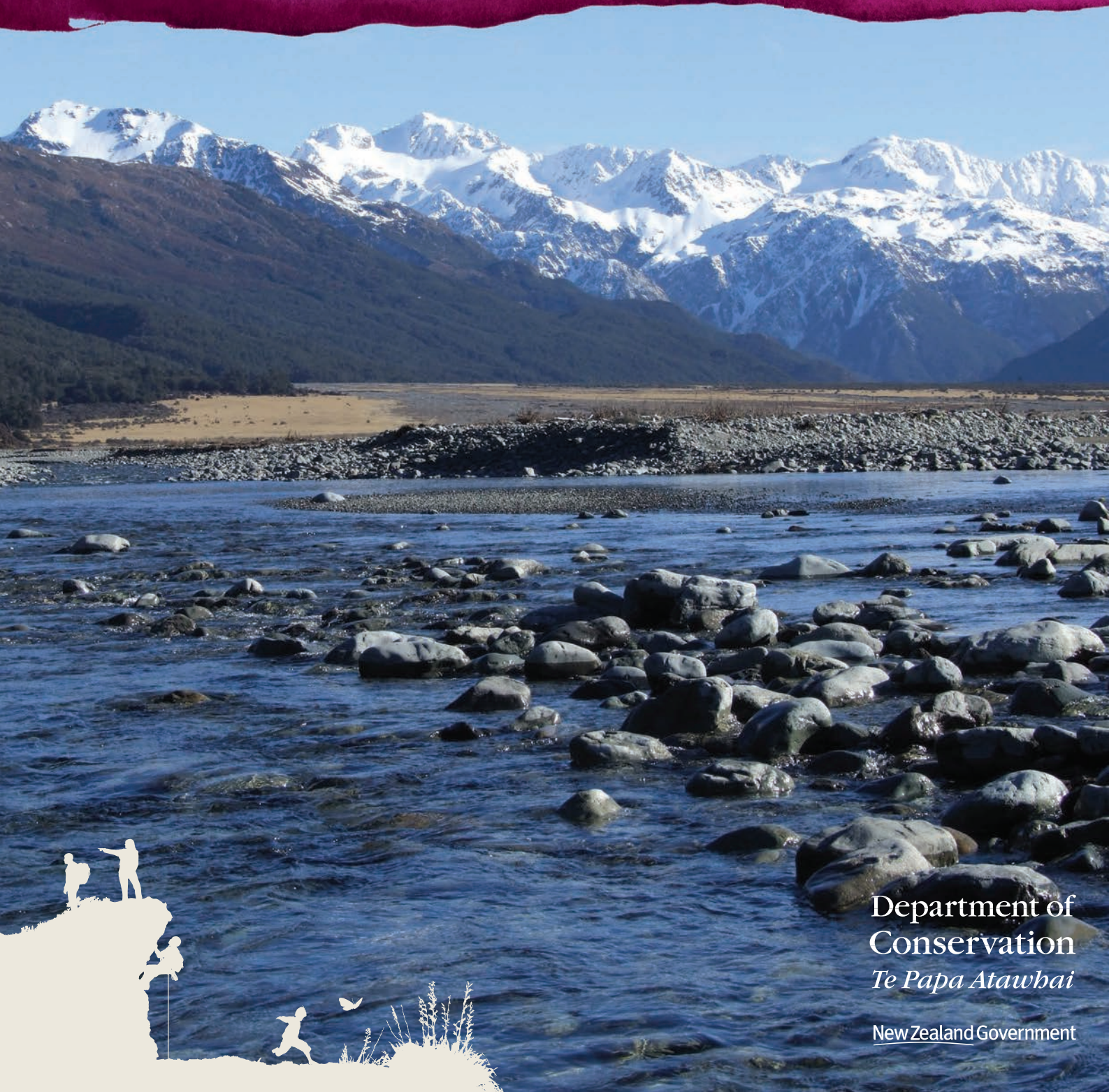


CMS

CONSERVATION MANAGEMENT STRATEGY

Canterbury (Waitaha) 2016, Volume 1



Department of
Conservation
Te Papa Atawhai

New Zealand Government

CMS

CONSERVATION MANAGEMENT STRATEGY

Canterbury (Waitaha) 2016, Volume 1

Cover image: Waimakariri River looking toward Shaler Range and Southern Alps/Kā Tiritiri o te Moana
Photo: Graeme Kates

September 2016, New Zealand Department of Conservation

ISBN 978-0-478-15091-9 (print)

ISBN 978-0-478-15092-6 (online)



Crown copyright © 2016

This work is licensed under the Creative Commons Attribution 4.0 International licence. In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work to the Crown and abide by the other licence terms. To view a copy of this licence, visit <https://creativecommons.org/licenses/by/4.0/>.

Please note that no departmental or governmental emblem, logo or Coat of Arms may be used in any way which infringes any provision of the Flags, Emblems, and Names Protection Act 1981. Attribution to the Crown should be in written form and not by reproduction of any such emblem, logo or Coat of Arms. Use the wording 'Department of Conservation' in your attribution, not the Department of Conservation logo.

This publication is produced using paper sourced from well-managed, renewable and legally logged forests.

Contents

Foreword	7
Introduction	8
Purpose of conservation management strategies	8
Treaty partnership with Ngāi Tahu	9
CMS structure	10
Interpretation	11
CMS term	12
Relationship with other Department of Conservation strategic documents and tools	12
Relationship with other planning processes	14
Legislative tools	15
Treaty of Waitangi and Ngāi Tahu settlement obligations	15
International obligations	16
Part One	17
1.1 The Department in Canterbury (Waitaha)	17
1.2 Vision for Canterbury (Waitaha)—2066	17
1.3 Distinctive features, values and issues of Canterbury (Waitaha)	19
1.4 Treaty partnership with Ngāi Tahu	22
1.5 Canterbury (Waitaha) by 2026	30
Part Two—Places	41
2.1 National Parks Place	42
2.2 Southern Conservation Parks Place	45
2.3 Northern High-Country Place	59
2.4 High-Country Basins Place	72
2.5 Foothills Place	85
2.6 Braided Rivers/Ki Uta Ki Tai Place	92
2.7 Christchurch City/Ōtautahi Place	100
2.8 Banks Peninsula/Te Pātaka o Rākaihautū Place	104
2.9 Coastal Land and Marine/Ki Tai Place	117
Part Three—Specific policy requirements for Canterbury (Waitaha)	132
3.1 General	132
3.2 Vehicles	134
3.3 Mountain bikes (non-motorised)	136
3.4 Electric power-assisted pedal cycles	137
3.5 Other means of transport	138
3.6 Aircraft	139
3.7 Animals	145

3.8	Dogs	145
3.9	Horses and pack animals	146
3.10	Structures and utilities	147
3.11	Private accommodation and related facilities	148
3.12	Marine mammal viewing	151
3.13	Commercial eeling	151
3.14	Sports fish and game bird hunting	152
3.15	Grazing and farming	152
3.16	Mining	153
3.17	Sand and shingle extraction	153
3.18	Commercial filming and photography	154
3.19	Collection of materials	155
3.20	Wild animals	156
3.21	Game animals (see also Wild animals)	158
3.22	Sporting and other competitive events	159
3.23	Recreation activities using fixed anchors	160
3.24	Fire management	161
3.25	Ski fields	162
3.26	Gemstone fossicking	162
Part Four—Implementation monitoring and reporting, and review		164
Glossary		165
<hr/>		
Appendices		
<hr/>		
Appendix 1		186
	Work or activities of the Department of Conservation that it considers meets the requirements of Section 4(3) of the Resource Management Act 1991 for exemptions from land use consents	
Appendix 2		196
	Ecosystem and habitat types within Canterbury (Waitaha)	
Appendix 3		213
	Islands in Canterbury (Waitaha)	
Appendix 4		215
	Priority ecosystem units on public conservation lands and waters in Canterbury (Waitaha) identified by the Department through natural heritage prioritising processes in September 2013	
Appendix 5		227
	Threatened and at-risk indigenous flora and fauna present in Canterbury (Waitaha)	
Appendix 6		238
	Threats or pests and wild animals present in Canterbury (Waitaha)	
Appendix 7		254
	Nationally iconic species in Canterbury (Waitaha)	
Appendix 8		255
	Marine habitats and ecosystems in Canterbury (Waitaha)	
Appendix 9		262
	Significant geological features, landforms and landscapes in Canterbury (Waitaha)	

Appendix 10	266
Actively conserved historic places on public conservation lands and waters in Canterbury (Waitaha)	
Appendix 11	273
Icon and Gateway destinations in Canterbury (Waitaha)	
Appendix 12	274
Prescriptions for managing visitor management zones	
Appendix 13	278
Ngāi Tahu Claims Settlement Act 1998 provisions relating to Canterbury (Waitaha)	
Appendix 14	301
Statement of Outstanding Universal Value for Te Wāhipounamu—South West New Zealand World Heritage Area	
Appendix 15	305
List of larger conservation units, ecosystems and historic values within Foothills Place	
Appendix 16	308
Publicly-available huts on public conservation lands and/or managed by the Department within Canterbury (Waitaha)	
Index	313

Foreword

Major issues dealt with in this CMS are ongoing threats to indigenous biodiversity especially in the lowlands and high-country basins, increasing concerns about the effects of climate change, and management of the extensive additional public conservation lands since 2000. The Department has recognised that to halt the ongoing decline of New Zealand's natural heritage, and to manage well our visitor facilities, we need to significantly increase our conservation effort by working more with others - Ngāi Tahu, communities, businesses and individuals; even more than has occurred over the past ten years.

For the first time, this CMS integrates national and local conservation priorities at particular places and identifies desired outcomes for places that are special to communities and Ngāi Tahu.

This CMS has been developed through a lengthy public process and is the result of input from Ngāi Tahu and many in the community. Their input, and enthusiasm and support for conservation, is acknowledged and has helped to direct the future of conservation in Canterbury (Waitaha) over the next ten years and beyond.

This CMS became operative on 1 September 2016.



Dr Warren Parker

Chairman, New Zealand Conservation Authority



Dr Mick Abbott

Chairman Canterbury Aoraki Conservation Board



Andy Roberts

Director, Operations, Eastern South Island
Kaihautū, Matarautaki

Introduction

Purpose of conservation management strategies

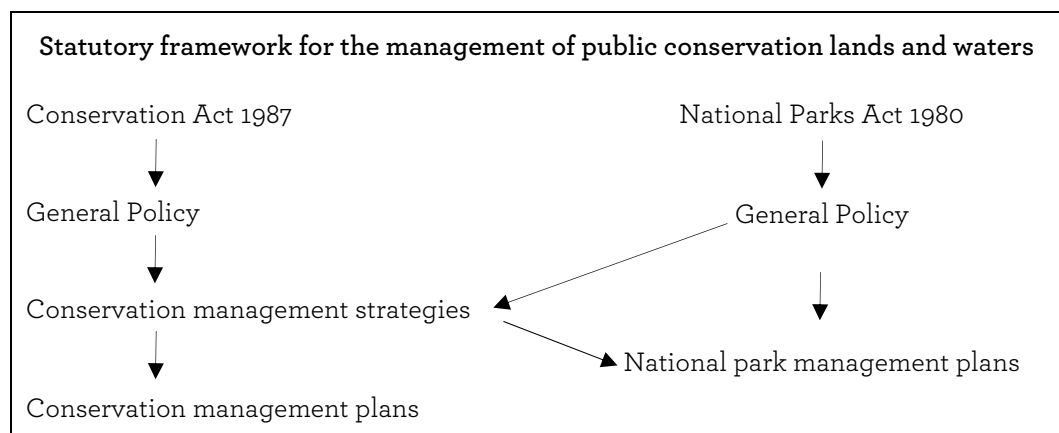
Conservation, as defined under section 2 of the Conservation Act 1987 (the Act), is the: ‘preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations’.

The functions of the Department of Conservation (the Department) are for the most part identified in section 6 of the Act and in other Acts listed in the First Schedule of the Act.

The purpose of a conservation management strategy (CMS), as defined by section 17D of the Act, is to implement statements of general policy, and to establish objectives for the integrated management of natural and historic resources, including species managed by the Department, and for recreation, tourism and other conservation purposes.

The Act creates a hierarchy of documents to guide the Department in its management. The Act is at the top, General Policy is next and below that are the CMS and conservation management plans, and other management plans. In Canterbury (Waitaha) there are 14 operative conservation management plans¹ including the Te Waihora Joint Management Plan 2005² and Molesworth Management Plan 2013.

There are two operative national park management plans prepared under the National Parks Act 1980: for Aoraki/Mount Cook National Park and Arthur’s Pass National Park.



A lower order planning document cannot derogate from a higher order one; meaning it cannot be contrary to it. The lower in order a planning document is, the greater the level of detail as to management intentions.

¹ Except for the Te Waihora Joint and Molesworth Management Plans, these plans are all reserve and Crown land management plans from the 1970s to 1990s, and are intended to be revoked or withdrawn subsequent to this strategy’s approval. The intent of the Conservation Amendment Act 1996 was that CMS provide any required management detail for individual areas of public conservation lands and waters.

² Te Rūnanga o Ngāi Tahu and Department of Conservation. 2005: Te Waihora Joint Management Plan—Mahere Tukutahi o Te Waihora. Te Rūnanga o Ngāi Tahu and Department of Conservation, Christchurch. NB While the New Zealand Geographic Board name is ‘Lake Ellesmere (Te Waihora)’, the CMS uses the abbreviation ‘Te Waihora’ as used in the joint management plan.

The general policies relevant to this CMS are the:

- Conservation General Policy 2005, which applies to all conservation lands, waters and resources managed by the Department under the following Acts: the Conservation Act 1987, the Wildlife Act 1953, the Marine Reserves Act 1971, the Reserves Act 1977, the Wild Animal Control Act 1977 and the Marine Mammals Protection Act 1978.
- The General Policy for National Parks 2005, which sets expectations and takes priority for national park management planning.

Other legislation for which the Minister of Conservation has a role or that is relevant to this CMS includes: the Greater Christchurch Regeneration Act 2016,³ the Electricity Act 1992, the Freedom Camping Act 2011, the Heritage New Zealand Pouhere Taonga Act 2014, the Protected Objects Act 1975, the State-Owned Enterprises Act 1986, the Crown Minerals Act 1991, the Ngāi Tahu Claims Settlement Act 1998, Crown Pastoral Land Act 1998, the Walking Access Act 2008 and the Game Animal Council Act 2013.

Each CMS is prepared with public participation according to the process set out in the Conservation Act 1987. Preparation of this CMS has involved consultation with an extensive list of agencies, concessionaires, commercial interest groups, and recreation, conservation and other community groups. Many were met through the Department's ongoing community liaison processes, and others invited the Department to CMS meetings. Pre-draft sections of the CMS and other background documents were posted on a 'CMS' website for informal public comment. Te Rūnanga o Ngāi Tahu and Ngāi Tahu Rūnanga with Canterbury (Waitaha) interests were kept informed, and hui on general and specific matters were held from time to time. Public submissions were sought and received, and where requested by submitters they had hearings.

The Canterbury Aoraki Conservation Board was involved throughout the draft CMS preparation stages, from identification of Canterbury issues and choice of the CMS places, through to workshops and comment on all sections of the CMS. The Board considered the revised draft CMS, requested revisions, and sent the revised draft CMS to the New Zealand Conservation Authority for approval.

The CMS is approved by the New Zealand Conservation Authority.

Treaty partnership with Ngāi Tahu

Ngāi Tahu are the tangata whenua with rangatiratanga or tribal authority over the area covered by this CMS. They are the Department's primary partner under the Treaty of Waitangi. Te Rūnanga o Ngāi Tahu is the governing tribal council established by the Te Rūnanga o Ngāi Tahu Act 1996. Papatipu rūnanga are the representative bodies of the tangata whenua who hold mana whenua in their respective traditional takiwā (boundaries). There are 10 Papatipu Rūnanga in Canterbury (Waitaha). (See Table 1 and Map 5.8.1.)

³ The Greater Christchurch Regeneration Act 2016 replaced the Canterbury Earthquake Recovery Act 2011.

Table 1: The Papatipu Rūnanga of Canterbury (Waitaha)

PAPATIPU RŪNANGA	TAKIWĀ
Te Rūnanga o Kaikōura	The takiwā of Te Rūnanga o Kaikōura centres on Takahanga and extends from Te Parinui o Whiti to the Hurunui River and inland to the Main Divide.
Te Ngāi Tūāhuriri Rūnanga	The takiwā of Te Ngāi Tūāhuriri Rūnanga centres on Tuahiwi and extends from the Hurunui to Hakatere, sharing an interest with Te Rūnanga o Arowhenua northwards to Rakaia, and thence inland to the Main Divide.
Te Hapū o Ngāti Wheke ⁴	The takiwā of Te Hapū o Ngāti Wheke centres on Rāpaki and includes the catchment of Whakaraupō and Te Kaituna.
Te Rūnanga o Koukourārata	The takiwā of Te Rūnanga o Koukourārata centres on Koukourārata and extends from Pōhatu Pā to the shores of Te Waihora including Te Kaituna.
Wairewa Rūnanga	The takiwā of Wairewa Rūnanga centres on Wairewa and the catchment of the lake Te Wairewa and the hills and coast to the adjoining takiwā of Koukourārata, Ōnuku Rūnanga, and Taumutu Rūnanga.
Te Rūnanga o Ōnuku	The takiwā of Te Rūnanga o Ōnuku centres on Ōnuku and the hills and coasts of Akaroa to the adjoining takiwā of Te Rūnanga o Koukourārata and Wairewa Rūnanga.
Taumutu Rūnanga	The takiwā of Taumutu Rūnanga centres on Taumutu and the waters of Te Waihora and adjoining lands and shares a common interest with Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Arowhenua in the area south to Hakatere.
Te Rūnanga o Arowhenua	The takiwā of Te Rūnanga o Arowhenua centres on Arowhenua and extends from Rakaia to Waitaki, sharing interests with Ngāi Tūāhuriri ki Kaiapoi between Hakatere and Rakaia, and thence inland to Aoraki and the Main Divide.
Te Rūnanga o Waihao	The takiwā of Te Rūnanga o Waihao centres on Wainono, sharing interests with Te Rūnanga o Arowhenua to Waitaki, and extends inland to Omarama and the Main Divide.
Te Rūnanga o Moeraki	The takiwā of Te Rūnanga o Moeraki centres on Moeraki and extends from Waitaki to Waihemo and inland to the Main Divide.

Source: Derived from Te Rūnanga o Ngāi Tahu (Declaration of Membership) Order 2001

The Treaty partnership is an enduring Treaty-based relationship between Ngāi Tahu and the Crown. This partnership is based on the principles upon which the Treaty is founded, and gives ongoing effect to the tino rangatiratanga of Ngāi Tahu alongside the requirement of the Crown to govern responsibly. With respect to conservation management, its practical application is expressed through the exercise of Ngāi Tahu's kaitiakitanga (guardianship) responsibilities over their natural resources (see section 1.4).

CMS structure

This CMS describes the conservation values present in the Canterbury (Waitaha) region, and provides guidance for the Department's work in the form of a vision, objectives, outcomes for Places, policies and milestones, translating the Department's strategic outcomes for Canterbury. The Places described in Part Two of this CMS have been identified for the purposes of integrated conservation management and require some specific management direction.

This CMS has two volumes.

⁴ Listed as Rāpaki Rūnanga within the 2001 Order.

Volume I includes:

- A vision for Canterbury (Waitaha), and objectives, policies and milestones for the whole region (Part One)
- Outcomes, policies and milestones for Places within Canterbury (Waitaha) (Part Two)
- Other specific whole region policies and milestones that address legislative and general policy requirements (Part Three)
- Objectives for implementation monitoring and reporting, and review (Part Four)
- The Glossary
- Appendices.

Volume II contains maps and a public conservation land inventory.

The various objectives, outcomes, policies and milestones in the CMS sometimes refer to information in various appendices and maps (see the Contents page). All other text is provided as supportive background material.

Parts One, Three and Four apply generally to all of Canterbury. Those Places where specific management provisions are necessary are identified in Part Two. The areas within Canterbury not specifically mentioned in Part Two are of no lesser value or importance, but require less detailed management direction.

Milestones are included as specific actions that are measurable steps towards achieving objectives, outcomes and policies. They are a means by which the Conservation Board can monitor and report on CMS implementation.

Information in the Appendices and the CMS Volume II conservation land inventory maps may be amended from time to time to keep the information accurate, with consequent updates to other CMS maps. Where such amendments relate only to public conservation lands and waters they may be able to be undertaken in accordance with section 17I (1A) of the Conservation Act 1987. Where the amendments would have implications beyond public conservation lands and waters or for statutory parts of the CMS (objectives, outcomes, policies and glossary), the Department will consider an amendment process in accordance with section 17I (2) or (4) of the Act. All amendments and a schedule of them will be made and recorded on the Department's website.

Interpretation

All public conservation lands and waters must be managed in accordance with the legislation under which they are held. All operative provisions of this CMS must be interpreted and applied in accordance with that legislation.

The operative parts of this CMS that have legal effect are the objectives, outcomes, policies and glossary:

- Objectives describe the goals that we want to achieve across the area covered by the CMS and support national directions and community aspirations to achieve integrated management.
- Outcomes describe the future state of a 'Place', including its values and expected changes over the 10-year term of the CMS, and will be used for conservation management and decision-making. This applies whether or not there is a relevant specific policy for a Place.
- Policies describe the course of action or guiding principles to be used for conservation management and decision-making.
- Glossary defines words and phrases.

The Minister's decision-making powers are in most cases delegated to departmental employees. When that is the case, that person acts as the Minister's delegate. The Director-General's decision-making powers are also in most cases delegated.

POLICIES

1. Public conservation lands and waters will be managed consistently with the provisions of the relevant legislation, general policy and the purposes for which they are held.
2. The operative parts of this CMS are the objectives, outcomes, policies and glossary.
3. The objectives in Part One, the policies in this section and the policies in Part Three of this CMS apply to all lands, waters and resources administered by the Department of Conservation in Canterbury.
4. The outcomes and policies in each section of Part Two apply to all the lands, waters and resources administered by the Department of Conservation in that section.
5. Where the outcomes and policies in Part Two differ from the objectives in Part One and/or the policies in Part Three, the provisions of Part Two prevail.
6. An integrated approach will be applied by the Department to its management within Canterbury, and to cross-boundary management of public conservation lands and waters.
7. In interpreting the policies in this CMS the words 'will', 'should' and 'may' have the following meanings:
 - a) policies where legislation provides no discretion for decision-making or a deliberate decision has been made by the Minister to direct decision-makers, state that a particular action or actions 'will' be undertaken;
 - b) policies that carry with them a strong expectation of outcome without diminishing the constitutional role of the Minister and other decision-makers, state that a particular action or actions 'should' be undertaken; and
 - c) policies intended to allow flexibility in decision-making, state that a particular action or actions 'may' be undertaken.
8. Approved national park and conservation management plans continue to have effect until they are amended, reviewed, withdrawn or revoked.
9. Approved national park and conservation management plans have primacy until such time as they are reviewed; then their review will be undertaken within the framework established by this CMS.

