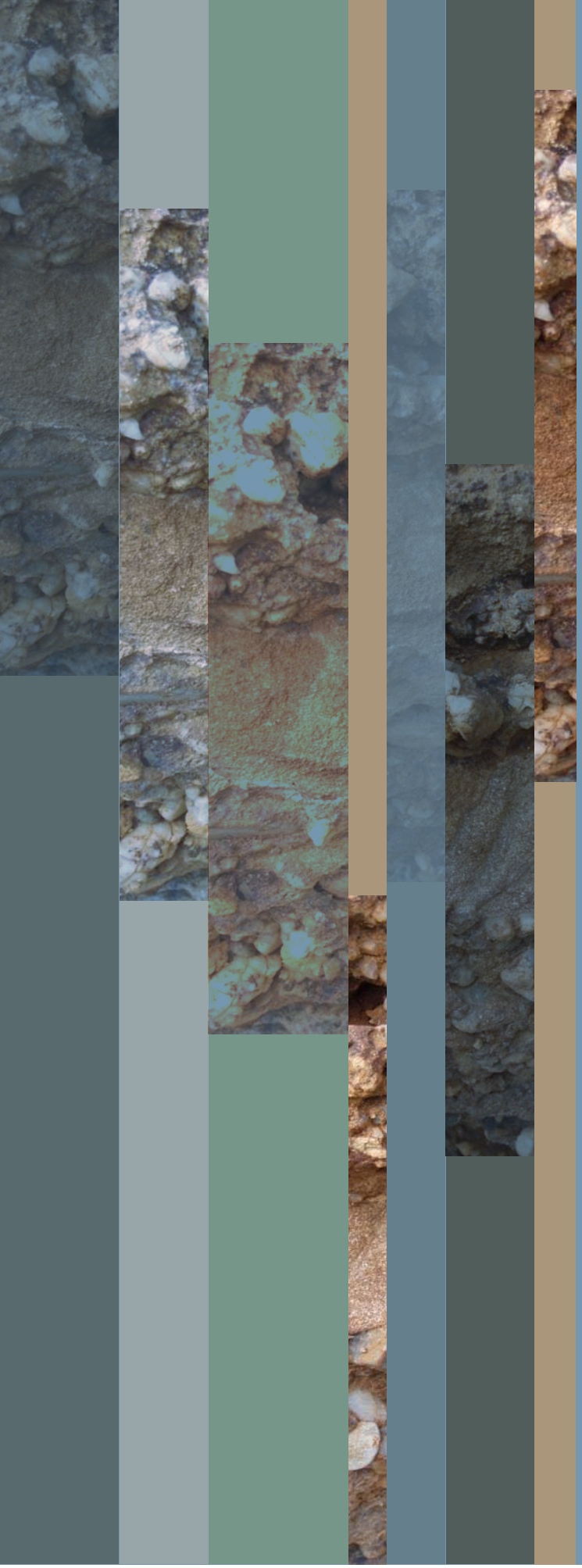

Investigation into additional prospecting areas in parks

REPORT

May 2013

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State Government Victoria

VEAC
Victorian Environmental Assessment Council

VICTORIAN ENVIRONMENTAL ASSESSMENT COUNCIL

The Victorian Environmental Assessment Council (VEAC) was established under the *Victorian Environmental Assessment Council Act 2001*. It provides the State Government of Victoria with independent advice on protection and management of the environment and natural resources of public land.

The five Council members are:

Hon. Phil Honeywood *(Chairperson)*

Mr Ian Harris

Dr Charles Meredith

Mr Ian Munro PSM

Ms Angela Reidy

Community Reference Group

The Community Reference Group for VEAC's Investigation into Additional Prospecting Areas in Parks is independently chaired by Mr Ian Voigt.

Membership consists of:

Mr Graham Atkinson, *Native Title Services Victoria*

Ms Rita Bentley, *Prospectors and Miners Association of Victoria*

Mr Maelor Himbury, *Victorian Environment Friends Network*

Mr Mick Harding, *Victorian Aboriginal Heritage Council*

Mr John Harris, *Field Naturalists Club of Victoria*

Mr Philip Ingamells, *Victorian National Parks Association*

Mr David Moore, *The Geological Society of Australia, Victoria Division*

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Victorian
Environmental
Assessment
Council

31 May 2013

The Hon. Ryan Smith MP
Minister for Environment and Climate Change
8 Nicholson St
East Melbourne VIC 3002

Dear Minister

INVESTIGATION INTO ADDITIONAL PROSPECTING AREAS IN PARKS

In accordance with the requirements of Section 23 of the *Victorian Environmental Assessment Council Act 2001*, the Victorian Environmental Assessment Council is pleased to submit to you the report on the Investigation into Additional Prospecting Areas in Parks and copies of each submission received in relation to the investigation.

The Council made full use of the one-month extension which you granted for this investigation. The extension enabled Council members and staff to ensure that all nine parks subject to this investigation were both visited and assessed.

I extend my appreciation to my fellow Council members and to VEAC staff for the time and effort that has gone into this investigation.

Yours sincerely

P. Honeywood

Phil Honeywood
Chairperson

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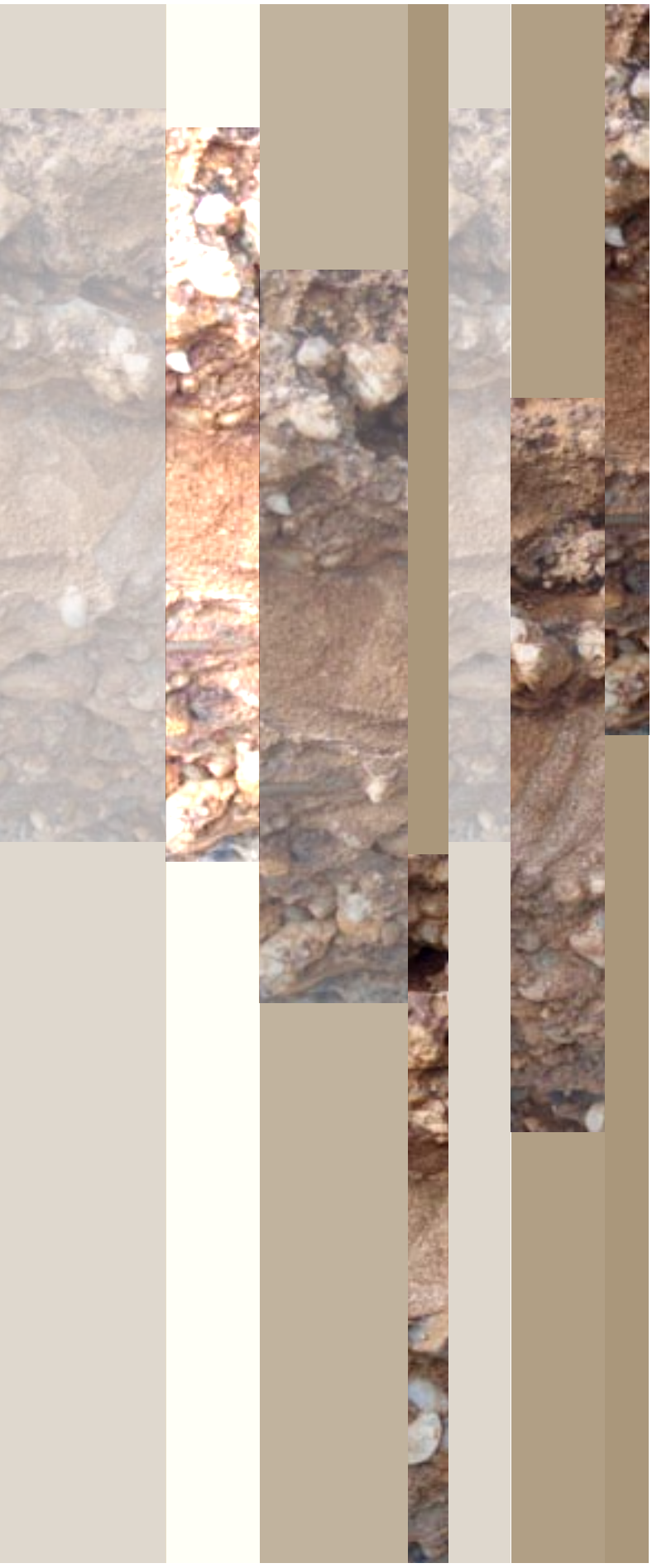


Investigation into additional prospecting areas in parks

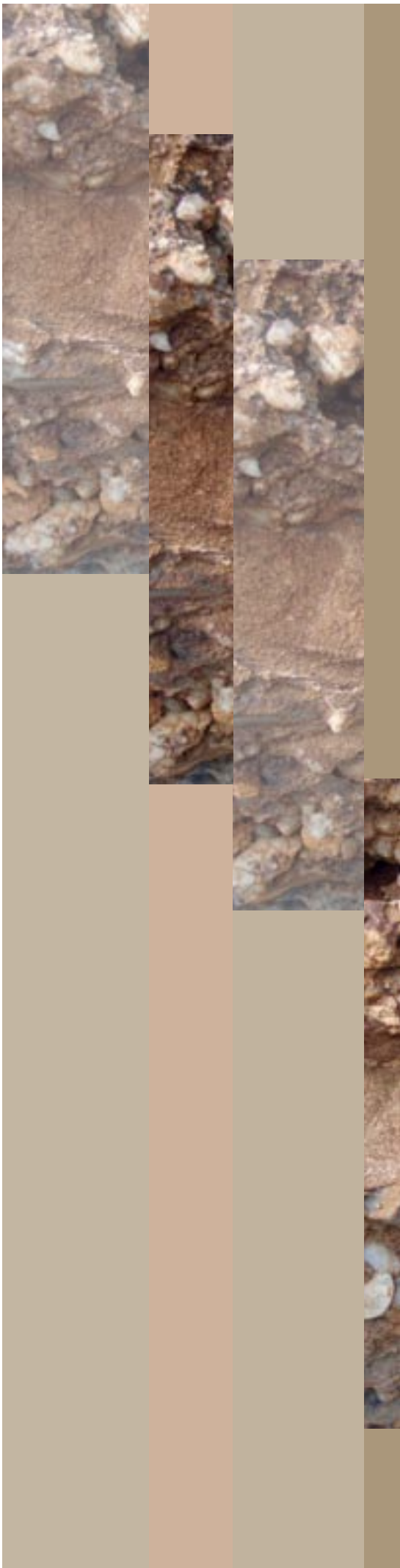
REPORT

May 2013

VEAC
Victorian Environmental Assessment Council

Acknowledgement of Country

The Victorian Environmental Assessment Council acknowledges and pays its respects to Victoria's Native Title Holders and traditional owners for the national parks and state park in the investigation area, and the rich cultural and intrinsic connection they have to Country. The Council also recognises and acknowledges the contribution and interest of other Aboriginal peoples and organisations in the management of land and natural resources.



FOREWORD

The Victorian Environmental Assessment Council's (VEAC) report on this investigation into additional prospecting areas in parks contains recommendations for eight additional areas in three parks.

Council members travelled to all nine parks specified in the terms of reference for consideration, examined legislation and policy, and gathered an extensive body of information and opinion from more than 950 written submissions and discussions with stakeholders, land managers, and the broader community.

This information highlights a number of important themes, key of which is the purpose of national parks. National parks are the foundation of efforts to protect biodiversity. The primary aim of national parks is to permanently preserve and protect the natural environment, and for enjoyment and appreciation through activities compatible with that purpose.

Another significant theme is the enjoyment that is derived from the recreational activity of prospecting. The Council heard from many individual prospectors about the health and social benefits they gained from prospecting for gold and gemstones. The Council also heard from individuals and organisations about many recreational and tourism uses of national parks that depend on the natural environment being protected from extractive uses such as prospecting.

While it is recognised that recreational prospecting can be low impact, it is clear that it can also result in damage to natural and cultural heritage values, especially in waterways, but also in other vulnerable environments.

Council believes that, while recreational activities that extract resources or may result in damaging impacts are able to be accommodated on public land such as state forest and some Crown land reserves, they do not sit well with the purposes of national and state parks. In determining additional areas for prospecting, Council therefore took into account the opportunities already available for prospecting on public land near the parks under consideration. Restrictions on the equipment that can be used for prospecting in waterways are also recommended to reduce potential impacts.

On behalf of the Council, I want to thank those who made written submissions, the individuals and organisations who met with the Council at meetings and site visits, and the Community Reference Group for the investigation. The Council appreciates all these efforts to provide VEAC with wide-ranging input based on first-hand experiences and concerns.

Phil Honeywood
Chairperson

STRUCTURE OF THE REPORT

Section 1

Introduces the investigation and explains the role of the Victorian Environmental Assessment Council (VEAC). It also outlines the terms of reference and other matters to be taken into account in the investigation, and describes the investigation timeline and process, including consultation and other sources of information.

Section 2

Provides an overview of national and state parks, including relevant legislation and policy, and briefly describes the eight national parks and one state park specified in the terms of reference.

Section 3

Provides background to recreational prospecting in Victoria, including a description of the activity and a brief overview of relevant legislation and policy.

Section 4

Discusses other relevant legislation and policy.

Section 5

Covers the major considerations taken into account by the Council, and reflects the issues raised most often in consultation, grouped under the following headings: natural environment, Aboriginal cultural heritage, non-Aboriginal cultural heritage, recreation, social and economic matters, purposes of national parks, park management and compliance, and safety and risk. It includes a summary of the views of stakeholders and the broader community presented to VEAC during the investigation.

Section 6

Reports on the process the Council undertook to develop its recommendations and presents the recommendations.

References
are provided as endnotes in the order of citation in the report.

Maps

are provided as a separate pdf accompanying this document.

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INTRODUCTION

1.1 Background to the investigation

On 7 August 2012, the Minister for Environment and Climate Change, Ryan Smith, and the then Minister for Energy and Resources, Michael O'Brien, announced that the Government would ask the Victorian Environmental Assessment Council (VEAC) to investigate "under what circumstances it is appropriate that greater access be provided for low impact prospecting, while still protecting the heritage and environmental values of our national parks".[1] Following consultation on the proposed terms of reference the Minister for Environment and Climate Change formally requested VEAC to conduct the investigation on 25 October 2012.

Recreational prospecting is the search for minerals (usually gold or gemstones) under a miner's right, using hand tools only for excavation. Recreational prospecting can take place in state forest, in many other Crown land areas, and in 16 parks under the *National Parks Act 1975.*

1.2 The Victorian Environmental Assessment Council

The *Victorian Environmental Assessment Council Act 2001* (VEAC Act) came into effect on 31 December 2001. This Act repealed the *Environment Conservation Council Act 1997* and established the Victorian Environmental Assessment Council (VEAC) to conduct investigations and make recommendations relating to the protection and ecologically sustainable management of the environment and natural resources of public land. VEAC is a successor organisation to the Land Conservation Council (LCC), established in 1971, and the Environment Conservation Council, which replaced the LCC in 1997.

The current five members appointed to VEAC are Hon. Phil Honeywood (Chairperson), Mr Ian Harris, Dr Charles Meredith, Mr Ian Munro PSM and Ms Angela Reidy. A brief biography of each of the Council members can be found on VEAC's website at **www.veac.vic.gov.au**. The Council is supported by a small research, policy and administrative secretariat. The VEAC Act requires the Council to consult with departments and public authorities, and requires departments and public authorities to give practicable assistance to the Council in carrying out investigations. VEAC papers and reports are, however, prepared independently.

The Council conducts its affairs in accordance with the VEAC Act. In particular, Section 18 specifies that "Council must have regard to the following considerations in carrying out an investigation and in making recommendations to the Minister –

a the principles of ecologically sustainable development;

b the need to conserve and protect biological diversity;

c the need to conserve and protect any areas which have ecological, natural, landscape or cultural interest or significance, recreational value or geological or geomorphological significance;

d the need to provide for the creation and preservation of a comprehensive, adequate and representative system of parks and reserves within the State of Victoria;

e the existence of any international treaty ratified by the Commonwealth of Australia which is relevant to the investigation;

f any agreement at a national, interstate or local government level into which the Government of Victoria has entered, or under which the Government of Victoria has undertaken any obligation in conjunction with the Commonwealth, a State, Territory or municipal council, which relates to the subject matter of the investigation;

g the potential environmental, social and economic consequences of implementing the proposed recommendations;

h any existing or proposed use of the environment or natural resources."

1.3 Terms of reference

The Minister for Environment and Climate Change, the Hon. Ryan Smith MP, requested the Victorian Environmental Assessment Council (VEAC) to undertake the Investigation into Additional Prospecting Areas in Parks on 25 October 2012. The terms of reference for the investigation are on the page opposite. The *Victorian Environmental Assessment Council Act 2001* (the VEAC Act) specifies that, prior to the Minister requesting VEAC to conduct an investigation the Minister must publish a notice of the investigation in newspapers circulating generally throughout Victoria specifying the proposed terms of reference for the investigation and allowing a notification period of 28 days. The process prior to VEAC receiving the request is coordinated by the Department of Sustainability and Environment. A notice of the proposed terms of reference for an investigation into additional prospecting areas in parks was published in newspapers on 9 and 15 August 2012.

The public submission period on the proposed terms of reference ran until 14 September 2012. Section 16(2) of

the Act states that within 7 sitting days of each House of Parliament after the close of the submissions period, each House must be provided with a statement of how any comments received on the proposed terms of reference have been dealt with. The statement was tabled in Parliament on 25 October 2012.

The tabling statement records that 11 submissions were received on the proposed terms of reference during the submission period. Eight were from individuals and one each was received from the Friends of Mallacoota, Native Title Services Victoria and the Prospectors and Miners Association of Victoria. Nine submissions opposed the proposed investigation. One submission supported the proposed investigation and one requested specific changes to the terms of reference but did not oppose or support the investigation. The Minister's tabled response to submissions says that "the purpose of the investigation states that VEAC is to consider 'which areas (in general terms) of the following parks could be made available for recreational prospecting'. This statement is considered to allow scope for VEAC to find that some areas should not be made available".

In March 2013 the Council sought and was granted an extension of one month to complete the investigation. The Council's program of site visits was affected by the bushfires in eastern Victoria, and the short extension of time gave Council members the opportunity to visit all the parks specified in the terms of reference and conduct additional consultation with key stakeholders if required.

1.4 Matters to be taken into account

As indicated in the terms of reference, the Council must also take into account the relevant State Government policies, strategies and Ministerial statements and agreements under the *Traditional Owner Settlement Act 2010* and the *Conservation, Forests and Lands Act 1987* relating to the specified parks.

These matters are discussed in more detail in sections 2, 3 and 4.

Terms of reference

This notice is made pursuant to section 15 of the *Victorian Environmental Assessment Council Act 2001.*

The Minister for Environment and Climate Change hereby requests the Victorian Environmental Assessment Council (the Council) to carry out an investigation into prospecting* in specified parks under the *National Parks Act 1975*.

The purpose of the investigation is to make recommendations on which areas (in general terms) of the following parks could be made available for recreational prospecting: Alpine, Baw Baw, Croajingolong, Errinundra, Lake Eildon, Lind, Mitchell River and Yarra Ranges national parks and Lerderderg State Park.

