREATION RESERVE, ST ARNAUD	8.1 8.9	L	ST0086	NEW BENDIGO CENETERY, BAKERY HILL	9.7	L/R
ST0044	MEMORIAL GATES AND MEMORIAL TO PIONEERS, ST ARNAUD	8.8 8.9	L	ST0087	RAIL STATION AND SILOS, SUTHERLAND	3.7 3.11	NA
ST0045	LAMP POSTS, GATE AND SWIMMING POOL COMPLEX, ST ARNAUD	8.1 4.3	L	ST0088	SCHOOL MONUMENT AND MEMORIAL HALL, SLATY CREEK	4.3 8.8	L
ST0046	RAIL WAY STATION, ST ARNAUD	3.7	S	ST0089	TRESTLE BRIDGE, ARCHDALE	3.7	NA
ST0047	CHOCK & LOG FENCE, CARAPOOEE	3.8	R	ST0091	ST ARNAUD DAM SOIL CONSERVATION PROJECT, ST ARNAUD	3.10	NA
ST0048	CHOCK & LOG FENCE, CLOVER VALLEY	3.8	R	ST0092	NAVARRE HILLS SOIL CONSERVATION PROJECT, NAVARRE HILLS	3.10	R
ST0049	CENETERY, CARAPOOEE	9.7	L	ST0093	SWANTONS BATTERY VATS AND TAILINGS, STUART MILL DISTRICT	3.3	NA
ST0050	SHEARING SHED ROAD DUMP # 1, SOUTH OF ST ARNAUD	3.3 7.5	L	ST0094	EMU CEMENT WORKINGS, EMU	3.3	R

Site ID	Site name	Themes	Significance
ST0095	CEMENT LEAD DIGGINGS, STUART MILL	3.3	R
ST0096	ISIS CO MINE, STUART MILL	3.3	L
ST0097	QUEENSLAND CO MINE, SEBASTOPOL	3.3	L
ST0098	WELCOME NELSON CO MINE, ST ARNAUD	3.3	L
ST0099	SWANTONS BATTERY, STUART MILL	3.3	L
ST0100	JEREJAW REEF MINE, JEREJAW MILL	3.3	L
ST0101	BROWNING'S LUCK CO MINE, ST ARNAUD	3.3	NA
ST0102	BELL ROCK CO MINE, HEAP AND FOUNDATIONS	3.3	L
ST0103	LLOYD'S WHIP SHAFT, DEVONSHIRE REEF, STUART MILL DISTRICT	3.3	L
ST0104	NEW BENDIGO CO MINE, NEW BENDIGO REEF, ST ARNAUD	3.3	L
ST0105	BRISTOL REEF MINE, BRISTOL REEF, ST ARNAUD	3.3	L
ST0106	GREENOCK REEF BATTERY, STUART MILL DISTRICT	3.3	L
ST0107	BLINK BONNIE CO MINE, BLINK BONNIE REEF, ST ARNAUD	3.3	L
ST0108	DEVONSHIRE GULLY STRUCTURE, STUART MILL DISTRICT	3.3	NA
ST0109	NEW BENDIGO DIGGINGS, NEW BENDIGO, ST ARNAUD DISTRICT	3.3	L
ST0110	ROSTRONS PUDDLERS, ROSTRONS	3.3	L
ST0111	WATTLE FLAT DIGGINGS, HARD HILL, STUART MILL DISTRICT	3.3	L
ST0112	GRUMBLERS GULLY, ST ARNAUD DISTRICT	3.3	L
ST0113	VICTORIA GULLY DIGGINGS, STUART MILL DISTRICT	3.3	L
ST0114	GOWAR MINE, STAWELL	3.3	L
ST0115	SALLY'S GULLY MINE, SALLY'S GULLY, ST ARNAUD DISTRICT	3.3	R
ST0116	STUART MILL WORKINGS, STUART MILL	3.3	R
ST0117	VICTORIA GULLY PUDDLERS, STUART MILL	3.3	NA
ST0118	NICHOLL'S PLAINS SCHOOL # 2342 (SITE) AND TENNIS COURTS, NICHOLL'S PLAINS	6.2	L
WA0001	RESERVE, ANTWERP	3.9 8.6 7.5	
WA0002	COURTHOUSE, DIMBOOLA	7.5	R
WA0003	HIGH SCHOOL & MEMORIAL HALL, DIMBOOLA	6.2	NA
WA0004	SHIRE HALL (FORMER), DIMBOOLA	7.2	R
WA0005	PRIMARY SCHOOL # 1372, DIMBOOLA	6.2	NA
WA0006	RAILWAY STATION COMPLEX, DIMBOOLA	3.7	R
WA0007	RECREATION RESERVE/SHOWGROUNDS, DIMBOOLA	8.1 3.4	L
WA0008	FIRST PUMP STATION, DIMBOOLA	4.2	L
WA0009	SEWAGE PUMPING STATION, DIMBOOLA	4.2	NA
WA0010	OLD WEIR, DIMBOOLA	4.2	L
WA0011	POLICE STABLES, DIMBOOLA	7.5	L
WA0013	COURTHOUSE, WARRACKNABEAL	7.5	S
WA0014	LOG LOCK-UP, WARRACKNABEAL	7.5	S
WA0015	WATER TOWER, WARRACKNABEAL	4.2	BL