CMS term

This CMS will have effect for 10 years, or until formally amended or reviewed in full or in part. The term of this CMS is from 2016 to 2026 but may be extended with ministerial approval.

Relationship with other Department of Conservation strategic documents and tools

This CMS must be read in conjunction with the Conservation General Policy and General Policy for National Parks, as these are the key statutory tools directing the content of CMSs. Relevant provisions of the Conservation General Policy 2005 are not repeated in this CMS.

This CMS should also be read in conjunction with the Department's Statement of Intent,⁵ revised yearly.

⁵ Department of Conservation. 2014. Statement of Intent 2015–2019. www.doc.govt.nz

The Conservation General Policy 2005 provides clear direction that each CMS should integrate the management of Places to achieve national conservation outcomes and coordinate planning between Places in other CMSs. To help achieve this integration towards national conservation outcomes, the high level objectives of the Department's Statement of Intent 2015–2019, and national priorities identified through the Department's national decision-making support tools are reflected in this CMS. These tools, including the natural heritage management and destination management systems, identify national priorities for the delivery of the Department's biodiversity, historic and recreation functions. National priorities for ecosystems and recreation are identified on Map 2 ('Ecosystem priorities and Icon and Gateway destinations').

In this CMS, the term 'priority ecosystem unit' refers to a site where conservation work will most effectively contribute to protecting the full range of ecosystems nationally and the threatened and at-risk species associated with them. These sites have been identified through the application of the Department's natural heritage prioritising processes. Research and increased knowledge will result in adaptations to management approaches.

Threatened and at-risk species are referred to by their status according to their level of threat of extinction identified in the New Zealand Threat Classification System (2008).⁶ 'Nationally iconic species' are those that the public has told the Department help define New Zealand's identity.

Recreation opportunities on public conservation lands and waters have been categorised as a national suite of destinations to reflect known and potential demand, and to capture people's outdoor leisure preferences. This is part of an approach known as Destination Management.

'Icon destinations' are those that the Department has identified as high-profile, popular destinations that underpin national and international tourism, and provide memorable visitor experiences in New Zealand. 'Gateway destinations' introduce New Zealanders to the outdoors and allow them to learn about conservation. These destinations may provide for a diverse range of activities but include many traditional camping and tramping destinations. 'Local Treasure destinations' are vehicle-accessible, locally valued locations that provide recreation opportunities for, and grow connections with, nearby communities. 'Backcountry destinations' provide for more challenging adventures, including popular walks and tramps, within the body of large-scale natural settings. 'Historic Icon sites' are an important part of New Zealand's history and identity, and will be the focus of the Department's storytelling to bring history to life. Acknowledging the collective values of all these destinations is part of Destination Management.

National conservation initiatives, such as Battle for our Birds, Wilding Conifer Strategy and War on Weeds, are all operational programmes implementing the intermediate outcomes and objectives of the Statement of Intent and the Department's 2025 Stretch Goals (as developed in 2015).

CMSs integrate the Department's national priorities with local priorities identified through consultation with the community. They guide the Department's management of Places, business planning and the Statement of Intent, decisions on concessions and other authorisations, and identify opportunities for collaborative efforts to achieve more conservation.

⁶ Townsend, A.J.; de Lange, P.J.; Duffy, C.A.J.; Miskelly, C.M.; Molloy, J.; Norton, D.A. 2008: New Zealand threat classification system manual. Department of Conservation, Wellington.

Relationship with other planning processes

CMSs are part of a wider planning framework. In preparing a CMS, the Conservation General Policy 2005 requires that regard be had to local government planning documents. In turn, local government planning processes are required to have regard to the Department's statutory plans when preparing documents under the Resource Management Act 1991 (referred to throughout this CMS as the RMA). Planning for natural and historic resources cannot be undertaken in isolation from the wider regional, local government and Ngāi Tahu planning processes.

Te Rūnanga o Ngāi Tahu and Papatipu Rūnanga have prepared the following non-statutory documents. While they do not form part of the CMS they are a valuable resource for the Department, concessionaires and others in providing an understanding of Ngāi Tahu cultural values:

- Te Rūnanga o Ngāi Tahu Freshwater Policy 1999. Te Rūnanga o Ngāi Tahu, Christchurch.
- Hazardous Substances and New Organisms Policy Statement, 2008. Te Rūnanga o Ngāi Tahu, Christchurch
- Tau Te M., Goodall, A., Palmer D., & Tau, R. 1990. Te Whakatau Kaupapa, Ngāi Tahu Resource Management Strategy for the Canterbury region. Aoraki Press, Wellington
- Te Poho o Tohu Raumati, Te Rūnanga o Kaikōura Environmental Management Plan, Te Mahere Whakahaere Taiao o Te Rūnanga Kaikōura. 2009. Te Rūnanga o Kaikōura Inc, Kaikōura
- Mahaanui Iwi Management Plan. 2013. Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki), Te Rūnanga o Koukourārata, Ōnuku Rūnanga, Wairewa Rūnanga and Te Taumutu Rūnanga, Christchurch
- Te Taumutu Rūnanga Natural Resource Management Plan. 2003. Te Taumutu Rūnanga, Christchurch
- Iwi Management Plan of Kati Huirapa, for the area Rakaia to Waitaki, part one—land, water and air policies. 1992. Te Rūnanga o Arowhenua, Arowhenua
- Kāi Tahu ki Otago Natural Resource Management Plan. 2005. Kai Tahu ki Otago, Dunedin.

Individual nohoanga management plans are also being developed by Te Rūnanga o Ngāi Tahu and as they are being completed will be added to the Te Rūnanga o Ngāi Tahu website.

Integration of this planning framework will ensure that plans and policies work as building blocks to deliver good conservation and environmental outcomes at a regional scale.

Under the Biosecurity Act 1993, regional councils are responsible for preparing regional pest management strategies and pathway plans to ensure a coordinated approach to pest control is taken. The Department will work with regional councils on the preparation of these strategies and plans.

Within Greater Christchurch⁷ the CMS is subject to the Greater Christchurch Regeneration Act 2016. Certain aspects of the CMS support regeneration as set out in the Act. The Department works with Regenerate Christchurch as and when required.

⁷ The districts of Christchurch City, Selwyn and Waimakariri District councils, and the adjacent coastal marine area.

Legislative tools

Exemption from land use consents

Section 4(3) of the RMA exempts the Department from obtaining district council land use consents where activities are consistent with a CMS, conservation management plan or similar document and do not have significant adverse effects beyond the boundary of public conservation lands and waters. Appendix 1 of this CMS lists many activities that the Department considers meet the requirements for an exemption under section 4(3) (a) and (b) of the RMA. The facilities and activities in Appendix 1 are listed for the sole purpose of enabling the exemption under section 4(3) of the RMA and do not represent an undertaking in terms of the provision of these facilities.

Closure of areas and access restrictions

Section 13 of the Conservation Act 1987 enables the Minister of Conservation to close areas administered under that Act for reasons of public safety or emergency. This section also enables the Minister to close areas if a CMS provides for the closure for conservation purposes (see Part Three, Policy 3.1.3).

Access to national parks may be restricted to preserve native plants and animals or for the general welfare of the park. Access to reserves may also be restricted under the conditions of use for the reserve by Gazette, or signage.

Bylaws and regulations

Bylaws can be established for reserves under the Reserves Act 1977, for national parks under the National Parks Act 1980, and regulations can be made for conservation areas and other conservation purposes under the Conservation Act 1987.

Conservation management plans

Sections 17E and 17G of the Conservation Act 1987 provide for the preparation of conservation management plans for the purpose of implementing a CMS and establishing detailed objectives for the integrated management of natural and historic resources for an area or areas, and for recreation, tourism or other conservation purposes. The Act provides for the intention to prepare a conservation management plan to be identified in a CMS.

This does not preclude the preparation of conservation management plans, which may come about as a requirement in Treaty Settlement Acts, e.g. the Te Waihora Joint Management Plan 2005.

Treaty of Waitangi and Ngāi Tahu settlement obligations

The Conservation Act 1987 and all the Acts listed in its First Schedule must be interpreted and administered so as to give effect to the principles of the Treaty of Waitangi (Conservation Act 1987: section 4). The Department also has specific responsibilities under Treaty settlement legislation. As Canterbury (Waitaha) falls entirely within the takiwā of Ngāi Tahu, the Ngāi Tahu Claims Settlement Act 1998 applies.

In addition to the Department's responsibilities under section 4 of the Conservation Act 1987, specific provisions in the Ngāi Tahu Deed of Settlement 1997 (the Deed) and Ngāi Tahu Claims Settlement Act 1998 provide further opportunity and direction for the Crown and Ngāi Tahu to work together to give effect to the principles of the Treaty of Waitangi. The Deed was signed in 1997 between representatives of Ngāi Tahu and the Crown. The settlement was later passed into law through the Ngāi Tahu Claims Settlement Act 1998, which provides for a final settlement of the Ngāi Tahu historic claims. Settlement provisions

include Tōpuni, Statutory Advisor, Deeds of Recognition, nohoanga sites, taonga species and Protocols, as well as those regarding customary use (see section 1.4).

The Ngāi Tahu Claims Settlement Act 1998 provides a practical framework for assisting the Treaty partnership between Ngāi Tahu and the Crown. The legal mechanisms established through the Ngāi Tahu Claims Settlement Act 1998 provide a starting point for Ngāi Tahu tino rangatiratanga and its expression through kaitiakitanga, and the basis for an enduring partnership between Ngāi Tahu and the Crown.

International obligations

New Zealand is a signatory to many international agreements that are relevant to conservation. The Department implements these agreements in accordance with its functions and has responsibilities for a number of species under these agreements. Examples of important international agreements of most relevance within Canterbury (Waitaha) include the:

- Convention on Biological Diversity;
- Convention Concerning the Protection of the World's Cultural and Natural Heritage (World Heritage Convention);
- Convention on International Trade in Endangered Species of Wildlife Flora and Fauna (CITES);
- International Convention for the Regulation of Whaling;
- Convention on the Conservation of Migratory Species of Wild Animals;
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention);
- Convention for the Protection of Cultural Property in the Event of Armed Conflict; and
- Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property.

Aoraki/Mount Cook National Park and part of Ahuriri Conservation Park are within Te Wāhipounamu—South West New Zealand World Heritage Area.

Part One

1.1 The Department in Canterbury (Waitaha)

This section contains a vision, objectives and milestones that apply to all public conservation lands, waters and resources in Canterbury (see Map 1). Where there is a more specific provision in Part Two or Part Three, that more-specific provision prevails.

This section, along with Part Two, also guides the Department when it advocates for conservation off public conservation lands and waters.

1.2 Vision for Canterbury (Waitaha)—2066

The 50-year vision sets the long-term picture for the conservation of natural and historic resources of Canterbury. It goes well beyond the 10-year life of this CMS and may change over time.

The Department of Conservation also has a national longer-term vision:

New Zealand is the greatest living space on Earth

Kāore he wāhi i tua atu i a Aotearoa, hei wāhi noho i te ao

This vision is aspirational, a great deal bigger than conservation, and a great deal bigger than the Department. It challenges the Department to connect with others in order to achieve it, often in ways that expand the traditional view of the Department's role and who its partners are, in addition to its primary Treaty partner within the Ngāi Tahu takiwā. In doing so, it requires the Department to build empathy, trust and understanding, so that both traditional and non-traditional audiences engage in a common vision.

Conservation protects New Zealand's natural capital. Conserving and protecting our natural resources and heritage are an essential investment in New Zealand's long-term wellbeing and prosperity. The Department provides leadership to inspire and involve others to work together to achieve more conservation than it could achieve alone.

It means changing the way people perceive a healthy environment, so that they understand and value spending on nature conservation, seeing that it delivers a broad range of benefits such as healthy soils, clean air, and fresh water. The benefits that nature provides are also multi-faceted and broad—they feed our social, physical, cultural and spiritual health, and our wealth. This allows people to be drawn to making *New Zealand the greatest living space on Earth* through many pathways.

Working towards the longer-term vision for the Department and the vision for Canterbury (Waitaha), the Department aims to increase the amount of conservation work being achieved over the life of this CMS by building a strong partnership with its primary Treaty partner Ngāi Tahu, and strong local partnerships with communities, agencies and business.

Neither the ecological nor social environment of New Zealand will be the same in 100 years as it is today. The Department will adapt its management as the decades pass in response to climate and demographic changes so as to maintain relevance to New Zealanders and to demonstrate conservation leadership. Future revisions of the CMS will reflect those adaptations.

VISION FOR CANTERBURY (WAITAHA)—2066

Aoraki/Mount Cook and the Southern Alps/Kā Tiritiri o te Moana are the core of extensive high-country public conservation lands protecting diverse natural and historic values. The opportunities for recreation and tourism and the ecosystem services they provide are a cornerstone of the Canterbury and national economy. The high-country basins retain their natural, open, unspoiled character.

An effective Treaty partnership between the Department and Ngāi Tahu is a key component of this vision. It creates an enduring relationship that recognises Ngāi Tahu tino rangatiratanga over their taonga tuku iho (treasured resources) and it enables the exercise of their kaitiakitanga responsibilities (cultural guardianship) and protection over them. The contribution of Ngāi Tahu resources, knowledge and values to conservation is thereby recognised, and Ngāi Tahu will actively engage in decision-making and management processes meaningfully.

Partnerships with Ngāi Tahu and community-based programmes are responding to challenges posed by aquifer degradation by restoring the mauri, ecosystem health, mahinga kai and recreational use of waterways. Te Waihora, Wainono Lagoon, other hāpua and estuaries, and numerous high-country lakes and wetlands are healthy as a result of good management. Other partnerships are protecting priority terrestrial ecosystems, and all demonstrate the commitment of communities to ecosystem restoration.

Flowing from the mountains, through the high-country basins and across the Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha), braided rivers and lowland streams with restored riparian margins connect the mountains and the sea with remnant ecosystems on the plains. These waterways and their margins are thriving, clean and healthy ecosystems highly valued by the community and recognised internationally as habitats for a diverse range of native plants and animals. Canterbury is widely known for its clean rivers and lakes.

The Department and the community are working to protect Hector's dolphins/tūpoupou and improve protection of the marine environment. Whales and other marine mammals are regularly seen and mainland-nesting seabird populations are a feature of the coast.

Land use on the coast adapts to sea-level rise, with natural coastal ecosystems given room to retreat inland.

Christchurch is a major visitor entrance to the South Island and to the Ngāi Tahu takiwā. It has recovered from the 2010–2011 earthquakes, and vulnerable waterways are restored. The Port Hills and Banks Peninsula are destinations for an integrated historical, cultural and eco-tourism experience, and are popular for recreation.

The history of Canterbury is brought to life in localities such as Ripapa and Otamahua/Quail Islands, Awaroa/Godley Head, Aoraki/Mount Cook, Arthur's Pass, Raincliff and Weka Pass, Hakatere and the high-country pounamu trails and conservation parks.

An appreciation of how conservation contributes to the quality of life, an awareness of indigenous biodiversity and its importance to culture and economy, and a desire to be involved in conservation partnerships are at the heart of what it is to live in Canterbury. Youth are supported in their outdoors education and recreation, and are active participants in conservation management.

Local and overseas visitors enjoy easily accessible recreation and tourism opportunities on public conservation lands and waters close to urban areas, public transport routes, and the Mackenzie and Hurunui visitor hubs. More distant backcountry recreational opportunities are still available, with access adapting to glacier retreat and less certain snow fall.

Canterbury's 'flourishing kete' supports a range of opportunities for hunting and gathering activities that are important to the ongoing expression of Ngāi Tahu and the community's identity.

Concessionaire use of public conservation lands, with long-term commitments and delivering measurable benefits to enhanced conservation values, also contributes to the Canterbury and national economy. Partnerships add value to conservation and the people's enjoyment of natural, historic, cultural and recreational values.

1.3 Distinctive features, values and issues of Canterbury (Waitaha)

Canterbury (Waitaha), bounded clearly between the Southern Alps/Kā Tiritiri o te Moana and the Pacific Ocean, is truly a mountains-to-sea (Ki Uta Ki Tai) region, with dramatically different landscapes in the mountains and hills, inter-montane basins, plains, Banks Peninsula, and marine areas. The transition from Pacific Ocean to the Main Divide of the Southern Alps/Kā Tiritiri o te Moana, through dryland, alpine, and into rainforest ecosystems, showcases a stunning ecological sequence. It stretches so far west that parts are more akin to ecosystems within, and more easily accessed from, the West Coast (Tai Poutini).

Its communities face big resource management challenges, including high-country tenure review, freshwater use and allocation, land use change and intensification, natural hazards, and re-shaping of Christchurch's urban areas.

All of Canterbury lies within the rohe of a single iwi, Ngāi Tahu, who have had footprints here for over 800 years. Ngāi Tahu have a special relationship with the land, waters and resources in Canterbury. As tangata whenua, Ngāi Tahu have particular rights and responsibilities. They are kaitiaki and have rangatiratanga status, in the management of the lands, waters and resources in the takiwā (see section 1.4).

Christchurch is by far the largest urban area in the South Island. It is the arrival point for many visitors to the South Island as well as home to a growing and increasingly diverse population.

Key issues identified for conservation in Canterbury are:

- Enabling Ngāi Tahu rangatiratanga and kaitiakitanga to be exercised in relation to ngā taonga tuku iho (treasured resources) in the takiwā
- Realising the potential for indigenous biodiversity and landscape appreciation and protection, ecosystem services, and compatible public use of the high country and foothills
- Halting the degradation of freshwater and dryland ecosystems and threats to their indigenous species and sports fish
- Valuing the coastal environment, both land and marine, and establishing adequate protective measures
- Enabling coordinated community approaches to conservation and environmental sustainability, building on Canterbury's heritage of these approaches
- Valuing the history and historic sites on public conservation lands and waters.

Aoraki/Mount Cook, the high country, inter-montane basins and foothills

North, south and east of Aoraki/Mount Cook and its adjoining tūpuna/high mountains, the Canterbury (Waitaha) high country and foothills are distinctive from the rest of Canterbury. They contain extensive public conservation lands including 2 national parks, 10 conservation parks, a wilderness area, and other large conservation areas and reserves. As

the upper catchment for most Canterbury rivers, the area provides vital ecosystem services for lower catchment use, hydroelectricity generation and the Canterbury and national economies.

The high country, inter-montane basins and foothills have outstanding landscapes incorporating geological and landform features and processes; representative, unique and endemic ecosystems and indigenous species; and a wide variety of river, lake and wetland systems. While public conservation areas are extensive they are predominantly at higher altitudes and lower altitude ecosystems are under-represented. The multi-faceted history of the area includes:

- Many Ngāi Tahu wāhi tapu, whenua tūpuna and wāhi taonga including ara tawhito (ancient trails) and mahinga kai
- The forging of road and stock-droving access to adjoining provincial areas
- The seeking of gold
- Pastoral run-holding
- Early tourism development
- Early botanical research and protection
- Exotic wild animal liberation and subsequent control, including by hunting
- The emergence of New Zealand backcountry recreation.

The high country and foothills provide recreational settings from urban to wilderness, and for activities as varied as passive resting and short walks, to intensive facility use such as on ski fields and intensive aircraft use. The mountain ranges, with their all-year or winter ice and snow, are prime areas for mountaineering and skiing, with the majority of New Zealand's ski fields located here. The impact of climate change is being felt keenly at these sites.

Pastoral lease tenure review is increasing the extent of public conservation lands and the management requirements of the Department for covenanted Crown lands, both providing protection for natural and historic values and providing new opportunities for recreation. Threats from pest plants and animals and fire are potentially increasing through climate change. Wild animals present both a threat and recreational opportunity.

Intensification of land use and proposals for more man-made water storage capacity pose ongoing or additional threats to the waterways and outstanding landscapes, ecosystems and species. The Waitaki hydropower generation system and its effects are now long in-place, but there may be opportunities to minimise effects and provide mitigation.

Sustainability of the lowlands and freshwater

Land development historically on the Canterbury Plains (Ngā Pākihi Whakatekata o Waitaha), more recently intensified through irrigation and dairying, has seen the almost total loss of indigenous ecosystems and species. Few areas are protected either formally or by nature of being too difficult to develop. Where indigenous ecosystems remain they often are the last and very important refuges for unmodified Canterbury (Waitaha) soils, vegetation and species. Protection of these refuges has often been initiated by community actions (e.g. Bankside Scientific Reserve, Travis Swamp, and Harris Scientific Reserve). Even when protected they are vulnerable to adjoining land use impacts from irrigation, nutrient spread, fire, and stock trespass.

Along the coastal edge most lagoons and estuaries still remain, often only due to the physical and economic limits to their drainage, but the majority of their original adjoining wetlands have been drained and destroyed.

A network of large and small braided rivers created the Canterbury Plains, and now flows over them and feeds the underground aquifers and lowland springs and streams. The rivers are home to distinctive and internationally rare freshwater ecosystems, and species such as wrybill/ngutu pare. The underground aquifers themselves have distinctive ecosystems and species, only recently being studied.

Now heavily modified by river containment, water abstraction, nutrient loading and siltation, plant and animal pest invasion and human disturbance, these freshwater and coastal ecosystems have irrecoverably lost many of their original natural values.

Faced with these conflicts, the Canterbury community is responding through:

- A growing awareness of the importance of all the remnants and the means of linking them as ecological corridors through the landscape
- Creation of community rivercare groups such as BRaid, and those for the Waiau Uwha,⁸ Ashley/Rakahuri, Ashburton/Hakatere and Orari rivers
- The Canterbury Water Management Strategy process, coordinated by Environment Canterbury, a community-wide approach seeking environmental and economic sustainability in the use of water.

Protection of Banks Peninsula and the coastal land and marine environment

Canterbury (Waitaha) has few currently well-protected areas within its coastal land and marine environment, relying instead on a mix of statutory (e.g. fisheries controls), management (e.g. attempted vehicle control) and physical (e.g. remoteness) measures. The coastal environment has wide variety in its landforms and coastal processes, ecosystems and habitats, and indigenous species, including priority ecosystem units such as Kaitorete Spit and threatened species such as basking shark/mangō reremai. Marine mammal populations are in some cases recovering (e.g. New Zealand fur seals/kekeno and whales), but Hector's dolphins/tūpoupou are threatened. Connections between land, freshwater and marine ecosystems are not always well recognised for their ecological and economic importance.

Banks Peninsula is almost entirely a coastal setting, with a growing patchwork of mixed types of protected areas and increasing indigenous biodiversity protection and recovery through community actions.