In addition to the considerations in section 18 of the *Victorian Environmental Assessment Council Act 2001,* the Council must take into consideration that the overall objective of the investigation is to increase the number of parks under the *National Parks Act 1975* where prospecting may be permitted.

The Council is required to publish information to assist in the making of submissions on the notice of investigation.

In addition to the considerations in section 18 of the *Victorian Environmental Assessment Council Act 2001,* the Council must take into account the following matters:

(i) relevant State Government policies, strategies and Ministerial statements; and

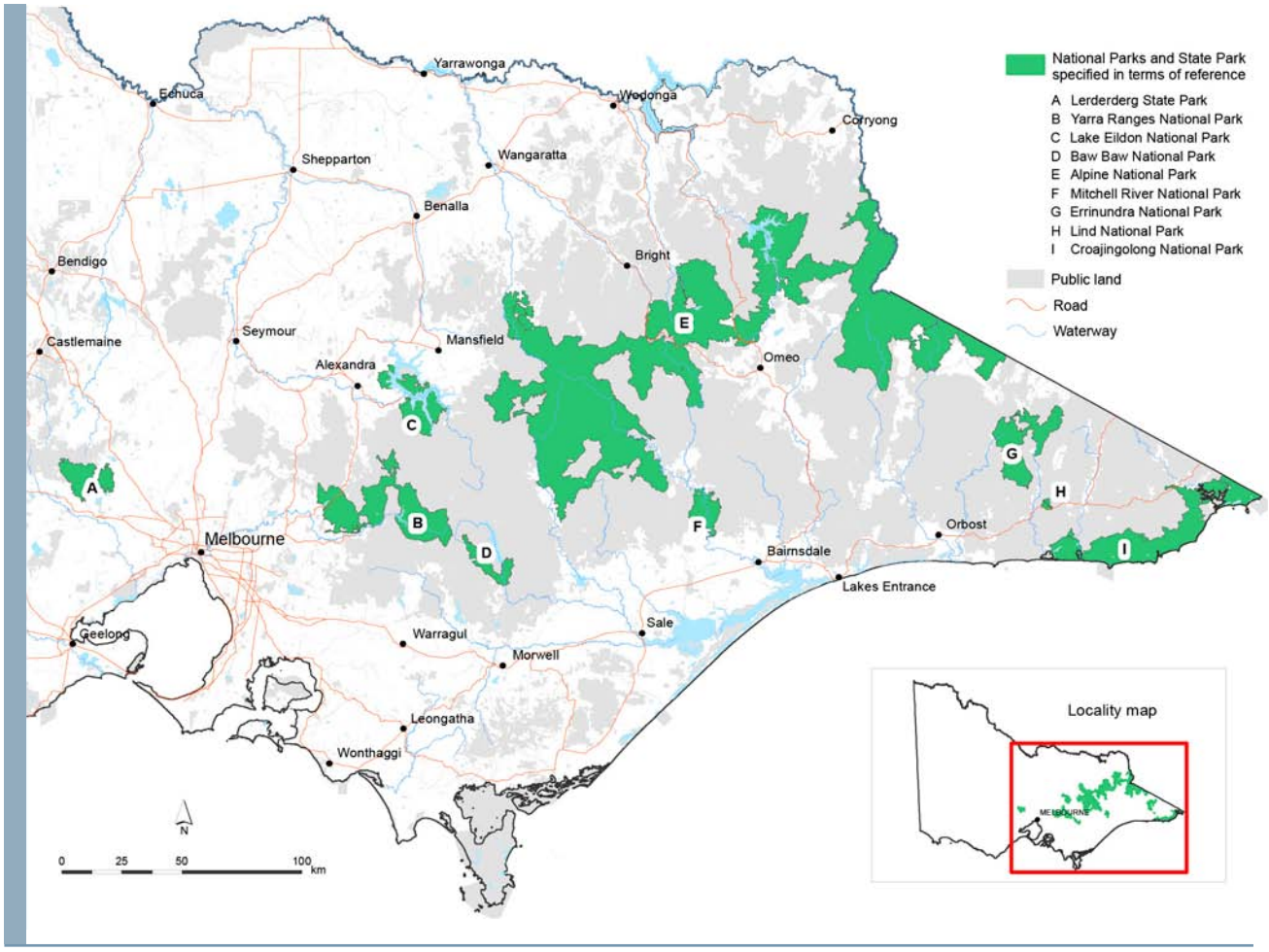
(ii) agreements under the *Traditional Owner Settlement Act 2010* and the *Conservation, Forests and Lands Act 1987* relating to the specified parks.

The Council must report on the completed investigation by 30 April 2013**.

**Prospecting means searching for minerals or gemstones under a miner's right or a tourist fossicking authority as defined in the Mineral Resources (Sustainable Development) Act 1990.*

***In March 2013, the Minister extended the time for the completion of the investigation until 31 May 2013.*

Figure 1.1
Parks specified in the terms of reference for the investigation



1.5 The investigation process

The process for this investigation was undertaken as specified in the VEAC Act and the terms of reference for the investigation. The process and timelines are shown in figure 1.2 below.

Figure 1.2
Investigation process and timelines

1.6 Consultation

For every investigation, the VEAC Act requires VEAC to publish a notice of investigation and receive submissions for a minimum period of 60 days (if the Minister does not specify a time). Because of the short timeframe for the investigation, the Minister's letter of request to VEAC specified that a discussion paper and a draft proposals paper were not to be prepared; however, the terms of reference required the Council to publish information to assist in the making of submissions on the notice of investigation.

In December 2012, VEAC called for submissions by advertising widely in statewide, local and regional media, distributing postcards to more than 60 locations in the vicinity of the parks specified in the terms of reference, and directly notifying a range of interested organisations and individuals. In December 2012 to January 2013 VEAC prepared material which was available on its website or printed by request comprising: a four-page flyer with information about the investigation and how to make a submission, a five-page Q&A leaflet, and overviews for each of the nine parks.

In addition to the formal submission period, consultation included advice from a Community Reference Group, meetings and discussions with stakeholders and land managers, and related field trips by VEAC.

1.6.1 Written submissions

Written submissions are one of the key processes used by VEAC to seek community views on issues associated with public land. The single submission period for this investigation commenced on 14 December 2012 and closed on 18 February 2013.

VEAC received some 950 submissions following publication of the notice of investigation, almost 900 of which were from individuals. The remaining submissions were from organisations including prospecting groups, environment groups, friends groups, businesses, Aboriginal groups, and Victorian government departments and agencies. Submissions can be viewed at www.veac.vic.gov.au.

Approximately 125 submissions were received from the Gippsland and Central Goldfields regions, with another 375 submissions received from other parts of regional Victoria. Of note is that more than 150 submissions were sent from interstate or overseas, suggesting a wide-ranging interest in the investigation.

The submissions provided VEAC with valuable insights into community views on the issue of additional prospecting in national and state parks. While most submissions expressed general views on the investigation purpose, approximately 35 submissions included proposals concerning specific public land areas or parks.

1.6.2 Community Reference Group

VEAC established a Community Reference Group (CRG) for this investigation in accordance with section 13 of the VEAC Act. Members of this group represented a broad range of interests related to the investigation. The CRG members are listed on the inside front cover of this report. The CRG met twice during the investigation: in December 2012 and in March 2013.

The CRG's deliberations were conveyed to Council through meeting notes and reports and through a briefing from the independent Chairperson.

1.6.3 Meetings and site visits

Council members and VEAC staff visited each of the nine parks specified in the terms of reference between December 2012 and April 2013. In December 2012, the Council also visited prospecting areas in Central Goldfields parks and reserves, and a prospecting supplies shop in Maryborough. In February 2013, the Council met with the Prospectors and Miners Association of Victoria (PMAV) at the Latrobe River in west Gippsland, where PMAV members demonstrated metal detecting and panning and sluicing activities. In March 2013, the Council held a further meeting with PMAV representatives in Melbourne, and met with representatives of environment groups at Warrandyte State Park. The Council is very grateful for the opportunity to inspect areas at first hand and to have on-site discussions with land managers and stakeholders.

1.7 Commissioned work

Rhithroecology Pty Ltd was commissioned to carry out a brief review to identify, as far as possible, potential ecological impacts that may occur as a result of prospecting in streams in the specified parks, based on published scientific literature and professional judgement.

NATIONAL AND STATE PARKS 2

Victoria's national and state parks comprise the majority of the state's protected areas system. National and state parks are managed for the same objectives under the *National Parks Act 1975*. They are primarily set aside to conserve and protect natural ecosystems and provide for public enjoyment, education and inspiration in natural environments. Henceforth in this report a reference to national parks should be read as including state parks under the National Parks Act.

2.1 International and national context

Protected areas, including national parks, are the foundation of most international and national biodiversity conservation strategies, and are supported by international instruments such as the Convention on Biological Diversity (ratified by the Australian government).[2]

The summary below describes the purposes of protected areas and is drawn from the work of the global organisation International Union for Conservation of Nature (IUCN), founded in 1948, and one of its six commissions, the World Commission on Protected Areas.

The IUCN developed criteria for national parks in 1969 to 1971, which emphasised that the protection of nature takes precedence and that exploitation of natural resources (with some qualifications) was not allowed. There are many forms of recreation that are compatible with nature conservation and these are generally encouraged in national parks.

Purposes of protected areas

Protected areas are set aside to maintain functioning natural ecosystems, to act as refuges for species and to maintain ecological processes.

They act as benchmarks against which we understand human interactions with the natural world. People benefit from the opportunities for recreation and renewal available in national parks and wilderness areas, from the genetic potential of wild species, and the environmental services provided by natural ecosystems, such as provision of water.

Increasingly they are recognised key components in climate change mitigation strategies. Many national parks are also essential for vulnerable human societies and conserve sites of great cultural and spiritual value. Protected areas represent a commitment to future generations.

Source: Dudley, N (ed.) 2008 Guidelines for applying protected area management categories. Gland, Switzerland. IUCN.

2.2 National parks in Victoria

While there were small reservations of land at Fern Tree Gully in the Dandenong Ranges in 1882 and at Tower Hill in 1892, Wilsons Promontory is Victoria's oldest national park, initially reserved in 1898 following deputations by the Field Naturalists Club of Victoria to the Minister of Lands.[3] The national park was permanently reserved in 1908, followed by the reservation of national parks at Mallacoota Inlet, Wyperfeld and Wingan Inlet the following year.

Prior to the establishment of the Land Conservation Council (LCC) in 1971, 3 per cent of the state was protected in parks and conservation reserves. By 1988, this had increased to 10 per cent of Victoria.[4] Today there are 45 national parks and 25 state parks in Victoria as well as wilderness parks, marine national parks and marine sanctuaries, and other parks and conservation reserves, making up approximately 17 per cent of Victoria.

2.2.1 National parks legislation

The objectives for national parks and state parks are specified in section 4 of the *National Parks Act 1975* (see extract below). The Act provides that, subject to preservation and protection of the natural environment and other features, the primary use of national parks and state parks is for enjoyment, recreation and education.

Extract from the National Parks Act

The objects of this Act are to –

(a) to make provision, in respect of national parks, state parks … —

(i) for the preservation and protection of the natural environment including wilderness areas and remote and natural areas in those parks;

(ii) for the protection and preservation of indigenous flora and fauna and of features of scenic or archaeological, ecological, geological, historic or other scientific interest in those parks; and

(iii) for the study of ecology, geology, botany, zoology and other sciences relating to the conservation of the natural environment in those parks; and

(iv) for the responsible management of the land in those parks;

…

(c) to make provision in accordance with the foregoing for the use of parks by the public for the purposes of enjoyment, recreation or education and for the encouragement and control of that use.

Management of non-conforming uses in national parks

The National Parks Act has, as a paramount aim, the obligation to 'preserve and protect' the natural environment. The *National Park (Park) Regulations 2003* support this by providing penalties for activities such as disturbing, defacing, digging and removing vegetation and soils. Specific provisions must therefore be made in the National Parks Act for uses that do not conform to these rules, such as timber harvesting, mining, grazing and recreational prospecting. Such uses, whether 'once-off' or ongoing, are often referred to as 'non-conforming uses' and are exceptions to the management regime of preservation and protection of the natural environment.

2.2.2 Reference areas, heritage rivers, wilderness areas and other land use overlays

Reference areas

Reference areas are small areas of public land containing viable samples of one or more land types that are relatively undisturbed. Such areas are set aside in perpetuity under the *Reference Areas Act 1978* to maintain natural systems as a scientific reference to enable comparative study of modified and unmodified lands. A management plan for each reference area typically also defines a buffer area in which restrictions are placed on land uses that may have a detrimental effect on the reference areas.

Within reference areas, only activities associated with protecting the natural processes of the area, emergency operations and approved research are permitted. Grazing, mineral exploration, mining, harvesting of forest produce, apiculture, quarrying, educational activities and recreational activities are specifically prohibited in reference areas. Access is restricted to authorised researchers and people undertaking management tasks and emergency operations, as well as those with Ministerial approval.

There are 144 reference areas in Victoria, 31 of them in the nine parks specified in the terms of reference for this investigation.

Heritage rivers and natural catchment areas

Victoria's heritage rivers are rivers with outstanding values for current and future generations, and are protected under the *Heritage Rivers Act 1992*. The Land Conservation Council's (LCC) Rivers and Streams Special Investigation (1991) systematically studied the biodiversity, recreational, cultural heritage and scenic values of Victoria's rivers. Heritage rivers were nominated by the LCC on the basis of natural values, cultural heritage, scenic landscape or recreation values.

Natural catchment areas are also protected under the *Heritage Rivers Act 1992* which requires that the area is maintained in an essentially natural condition. The Act designates a number of activities that must not be carried out in a natural catchment area including the clearing of indigenous flora, mining or mineral exploration or extractive industries, and the making of new roads or the upgrading of existing roads.

There are 18 heritage river areas in Victoria. All or part of 11 of these occur in five parks of the nine specified in the terms of reference for this investigation. Of Victoria's 26 designated natural catchment areas, 11 occur in four parks of the nine specified in the terms of reference for this investigation.

Wilderness areas and remote and natural areas

Wilderness areas were established in Victoria largely as a result of the LCC's Wilderness Special Investigation (1991) into the identification, reservation and use of wilderness areas and other areas of high wilderness quality in Victoria. Wilderness areas were defined as 'a large area with landforms and native plant and animal communities relatively unaltered or unaffected by the influence of the European settlement of Australia'.

The LCC recommended 15 areas in Victoria to be protected and managed as new wilderness areas, in addition to the two existing areas (at the time) of Big Desert and Avon. It also recommended three additions in Victoria to existing wilderness areas of New South Wales, as well as additions and minor amendments to the boundaries of the two existing Victorian wilderness areas.

The LCC also identified 24 other areas with remote and natural attributes. The LCC's recommendations, varied by Government, were implemented through amendments to the *National Parks Act 1975*. In addition to creating one new wilderness park and adding to the two existing wilderness parks, new schedules creating 20 wilderness zones and 22 remote and natural areas in national parks were added to the Act along with new provisions to provide a clear basis for the protection and management. The objectives for wilderness parks and wilderness zones are for their protection, enhancement and management as wilderness so as to maximise the extent to which they are undisturbed by the influences of the European settlement of Australia, and for their use and enjoyment for inspiration, solitude and appropriate self-reliant recreation. Generally wilderness parks and wilderness zones must be managed to ensure that there are no roads, structures or installations; no commercial activity or development; and no use of any form of motorised or mechanical transport.

Remote and natural areas must be managed in a manner that will protect and preserve the natural environment of the area. Activities that must not take place in a remote and natural area include making or upgrading of vehicular tracks, construction of new structures or facilities, new works including excavation and earth works, and destruction, removal and lopping of vegetation.

Eight of the 20 wilderness zones are in two parks of the nine specified in the terms of reference for this investigation. Eleven of the 22 remote and natural areas are in four parks of the nine specified in the terms of reference for this investigation.

2.2.3 National and international designations

National Heritage List

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* establishes the National Heritage List, which includes natural, Indigenous and historic places that are of outstanding heritage value to the nation.

Two national parks specified in the terms of reference for this investigation – the Alpine National Park and the Baw Baw National Park – are included on the National Heritage List as part of the Australian Alps National Parks and Reserves designation.

Biosphere reserves

'Biosphere Reserve' is an international designation made by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) on the basis of nominations submitted by countries participating in the Man and the Biosphere Programme (MAB).[5] MAB was launched in 1971 to promote a greater understanding and provision of knowledge and skills to support sustainable relationships between people and their environment. A biosphere reserve includes one or more protected areas and surrounding lands that are managed to combine both conservation and sustainable use of natural resources. There are currently 610 biosphere reserves in 117 countries.[6]

Australia currently has 14 biosphere reserves, four in Victoria. One of the parks specified in the terms of reference for this investigation is part of a biosphere reserve: Croajingolong National Park.

2.2.4 Park management

In Victoria, management of all national and state parks is undertaken by Parks Victoria, a separate statutory authority established in 1998 and reporting to the Minister for Environment and Climate Change. Under the *Parks Victoria Act 1998*, Parks Victoria's responsibilities are to provide services to the state and its agencies for the management of parks, reserves and other land under the control of the state. Parks Victoria is responsible for managing all areas under the *National Parks Act 1975* – approximately 3.45 million hectares in 2012.

Parks Victoria's relationships and responsibilities for the provision of services to the state are set out in a Management Services Agreement between Parks Victoria, the Secretary to DSE and the Minister for Environment and Climate Change. Parks Victoria's services are delivered within state policy and contractual agreements, and in accordance with statutory responsibilities and statutory delegations.

Management planning

The National Parks Act requires that the Secretary to the Department of Environment and Primary Industries prepare a plan of management for each national and state park. The Secretary to the Department of Environment and Primary Industries delegates this responsibility to Parks Victoria within the Management Services Agreement.

Park management plans articulate the vision, goals, outcomes, measures and long-term strategies for parks. They are consistent with legislation and policies, and are prepared in consultation with the community. When approved, plans guide future management of each park.

Management plans have a 15-year time frame and adopt a landscape-wide approach, so they consider matters bordering the park that may influence how a park operates. Zones and overlays provide further prescriptions for management within defined areas. Some zones reflect areas defined through legislation, such as reference areas and heritage river areas, while others are set through the management planning process, such as conservation zones.

Management planning involves a careful consideration of the environmental and cultural values in various parts of the parks, the capacity of parks to accommodate particular recreational uses, whether recreational uses can co-exist or whether they conflict with each other and need to be separated, and the level of facilities and infrastructure that may be required. Management zones are applied accordingly.

Although Parks Victoria is responsible for the overall management of parks, other agencies are responsible for planning, managing or regulating certain activities in parks and on other public land (see section 4).

Aboriginal joint management

Joint management is a term used to describe a formal partnership arrangement between traditional owners and the state where both share their knowledge to manage specific national parks and other protected areas.

Joint management recognises the ongoing connection of traditional owners to the land. In Victoria, joint management is established under the terms of the *Traditional Owner Settlement Act 2010.* This Act provides for agreements to be negotiated between the state and traditional owner groups to enable Aboriginal cultures to be recognised, in particular the recognition of the special relationship of Aboriginal peoples with their land; to recognise traditional owner rights, and for rights to be conferred on identified traditional owner groups. The Act allows for parks and reserves to be returned to Aboriginal ownership under a form of land title called Aboriginal Title.