Site ID	Site name	Themes	Significance
WA0016	CEMETERY, WARRACKNABEAL	6.9	L
WA0017	SHOW-YARDS, WARRACKNABEAL	3.4	NA
WA0018	ANZAC MEMORIAL PARK, WARRACKNABEAL	4.3 8.8	L
WA0019	RAILWAY STATION COMPLEX, WARRACKNABEAL	3.7	S
WA0020	HOUSING COMMISSION ESTATE, WARRACKNABEAL	4.5	NA
WA0021	POLICE RESERVE BUILDINGS, WARRACKNABEAL	7.5	BL
WA0022	HIGH SCHOOL, WARRACKNABEAL	6.2	NA
WA0023	CEMETERY, DIMBOOLA	9.7	L
WA0024	DIMBOOLA VILLAGE SETTLEMENT, BETWEEN WAIL AND DIMBOOLA	2.5	NA
WA0025	EUCALYPTUS DISTILLERY CO. DISTILLERY, WARRACKNABEAL	3.3	R
WA0026	DAM WEIR, LAH	4.2	NA
WA0027	ELLIOT'S HOUSE & DAIRY, SW OF WARRACKNABEAL	3.8	NA
WA0028	CEMETERY MEMORIAL, ANTWERP	9.7	
WA0029	THOMAS AND SONS FLOUR MILL AND SILOS, WARRACKNABEAL	3.11	NA
WA0030	PIONEER MONUMENT, WARRACKNABEAL	8.9	L
WA0031	COOL STORE, WARRACKNABEAL	3.11	NA
WA0032	BRIM GOODS SHED AND RAIL RESERVE SILOS, BRIM	3.7 3.11	NA
WA0033	JAMES SIMSON GRAVE, BRIM	9.7	L
WA0034	CEMETERY, BRIM	9.7	L
WA0035	WILLENABRINA HALL AND MEMORIAL GATES AND OVAL, WARRACKNABEAL	4.3 8.8	NA
WA0036	BRIDGE OVER YARRIAMIACK CREEK, WARRACKNABEAL	3.7	L
WA0037	FORMER WILLENABRINA SCHOOL # 2632 (SITE), WARRACKNABEAL	6.2	L
WA0038	PRIMARY SCHOOL (SITE), LAH	6.2	L
WA0039	STONE WALLS, MT NAPIER	3.8	NA
WA0040	RECREATION RESERVE, MT NAPIER	8.1	NA
WA0041	CEMETERY, KATYIL	9.7	L
WA0042	STATE SCHOOL (SITE) # 3104, ANTWERP	6.2	L
WA0043	SAILORS HOME PUBLIC HALL, DIMBOOLA DISTRICT	4.3	L
WA0044	FORMER ROAD BRIDGE, ANTWERP	3.7	L
WA0045	PUBLIC HALL, ANTWERP	4.3	L
WA0046	CEMETERY, ANTWERP	9.7	L
WA0047	NETTING FENCE GALAQUIL	3.8 7.5	R/S
WA0048	SAILORS HOME CEMETERY, EAST OF DIMBOOLA	9.7	L
WE0001	MEMORIAL HALL, LAKE MARMAL	4.3 8.8	NA
WE0002	HALL, BUCKRABANYULE	4.3	L
WE0003	SILOS AND STATION, BUCKRABANYULE	3.7 3.11 3.4	NA
WI0001	CEMETERY, HEXHAM	9.7	NA

Site ID	Site name	Themes	Significance
W10002	CAST-IRON MILEPOSTS, CARAMUT	3.7	S
W10003	PRIMARY SCHOOL # 947, GLENTHOMSON	6.2	R/S
W10004	WAR MEMORIAL, WICKLIFFE	8.8	L
W10005	PUBLIC HALL, HEXHAM	4.3	R/S
W10007	WAR MEMORIAL, HEXHAM	8.8	L
W10008	PRIMARY SCHOOL # 296, HEXHAM	6.2	S
W10009	AVENUE OF TREES, CARAMUT	4.3	L
W10010	BRIDGE, BURCHARTS CREEK, CARAMUT DISTRICT	3.7	S
W10011	BRIDGE, MUSTON CREEK, CARAMUT	3.7	NA
W10012	STONE MILEPOST, CARAMUT	3.7	NA
W10013	RECREATION RESERVE, CARAMUT	8.1	L
W10015	PRIMARY SCHOOL # 278, CARAMUT	6.2	L/R
W10016	CEMETERY, CARAMUT	9.7	L
W10017	CEMETERY, WICKLIFFE	9.7	NA
W10019	COMMON SCHOOL (FORMER), LAKE BOLAC	6.2	NA
W10022	MEMORIAL HALL, LAKE BOLAC	4.3	NA
W10023	PRIMARY SCHOOL # 3833, WESTMERE	6.2	R/S
W10024	WAR MEMORIAL, WESTMERE	8.8	L
W10025	PUBLIC HALL, WESTMERE	4.3	BL
W10026	RAILWAY STATION, WESTMERE	3.7	L
W10027	WAR MEMORIAL, LAKE BOLAC	8.8	L
W10028	CEMETERY, LAKE BOLAC	9.7	L
W10029	HIGH SCHOOL, LAKE BOLAC	6.2	L
W10034	COBRA KILLUC, NORTH-EAST OF HEXHAM	2.1 2.2	
W10035	LAKE BOLAC	2.1 2.2	
W10036	PRIMARY SCHOOL # 2662, WILLAURA	6.2	L
W10037	COURTHOUSE (FORMER), WILLAURA	7.5	S
W10038	WATER TROUGH, WILLAURA	4.2	L
W10039	WAR MEMORIAL, WILLAURA	8.8	L
W10040	WILLAURA & DISTRICT HOSPITAL, WILLAURA	3.25	L
W10041	SILOS, WILLAURA	3.11 3.4	NA
W10042	PRIMARY SCHOOL # 3851 (FORMER), MINNERA	6.2	NA
W10043	CEMETERY, WILLAURA	9.7	L
W10044	RECREATION GROUND, WILLAURA	8.1	NA
W10045	RAILWAY STATION, WILLAURA	3.7	S
W10046	RSL MEMORIAL TO WWII, WILLAURA	8.8	L
W10047	POLICE LOCK-UP (FORMER), WILLAURA	7.5	BL
W10048	MEMORIAL HALL, WILLAURA	4.3 8.8	NA
W10049	PUBLIC HALL AND MECHANICS INSTITUTE, WICKLIFFE	4.3 6.1	L