Community and Ngāi Tahu aspirations for better coastal protection and management are often evident, but are frustrated by:

- Multiple administrations and land tenures
- Active coastal processes
- The threat of sea-level rise
- Up-catchment and marine developments
- Sedimentation from land erosion
- Insufficient awareness of habitat and species vulnerabilities
- Public use, primarily indiscriminate vehicle use, and fishing.

The coast, including Banks Peninsula, provides a wide range of easily-accessible through to isolated recreational opportunities.

⁸ At the operative date of this CMS, a proposal to change the recorded name of the Waiau River was before the NZ Geographic Board. The proposed name, the Waiau Uwha River, is used in this CMS.

Dealing with all these attributes through statutory and other processes, devising an effective marine protected areas system, protecting valued land environments and landscapes, and sustainably managing the whole is a challenging theme for Canterbury.

The people and their cultures

Successions of Waitaha, Kāti Māmoe and Ngāi Tahu have provided a continuity of presence in Canterbury (Waitaha), from historical and current settlements and mahinga kai, to current land ownership and developments and tourism operations. Ngāi Tahu tribal identity and continuity between generations is reinforced by traditions around events which shaped the environment of the South Island/Te Waipounamu, with traditional figures such as Aoraki and his brothers present as Canterbury's high peaks, and the land-shaping work of Tū Te Rakiwhānoa and Rākaihautū readily visible. Ngāi Tahu values are detailed in such as Tōpuni and Deed of Recognition statements and within iwi management plans (refer section 1.4). Today, Ngāi Tahu are represented by 10 Papatipu Rūnanga with rohe in Canterbury.

European settlement, drawn by agricultural potential and other resources, led also to the development of natural landscape tourism, biodiversity protection and backcountry recreation. Pioneers led Canterbury in many ways, e.g. Julius Von Haast in geology and moa species, Leonard Cockayne and Jane Deans in botanical protection, Freda Du Faur in women's mountaineering, Rita Angus in iconic landscape painting, and Harry Wigley in ski-plane tourism. Historical connections to the West Coast (Tai Poutini) goldfields and exploration of Antarctica remain alive through historic sites, museums, stories and ongoing development and research.

The Department has an explicit statutory obligation to future generations; starting with the youth of today and their conservation heritage, and also reflecting the widening ethnic diversity of the Canterbury people. Implementing innovative ways to involve youth and all peoples in Canterbury conservation is an ongoing theme for the Department.

Christchurch holds 70 per cent of the Canterbury population and is one of New Zealand's three largest urban areas. It is the predominant entranceway for visitors to the South Island and to some extent beyond, to Stewart Island/Rakiura, Chatham Islands and Antarctica. As at 2016 it is a city recovering from the major earthquakes in 2010 and 2011, having lost much of its built heritage, and needing to rehabilitate many of its natural and recreational assets. There are opportunities to better emphasise the natural environment for both its indigenous biodiversity and for open space recreation, and to further develop community support for these long-recognised values.

1.4 Treaty partnership with Ngāi Tahu

Ngāi Tahu are the tangata whenua of Canterbury and as such are the primary Treaty partner with the Department of Conservation. Under this kākahu (cloak) of partnership, the parties are committed to strengthening their relationship to ensure they stand side by side to protect and manage ngā taonga tuku iho, recognise Ngāi Tahu rangatiratanga over these taonga and enable the iwi to exercise their kaitiakitanga obligations accordingly.

Ngāi Tahu – mana whenua

Ngāi Tahu are the mana whenua of this region. They are a resilient, entrepreneurial people who have lived in Te Waipounamu for over 800 years. Ngāi Tahu means ‘people of Tahu’ and is the iwi comprised of Ngāi Tahu Whānui; the collective of the individuals who descend from the five primary hapū: Ngāti Kuri, Ngāti Irakehu, Kāti Huirapa, Ngāi Tūāhuriri and Ngāi Te Ruahikihiki. Post-Settlement, these five hapū are represented by 18 Papatipu Rūnanga.

The Ngāi Tahu takiwā extends over 80 per cent of Te Waipounamu, and the traditions of Ngāi Tahu tūpuna (ancestors) are embedded in the landscape. Tūpuna left markers of their identity as they journeyed across and occupied the whenua of Te Waipounamu. These markers included tangible additions to the landscape such as pā and kainga, and less tangible reminders such as the place names, and stories of peaks, lakes, rivers and oceans.

The Ngāi Tahu relationship with the land, waters and resources in their takiwā is derived from whakapapa. Whakapapa explains the relationship between all elements of the natural and spiritual world, including humans, and links Ngāi Tahu to geographic areas and natural resources through common ancestors. To Ngāi Tahu, Canterbury (Waitaha) is whenua tūpuna (a cultural landscape), which is treasured for its natural features, physical formations, cultural features, ara tawhito (traditional trails), mahinga kai (resource gathering places and practices), mātauranga (knowledge), wāhi tapu (sacred places), taonga (treasures), spiritual values, cultural values, traditions and associations.

Ngāi Tahu are kaitiaki over the natural resources in Waitaha covered by this CMS. The kaitiaki responsibility of Ngāi Tahu is an expression of rangatiratanga, and one of their responsibilities as mana whenua. This role is reliant on mātauranga tuku iho (traditional knowledge and understanding) to care for natural resources and leave them in a better state for generations to come, as reflected in the tribal whakataukī *mō tātou, ā, mō kā uri ā muri ake nei*.

Mahinga kai in particular is central to Ngāi Tahu resource management practices, and was a strong component of the grievances that were recognised in the Ngāi Tahu Claims Settlement Act 1998. Customary practices have evolved over time to adapt to the changing needs of Ngāi Tahu Whānui and the changing environment. The ability to make use of mahinga kai and cultural materials, and the ability to continue and evolve cultural practices to meet changing needs, are crucial to enable Ngāi Tahu to maintain their identity, traditional knowledge, cultural traditions and wellbeing into the future.

Responsibilities under specific legislation relating to Ngāi Tahu

The Ngāi Tahu Claims Settlement Act 1998 is referred to in this CMS’s Introduction, under ‘Treaty of Waitangi and Ngāi Tahu settlement obligations’. The key components of the Act included an apology from the Crown, acknowledgement of the maunga tupuna Aoraki, tribal redress, economic redress and cultural redress through provisions for Ngāi Tahu to express its traditional kaitiaki relationship with the environment. The Act included a number of specific mechanisms for active involvement by Ngāi Tahu in management of conservation lands and resources, as summarised below.

Tōpuni

The concept of Tōpuni derives from the traditional Ngāi Tahu tikanga (values and practices) of persons of rangatira (chiefly) status extending their mana and protection over a person or area by placing their cloak over them or it. In its new application, a Tōpuni confirms and

places an overlay of Ngāi Tahu values in relation to specific pieces of public conservation lands and waters. A Tōpuni does not over-ride or alter the underlying land status (for example, national park), but ensures that Ngāi Tahu values in relation to Tōpuni are also recognised, acknowledged and provided for.

The Tōpuni addressed in this CMS, as identified and described in Appendix 13.1, are:

- Aoraki/Mount Cook
- Kura Tāwhiti/Castle Hill
- Ripapa Island.

Statutory Advisor

Te Rūnanga o Ngāi Tahu are also Statutory Advisor for the above Tōpuni sites and the public conservation lands and waters within the Te Waihora Joint Management Plan Area, which enables Te Rūnanga o Ngāi Tahu to have greater input to the management of these sites. The Minister of Conservation must have particular regard to any advice received directly from Te Rūnanga o Ngāi Tahu in relation to these sites when considering any draft CMS, conservation management plan or national park management plan affecting the sites, or when making written recommendations to the New Zealand Conservation Authority in respect of the sites.

Deed of Recognition

There are 16 Deed of Recognition sites that include public conservation lands and waters within Canterbury (Waitaha), as listed in Appendix 13.2. A Deed of Recognition provides for Ngāi Tahu input into the decision-making processes of the Crown body responsible for the administration of each named area. It recognises the particular Ngāi Tahu cultural, spiritual, historic and traditional association with each area. A Deed of Recognition obliges the Department to consult with Te Rūnanga o Ngāi Tahu and to have particular regard to its views in relation to the management of each area.

Nohoanga entitlements

Nohoanga literally means ‘a place to sit’ and traditionally referred to the seasonal occupation sites which were an integral part of the mobile lifestyle of Ngāi Tahu tūpuna (ancestors) as they moved around in pursuit of various foods and other natural resources, such as pounamu. This traditional concept has been given contemporary effect in the Ngāi Tahu Claims Settlement Act 1998. Ngāi Tahu have been granted 72 nohoanga entitlements (campsites) to temporarily and exclusively occupy land close to waterways on a non-commercial basis, for the purposes of lawful customary fishing and gathering of other natural resources. Fifteen of these nohoanga entitlement sites are located on public conservation lands within Canterbury (Waitaha) (see Appendix 13.3).

The nohoanga entitlement sites provide Ngāi Tahu with an opportunity to experience the landscape as their tūpuna did, and to rekindle the traditional practices of gathering food and other natural resources that are an essential part of Ngāi Tahu culture. The Department supports and encourages the utilisation of these sites.

The sites may be used for up to 210 days each year between mid-August and the end of April. Camping shelters or similar temporary dwellings can be erected during this period. The sites are approximately one hectare in size, are set back from marginal strips and were chosen to not unreasonably impair existing public access or use at the time of granting. They are subject to all legislation, bylaws, regulations, and land and water management practices, such as pest and river control.

Taonga species management

Taonga species are animals and plants treasured by Ngāi Tahu.⁹ Although Ngāi Tahu consider all natural resources as taonga, specific species (see Appendix 13.4) are identified as taonga species under the Ngāi Tahu Claims Settlement Act 1998 (the Act) for the purposes of sections 288 to 296, 298 to 302, and 304 of the Act.

Through sections 288 and 298 of the Act, the Crown acknowledges the cultural, spiritual, historic and traditional association of Ngāi Tahu with the taonga species. These include species of birds, plants, marine mammals, fish and shellfish, many of which the Department is actively managing. The Act also provides for participation by Ngāi Tahu in consultation processes connected with the Minister of Conservation's or the Director-General of Conservation's decision over the management of certain taonga species, as well as participation in some species recovery groups.¹⁰

Taonga species under management within Canterbury (Waitaha) include:

- Kōwhiowhio/blue duck (*Hymenolaimus malacorhynchos*)
- Kakī/black stilt (*Himantopus novaezelandiae*)
- Roroa/great spotted kiwi (*Apteryx haastii*)
- Mohua/yellowhead (*Mohoua ochrocephala*)
- Kākāriki/orange-fronted parakeet (*Cyanoramphus malherbi*)
- Weka (*Gallirallus australis*)
- Hoiho/yellow-eyed penguin (*Megadyptes antipodes*)
- Kōwharo/Canterbury mudfish (*Neochanna burrowsius*)
- Taiwharu/giant kōkopu (*Galaxias argenteus*).

Department of Conservation and Ngāi Tahu protocols

The Minister of Conservation has issued protocols in relation to how the Department of Conservation and Ngāi Tahu will work together on specified matters of cultural importance to Ngāi Tahu. Appendix 13.5 provides a copy of the protocols. A number of documents produced by the Department and Ngāi Tahu provide guidance on the implementation of these protocols, all of which need reviewing.

Customary use

Applications for the customary use of animals and plants can be made under the Conservation Act 1987, the National Parks Act 1980, the Wildlife Act 1953, the Marine Mammals Protection Act 1978 and the Reserves Act 1977. Through the Ngāi Tahu Claims Settlement Act 1998, Ngāi Tahu do not require a permit to hold specimens¹¹ that are protected by the Wildlife Act 1953.

Authorisations are required to hold whale bone and to take plant materials and clays from public conservation lands and waters. Authorisations to take native fish are only required for reserves and national parks. The Department and Te Rūnanga o Ngāi Tahu have developed

⁹ For indigenous species not listed as taonga under the Act, Ngāi Tahu still has a kaitiaki responsibility for them, including involvement in species translocations and management.

¹⁰ 'Species recovery groups', as referred to in the Ngāi Tahu Claims Settlement Act 1998, have been replaced by alternative species management systems within the Department. The Department is engaging with Ngāi Tahu to ensure these new management systems provide for the interests and representation of Ngāi Tahu.

¹¹ 'Specimens' in this case includes the dead bodies or any part of the dead bodies of any species of wildlife absolutely protected pursuant to section 3 of the Wildlife Act 1953 or partially protected pursuant to section 5 of that Act.

the *Allocation of Cultural Materials Guidelines 2007* for Ngāi Tahu takiwā to guide staff and applicants in the processing of applications.

Although the commercial component of the customary right of Ngāi Tahu to take tuna/eel was settled in the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992, the customary right of Ngāi Tahu to take tuna/eel on a non-commercial basis remains.

A living Treaty partnership

Te Tiriti o Waitangi and its principles provide the foundation for the relationship between the Department and Ngāi Tahu. A meaningful Treaty partnership between the Department and Ngāi Tahu respects the Department's conservation responsibilities, while protecting the authority of Ngāi Tahu in relation to ancestral lands and taonga.

The Ngāi Tahu Claims Settlement Act 1998 (the Settlement) provided a framework for partnership through a number of legal mechanisms. In the years immediately post-Settlement, the Department and Ngāi Tahu worked closely together to implement the Settlement and build a close working relationship. Much has changed since, both within the Department and Ngāi Tahu, and concerning the challenges and opportunities in managing natural resources in partnership. Both parties are committed to building on the platform established by the Settlement to develop and strengthen a partnership that fully realises the Department's section 4 (Conservation Act 1987) responsibilities and actively provides for Ngāi Tahu tino rangatiratanga and its expression through kaitiakitanga. This includes:

- Active and shared management and decision-making with Ngāi Tahu (consistent with legislation) in management of public conservation lands, waters and resources of importance to Ngāi Tahu
- Recognition of the kaitiaki responsibility and associated mātauranga of Papatipu Rūnanga in regard to whenua tūpuna and ngā taonga tuku iho (treasured resources)
- Enabling Ngāi Tahu to undertake customary practices, including access to and use of cultural materials and mahinga kai, consistent with legislation
- Protection of Ngāi Tahu values and the historic and continuing presence of Ngāi Tahu in the whenua tūpuna (cultural landscape)
- Enabling Ngāi Tahu to explore and develop opportunities to support intergenerational wellbeing
- Implementing the Ngāi Tahu Claims Settlement Act 1998.

Implementation of the above requires a framework to manage the partnership at governance, management and operational levels. The Department and Ngāi Tahu will work together to co-design a partnership framework that sets out the principles and mechanisms for strengthening the partnership and maintaining it on an ongoing basis at all levels. Identifying projects of strategic priority to Ngāi Tahu that the Department can support is one mechanism to achieve this.

An active partnership requires acknowledgement that changes may occur over time. The Department and Ngāi Tahu will work together to regularly monitor and review the effectiveness of the partnership framework, and adapt it as necessary to strengthen the relationship.

The Department and Ngāi Tahu have developed some guidelines and documents to cover customary use, species recovery, historic and cultural heritage, concessions and relationship matters. The Department and Ngāi Tahu will work together to regularly review and improve these existing documents and co-develop new processes and protocols, where necessary, to

ensure that Ngāi Tahu Treaty rights and kaitiaki responsibilities are recognised and provided for. This includes: the involvement of community and business groups in activities on public conservation lands and waters; and management of sites and species of significance to Ngāi Tahu.

Achieving a sustainable, living Treaty partnership between the Department and Ngāi Tahu underpins this CMS. The objectives and policies that follow apply to all of the Department's activities across the Canterbury (Waitaha) region.

1.4.1 OBJECTIVES

- 1.4.1.1 To maintain and strengthen the partnership between the Department of Conservation and Ngāi Tahu so as to enhance conservation of natural resources through the administrative processes of the Department and the exercise of traditional tino rangatiratanga and kaitiakitanga practices of the iwi. This partnership is to be based on mutual good faith, and active engagement and transparency in decision-making processes.
 - 1.4.1.2 To formalise and support, through agreement between the Department and Ngāi Tahu, the enhancement of those relationships.
 - 1.4.1.3 To ensure that the Department actively consults at all times with Ngāi Tahu in a timely, informed and effective way.
 - 1.4.1.4 To enable Ngāi Tahu to pursue their customary practices, and the customary use of traditional materials and indigenous species, in a manner consistent with their kaitiakitanga obligations, the relevant legislation, regulations, general policies, and the purposes for which the land is held.
 - 1.4.1.5 To encourage increased Ngāi Tahu involvement and participation in the conservation of public conservation lands and waters.
 - 1.4.1.6 To promote integrated conservation management for areas adjoining public conservation lands or waters that have been returned to Ngāi Tahu through Treaty of Waitangi claim settlements.
 - 1.4.1.7 To work with Ngāi Tahu, where the Department has a common interest, to advocate for the protection of mahinga kai, wāhi tapu and other cultural resources located outside of public conservation lands in accordance with the Ngāi Tahu Deed of Settlement 1997 and Ngāi Tahu Claims Settlement Act 1998.
 - 1.4.1.8 To work with Ngāi Tahu to establish and review formal protocols to:
 - provide for the customary use of traditional materials and indigenous species;
 - guide the management of marine mammal strandings;
 - recognise the rangatira and kaitiaki role of Ngāi Tahu in regard to management of taonga species; and
 - recognise the rangatira and kaitiaki responsibilities of Ngāi Tahu in regard to management of other indigenous species.
 - 1.4.1.9 Promote authenticity in the use of Ngāi Tahu stories, terms and images, and provide for the development of protocols around the use of these by business and community groups involved in conservation projects and activities on public conservation lands and waters.
 - 1.4.1.10 Explore and develop opportunities for intergenerational Ngāi Tahu wellbeing.
-

1.4.2 POLICIES

- 1.4.2.1 Ensure Department staff are aware of, and implement, the Department's responsibilities under the Ngāi Tahu Deed of Settlement 1997 and the Ngāi Tahu Claims Settlement Act 1998 provisions, and associated protocols and guidance documents.
- 1.4.2.2 Work with Ngāi Tahu to develop and implement a partnership framework that identifies the principles and mechanisms to strengthen and maintain an enduring partnership at all levels.
- 1.4.2.3 Work with Ngāi Tahu to explore, identify and implement:
- a) opportunities for co-management of sites and species of significance to Ngāi Tahu;
 - b) measures to improve Ngāi Tahu access to and customary use of mahinga kai and other cultural materials; and
 - c) opportunities for shared decision-making;
- consistent with legislation.
- 1.4.2.4 Work with Ngāi Tahu to develop, where necessary, review and implement guidelines and protocols for Department engagement with Papatipu Rūnanga and Te Rūnanga o Ngāi Tahu.
- 1.4.2.5 Maintain effective communication between Papatipu Rūnanga and the Department.
- 1.4.2.6 Provide for the non-commercial customary take of tuna/eel and other indigenous freshwater fish from public conservation waters where:
- the effects of the harvest are understood, and adverse effects on indigenous species or ecosystems within those waters are avoided or otherwise minimised;
 - the activity is consistent with the Outcome sought for Place and the Aoraki/Mount Cook or Arthur's Pass national park management plans;
 - there is an established tradition of such a customary use at the site; and
 - this is consistent with section 50 of the Reserves Act 1977, in the case of reserves under that Act.
- 1.4.2.7 Consult with Papatipu Rūnanga on proposals for the taking of, and/or research relating to, taonga species.
- 1.4.2.8 Explore with Ngāi Tahu how customary Ngāi Tahu conservation practices such as rāhui (restriction on resources) may be used and supported to achieve shared conservation goals.
- 1.4.2.9 Work with Ngāi Tahu to review and implement the Department of Conservation and Ngāi Tahu Guidelines for Management of Wāhi Tapu and Wāhi Taonga: Protection and Management of Historic and Cultural Heritage on Public Conservation Lands and Waters.
- 1.4.2.10 Engage with Ngāi Tahu when developing partnerships with others to ensure the rights and values of Ngāi Tahu in relation to such partnerships are fully considered.
- 1.4.2.11 Work with Ngāi Tahu to develop and implement guidelines to ensure cultural sensitivity regarding the use of taonga species and sites of significance to Ngāi Tahu within advertising and promotional material.
- 1.4.2.12 Ensure that the 3 Tōpuni and 16 nohoanga entitlement sites on public conservation lands within Canterbury (Waitaha) are managed in accordance within sections 237–252 and 255–268 of the Ngāi Tahu Claims Settlement Act 1998.

- 1.4.2.13 Work with Ngāi Tahu to review and implement decision-making processes for authorisation applications, to maximise opportunities for the involvement of Ngāi Tahu and ensure provision is made for Ngāi Tahu rights and values.
 - 1.4.2.14 Ensure that Ngāi Tahu tikanga and kawa (protocols) are upheld where iwi or hapū from outside of the Ngāi Tahu takiwā are involved in conservation projects within the Ngāi Tahu takiwā.
 - 1.4.2.15 Ensure that concessions for guiding or otherwise taking visitors onto public conservation lands and waters include provisions to recognise and provide for Ngāi Tahu values and the respectful use of Ngāi Tahu cultural information.
 - 1.4.2.16 Support the erection of mutually agreed to Ngāi Tahu cultural markers (pou whenua) on or beside public conservation lands and waters.
 - 1.4.2.17 Develop, with Ngāi Tahu, guidelines for active consultation regarding land reclassification, disposal or exchanges and provide for reviews of those guidelines.
-

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- An agreed 'partnership framework' has been developed with Ngāi Tahu to implement and monitor the Treaty partnership with respect to the management of conservation lands in Canterbury (Waitaha). This framework is to be formally presented to Te Rūnanga o Ngāi Tahu, the New Zealand Conservation Authority (primarily through the Canterbury Aoraki Conservation Board), and the Director-General of Conservation.
- A process has been established between the Department and Ngāi Tahu to prioritise, review, develop and implement protocols and guidance documents addressing Ngāi Tahu Claims Settlement Act 1998, Conservation Protocols and section 4 Conservation Act 1987 matters.
- Measures to protect, encourage respect for, and provide for active involvement of Ngāi Tahu in the management of sites and species of significance to Ngāi Tahu have been formally put in place.
- Guidelines on the use of taonga species and sites of significance to Ngāi Tahu within advertising and promotional material have been mutually formalised and implemented.
- A process has been mutually agreed to, and implemented, that will enable the Department to identify and support conservation-related projects of strategic priority to Ngāi Tahu.

Achieved by the end of Year 5 after CMS approval (2021)

- Regular monitoring of the partnership framework, including relevant protocols and guidance documents, has been firmly implanted in the ongoing relationship between the Department and Ngāi Tahu, and when required, any changes are mutually agreed to and implemented.
- Regular monitoring of the measures to protect, encourage respect for, and provide for active involvement of Ngāi Tahu in the management of sites and species of significance to Ngāi Tahu has become firmly implanted in the ongoing relationship between the Department and Ngāi Tahu, and that any necessary changes are mutually agreed to and implemented.