Traditional Owner Land Management Boards (TOLMBs) are established to oversee the management of parks covered by joint management arrangements. The TOLMBs are made up of traditional owners (majority), government representatives and members of the broader Victorian community.

As part of the Gunaikurnai Recognition and Settlement Agreement, the state entered into a Traditional Owner Land Management Agreement under the *Conservation, Forests and Lands Act 1987* to establish the Gunaikurnai Traditional Owner Land Management Board to jointly manage ten national parks and reserves in their agreement area. Mitchell River National Park is one of the jointly managed parks and is also one of the ten areas over which it has been agreed that Aboriginal Title will be granted to the Gunaikurnai People under the *Traditional Owner Settlement Act 2010.*

Under the Traditional Owner Land Management Agreement, one of the functions of the board is to make submissions on matters affecting the land to which the agreement applies. The board also has a function under the *Conservation, Forests and Lands Act 1987* to prepare a draft management plan for the park, consistent with the *National Parks Act 1975.*

2.3 National and state parks specified in the terms of reference

This section provides an overview of each of the eight national parks and one state park specified in the terms of reference for the investigation.

More detailed information is available on VEAC's website and at http://parkweb.vic.gov.au.

2.3.1 Alpine National Park (661,775 hectares)

The Alpine National Park extends from central Gippsland to the New South Wales border where it adjoins Kosciuszko National Park. Within the park are a variety of alpine landscapes, including Victoria's tallest mountain peaks, escarpments and grassy high plains, and the headwaters of many of Victoria's major rivers and streams. The park can be generally described as steep, rugged with significant remote and wilderness sections. The ski resorts of Hotham, Falls Creek, Mount Buller and Mount Stirling adjoin the park and most of the park is contiguous with state forest. Also adjoining the park are a series of historic and cultural features reserves that cover former mining settlements and workings (Howqua Hills, Grant, Mount Wills, Mt Murphy).

Through their cultural traditions, the Bidwell-Maap, Dhudhuroa, Gunaikurnai, Yaitmathang, Taungurung and Nindi-Ngujarn Ngarigo Monero identify parts of the Alpine National Park as their traditional Country. The European history of the park includes exploration, tourism, timber harvesting, gold mining and fire, and the park contains a range of values associated with these activities and events.

The park is part of the broader Australian Alps, which are considered to be of international significance, and to have world heritage potential because of their outstanding natural values.[7] The Australian Alps, including the Alpine National Park, were included on the National Heritage List in 2008.

The park contains six wilderness zones and eight remote and natural areas under the *National Parks Act 1975*, part or all of six heritage rivers and six natural catchment areas under the *Heritage Rivers Act 1992*, and 16 reference areas under the *Reference Areas Act 1978*. Information about natural values can be found on VEAC's website.

2.3.2 Baw Baw National Park (13,530 hectares)

Baw Baw National Park, north of the Latrobe Valley, consists of a distinctive sub-alpine plateau and surrounding forested uplands. It contains the headwaters of the Tyers River, and tributaries of the Thompson and Aberfeldy Rivers which provide water to Melbourne and towns surrounding the park. Although similar in some respects, the park is considerably isolated from the rest of Victoria's high country and its flora has similarities with Tasmania's vegetation. The park is surrounded mostly by state forest and also by the Walhalla Historic Area in the south-east (covering parts of the major goldfields of the Aberfeldy – Walhalla area) and the Baw Baw Alpine Resort.

Baw Baw National Park is located about 120 kilometres east of Melbourne and 50 kilometres north of the Latrobe Valley.

The park is part of the broader Australian Alps, which are considered to be of international significance, and to have world heritage potential because of their outstanding natural values.[8] The Australian Alps, including the Baw Baw National Park, were included on the National Heritage List in 2008. The park contains one remote and natural area, one reference area, and all or part of two heritage rivers. Information about natural values can be found on VEAC's website.

Through their cultural traditions, the Gunaikurnai identify the park as their traditional Country. The park has a history of use since European settlement, including grazing, gold mining, timber harvesting and tourism.

2.3.3 Croajingolong National Park (88,500 hectares)

Croajingolong National Park incorporates approximately 100 kilometres of Victoria's far-eastern coastline adjacent to the New South Wales border. The park includes coastal river systems, tidal inlets, estuaries, coastal sand dunes, rocky cliffs, lakes and ranges, with extensive remote and wilderness environments. Croajingolong National Park is bordered by state forest to the north, Cape Conran Coastal Park to the west and Bass Strait to the south, including the Point Hicks and Cape Howe marine national parks.

The park is located approximately 450 kilometres east of Melbourne in far East Gippsland. Surrounding towns are Bemm River at the western end and Mallacoota in the east.

The park has four reference areas and two natural catchment areas. More than 30 per cent of the park is in two wilderness zones encompassing Sandpatch and Cape Howe wilderness, plus the Rame Head remote and natural area, to be used for self-reliant recreation. Together with Nadgee Nature Reserve in New South Wales, the park forms the Croajingolong National Park Biosphere Reserve – one of only four in the state. Information about natural values can be found on VEAC's website.

Through their cultural traditions, the Bidwell-Maap and Nindi-Ngujarn Ngarigo Monero identify parts of the park as their traditional Country. The park has a history of European use, including grazing, gold mining, timber harvesting and tourism.

2.3.4 Errinundra National Park (39,870 hectares)

Extending from Mt Ellery across the Errinundra Plateau to the Coast Range, Errinundra National Park contains Victoria's largest stands of rainforest, encompassing both cool temperate and warm temperate rainforests. The park contains three granite outcrops, Mt Ellery, Mt Morris and Cobbs Hill and also features old growth eucalypt forest, diverse arboreal fauna and undisturbed catchments. The park is largely surrounded by state forest, joining the Snowy River National Park in the north and with a few small sections abutting private land. The park is located in east Gippsland, approximately 373 kilometres east of Melbourne.

Significant features of the Errinundra National Park are the undisturbed natural catchment areas and the rivers and streams, including one remote and natural area, and part of the Bemm, Goolengook, Arte and Errinundra Rivers Heritage Area. There are also three reference areas. Information about natural values can be found on VEAC's website.

Through their cultural traditions, the Bidwell-Maap and Nindi-Ngujarn Ngarigo Monero identify the Errinundra National Park as their traditional Country. European history is evident in the park through mine shafts, fences and machinery used for grazing, mining and timber harvesting.

2.3.5 Lake Eildon National Park (27,750 hectares)

Lake Eildon National Park surrounds the shores of Lake Eildon and comprises the former Fraser National Park and Eildon State Park. The park is a major conservation area and popular destination for a range of recreational activities associated with Lake Eildon. The park contains flora and fauna not well reserved elsewhere, including Box Woodland and foothill forests. The park largely adjoins private land with some state forest located to the south and north of the park. The park is located 145 kilometres north east of Melbourne.

The Taungurung people's traditional Country extends across Lake Eildon National Park. The park has an extensive European history, relating to gold mining, pastoral development and the construction of Lake Eildon.

The park contains two reference areas and part of the Big River Heritage Area. Information about natural values can be found on VEAC's website.

2.3.6 Lerderderg State Park (20,185 hectares)

Lerderderg State Park encompasses scenic and geological gorge formations surrounding the Lerderderg River as well as the volcanic cone of Mount Blackwood. The separate block to the east called the Pyrete Range also forms part of the park. The park is known for its remote setting, and the 300 metre deep Lerderderg River gorge is a dominant feature. Private land abuts the park to the south and the Wombat State Forest abuts to the north and west.

The Lerderderg River is a proclaimed heritage river and there are three reference areas in the park. Detailed information about natural values can be found on VEAC's website.

The Wurundjeri and the Wathaurung are Aboriginal tribes known to have lived in the area. European occupation of the area commenced during the 1830s when squatters took up large pastoral runs around Bacchus Marsh. Gold was first discovered at what is now the township of Blackwood, in 1851.

2.3.7 Lind National Park (1370 hectares)

Lind National Park was established in the 1920s, and is one of Victoria's oldest and smallest national parks. It occupies a remnant of warm-temperate rainforest encompassing a tributary of the Bemm River. The park is surrounded by state forest.

Lind National Park is situated adjacent to the Princes Highway, between Orbost and Cann River, near Club Terrace. The park is bisected by the Euchre Valley Nature Drive which, until recently, was the main access to the park, but is currently closed to vehicle traffic.

Through their cultural traditions, the Bidwell-Maap and Nindi-Ngujarn Ngarigo Monero identify the park as their traditional Country. The park has had a long history of European use, including grazing, gold mining, timber harvesting and tourism. There are shafts and relics reflecting a history of mining around Olive Branch Creek (Early Bird Extended Mine). The adjacent town of Club Terrace was established as a result of goldmining in the 1890s.

2.3.8 Mitchell River National Park (14,365 hectares)

Mitchell River National Park extends along both sides of the Mitchell River from the Tabberrabbera district near Dargo, to Iguana Creek. The park is known for its spectacular scenery and remote character, including the rugged and remote Mitchell River gorge, the rainforest fringing the river and tributaries, and its Aboriginal and European history. Except for small areas in the southern and northern boundaries, the park is surrounded by state forest. Former farmland around Tabberabbera, part of which was the site of a proposed dam, has been incorporated into the park. The Mitchell River is the main water supply for the towns of Bairnsdale and surrounding districts.

The park is jointly managed with the Gunaikurnai people and will be granted as Aboriginal title as part of an agreement under the *Traditional Owner Settlement Act 2010.*

The park is located in east Gippsland, approximately 25 kilometres north of the Princes Highway between Stratford and Bairnsdale. The park includes part of the Mitchell and Wonnangatta Rivers Heritage Area. Information about natural values can be found on VEAC's website.

The park has a rich Aboriginal cultural history which tells of conflict between different tribes as well as Europeans, dreaming stories, journeys, food gathering and community life. Two clans of the Gunaikurnai Tribe inhabited the park; the Brabuwooloong east of the Mitchell River and the Brayakooloong to the west. The Den of Nargun is one of many places of great cultural significance to the Gunaikurnai people, especially Aboriginal women.

Grazing runs were established on the undulating country between Dargo and Tabberabbera between 1845 and 1847. In 1857 gold was discovered in the foothills. The alluvial fields along the Mitchell River and its tributaries were worked from the late 1850s to early last century. Reef mining began in the area in the 1860s.

2.3.9 Yarra Ranges National Park (77,190 hectares)

Yarra Ranges National Park is located within Victoria's Central Highlands and encompasses the headwaters of the Yarra, O'Shannassy and Taggerty rivers. It also encompasses the major closed catchment area for Melbourne's water supply. The park is renowned for its tall trees, old growth forest, fern gullies, and snow play areas. State forest abuts the park on all sides, except for the Lake Mountain Alpine Resort. The park is bordered by the townships of Healesville, Warburton, Narbethong and Marysville.

The Designated Water Supply Catchment Area of the Yarra Ranges National Park is a component of Melbourne's water supply system. More than 80 per cent of the park is zoned for conservation and water supply and is largely closed to public access to protect water quality. There are four reference areas in the park, and one natural catchment area. Information about natural values can be found on VEAC's website.

The park lies within the lands traditionally associated with the Wurundjeri people (south of the Great Dividing Range) and the Taungurung people (north of the Range). By the 1840s squatters had occupied surrounding areas but did not permanently settle the densely forested terrain of the Yarra Ranges. Goldfields opened up around the Warburton to Reefton Spur area in the 1850s and 1860s. The Yarra Track provided access to the Woods Point goldfields via Healesville, Fernshaw and Cumberland. The tall trees of the Yarra Ranges attracted wide interest and, from the 1880s, townships such as Marysville, Fernshaw and Warburton became popular tourist destinations.

Diversions for Melbourne's water supply commenced in 1886 with a weir on the Watts River, followed by the O'Shannassy and Maroondah Dams (1920s) and the Upper Yarra Dam (1957). The closed catchment policy required the removal of Fernshaw township, which was in the Maroondah Reservoir catchment, in 1885 and the cessation of most human activities in the catchments.

RECREATIONAL PROSPECTING 3

Commercial and recreational fossicking or prospecting for minerals has probably been carried out on most areas of public land in Victoria since European settlement. The search for, and extraction of, minerals such as gold has been important in the history and development of the state. Victoria is one of the richest gold provinces in the world. Since the first discovery in 1851, the state has yielded about 80 million troy ounces, making up about 2 per cent of all the gold ever mined throughout world history. Victoria is famous for large masses of gold, known as nuggets.[9] In 2012, in recognition of its importance in the history of the state, gold was declared the mineral emblem of Victoria.

Recreational prospecting (sometimes known as fossicking) is the search for minerals, gemstones or mineral-bearing material using non-mechanical hand tools only. The search for relics and artefacts such as bottles and coins are not within the scope of this investigation.

3.1 Victorian geology

3.1.1 Gold

In Victoria most gold occurs in quartz vein deposits or reefs hosted by older Palaeozoic age sedimentary rocks, or in secondary deposits formed by weathering and erosion of these reef deposits. While gold-bearing reefs made Bendigo by far the largest gold-producing centre in the state, it is the secondary shallow alluvial deposits that attracted thousands of people to the region for the gold-rushes of the nineteenth century. The Bendigo and Ballarat goldfields rank highly on a world production scale with the peak period in the years 1851 to 1871.

Nearly two thirds of all gold found in Victoria was derived from alluvial deposits where erosion and weathering has concentrated gold from the primary reefs. Gold's heavy weight leads to a concentration close to the host reef or in coarse gravels of fast flowing streams. Soils, river beds and buried ancient streams known as deep leads have all yielded pieces of native gold or nuggets. Most nuggets have been found in the so-called Golden Triangle region within a line bound by the townships of Dunolly, Wedderburn and Tarnagulla.[10]

During the 1980s many prospectors revisited the early goldfields, and with new technology such as metal detectors found gold nuggets overlooked by early miners. In 1980 the 'Hand of Faith' nugget weighing 27 kilograms was found using a metal detector near Kingower, renewing interest in prospecting throughout the Golden Triangle. Although significantly smaller than the 71 kilogram 'Welcome Stranger' nugget found north-west of Dunolly in 1869, nuggets continue to be discovered throughout the Victorian goldfields.

3.1.2 Gemstones

Victoria's great geological diversity provides a variety of gem and specimen minerals although there are no significant mines or commercial operations.[11] There are many small alluvial deposits of varying ages containing interesting gemstones, including sapphires, rubies, turquoise, coloured quartz, topaz and diamonds. Most of the known gem minerals in Victoria were discovered during the heyday of alluvial gold mining. Probably the greatest diversity of gemstones occurs in stream gravels near Beechworth, while minerals such as agate and jasper are found widely across the state.[12]

Limited areas have been made available, with strict conditions, in parks under the *National Parks Act 1975* to allow fossicking for unusual or unique occurrences of minerals – zeolite at Cape Schank and wavellite at Warby Ranges.

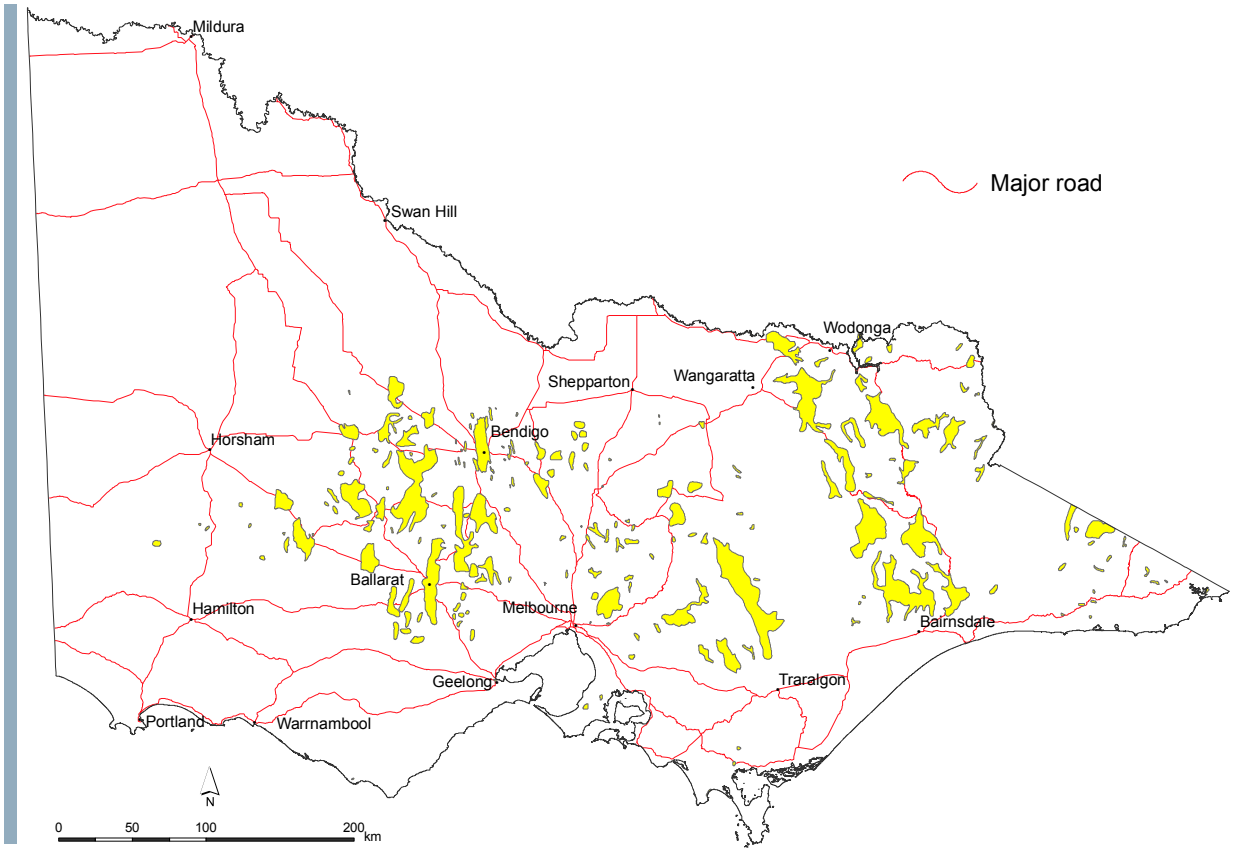
3.2 Recreational prospecting for gold

Prospecting for gold involves the use of metal detectors, hand tools (such as picks and shovels), pans, cradles and sluices.

The most common form of prospecting for gold in Victoria is with a metal detector, especially in the central Victorian goldfields. Metal detectors work by transmitting an electromagnetic field from the search coil into the ground. Any metal objects (targets) within the electromagnetic field will become energised and retransmit an electromagnetic field of their own. The detector's search coil receives the retransmitted field and alerts the user by producing a target response. Some metal detectors are capable of discriminating between different target types and can be set to ignore unwanted targets.[13] Operators hold their metal detectors just above the surface and sweep back and forth in arcs while slowly walking along a traverse. Prospectors may first rake the ground clear of leaf-litter and sticks.