Site ID	Site name	Themes	Significance
WR0001	COURTHOUSE, PORT FAIRY	7.5	S
WR0002	MECHANICS INSTITUTE (FORMER), PORT FAIRY	6.1	R/S
WR0003	STATE SCHOOL, YAMBUK	6.2	NA
WR0004	CEMETERY (FIRST), PORT FAIRY	9.7	R
WR0005	TRAMWAY BUILDING SITE, WARRNAMBOOL	3.7	NA
WR0006	WOLLASTON BRIDGE, WARRNAMBOOL	3.7	S
WR0007	FORT & POWDER MAGAZINE, BATTERY HILL, PORT FAIRY	7.5	S
WR0008	AIRPORT, MAILORS FLAT, WARRNAMBOOL	3.7	NA
WR0009	DRILL HALL/ORDERLY ROOM (FORMER), WARRNAMBOOL	7.5 6.1	S
WR0010	COURTHOUSE, KOROIT	7.5	R
WR0011	POLICE RESIDENCE, KOROIT	3.5 7.5	L
WR0012	POLICE LOCK UP, KOROIT	7.5	L
WR0013	TOWN HALL, KOROIT	7.2	L/R
WR0014	RAILWAY STATION & GOODS SHED, KOROIT	3.7	L
WR0015	FORMER FIRE STATION, KOROIT	4.2	L
WR0016	BOTANICAL GARDENS, KOROIT	4.3	L
WR0017	HORSE TROUGH, KOROIT	4.2	L
WR0018	HITCHING POST, KOROIT	3.7	NA
WR0019	VICTORIA PARK, KOROIT	8.9	L
WR0020	KOROIT & DISTRICT MEMORIAL HOSPITAL, KOROIT	3.25	NA
WR0021	MEMORIAL THEATRE, KOROIT	3.20	NA
WR0022	KOROIT RACECOURSE (SITE)	8.1	L
WR0023	NATIONAL SCHOOL # 618 (FORMER), TOWER HILL LAKE, KOROIT	6.2	S
WR0024	STATE SCHOOL # 618, KOROIT	6.2	L
WR0025	STATE SCHOOL TEACHER'S RESIDENCE, KOROIT	3.5 6.2	NA
WR0036	CEMETERY, TOWER HILL, KOROIT	9.7	S
WR0037	STONE MILEPOSTS, WARRNAMBOOL	3.7	S
WR0038	DAN'S CAVE, COAST EAST OF WARRNAMBOOL	3.15	L
WR0039	CAPTAIN MILLS COTTAGE, PORT FAIRY	3.15 3.3	S
WR0040	LIGHTHOUSE COMPLEX, LADY BAY, WARRNAMBOOL	3.7 7.5	S
WR0041	LIGHTHOUSE COMPLEX, GRIFFITH ISLAND, PORT FAIRY	3.7 7.5	S
WR0042	PROUDFOOT'S BOATHOUSE, WARRNAMBOOL	8.1 3.22	S
WR0043	PRIMARY SCHOOL # 648, WOODFORD	6.2	NA
WR0044	RECREATION GROUND, KILLARNEY BEACH	8.1	NA
WR0045	PROTECTED DUNES, ARMSTRONG BAY, WARRNAMBOOL DISTRICT	3.10	L/R
WR0046	EASTERN BEACH, PORT FAIRY	8.2	L/R
WR0047	SOUTHERN BEACH, PORT FAIRY	8.2	L/R
WR0048	BREAKWATER, WARRNAMBOOL, LADY BAY	3.10	R

Site ID	Site name	Themes	Significance
WR0049	THUNDER POINT COASTAL RESERVE, WEST OF WARRNAMBOOL	7.5	L/R
WR0050	RAILWAY BRIDGE, WEST OF DENNINGTON	3.7	NA
WR0051	'SS CASINO' MONUMENT, PORT FAIRY	8.9 3.7	L
WR0052	'LA BELLA' GROUNDING SITE, WARRNAMBOOL	3.7	NA
WR0053	'EDINBURGH CASTLE' GROUNDING SITE, WARRNAMBOOL	3.7	NA
WR0054	GEORGE WATMORE'S GRAVE, W OF PORT FAIRY	9.7	
WR0055	THUNDER POINT, WARRNAMBOOL	2.1 2.2	
WR0056	LAKE YAMBUK, SOUTH OF YAMBUK	2.1 2.2	
WR0057	TOWER HILL OUTLET, TOWER HILL	2.1 2.2	
WR0058	KILLARNEY BEACH, WEST OF WARRNAMBOOL	2.1 2.2	
WR0059	CRAGS AND DEEN MAAR, WEST OF PORT FAIRY	2.1	
WR0060	PRIMARY SCHOOL # 1210 (FORMER), MAILOR'S FLAT	6.2	NA
WR0061	FORMER AMP BUILDING, WARRNAMBOOL	3.17	L
WR0062	MERRI RIVER CUTTING, WARRNAMBOOL	3.10	NA
WR0063	CUTTING AT FLAGSTAFF HILL, WARRNAMBOOL	3.7 3.10	L
WR0064	MUNICIPAL BATHS (FORMER), WARRNAMBOOL	4.3	NA
WR0065	CUSTOMS HOUSE (FORMER), WARRNAMBOOL	7.5	R/S
WR0066	COURT HOUSE, WARRNAMBOOL	7.5	S
WR0067	STONE WALL, FORMER CATTLE SALEYARDS, WARRNAMBOOL	3.4	NA
WR0068	BOTANICAL GARDENS, WARRNAMBOOL	4.3	S
WR0069	POLICE COMPLEX, WARRNAMBOOL	7.5	R
WR0070	PRIMARY SCHOOL # 1743, WARRNAMBOOL	6.2	R/S
WR0071	VILLIERS BLOCK, WARRNAMBOOL BASE HOSPITAL	3.25	NA
WR0072	RAILWAY STATION, WARRNAMBOOL	3.7	S
WR0074	SHELLY BEACH, WARRNAMBOOL	8.2	L
WR0077	TOWER HILL	1.4 3.22 3.8	S
WR0078	VISITOR CENTRE, TOWER HILL	3.22 7.5	S
WR0079	ROCKET HOUSE, PORT FAIRY	3.7	S
WR0080	LIFEBOAT SHED, PORT FAIRY	3.7	S
WR0081	WHARF COMPLEX, PORT FAIRY	3.7 3.4	S
WR0082	RAILWAY STATION (FORMER), PORT FAIRY	3.7	NA
WR0083	CUSTOMS HOUSE, PORT FAIRY	7.5	NA
WR0084	HOSPITAL, PORT FAIRY	3.25	NA
WR0085	PRIMARY SCHOOL # 6247, PORT FAIRY	6.2	S
WR0086	MUNICIPAL CHAMBERS (FORMER), PORT FAIRY	7.2	NA
WR0087	FISHERMEN'S SHED, PORT FAIRY	3.4	S
WR0088	LIFEBOAT, PORT FAIRY	3.7	S
WR0089	POLICE RESIDENCE, PORT FAIRY	3.5 7.5	NA
WR0090	BOTANIC GARDENS, PORT FAIRY	4.3 8.3	NA