- Success of advocacy undertaken to protect mahinga kai, wāhi tapu and other Ngāi Tahu cultural resources and values.
- Progress made on agreed projects of strategic priority to Ngāi Tahu.

Achieved by the end of Year 10 after CMS approval (2026)

- Monitoring of the Treaty partnership in accordance with the partnership framework, including relevant protocols and guidance documents, and required changes agreed and implemented.
 - All existing protocols and guidance documents reviewed, and new protocols and guidance documents developed as required.
 - Satisfaction with measures to protect, encourage respect for, and provide for active involvement of Ngāi Tahu in the management of sites and species of significance to Ngāi Tahu.
 - Progress made on agreed projects of strategic priority to Ngāi Tahu.
-

1.5 Canterbury (Waitaha) by 2026

This section outlines national and regional conservation objectives for natural heritage, history, recreation, public engagement and conservation gains from business partnerships to be delivered by management of conservation resources within Canterbury (Waitaha) over the next 10 years (see the Introduction).

The national conservation objectives in this Part are linked to the intermediate outcomes and their objectives in the Department's Outcome Statement and 100-year vision, as detailed in the Department's Statement of Intent 2015–2019. The wording of the headings for sections 1.5.1–1.5.5 mirrors those used for the intermediate outcomes.

Map 2 demonstrates ecosystem priorities (see Appendix 4) and Icon and Gateway destinations (see Appendix 11) in Canterbury as part of the jigsaw of national ecosystem and recreation outcomes identified by the Department.

Regional objectives are consistent with the national objectives but identify specific goals for Canterbury.

1.5.1 Natural heritage

Section 1.3 outlines the key matters that have shaped Canterbury (Waitaha) into being a significant region for natural heritage, the pressures that make it vulnerable to further decline and the opportunities that need to be pursued into the future. Canterbury terrestrial and freshwater ecosystems include those that are well-protected (e.g. beech forests and their lakes), poorly-protected and threatened (e.g. inter-montane basin-floors, lowland streams, wetlands), naturally rare (e.g. Kaitorete Spit, Hurunui lakes) and those important for threatened and/or at-risk species (e.g. braided rivers). Coastal and marine ecosystems are variable in their protection and have not been systematically assessed.

Within these ecosystems the Department has identified over 80 priority ecosystem units on public conservation lands and waters (see Appendix 4).

The majority of threatened and at-risk species in Canterbury are in lowland and montane altitude zones, rather than the subalpine and alpine zones.

All of the Places in Part Two of this CMS contain areas of national importance for natural heritage management. Additionally, although much of the Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha) are not covered within a Place, they do still contain ecosystem remnants that are also of national importance for natural heritage management.

There are non-Department biodiversity strategies and programmes within Canterbury (e.g. the Canterbury Biodiversity Strategy¹² and the Natural Environment Recovery Programme for Greater Christchurch¹³) and national strategies (e.g. the New Zealand Wilding Conifer Management Strategy 2015–2030¹⁴) that will be relevant when the Department is working with others.

The Department implements its responsibilities under the Forest and Rural Fires Act 1977, the Fire Service Act 1975, and the Forest and Rural Fires Regulations 2005 through its National Fire Plan.

OBJECTIVES

- 1.5.1.1 The diversity of New Zealand’s natural heritage is maintained and restored with priority given to:
 - a) conserving a full range of New Zealand’s ecosystems to a healthy functioning state, with an emphasis on the priority ecosystem units in Appendix 4;
 - b) supporting the work of others to maintain and restore ecosystem types selected from Appendix 2;
 - c) conserving threatened and at-risk species to ensure persistence,¹⁵ with an emphasis on those listed in Appendix 5;
 - d) maintaining or restoring populations of nationally iconic species that occur locally, with an emphasis on those listed in Appendix 7; and
 - e) conserving significant geological features, landforms and landscapes, including those listed in Appendix 9, where they are on public conservation lands and waters.
- 1.5.1.2 Build partnerships with others to maintain or restore the species, natural features and ecosystems that collectively are valued by a local community as defining their locality.
- 1.5.1.3 Engage in collaborative processes to build a nationally representative network of marine reserves and other marine protected areas, taking into account the marine habitats and ecosystems listed in Appendix 8.
- 1.5.1.4 Advocate for the protection of priority natural heritage, such as: priority ecosystem units and threatened species; and significant geological features, landforms and landscapes at risk of permanent degradation selected from Appendix 9.
- 1.5.1.5 Raise community awareness of fire threat, in partnership with other fire fighting authorities and at sites where this will achieve conservation benefits.
- 1.5.1.6 Work with landowners, Ministry for Primary Industries, fish and game councils, local government and other agencies, and advocate for:
 - a) the protection of freshwater fisheries, fish habitat and fish passage;
 - b) the preservation of threatened indigenous freshwater species; and
 - c) the maintenance and improvement of habitat connectivity and water quality from the headwaters of waterways to the coast.

¹² Environment Canterbury 2008. Canterbury Biodiversity Strategy. Report Number R08/13

¹³ Environment Canterbury 2013. Natural Environment Recovery Programme for Greater Christchurch, Whakaara Taiao. Report Number R13/68.

¹⁴ New Zealand Wilding Conifer Strategy 2015–2030. 2014. Ministry for Primary Industries, Wellington.

¹⁵ Persistence is achieved when there is a 95 per cent probability of a species surviving over the next 50 years or three generations (whichever is longer).

- 1.5.1.7 Contain or control pest plants and animals and wild animals, including those identified in Appendix 6, in priority ecosystem units through a targeted strategic and sustainable multi-threat management approach.
- 1.5.1.8 Foster management action on plant and animal pest and wild animal control, involving inter-agency, concessionaire, and community involvement.
- 1.5.1.9 Work with others to manage or avoid threats to marine mammals and seabirds, particularly Hector's dolphins, to ensure their recovery and protection.
- 1.5.1.10 Manage islands in accordance with the purposes for which they are held and the guidance provided and issues identified in Appendix 3.
- 1.5.1.11 Contribute to the Crown tenure review process to seek the best protection of significant inherent values.¹⁶
- 1.5.1.12 Contribute to multi-agency management of waterbodies.
- 1.5.1.13 Foster and develop, with Ngāi Tahu, positive and cooperative working relationships with the community to achieve greater conservation outcomes.
- 1.5.1.14 Maintain the mammalian pest-free status of islands where this exists.
- 1.5.1.15 Contribute to efforts to assess and conserve refuge habitats such as limestone outcrops, cliffs, islands and small areas of public conservation land on the Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha).
- 1.5.1.16 Contain Himalayan tahr within the feral range set out in the Himalayan Thar Control Plan 1993¹⁷ and seek to ensure that new populations of wild animals and pest animals are not established.
- 1.5.1.17 Contribute to achieving zero-density of wilding trees within priority ecosystem units and areas of Outstanding Natural Features and Landscapes within the high country, using sustained control.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- A baseline report assessing the condition of the priority ecosystem units.
- Scheduled outputs identified in approved work programmes for priority ecosystem units in Canterbury (Waitaha).
- Scheduled outputs identified for threatened species outside priority ecosystem units for which a work programme is underway.

Achieved by the end of Year 5 after CMS approval (2021)

- Scheduled outputs identified in approved work programmes for priority ecosystem units in Canterbury (Waitaha).
- Scheduled outputs identified for threatened species outside priority ecosystem units for which a work programme is underway.
- No increase in the feral range and populations of wild animals and pest animals.

¹⁶ 'Significant inherent value' in the Crown Pastoral Land Act 1998, in relation to any land, means inherent value of such importance, nature, quality or rarity that the land deserves the protection of management under the Reserves Act 1977 or the Conservation Act 1987.

¹⁷ Department of Conservation. 1993: Himalayan Thar Control Plan. Department of Conservation, Christchurch.

- Sustained control of wilding trees within the high country in accordance with the New Zealand Wilding Conifer Management Strategy 2015-2030.

Achieved by the end of Year 10 after CMS approval (2026)

- Scheduled outputs identified in approved work programmes for priority ecosystem units in Canterbury (Waitaha).
 - Scheduled outputs identified for threatened and/or at-risk species outside priority ecosystem units for which a work programme is underway.
 - Reduced feral range and populations of wild animals and pest animals.
 - Sustained control of wilding trees within the high country in accordance with the New Zealand Wilding Conifer Management Strategy 2015-2030.
-

1.5.2 Historic and cultural heritage

In Canterbury (Waitaha), the Department has identified 77 historic sites for active conservation management (see Appendix 10). Most of these sites are located within Places (see Part Two). Active conservation management means that the Department will undertake a planned programme of work that takes into account threats, condition, technical feasibility, future use, and resource levels.

Appendix 10 includes very few sites that reflect historic events or actions that did not result in structures or archaeological sites; for example, ara tawhito (ancestral trails), a significant biodiversity protection action, or the advent of ski planes; these types of sites may need further consideration.

Places and sites where the Department will focus effort to ensure history is protected and brought to life are:

- National Parks Place: the villages and their nearby historic sites, historic huts.
 - Southern Conservation Parks Place: historic huts, Quailburn, Staveley lime kilns, Avoca homestead, Mount Somers, Browning Pass/Noti Raureka pounamu trail.
 - Northern High-Country Place: Hurunui pounamu trail, St James homestead, historic huts.
 - High-Country Basins Place: Kura Tāwhiti, Cave Stream, Hakatere corner, scientific reserves.
 - Foothills Place: Peel Forest, limestone rock art at Raincliff and Weka Pass.
 - Banks Peninsula/Te Pātaka o Rākaihautū Place: Awaroa/Godley Head, Ripapa Island, Otamahua/Quail Island, Sign of the Packhorse Hut, Christchurch to Little River Rail Trail.
 - Coastal Land and Marine/Ki Tai Place: Te Waihora, Kaitorete Spit.
-

OBJECTIVES

- 1.5.2.1 Historic and cultural heritage on public conservation lands and waters is valued by New Zealanders.
- 1.5.2.2 Understand the location, value, significance and condition of historic places on public conservation lands and waters, and ensure that records of these places are up to date.
- 1.5.2.3 Profile the Historic Icon sites and selected actively conserved historic places listed in Appendix 10 through quality interpretation, both on- and off-site, to enable visitors to identify with the historic sites and their stories.

- 1.5.2.4 Prioritise for protection and conservation the actively conserved historic places listed in Appendix 10 on the basis of their historical, cultural and physical significance, their value to Ngāi Tahu and the community, and their conservation requirements.
- 1.5.2.5 Understand the expectations of Ngāi Tahu, the community and others regarding the conservation and management of historic places on public conservation lands and waters.
- 1.5.2.6 Build relationships with Ngāi Tahu, the community and business to increase understanding, skill, active management and support for historic places.
- 1.5.2.7 Undertake conservation work (repair and maintenance) at actively conserved historic places having regard to conservation plans, national and international best practice and the International Council on Monuments and Sites (ICOMOS) NZ Charter.
- 1.5.2.8 Work with Ngāi Tahu to identify and manage places of importance to them according to the values of those places, and where there is a common interest support Papatipu Rūnanga to lead management.
- 1.5.2.9 Work with Ngāi Tahu to implement and update interpretation that tells their history on public conservation lands and waters, at places of importance to Ngāi Tahu, including ara tawhito (ancestral trails).
- 1.5.2.10 Work with Ngāi Tahu to protect cultural sites and whenua tūpuna on public conservation lands and waters from adverse effects of development.
- 1.5.2.11 Contribute to the Crown pastoral lease tenure review process to seek the best protection of historic places.
- 1.5.2.12 Expand the understanding, recording and interpretation of historic places/sites beyond those in Appendix 10, to include significant historic events, actions, tracks and routes.
- 1.5.2.13 Work collaboratively with Ngāi Tahu, Heritage New Zealand Pouhere Taonga and other agencies to identify, protect, conserve and correctly interpret historic and cultural heritage, including cultural markers within the landscape.
- 1.5.2.14 Work with the high-country farming community and others on the integration of respective roles for the protection and interpretation of historic pastoral farming sites on and off public conservation lands.
- 1.5.2.15 Work with the Ngāi Tahu Rock Art Trust on the integrated management of rock art sites on and off public conservation lands.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- A baseline report assessing the condition of actively conserved historic places listed in Appendix 10 that are stable and not deteriorating, including identification of Ngāi Tahu values, and including the identification of relevant community partnerships.
- Identification of new sites for inclusion in Appendix 10, including sites important to Ngāi Tahu.

Achieved by the end of Year 5 after CMS approval (2021)

- An increase in the number of actively conserved historic places listed in Appendix 10 that are stable and not deteriorating.
- New community relationships developed and existing ones sustained and improved that support historic values protection of Department managed places.

- Additional sites, including those of significant historic events or actions, where history has been brought to life.
- Cooperative efforts that protect and interpret historic pastoral farming sites.

Achieved by the end of Year 10 after CMS approval (2026)

- A further increase in the number of actively conserved historic places included in Appendix 10 that are stable and not deteriorating.
 - New community relationships developed and existing ones sustained and improved that support historic values protection of Department managed places.
 - Additional sites, including those of significant historic events or actions, where history has been brought to life.
-

1.5.3 Recreation

The Department uses a combination of approaches to manage recreation, including destination management, visitor management zones, and visitor groups. The intent of destination management (see Glossary and Appendix 11) is to increase recreational use on public conservation lands and waters. It is a holistic approach that considers marketing and the contribution of community and business to the visitor experience, and focuses on the predominant visitor groups accessing different destinations (see Glossary for a fuller definition of destination categories):

- Icon destinations—people travelling on holiday
- Gateway destinations—new participants
- Local Treasure destinations—the recreation needs of local communities
- Backcountry destinations—the recreation needs of the backcountry community.

The Department has identified Icon and Gateway destinations in Canterbury (Waitaha) (see Appendix 11).

The purpose of visitor management zones (see Map 3 and Appendix 12), which use the Recreation Opportunity Spectrum (ROS),¹⁸ is to plan for a range of recreation opportunities from short stops next to main highways, to multi-day wilderness experiences. Visitor groups are described in the 1996 Visitor Strategy¹⁹ and used to guide the application of visitor management zones and destination categories. These zones and categories ensure that visitors are able to seek out different locations to suit the type of experience that they want.

The Department uses other operational tools to manage individual facilities at a more detailed level, taking into account visitor management zones, destination categories and visitor groups. It is recognised that some locations with longstanding patterns of use may not fit a standard zone, category and group model. For example, there may be a Local Treasure destination in a backcountry or remote zone where day visitors are known to venture often, such as the Bealey Spur Track in Arthur's Pass National Park.

Where possible or appropriate, the Department seeks to collaborate or partner with others to maintain or better develop visitor opportunities on public conservation lands and waters, and elsewhere. The heritage and/or historic value of backcountry facilities is highly regarded by New Zealanders and internationally, and to assist their retention an agreement

¹⁸ The New Zealand Recreation Spectrum – Guidelines for users (1993) Hillary Commission and Department of Conservation.

¹⁹ Department of Conservation (1996) Visitor Strategy. www.doc.govt.nz

has been reached between outdoor recreation clubs and the Department to facilitate shared management arrangements for these facilities.

The extensive public conservation lands and waters of Canterbury present an opportunity for more people to participate in recreation and in so doing to gain health benefits and an improved sense of wellbeing. The Department manages a well-established network of visitor facilities and recreational opportunities, complemented by concessionaire facilities and services (e.g. ski fields and guides), and by regional and local parks and facilities managed by councils, trusts and landowners.

While the Department's main focus will be on the recreation opportunities and experiences on public conservation lands and waters, which in Canterbury are mainly in the hill and high country and Banks Peninsula, it will also work with councils, trusts and others, especially where they provide opportunities that differ from or complement those provided by the Department. Increased participation in recreation will also be pursued at destinations where the Department can partner with others, including concessionaires, or at Places that experience moderately high visitor numbers and can expect continuing demand. Existing examples of these include the larger ski fields (e.g. Mount Hutt and Porters) and Aoraki/Mount Cook village.

OBJECTIVES

- 1.5.3.1 Understand demand for outdoor recreation and provide recreation opportunities where:
 - a) the recreation opportunities are consistent with:
 - i) the protection of indigenous natural, historic, and cultural values; and
 - ii) the purposes for which the lands and waters concerned are held.
 - b) demand is evident; and
 - c) demand is expected to be maintained.
- 1.5.3.2 Contribute to a national network of visitor opportunities by promoting the Icon and Gateway destinations identified in Appendix 11, as strategic attractions within the network of opportunities offered in Canterbury.
- 1.5.3.3 Contribute to a national network of visitor opportunities by promoting the Local Treasure and Backcountry destinations, as locally important locations and as more challenging attractions respectively, within the network of opportunities offered in Canterbury.
- 1.5.3.4 Recognise the historic and/or heritage value of Canterbury's network of huts and tracks (identified in Appendix 16), and its ongoing value for backcountry and front-country recreation. To achieve this, work with outdoor recreation groups and the Canterbury Aoraki Conservation Board to assist with management and retention of the network, while recognising that some parts of that network may need to adapt in response to changes in the community that uses them.
- 1.5.3.5 Build partnerships with others to plan for, maintain and/or better develop recreation destinations.
- 1.5.3.6 Provide visitors with the opportunity for a positive social, physical and learning experience on public conservation lands and waters.
- 1.5.3.7 Work with the New Zealand Walking Access Commission to achieve priorities for improved access to public conservation lands and waters for recreation and to enhance public access to the coastal margin and rivers.

- 1.5.3.8 Contribute to the Crown pastoral lease tenure review process to seek public access to public conservation lands and the best provision of recreational opportunities.
- 1.5.3.9 Seek to avoid or otherwise minimise conflicts between visitors undertaking different types of activities in the same location.
- 1.5.3.10 Enhance visitors' understanding and appreciation of natural, historic and cultural heritage, particularly at Icon and Gateway destinations, and at major concessionaire destinations.
- 1.5.3.11 Understand and encourage visitor desires to undertake voluntary conservation work as recreation, and when initiated by concessionaires encourage this also.
- 1.5.3.12 Encourage recreational opportunities on public conservation lands and waters, especially within the extensive conservation parks and conservation areas of Canterbury, that are consistent with outcomes for a Place, and that meet one or more of the following:
 - a) emphasise access from urban areas and Mackenzie and Hurunui basins holiday accommodation areas, and from state highways;
 - b) integrate recreational opportunities on and off public conservation lands and waters;
 - c) integrate recreational opportunities across the whole of Canterbury and with neighbouring public conservation lands and waters;
 - d) integrate recreational opportunities with objectives in 1.5.1–1.5.5;
 - e) provide educational benefit to schools and educational groups;
 - f) have been subjected to thorough environmental impact assessment and landscape design processes, and are likely to have minimal environmental and landscape impacts; and
 - g) are supported or enabled by facilities that are able to be maintained into the future.
- 1.5.3.13 Work with Ngāi Tahu, fish and game councils, councils and others to position Canterbury as a world-class visitor destination.
- 1.5.3.14 Assess the demand for and seek to provide improved opportunities for disabled visitors in urban, rural and front-country zones to access and appreciate natural, historic and cultural values on public conservation lands and waters.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- A baseline report assessing the number and condition of huts, tracks and other visitor facility structures, the numbers and the satisfaction of people using them, and the opportunities for recreational groups to assist in their management and retention.

Achieved by the end of Year 5 after CMS approval (2021)

- An increase in the number of people recreating on public conservation lands and waters at Icon, Gateway, Local Treasure and Backcountry destinations in Canterbury, and an increase in the quality of their experience.
- An increase in the number of huts and tracks that have recreational groups assisting in their management and retention.

- An assessment of the success and difficulties of management of four-wheel drive vehicle roads on public conservation lands.

Achieved by the end of Year 10 after CMS approval (2026)

- A further increase in the number of people recreating on public conservation lands and waters at Icon, Gateway, Local Treasure and Backcountry destinations in Canterbury, and an increase in the quality of their experience.
-

1.5.4 Community engagement

The Department has an increased focus on connecting New Zealanders and others to the values of conservation, assisting them to understand how conservation relates to them and their country's wellbeing, and providing them with opportunities to act in leading and working to achieve conservation gains.

To take up this challenge in Canterbury (Waitaha), four priority engagement themes have been identified. These priorities will be supported by significantly developing existing relationships and pursuing opportunities with new potential partners. The Department's partnership with Ngāi Tahu and their educational initiatives is a developing one in these priorities.

The Department works with a wide range of other statutory agencies to achieve common objectives and mutually agreed priorities. Examples include: the New Zealand Transport Agency on roading; the New Zealand Walking Access Commission on access; TBfree New Zealand on possum control; regional councils on biodiversity and pest management; Heritage New Zealand Pouhere Taonga on historic heritage management; the Canterbury Fish and Game Councils on sports fish and game bird-related issues; the Police and Search and Rescue on emergency response; the Royal New Zealand Navy on conservation management and compliance; and the Game Animal Council on improving hunting opportunities.

The four priority engagement themes are:

1. Conservation profile—connecting people with conservation through positive experiences as they engage in recreation, tourism, education and volunteering. Through engaging people with conservation and the natural world, more New Zealanders and others will have a wider appreciation of the connection between conservation and their wellbeing.
2. Education—a transformational way for creating connections to and understandings of conservation, within a wider understanding of sustainability. Working with children, youth and their families is critical for the support of conservation action and national decision-making now and into the future.
3. Biodiversity, with a focus on freshwater—growing partnerships with Trusts and community groups that focus on reducing biodiversity loss and protecting habitats, while retaining meaning and inspiration for the groups involved. Freshwater is a critical environmental, economic and conservation priority in Canterbury, and working in this area will have significant gains for biodiversity and conservation.
4. Christchurch rebuild—the earthquakes in Christchurch provide an opportunity to strengthen inter-city and wider Canterbury relationships and to identify and develop new ones that will help connect conservation value and action with a large urban population (see 2.7 Christchurch City/Ōtautahi Place).

The above themes provide direction for where the Department will work and where the community will also be encouraged to lead and work with the Department.

OBJECTIVES

- 1.5.4.1 Increase community understanding, technical skill and active management and support for conservation in Canterbury.
 - 1.5.4.2 Seek opportunities that connect more people to conservation values.
 - 1.5.4.3 Work with a range of partners (such as statutory agencies, regional and local authorities, businesses, schools, tertiary and research providers and the community) in enduring relationships to achieve ongoing conservation outcomes.
 - 1.5.4.4 Focus relationship building in those areas where cooperative relationships support priority conservation outcomes.
 - 1.5.4.5 Achieve recognition of the contribution that public conservation lands and waters within Canterbury make to the wellbeing and economic prosperity of Canterbury and New Zealand.
 - 1.5.4.6 Raise public awareness that intact functioning ecosystems underpin New Zealand's economy both directly and indirectly.
 - 1.5.4.7 Identify and support partnerships that target sectors of the community that are not fully engaged with conservation, including young people and new New Zealanders.
-

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Identification and assessment of programmes and their outcomes aimed at increasing the amount of conservation achieved with community partners in Canterbury (Waitaha).