In the last few years there have been advances in metal detector technology that allow greater depth, improved sensitivity, automatic ground balance and superior discrimination. Metal detectors have also been developed which can be operated in fresh and sea water up to depths of 200 feet.[14]

Figure 3.1
Victorian goldfields
(Source: Department of Primary Industries (2003) – Mineral areas)



Prospecting for gold by panning or other methods also occurs in the central Victorian goldfields, but is limited by the availability of water. In other regions of Victoria which are less suitable for metal detecting, recreational prospecting in rivers and creeks using gold pans or sluices may occur.

Panning for gold is carried out with a prospecting pan or dish with a flat bottom and sloping sides, usually with ripples. The high specific gravity of gold makes it possible to separate it from the dirt and stones which are mixed with it by washing away the material of lighter weight and leaving the heavier gold behind. The edge of the gold pan with the ripples is angled down into the water, so that the ripples catch the heavier materials in the pan.

A sluice is defined as an artificial channel through which water flows. In prospecting, it includes sluiceboxes which collect the gold by means of various configurations of riffles, corrugations, mats, expanded metal and so on, which trap the heavier particles while allowing the other material to continue through. The natural flow of a stream is used or the current is sometimes diverted by forming dams with piled rocks or stones. Where the natural water flow is insufficient, a power sluice, sometimes called a highbanker, uses a pump to force water through a sluice box to mimic the natural flow of a stream. Eductor dredging, involving a portable suction device mounted on a floating barge, has been prohibited in Victoria since 1990.

3.3 Mineral resources legislation and policy context

Either a miner's right or a tourist fossicking authority (for tour operators) is required under the *Mineral Resources (Sustainable Development) Act 1990* (MRSDA) to recreationally search for minerals. These authorities specify search conditions that must be observed. Generally, all minerals belong to the Crown, even on private land. A miner's right transfers the ownership of any minerals found whilst prospecting, to the holder of the miner's right.

The MRSDA provides that the holder of a miner's right must not use any equipment for the purposes of excavation other than non-mechanical hand tools, must not use explosives, must not remove or damage any tree or shrub, must not disturb any Aboriginal cultural heritage, and must repair any damage to the land arising out of the search. This generally involves re-filling any hole and replacing any soil and leaf litter. A miner's right is granted for two or ten years. Penalties apply under the MRSDA for failure to comply with the obligations of the miner's right.

As the legislation refers to not using equipment for the purposes of excavation other than non-mechanical hand tools, this has been interpreted to mean that there is no prohibition on the use of mechanical tools for work other than excavation i.e. for processing material that is excavated by hand.

Under section 6 of the MRSDA certain types of Crown land are classified as 'not available' and are exempt from being subject to exploration or mining (see section 3.4). 'Restricted' Crown land is estimated to comprise 1.2 million hectares (approximately 5 per cent of Victoria's land area).[15] Regional parks, coastal parks, marine parks, coastal reserves, alpine resorts and forest parks are examples of restricted Crown land as defined under Schedule 3 of the MRSDA. On restricted Crown land a licensee cannot apply for an exploration or mining licence without consent from both the Ministers for Energy and Resources and Environment and Climate Change. Provisions applying to the land listed as 'restricted Crown land' in Schedule 3 of the MRSDA do not apply to miner's rights.

A major review of the MRSDA is currently being undertaken by the Department of Primary Industries. The first stage of the review of the Act is complete and stage 2 is now underway.

3.4 Areas where recreational prospecting is permitted

As described in section 2.2, approximately 17 per cent of Victoria or about one third of the state's public land has been set aside as parks and conservation reserves primarily for the protection of natural and cultural features and the conservation of natural resources. Prospecting is generally not permitted in these areas. Most of the remaining two thirds of the state's public lands (e.g. most state forest) has been set aside primarily for the utilisation of natural resources, and recreational prospecting is both permitted and practised on such land.

Recreational prospecting can take place in state forests, in many other Crown land reserves, and in 16 parks in accordance with specific provisions of the *National Parks Act 1975* (see table 3.1). Recreational prospecting can be undertaken on private land, with the consent of the owner or occupier, or on land under minerals leases with the consent of the licensee.

Section 55 of the MRSDA sets out the limitations on use of miner's rights on Crown land, by reference to exemptions under sections 6, 6A and 7 of the MRSDA (reference areas, national, state and wilderness parks, and marine parks and marine sanctuaries unless the subject of a notice under section 32D(1) of the *National Parks Act 1975)*, and Crown land nominated under section 7(1) of the *Crown Land (Reserves) Act 1978* (CLRA). A list of the Crown land reserves nominated under section 7(1) of the CLRA is not readily available. As described in section 3.3, land listed as 'restricted Crown land' is potentially available for recreational prospecting unless nominated under section 7(1) of the CLRA or prohibited under other legislation.

The Department of Primary Industries advises holders of miner's rights that approximately 300 rivers and streams are exempt from prospecting under a miner's right under gazettals that date back to 1881.[16] Most major rivers in Victoria are included in the list of exempt rivers, including many rivers in the parks specified in the terms of reference e.g. Lerderderg River, Yarra River.

The area of the state currently available for recreational prospecting is estimated at 4.81 million hectares of state forest and other categories, plus an estimated 52,370 hectares in certain parks (totalling 57 per cent of Crown land, and 21 per cent of Victoria). The total area of private land is 14.23 million hectares (63 per cent of Victoria); however a significant proportion is occupied and therefore not available for prospecting except with the consent of the owner or occupier. An additional estimated 5500 hectares is available for searching for gemstones only. Although a large proportion of Victoria is potentially available, much of the land may be considered by hobbyists to be lacking in prospectivity.

Recreational prospecting and fossicking elsewhere

Recreational prospecting (usually referred to as fossicking) is not permitted in national parks in Western Australia, South Australia, Tasmania, New South Wales, Queensland or in Australian government-managed national parks. Recreational prospecting is not permitted in national parks in some other countries such as the United States of America.

In areas outside national parks, several Australian states and territories have placed restrictions on equipment that may be used for prospecting or on depth or volume of excavation. For example, in New South Wales, power-operated equipment cannot be used on land or in waters for surface disturbance, excavation or processing. Power operated equipment includes mechanical, hydraulic, pneumatic, battery and electrical equipment or machinery. The disturbance of more than one cubic metre of any soil, rock or other material during any single period of 48 hours is prohibited in New South Wales.[17] In Queensland, fossickers are not permitted to dig below two metres of the natural ground surface of land, or below 0.5 metres in streams.[18] In the Northern Territory, the search for and extraction of limited amounts of rocks, minerals and crystals by means of digging by hand or by using hand held tools, is limited to a depth of one metre.[19]

In some parts of Australia, entry to those areas where recreational prospecting is permitted is restricted to specified periods and may require prior written notification. For example, in the Northern Territory 14 days notification is required to obtain written consent to fossick in parks and reserves, and the fossicking request must include information such as name and full contact details, a

description or map of the area where the fossicker intends to fossick, clearly indicating the location, equipment to be used, date of intended entry, estimated duration of fossicking, vehicle details and so on.[20] In order to fossick in New South Wales state forests, permission is needed from Forests NSW, in the form of a special purpose permit.

3.5 Recreational prospecting in areas under the *National Parks Act 1975*

As described in section 2.2, the *National Parks Act 1975* contains a primary obligation to permanently preserve and protect the natural environment. Regulations made under the Act support this by, for example, providing penalties for disturbing, defacing, digging and removing vegetation and soils. Recreational prospecting is identified as a 'non-conforming use', which is treated similarly to timber harvesting, mining, and grazing, as exceptions rather than the rule. Hence prospecting is provided for in Division 4 of the Act 'Special provisions relating to specific parks' in section 32D. There are rigorous procedures that must be followed to approve and designate prospecting areas, whereby Parliament determines the parks subject to prospecting, the Minister prepares a notice identifying the areas within a park available for recreational prospecting; and the Secretary of the Department of Sustainability and Environment grants permits subject to conditions. These procedures underscore the intent to ensure the 'preserve and protect' aims of the Act are addressed, even within the designated prospecting areas.

Recreational prospecting is permitted in limited areas in 16 national, state and other parks under the National Parks Act (see table 3.1). Under s32D(1) the Minister may, by notice in the Government Gazette, designate the area or areas in the parks described in Part 30, 41, 42 or 43 of Schedule Two, Part 15, 26, 31, 36 or 38 of Schedule Two B, Part 1 or 13 of Schedule Three, Part 8 of Schedule Four, and in which searching for minerals under a miner's right or tourist fossicking authority will be permitted; and the parks described in any of the following Part 31 of Schedule Two; Part 15 or 30 of Schedule Two B; Part 15 of Schedule Three and the tidal zones of the park described in Part 4 of Schedule Two in which searching for gemstones under a miner's right or tourist fossicking authority will be permitted. The parks described in these schedules are noted in table 3.1.

Many parks in which prospecting is currently available were the subject of previous Land Conservation Council (LCC) or Environment Conservation Council (ECC) recommendations regarding this use. The specific delineation of areas was, in general, recommended to be undertaken by the land manager through a management plan, involving community consultation. The parts of the park determined appropriate for prospecting as part of such a process were intended to be authorised under Section 32D of the National Parks Act by notice published in the Government Gazette.

Responding to stakeholder submissions after the completion of the ECC Box-Ironbark Forests and Woodlands Investigation, the government endorsed prospecting in three parks for which the ECC had recommended no prospecting. In 2002, the government created eight parks arising from the ECC recommendations, and at the same time arranged for Section 32D prospecting notices to be gazetted to reflect the areas currently used by prospectors in those parks.[21]

At the same time, additional conditions and restrictions were gazetted to apply to prospecting areas in these parks, including requirements that excavation and damage to ground layer vegetation be kept to a minimum, and that any damage to the land must be repaired on the same day as the damage is caused. No specific offence was created for failure to comply with these conditions, and enforcement relies on general penalties in the park regulations.

Areas available for prospecting in parks range from less than 5 per cent of a park to 95 per cent of a park. The parks with less than 5 per cent of areas available for prospecting include all those in which gemstones only are sought, and Warrandyte State Park and Steiglitz Historic Park where small areas for gold panning were provided in the 1970s when the parks were established, for educational purposes and as links to the gold history of the area. The average area of the remaining parks available for prospecting is 60 per cent.

Table 3.1
Existing parks available for recreational prospecting, pursuant to s32D of the *National Parks Act 1975*

Park name	Schedule and part number	Total area of park (hectares)	Prospecting area in park (hectares) and % of park
Chiltern-Mt Pilot National Park	Schedule Two Part 30	21,650 ha	8,071 ha (37%)*
Greater Bendigo National Park	Schedule Two Part 41	17,340 ha	11,967 ha (69%)*
Heathcote-Graytown National Park	Schedule Two Part 42	12,700 ha	12,600 ha (99%)*
Kara Kara National Park**	Schedule Two Part 43	13,990 ha	7,600 ha (55%)*
Kooyoora State Park	Schedule Two B Part 15	11,350 ha	8,040 ha (71%)*
Paddys Ranges State Park	Schedule Two B Part 26	2,010 ha	600 ha (30%)*
Warrandyte State Park	Schedule Two B Part 31	685 ha	6.5 ha (1%) of park The bed of Andersons Creek, Stony Creek and Jumping Creek, upstream from the Jumping Creek road bridge (metal detectors, hand tools, pans and/or simple cradles only)
Enfield State Park	Schedule Two B Part 36	4,400 ha	2,878 ha (65%)
Reef Hills State Park	Schedule Two B Part 38	2,020 ha	1,425 ha (70%)*
Beechworth Historic Park	Schedule Three Part 1	1,090 ha	125 ha (11%)*
Steiglitz Historic Park	Schedule Three Part 13	425 ha	Within the creek bed only in the section one kilometre downstream from the Meredith Road Bridge on Sutherlands Creek (metal detectors, hand tools, pans and/or simple cradles only).
Castlemaine Diggings National Heritage Park	Schedule Four Part 8	7,585 ha	7102 ha (94%)
Existing parks available for gemstone fossicking only			
Mornington Peninsula National Park	Schedule Two Part 4	2,680 ha	Cairns Bay in the intertidal area between Stockyard and Double Creeks only (for the mineral zeolite)
Great Otway National Park	Schedule Two Part 31	103,185 ha	intertidal areas only of Wreck Beach at Moonlight Head (agates and other semi-precious gems)
Warby-Ovens National Park	Schedule Two Part 49 ***	14,655 ha	small area in the Killawarra section of the park – 200 metres either side of Tarrawalla Track (between Boweya Track and a point 200 metres past the junction of the adjoining Parallel track) – for the mineral wavellite
Cape Liptrap Coastal Park	Schedule Three Part 15	4,175 ha	part of beach only between Walkerville South and Cape Liptrap (jasper, serpentine, and other siliceous pebbles)

* This park is one of the box-ironbark parks established in 2002, with an initial area gazetted for prospecting. The areas were further refined in consultation with stakeholders during the subsequent preparation of management plans for the parks. Some of these amended areas may not yet be gazetted.

** The name of St Arnaud Range National Park was changed to Kara Kara National Park in 2012

*** The provisions in s32D refer to Part 30 of Schedule Two B (formerly Warby Range State Park) which was repealed in 2009 and the park incorporated into the new Warby-Ovens National Park

OTHER RELEVANT LEGISLATION AND POLICY 4

As described in previous sections of this report the primary management framework for national parks and state parks is provided by the National Parks Act and regulations, and recreational prospecting is managed primarily under the mineral resources legislation. However there are certain values and activities in national and state parks for which the primary responsibility lies under other legislation and policy frameworks, or for which there is overlapping responsibility. The key additional legislation and policy frameworks are outlined in this section. This section addresses in part the requirement in the terms of reference to take into account relevant State Government policies, strategies and Ministerial statements; and agreements under the *Traditional Owner Settlement Act 2010* and the *Conservation, Forests and Lands Act 1987* relating to the specified parks.

4.1 Waterways and catchments

Rivers and streams in the specified national parks are a major focus for VEAC's investigation into additional prospecting areas in parks, as they are likely to be of interest to recreational prospectors.

4.1.1 Legislation

The Water Act 1989 governs water management and use across Victoria, and includes functions and powers that support activities to protect and improve river health, floodplain management and regional drainage. The Water Act outlines the functions and powers in relation to waterway management, floodplain management and regional drainage for catchment management authorities (CMAs) and Melbourne Water.

The Government is carrying out a comprehensive review of Victoria's water laws to deliver a streamlined and effective legislative framework for water management and use in Victoria. with the aim of introducing a bill to Parliament in the first half of 2014.[22]

Under the *Catchment and Land Protection Act 1994*, Victoria is divided into 10 catchment regions each with a CMA responsible for the integrated planning and coordination of land and water management in their region. Management of waterways is a key part of this integrated catchment management. Under the Water Act, authorities are designated with specific responsibility for the management of waterways, drainage and floodplains.

The designated waterway management authorities are the CMAs, except in the Port Phillip and Westernport catchment region where it is Melbourne Water. These ten waterway managers (nine CMAs and Melbourne Water) have the lead role in developing and delivering regional programs for waterway management.

4.1.2 Works and activities on waterways

By-laws made under the Water Act by waterways managers provide for the control, management and authorisation of works and activities in, on or over designated waterways. The by-laws protect designated waterways by requiring a person to obtain a permit before undertaking certain works and activities in such waterways. Such by-laws appear to require a permit before obstructing or interfering with a designated waterway or with trees or other vegetation within or from a designated waterway or interfering with or taking any soil, earth, sand, gravel or other material within or from a designated waterway. It is not clear how recreational prospecting for gold by panning or sluicing in waterways is dealt with under this legislative regime. There are few if any other recreational activities in waterways that disturb soils and vegetation.

4.1.3 Draft Victorian Waterways Management Strategy

The Draft Victorian Waterway Management Strategy is a proposed integrated management framework for Victoria's rivers, estuaries and wetlands.[23] The objective of the framework is to provide the level of environmental condition needed to sustain key environmental, social and economic values. As such, management actions are targeted towards protecting or improving the environmental condition of priority waterways to provide public benefits.

The strategy classifies waterways into four categories: near natural waterways, ecologically healthy waterways, sustainable working waterways and highly modified waterways. Only a few waterways in Victoria remain in a near natural or ecologically healthy condition, where many of the natural values are still present. The majority of Victoria's waterways are in a sustainable working or highly modified state as a result of human use. A waterway that is in a near natural state will contain almost all of the naturally occurring environmental values and is likely to be found within largely unmodified catchments. These environmental values may include most species that would have been present prior to European settlement and a high degree of naturalness for bird, fish, invertebrate and plant communities due to limited human impacts. Near natural waterways might also have special environmental features such as drought refuges, or important bird habitat for internationally protected species. These systems are generally unregulated rivers or unaltered wetlands

with close to natural hydrological regimes and water quality. They will usually be formally recognised for their environmental significance.

In relation to managing the river channel, the strategy outlines the policy that waterways will be maintained to ensure minimal erosion, sedimentation and avulsion over the long term and consistent with natural processes. Under near natural or ecologically healthy conditions, the focus of management is on protecting natural processes, managing invasive species and managing waterway-related bushfire risks and impacts.

The draft strategy proposes that waterways with formally recognised significance such as Ramsar wetlands, heritage rivers and waterways in national parks will be identified as high value waterways in regional priority setting. The regional waterway strategies will consider all waterways with formally recognised significance as high value waterways. Waterways with formally recognised significance are considered to be important to all Victorians, but also to all Australians and the broader global community, and are proposed to continue to be managed to protect and, where possible, improve their values.

The strategy also outlines the approach to management of riparian land. Other than stock grazing, threats to the condition of riparian land include recreational pressure, weeds (especially willows), unmanaged vehicle access and stream crossings, rubbish dumping, urban development, the collection of firewood, and some agricultural practices. These threats have all impacted on the condition of Victoria's riparian land. A 2004 statewide benchmarking of riparian land condition showed that less than 14 per cent were in good to excellent condition, around 54 per cent were in moderate condition and over 32 per cent were in poor to very poor condition.

4.1.4 Soil Health Strategy

The Department of Environment and Primary Industries's Soil Health Strategy[24] aims to maintain and strengthen the health of Victoria's soils for the benefit of environmental assets such as rivers, estuaries, wetlands, ecological vegetation communities and biodiversity, and to support a range of functions into the future (including production, climate, clean air and stability). The strategy provides a framework for regional and local planning and delivery of soil health in Victoria. It contains soil health management goals, outcomes and actions to guide planning and government investment in soil health across public and private land. Prospecting on public land has the potential to impact on soil health.

4.2 Cultural heritage

4.2.1 Aboriginal cultural heritage

The *Aboriginal Heritage Act 2006* is the primary legislation in Victoria for protecting Aboriginal cultural heritage. A major objective of the *Aboriginal Heritage Act 2006* is to accord appropriate status to traditional owners in relation to decision making about their cultural heritage. This objective is also consistent with the Victorian *Charter of Human Rights and Responsibilities Act 2006* and the United Nations Declaration on the Rights of Indigenous Peoples.