Site ID	Site name	Themes	Significance
WR0091	CEMETERY, PORT FAIRY	9.7	S
WR0092	SEA SCOUTS HALL, PORT FAIRY	8.5	NA
WR0093	WAR MEMORIAL, PORT FAIRY	8.8	L
WR0094	RECREATION OVAL AND GRANDSTAND, PORT FAIRY	8.1	NA
XX0001	GREAT OCEAN ROAD & ASSOCIATED FEATURES & CONSTRUCTION SITES	3.7 3.22 8.8	S
XX0002	STH AUST. GOLD ESCORT ROUTE, MT ALEXANDER TO ADELAIDE	3.7 3.3	R
XX0003	COASTAL STEAMER ROUTE, PORTLAND TO MELBOURNE	3.7	R
XX0004	C. J. TYERS ROUTE	3.2	NA
XX0005	ROUTE OF CHINESE DIGGERS	2.4	R
XX0006	GREAT SOUTH WEST WALK	3.22	R
XX0007	BIRREGURRA-FORREST RAILWAY LINE	3.7	R
XX0008	MT VICTORY ROAD, GRAMPPIANS NATIONAL PARK	3.7 3.22	R
XX0009	SILVERBAND ROAD, GRAMPPIANS NATIONAL PARK	3.7 3.22	NA

APPENDICES

APPENDIX I

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APPENDIX II

MUNICIPALITIES IN THE HISTORIC PLACES STUDY AREA*

Municipality (restructured)	Former municipalities	Municipality (restructured)	Former municipalities	
Ararat (Rural City)	Ararat	Northern Grampians	Donald (part)	
	Ararat (City)		Dunmunkle (part)	
	Stawell (part)		Kara Kara	
Buloke (part)	Birchip		St Arnaud (Town)	
	Charlton		Stawell	
	Donald		Stawell (City)	
	Wycheproof		Wimmera (part)	
Colac-Otway	Colac (City)		Southern Grampians	Dundas (part)
	Heytesbury (part)			Hamilton (City)
	Otway (part)			Heywood (part)
	Winchelsea (part)	Kowree (part)		
		Mount Rouse (part)		
	Wannon			
Corangamite	Hampden	Surf Coast (part)	Barrabool (part)	
	Heytesbury (part)		South Barwon (part)	
	Otway (part)		Winchelsea (part)	
Glenelg	Glenelg (part)	Warrnambool (City)	Warrnambool (part)	
	Heywood (part)		Warrnambool (City)	
	Portland (City)			
Hindmarsh (part)	Dimboola	West Wimmera	Arapiles (part)	
	Lowan		Glenelg (part)	
Horsham (Rural City)	Arapiles (part)			Kaniva
	Horsham (City)			Kowree
	Kowree (part)		Lowan (part)	
	Wimmera (part)	Yarriambiack (part)	Dunmunkle (part)	
	Horsham (part)			
	Karkaroo			
Moyne	Belfast		Warracknabeal	
	Dundas (part)			
	Minhamite			
	Mortlake			
	Mount Rouse (part)			
	Port Fairy (Bor)			
	Warrnambool			
Warrnambool (City)				

* Shires unless otherwise specified

APPENDIX III

A. GEOMORPHIC UNITS AND NUMBERS

Geomorphologic Unit	Number	Local name
West Victorian Uplands - Dissected Uplands (Midlands)	2.1	Dissected Uplands
West Victorian Uplands - Prominent Ridges (Grampians)	2.2	Grampians
West Victorian Uplands - Dissected Tableland (Dundas Tableland)	2.3	Dundas Tablelands
West Victorian Uplands - Dissected Tableland (Merino Tableland)	2.4	Casterton-Merino Hills
South Victorian Uplands - Dissected Fault Blocks (Otway Ranges)	3.1	Otway Ranges
Riverine Plain - Older Alluvial Plain	4.2	Older Alluvial Plain
Mallee Dunefield - Low Calcareous Dunes	5.1	Mallee Plains
Mallee Dunefield - High Siliceous Dunes	5.2	Big Desert Dunefield
Wimmera Plain - Clay Plains (Nhill)	6.1	Wimmera Clay Plains
Wimmera Plain - Ridges and Flats (Goroke)	6.2	South West Wimmera Plains and Ridges
Wimmera Plain - Siliceous Dunes (Little Desert)	6.3	Little Desert
West Victorian Volcanic Plains - Undulating Plain	7.1	Volcanic Plains
West Victorian Volcanic Plains - Stony Undulating Plain	7.2	Stony Rises
South Victorian Coastal Plains - Ridges and Flats (Follett)	8.1	South West Sands
South Victorian Coastal Plains - Dissected Plain (Port Campbell)	8.2	Port Campbell Plains
South Victorian Coastal Plains - Barrier Complexes (Discovery Bay)	8.5	Coastal Dunefields