Achieved by the end of Year 5 after CMS approval (2021)

- An increase in the amount of conservation achieved with community partners in Canterbury (Waitaha).

Achieved by the end of Year 10 after CMS approval (2026)

- A further increase in the amount of conservation achieved with community partners in Canterbury (Waitaha).
-

1.5.5 Business partnerships

The Department is seeking to double the amount of conservation achieved over the next 20 years by working with others. Business opportunities and partnerships that help deliver conservation gains are part of that objective.

Engaging in conservation offers businesses the opportunity to contribute to the protection of New Zealand's natural, historic and cultural heritage, and add to their business' worth, value and reputation.

Opportunities exist in Canterbury (Waitaha) for more commercial businesses that assist in the conservation of natural, historic and cultural values, and enable more people to participate in recreation, where these business opportunities complement the values of particular Places and localities.

For business opportunities requiring various authorisations such as concessions (under the Conservation Act 1987) and resource consents (under the Resource Management Act 1991), the Department and other agencies are keen to reduce duplication of regulatory controls and to streamline statutory processes.

Places and localities where the outcomes in Part Two—Places identify potential new business opportunities that would benefit conservation include:

- 2.2 Southern Conservation Parks Place and 2.3 Northern High-Country Place: additional guiding (walking, skiing, cycling, vehicles) and sporting event opportunities on recently acquired public conservation lands
- 2.8 Banks Peninsula/Te Pātaka o Rākaihautū Place—guided and other walking linking public conservation and other lands, with concessionaire or commercial accommodation
- St James and Hakatere historic buildings: concessionaire use in conjunction with historic building conservation
- At existing ski fields.

New business opportunities are also possible within 2.1 National Parks Place, as guided by the management plans for those parks.

OBJECTIVES

- 1.5.5.1 Work with concessionaires and other businesses to enhance the conservation experience of their customers and others, build support for conservation and deliver conservation gains consistent with the purposes for which the lands and waters are held.
 - 1.5.5.2 Work with regional tourism organisations, other promotional groups, Ngāi Tahu and businesses to create and develop opportunities to promote conservation initiatives, products and services.
 - 1.5.5.3 Seek opportunities to work with businesses that are looking for ways to demonstrate their commitment to and engagement with conservation.
 - 1.5.5.4 Work with relevant agencies to seek ways to reduce duplication of regulatory controls on public conservation lands and waters, and to streamline and seek efficiencies in statutory processes.
-

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Identification and assessment of programmes and their outcomes aimed at increasing the amount of conservation achieved with business partners in Canterbury (Waitaha).

Achieved by the end of Year 5 after CMS approval (2021)

- An increase in the amount of conservation achieved with business partners in Canterbury (Waitaha).

Achieved by the end of Year 10 after CMS approval (2026)

- A further increase in the amount of conservation achieved with business partners in Canterbury (Waitaha).
-

Part Two—Places

This section addresses Places in Canterbury (Waitaha) (see Map 5) that have been identified for the purposes of integrated conservation management and which require some specific management direction. Each Place has a description, an outcome statement (outcome), policies and milestones.

- Outcomes describe the future state of a Place, including its values, and reflect the expected changes at that Place over the 10-year term of the CMS. They will be used for conservation management and when making decisions including in the absence of a relevant specific policy for a Place.
- Policies describe the course of action or guiding principles to be used for conservation management and when making decisions. Policies refer to public conservation lands and waters within a Place unless they are addressing matters of advocacy.
- Milestones are specific actions that are measurable steps towards achieving the outcomes and policies.

Part Two must be read in conjunction with Parts One and Three, and the Volume II maps. Where the outcomes and policies in Part Two are more specific than the objectives in Part One and/or the policies in Part Three, the provisions of Part Two prevail.

The Places are:

- 2.1 National Parks Place
- 2.2 Southern Conservation Parks Place
- 2.3 Northern High-Country Place
- 2.4 High-Country Basins Place
- 2.5 Foothills Place
- 2.6 Braided Rivers/Ki Uta Ki Tai Place
- 2.7 Christchurch City/Ōtautahi Place
- 2.8 Banks Peninsula /Te Pātaka o Rākaihautū Place
- 2.9 Coastal Land and Marine/Ki Tai Place

Note that the Places, collectively, do not cover all of Canterbury. Not included are large areas of the lowland plains, but these areas are still subject to the relevant provisions within Parts One and Three of the CMS.

2.1 National Parks Place

Description

This Place covers Aoraki/Mount Cook and Arthur's Pass national parks and a proposed extension to Aoraki/Mount Cook National Park (see Map 5.1).

Each national park has its own management plan. A national park management plan contains the outcomes or objectives planned for the park and the details of management as required by the National Parks Act 1980 and the General Policy for National Parks 2005. This information is not repeated in the CMS. It can be viewed in the Aoraki/Mount Cook and Arthur's Pass national park management plans.

Aoraki/Mount Cook National Park

Aoraki/Mount Cook National Park contains a cross-section of landforms and vegetation extending from the South Island's high-country braided riverbeds to the highest peaks of the Southern Alps/Kā Tiritiri o te Moana. It includes New Zealand's highest mountain, Aoraki/Mount Cook, which with its surrounding area is of immense cultural, spiritual and traditional significance to Ngāi Tahu, the mountain having Tōpuni status (see section 1.4). Since 1986 the Park has been part of New Zealand's first World Heritage Area, and since 1989 part of the larger Te Wāhipounamu—South West New Zealand World Heritage Area (see Appendix 14). Public recreation and tourism interests in the park's best-known features—the mountains and the glaciers—have been significant for over a century.

The upper Tasman and Godley riverbeds within the park are priority ecosystem units.

The Park has two Icon visitor destinations (the Hooker/Mueller tracks and Tasman Glacier walks) and a Gateway destination (the Aoraki/Mount Cook Village walks). When the national park management plan is next reviewed, these destinations need consideration in an integrated manner with the associated concessions operations area that includes the Aoraki/Mount Cook Visitor Centre, village, village walks, and adjoining front-country.

The Aoraki/Mount Cook Village, as an amenities area under section 15 of the National Parks Act 1980, is a major accommodation and services centre within the Canterbury (Waitaha) public conservation lands. In accordance with the Aoraki/Mount Cook National Park Management Plan 2004, the village is not intended as a destination in itself but as a gateway to experiencing the unique natural and cultural environment of the Park.

An Aoraki Mackenzie Dark Sky Reserve was 'approved' in June 2012 by the International Dark-Sky Association, with community support, to recognise that the Mackenzie Basin is one of the best stargazing sites in the world. The 'reserve' has no statutory status as yet. Natural darkness preservation and appreciation of the night sky is already recognised in the Aoraki/Mount Cook National Park Management Plan, but could be strengthened.

Arthur's Pass National Park

Arthur's Pass National Park is noted for its alpine flora and the sharp contrasts in scenery that result from the topographic and climatic influences from the park sitting astride the Main Divide of the Southern Alps/Kā Tiritiri o te Moana. The various natural, Ngāi Tahu and other cultural, and scientific values enable the park to be enjoyed by people in many ways, as well as being a scenic highlight for those travelling through, either by rail or State Highway 73 joining Canterbury (Waitaha) and the West Coast (Tai Poutini). Public use of the park is strongly influenced by its easy proximity to the predominantly urban populations of Canterbury and the West Coast (Tai Poutini). Within Canterbury, Goldney Saddle, Lake

Minchin and Mount White (East Branch Poulter/Mounds of Misery) are priority ecosystem units.

The park has a Gateway destination, the Arthur's Pass Walks within the Bealey River valley. When the national park management plan is next reviewed this destination needs consideration in an integrated manner with the associated concessions and commercial operations area that includes the Arthur's Pass Visitor Centre, village and railway station.

The current Arthur's Pass National Park Management Plan was approved in December 2007 and no need is seen to address further within this CMS any matters within the plan.

Additions to Aoraki/Mount Cook National Park

Additions to the park have long been suggested.

As noted in the Aoraki/Mount Cook National Park Management Plan, past additions suggested have included the ranges and valleys south-east of the park, and the Tasman River bed (currently Crown land). Some of this area is now included within the Te Kahui Kaupeka Conservation Park or potential extensions to that park (see 2.2 Southern Conservation Parks Place), or some other public conservation lands status (see Policy 2.2.14).

Two broad options are seen for the park addition: the first being to only add areas that emphasise the approach to Aoraki/Mount Cook (the mountain) and the current park emphasis on land formation and glacial processes; the second being to add all the directly adjoining conservation areas that may arise from the tenure review process. For the second option, tenure review outcomes will determine the potentially available lands, and consideration against the relevant policies in Chapter 6 of the General Policy for National Parks 2005 would be required.

The first option above is preferred given the likely future presence of public conservation lands and waters adjoining all the park's boundaries except for the Tasman and Godley braided riverbeds, the advent of adjoining conservation parks, the Tasman River's outstanding natural values, and that braided river values have yet to be well represented within any national park.

OUTCOME

Aoraki/Mount Cook National Park has preserved in perpetuity in its natural state, as far as possible—the landscapes, indigenous ecosystems and natural features and processes of the park, particularly within its priority ecosystem unit and its threatened species. The Ngāi Tahu values for Aoraki/Mount Cook itself are protected by the Tōpuni. In addition to providing premier alpine climbing opportunities, the benefit, use and enjoyment of the public is primarily managed in an integrated manner by the Tasman Glacier walks and Hooker/Mueller tracks, the Aoraki/Mount Cook Village and its Visitor Centre, and the associated front-country and concessions operations areas. The Aoraki/Mount Cook Village continues to serve the park by providing accommodation and services that are based on the natural, historic and cultural values within the park only.

Arthur's Pass National Park has preserved in perpetuity in its natural state, as far as possible—the landscapes, indigenous ecosystems and natural features and processes of the park, particularly within priority ecosystem units, and its threatened species. The benefit, use and enjoyment of the public are provided for by the Arthur's Pass walks and Visitor Centre as part of an integrated Icon or Gateway destination and associated concessions and commercial operations area that includes Arthur's Pass village and railway station, and by a network of Local Treasure and

Backcountry destinations throughout the park. The park is largely free of aircraft landings and visitors to backcountry and remote areas experience a high degree of natural quiet.

Aoraki/Mount Cook National Park has been extended to better encompass the Tasman River valley approach to Aoraki/Mount Cook, including the past and present glaciation and braided river land-forming processes, and to preserve the ecosystems and scenic grandeur that evolved with those processes. The resultant park extends from the Southern Alps/Kā Tiritiri o te Moana to the edge of Lake Pukaki by including the Tasman River bed and its margins.

POLICIES

- 2.1.1 Manage Aoraki/Mount Cook and Arthur's Pass national parks in accordance with their national park management plans, including their visitor management, aircraft and vehicle provisions.
 - 2.1.2 Manage (including when considering concession applications) Aoraki/Mount Cook National Park to maintain the values described in the statement of outstanding universal value of the Te Wāhipounamu—South West New Zealand World Heritage Area (see Appendix 14).
 - 2.1.3 Seek further protection of natural darkness and the night sky within Aoraki/Mount Cook National Park when the park management plan is next reviewed.
 - 2.1.4 Undertake the necessary statutory processes for additions to Aoraki/Mount Cook National Park with particular recognition of the following criteria:
 - that the investigation post-dates completion of tenure review settlements for any pastoral lease lands that may be part of the investigation area; and
 - that the park extension focuses on the Tasman River valley approach to Aoraki/Mount Cook and the processes of glaciation and braided river formation within that valley.
 - 2.1.5 Seek extension of the World Heritage Area to include any extension of Aoraki/Mount Cook National Park.
-

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Completion of review of Aoraki/Mount Cook National Park Management Plan.

Achieved by the end of Year 5 after CMS approval (2021)

- Completion of review of Arthur's Pass National Park Management Plan.

Achieved by the end of Year 10 after CMS approval (2026)

- National Parks Act 1980 processes completed for an extension to Aoraki/Mount Cook National Park.
 - Extension of Te Wāhipounamu—South West New Zealand World Heritage Area to include any extension to Aoraki/Mount Cook National Park.
-

2.2 Southern Conservation Parks Place

Description

The Southern Conservation Parks Place (see Map 5.2) includes one conservation park from State Forests prior to the Conservation Act 1987 and seven parks created following pastoral lease tenure reviews and Nature Heritage Fund purchases over the period 1999 to 2012. The Place also covers adjoining conservation lands including the Adams Wilderness Area and the Lindis Pass Scenic Reserve. Two parks, Hāwea and Oteake, straddle the Canterbury/Otago boundary. Conservation parks are managed so that their natural and historic resources are protected, and subject to this purpose, to facilitate public recreation and enjoyment.

Nestled within the Place and with some overlap is the High-Country Basins Place, while in part overlying and starting within the Place is the Braided Rivers/Ki Uta Ki Tai Place.

Collectively, the eight conservation parks are an outstanding national asset, covering over 458,000 ha of Canterbury's southern high country. The parks are predominantly tussock grasslands and a mosaic of beech and cedar/tōtara forest, alpine vegetation, and river valley grass and shrublands.

Twelve priority ecosystem units (see Appendix 4) are located either wholly or partially within this Place. Intensive management of these sites is increasing, while the removal of stock grazing and the avoidance of fire are enabling ecosystem recovery generally over previously farmed areas. Numerous threatened and at-risk species (see Appendix 5) are present, both in and out of priority ecosystem units and off public conservation lands and waters, and unless intensive management occurs the species will continue to decline in the face of the current pest and other threats to them. Community programmes working with priority ecosystem units or threatened and at-risk species in this Place are few at present.

The Place contains many geological features, landforms and landscapes of significance (see Appendix 9). Geological features, within Canterbury's predominantly sandstone geology, and outside of the high-country basins, include gemstone and fossil locations, the Wilberforce gold-bearing quartz reefs, Mount Somers volcanics, and Oteake's schist. Almost the entire Place has been identified as an Outstanding Natural Feature and Landscape.²⁰

Ngāi Tahu values for the Place are considerable, relating ara tawhito (traditional trails) to seasonal settlements, rock shelters and rock drawings, land and water mahinga kai sites, and the whakapapa to the land that comes with place names, stories and wāhi tapu. For example, the Craigieburn and Torlesse ranges were well-used mahinga kai for Kaiapoi Ngāi Tahu, the Ashburton River/Hakaterere gorge was the main pounamu trail for the Arowhenua Hapū connecting with the upper reaches of the Rakaia and Wilberforce rivers to Browning Pass/Noti Raureka and on to the West Coast (Tai Poutini), and Oteake was important to tangata whenua from coastal Otago as a mahinga kai. Active use of the Place by Ngāi Tahu is both historical and ongoing. Of the specific provision sites under the Ngāi Tahu Claims Settlement Act (see section 1.4), some Deed of Recognition riverbed areas may be within this place.

The Place has a rich post-European settlement history. Arising from the former pastoral lease lands, there are 11 former musterers' huts and all or parts of three homestead area buildings, as in common with the Northern High-Country Place. Additionally, there are 10 huts built and managed since the early days of backcountry recreation by the Canterbury Mountaineering Club, the Canterbury University Tramping Club, the New Zealand Alpine

²⁰ Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional and district policy statements and plans should be consulted for their consideration of this landscape review.)

Club and the New Zealand Deerstalkers' Association. A further nine huts date from the early years of New Zealand Forest Service ground-based hunters undertaking wild animal control. Other huts have historic origins, such as Urquhart's and Ida Railway huts. The diverse heritage values of these huts are part of their ongoing attraction to visitors. The rare presence in Canterbury of gold-bearing rocks just in from the West Coast (Tai Poutini) border in the Wilberforce River catchment, and from the Otago border in the Ida Range, resulted in gold prospecting and mining sites in those areas. Historic coal mining sites occur in the Avoca River and Mount Somers areas. Other historical rural sites included lime works, a gemstone mining site, and a tourist hut.

The Place has significant value as a visitor resource, offering a diverse range of recreation opportunities including 10 ski fields, many front-country and backcountry sites, track and hut facilities, hunting, four-wheel driving, mountain biking and horse riding. Te Araroa Trail runs the length of the Place. Retention of the extensive network of facilities, particularly the huts and vehicle tracks arising from the former pastoral farming era, requires ongoing assessments against the available Department and community resources.

The 10 ski fields within the Place, while being some of the most intensive visitor-use locations on public conservation lands, and some justifying an importance akin to an Icon visitor destination, are vulnerable to climate change and rising operational costs. Increasingly, the larger commercial fields will become more reliant on snow-making, but they and other ski field operators are also likely to seek better visitor access and closer visitor accommodation. They may also wish to broaden the range of recreational activities permissible within their permitted areas. Smaller fields may survive as largely club- and volunteer-run fields, but some will not survive or will operate less frequently. This scenario mirrors an international trend and suggests a precautionary approach is needed for proposed ski field developments and terrain modification, especially for the more-vulnerable fields, to minimise abandoned structures and adverse landscape effects.

The ski fields, in drawing visitors to higher-altitude areas, also have potential for wide-ranging conservation advocacy and interpretation about these areas, additional to their recreation.

With the exception of heli-skiing areas, at ski fields during winter, and scenic landings on the Liebig and Ben Ohau ranges, there is only a low level of aircraft use across the Place, the main activity being the positioning of recreational hunters and other recreationalists.

A relatively new activity for consideration on public conservation lands is snowmobiling. Delivered to usable snow-fields by four-wheel drive vehicle on approved access roads, or by helicopter fly-in, snowmobiles can enable winter backcountry touring and access for ski-touring and hunting. Potential adverse effects can be minimised by avoiding bare ground and vegetation, having quieter four-stroke engines, and having separation from non-vehicle users. Little activity may occur, however, due to the high costs involved, difficulty of vehicle registration, and the limited use period imposed by snow availability. No code of practice for snowmobilers yet exists in New Zealand.

Park-specific issues are outlined in Table 2, but general ones include the management of grazing incursions, fire, wilding trees, wild animals, fencing, and vehicle access. The numerous unformed legal roads passing through the parks, often accessible by four-wheel drive and other vehicles (including helicopters), can make the achievement of integrated conservation management of adjoining lands and waters difficult.

For most of the parks that have arisen from tenure review or Nature Heritage Fund purchases, vegetation patterns reflect pre-European fire and pastoral farming impacts, with areas of depleted tussockland, vulnerable wetlands and stock-affected forest edges. Their ecosystem restoration will largely occur through natural regeneration in the absence of

grazing, with fire prevention and control, and pest and wild animal control. This regeneration has considerable potential to restore natural water storage, providing down-catchment ecosystem services, and potential carbon-fixing credits.

Himalayan tahr are present and are managed in accordance with the Himalayan Thar Control Plan 1993, made under the Wild Animal Control Act 1977. Hunting to keep animal numbers below prescribed maximum population densities and prevent tahr expansion beyond a defined feral range is priority animal control work to minimise ecosystem damage. Craigieburn, Korowai Torlesse Tussocklands, eastern Hakatere, and Oteake conservation parks are all outside the tahr feral range. A combination of ground-based and aerially-assisted recreational hunting, plus commercial hunting and culling by the Department, seeks to keep the population in check and within the defined feral range. Recreational hunter interest in tahr management is high.

Bennett's wallabies have a feral range lying generally between the Rangitata and Waitaki rivers and including Te Kahui Kaupeka Conservation Park, having spread from the South Canterbury hill country. An incursion of wallabies lies south of Lake Benmore (Te Ao Mārama) and the Waitaki River, and an isolated population exists north-east of Lake Pukaki. These isolated groups threaten Oteake Conservation Park and Aoraki/Mount Cook National Park respectively. Pigs are found in many of the parks, but the Mackenzie Basin and adjoining parks have generally been kept pig-free.

For wallabies and pigs, and some wild animals, there are illegal releases into new areas and a need for vigilance in animal control.

Recreational hunters highly rate the trophy potential and history of the red deer herd found in the Rakaia, Mathias and Wilberforce river catchments (covering the Ragged, Rolleston and Cascade ranges) and seek retention of this trophy herd and recreational hunting opportunity. Complicating factors are the presence of priority ecosystem units, and possum/TB control by TBfree New Zealand (using 1080 poisoning with deer-repellent). The Department's pest control within the priority ecosystem units does include commercial deer hunting. If using 1080 for possum control, Department policy does allow the use of deer-repellent if its cost is met by those requesting its use. Recreational hunting can be encouraged by facilitating permits and access, providing facilities, and excluding commercial hunting at key times popular for recreational hunting.

Nestled beside some parks are reserves (e.g. Sharplin Falls Scenic Reserve) connected ecologically and/or by public use to the parks, and integrated management between the two is desirable. Existing and new conservation areas adjacent to the conservation parks, from tenure review processes, warrant consideration as potential additions to the parks.

New public conservation lands and waters adjoining Lindis Pass Scenic Reserve (the Longslip area) and in the area between the Godley and Tasman rivers do not easily fit as potential additions to the existing conservation parks. Their future land status under the Reserves Act 1977 or the Conservation Act 1987 warrants formal consideration once Crown Pastoral Land Act tenure reviews in the vicinity are substantially completed.

Where the parks have individual values or issues additional to those described above these are listed in Table 2 below.

Adams Wilderness Area

The Adams Wilderness Area (gazetted 2003) straddles the Main Divide, and within Canterbury (Waitaha) includes the upper headwaters of the Rakaia, Clyde and Havelock rivers. The Area, within Canterbury, provides a high-alpine wilderness experience (see Appendix 12) for transalpine tramping, mountaineering, ski-touring and a small amount of

tahr hunting by ground-hunters, within the much larger area of the central Southern Alps/Kā Tiritiri o te Moana. Scenic over-flights occur over this larger area, but in general the wilderness area has a high degree of natural quiet.

Wilderness areas provide visitors with the opportunity to immerse themselves in the natural environment, engaging all their senses and experiencing solitude in a place that is unmodified and unaffected by humans and rarely visited, including by departmental staff, and where management activities are minimal and usually undetectable. Aircraft use is restricted to that necessary for emergencies and park management purposes such as the control of animals which have adverse effects on indigenous natural values.