The Act established the Victorian Aboriginal Heritage Council (VAHC) whose current primary function is the appointment of Registered Aboriginal Parties. It also established Cultural Heritage Management Plans and Cultural Heritage Permit processes to manage high impact activities that may harm Aboriginal cultural heritage. Cultural Heritage Management Plans are documents that identify the heritage located within a particular area and set out the measures to be taken to ensure that any heritage is appropriately managed and protected during the conduct of an activity or development.

The *Aboriginal Heritage Act 2006* was reviewed in 2012. The review is a legislated requirement under section 193 of the Act and was required to be conducted before the fifth anniversary of its commencement i.e. by May 2012. The review looked into the operation of all parts of the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2007*. Running in parallel with the review was a Parliamentary inquiry into the establishment and effectiveness of Registered Aboriginal Parties. The report of the inquiry was tabled in Parliament in November 2012.[25] The Government response to the inquiry was tabled on 14 May 2013.[26]

Registered Aboriginal Parties (RAPs) are incorporated bodies appointed by the Council to manage Aboriginal cultural heritage for a specific area. If a RAP applicant has been registered as a native title holder under the Commonwealth *Native Title Act 1993*, or has entered into an agreement with the state under the Victorian *Traditional Owner Settlement Act 2010*, the Council must register the applicant as a RAP. In all other situations, the Act directs the Council to consider a range of issues in determining an application. The Council has appointed nine RAPs, which together cover 61 per cent of the area of Victoria.

Registered Aboriginal Parties covering the parks specified in the terms of reference for this investigation are:

- Gunaikurnai Land and Waters Aboriginal Corporation whose appointed Country includes the Alpine, Baw Baw and Mitchell River national parks
- Taungurung Clans Aboriginal Corporation whose appointed Country includes the Lake Eildon and Alpine national parks
- Wurundjeri Tribe Land and Compensation Cultural Heritage Council Inc. whose appointed Country includes the Lerderderg State Park and Yarra Ranges National Park.

RAP applications were declined by the VAHC in April 2013 from the Bidwell-Maap Nation Aboriginal Corporation, whose application area included the Alpine, Croajingolong, Errinundra and Lind national parks, and from Nindi-Ngujarn Ngarigo Monero Aboriginal Corporation, whose application area also included the Alpine, Croajingolong, Errinundra and Lind national parks.[27] The VAHC noted in both cases that their memberships include traditional owners.

The Right People for Country project was recently established by the Office of Aboriginal Affairs Victoria as an avenue for traditional owner groups to reach agreements regarding group membership and boundaries. The project aims to provide a framework whereby traditional owner groups can be supported to reach their own agreements – both within and between groups – relating to group membership and land boundaries.[28]

Registered Aboriginal Parties are designed to provide for traditional owners to be involved in the management and protection of their heritage on a local level. One of the key functions of RAPs is their involvement in the development and assessment of Cultural Heritage Management Plans. Aboriginal places and objects in Victoria, whether known or unknown, are protected under the *Aboriginal Heritage Act 2006* and cannot be disturbed or destroyed. Cultural Heritage Management Plans are required for high impact activities proposed for listed areas of cultural heritage sensitivity, as defined in the *Aboriginal Heritage Regulations 2007.*

4.2.2 Archaeological sites and relics

The key piece of Victorian legislation relating to historic cultural heritage is the *Heritage Act 1995*. Commonwealth and local governments also play a role in protection of historic cultural heritage. The Heritage Act provides for the protection and conservation of places and objects of cultural heritage significance and the registration of such places and objects. The Act also establishes the Victorian Heritage Register, the Heritage Inventory and the Heritage Council of Victoria.

An archaeological site is defined in the *Heritage Act 1995* as any place that contains relics which are 50 or more years old. The site must relate to non-Aboriginal settlement, be in a ruinous condition and likely to yield buried relics. All physical evidence of historic gold mining operations and associated human occupation, above and below ground, constitutes an archaeological site. Unauthorised and intentional digging on archaeological sites in search of historic artefacts or relics is an offence under sections 127 and 129 of the Heritage Act.

A comprehensive inventory has been made of more than 3000 of the state's extant historic gold mining sites on public land.[29] These Historic Gold Mining Sites reports highlight the varied range of archaeological evidence and places of cultural heritage significance which have been left behind by historic gold mining in Victoria. These include mine workings, industrial relics and habitation sites. Associated gazetteers contain information on the history and features of each site and include the Heritage Inventory number and, where relevant, the Victorian Heritage Register number.

4.3 Native Title and traditional owner agreements

The report of the Parliamentary inquiry into Registered Aboriginal Parties (2012) discusses the concept of traditional ownership and the impact that the native title process has had on Victoria's Aboriginal community. The report describes traditional owners broadly as the descendants of the Aboriginal groups that existed prior to European settlement who claim an ongoing 'connection to their land as the basis of their existence and identity'.[30] The Victorian Traditional Owners Land Justice Group currently has representatives appointed from 20 traditional owner groups in Victoria.[31]

Native title is the recognition in Australian law that some Indigenous peoples continue to hold rights to their lands and waters, which come from their traditional laws and customs. Aboriginal groups can apply to have these rights recognised by the Federal Court, under the Commonwealth *Native Title Act 1993*.

To date native title has been found to exist in Victoria on four occasions. However, the difficulty of achieving the native title test led to the development of an alternative system for recognising rights of Aboriginal traditional owners.

The Victorian *Traditional Owner Settlement Act 2010* (TOS Act) enacts a state-based system for the out-of-court resolution of native title claims. Under the TOS Act the state may enter into 'recognition and settlement agreements' with traditional owner groups to recognise their relationship to land and to confer certain rights in

relation to areas of land, such as rights of access. In return for entering into a settlement agreement traditional owner groups must withdraw any native title claims they have and agree not to lodge any claims into the future.

The recognition and settlement agreement between the Gunaikurnai and the State of Victoria in October 2010 was the first claim to be settled under Victoria's new native title settlement framework. The grant of Aboriginal Title is an important aspect of this agreement. Aboriginal Title as a form of Victorian land tenure was introduced with the passage of the *Traditional Owner Settlement Act 2010*. Where Aboriginal Title to land is to be granted, the grant is subject to entering into a traditional owner land management agreement under section 82P of the *Conservation, Forests and Lands Act 1987* as to the management of the land that is the subject of the grant.[32]

The Gunaikurnai settlement includes:

- Orders by the Federal Court recognising that the Gunaikurnai people hold native title in the settlement area
- an agreement for ten parks and reserves (including the Mitchell River National Park) to be transferred to the Gunaikurnai as Aboriginal title to be jointly managed with the state
- rights for Gunaikurnai people to access and use Crown land for traditional purposes, including hunting, fishing, camping and gathering in accordance with existing laws
- funding for the Gunaikurnai to manage their affairs, including responding to their obligations under the settlement.

The Gunaikurnai Traditional Owner Land Management Board (TOLMB) was established in October 2012 under section 82B(1) of the *Conservation, Forests and Lands Act 1987* pursuant to the traditional owner land management agreement between Gunaikurnai and the state. The objective of the TOLMB is to enable the knowledge and culture of the Gunaikurnai people to be recognised in the management of the 'appointed land', which consists of the ten parks and reserves within Gippsland including the Mitchell River National Park. A role of the TOLMB is to set and guide strategic direction for the joint management of the 'appointed land'. One of the functions of the TOLMB is to comment on matters affecting or concerning the use or management of the appointed land.

A second recognition and settlement agreement under the TOS Act was signed in March 2013 by the Government and representatives of the Dja Dja Wurrung people for lands in central Victoria. The settlement is expected to commence in August 2013.

4.4 Biodiversity

Flora and fauna communities and species considered threatened in Victoria are protected by federal and state legislation. For example, the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* seeks to protect nationally threatened species, while Victoria's *Flora and Fauna Guarantee Act 1988* protects threatened species and communities within Victoria. Any direct or indirect impacts from development on threatened species listed under these Acts must be assessed. The other primary piece of Victorian legislation providing for the protection, conservation and management of Victoria's biodiversity is the *Wildlife Act 1975*.

The Department of Sustainability and Environment's threatened species advisory lists contain flora and fauna considered critically endangered, endangered, vulnerable, poorly known, near threatened or extinct in Victoria.[33] The advisory lists are not the same as the threatened list under the *Flora and Fauna Guarantee Act 1988*. There are no legal requirements that flow from inclusion of a species in the advisory lists.

Australia's Strategy for the National Reserve System 2009-30 is a long-term strategy for the protection of Australia's biodiversity. The strategy aims to enhance the National Reserve System (the national network of protected areas set aside to protect natural values) over the next twenty years. It focuses on improved design and selection, accelerated establishment and effective planning and management of protected areas, and strengthened partnerships and increased community support.

ISSUES AND CONSIDERATIONS 5

This section sets out the major matters taken into account by the Council in making its decisions, and reflects the issues raised most often in consultation. Although the issues are presented under a number of broad headings, many are interrelated.

There were a number of issues raised in submissions that were outside the terms of reference for the investigation. For example, more than 30 submissions commented on the process for the investigation and VEAC's role more generally. These are briefly summarised here for completeness but were not further considered by the Council. Some submissions suggested that the terms of reference for the investigation were restrictive or inappropriate, and that the timeframe for the investigation was too short. Other submitters proposed that VEAC should examine the existing impacts of prospecting activities in parks prior to making any recommendations, or be allowed to recommend that there be no prospecting in the national parks in the investigation area or in parks in general.

5.1 Natural environment

Concerns were raised about the impacts of prospecting activities on the natural environment, largely around the impacts of ground disturbance including increased vulnerability to weed invasion, impacts on waterways, spread of pests and diseases, and the impacts of vehicular access and track formation. This last concern appears to be more relevant to recreational prospecting activities in the open landscapes of Victoria's central goldfields region than to the parks considered in this investigation.

The box–ironbark forests and woodlands lie inland of the Great Divide in northern Victoria. Box–ironbark forests and woodlands contain some of Victoria's most significant historic gold mining landscapes and features on public land, and are of great interest for recreational prospecting.[34] In the box-ironbark parks and reserves, access is generally easy and metal detecting is the major form of prospecting for gold (although panning and sluicing also occur where water is available).

However, in the national parks specified in the terms of reference many of the landscapes are steep and heavily forested, often remote, and therefore many areas appear unsuitable for casual metal detecting. As it is an obligation under the miner's right not to remove or damage shrubs and trees, there are few areas in these densely vegetated landscapes where metal detecting would be feasible (except perhaps after a major fire). Much of the interest for gold prospecting is therefore likely to be in or along the waterways in many of these national parks.

The following sections provide some examples of particular susceptibility in the native flora and fauna including threatened species that are highly dependent on environments favoured for prospecting, describe potential impacts on waterways more generally, and discuss contaminants and the potential spread of pathogens.

5.1.1 Flora and fauna

Some activities undertaken by prospectors can damage natural values by causing disturbance of soils and damage to vegetation. For example, orchid tubers can be inadvertently damaged or destroyed by prospecting activities when dormant. Comprehensive information is not currently available on the distribution of significant values susceptible to disturbance in the parks, including threatened flora. In addition, there is little research directly addressing the potential effects of prospecting on flora and fauna. However, it is well known that while some native plants (and most introduced weeds) are advantaged by soil disturbance, many are not.

Disturbances which might result in changes to the physical or biotic habitat in or adjacent to streams are a particular concern for the endangered Spotted Tree Frog *Litoria spenceri* which is confined predominantly to the north-western side of the Great Dividing Range, between the Central Highlands of Victoria and Mt Kosciuszko in New South Wales. The Spotted Tree Frog is known from only 13 streams (11 in Victoria). This evidence suggests that the Spotted Tree Frog has suffered a general decline in distribution and abundance. Potentially threatening processes implicated in the decline of this species include disturbance in and adjacent to streams and in catchments of streams, which may result in changes to water flow, water quality, stream sedimentation or other changes to the physical or biotic habitat.[35] Several catchments in the parks under investigation are important for the conservation of this species e.g. Alpine National Park, or are re-introduction sites e.g. Lake Eildon National Park. Being amphibious, the frog is susceptible to impacts in both the riparian environment where the adults live and in the waterways where the tadpoles live and where, for example, their breathing may be impacted by turbid water as well as the other potential effects listed in section 5.1.2.

Another group that is potentially highly susceptible to impacts from prospecting is the obligate cave-dwelling bats. Two species are found in the parks under investigation: the Eastern Horseshoe Bat *Rhinolophus megaphyllus megaphyllus* and Eastern Bent-wing Bat *Miniopterus schreibersii oceanensis.* Both are vulnerable in Victoria and listed under the *Flora and Fauna Guarantee Act 1988*. These bats spend the day in suitable caves or old mines, including a number of mines within the parks under investigation. Some of these mines can support many thousands of individuals. There are only a handful of known caves in Victoria used as breeding sites, none of which are in the parks under investigation but there is some evidence for undiscovered breeding sites in some of these areas, likely to be in disused mines.[36]

During cold weather, especially over winter, the bats stay in the caves day and night, reducing their core body temperature and going into torpor to conserve energy. If they are disturbed at this time they may come out of torpor, expending a large amount of energy that cannot be replaced at a time when ambient temperatures are low and their flying insect prey are scarce. Thousands of bats may die if they are regularly disturbed inside their roosts. As bats typically roost in old mine adits (almost horizontal, rather than vertical shafts) there is potential for conflict as these adits are likely to attract prospectors due to associated mullock heaps and other old mining features. Even a trivial event such as someone unknowingly moving around near a mine entrance can cause disturbance to the bats. Entering the mine would cause even more significant disturbance.

5.1.2 Waterways

Disturbance to the bed of the waterway and in-stream washing and sorting of materials can result in direct impacts on aquatic habitats or indirect impacts such as siltation and smothering of in-stream gravel beds and aquatic vegetation. Siltation can also reduce water quality for in-stream fauna.

Scientific review

VEAC commissioned a review to identify, as far as possible, based on published scientific literature and professional judgement, the potential ecological impacts that may occur as a result of prospecting in streams in the specified parks. The main findings of the review are summarised in the box on page 30 and the full review is available on VEAC's website.[37] The review concluded that prospecting activities in streams in Victorian national parks may result in appreciable ecological risks. The risks will vary depending on the specific location, because different locations have different stream characteristics and some locations may have species present which have particular conservation significance. The risks would also depend on the intensity of the prospecting activity at a particular site – the number of prospectors, the time of year, the extent of the prospecting and the frequency of prospecting, with higher intensity prospecting posing greater ecological risks.

Scientific review: summary [37]

- Removal or moving of stones on the stream bed surface may disrupt bed armouring, and reduce the future stability of the stream bed. Armouring is the development of a stream bed surface layer which is coarser than the material beneath. This layer protects the finer sediments beneath during high flow events. Disturbance or extraction of bed material will disrupt organisms living on or among the grains of the material. Some of the organisms may be killed or damaged, others may be washed off or may purposefully drift out from the material as it is extracted. When the material is replaced it will be packed in the stream bed differently, usually in a less tightly packed state, creating a different habitat structure. In disrupting the armouring, prospecting differs significantly from natural high flow events where armouring normally remains substantially intact.
- The removal of material from the bed will also release fine particulate material into the water column. Some of this material, which is normally buried in the stream bed, will be exposed to the current and washed downstream.
- Tailings are the waste products (usually rocks and soil) remaining after gold or other valuable components are removed from the excavated gravel. Because the gold normally constitutes a small fraction of the material excavated, the volume of tailings is almost the same as the volume of excavated material. When the excavate is processed using stream water the larger particle sized material, such as stones, gravel and sand, will drop out at the immediate processing point. The finer particle material will be carried in suspension for some distance downstream. As with the excavation process, any contaminants that may have been stored in the stream bed attached to the fine particles will be remobilised when the fine particles are resuspended. Sluicing is commonly used in prospecting. The tailings from a sluice form into a pile below the outlet of the sluice, unless redistributed by the prospector. In smaller streams, the tailings pile may substantially alter the localised physical structure of the stream, at least until the next high flow event.
- The excavating process of prospecting will be in some respects similar to the disturbance created by a flood. The differences will be in the depth of the excavation which, if it extends to the bedrock, or below about 20 cm below the stream bed surface, will disturb the hyporheos*, a habitat which normally serves as a refuge when streams are disturbed by floods. In addition when the excavated material is returned to the stream bed it will not be packed as effectively as is the case naturally, leaving a weakness in the bed that may be less resistant to floods and therefore subject to increased disturbance in future.
- The biota of streams is strongly affected by the level of suspended particulate material (SPM). There is no general threshold below which increased levels of SPM will not affect the stream biota. The biota in streams with low levels of SPM will be more sensitive than that in streams which are normally more turbid.

* *The hyporheos is the habitat within the stream bed, below the flow, and can extend a substantial distance vertically and laterally where the bed of the stream consists of loosely packed cobbles, pebbles and gravel.*

Potential contaminants

Prospecting has the potential to disturb material containing contaminants resulting from former gold mining activities, and to mobilise contaminants which could then move into waterways. When gold is mined, rocks are brought to the surface and crushed to extract the gold. The crushed rocks that are left over are known as mine tailings, and are often found in large piles or 'tailings dumps'. These tailings, which often contain potential contaminants, could be targeted by recreational prospectors. The location of tailings was not always recorded and statewide information about potentially contaminated sites is not available.

Arsenic

Arsenic is found naturally in rock, often near gold deposits. Mine tailings can contain high levels of arsenic. If the ore was roasted as well as crushed, the calcine sands left over from this process will have much higher levels of arsenic than other mine tailings. Arsenic can cause long-term health effects in people, or arsenic poisoning.[38]

Mercury

Mercury was used to enhance gold recovery in all the various types of mining operations. Mercury was commonly used to separate gold, by amalgamation, from crushed ore in the early days on the Victorian goldfields. It is estimated that approximately 950 tonnes of metallic mercury was lost in the streams of the Great Dividing Range by this process. Studies in the 1970s and 1980s have shown that this mercury accumulates in fish that live in the affected habitats. Significant levels of mercury are known to be contained in the tailings from amalgamation operations e.g. Thomson River, Woods Point. Mercury accumulation near gold mines has been reported in the Woods Point area, in the Gippsland Lakes, and at Blackwood. Disturbance of sediments through gold prospecting may re-mobilise mercury. Tailings dumps can be a continuing source of mercury-rich sediments to the river system. Studies have found that brown trout from Lake Eildon, Blue Rock Reservoir, Lake Dartmouth, Ovens River and Goulburn River upstream from Lake Eildon are contaminated by mercury to a greater extent than brown trout from other waters surveyed in north-east Victoria.[39]

In the catchment of the Lerderderg River, gold mining operations using the mercury amalgamation process was carried out until 80 years ago. The distribution of mercury in water, sediments and fish has been investigated and, while mercury in water values were low, mercury concentrations in sediments revealed a pattern of mercury contamination which could be related to past gold-mining activities, and elevated concentrations were found in river blackfish living at sites with elevated mercury sediment levels.[40]

Mercury and its compounds have no known metabolic function and are hazardous to fish and invertebrates. Overseas research has shown direct effects to fish and invertebrates from mercury, including acute effects for fish such as flaring of gills, loss of equilibrium and sluggishness followed by death, and chronic effects such as impaired reproduction, growth, behaviour and osmoregulation amongst others.[41] Localised methylation of inorganic mercury derived mostly from anthropogenic sources including mine tailings is one means by which mercury is transported and distributed. Fish then accumulate mercury through the food chain. Human health concerns arise mainly around exposure to methyl mercury through consumption of contaminated fish.