B. KEY TO LAND SYSTEMS

Landform

C	Coastal dune
E	East-west dune
F	Present floodplain
G	Gentle to moderate hill
I	Irregular dune
L	Lunette
P	Plain above flood level
R	Stranded beach ridge, usually trending NNW-SSE
S	Steep mountain and hill
W	Weakly elongated dune
Y	Gypseous dune

Lithology (rock type)

c	Coarsely-textured unconsolidated deposits
f	Finely-textured unconsolidated deposits
g	Granites and gneisses
l	Limestone
s	Sedimentary rocks
v	Volcanic rocks
z	Saline finely-textured deposits

Climate (mean annual rainfall)

2	200-300 mm
3	300-400 mm
4	400-500 mm
5	500-600 mm
6	600-700 mm
7	> 700 mm; temperate
8	> 700 mm; montane
9	> 700 mm; sub-alpine

Subscripts

These distinguish land systems with similar landform, lithology and climate, but different soils and vegetation.

APPENDIX IV

PRE-1750 BROAD VEGETATION TYPES

Broad landscape unit	Broad vegetation type	Geomorphic units
Coastal	1. Coastal scrubs and grassland complexes	8.5
	2. Coastal grassy woodland complexes	8.1, 8.5
	3. Heathy woodland complexes	8.1, 8.5
Lowlands (mostly coastal plains)	4. Lowland forest complexes	8.1, 8.2
	5. Heath complexes	
	6. Swamp scrub complexes	7.1
Lowlands (generally inland slopes)	7. Box-ironbark forest complexes	2.1
	8. Inland slopes woodland complexes	2.2
	9. Sedge-rich woodland complexes	
Foothills	10. Dry foothill forest complexes	2.1, 2.2, 3.1
	11. Moist foothill forest complexes	3.1
Montane	12. Montane dry woodland complexes	
	13. Montane moist forest complexes	
Montane riparian	14. Montane riparian woodlands and thicket complexes	
Sub-alpine	15. Treeless sub-alpine complexes	
	16. Sub-alpine woodland complexes	
Fertile geologies (sub-montane)	17. Grassland complexes	4.2, 7.1, 2.4
	18. Plains grassy woodland complexes	2.1, 2.3, 4.2, 6.1, 6.2, 7.1, 8.1
	19. Valley grassy forest complexes	2.2
	20. Herb-rich woodland complexes	2.2, 6.2, 7.2
Fertile geologies (supra-montane)	21. Sub-alpine grassy woodland complexes	
	22. Montane grassy woodland complexes	
Riparian	23. Riverine grassy woodland complexes	4.2, and along streams in 2.1, 5.1, 6.1, 7.1
	24. Riparian forest complexes	Along streams in 8.2
Rainshadow	25. Rainshadow woodland complexes	
Mallee	26. Mallee complexes	5.1, 5.2, 6.3
	27. Mallee woodland complexes	

Source: Department of Conservation and Natural Resources

Park	Total visitor days						
	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Grampians National Park	1 345 900	1 337 000	1 656 300	1 587 400	1 655 300	1 430 000	1 709 000
Port Campbell National Park	433 700	441 000	399 400	987 500	927 940	900 000	743 000
Angahook-Lorne State Park	98 500	236 200	210 300	195 000	256 090	260 000	426 000
Otway National Park	140 500	77 700	73 900	65 000	67 000	100 000	159 100
Little Desert National Park	8 400	29 360	38 700	42 200		40 000	25 500
Lower Glenelg National Park	30 400	31 700	32 100	34 200	40 650	37 200	33 800
Mt Eccles National Park	14 200	23 300	15 100	28 200	29 330	22 100	26 000
Mt Richmond National Park	16 000	16 000	17 000	0	16 900	16 000	16 000
Mt Arapiles-Toooan State Park	34 000	55 000	71 000	64 000	116 800	120 000	126 500
Langi Ghiran State Park	3 000	5 000	10 700	7 700	7 700		3 800
Mt Buangor State Park			18 800	24 000	25 200		17 000
Carlisle State Park						NR	NR
Melba Gully State Park	51 900	58 000	87 500	66 000	97 100	100 000	86 200
Black Range State Park	1000	7 200	15 000	14 400		NR	8 000
Cape Nelson State Park	11 300	7 000	10 900	NR	8 600	9 000	9 000
Dergholm State Park ^a			NR	NR	NR	NR	NR
Discovery Bay Coastal Park	93 300	113 900	106 600	103 000	103 000	100 000	106 000
Mt Napier State Park	NR	NR	NR	NR	NR	NR	NR
Princess Margaret Rose Caves	31 500	30 000	33 400	44 900	38 540	24 400	32 000

Notes: # Park yet to be proclaimed

NR Not recorded

Source: National Parks Service

PARK RECREATION - 1987/88 TO 1993/94

APPENDIX V

APPENDIX VI

FOREST RECREATION

Forest	Day visitors (p.a.)	Camper nights (p.a.)
HORSHAM		
Illawarra	2 500	0
Wail	NA	5 500
Ironbark	21 000	0
Dunneworthy	200	0
Mt Difficult	100	4 000
Rocklands Reservoir	2 200	130 000
Anderson's Creek	200	2 000
MIDLANDS		
Mt Cole	20 000	9 000
OTWAYS		
Stephensons Falls	3 500	11 000
Lake Elizabeth	250	250
Mt Sabine Falls	3 500	0
Beauchamp Falls	3 800	1 500
Hopetoun Falls	3 500	0
Aire Valley	3 000	2 000
Triplet Falls	6 000	0
Aire Crossing	NA	400
PORTLAND		
Annya Camp	14 000	700
Crawford River	2 000	200
Cobboboonee Forest Drive	1 000	0
Surrey Ridge Picnic Area	700	200
Pipe Clay	500	100
Jackass Fern Gully	0	0
Sawpit Picnic Area	14 000	200
Great South West Walk	3 000	300

Activities: Walking, Picnicking, Horse riding, Camping, Fishing, Hunting, Trail-bike riding, Swimming, Power boating, Fossicking, Four-Wheel Driving, Nature observation, Touring/forest driving, Hang gliding, Orienteering/rogaining, Car rallying and Army exercises.