Table 2: Southern Conservation Parks Place—specific features, values and issues

Name, gazettal year, size	Park-specific features and values additional to the general description above²¹	Issues for management additional to the general description above
Craigieburn 1967 44,171 ha	<p>An extensive complex of historic sites within the Wilberforce River catchment dating from the Browning Pass/Noti Raureka pounamu trail, pack road and gold prospecting eras</p> <p>Low level of aircraft use</p> <p>One commercial (Porters) and three club (Craigieburn Valley, Broken River, Mount Cheeseman) ski fields and activities</p> <p>Private huts held by the Hamilton Peak and Ski Touring Clubs</p> <p>New Zealand Conservation Trust support for threatened species protection, utilising Craigieburn research base facilities</p> <p>Canterbury Environmental Trust and St Andrews College education centres</p> <p>Location of mountainland ecosystem research by Forest Research Institute 1950s to 1990s</p> <p>Wilding tree removal & wasp control community action by Waimakariri Ecological and Landscape Restoration Alliance & Waimakariri Environment and Recreation Committee</p> <p>Community-developed cross-country mountain bike tracks</p>	<p>The control of old experimental conifer-tree plots and wilding trees</p> <p>Control of trespassing stock from adjoining lands and up river valleys, requiring action with adjoining landholders</p> <p>Ensuring public use or phase out of private huts</p> <p>Porters ski field development</p> <p>Down-hill and other mountain biking impacts</p> <p>Supporting use of education centres and the provision and management of facilities near them</p> <p>Working with community conservation programmes</p> <p>Wasp control</p> <p>Transpower transmission lines</p>
Korowai Torlesse Tussocklands 2001 20,328 ha	<p>Minimal aircraft use</p> <p>Historic road, pack track, homestead and coal mining sites at Avoca</p> <p>Torlesse Range landscape prominence and day-climbs</p> <p>SH73 over Porters Pass</p> <p>Midland Railway up Waimakariri and Broken Rivers gorge</p> <p>Lake Lyndon Lodge</p>	<p>SH73 interpretation plan</p> <p>Historic sites and structures management</p> <p>New Zealand Rail liaison regarding conservation interpretation and potential access stops</p> <p>Supporting use of Lake Lyndon Lodge</p> <p>Transpower transmission lines</p>
Hakatere 2007 39,137 ha	<p>Historic Hakatere farm building complex, Mount Somers mining sites, and Mt Harper ice rink</p> <p>Mount Hutt and Mount Potts ski fields and activities</p>	<p>Exotic tree plantings in the Mount Hutt and Black Hill ranges and willow planting along the North Ashburton River, now sources for wilding trees</p> <p>Historic site protection</p>

²¹ NB: The presence of Ngāi Tahu cultural sites and of landform and geological features is taken 'as read' and only mentioned if there are features that can be affected by specific management action, e.g. known Ngāi Tahu sites and vulnerable geopreservation sites.

Name, gazettal year, size	Park-specific features and values additional to the general description above ²¹	Issues for management additional to the general description above
	<p>Mount Somers Track Gateway destination, with Mount Somers Walkway Society</p> <p>High natural quiet and minimal aircraft use on frontal ranges, with seasonal heli-skiing and low levels of aircraft use on back ranges</p> <p>Gemstone sites in Mt Somers and Mt Barossa areas, with high impact fossicking history</p> <p>Wilding tree removal community workdays</p> <p>Adjoins Adams Wilderness Area</p> <p>Rock-climbing on Mt Somers bluffs within Alford Forest priority ecosystem unit</p>	<p>Gemstone fossicking impacts</p> <p>Mt Hutt ski field management and development, and conservation advocacy</p> <p>Buffering the Adams Wilderness Area from activities that may impact on wilderness area values</p> <p>Climbing and fixed-anchor impacts on geological features, priority ecosystem units and threatened and at-risk species</p>
<p>Te Kahui Kaupeka</p> <p>2009</p> <p>93,856 ha</p>	<p>Mt D'Archiac / Te Kahui Kaupeka visible from SH1</p> <p>Historic resources include pastoral farm buildings, lime kilns and sawmilling remnants</p> <p>Mount Dobson and Round Hill ski field and activities</p> <p>High natural quiet and low levels of aircraft use throughout the whole park, except seasonal heli-skiing from Round Hill south and in northern areas</p> <p>Remote ski-touring in central part of the park</p> <p>Club (New Zealand Deerstarkers' Association, Canterbury Mountaineering Club), community (McKenzie Alpine Trust) and concessionaire huts</p> <p>Adjoins Adams Wilderness Area and Aoraki/Mount Cook National Park</p> <p>High standard community plant pest control in upper Rangitata River valley</p>	<p>Buffering Adams Wilderness Area from activities that may impact on the wilderness area values</p> <p>Maintaining natural quiet areas for ski-touring, and providing for separate heli-skiing areas</p> <p>Round Hill and Mount Dobson ski fields' management and development, and conservation advocacy, with cautionary approach in response to climate change effects</p>
<p>Ruataniwha</p> <p>2006</p> <p>37,220 ha</p>	<p>Buffering Aoraki/Mount Cook National Park</p> <p>One priority ecosystem unit and threatened species</p> <p>Red Hut historic site, a tourist hut from 1916</p> <p>Popular front-country, day-visitor four-wheel drive, mountain bike and walking access from Twizel and SH80</p> <p>Alps 2 Ocean Cycle Trail</p> <p>Low levels of aircraft use in the western park areas, but higher levels of use on Ben Ohau Range and of adjoining pastoral run and Crown lands</p> <p>Long-term grazing licence between Dorcy and Gretas Streams</p> <p>Ohau ski field facilities and activities and Glen Mary Ski Club huts, on adjoining conservation lands</p> <p>Extensive wilding tree control on and adjoining public conservation land</p> <p>Glentanner 2015 concession activities resulting from Glentanner tenure review</p>	<p>Improving linkages between the park areas, enabling better integration of ecosystem and of visitor management</p> <p>Reducing stock grazing into the park</p> <p>Dobson vehicle access</p> <p>Ohau ski field management and conservation advocacy, with cautionary approach in response to climate change effects</p> <p>Aircraft activity complementary to adjoining Aoraki/Mount Cook National Park values</p> <p>Wilding tree control</p>

Name, gazettal year, size	Park-specific features and values additional to the general description above ²¹	Issues for management additional to the general description above
Ahuriri 2004 46,655 ha	<p>Partly within Te Wāhipounamu—South West New Zealand World Heritage Area</p> <p>Largely one catchment, of the Ahuriri River</p> <p>Homestead complexes from the pastoral farming era; Birchwood—under concessionaire use; historic Quailburn for protection and interpretation, but under gradual decline</p> <p>Popular climbing and tramping area with links to Ruataniwha and Hāwea Parks, with mountain biking opportunity</p> <p>Natural quiet important in Ahuriri valley, with low levels of aircraft use elsewhere</p> <p>Angling in the Ahuriri River</p> <p>Alps 2 Ocean Cycle Trail along southern edge</p> <p>Over-flight glider activity and use of the emergency landing airstrip at Birchwood</p>	<p>Reporting on state of World Heritage Area</p> <p>Limiting four-wheel drive access to as far as Canyon Creek</p> <p>Quailburn management as the historic site naturally declines</p> <p>Management of glider landing airstrip</p>
Hāwea 2009 1660 ha within Canterbury	<p>Straddles Canterbury–Otago boundary, with a small part within Canterbury</p> <p>Te Araroa Trail link from Canterbury to Otago</p> <p>High natural quiet sought</p>	No obvious issues
Oteake 2008 33506 ha within Canterbury (also Mt Ida Conservation Area, 8621 ha)	<p>Straddles Canterbury–Otago boundary</p> <p>Buster Diggings goldfields historic sites</p> <p>Awakino ski field</p> <p>Winter ski-touring</p> <p>Four lengthy four-wheel drive roads (including Canterbury to Otago linkages), four mountain bike tracks and other opportunities</p> <p>Snowmobile use interest</p> <p>Low levels of aircraft use</p> <p>Grazing concession on Mt Ida Conservation Area, with an environmental monitoring programme; limited exclusive use of huts; concessionaire vehicle access; expires 2020</p>	<p>Protection and interpretation of Buster Diggings</p> <p>Retaining four-wheel drive-only access road standard</p> <p>Containing four-wheel drive use to the four identified access roads</p> <p>Providing for snowmobile use, with a code of conduct</p> <p>Awakino ski field management and conservation advocacy, with cautionary approach in response to climate change effects</p> <p>Future of grazing concession on Mt Ida Conservation Area</p>

OUTCOME

All southern conservation parks and other public conservation lands and waters

The Outstanding Natural Features and Landscapes of the South Island high country, as represented within the Southern Conservation Parks Place, are valued and protected. The community understands and supports the management of conservation parks, and community groups actively contribute to park management.

Priority ecosystem units are recovering or are in a healthy functioning state as a result of integrated programmes that include intensive plant and animal pest management. Removal of stock grazing and avoidance of fire are enabling ecosystem recovery. Further extinctions of threatened species have not occurred and populations are improving where intensive management is occurring either on or off public conservation lands and waters. Elsewhere, threatened and at-risk species continue to face causes of decline. Community programmes working with priority ecosystem units or threatened and at-risk species are underway or developing.

Himalayan tahr are controlled within a defined feral range at no greater population densities than as prescribed within the Himalayan Thar Control Plan 1993, and are eradicated outside that range. Bennett's wallabies are contained, within this Place, to a zone within the Two Thumb Range and are eradicated outside this zone, particularly keeping Aoraki/Mount Cook National Park and Oteake Conservation Park wallaby-free.

Public conservation lands and waters within the Rakaia, Mathias and Wilberforce river catchments (covering the Ragged, Rolleston and Cascade ranges) are managed to facilitate and encourage recreational hunting for red deer, consistent with priority ecosystem units management.

Prominent landscape and geological features (ridgelines, plateaus, and mountain tops) remain in their natural state, or are unmodified beyond their state at the time of becoming public conservation land. Within public conservation lands and waters away from prominent landscape and geological features, except where in accordance with a ski field concession, small structures may be present where these are well blended into the landscape.

The extensive network of historic sites, with an emphasis on goldfields, exploration, recreation history and pastoral farming, are protected from avoidable adverse effects, and their stories enable visitors to connect with the past. A direct connection with history occurs through ongoing public use of historic huts.

Foot access is the predominant means of reaching all parts of the Place, but this is assisted and complemented by provisions for vehicle, including aircraft, access.

More people participate in recreation in conservation parks. Visitors are offered a wide range of experiences, from small-group activities walking through less-accessible and challenging areas, to easily accessible walking and vehicle use areas, and intensive use areas such as ski fields and their related accommodation.

A network of Local Treasure and Backcountry destinations providing access and accommodation facilities is maintained by the Department and by community organisations in accordance with departmental facility provision priorities and design requirements. Business concessionaires provide a small number of accommodation facilities, other than that associated with ski fields.

The diverse heritage values of the Department-, club- and community-provided huts remain part of their ongoing attraction to visitors.

Tourism and accommodation providers on pastoral farmland are resulting in increased recreation on public conservation lands and waters, some integration of facilities between the providers and the Department, and coordination on natural and historic values interpretation.

All 10 ski fields, but particularly the smaller ones, are managed in a precautionary way in terms of additional structures and terrain modification, given the uncertainty of future snow availability and ski field longevity and risk of abandoned fields. Further development of existing ski fields, especially the larger ones, may occur, in preference to any new ski fields. Recognition of the ski fields' location on public conservation lands, and conservation interpretation, is readily apparent to visitors.

The conservation parks complement the nearby national parks and Adams Wilderness Area by providing opportunities for activities not so compatible with national park or wilderness area values. Occasional large events, such as sporting events or filming, occur in this Southern Conservation Parks Place.

Management of the conservation parks and adjoining public lands and waters is integrated.

Craigieburn

The community undertakes conservation biodiversity work at the Craigieburn research base and the Environmental Education Centre, and contributes to ecological restoration in the area through involvement in the Waimakariri Ecological and Landscape Restoration Alliance, the Waimakariri Ecological and Recreation Committee, and the Canterbury Environmental Trust.

The Wilberforce River catchment historic site complex remains, subject to natural processes, intact for research and exploration, including by trampers as they approach and cross Browning Pass/Noti Raureka.

The Canterbury Environmental Trust and St Andrews College education centres provide opportunities for visitors, particularly the young, to engage with conservation; both recreation and community biodiversity programmes.

Four ski fields provide intensive use recreational experiences for visitors, while in between these ski fields, snow fields provide an off-piste experience free of structures. Aircraft landings associated with ski field activities occur in winter but elsewhere, and over summer, aircraft landings are occasional or rare and do not adversely affect ecological or cultural values or the experience of visitors.

Four-wheel drive vehicle access is available up the Avoca and Wilberforce river valleys. Mountain biking takes place on the Craigieburn ski field roads and managed mountain bike tracks, but down-hill mountain biking does not occur off roads.

Private accommodation huts held by the Hamilton Peak and Ski Touring Clubs are either being phased out or are publicly available.

Transpower transmission lines follow an authorised, defined route through the conservation park.

Korowai Torlesse Tussocklands

Landscape features and the Lake Lyndon marginal strip priority ecosystem unit are protected as part of the transition from Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha) to Waimakariri Basin.

Conservation interpretation is provided for State Highway 73 and Midland Railway visitors. Visitors explore the Avoca historic sites by walking, mountain biking or horse riding. A mountain biking track may link to the Craigieburn tracks.

Lake Lyndon Lodge provides opportunities for visitors, particularly the young, to engage with conservation through both recreation and community biodiversity programmes.

Visitor encounters with aircraft landing on public conservation lands are rare.

Transpower transmission lines follow an authorised, defined route through the conservation park.

Hakatere

Mount Hutt and Mount Potts ski fields provide intensive use recreational experiences for visitors. The Mount Somers tracks are managed with the Mount Somers Walkway Society, as a Gateway destination.

Climbing activity and fixed-anchor placement on Mount Somers bluffs avoids adverse effects on geopreservation sites, priority ecosystem units and threatened and at-risk species.

Mount Somers and Mount Barossa gemstone resources are substantially protected for appreciation by future generations, with fossicking allowed by permit only.

Management of activities in areas adjoining the Adams Wilderness Area ensures that wilderness values are maintained.

Aircraft landings are regular in winter where associated with heli-skiing or ski field activities. Elsewhere aircraft landings are occasional or rare and do not adversely affect ecological or cultural values or the experience of visitors.

Te Kahui Kaupeka

Round Hill and Mount Dobson ski fields provide intensive use recreational experiences for visitors. A single authorised operator provides heli-skiing south from Round Hill and north of North East Gorge Stream. Aircraft landings are regular in winter where associated with heli-skiing or ski field activities.

Ski-touring occurs in the area north of Round Hill to North East Gorge Stream, where aircraft landings are rare and do not adversely affect high natural quiet values or the experience of ground-based visitors.

Management of activities in areas adjoining Aoraki/Mount Cook National Park and the Adams Wilderness Area ensures that the national park and wilderness values, respectively, are maintained. There are high natural quiet values and visitor encounters with aircraft are rare.

Ruataniwha

Conservation Park land areas are more contiguous and better represent valley floor to ridge-top ecosystems.

Management of activities in the park ensures that the national park values of the adjoining Aoraki/Mount Cook National Park are maintained, including by the management of a more-intensive aircraft landing area just outside, and enabling viewing into, the national park.

Visitors encounter only occasional aircraft landings in the western park areas, but more regular or frequent landings on the Ben Ohau Range.

Ahuriri

Te Wāhipounamu—South West New Zealand World Heritage Area values are maintained. Visitors will experience high levels of natural quiet. Visitor encounters with aircraft are rare.

A concessionaire lodge operates from the former Birchwood homestead.

Hāwea

Te Araroa Trail links Canterbury and Otago. The Canterbury part of the Hāwea Conservation Park extends the area of high natural quiet found within the adjoining Ahuriri Conservation Park.

Oteake

The historic Buster Diggings are a protected and accessible visitor site.

Within this park, except near four-wheel drive roads, visitors will experience predominantly high levels of natural quiet, low visitor numbers, and only occasional aircraft encounters.

Four-wheel drive opportunities are maintained seasonally on four existing roads linking Canterbury and Otago, with numerous mountain-biking and horse-riding opportunities beyond these four roads.

In suitable snow conditions, snowmobiles venture only onto the St Marys Range from Awakino ski field.

Adams Wilderness Area

Visitors enter this area on foot only and are self-reliant. All visitors are self-sufficient in their accommodation. No buildings or machinery are encountered and natural quiet is absolute, except for over-flights and occasional wild animal control operations.

Lindis/Longslip, and Godley to Tasman rivers

Visitors encounter only occasional aircraft landings in these areas, but more regular or frequent landings within the southern side of the Gorilla Stream catchment.

POLICIES

- 2.2.1 Manage (including when considering concession applications) that part of the Ahuriri Conservation Park within Te Wāhipounamu—South West New Zealand World Heritage Area, to maintain the values described in the statement of outstanding universal value (see Appendix 14).
- 2.2.2 When considering management activities or concessions or access arrangements under the Crown Minerals Act within the Wilberforce River catchment and the Ida Range, have particular regard to the vulnerability of known historic sites and take a precautionary approach to known of, but as yet not-located, historic sites.
- 2.2.3 Encourage the retention and use of the Canterbury Environmental Trust and St Andrews College education centres and the Lake Lyndon Lodge, and the use of their surrounding public conservation lands and waters, consistent with outcomes for the Place.
- 2.2.4 Should allow vehicles only on the roads purposely formed and maintained for vehicle use, and the vehicle access identified in Table 3.
- 2.2.5 Down-hill mountain biking, irrespective of Policy 2.2.4, should not be permitted other than on formed roads, and the ferrying (shuttling) by vehicles (including aircraft) of mountain bikes to higher altitudes to enable down-hill mountain biking other than on formed roads should not be permitted.
- 2.2.6 Should allow horse and pack-animal access only within the conservation parks and areas identified in Table 4.

- 2.2.7 Should allow aircraft access only within the public conservation lands in accordance with Map 4 and Policies 3.6.1–3.6.9 in Part Three.
- 2.2.8 Manage the placement of fixed anchors for recreation in accordance with Policy 3.23.1 in Part Three.
- 2.2.9 In respect of ski fields:
- a) require all ski fields to operate under a valid concession from the Department;
 - b) may allow further development of existing authorised ski fields, where their natural values are already affected, in preference to the development of new ski fields;
 - c) should, in considering the development of existing authorised ski fields, take a precautionary approach to the approval of new structures and terrain modification and consider both the likely longevity of the field in the face of climate change, and any land remediation and facility removal requirements should the ski field cease to operate;
 - d) where practicable, encourage non-skier and/or non-ski season visitor use of the ski field, and visitor use beyond the ski field consistent with outcomes at Place; and
 - e) should provide opportunities for conservation advocacy and interpretation.
- 2.2.10 Private accommodation huts within Craigieburn Conservation Park, if not phased out (see Policies 3.11.1–3.11.7) should have a single, easily accessible public booking system for all visitors using the park.
- 2.2.11 Should allow rock and mineral disturbance or removal (gemstone fossicking), other than in active riverbeds, only in accordance with the following criteria:
- a) avoidance of effects on priority ecosystem units, threatened or at-risk species, geopreservation sites or other geological sites recorded as being of national value;
 - b) the permission being to an incorporated club or organisation only, for managed group activities on specified dates;
 - c) any ground disturbance being in accordance with a soil and vegetation restoration plan approved by the Department, that includes a monitoring programme and only in areas not visible from visitor facilities (huts and tracks); and
 - d) consideration being given to weight or volume limits for removed stone, per group or person, per visit.
- 2.2.12 Consider conservation areas that fall within the catchments and ranges listed in Table 5, for inclusion within the adjoining conservation parks, or a Reserves Act 1977 status.
- 2.2.13 Where Crown river and lake beds extend into, or are surrounded by public conservation lands and waters, work with Land Information New Zealand to achieve integrated management across the combined lands and waters, or the inclusion of the river and lake beds within public conservation lands and waters.
- 2.2.14 Undertake, in conjunction with Otago (and in consideration of whether Crown Pastoral Land Act tenure reviews have been completed in these areas), a land-status review for public conservation lands and waters within the Lindis Pass and Longslip area, and the area between the Godley and Tasman rivers, which do not fall within the extent of potential land additions to conservation parks as listed in Table 5, having regard to land status options under the Conservation and Reserves Acts.
- 2.2.15 In respect of legal roads, where actual or potential activity on or near these legal roads creates difficulties in achieving integrated management of adjoining public conservation lands and waters, work with Land Information New Zealand, New Zealand Walking Access Commission, territorial local authorities, other agencies and the public to:

- a) seek that the public voluntarily manage their use of legal roads running through public conservation lands and waters in a way that is compatible with or recognises adjoining lands and waters management; or
 - b) enable the Department to manage roads and facilitate recreation on them in a way that is compatible with or recognises adjoining public conservation lands and waters management; or
 - c) seek that local authorities actively manage the roads and facilitate recreation on them in a way that is compatible with or recognises adjoining public conservation lands and waters management; or
 - d) stop or resume legal roads running through public conservation lands and waters and add the stopped or resumed road lands to the public conservation lands and waters, except where the adjoining lands are stewardship areas under the Conservation Act 1987 (unless those adjoining lands are part of an action or policy to confer additional protection or preservation under section 18 of the Conservation Act 1987 or under the National Parks Act 1980 or the Reserves Act 1977).
- 2.2.16 Seek the stopping or resumption of the unformed legal road up the Ahuriri River valley beyond the Canyon Creek formed road-end.

Adams Wilderness Area

- 2.2.17 Concession applications for within the Adams Wilderness Area should be dealt with in accordance with Policies 2.2.18 below and 3.20.6 in Part Three.
- 2.2.18 May grant concessions for the Adams Wilderness Area where necessary or desirable for the preservation of the area's indigenous natural resources. Concessions that meet this test will:
- a) demonstrate that the activity is necessary or that it actively benefits the preservation of the area's indigenous natural resources;
 - b) not use vehicles, motorised watercraft or aircraft in the area, other than in accordance with Policy 3.20.6;
 - c) not establish encampments or defined tracks, routes or trails;
 - d) not involve the erection or maintenance of buildings or machinery;
 - e) not involve the taking in or use of animals in the area;
 - f) be consistent with the outcome and policies within 2.2 Southern Conservation Parks Place;
 - g) be consistent with relevant aircraft access zones shown on Map 4 and visitor management zones as described in Appendix 12 and shown on Map 3 in this CMS;
 - h) be indistinguishable from independent users of the wilderness area; and
 - i) be self-reliant.

Table 3: Vehicle access²² within Southern Conservation Parks Place

CONSERVATION PARK OR AREA²³	VEHICLE ACCESS (In some cases this access may use legal road, or additional adjoining legal road access may exist, in which cases see policy 2.2.15.)
Craigieburn	All vehicles: existing roads, subject to locked gates for ski field facility security. Mountain bikes: existing mountain bike tracks and as provided for by Policy 2.4.35. Electric power-assisted pedal cycles: as may be provided for by Policy 2.4.36.

²² The provisions for four-wheel drive vehicles also apply to motorbikes and electric power-assisted pedal cycles.

²³ These parks or areas include all conservation areas under the Conservation Act 1987 within the boundaries listed in Table 5, but only includes reserves under the Reserves Act 1977 where they are specifically listed.