5.1.3 Pathogens

Invasive diseases, fungi and parasites in Australia affect many native plants and animals and agricultural crops, and can affect the health of native species, reducing their ability to reproduce or survive. Threatened species with reduced and restricted populations are particularly vulnerable to outbreaks caused by these introduced organisms. Species of national concern which are also of concern in Victoria's natural environment include *Phytophthora cinnamomi* disease, Chytrid amphibian fungus and Myrtle Rust (*Uredo rangelii*).

Cinnamon fungus *Phytophthora cinnamomi*

Initially thought to be a fungus, *P. cinnamomi* is now known to be a soil borne water mould. It attacks the root systems of susceptible native plants thereby threatening some plant species, the ecosystems of which they form part and the animals that depend on them. It is listed in the top 100 of the world's most invasive species and is Victoria's most significant plant pathogen affecting both native ecosystems and the horticultural industry.

P. cinnamomi is primarily spread through movement of water, soil and plant material which may occur through human activities or natural means. Humans are the main cause of *P. cinnamomi* spread across the landscape. The major pathways of *P. cinnamomi* spread include transfer of infected plants or contaminated soil. The unintentional movement of contaminated plants, soil and water also poses a threat. Once introduced to an area, *P. cinnamomi* may spread due to human activities such as bushwalking, horse riding, trail bike and other vehicle movement. *P. cinnamomi* infections typically start from roadsides and tracks where infected soil is dislodged. Heathlands and coastal forest communities are particularly susceptible to *P. cinnamomi*. Infection of susceptible plants can pose a significant threat to ecosystem function in these areas by dramatically altering and reducing the species composition and structural form of the vegetation. This ultimately leads to changes in the faunal assemblage at a site.[42]

The impact of *P. cinnamomi* has been formally recognised under both Federal and state legislation. *P. cinnamomi* has been listed twice as a 'potentially threatening process' under the *Flora and Fauna Guarantee Act 1988* and dieback caused by *Phytophthora cinnamomi* is listed as a 'key threatening process' in Schedule X to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999.* A nationally coordinated threat abatement plan was prepared in 2002 to manage the impact of *P. cinnamomi* on Australian ecosystems.[43]

Within Victoria, the pathogen has had serious impacts in many areas. In the parks subject to this investigation, it is a major issue in Croajingolong National Park and Lerderderg State Park.[44]

Chytrid fungus

Australia's native amphibians are threatened by a pathogenic fungus, *Batrachochytrium dendrobatidis*, known either as the amphibian chytrid or the amphibian chytrid fungus, which causes the infection known as chytridiomycosis. The amphibian chytrid fungus appears to have been introduced to southeast Queensland in the mid- to late-1970s, and subsequently spread to occupy a zone in eastern Australia from north Queensland to Melbourne. The effects of chytridiomycosis on amphibian populations, particularly those in upland eastern Australia, have been devastating with at least one species driven to extinction, and the threat status of others worsened. Chytridiomycosis has now been identified in 52 per cent of threatened amphibian species. Management strategies are recommended which increase the well-being of the amphibians. Reduction in other stressors and suitable modification of environment may also result in lower mortality rates in susceptible species.[45] Chytrid fungus is transmitted in water, moist or wet materials (including soil or equipment) or on the skin of infected amphibians. The greater the movement of people with equipment between relatively undisturbed waterways, the greater the potential threat to rare and even common amphibian species.[46]

Myrtle rust *Uredo rangelii*

The fungus myrtle rust, was found in Victoria for the first time in December 2011. It poses a threat to Victoria's nursery, forestry and beekeeping industries, as well as to public parks and gardens and native forests. It can potentially attack all species of the Myrtaceae family, which

includes such familiar plants as the eucalypts, paperbarks, bottlebrushes and tea-trees. Myrtle rust has now been detected at more than 70 sites in Victoria, mainly at production nurseries and wholesale outlets in and around metropolitan Melbourne but also at public parks and private residences, as well as at Shepparton, Ballarat, Tynong North and east Gippsland in regional Victoria. However, at present myrtle rust has not been detected in the natural environment. Myrtle rust is widespread in both New South Wales and Queensland, including some bushland areas, and because the disease is so easily spread, Victoria is likely to see further introductions from these states.[47]

Under the right conditions, myrtle rust may slow the regeneration of native forests after harvesting or bushfire and could in extreme circumstances change forest biodiversity. The climate along the coasts of east Gippsland, south Gippsland and the Otway Ranges makes these the most susceptible areas to myrtle rust in Victoria.

Rusts are highly transportable because they can produce large numbers of very small spores. Myrtle rust spores are readily spread by wind, water, animals and contaminated equipment such as shovels, clothing, footwear and vehicles.[48] Increased human access to infrequently visited areas could increase the risk of spread, especially when access is away from tracks or along waterways. Myrtle rust was first detected in Australia in 2010 with indications that it had been present for at least two years, highlighting the potential for severe pathogens to spread undetected for a period of time.

Stakeholder views – natural environment

Approximately 655 submissions opposed any additional prospecting areas being made available in national parks (either in the parks under investigation or more generally), most expressing concern about impacts on the natural environment. Two thirds of these submissions were based largely on a proforma submission to the investigation. These submissions expressed strong opposition to making national parks available to fossicking/prospecting and considered that these activities could damage streamsides and threaten rare species.

Many submissions considered that prospecting has a negative impact on environmental and heritage values. Submissions referred to prospecting by its nature not being confined to roads, paths and trails, and therefore the impact was considered to be potentially more widely dispersed than many other recreational activities. Impacts that were cited included damage to streambeds and stream banks, reduced water quality through increased turbidity and release of sediments and pollutants (with additional impacts further downstream), soil and vegetation disturbance, the spread of weeds and pathogens such as cinnamon fungus *Phytophthora cinnamom*i and chytrid fungus, and disturbance of Indigenous and European heritage sites.

A small number of submissions referred to specific areas in which additional prospecting should not be allowed; those that did most commonly mentioned the Alpine National Park, Croajingolong National Park, Errinundra National Park and Yarra Ranges National Park.

The Victorian National Parks Association (VNPA) submission did not support prospecting or fossicking in national and state parks, or the expansion of prospecting into additional areas in national and state parks. It considered that prospecting damages the environment (particularly rivers and streams and associated plants and animals, and threatened species such as orchids) and Indigenous and European cultural heritage sites. The submission drew attention to the impacts of current prospecting activity in Castlemaine Diggings National Heritage Park. It proposed that heritage rivers, natural catchments, representative rivers and reference areas in the investigation areas be protected from any new prospecting activity.

The Prospectors and Miners Association of Victoria Inc. (PMAV) stressed in its submission that prospecting does not damage the environment, particularly when compared to the impact of pest plants and animals on public land, and cited a lack of evidence to support the suggestion that there were impacts. Rather, the PMAV maintained that most prospectors follow sound environmental practice under a code of conduct, and informally assist with environmental management activities on public land, for example, through weed and rubbish removal. Several submissions commented that many prospectors and fossickers operate under a code of conduct which encourages good environmental practice.

Several submissions commented on the importance of many rivers, streams and catchments flowing from eastern Victoria to rural, regional and city water supplies, and that prospecting activities were considered a threat to the condition of these water supplies through pollution, sedimentation and streambed erosion. Submissions from organisations also referred to potential impacts on waterways from prospecting. These included the Victorian Water Industry Association's (VicWater) Catchment Task Group which stated that it did not support extending recreational prospecting into 'closed' potable water supply catchments, due to the potential increased fire risk and spread of waterborne disease. Melbourne Water considered that extractive and excavation activities, such as gold fossicking and prospecting, have the potential to cause substantial movement of sediment and nutrients in waterways which, if not carefully managed, can pose substantial risks to the environment and public health.

High-level themes raised in Community Reference Group discussions about potential impacts to the natural environment included pests and diseases, silting and sedimentation in streams, soil erosion, ecosystems, and impacts on both threatened and intact ecosystems.

Submissions in favour of providing additional areas for prospecting cited threats or permitted activities that were believed to have more impact than prospecting, such as four-wheel driving, car rallies, fuel reduction burning, natural disturbances, and threats such as weeds.

Council consideration – natural environment

While the Council considers that prospecting can be carried out in ways that minimise impacts on the natural environment, it is aware that there are also instances of inadvertent disturbance to flora and fauna. Even when holes are immediately and carefully filled in after prospecting, the soil structure and the biota are disturbed in the immediate area. While this impact may be acceptable in many areas of Crown land, it should be minimised in national parks which have been established to preserve and protect the natural environment. Council notes that the Prospectors and Miners Association of Victoria and the Victorian Gem Clubs Association have codes of conduct, and that individual prospecting and gem clubs promote responsible prospecting and assist in reducing impacts.

The Council has been shown clear evidence of unfilled holes, and of damage to stream beds and banks as a result of prospecting in waterways. It also notes the concerns of Melbourne Water, for example, that prospecting could undermine significant investment in projects and investments into improving the health of rivers. Council has taken into account government policy, contained in the draft government strategy for waterways, that aims to ensure minimal erosion and sedimentation in waterways over the long term consistent with natural processes. This strategy also identifies as high value all waterways with formally recognised significance, such as waterways in national parks which are proposed to continue to be managed to protect and, where possible, improve their values.

Council has also taken into account potential risks to the natural environment that arise from the off-track nature of prospecting activity in the landscape, the potential focus of activity on former gold workings such as mine tailings and old mine shafts, and the risk of inadvertently increasing the spread of pathogens.

5.2 Recreation in natural environments

Recreational prospecting is a leisure activity that brings pleasure and benefits to those who participate in it. Department of Primary Industries (DPI) data indicates that approximately 4200 people are currently licensed to undertake the activity in Victoria, with anecdotal information suggesting that many of these travel from interstate to Victorian sites. There are 4157 current licences as of 30 June 2012, 3341 of which are two year miner's rights and 816 10 year miner's rights There are six granted tourist fossicking authorities. The Prospectors and Miners Association of Victoria (PMAV) has six branches with reported memberships of 850 estimated to represent approximately 2000 members. (Clubs have joined as single memberships so total numbers are not known.) The Victorian Gem Clubs Association advises that it has 32 member gem and lapidary clubs in Victoria. Reports from prospecting and gem clubs indicate a predominantly older male membership, but the involvement of families was also mentioned frequently as an important aspect of the pastime.

There are many types of recreational or leisure activities undertaken in the parks specified in the terms of reference. Park management plans list a wide range of activities as significant recreational pursuits for the nine parks under investigation. In addition several of the parks are used for schools education, and many people use their leisure time to give practical assistance to particular parks through participating in the activities of Friends groups.

Several of these recreational activities are enjoyed by large numbers of people across Victoria. For example, in its submission Bushwalking Victoria notes that it represents more than 70 Victorian bushwalking clubs, with in excess of 8000 members. The Victorian Environment Friends Network lists 289 separate Friends groups in Victoria, including several that operate in the national parks specified in the terms of reference for this investigation.

While some recreational or leisure activities would not conflict with recreational prospecting, other uses are potentially incompatible e.g. bushwalking, canoeing, rafting, nature study, recreational fishing, day walking and picnicking, activities of Friends groups and others.

Table 5.1
Recreational activities in national and state parks specified in the terms of reference

Activity	Alpine National Park	Baw Baw National Park	Croajingolong National Park	Errinundra National Park	Lake Eildon National Park	Lerderderg State Park	Lind National Park	Mitchell River National Park	Yarra Ranges National Park
boating*	•		•		•				
bushwalking	•	•	•	•	•	•	•	•	•
camping	•	•	•	•	•	•		•	
canoeing and rafting	•	•	•		•			•	
cross-country skiing	•	•							•
cycling**	•		•	•	•	•	•	•	•
day walking	•	•	•	•	•	•	•	•	•
deer hunting	•	•			•			•	
fishing	•	•	•	•	•	•		•	•
four-wheel driving**	•	•	•	•	•	•		•	•
horse riding	•	•	•	•		•		•	•
mountain biking**	•	•	•		•			•	
nature study	•	•	•	•	•	•	•	•	•
orienteering and rogaining	•	•	•		•			•	
picnicking	•	•	•		•	•		•	•
rock climbing and abseiling		•	•	•		•		•	•
scenic driving	•	•	•	•	•	•		•	•
snow play	•	•							•
swimming*	•	•	•		•	•		•	•
trail bike riding**	•	•	•	•	•	•		•	•
schools education	•		•		•	•			•
Friends and volunteers	•	•	•	•		•			•

*May be adjacent to the park **Roads and vehicle tracks that are open to the public are available to bicycles, mountain bikes and licensed motor vehicles, including four wheel drive vehicles and trail bikes. Cycling and mountain bike riding may also be allowed on some tracks. Off-road driving and riding on Victoria's public land is illegal.

Stakeholder views – recreation in natural environments

Approximately 200 submissions expressed support for additional areas in parks to be made available for prospecting or fossicking. Other submissions, while not explicitly supporting additional prospecting in parks, expressed overall support for prospecting as a recreational activity. These submissions described prospecting as an activity with a minimal impact, similar to that of natural disturbances and other recreational activities such as bushwalking, horse-riding and four-wheel driving.

Some prospectors did not seek access to additional prospecting or fossicking areas in the national parks. For example, the Gemmological Association of Australia declined an invitation to be represented on the Community Reference Group for this investigation, stating that there are currently sufficient areas for non-commercial gemstone fossicking in Victoria.

The PMAV and many PMAV members or regional branches provided submissions. The PMAV submission proposed that access to public land for prospectors be in accordance with a strict code of conduct, and sought access to both areas located within known historical goldfields and areas of parks where there is no recorded gold. The PMAV did not seek access to areas such as closed water supply catchments and reference areas.

Most submissions did not identify specific areas in which prospecting should be allowed; those few that did most commonly mention the Alpine National Park, Baw Baw National Park, Lerderderg State Park and Yarra Ranges National Park. The PMAV advised that the parks under consideration are not noted for their large nuggets but are rich in small coarse gold which is quite detectable, and that the areas have not been well explored with modern (post 1995) detectors. Two submissions, including the submission from the East Gippsland Branch of the PMAV, provided detailed maps indicating broad areas of potential interest for gold prospecting in all the nine parks specified in the terms of reference.

A small number of submissions proposed that prospecting be allowed in national parks (either in the parks under investigation or in general), parks or public land with special conditions or on a trial basis. The PMAV East Gippsland Branch proposed that a trial could be implemented with participation limited to PMAV members, while the PMAV submission proposed that consideration be given to ongoing access to the parks being subject to current PMAV membership. Conditions proposed in submissions included the use of a monitored permit system for prospectors in parks, the establishment of a permit with stricter limits than the existing miner's right, and clear delineation of declared prospecting areas. Some submitters proposed that areas such as water supply

catchments, reference areas and wilderness zones be excluded from prospecting.

While acknowledging that prospecting equipment can be expensive, some submissions stressed that the pastime can also be carried out quite inexpensively. It was observed in submissions that the activity could be expected to increase in popularity in the future as the baby boomer generation retires. Some submissions considered exploration to be an inherent characteristic of prospecting, and that new areas would be sought in search of a find. Council also heard concerns from stakeholders about the potential for increased activity and pressure for further expansion of areas if there is a major find.

The VNPA submission and many individual submissions noted that fossicking is already permitted in extensive areas outside national parks in Victoria (e.g. state forests in eastern Victoria).

The Community Reference Group discussed the potential for collaboration between prospectors in the additional areas and Friends groups.

Council consideration – recreation in natural environments

Council notes the wide range of recreational activities that take place in the nine parks under investigation, several of which are dependent on undisturbed natural environments. Many thousands of people currently participate in these activities, from all parts of the community. Some require high levels of fitness or skill, but many are open to people of all ages and abilities. While most recreational activities in national parks have impacts which must be carefully managed, only deer hunting and fishing directly extract resources from the parks, and both of these activities largely (i.e. trout fishing) or solely target introduced species.

Council considered the merits of the proposal for a trial to assess the impacts of prospecting. On balance, it considered that a trial would not necessarily provide any relevant insight into the impacts of prospecting as a whole. Considerations included that the impacts of prospecting in various locations will vary according to the environmental and physical attributes of each area, the level of use, and equipment used. The Council does not consider that a representative area can be identified to provide a clear picture of the impacts of prospecting that can be applied across the state as a whole. Council also took into account that the assessment of a trial area with low levels of visitation during the trial period may not be indicative of visitation and impacts in areas if and when significant amounts of gold are found at some time in the future.

The Council was made aware of areas of public land in state forests and historic reserves where prospecting is currently allowed adjacent to the parks.

5.3 Aboriginal cultural heritage

The Office of Aboriginal Affairs Victoria (OAAV) advised VEAC that national and state parks are generally considered to be places of high potential to contain Aboriginal heritage places, and that mining, exploration and prospecting have the potential to harm Aboriginal cultural heritage places.[49] OAAV advised VEAC that there are a total of 942 registered Aboriginal cultural heritage places within the nine specified parks, cautioning that these data do not indicate the relative level of risk of harm posed by prospecting in the parks, they merely indicate what is known about Aboriginal cultural heritage places in these parks. Parks with fewer recorded places simply may not have been explored to the same degree. Prospecting activities such as dredging and sluicing and the associated increase in four wheel drive access and potential artefact removal are considered by the OAAV to have a high potential to harm Aboriginal heritage.

Stakeholder views – Aboriginal cultural heritage

More than 20 submissions refer to Indigenous cultural heritage values within the nine parks under investigation and parks in general. Some submitters observed that extensive and sensitive Indigenous cultural heritage exists across Victoria, particularly in areas without significant ground disturbance. In general, national parks represent broad Indigenous cultural landscapes with rich intangible heritage, and contain sensitive cultural heritage areas such as waterways and ridges.

Most of these submissions expressed concern that additional prospecting in parks has the potential to damage important Indigenous cultural heritage sites. Some submissions included suggestions to limit the potential for damage to cultural heritage sites in parks. These include assessing the potential impact on Indigenous heritage sites in detail prior to proposed expansion of prospecting activities, and additional training to assist prospectors to identify Indigenous cultural heritage in parks. One submitter suggested that cultural heritage awareness training be required to obtain a prospecting licence. Monitoring of prospecting activities was also proposed to protect cultural heritage sites.

A few submissions recognised that several of the national parks under investigation are currently, or are likely to be, the subject of joint management arrangements with traditional owners. These submissions stressed the need for appropriate consultation with, and decision-making by, those traditional owner organisations (Traditional Owner Land Management Boards, Registered Aboriginal Parties, traditional owner groups) affected by the proposed additional prospecting areas.

In its submission, the Victorian Traditional Owner Land Justice Group stated that Victorian traditional owners

support the sustainable use of natural resources; however, there are significant unresolved land justice issues in this state that make existing and proposed new resource-sharing arrangements inequitable and risk causing further harm to our cultural and natural heritage.