Source: Department of Conservation and Natural Resources

APPENDIX VII

Mineral Occurrences Within the South-western Area

Name	Type	Resource class	Name	Type	Resource class
Mather Creek	Au	MIN	Caringa	Gyp	MIN
Mouchong Creek	Au	MIN	Reedy Swamp	Gyp	MIN
Glenisla	Au	MIN	West Wail	Gyp	MIN
Gap Creek	Au	MIN	Vectis	Gyp	MIN
Stony Creek	Au	MIN	Antwerp (west)	Gyp	MIN
Mafeking Goldfield	Au	MIN	Antwerp	Gyp	MIN
Stawell Goldfield	Au	MAJ	Avon Plains (south)	Gyp	MIN
Londonderry Goldfield	Au	MIN	Avon Plains	Gyp	MIN
Moyston Goldfield	Au	MAJ	Lake Cope Cope	Gyp	MIN
Ararat and Great Western Goldfield	Au	MAJ	Harrow	HMS	MAJ
Kingston	Au	MIN	Toolongbrook	HMS	MAJ
Wangerrip	Au	MIN	Wim 50	HMS	MAJ
Rostron Diggings	Au	MIN	Wim 100	HMS	MAJ
St Arnaud Goldfield	Au	MAJ	Wim 150	HMS	MAJ
Stuart Mill	Au	MIN	Darragan	HMS	MAJ
Carapooee	Au	MIN	Dollin	HMS	MAJ
Emu	Au	MIN	Jung Jung	HMS	MAJ
Dooboobetic	Au	MIN	WIM 200	HMS	MAJ
Greenwald	Ben	MIN	WIM 250	HMS	MAJ
Gellibrand	Ben	MIN	Portland	Ls	MAJ
Willenabrina	CBR	OCC	Heywood	Ls	MIN
Warracknabeal	CBR	OCC	Tyrendarra	Ls	MIN
Deans Marsh - Bambra	CBR	MIN	Tyrendarra	Ls	MIN
Benwerrin	CBR	MIN	Port Fairy	Ls	MIN
Wensleydale	CBR	MIN	Port Fairy	Ls	MIN
Neilds Gully	Cu, Mo	OCC	Warmambool	Ls	MIN
Mt Ararat	Cu,Ag	MIN	Strathallan	Ls	MIN
Helendoite	Cu	OCC	Cudjee	Ls	MIN
Silver Reef, St Arnaud	Cu,Pb,Ag	OCC	Curdie	Ls	MAJ
Roseneath	Ds	MIN	Kawarren	Ls	MIN
Baileys Rocks	Ds	MIN	Nolan Creek	Pb,Ag,Zn	OCC
Dergholm	Ds	OCC	Hamilton	Pb	OCC
Wando Vale	Ds	MIN	Princetown	Pb	OCC
Port Fairy	Ds	MAJ	Swan Marsh	Pt	MIN
Dunkeld	Ds	MIN	Lake Wangoom	Pt	OCC
Heatherlie	Ds	MAJ	Ecklin South, Barbours Swamp	Pt	OCC
Mount Emu	Ds	OCC	Ellerslie, Hopkins River	Pt	OCC
Gorae	Dt	OCC	Terang, Keayang Swamp	Pt	OCC
Portland	Dt	MIN	Panmure, Mount Emu Creek	Pt	OCC
Merino	Fe	MIN	Terang, Mount Emu Creek	Pt	OCC
Wartook Reservoir	Fe	OCC	Terang, Pejark Marsh	Pt	OCC
Moree	Fs	OCC	Cobden, Curdie River	Pt	OCC
Balmoral	Fs	OCC	Birregurra, Barwon River	Pt	OCC
Ararat	Gs	OCC	North Lake	Sa	MIN
Moonlight Head	Gs	OCC	Centre Lake	Sa	MIN
Carapooee	Gs	OCC	McClures Lake	Sa	MIN
Lake Wyn Wyn	Gyp,Sa	MIN	Lake Dutchembegarra	Sa	MIN
Polkemmet	Gyp	MIN	Lake Bow	Sa	MIN
Yanac Swamp	Gyp	MIN	Mitre Lake	Sa	MIN
Netherby (North)	Gyp	MIN	Pink Lake	Sa	MIN
Detpa	Gyp	MIN	Portland	Si	OCC
Jeparit (southeast)	Gyp	MIN	Wando Bridge	Tc	OCC
Gerang Gerang	Gyp	MIN	Wando Vale	Tc	OCC
Nt Lyttleton	Gyp	MIN	Wycheproof quarry	U	OCC
Tullyvea (north)	Gyp	MIN	Cores Creek	Wo	OCC
Ebenezer Station	Gyp	MIN	Robertsons Creek	Wo	OCC
Tullyvea (south)	Gyp	MIN			

APPENDIX VIII

Stone Production from the South-western Area for the Financial Year Ending June 1994

(Extractive Industry titles only)