CONSERVATION PARK OR AREA²³	VEHICLE ACCESS (In some cases this access may use legal road, or additional adjoining legal road access may exist, in which cases see policy 2.2.15.)
Korowai Torlesse Tussocklands	Four-wheel drive vehicles: Thirteen Mile Bush Stream to park boundary. Mountain bikes: Starvation Gully to Trig M; Coach Stream to Trig M; ex-Avoca Station access track from Avoca Hut; and as provided for by Policy 2.4.35. Electric power-assisted pedal cycles: as may be provided for by Policy 2.4.36.
Hakatere	All vehicles: Mt Hutt and Mt Potts ski field roads, subject to locked gates for ski field facility security. Four-wheel drive vehicles: Lakes Emily, Emma and Denny access tracks; Lake Heron/Harrison Bight track. Mountain bikes: existing mountain bike tracks, otherwise as limited by topography and vegetation, but not on Mt Somers Tracks.
Te Kahui Kaupeka	All vehicles: Round Hill and Mount Dobson ski fields, subject to locked gates for ski field facility security. Four-wheel drive vehicles: park periphery only, via Godley, Macaulay and Havelock River valley vehicle tracks, to Red Stag, Macaulay and Mistake Flat huts respectively. Mountain bikes: Richmond Trail, otherwise as limited by topography and vegetation.
Ruataniwha	Four-wheel drive: up Hopkins River valley to Elcho Hut, Dobson River valley to Kennedy Memorial Hut, and to Baikie Hut in conjunction with adjoining landowner approval. Glentanner Station Ltd 2015 concession-approved activities. Mountain bikes: as limited by topography and vegetation.
Ahuriri	All vehicles: Ohau ski field, subject to locked gates for ski field security and Quailburn historic site access roads; Ahuriri River valley to road end near to Canyon Creek. Mountain bikes: Ahuriri River valley track to Hagens Hut, elsewhere as limited by topography and vegetation.
Hāwea	Mountain bikes: within the Canterbury part of the park, as limited by topography and vegetation.
Oteake (including Mt Ida Conservation Area) Within Canterbury...	Four-wheel drive vehicles: East and West Manuherikia Tracks (Omarama Stream valley). Johnstone Creek Track (Walking Spur track through to Mt Buster Road). Mt Buster Track (Mt Buster Road through to headwaters of Awakino River). Awakino Ski Area . Awakino River East Branch 4wd road to the freehold private hut by the easement holder/hut owner. Mt Ida Conservation Area by the grazing concession holder. Snowmobiles: St Marys Range, north of Hut Creek, with access from Awakino Ski Area or fly-in, on fully snow-covered areas only. Mountain bikes: four-wheel drive tracks, four existing mountain bike tracks, elsewhere as limited by topography and vegetation, but avoiding the Buster Diggings historic site.

Table 4: Horse and pack-animal access within Southern Conservation Parks Place

CONSERVATION PARK OR AREA²⁴	HORSE AND PACK-ANIMAL ACCESS (In some cases this access may use legal road, or additional adjoining legal road access may exist, in which cases see policy 2.2.15.)
Craigieburn	As limited by topography and vegetation.
Korowai Torlesse Tussocklands	As limited by topography and vegetation.
Hakatere, and Redcliffe SR	As limited by topography and vegetation, but excluding Mount Somers Tracks and avoiding wetlands.
Te Kahui Kaupeka	As limited by topography and vegetation, but avoiding wetlands.

²⁴ These parks or areas include all conservation areas under the Conservation Act 1987 within the boundaries listed in Table 7, but only includes reserves under the Reserves Act 1977 where they are specifically listed.

CONSERVATION PARK OR AREA²⁴	HORSE AND PACK-ANIMAL ACCESS (In some cases this access may use legal road, or additional adjoining legal road access may exist, in which cases see policy 2.2.15.)
Ruataniwha	As limited by topography and vegetation, but avoiding wetlands, and including the Huxley River valley to the Huxley Forks Huts only.
Ahuriri	As limited by topography and vegetation, but avoiding wetlands, and including Ahuriri Base Hut to Dingle Burn.
Hāwea	Within Canterbury, as limited by topography and vegetation.
Oteake (including Mt Ida Conservation Area)	Within Canterbury: access roads, four-wheel drive vehicle tracks. Elsewhere: as limited by topography and vegetation.
All marginal strips	As limited by topography and vegetation, but avoiding wetlands.

Table 5: Potential land additions to conservation parks

CONSERVATION PARK	ASSOCIATED CATCHMENTS AND/OR RANGES
Craigieburn	Conservation areas within the Craigieburn Range and the Wilberforce River catchment, north of Coleridge Pass and Porter River.
Korowai Torlesse Tussocklands	Conservation areas within and adjoining the Big Ben and Torlesse ranges, and bounded by Coleridge Pass and Porter River to the north, Broken River to the east, and farmland to the west and south.
Hakatere	Conservation areas within the upper Rangitata, Ashburton/Hakatere and Rakaia rivers catchments, between the Rangitata/Havelock and the Rakaia rivers, but not the Adams Wilderness Area.
Te Kahui Kaupeka	Conservation areas within the Two Thumb, Ben McLeod, Sinclair and Sibbald ranges.
Ruataniwha	Conservation areas within the Hopkins and Dobson river catchments and the Ben Ohau Range.
Ahuriri	Conservation areas within the Ahuriri River catchment.
Hāwea	Nil.
Oteake	Within Canterbury, conservation areas within the Ōtemātātā River catchment and the surrounding ranges of the Hawkdun, Ewe, Ida, St Bathans and St Marys.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Additions to conservation parks in accordance with Policy 2.2.12 and Table 5.
- Himalayan tahr and Bennett’s wallaby controlled and contained within defined feral ranges.

Achieved by the end of Year 5 after CMS approval (2021)

- Further additions to conservation parks in accordance with Policy 2.2.12 and Table 5.
- Land status reviews for public conservation lands and waters in the Lindis Pass and Longslip area, and the area between the Godley and Tasman rivers, have been completed, subject to relevant tenure reviews being completed.
- Himalayan tahr and Bennett’s wallaby controlled and contained within defined feral ranges.

- Recreational hunting encouragement for red deer within the upper Wilberforce, Mathias and Rakaia river catchments (covering the Ragged, Rolleston and Cascade ranges), with assessment of any conservation benefits and conflicts that have arisen.

Achieved by the end of Year 10 after CMS approval (2026)

- Decision made on any grazing concession application within the Mt Ida Conservation Area.
 - Himalayan tahr and Bennett's wallaby controlled and contained within defined feral ranges.
 - Assessment of ski field authorisations and operational issues as a result of responses to climate change and economic effects.
 - The stopping or resumption of unformed legal road within the Ahuriri valley.
-

2.3 Northern High-Country Place

Description

Overall

This Northern High-Country Place (see Map 5.3) includes over 210,000 ha of public conservation lands and waters—alpine snow tussock and subalpine shrubland mountain tops, beech-forested montane valleys, and shrub/grassland valley floors—extending from the Lake Sumner Forest Park to the St James Conservation Area and Molesworth Recreation Reserve.

The focus of this Place is on the public conservation lands and waters, but connections to adjoining lands and waters are sometimes also addressed.

Significant features include marked climatic gradients, a variety of ecosystems, numerous notable fauna (fish, birds and lizards) and threatened or at-risk species, extensive catchment protection forests, numerous geological sites including relic glacial lake features and geothermal sites. The public conservation lands and waters include numerous wetlands, small tarns and lakes (e.g. Morris Tarn in the Hope Ecological Area; Lakes Marion, Guyon and Tennyson), but does not include Lake Sumner (Hoka Kura) and its linked Loch Katrine, or the nearby Lakes Mason, Sheppard and Taylor.

The Place includes Lake Marion Faunistic Reserve and Morris Tarn, both free of exotic fish, and the Upper Hope Ecological Area with its representative vegetation gradients and fauna.

A major biodiversity programme has run in the Hurunui River South Branch catchment since 1995 to protect a beech-forest ecosystem with healthy bird populations, through intensive plant and animal pest management. Volunteers have been involved in great spotted kiwi/roa monitoring, as part of the national kiwi monitoring programme. Further north, the Hurunui College Nina Valley Restoration Group is undertaking pest trapping and kiwi monitoring conservation work.

Six priority ecosystem units are within the Place. Numerous threatened or at-risk species are present.

The entire Place, with the exception of lands in and east of Hanmer Forest Park, has been identified as an Outstanding Natural Feature and Landscape.²⁵ Geothermal springs occur in the Hurunui, Lewis and Edwards river valleys; all have long been modified for recreational use.

As befitting an area with two major trans-Main Divide passes (Harper and Lewis), several other passes (Hope, Amuri, Ada and Waiau) and a rich biodiversity, historical use was extensive. Ngāi Tahu use included mahinga kai purposes, the physical and spiritual healing waters of several hot puna (hot springs), and ara tawhito (e.g. the pounamu trails). Lake Sumner (Hoka Kura) and Harper Pass featured prominently. Gold rush and stock-droving routes followed, then pastoral development and construction of State Highway 7 and the upper Waiau Toa/Clarence River²⁶ valley electricity pylon lines. Historic sites abound, with active management of Hurunui No. 3 Hut, Doubtless Hut, and St James Station structures and sites (see Appendix 10).

The Hurunui River is a Deed of Recognition site, and a nohoanga is on the Lake Sumner shore near Loch Katrine (see section 1.4).

Public use of the area is extensive but far from crowded. State Highway 7 (the Lewis Pass Highway) traverses and gives easy access to the central area, with access to the south from Lake Sumner (Hoka Kura) and the Mount White vicinity, and to the north from the Hanmer area. While only a third-order route for domestic and international tourists, State Highway 7 still gets considerable traffic, is well served by public transport, and has good roadside facilities.

The St James Track,²⁷ a Gateway destination site, loops from State Highway 7 at the Lewis Pass summit into the West Coast (Tai Poutini), then through St James Conservation Area and back to State Highway 7. Elsewhere, a well-established network of huts, tracks and open-tops and valley routes provides for public use. Horse trekking has occurred along some tracks and routes for many years. Te Araroa Trail passes through the length of the Place, partly on the St James Track, but may not significantly increase public use.

Within the South Island high country, the Place tends towards more gentle topography with smaller rivers, less-fractured tops and easy valley-floor routes. With better weather and less snow than in the south, the area is ideally suited to family and group opportunities. The rivers offer good fishing for trout.

The Waiau Uwha, upper Hurunui and Waiau Toa/Clarence rivers are all used by rafters or kayakers; the Waiau Uwha and Hurunui being nationally highly rated white-water.²⁸ Use of all three rivers is assisted by road or air access, suitable riverflows, and camping sites with basic facilities.

Hot springs in their natural state are at three easily accessed locations. They are in contrast with the highly developed springs at Hanmer Springs and Maruia Springs or the more protected and elusive springs within Arthur's Pass National Park.

Currently the level of aircraft use is low. Natural quiet is high and valued in areas adjoining Nelson Lakes National Park and in intensive ground-user areas like the St James Track and the Lewis Pass National Scenic Reserve and State Highway 7 corridor. Lake Sumner

²⁵ Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional and district policy statements and plans should be consulted for their consideration of this landscape review.)

²⁶ At the operative date of this CMS, a proposal to change the recorded name of the Clarence River was before the NZ Geographic Board. The proposed name, the Waiau Toa/Clarence River, is used in this CMS.

²⁷ This track no longer qualifies as a 'walkway' under the Walking Access Act 2008.

²⁸ Three to five star ratings by Whitewater NZ.

Recreational Hunting Area hunters do not want commercial aerial deer recovery within the Recreational Hunting Area, but some positioning of ground hunters is sought through much of the Place.

Transpower transmission lines follow a route on public conservation lands from Hanmer Springs and along the Waiau Toa/Clarence River valley.

Lake Sumner (Hoka Kura) and Loch Katrine

Lake Sumner Road gives access to Lake Taylor, with a rough four-wheel drive road continuing on to Loch Katrine. Boat access exists from Loch Katrine to Lake Sumner (Hoka Kura). A four-wheel drive vehicle track through farmland beyond Loch Katrine is not fully aligned with the legal road, causing some disagreement between interest groups on vehicle use to Lake Sumner (Hoka Kura). An improved four-wheel drive road standard to Loch Katrine is desirable.

Lake Sumner (Hoka Kura), nationally one of few large unmodified high-country lakes, is largely surrounded by public conservation lands, and has been proposed for modification for irrigation water storage. A proposed weir at the lake outlet would affect lake levels, including for Loch Katrine, and could significantly affect lake-edge and wider ecosystems and species, recreational opportunities, and the outstanding natural character of the lake and its setting within the Lake Sumner Forest Park.

Loch Katrine Recreation Reserve has a collection of unauthorised private huts in the process of being removed, with publicly-available huts being authorised by concession, both in accordance with the Loch Katrine Recreation Reserve Management Plan 1999. It is expected that this reserve will have increasing public use as its access and public accommodation facilities (camping and huts) are improved, and increased landscape significance as adjoining farmland is developed.

Recreational hunting

Within the Lake Sumner Forest Park, the Lake Sumner Recreational Hunting Area (RHA) was gazetted in 1981/82 and a Wild Animal Control Plan (1981–1984)²⁹ prepared in 1981 and reviewed in 1987. Extension of the RHA into the Boyle and Waiau forest parts of the park was an assessment to be undertaken once the Lewis Pass National Scenic Reserve was gazetted in 1981.

The RHA boundary reflects State Forest land as at 1981 and meanders around non-forest areas that are now public conservation lands. The actual area used for recreational hunting extends well beyond the RHA including, since 2008, into the southern St James Conservation Area. There are two priority ecosystem units (Lakes Marion and Paget) within this extended hunting area. In addition to the existing RHA provisions, recreational hunting can be encouraged by facilitating permits and access, providing facilities, and excluding or limiting commercial hunting in areas beyond the RHA using provisions of the Wild Animal Control Act 1977 or the Game Animal Council Act 2013.

Lewis Pass National Scenic Reserve and State Highway 7 corridor

The Lewis Pass National Scenic Reserve was gazetted in 1981, with its boundaries then constrained by adjoining pastoral lease lands and State Forest. In recent years the purchase of part of the Poplars Station by the Nature Heritage Fund, other conservation land additions, and the adjoining

²⁹ Belton, M.C. 1987. Lake Sumner Recreational Hunting Area Wild Animal Control Plan 1986–1991. New Zealand Forest Service, Canterbury Conservancy, Christchurch.

Lake Sumner Forest Park have protected a large extent of the visual catchment seen from State Highway 7 from about the Hope River to Lewis Pass.

Two lodges (the New Zealand Deerstalkers' Association Palmer Lodge within the scenic reserve, and the Royal Forest and Bird Protection Society Boyle Base within the conservation area), and the Boyle River Outdoor Education Centre adjoining and using public conservation lands and waters, all cater for club, school and other groups.

Hanmer Forest Park and Hanmer Springs

Established in 1978, Hanmer Forest Park includes the Hanmer Range with extensive beech forest extending to sub-alpine and alpine vegetation. At lower altitudes, fire-induced shrub vegetation merges into the adjoining non-conservation land exotic production and recreational forests in and around Hanmer Springs. To the north the park adjoins St James Conservation Area and Jollies Pass Scenic Reserve. Wilding tree and fire protection and control remain as management risks. Wild animal control is largely by recreational hunting.

Two formed roads through the park, partly on legal road, provide access into the Waiau Toa/Clarence River valley and on to St James and Molesworth. The Hanmer Picnic Area, jointly managed with Hurunui District Council, is a Gateway destination at the entrance to the recreation and track facilities originally part of the larger pre-1987 Forest Park network. Although now fractured into various landholdings, the facilities are highly valued by the community and require ongoing integrated management. Buildings dating to early forest park and reserves management have scope for community or concessionaire use alongside the Department.

Hanmer Springs is an increasingly popular tourist resort, with the Hurunui District Plan seeking well-managed recreation and tourist growth in the Hanmer basin, while retaining scenic values and the character of the village. Of importance in this respect is the historic experimental forest known as the Hanmer Heritage Forest, protected by a conservation covenant.

St James Conservation Area

In 2008, St James Station was purchased by the Nature Heritage Fund for public conservation land. Crown riverbed and legal roads (subject to undertaking Local Government Act 1974 road stopping processes) within the station area were also approved for inclusion as conservation area. All cattle and sheep have since been removed.

The purchase provided, for the previous owners, for three private dwellings at the Ada homestead, four-wheel drive vehicle access to the homestead and aircraft access to the homestead airstrip.³⁰ An alternative airstrip near Muddy Lakes may be more suitable for public use, but to remain operational may need vegetation re-growth control now that stock grazing has ceased.

Three priority ecosystem units (Lake Paget, St James eastern and Waiau/Clarence Headwaters) exist alongside largely unmodified forest areas and highly modified areas that will require pest-control management and ecosystem restoration. While the St James purchase area (itself an amalgamation of earlier pastoral runs) has pastoral run historic values, its boundaries poorly reflect landscape, biodiversity and public use patterns.

³⁰ All these conditions are part of the legal agreement between the former owners and the Department and, as such, are not negotiable within this CMS.

Regeneration of indigenous vegetation in previously farmed areas has considerable potential to restore natural water storage, thus providing down-catchment ecosystem services, and potential carbon-fixing credits.

Apart from along the St James Track and away from the farmed valley floors, public access has not been readily available in this area. Some commercial operators have had private access arrangements. The public are now gaining a fuller appreciation of the St James area and its actual and potential public-use opportunities. With improved access via the St James Conservation Area, the upper Waiau Uwha River and Lake Guyon have become more important areas for angling. The popularity of the St James Track is expected to increase now that stock-trampling has ceased and the valley-floor native vegetation recovers.

Four-wheel drive vehicle access is managed over both Edwards and Maling passes to, but not beyond, the Waiau Uwha River. A 64 km mountain bike trail has been provided since 2011, as part of Ngā Haerenga, the New Zealand Cycle Trail, allowing a circuit from the Tophouse Road. A family-orientated cycle trail, the Homestead Run, is provided in the Peters Valley.

As a public attraction, and in recognition of a historical practice, a managed maximum 80-horse herd has been retained within the St James Conservation Area. Whether this herd remains compatible with regenerating valley-floor vegetation and increased public use, including horse trekking, is uncertain; monitoring will be required.

The St James homestead site in the Waiau Toa/Clarence River valley includes historic and more modern buildings. Continued use of these buildings would assist their ongoing historic site conservation.

The Hanmer Springs Ski Area operates, snow permitting, on the St James Range. For the reasons given in 2.2 Southern Conservation Parks Place, climate change and other national influences on ski fields will likely in time make this ski area less successful, but alternative uses for some of the facilities may emerge.

Hydropower investigations are looking at options for Waiau Toa/Clarence River water transfer from near the St James homestead, by tunnel through to the Hanmer Plain and Waiau Uwha River.

Tophouse (Rainbow) Road and Molesworth

North from Hanmer Springs, the Clarence Valley Road (over Jacks Pass) and Jollies Pass Road both connect to Tophouse Road up the Waiau Toa/Clarence River valley (to St James, western Molesworth, Lake Tennyson and beyond through Rainbow Station to the Nelson Lakes area), and to the road down the Waiau Toa/Clarence River valley (into eastern Molesworth and through to the Blenheim area). The roads through Rainbow Station and Molesworth both have restricted public access.

Molesworth (a recreation reserve, subject to a grazing lease under the Land Act 1948 expiring in 2020) extends into Canterbury (Waitaha). Managed in accordance with the Molesworth Management Plan 2013, that part of Molesworth within Canterbury has open public access. Occasionally Molesworth cattle graze across the Waiau Toa/Clarence River to the St James nominal-boundary fence alongside Tophouse Road, in part through the St James- eastern priority ecosystem unit. The control of wilding pines and other pest plants is required by the plan.

Historic sites and visitor facilities on Molesworth near the border between Canterbury and Nelson/Marlborough include Acheron Accommodation House and camping site, a Waiau

Toa/Clarence River-users shelter, Lake Tennyson access and camping area, and a historic boundary rabbit fence.

Land status

Land status for public conservation lands and waters in this Place is complex, and rather than reflecting the conservation values of the lands and waters, reflects historical multiple land ownership, split government department management, and previous land use such as grazing.

The public conservation lands and waters extend over the Main Divide of the Southern Alps/Kā Tiritiri o te Moana with a continuation of the Lewis Pass National Scenic Reserve, and also forming the Victoria Forest Park and the Nelson Lakes National Park. All these areas are linked by topography, ecological systems, landscape and public use.

The variety of land statuses requires careful consideration of the differing legislative provisions under the Conservation and Reserves Acts.

A 1970s national park investigation (Alexander et al. 1979)³¹ of the general area from the Doubtful River to the Matakitaki River catchments, mostly west of the Main Divide and excluding the then St James Station, found that there were national park values for much of this area. Some problems with granting this land national park status at that time have since been resolved. The 1979 investigation report led to the enlargement of Nelson Lakes National Park, and the enlargement and national reserve status for the Lewis Pass National Scenic Reserve.

A review (Report of the Independent Review Panel on the Conservation Values of Indigenous Forests Currently Managed by Timberlands West Coast Ltd, 2000) following the Forests (West Coast Accord) Act 2000, proposed a 'Maruia-Waiau' national park for conservation areas centred on the Lewis Pass, upper Maruia River valley, St James Track area and the upper Waiau Uwha River valley.

There are many unformed legal roads running through the above public conservation lands; some may provide practical off-road vehicle or horse access, but many clearly could not. There is also a network of unformed legal roads providing degrees of access through adjoining properties to the conservation lands, but there is some resistance by adjoining landowners to their public use.

³¹ Alexander, D.J.; Neeson, M.P.; Simpson N.C. 1979: The Lewis Pass region: an investigation for the National Parks Authority. Department of Lands and Survey, Wellington.

OUTCOME

Whole Place

The Outstanding Natural Features and Landscapes of the Lake Sumner (Hoka Kura) and Lewis Pass National Scenic Reserve areas are valued and protected. Adverse effects on landscape values are avoided, particularly in the management of State Highway 7, Lake Sumner and its margins, and Loch Katrine Recreation Reserve.

Priority ecosystem units are recovering or are in a healthy functioning state as a result of integrated programmes that include intensive plant and animal pest management. Removal of stock grazing and avoidance of fire are also enabling ecosystem recovery. Further extinctions of threatened species have not occurred and populations are improving where intensive management is occurring either on or off public conservation lands and waters. Elsewhere, threatened and at-risk species continue to face causes of decline. A partnership with the Hurunui College and the community has secured a self-sustaining population of great spotted kiwi/roa in the Nina River valley.