The Council was told that there are emerging traditional owner groups in Victoria who are not yet recognised bodies, for example, in far East Gippsland and for part of the Alpine region. These traditional owners need to be made aware of proposals affecting their Country.

Council consideration - Aboriginal cultural heritage

Council has been advised by the Gunaikurnai Traditional Owner Land Management Board (TOLMB), which has joint management of Mitchell River National Park, that the Mitchell River National Park has many culturally sensitive areas, sites of significance, Gunaikurnai sacred places, and provides habitat for many threatened species that are also significant to the Gunaikurnai people. Permitting disturbance of these features will not preserve Gunaikurnai culture or allow the realisation of the Gunaikurnai knowledge and culture to be incorporated in the management of the park. Council supports this view.

Council considers that the protection of Aboriginal cultural heritage values and the need to reflect Aboriginal community views is a high priority. Effective consultation was not possible in the timeframe with any of the traditional owners for the parks where additional areas are recommended, and this consultation, including a cultural heritage assessment if required, should occur before implementation of the recommendations. VEAC has been advised that traditional owner representative bodies do not cover all the parks under consideration. Where there are no recognised bodies, emerging traditional owner groups should be consulted.

5.4 Non-Aboriginal cultural heritage

Section 4.2.2 describes the legislation relating to archaeological sites and historic artefacts or relics. Prospectors frequently unearth archaeological relics when searching for gold as they are often doing so in areas formerly occupied and worked by gold rush miners. Heritage Victoria (HV) advised VEAC that the risk to historic archaeological sites can be minimised through sensitive detecting, the careful location of holes, digging carefully, and keeping excavations small and shallow. However HV noted that, unlike the goldfields of central and western Victoria, the parks now under investigation are not particularly suitable for prospecting with metal detectors, but are more suited for sluicing. In these environments alluvial gold is located primarily in creek and river beds, banks flats and elevated terraces, and extend for considerable distances along rivers. As river deposits and banks are continually replenished by flood action there may be intensive and repeated sluicing in the more sensitive river environments of the mountainous regions.

In the mountainous environments, the archaeological evidence of historic sluicing – small quarries, pebble dumps, tail races and habitation remains – is mostly found extending linearly along river banks. Heritage Victoria argued that there is a high likelihood that these types of archaeological sites will be disturbed if prospecting is introduced into these areas. HV also notes that historic mining sites in the mountainous goldfields have generally been subject to lesser disturbance than their lowlands counterparts; substantial areas of historic alluvial workings survive and quartz reefing sites often retain mining plant. Auriferous (gold-bearing) gullies and reef lines in these areas also tend to be obscured by blackberries, which means that there is potential for new archaeological sites through chance discoveries. Access to these areas generally requires four-wheel drive vehicles. HV is concerned that increasing four-wheel drive activity by including these areas as prospecting areas will make fragile historic mining sites more vulnerable to the pilfering of relics.

Stakeholder views – non-Aboriginal cultural heritage

Many submissions referred to prospecting as part of Victoria's history, particularly in central and western Victoria, and noted that gold prospecting and fossicking provide a strong historical and cultural link to this mining history.

Concern was expressed in one submission about the potential for unauthorised and intentional digging by prospectors on archaeological sites in the search for historic artefacts or relics and notes that such artefacts are protected by the *Heritage Act 1995*. VEAC heard from several prospectors of their interest in natural landscapes and how they had been shaped by gold mining. An integral part of their interest in prospecting was researching the gold mining history in their local area.

The United Kingdom's Portable Antiquities Scheme was mentioned in Community Reference Group discussions as an example of improving the recording of historic artefacts or relics. The scheme commenced in 1997 to encourage the voluntary recording of archaeological objects found by members of the public in England and Wales. Every year many thousands of objects are discovered, many of these by metal-detector users.[50]

Council consideration – non-Aboriginal cultural heritage

Council considered that the protection of non-Aboriginal heritage values should be a major consideration when considering additional areas. The Council accepts the view of Heritage Victoria that there appears to be considerable potential for damage to heritage sites and values in many of the nine parks under consideration. This is compounded by a general lack of awareness of regulations applying to archaeological relics.

5.5 Social and economic matters

Recreational prospecting can contribute to the Victorian economy directly through discovery and sale of gold or gemstones and indirectly through regional multiplier effects. Anecdotal evidence however is that gold found by recreational prospectors is often kept rather than sold or traded. There may be expenditure on equipment, and services to retail businesses such as camping and bushwalking, food and accommodation businesses, and petrol stations. These expenditures will occur whether or not the prospector is successful.

Any economic assessment however is hampered by the absence of relevant data. Participation in the hobby can be estimated by the numbers of miner's rights sold. As discussed in section 5.2 DPI reports approximately 4200 current miner's rights as of June 2012. However, no demographic data are available on holders of miner's rights, including whether the prospectors are Victorian residents or interstate or international visitors. No data are available on the frequency or patterns of prospecting in Victoria, although it is clear from anecdotal reports that most activity takes place in the goldfields of central Victoria.

The application fee for a miner's right is currently $31.30 for two years and $87.70 for ten years. It was not possible to obtain an estimate of annual revenue from fees. In comparison a game licence costs from $50.10 to $225.30 (depending on game species) for a period of up to three years, providing more than $2 million in revenue in 2011-12.[51] There were almost 41,000 licensed hunters in Victoria in 2011/12. In 2010/11 268,484 Recreational Fishing Licences were sold including three-year, one-year, 28-day and two-day licences, with fees from $6.00 to $66.00, for a total amount of almost $6 million.[52] VRFish estimates that there are more than 700,000 Victorians participating in recreational fishing.

A range of visitation data are available for Victorian national parks. For example, the Visitor Number Monitor is a biennial survey covering a sample of mostly Victorians but also interstate and overseas visitors. The statewide monitor was introduced in 2001 to monitor the number of visits to national and other parks and to report on change and trends in visitation numbers. The most recent monitor, in 2010–11, recorded 85.95 million annual visits to the Parks Victoria estate, including 46.42 million visits to parks. Visitor data for individual national parks are also sometimes available from visitor surveys.

Several estimates have been made of the economic value of nature-based tourism in national parks in Australia, usually finding that the economic benefits far exceed government expenditures on management. A report on the economic value of three national parks in Victoria identified that in 2001/02 Grampians National Park contributed $246 million to the Victorian economy and Port Campbell National Park contributed $190.4 million. At the Grampians National Park, Victoria, $2.6 million was spent on park management services in 2001.[53]

Economic costs associated with additional prospecting areas in parks are the direct costs of management, regulation, monitoring and administration, and a range of potential indirect costs. Indirect costs include possible threats to government investment in waterways management and rehabilitation, and a possible contraction of benefits from other recreational activities that are in conflict with use of the areas of the parks for prospecting.

Additional data from Parks Victoria indicate that there are approximately 200 volunteer and Friends groups who donate their time to Victorian parks, reserves, and marine sanctuaries throughout the year. In 2011-12 they contributed over 20,000 days of unpaid work.[54]

Research from around the world over the last century, shows that parks are important to the wellbeing of communities at a number of levels. They provide an extensive range of physical and mental health benefits, bring communities of people together, and support a range of science and learning opportunities.[55]

Waterways also provide significant social benefits for communities. A survey conducted in 2009 by the Department of Sustainability and Environment investigated the social importance of our rivers creeks wetlands and estuaries.[56] More than 7000 surveys were completed, with sizeable representation from every catchment across Victoria, making it the most comprehensive study of its kind in Australia. The most frequently mentioned use of waterways is for simply enjoying the scenery, followed by enjoyment of native animals, plants and birds, and for recreational activities such as walking, hiking, cycling, picnics, and barbecues. Almost two thirds of these recreational activities take place within a public park.

Stakeholder views – social and economic matters

The mental and physical health benefits gained from prospecting, particularly for older people, and the positive economic impact of prospecting in regional and rural areas, were highlighted in many submissions from individual prospectors. Other social benefits raised in submissions were the ability to enjoy the bush and the outdoors, improve awareness of natural environments, and carry out an enjoyable family activity teaching children about heritage and the bush.

PMAV submitted that prospecting continues to underpin the economy of many central Victorian towns, and that local communities would benefit from the expansion of prospecting into additional areas in national and state parks. The PMAV submission described prospecting as a low-impact activity that improves physical health and mental wellbeing.

The potential benefits that would arise from increased interstate and international tourism were raised in submissions. The New South Wales (NSW) and Australian Capital Territory (ACT) Prospectors and Fossickers Association said they regularly spend time in the Victorian goldfields and had a particular interest in the Alpine, Croajingolong and Errinundra national parks because of their proximity to southern NSW and the ACT. A number of submissions emphasised the connection between Victoria's gold mining past and today's recreational prospecting activities. Living heritage, it was argued, is a potential adjunct to tourism in former gold mining areas.

On the other hand, several submissions considered that extending prospecting into the specified parks would compromise the tourism values of national parks as unspoilt places.

The Community Reference Group (CRG) discussed the fee for a miner's right which it was thought would not cover the cost of monitoring impacts. The CRG also raised the question of whether it was expected that there would be an increase in the numbers of applications for miner's rights as a result of additional areas in parks. If there are similar numbers, as might be expected, then some areas would potentially gain from a shift in activity while others would lose.

Council consideration – social and economic matters

It was observed almost 20 years ago by the Parliamentary committee in Victoria inquiring into the search for minerals using an eductor dredge,[57] that the issue brought into conflict people of markedly different beliefs and viewpoints. The Council observed this same conflict in the present investigation, heightened in this case as the activity is proposed to take place in additional national parks which were set up primarily to protect the natural environment.

Council has been provided with a range of anecdotal evidence, both in submissions and in discussions with stakeholders, and from its own inspections of the specified parks and discussions with public land managers, and concludes that:

- prospectors and other visitors contribute to the economies of small towns close to major centres of prospecting activity or interest such as Maryborough
- visitors to national parks where prospecting is not permitted contribute to the economies of small towns such as Mallacoota
- no evidence was presented that the inability to access the specified national parks is limiting pursuit of prospecting in the areas of Victoria close to those parks
- there is little information on the level of prospecting in the 4.8 million hectares of state forest and other areas of Crown land currently available for recreational prospecting
- there would be substantial additional costs of management if prospecting were allowed in remote national parks (supervision, provision of reliable access, enforcement).

While Council accepts that there are economic benefits brought to local economies by the activities of prospectors, it is unlikely that this will be a major contributor to the local economies near the nine parks under consideration compared to other activities such as farming, resource industries, general tourism and the broader service sector. Although prospecting would be likely to have some economic impact in the central goldfields, no information was presented to quantify this benefit. The Council considers that the small additional number that would prospect in eastern Victoria would provide a minimal economic impact for local economies.

Because there is suitable public land already available for prospecting, but apparently under-utilised, the social benefits of prospecting are not dependent on the availability of the national parks. There is no evidence that making areas in the specified national parks available will increase overall visitation levels or that participation in the hobby will increase.

5.6 Purposes of national parks

As outlined in section 2, the primary purpose of national parks is for preservation and protection of the natural environment.

For a national or state park, assessments of environmental impacts are made in the context that the primary purpose of national parks is to provide the highest level of protection to natural environments. Within this context activities and uses are permitted in national parks where they are compatible with the primary purpose. While an impact may be acceptable on public land in categories such as state forest, natural features reserve or regional park, it may not necessarily be acceptable in a national park. The distinction is recognised in mineral resources legislation in Victoria, which takes as a starting principle (unless otherwise provided for) that national, state, wilderness parks and reference areas are exempt from mining and exploration.

In view of the sustained demand for outdoor recreation and the high capability of some public land to meet this demand, VEAC and its predecessors, in making their recommendations, have recommended that most public land should be available for some types of recreational uses, and that most recreational activities can be accommodated somewhere on public land without detriment to other values, but not all activities are able to be accommodated everywhere. This is consistent with current government policy for public land.[58]

Information was provided in section 2.2.2 about a number of statutory land use designations that form overlays to national parks. Most of these either legally prohibit access or prohibit certain activities, including extractive activities such as prospecting. Others, such as heritage rivers, are managed in a broader policy framework. A relatively high number of areas with additional protection through land use designations are found in the nine parks under investigation. The nine parks form only 13 per cent of Victoria's 71 national and state parks but contain 22 per cent of the reference areas, 61 per cent of the heritage rivers, 42 per cent of the designated natural catchments, 40 per cent of the wilderness zones and half of the remote and natural areas.

Stakeholder views – purposes of national parks

Most submissions commenting on the purpose of national parks opposed prospecting in additional areas. Several submissions stated that prospecting is incompatible with the primary purpose of national parks, to preserve natural environments, as specified in the *National Parks Act 1975.* These submissions commented that parks are reserved for the conservation of natural values and compatible recreation rather than economic activities. Many stressed the important role that national parks play in protecting natural areas and values for future generations, while some referred specifically to the obligation to pass on to our children some places that have been protected from all unnecessary disturbances. Others believed prospecting to be incompatible with quiet enjoyment, and that people need access to unspoiled natural places.

Some submissions noted that Victoria is the only state that currently permits recreational prospecting in national parks, and that there are already many other areas available for prospecting in Victoria's state forests, particularly in the vicinity of the parks under investigation.

Some submissions referred to areas with higher levels of protection which need to be respected e.g. heritage rivers, natural catchments. Others pointed to the potential for prospecting to undermine efforts of agencies and community volunteers in sensitive areas, for example, platypus conservation work in the Yarra Ranges.

Previous Land Conservation Council (LCC) reports and recommendations, referring to fossicking and prospecting as legitimate uses of public land, were raised in a small number of submissions and in Community Reference Group (CRG) discussions. Others referred to the LCC reports being 30 years old, and pointed to new ecological threats that had emerged since then, and changes in prospecting itself resulting from technological improvements especially to metal detectors.

Council consideration – purposes of national parks

The Council heard arguments from recreational gold prospectors that all of the area of the nine parks, other than some closed areas such as reference areas and water supply catchments, should be made available for recreational prospecting, on the basis that prospecting is a low-impact activity and for reasons related to a view that personal freedoms are being infringed by being generally excluded from parks. Council does not accept that prospecting is always low impact for the reasons outlined in 5.1 to 5.4 and therefore it does not accept this approach. Council notes that this approach appears to be based on a view that all recreational uses should be accommodated on almost all categories of public land including national parks. This is inconsistent with national and international understanding of national parks, and with long-standing practice in Victoria. Council's

recommendations in the investigation reflect its view that the primary purpose of national parks is protection of the natural environment, and that the approach that treats prospecting as a non-conforming use is still appropriate.

The Council has also examined the legal framework and purposes of land use designations which form overlays in national parks. The additional protection conferred by these designations has been taken into account in developing recommendations.

There was a range of views about the consideration that should be given to heritage rivers in this investigation. The Land Conservation Council's Rivers and Streams Special Investigation final recommendations (1991) refers to recreational activities being permitted to continue 'in accordance with land status' and, in relation to commercial exploration and the recreational search for minerals 'areas currently exempted or excepted under existing legislation should remain so'. Heritage rivers occur both inside and outside national parks, and the legislation is not prescriptive with respect to permitted activities. Council's view is that for those heritage river areas that have been designated within parks the designation is applied in combination with the protection afforded by its national park status, and heritage river areas in national and state parks have a higher level of protection than those outside, for example, in state forest.

5.7 Park management and compliance

Concerns raised around park management were focused on the ability to adequately regulate and supervise the activity in additional areas of parks, and resourcing issues.

The Department of Primary Industries advised VEAC that contraventions have been investigated but there have been no prosecutions relating to the miner's rights provisions under the *Minerals Resources (Sustainable Development) Act 1992*.

In some jurisdictions, restrictions are placed on equipment that can be used for recreational gold prospecting in waterways. For example, recreational panning may be restricted to hand pans, hand shovels, and metal detectors, with sluice or shaker boxes, suction dredges, and other mechanical devices not permitted. Restrictions are also placed on depth and volumes of excavation (see section 3.5). These restrictions are placed on recreational prospecting in land tenures with lesser protection than national parks; the activity is generally not permitted at all in national parks. Specific legislation is in force for prospecting in other Australian jurisdictions e.g. with definitions of the activity, permitted and prohibited equipment, and an offence and penalty regime.

Stakeholder views – park management and compliance

Some submissions expressed concern that the management of prospecting activity in additional areas in parks would increase management costs and/or divert staff and resources away from other necessary activities. Similarly, the relatively remote nature of some parks under investigation may make prospecting activities in these areas difficult to monitor, manage or regulate. Submissions suggested that there is currently little or no monitoring of the impacts of prospecting in more accessible parks such as the box-ironbark parks. Several submissions considered that there is insufficient monitoring of the impacts of existing prospecting in parks, and that these impacts should be assessed prior to the consideration of new areas for prospecting. The Friends of the Box-Ironbark Forests (Mount Alexander Region) highlighted issues with the management with prospecting in the Castlemaine Diggings National Heritage Park since it was established ten years ago, including examples of violations of the prospector's codes of practice, absence of monitoring and the low level of staffing in the park.

Other submissions suggested that prospecting can assist park management. They stated that prospectors could informally assist land managers by providing increased surveillance (particularly in remote areas) and through rubbish removal and removal of lead and mercury. The PMAV submission suggested that management resources should be used for improved public land management rather than over-regulation of prospecting activity. The PMAV also proposed that consideration be given to making access to additional areas subject to a current PMAV membership as a means of improving compliance.

The VNPA submission expressed concern that allowing prospecting in new areas will increase park management costs, particularly through the need for additional visitor management and regulation.

The VNPA noted that there has been no monitoring of environmental impacts in those parks where prospecting is currently permitted, and proposes a statewide review of these impacts prior to any expansion of this recreational activity. It highlighted the need to improve the management and regulation of prospecting in Victoria, and recommended a new regulatory framework for prospecting be enacted prior to identifying any new areas in national and state parks.

Discussion at the Community Reference Group (CRG) identified that effective tools available for management included regulation, and resourcing collaboration, education, and science-based research. Various suggestions were made in submissions to improve the management of prospecting including permit and notification regimes. The CRG also discussed that, as prospecting takes place largely unsupervised, there

was no reliable assessment of current compliance with regulations. There was little confidence that increased resources would be provided to enable management of the activity. Aboriginal cultural awareness training was suggested as a requirement before obtaining a miner's right as a means of improving compliance with Aboriginal heritage legislation.

The PMAV and prospecting clubs indicated that they are willing to assist in updating guides and protocols, especially protocols around prospecting in waterways, as the current guide focuses on metal detecting.

Council consideration – park management and compliance

In Victoria, enforcement in relation to prospecting is seriously hampered by the absence of a detailed regulatory regime, ambiguous or conflicting legislative provisions, limited resources for enforcement, and an absence of adequate communication materials, such as maps, up to date websites, and signage.

In developing its recommendations, Council also took into account the feasibility of managing prospecting activity in very remote areas, and the impact of adding this role to the already significant demands of park management. While most prospectors behave responsibly, some do not, and repairing damaged sites is an additional burden for park management. As far as possible, Council took care to recommend areas with readily identifiable boundaries to facilitate communication with prospectors and for ease of enforcement.