Material type	Quantity (t)	Estimated value (\$)
Crushed and broken stone:		
basalt	458 344	4 283 700
limestone	103 668	710 400
scoria	144 406	1 134 200
tuff	128 507	725 500
sandstone	22 157	180 900
hornfels and porphyry	179 157	1 936 300
Total	1 036 239	8 971 000
Sand and gravel	60 676	709 100
Clay (Brick)	14 342	-
Agricultural Limestone	35 690	1 081 600
Grand Total	1 146 947	10 761 700

Source: Department of Agriculture, Energy and Minerals

APPENDIX IX

GEOLOGICAL FEATURES OF INTERNATIONAL AND NATIONAL SIGNIFICANCE

Feature name	Significance level	Map	Easting	Northing
Dinosaur Cove	International	7520	708800	5704700
Mount Noorat	International	7421	669200	5772500
Red Rock volcanic complex	International	7621	719000	5763000
Cape Patton	National	7620	746950	5713500
Devils Kitchen	National	7520	698000	5706900
Lake Keilambete	National	7421	664000	5770000
Lake Purrumbete quarry	National	7521	696200	5759800
Lake Gnotuk and Bullen Merri volcanic complex	National	7521	684000	5766000
Lion Headland Slippery Point	National	7520	703000	5707750
Mount Leura volcanic complex	National	7521	688500	5764500
Mount Pordon volcanic complex	National	7521	700000	5757000
Pebble Point	National	7520	689900	5710400
Point Lewis dinosaur locality	National	7620	724200	5699000
Port Campbell National Park	National	7520	682000	5719000
Sentine Rock fossil locality	National	7620	712500	5702500
The Twelve Apostles	National	7520	683000	5718000
Mt Hamilton lava caves and cone	National	7422	674652	5816357
Skipton caves, Mt Widderin	National	7422	674722	5819686
Byaduk caves	National	7333	586433	5802961
Mt Napier, Buckley Swamp	National	7322	614294	5804469
Wallacedale Tumuli	National	7222	577608	5799350
Grange Burn and Muddy Creek, Hamilton	National	7222	588116	5823286
The Grampians, Halls Gap	National	7323	633030	5876325
Central Little Desert, Nhill	National	7334	567124	5954770
Cape Bridgewater Promontory	National	7121	533000	5751000
Cape Nelson, Nelson Bay	National	7221	547000	5746000
Tyrendarra Lava Flow	National	7221	568000	5766500
Lady Julia Percy Island	National	7221	587000	5747000
Mt Eccles	National	7221	581871	5786362
Tower Hill, Koroit	National	7321	619475	5758151

Source: Joyce and King (1980), Rooney *et al.* (1992), Buckley (1993)

APPENDIX X

LEGISLATION

State Legislation

Land Conservation Act 1970

Under this Act, the main function of the Land Conservation Council is to carry out investigations and make recommendations to the Minister with respect to the use of public land in order to provide for the balanced use of land in Victoria.

The role of the Council is to act as a primary source of advice to the government on the use of public land. In making its recommendations on public land use, the Council is required to have regard to relevant social and economic implications. The definition of public land, and the processes followed by the Council are explained in Chapter 1.

Crown Land (Reserves) Act 1978

Section 4 provides for the reservation of Crown land areas for public purposes, including the conservation of areas of scientific, historic or archaeological interest. The Act also allows for appointment of committees of management for some Crown land reserves, and regulations in relation to the reserves. Section 17 provides for the issuing of licences for use of the reserve. The Heritage Council may also acquire property under the provisions of the *Crown Land (Reserves) Act*, under which the properties are then reserved.

Forests Act 1958

Section 50 provides for the protection of sites and structures in reserved forest, and for the permanent or temporary excision from reserved forest of an area, including a historic area, to be used for public purposes and declared a reserve. The *Forests Act* also allows for appointment of committees of management and regulations for reserves within forests.

National Parks Act 1975

This Act makes provision for the management of national and other parks, and specified conservation areas, the appointment of a Director of National Parks and a National

Parks Advisory Council, and for park advisory committees. The Act also provides for specialised uses and activities in parks. Sections 17 and 18 allow for features of scenic, archaeological, ecological, geological, historic or other scientific interest in national and other parks to be controlled and managed for their preservation and protection. Section 22 provides for the proclamation of zones within parks, and these may be used to protect historic features. Section 32D relates to fossicking in parks, under conditions set within designated areas. Regulation 8 prohibits activities which excavate, remove, deface, damage or otherwise interfere with archaeological remains or relics.

Heritage Act 1995

This new Act brings together the statutory responsibilities of the *Historic Buildings Act 1981*, *Historic Shipwrecks Act 1981* and the non-Aboriginal aspects of the *Archaeological and Aboriginal Relics Preservation Act 1972*. It repeals the *Historic Buildings Act 1981*, and the *Historic Shipwrecks Act 1981*. It also provides for the appointment of a new ten member Heritage Council, and establishes a new Victorian Heritage Register which replaces and amalgamates the existing registers relating to historic buildings and structures, shipwrecks and historic archaeological sites. Buildings listed on the Government Buildings Register can now be transferred to the Victorian Heritage Register. Appeals against Council decisions may also be heard by the Administrative Appeals Tribunal. Where a place is listed on the Victorian Heritage Register, this Act overrides all other legislation relating to heritage in Victoria.

In regard to shipwrecks, the Act provides statutory protection for historic shipwrecks and relics, and in some cases for the declaration of protected zones.

Planning and Environment Act 1987

This Act provides local government with the power to control the development, including proposed building works or demolition, of buildings listed under planning scheme

provisions, except where the land is determined to have pre-existing use rights. Section 4(1)(d) outlines the objectives of planning in Victoria as they relate to heritage conservation.

Archaeological and Aboriginal Relics Preservation Act 1972.