5.8 Safety and risk

Abandoned mine workings are dangerous. Shafts and tunnels may be obscured by dense vegetation growth, and very deep vertical shafts are not uncommon. Many are unrecorded. Workings may be poorly ventilated and may have dangerous accumulations of carbon dioxide.

Safety and public risk is highlighted in park information materials through general cautions such as this in the Parknote for Castlemaine Diggings National Heritage Park: i.e. 'Caution: Keep to the tracks to avoid old mine workings such as shafts and tunnels. It can be cold and wet in winter and very hot and dry in summer so be prepared for adverse weather conditions'.

Many parks and forests are located in areas of high fire risk. In relation to bushfire risk, notices are included in park information materials advising visitors, for example, that the park will be closed to the public on Code Red Fire Danger days, and the action that should be taken if visitors are already in the park.

It was noted in section 5.6 that the nine parks under investigation have a relatively large number of remote areas, wilderness areas and so on. In some remote areas such as Errinundra National Park the wet climate and the steep, densely forested and untracked terrain of much of the park present inherent dangers and risks to ill-prepared and ill-equipped visitors. Some parts of the park present particular difficulties for any rescue operation. This is true of many of the national parks specified in the terms of reference such as the Alpine National Park and Baw Baw National Park. Baw Baw National Park, for example, contains one of the few remaining untracked sub-alpine areas in Victoria. Many parts of Lerderderg State Park, despite its proximity to Melbourne, are remote and hazardous environments only suitable for experienced bushwalkers.

Many prospecting clubs and organisations actively promote safe practices amongst their members. The PMAV together with the VGCA has developed field protocols, while, for example, the VGCA also encourages all members on its coordinated field trips to wear an orange fluoro safety vest when in the field.

Stakeholder views – safety and risk

Safety and risk was not frequently raised in submissions, although some stakeholders raised safety issues in areas such as Errinundra, Lind and Croajingolong national parks with their remote terrain, dense forest and unrecorded mine shafts. Parts of several of the specified parks are also available for deer hunting, and sharing the park with hunters at certain times of the year was considered by some people to be undesirable, as both groups have a tendency to go off track.

Council consideration – safety and risk

The parks under investigation are unlike the accessible landscapes in the central Victorian goldfields region that are the major destinations for gold prospectors. Extremes of temperatures combined with the remoteness and untracked nature of many areas mean that prospectors inexperienced in Victoria's bush, in particular, need to take proper precautions.

RECOMMENDATIONS 6

The Council's recommendations are presented in this section. The recommendations take into consideration the direction of Government in the terms of reference that the overall objective of the investigation is to increase the number of parks under the *National Parks Act 1975* where prospecting may be permitted.

The recommendations have been developed taking into account information gathered from written submissions, the advice of the Community Reference Group, further consultation with stakeholders, discussions with government agencies and land managers, site visits to the specified parks, and some additional commissioned work. Section 1.6 provides more details of consultation.

Council agrees with the submissions of prospectors that the activity they enjoy has a number of benefits and is often or mostly carried out responsibly. However, it was not presented with evidence that a lack of access to the specified parks is preventing the enjoyable pursuit of this activity, or that there is a high level of demand for access to additional park areas. Indeed, there are areas of state forest and several historic areas adjacent to the specified parks that provide identical or better or more extensive prospecting opportunities, and which appear to be currently under-utilised. Council also notes the submission of Heritage Victoria, and many individual submissions from prospectors and businesses associated with prospecting, that the goldfields area of central and western Victoria is by far the most important and accessible area for prospectors from Victoria or interstate.

6.1 The Council's approach to developing recommendations

The Council developed its recommendations using the following inputs and processes:

- **Background analysis** including the definition of the nature and attributes of recreational prospecting; review of the legal frameworks and definitions in Victoria (and a scan of the frameworks used in other jurisdictions); review of the areas currently available for recreational prospecting on public land (including existing parks) to gain an understanding of existing use patterns and management; review of the information on observed and potential impacts of prospecting to guide the identification of possible new available areas; and review of the general attributes of the parks specified in the terms of reference
- **Contact** with agencies and key stakeholders to assist in the analysis and to develop an understanding of the range of views
- **Consideration of information** provided in submissions
- **Mapping** of public land with recreational prospecting attributes using spatial datasets from the Department of Primary Industries (DPI), prospecting guides, consultation with DPI and stakeholder submissions; including an assessment of whether there are prospective areas in parks that are not available elsewhere
- **Development and application of criteria** that would preclude or condition access to the recreational prospecting areas: including areas as determined by legislation or policy such as reference areas, and areas that may be at risk from prospecting activity as determined by assessing environmental and heritage values
- **Mapping of potential candidate areas, and refining** areas through site visits and a broad analysis, taking into account impacts on other users and park assets, vehicular access, feasibility of management boundaries
- **Assessment of candidate areas against the extent of area available on adjacent public land** (especially given the paramount 'preserve and protect' aims of the national parks legislation)
- **Finalisation** of the recommended areas and mapping.

Accordingly, the Council's approach has been to systematically evaluate each of the nine parks as outlined above. It should be noted that the level of detail for each of these steps was limited by the time available. As there appeared to be little demand for additional areas for gem fossicking, the focus was on areas that were of

interest for gold prospecting. The process has resulted in selecting possible areas in some of the national parks while excluding other areas from further consideration. The major factors that were taken into account, usually in combination, were:

- the presence of reference area, closed catchment, wilderness area/zone, remote and natural area, natural catchment
- land use designation which, in a national park, is considered to be incompatible with use for recreational prospecting: e.g. heritage river
- whether prospecting could be feasibly undertaken without significant disturbance to vegetation
- the potential impact on high environmental value or vulnerable waterways
- the impact on Aboriginal cultural heritage, or whether incompatible with traditional owner preferences
- the impact on European cultural heritage
- whether prospecting is incompatible with other visitor uses of the site
- whether the activity compromises investment in park assets or other programs, such as investment in healthy waterways
- vehicular access issues
- remoteness which could result in the inability of land managers to effectively supervise prospecting
- the ability to define an appropriate area within a park that would avoid high value and vulnerable areas.

6.2 Additional areas

The Council recognises that the primary purpose of national parks, worldwide and under the Victorian National Parks Act, is the protection of natural environments for this and future generations, and notes Victoria's excellent record and reputation nationally and internationally in building up a representative and robust system of parks and conservation reserves. Council notes that while recreation and enjoyment of national parks is encouraged, extraction of natural resources is not generally compatible with the purpose of national parks, and is not allowed other than by exception. Similarly, digging and removal of vegetation is not permitted other than by exception. Consequently, where such uses are proposed either to be introduced or to continue, strict conditions should be put in place to reduce impacts as far as possible. In Victoria, public land has been systematically assessed and reviewed by VEAC and its predecessor organisations to ensure that recreational activities and extractive activities that are incompatible with the purpose of national parks are able to be undertaken in extensive areas of public land in categories such as state forests, regional parks and many Crown land reserves.

In relation to the commercial and recreational exploration and extraction of mineral resources, the principle of national and state parks being generally unavailable for these activities is reflected in both the mineral resources and the national parks legislation (see section 3). Specific amendments to primary legislation are required for such activities to be allowed, indicating that only in exceptional circumstances have governments departed from this principle.

The recommendations in R1 for the following eight additional areas in national and state parks to be made available for recreational prospecting are made within the context outlined above.

Lerderderg State Park

Two additional areas are recommended in the state park totalling approximately 573 hectares (see maps A and B). The areas are located in the northern part of the park: the Yankee Creek area (46 hectares) is located near Shaws Lake north of Blackwood, and the Morning Star area (527 hectares) is located north of O'Brien's Crossing and west of the Lerderderg River. The area takes in part of the Blackwood and Blakeville goldfields which also extend outside the park in the Crown land reserves and state forest near Blackwood and the Wombat forest.

Lake Eildon National Park

An additional area is recommended in the national park of approximately 2810 hectares (see maps A and C). The Jerusalem Creek area is located in the park's Jerusalem block, east of Eildon township. The area includes part of the Alexandra goldfield, which extends onto state forest and private land.

Alpine National Park

Howqua Hills

Two additional areas are recommended in the Howqua River section of the national park totalling approximately 2322 hectares (see maps A and D). Howqua Hills East (1813 hectares) lies between the eastern side of the Howqua Hills Historic Area and Brocks Road; Howqua Hills South (509 hectares) is south of the historic area. The two areas include part of the Howqua goldfield which also extends into the adjacent historic area.

Howittville

An additional area is recommended in the Dargo section of the national park, including the Wongungarra River, of approximately 1167 hectares (see maps A and E). The area is located between the Wongungarra River and the

Cynthia Range, and abuts the Grant Historic Area in the southern part of the park west of Dargo township. The area includes part of the Grant-Crooked River goldfield, which also extends into the adjacent Grant Historic Area to the east and the state forest to the west. The recommended area includes the Wongungarra River adjacent to the Grant Historic Area. Subject to clarification of the legal boundary of the park, the river may be either in the park or the historic area.

Dartmouth area

Two additional areas are recommended in this section of the national park totalling approximately 15,467 hectares (see maps A, F and G). The areas are located adjacent to Lake Dartmouth, north of Benambra and south-east of Mitta Mitta in the north-eastern part of the national park. The Wombat Post Office (PO) area (5492 hectares) extends east from the Mount Wills Historic Area, and the Eustaces area (9975 hectares) is on the eastern side of Lake Dartmouth. The areas take in part of the Wombat Creek-Glen Wills and Dart goldfields.

Other specified parks

The Council does not recommend additional areas be made available in the other parks specified in the terms of reference for reasons discussed in detail in section 5 and summarised in 6.1 above. The Council believes that its decision not to recommend additional areas in all nine specified parks will have few if any adverse impacts on the opportunities available for recreational prospecting in the areas in which those parks are located. Without exception, there are abundant suitable alternatives available on public land near the parks where no additional areas have been recommended (see map A).

Consultation with Aboriginal traditional owners

The Council notes that, in the time available for this investigation, it was not possible to carry out the appropriate consultation with Aboriginal traditional owners and other relevant organisations. Cultural heritage assessments have not been undertaken. Recommendation R1(e) addresses these matters.

6.3 Equipment and activities

The Council believes that in national and state parks, if recreational prospecting in waterways is allowed to take place, it is appropriate that it be limited to hand pans and sieves, shovels and picks, and metal detectors, to limit the amount of material that can be excavated from the streambed. It is widely recognised that a person using even a small sluice box can process far more material per hour than a person using a gold pan. The Council believes that the formal conditions for prospecting equipment, depth and volume of excavation, and repair of damage, applying broadly to recreational prospecting in Victoria fall short of minimum standards routinely applied in other parts of Australia and require review in consultation with stakeholders. In national parks however these conditions should apply immediately. The offence and penalty regime should be in the primary legislation. Recommendation R1 addresses these matters.

The Council considered recommending that a special permit or consent regime be established for prospecting in the recommended additional areas. Such regimes provide for finer scale management of sites and visitation levels, improve compliance, and can provide for cost recovery at a level that reflects the actual costs of management. In the Victorian context, a permit regime would also be consistent with the approach taken for all other activities in national parks (with the exception of fishing and deer hunting) that involve taking, digging, disturbance, or which are conducted for private profit. However, on balance, the Council believes that implementing the additional restrictions and conditions specified in recommendation R1 would provide an adequate framework for management and therefore has decided not to recommend a requirement for special permits. In making this decision, the Council was mindful that in the time available for the investigation it was not able to assess the implications of an individual permit regime on management of those parks in the more heavily visited goldfields area of Victoria where prospecting is currently allowed.

Recommendation

R1 Additional prospecting areas

(a) That recreational prospecting[1] be allowed in the eight areas listed below and shown on maps B to G:

1 Yankee Creek, Lerderderg State Park

2 Morning Star, Lerderderg State Park

3 Jerusalem Creek, Lake Eildon National Park

4 Howqua Hills South, Alpine National Park

5 Howqua Hills East, Alpine National Park

6 Howittville, Alpine National Park

7 Wombat PO, Alpine National Park

8 Eustaces, Alpine National Park;

and

(b) be subject to the following conditions and restrictions:

(i) only non-mechanical hand tools may be used

(ii) explosives must not be used

(iii) any excavation must be kept to a minimum and must not exceed one cubic metre

(iv) sluices and motorised equipment must not be used for processing excavated material

(v) any tree or shrub must not be damaged or removed

(vi) any damage to ground layer vegetation must be kept to a minimum

(vii) any damage to the land arising out of searching must be repaired on the same day as the damage is caused (including the reinstatement of litter, soil, rocks and debris removed during searching)

(viii) any park infrastructure including roads, vehicle tracks, bridges, culverts, drains, constructed walking tracks, camping grounds, picnic areas or any other specifically designated areas must not be dug, excavated, damaged, disturbed or otherwise interfered with

(ix) any Aboriginal place or object, and any non-Aboriginal heritage place or object, must not be damaged, defaced, disturbed or otherwise interfered with (including any archaeological site or relic, or burial site)

(x) the discovery of any Aboriginal site or object must be notified to the Office of Aboriginal Affairs Victoria and objects must not be removed

(xi) the discovery of any archaeological relic must be notified to Heritage Victoria and relics must not be removed

(xii) seasonal and local access restrictions and other directions of the park manager must be observed

(xiii) the holder of a miner's right must produce the miner's right for inspection if asked to do so by any person acting under a delegation conferred under section 91(b)(ii) of the *Minerals Resources (Sustainable Development) Act 1990;*

and

(c) that these conditions and restrictions are included in an amendment to section 32D of the *National Parks Act 1975*;

and

(d) that an offence and penalty be established in the Act for non-compliance with conditions;

and

(e) prior to these recommendations being implemented

(i) that consultation be carried out with the relevant traditional owner groups

(ii) that a cultural heritage assessment be carried out and any other actions that are required for compliance with the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2007*

(iii) that any required information on the nature of activities on or near a waterway be submitted to the relevant waterway manager for review.

[1] Recreational prospecting is searching for minerals or gemstones under a miner's right or a tourist fossicking authority as defined in the *Minerals Resources (Sustainable Development) Act 1990.*

6.4 General recommendations

In sections 2, 3 and 4 of this report Council observed that there are a number of possibly obsolete, ambiguous or otherwise unclear or weak provisions in the mineral resources and national parks legislation governing recreational prospecting in Victoria, and that there may also be ambiguous or conflicting provisions in water and heritage legislation. In particular, the so-called '1881 list of exempt rivers and streams' needs review (see section 3.4).

Enforcement appears to be compromised by the absence of provisions that are commonplace in legislation regulating other forms of extractive industries and recreational activities, such as fishing. The Council believes that a review of the provisions, definitions and offences that apply to other extractive activities with a view to applying similar regimes would improve the tools available for management and enforcement.

Recommendation R2 addresses these matters.

Recommendation
R2 Clarifying legislation

That the status of legislative provisions relating to activities associated with recreational prospecting be assessed, clarified and updated as follows:

(a) that rules be clearly specified around the use of motorised equipment in processing gravel and other material for minerals excavated with hand tools

(b) that rules be clearly specified for permissible volumes of material, and timeframes for repair of damage

(c) that the status of excavation of gravels and soil and interference with vegetation associated with recreational prospecting in waterways be clearly specified in the by-laws or regulations arising from the Water Act related to activities and works on waterways

(d) that the areas of restricted and unrestricted Crown land where recreational prospecting is permitted be clarified and appropriately gazetted and regulated

(e) that consideration be given to provisions to improve enforcement such as definitions of recreational prospecting and recreational prospecting equipment, prohibiting carriage of prospecting equipment in certain areas, and scaling of penalties relating to failure to 'repair' according to the severity of damage.

The Council was advised that Parks Victoria staff are not currently authorised to enforce provisions of the earth resources legislation relating to the miner's right, even though specific provision is made in the *Mineral Resources (Sustainable Development) Act 1990* for Parks Victoria employees to be delegated with the powers of an inspector. Together with the absence of a specific penalty for breach of the prospecting restrictions and conditions under the *National Parks Act 1975*, this limits the tools available to park staff to enforce the provisions for existing recreational prospecting in national and state parks. It is not clear why the delegations have not been made, but the Council believes that the situation should be remedied as soon as possible. Recommendations R1(b), (c), (d) and R3 address these matters.

Recommendation
R3 Authorisations for Parks Victoria employees

That relevant Parks Victoria staff are trained and authorised under s91(b)(ii) of the *Minerals Resources (Sustainable Development) Act 1990* to enforce provisions of that Act relating to the miner's right.

A major issue that was frequently raised with the Council was the ability of Parks Victoria staff to meet the additional demands of managing recreational prospecting. Although data are not available on the level of resources that are required to manage recreational prospecting in the parks in which it is currently allowed in central Victoria, it is clear that it consumes considerable time of rangers. This activity should not be introduced in additional parks if sufficient resources are not available for management. Council does not expect any additional physical infrastructure other than signage to be required in the short term. Recommendation R4 addresses this matter.

Recommendation
R4 Resourcing

That sufficient resources be provided to enable implementation of these recommendations, if accepted, including enforcement, adequate on-ground supervision of recreational prospecting in the additional areas, improved information and communication, and research and monitoring.

The Council was informed that, although a commitment was made in 2002 to monitoring of prospecting in the box-ironbark national and state parks in Victoria's goldfields region, no monitoring has been undertaken. The Council considers that a broad monitoring program may be difficult to design, but that research should be encouraged and supported in targeted areas particularly those associated with assessment of impacts on key environmental and heritage values. The Council was disappointed with the poor data that were available on the holders of miner's rights, and their levels and patterns of activity. This made it difficult for the Council to reliably determine who participated in recreational prospecting on Victorian public land including demographic patterns, the areas that were most important to hobbyists, and levels of compliance. Improved base levels of data collection are desirable to assist in management of recreational prospecting and in targeting information materials. Recommendation R5 addresses research.

Recommendation
R5 Research into the impacts of recreational prospecting

That further research into the potential effects of recreational prospecting in national and state parks should be undertaken and supported, with a priority on impacts on waterways in parks, impacts on ground flora, and impacts on Aboriginal and non-Aboriginal cultural heritage.

Many stakeholders expressed to VEAC, both in submissions and face-to-face, that it is difficult to obtain accurate and up-to-date information about where prospecting is permitted, and about other rules and regulations that affect the activity. The Council has also concluded that there is little knowledge outside local communities about the opportunities for recreational prospecting that already exist in very large areas of state forest and other Crown land in eastern Victoria, including around the specified parks. These opportunities should be publicised more widely, through readily accessible printed and online material. Recommendation R6 addresses the matters of information and communication.

Recommendation
R6 Information and communication

That improved community information is developed as follows:

(a) statewide and regional maps providing up to date information about public land where prospecting is permitted

(b) information clearly outlining heritage responsibilities for both Aboriginal and non-Aboriginal cultural heritage

(c) appropriate safety information;

and

(d) in addition to printed material, that the information is also available through improved websites which also link to local information such as seasonal road closures and other road conditions, and other temporary access restrictions due to wildfires or planned burns, or to avoid disturbance to sensitive flora and fauna.

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