Sections 15 and 16 allow for the declaration of archaeological areas, which can then be given restricted access and suitable management arrangements, though this has rarely been used for historical archaeological places in Victoria. Sections 21, 22 and 23 provide for the protection and reporting of relics, and for the requirement to obtain permits before any excavation activity. Under S.27, it is not an offence to pick up a portable relic which is exposed or lying on the surface of the land, but the relic cannot be damaged, and if removed from the site must be reported in writing to Heritage Victoria. Any person wishing to undertake activities which are likely to adversely affect identified historical archaeological sites is required to apply to Heritage Victoria for a permit.

Mineral Resources Development Act 1990

Section 114 of this Act relates to abandoned mining equipment, in that six months after a mineral extraction licence expires, remaining plant and machinery becomes the property of the Crown.

Section 45 states that a licensee must not work within 100 metres of a specified archaeological or Aboriginal site, or building or structure listed on the Victorian Heritage Register, Register of Government Buildings, or Register of the National Estate. Section 44 relates to land reserved or recommended for reservation as a conservation reserve by the Land Conservation Council.

Commonwealth Legislation

Historic Shipwrecks Act 1976

This Act affords protection to shipwrecks in Victoria, applying to wrecks located at low water mark and out to sea.

Australian Heritage Commission Act 1975

Section 4 of this Act defines National Estate places as "those places, being components of the natural environment of Australia, or the cultural environment of Australia, that have aesthetic, historic, scientific or social significance or other special value for future generations, as well as for the present community". Under S.30, the Commonwealth Government cannot take action which adversely affects places listed on the Register of the National Estate, unless there are no "feasible and prudent alternatives". If no alternative exists, then measures must be taken to minimise the effects of the action. The Australian Heritage Commission must be given the opportunity to consider and comment on any action proposed by the Commonwealth Government, which might significantly affect the National Estate values of a place.

Aboriginal and Torres Strait Islander Heritage Protection Act 1984.

This Commonwealth Act was developed with the specific purpose of increasing the decision-making role of Aboriginal communities in the protection and management of their cultural heritage (which includes archaeological sites and objects, traditional places of significance and intellectual property). Section 21U relates to the protection of Aboriginal sites and objects.

Regulations made under the Act define the boundaries of local Aboriginal communities, which have standing under the legislation.

All parts of Victoria are covered by these local community areas, and under the Act the communities have the right to request the Minister to make declarations to protect endangered Aboriginal places or objects.

These declarations may contain whatever conditions are considered necessary or appropriate to protect the site or place, and could include control of access or prohibition of disturbance.

APPENDIX XI

COMMON AND SCIENTIFIC NAMES OF PLANT SPECIES

austral bracken	<i>Pteridium esculentum</i>	myrtle beech	<i>Nothofagus cunninghamii</i>
Australian salt-grass	<i>Distichlis distichophylla</i>	Patterson's curse	<i>Echium lycopsis</i>
Bathurst burr	<i>Xanthium spinosum</i>	pink gum	<i>E. fasciculosa</i>
black box	<i>Eucalyptus largiflorens</i>	poa	<i>Poa</i> spp.
black wattle (late)	<i>A. mearnsii</i>	prickly Moses	<i>A. verticillata</i>
blackwood	<i>A. melanoxylon</i>	prickly spear grass	<i>Stipa stipoides</i>
broombush	<i>Melaleuca uncinata</i>	prickly tea-tree	<i>Leptospermum continentale</i>
brown stringybark	<i>E. baxteri</i>	red box	<i>E. polyanthemus</i>
bull mallee	<i>E. behriana</i>	red ironbark	<i>E. tricarpa</i>
buloke	<i>Allocasuarina luehmannii</i>	red stringybark	<i>E. macrorhyncha</i>
clover	<i>Trifolium</i> spp.	river red gum	<i>E. camaldulensis</i>
cypress pine	<i>Cupressus</i> spp.	rye grass	<i>Lolium</i> spp.
desert banksia	<i>Banksia ornata</i>	sand rocket	<i>Diplotaxis tenuifolia</i>
drooping she-oak	<i>Allocasuarina verticillata</i>	scent-bark	<i>E. aromaphloia</i>
early black wattle	<i>Acacia decurrens</i>	scotch thistle	<i>Onopordum acanthium</i>
curabbie	<i>E. globulus</i> ssp. <i>bicostata</i>	sedge	<i>Carex</i> spp.
forest wire grass	<i>Tetrarrhena juncea</i>	shining peppermint	<i>E. willisii</i>
golden wattle	<i>A. pycnantha</i>	shiny tea-tree	<i>L. turbinatum</i>
Grampians fringe- myrtle	<i>Calytrix sullivanii</i>	silver banksia	<i>B. marginata</i>
Grampians gum	<i>E. alpina</i>	silver wattle	<i>A. dealbata</i>
grey box	<i>E. microcarpa</i>	slender cypress pine	<i>Callitris gracilis</i>
hairy spinifex	<i>Spinifex sericeus</i>	slender thistle	<i>Carduus tenuiflorus</i>
hedge wattle	<i>A. paradoxa</i>	southern blue gum	<i>E. globulus</i> spp. <i>globulus</i>
horehound	<i>Marrubium vulgare</i>	spear grass	<i>Stipa</i> spp.
kangaroo grass	<i>Themeda triandra</i>	sugar gum	<i>E. cladocalyx</i>
long-leaf box	<i>E. goniocalyx</i>	swamp gum	<i>E. ovata</i>
lucerne	<i>Medicago sativa</i>	swamp yate	<i>E. occidentalis</i>
manna gum	<i>E. viminalis</i>	tutsan	<i>Hypericum androsaemum</i>
messmate	<i>E. obliqua</i>	variegated thistle	<i>Silybum marianum</i>
moonah	<i>M. lanceolata</i>	yellow box	<i>E. melliodora</i>
mountain ash	<i>E. regnans</i>	yellow gum	<i>E. leucoxydon</i>
mountain grey gum	<i>E. cypellocarpa</i>	yellow mallee	<i>E. incrassata</i>
		wallaby grass	<i>Danthonia</i> spp.