This place is valued and used for a wide range of recreational pursuits, from solitude-seeking to more intensive use such as on the St James Track. The use of vehicles and aircraft is confined to specified areas. Increasing numbers are visiting to walk, climb, ride mountain bikes and horses, four-wheel drive, and to hunt and fish in public conservation areas such as the St James Conservation Area and Lake Sumner Forest Park. Visitors continue to enjoy natural hot springs in their unmodified settings in the upper Hurunui, Lewis and Edwards rivers valleys.

A network of Local Treasure and Backcountry destinations providing access and accommodation facilities is maintained by the Department and community organisations in accordance with departmental facility provision priorities and design requirements. Business concessionaires provide a small number of accommodation facilities, including those associated with the Hanmer Springs Ski Area.

Access is primarily from State Highway 7 and Hanmer Springs, with secondary access from Loch Katrine and Lake Sumner (Hoka Kura) and the Waiau Toa/Clarence River valley and St James roads, and lesser access routes on foot and by bike, horse, watercraft and aircraft.

Motorised vehicle access on public conservation lands within this place is limited to the St James Conservation Area and managed via four-wheel drive roads over Edwards and Maling passes to, but not beyond, the Waiau Uwha River.

Aircraft use within this place avoids the Spenser Range and upper Waiau Uwha River valley (adjacent to Nelson Lakes National Park) as well as visitors using the Lewis Pass National Scenic Reserve and St James Track corridors. Aircraft landings are regular in winter, associated with ski field activities. Elsewhere, aircraft landings are occasional or rare and do not adversely affect ecological or cultural values or the experience of visitors.

The St James Track, a Gateway destination walking track free of grazing stock and vehicles, passes through diverse scenery and a regenerating landscape. The improved track accommodates more walkers. Walkers, mountain bikers and horse riders share use of the Christopher and Anne huts.

The Waiau Uwha and upper Hurunui rivers are highly rated white-water rivers, and the upper Waiau Toa/Clarence River is the beginning for many multi-day rafting trips.

New opportunities for public use and enjoyment are provided to take advantage of the primary access and activity points: along State Highway 7, the Hanmer Springs visitor hub, and rafting and kayaking entry and exit points on the three big rivers—Waiau Uwha, Hurunui and Waiau Toa/Clarence.

Occasional sporting events occur within or pass through this Place. Transpower transmission lines follow an authorised defined route through the public conservation lands and waters from Hanmer Springs, over Jacks and Jollies passes, and along the Waiau Toa/Clarence River valley.

Lake Sumner (Hoka Kura) and Loch Katrine

The high-country lakes of Lake Sumner (Hoka Kura) and Loch Katrine remain unmodified with natural lake levels and intact lake-edge to ridge-top ecosystems on the surrounding conservation lands and waters. Vehicle access is by four-wheel drive road to Loch Katrine and the southern shore of Lake Sumner, while all lake shores are accessed by boat from Loch Katrine. Farm development near Lake Sumner has heightened the importance of conservation lands and waters in protecting biodiversity values and providing recreational opportunities around the lakes, such as camping, boating, fishing and hunting. Riparian and wetland areas on farmland en-route to Loch Katrine are better protected through joint landowner and community actions guided by the Canterbury Water Management Strategy.

The Loch Katrine Recreation Reserve, enhanced by native plantings, provides for day-use and camping, and overnight stays in publicly available huts. Apart from camping facilities, and a maximum of 10 huts provided and managed by voluntary organisations or educational institutions, there are no other structures on the reserve. Improved road access has increased the number of people using the reserve and venturing through to the Lake Sumner area, and their involvement in the reserve's management.

Camping on the Lake Sumner (Hoka Kura) shore recognises the priority for Ngāi Tahu use at the nohoanga site.

Recreational hunting

Recreational hunting to assist wild animal control is encouraged within this Place, and especially within and adjoining the Lake Sumner Recreational Hunting Area including public conservation areas north and into the St James Conservation Area, with safe hunting precautions being taken to protect other visitors. Hunter access is enabled to these areas from State Highway 7, the Lake Sumner Road, by vehicle access to the Waiau Uwha River within St James Conservation Area, and by aircraft access provisions.

Lewis Pass National Scenic Reserve and State Highway 7 corridor

The outstanding landscape values of this reserve and corridor are protected, while allowing for State Highway 7 management, Boyle Village and two roadside lodges. More people are using the Boyle River Outdoor Education Centre, the New Zealand Deerstalkers' Association Palmer Lodge and Royal Forest and Bird Protection Society Boyle Base and other visitor facilities, for recreation, education and participation in conservation management. Other structures in the landscape are minimal.

Hanmer Forest Park and Hanmer Springs

Hanmer Springs' visitor numbers continue to grow, and more visitors enjoy nearby public conservation lands and waters. This growth is supported through partnerships between the Department and the community for managing a walking, cycling and horse-riding track network within Hanmer Forest Park and adjoining areas, with the Hanmer Picnic Area Gateway destination as a main entrance to this network. The Department's historic field base building shares that role, alongside conservation use by the community (or a concessionaire).

St James Conservation Area

Management of the St James Conservation Area has been integrated with other public conservation lands and waters in the Place. Indigenous biodiversity is recovering after stock removal and with wild animal and pest control. Regenerating wetland ecosystems on valley floors are valued for their ecosystem service in providing natural water storage for downstream water management. Regenerating vegetation is valued, including for its carbon storage.

Increased numbers of visitors are attracted by the accessibility of the Waiau Toa/Clarence and Waiau Uwha river valleys, their pastoral history and their recovery from pastoral farming. A variety of recreational experiences is available, including walking the St James Track, mountain biking on cycle trails, and four-wheel drive touring over the Edwards and Maling passes. Concessionaire and community use is assisting in the protection of the historic St James homestead complex. Historic and other buildings at the Ada homestead complex are managed by the leaseholder, with undisturbed occupation.

Hanmer Springs Ski Area provides snow sport opportunities but, in response to potential climate change effects, a precautionary approach is taken to any proposals to develop the ski field and especially to modify landforms. Alternative concessionaire use of the facilities may develop.

Molesworth

As a working high-country station until at least 2020 on land classified as recreation reserve, Molesworth integrates the protection of natural, historic and cultural heritage with farming and recreation. Within that part of Molesworth within Canterbury, pest plants are controlled and there is open public access. Canterbury roads provide access to historic sites and recreation facilities near the border with Nelson/Marlborough. Molesworth lands on the true right of the Waiau Toa/Clarence River, adjoining St James Conservation Area and Jollies Pass Scenic Reserve, are not considered for inclusion in any new Molesworth lease.

Land status

The status of public conservation lands and waters best reflects the conservation values within this Place.

POLICIES

Whole Place

- 2.3.1 Should allow aircraft access only within the public conservation lands in accordance with Map 4 and Policies 3.6.1–3.6.9.
- 2.3.2 Should allow vehicles only on the roads purposely formed and maintained for vehicle use, and the vehicle access identified in Table 6.
- 2.3.3 Should allow horses and other pack-animals only as identified in Table 7.
- 2.3.4 Remove redundant fences and other structures used during previous pastoral farming unless to be retained for their historic values, subject to gaining Heritage New Zealand Pouhere Taonga Act 2014 authority in respect of any pre-1900 archaeological sites.

Lake Sumner and Loch Katrine

- 2.3.5 Work with Hurunui District Council and the community on the upgrade of the Lake Sumner Road and resolution of public access issues into the Hurunui River valley, where legal road access already exists.

- 2.3.6 Work with the existing community of interest for Loch Katrine but recognise the wider, developing community of interest.
- 2.3.7 Remove all private accommodation and structures from Loch Katrine Recreation Reserve and other lake-edge conservation lands.
- 2.3.8 Continue with voluntary organisation or educational institution concessions for the operation of a maximum of 10 public accommodation huts, with easily accessible concessionaire-operated public booking systems.
- 2.3.9 Call for expressions of interest from potential concessionaires, being voluntary organisations or educational institutions, for the provision and management of public accommodation huts, additional to those provided by the Loch Katrine Association, up to the maximum of 10 huts as specified in Policy 2.3.8, and with consistent concession conditions for all concessionaires.
- 2.3.10 Should locate the publicly available huts in accordance with a landscape design plan for the reserve that gives priority to managed camping sites above floodplain level, providing physical and social separation between camping sites and huts, and that blends the huts into planted and regenerating indigenous vegetation.
- 2.3.11 Revoke the Loch Katrine Recreation Reserve Management Plan 1999.

Recreational hunting

- 2.3.12 Manage, as an area where recreational hunting will be given priority for wild animal control, using Wild Animal Control Act 1977 or Game Animal Council Act 2013 legislation, the existing Lake Sumner Recreational Hunting Area and adjoining areas within Canterbury, including public conservation areas and waters as far north as the Maling Pass road in the St James Conservation Area.
- 2.3.13 Should, if utilising legislative provisions requiring a statutory management plan, seek practical and efficient means of preparing and reviewing such a plan, and establish a monitoring programme to inform such plan reviews.
- 2.3.14 Any exclusions or limitations on commercial hunting on the eastern Spenser Mountains should be complementary to the adjoining Nelson Lakes National Park values.³²

Lewis Pass National Scenic Reserve and State Highway 7 corridor

- 2.3.15 Recognise State Highway 7 as a necessary highway link between Canterbury, the West Coast (Tai Poutini) and Nelson that also assists visitor experience of, and access to, the public conservation lands and waters and, as part of this recognition, work with the New Zealand Transport Agency in accordance with the Memorandum of Understanding between the New Zealand Transport Agency and Department of Conservation (2014).

Hanmer Forest Park and Hanmer Springs

- 2.3.16 Work with Ngāi Tahu and the community, including Hurunui District Council and recreational interest groups, on the integrated management of recreational facilities within Hanmer Forest Park, Hanmer Springs, and adjoining public conservation lands and waters.

³² Refer Nelson Lakes National Park Management Plan 2003.

St James Conservation Area

- 2.3.17 May allow a horse herd as a public attraction, subject to:
- a) a maximum of 30 breeding mares and 80 animals in total;
 - b) an authorisation to the Ada Homestead lessees;
 - c) the management of the herd remaining self-funding from the sale of horse progeny;
 - d) monitoring of the herd showing consistency with the criteria set out in Policy 11.2(a) of the Conservation General Policy 2005; and
 - e) the herd not conflicting with other approved recreational use.
- 2.3.18 May seek expressions of interest from community groups or potential concessionaires for the use and/or management of the St James Station buildings.
- 2.3.19 Undertake or facilitate monitoring and research into the ecosystem services and economic benefit provided by increased natural water storage in valley-floor wetlands.
- 2.3.20 May allow an airstrip to be maintained near Muddy Lakes, subject to a management agreement or concession containing airstrip management provisions, and allowing for its public use.
- 2.3.21 In respect of the Hanmer Springs Ski Area:
- a) Should, in considering the development of the ski field, apply the precautionary principle to the approval of new structures and terrain modification and consider both the likely longevity of the field in the face of climate change, and any land restoration and facility removal requirements should the ski field cease to operate.
 - b) Where practicable, encourage non-skier and/or non-ski season visitor use of the ski field, and visitor use beyond the ski field.
 - c) Should provide opportunities for conservation advocacy and interpretation.

Molesworth

- 2.3.22 Manage the Molesworth Recreation Reserve, within Canterbury, in accordance with the Molesworth Management Plan 2013.

Land status

- 2.3.23 Continue integrated management with West Coast (Tai Poutini) for public conservation lands that straddle the Main Divide.
- 2.3.24 May, where Crown river and lake beds extend into, or are surrounded by public conservation lands and waters within the Place, work with Land Information New Zealand to achieve integrated management across the combined lands and waters, or to seek the allocation of the beds to the Department as conservation areas, and their inclusion within the public conservation lands and waters.
- 2.3.25 In respect of legal roads, where actual or potential activity on or near these legal roads creates difficulties in achieving integrated management of adjoining public conservation lands and waters, work with Land Information New Zealand, New Zealand Walking Access Commission, Waimakariri and Hurunui District Councils, other agencies and the public to:
- a) seek that the public voluntarily manage their use of legal roads running through public conservation lands and waters in a way that is compatible with or recognises adjoining public conservation lands and waters management; or
 - b) enable the Department to manage the roads and facilitate recreation on them in a way that is compatible with or recognises adjoining public conservation lands and waters management; or

- c) seek that local authorities actively manage the roads and facilitate recreation on them in a way that is compatible with or recognises adjoining public conservation lands and waters management; or
 - d) stop or resume legal roads running through public conservation lands and waters and add the stopped or resumed road lands to the lands, except where the adjoining lands and waters are stewardship areas under the Conservation Act 1987 (unless those adjoining lands and waters are part of an action or policy to confer additional protection or preservation under section 18 Conservation Act 1987 or under the National Parks Act 1980 or the Reserves Act 1977); or
 - e) seek that the Department actively provides for public vehicle and horse access on legal roads to and/or through public conservation lands.
- 2.3.26 Seek the stopping or resumption of the unformed legal roads through the St James Conservation Area, except Tophouse Road.
- 2.3.27 Review the status of public conservation lands and waters within this Place, having regard to all land status options under the Conservation, Reserves and National Parks Acts.

Table 6: Vehicle access³³ within Northern High-Country Place

CONSERVATION LANDS AND WATERS	VEHICLE ACCESS (In some cases this access may use legal road, or additional adjoining legal road access may exist, in which cases see policy 2.3.25.)
Lake Sumner Forest Park	Glenhope Station vehicles: Steyning access road up-valley of Boyle Village, and between Tin Jug and Steyning Huts. Mountain bikes: as limited by topography and vegetation, but not on the St James Track.
Lewis Pass National Scenic Reserve	State Highway purposes: where essential for the operation of State Highway 7, in accordance with Policy 2.3.15 above.
St James Conservation Area	All vehicles: Hanmer Springs Ski Area road, subject to ski area management. Glenhope Station vehicles: between Tin Jug and Steyning Huts. Four-wheel drive vehicles: <ul style="list-style-type: none"> controlled³⁴ seasonal access via Maling and Edwards Passes to, but not beyond the Waiau Uwha River. controlled access for Canada goose culls on four-wheel drive vehicle roads retained for management purposes, but not off-road. controlled access on the four-wheel drive vehicle road to Ada homestead by the leaseholder. Mountain bikes: St James Cycle Trail and Homestead Run; otherwise as limited by topography and vegetation, including to the Christopher and Anne huts, but not on the St James Track. Electric power-assisted pedal cycles: St James Cycle Trail and Homestead Run.
Hanmer Forest Park	Mountain bikes: existing tracks as signposted.
Jollies Pass Scenic Reserve	All vehicles: the formed roads over Jacks Pass and Jollies Pass. Mountain bikes and electric power-assisted pedal cycles: proposed track linking Hanmer Springs with St James and Molesworth.

³³ The provisions for four-wheel drive vehicles also apply to motorbikes and electric power-assisted pedal cycles.

³⁴ 'Controlled' access is where public vehicle access is allowed, but with conditions such as obtaining a key for a locked gate, seasonal restrictions due to snow/wet or fire risk, and/or undertaking didymo de-contamination of vehicles.

Table 7: Horse and pack-animal access within Northern High-Country Place

CONSERVATION LANDS AND WATERS	HORSE AND PACK-ANIMAL ACCESS (In some cases this access may use legal road, or additional adjoining legal road access may exist, in which cases see policy 2.3.25.)
Lake Sumner Forest Park	As limited by topography and vegetation, but not on the St James Track, and avoiding lakes and wetlands.
Lewis Pass National Scenic Reserve	On existing formed roads only.
St James Conservation Area	As limited by topography and vegetation and allowing access to within 20 metres of Christopher and Anne huts but not on the St James Track, except to cross Anne Saddle and to avoid difficult sections of the Boyle riverbed, and avoiding lakes and wetlands.
Hanmer Forest Park	Tracks as signposted.
Jollies Pass Scenic Reserve	On existing formed roads only, and a proposed track linking Hanmer Springs with St James and Molesworth.
Other public conservation lands	As limited by topography and vegetation.

MILESTONES—OUTPUTS**Achieved by the end of Year 3 after CMS approval (2019)**

- Stopping or resumption of legal roads through the St James Conservation Area, except Tophouse Road.
- Land status review for all public conservation lands and waters within the Place, including the St James Conservation Area.
- Establishment of a monitoring programme for the biennial assessment of the managed horse herd within St James Conservation Area.
- Resolution of the boundaries and statutory provisions for an area where recreational hunting will be given priority for wild animal control.

Achieved by the end of Year 5 after CMS approval (2021)

- Establishment of Department and community partnership management of recreation facilities in and adjoining Hanmer Springs.
- Initiation of ecosystem services research regarding natural water storage within the St James wetlands.
- Resolution of the provision of concessionaire-managed public huts and the removal of unauthorised private accommodation at Loch Katrine Recreation Reserve.

Achieved by the end of Year 10 after CMS approval (2026)

- Resolution of grazing within that part of Molesworth Recreation Reserve fronting Jollies Pass Scenic Reserve and St James Conservation Area.

2.4 High-Country Basins Place

Description

This Place (see Map 5.4) includes the three major high-country inter-montane basins within Canterbury (Waitaha): the Mackenzie (Upper Waitaki River catchment), upper Rangitata and Ashburton/Hakatere river catchments (Ō Tū Wharekai), and the upper Waimakariri River catchment. There is some geographical overlap of Places with the 2.2 Southern Conservation Parks, 2.3 Northern High-Country and 2.6 Braided Rivers/Ki Uta Ki Tai Places, but no repetition in dealing with the conservation issues.

The basins, lying at between 400 and 900 metres in altitude, are variously surrounded by higher-altitude public conservation lands and waters, with a backdrop of the Southern Alps/Kā Tiritiri o te Moana. There are considerably less public conservation lands and waters (or other ecosystem protection) below than above 900 metres, with Ō Tū Wharekai having the more extensive public conservation lands and waters of the basins. The extent of indigenous vegetation altitudinal sequences from basin-floor to the surrounding higher lands also varies between the basins, with the Mackenzie Basin having the more intact sequences. Mackenzie is also less modified by pastoral farming than the other basins.

All three basins have west to east climatic and ecosystem variations and contrasts of extreme drylands to wetlands, with the sheer size of the Mackenzie resulting in the largest variations.

Thirteen priority ecosystem units are wholly or partly within the basins, covering the waters and margins of small lakes, tarns and wetlands, tussocklands, indigenous shrubland remnants, and riverbeds. Numerous threatened and/or at-risk species are present (see Appendix 5). Many of these threatened species (e.g. kakī/black stilt and fish) range or are found beyond public conservation lands and waters.

Geological features reflect climate oscillations and resulting glaciation phases, leaving ancient moraine surfaces and gravel outwash plains. These occur on a spectacular scale within the Mackenzie Basin, but are also prominent in the other basins, while Waimakariri Basin has prominent post-glacial stream and terrace features along with limestone outcrops (see Appendix 9).

Scientific reserves in the Waimakariri and Mackenzie basins are reminders of what some basin ecosystems looked like (e.g. Bendhu and Enys scientific reserves) and of how they could recover in the absence of grazing and pests (e.g. Tekapo Scientific Reserve). Lance McCaskill Nature Reserve in the Waimakariri Basin protects threatened limestone flora.

The current state of invasive pest plant (e.g. wilding trees, gorse, broom, Russell lupin) varies between the basins but is relatively low at Ō Tū Wharekai, while gorse and broom have not yet become a threat within the Mackenzie. Plant pest control is underway in all the basins.

Most of all three basins have been identified as Outstanding Natural Features and Landscapes.³⁵ Main road entrances to the basins are impressive: Lindis Pass and Burkes Pass (Dog Kennel Corner) on State Highway 80 for the Mackenzie; Rangitata Gorge Road and Ashburton Gorge Road (Hakatere corner) for Ō Tū Wharekai; and Porter's Pass and Klondyke Corner on State Highway 73 for the Waimakariri. Other entrances by road, air or walking and cycling tracks are also impressive.

³⁵ Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional and district policy statements and plans should be consulted for their consideration of this landscape review.)

Large mountain-catchment rivers and lakes intermingle with smaller-catchment and spring-fed lakes and streams, and are prominent landscape features within the basins. Water quality of these waterbodies is very high and they support extensive indigenous and sports fisheries and spawning streams.

For early Māori, the basins supported kāika and were part of seasonal mahinga kai and resource-gathering trails for fish, birds, plants and stone. The northern basins were traversed by pounamu trails and ara tawhito to and from the West Coast (Tai Poutini). Ngāi Tahu interest in these basins remains high, through ongoing mahinga kai, place-name recognition, and kaitiaki and conservation management roles.

Various provisions under the Ngāi Tahu Claims Settlement Act 1998 acknowledge the association and values that the basins hold for Ngāi Tahu. These include the Kura Tāwhiti Tōpuni, five Deed of Recognition sites, and four nohoanga sites on public conservation lands (see section 1.4).

Valued for farming, these basins are facing land use intensification, with pastoral lease tenure review and applications for discretionary actions under Crown Pastoral Land Act 1998 changing land ownership and facilitating intensive land development. This intensification is putting pressure on landscapes, ecosystems and water quality. Statutory processes under the RMA and related community processes such as the Canterbury Water Management Strategy and the Mackenzie Country Trust are dealing with these ongoing issues. Environment Canterbury rules³⁶ may increasingly see better stock exclusion from lake edge and riparian margins, and reduced nutrient loading.

Wilding conifers are a threat to shrub- and tussock-lands, but the long-term community vision for their sustained control at zero density is now being realised, as part of a national vision.³⁷ Other threats to the basins are plant pest invasion in riverbeds, increased and new plant pest sources from settlements, and fire. Willows are affecting the hydrology of lakes, streams and swamps by increasing sedimentation. Didymo is increasing its range. Vehicles and animals easily damage wetlands. Introduced pest animals threaten plants, birds, lizards and invertebrates. The vulnerability of some habitats and species is so high that even a single threat event such as from a fire or a vehicle can cause long-term damage.

The Department's biodiversity role in the basins is a leadership one and includes providing technical advice (e.g. ecological assessments to Land Information New Zealand for tenure review), demonstrating ecosystem management and restoration (e.g. at Tekapo Scientific Reserve), undertaking research (e.g. Ō Tū Wharekai and Project River Recovery), wetland restoration, working with community groups, and involvement in statutory and other advocacy (e.g. upper Waitaki catchment water consents and the Upper Waitaki Shared Vision Forum).

The basins provide for extensive land- and water-based recreation, within a much wider national and conservation parks and pastoral runs setting, including climbing, tramping, skiing, fishing, hunting, horse riding, mountain biking and walking.

All three basins have environmental education programmes to which the Department contributes.

Environment Canterbury administers bylaws³⁸ to manage watercraft activities on the lakes and rivers within the basins. These bylaws have a supplementary benefit in avoiding wildlife disturbance.

³⁶ Environment Canterbury. 2009: Natural resources regional plan. Environment Canterbury, Christchurch.

³⁷ See the New Zealand Wilding Conifer Strategy 2015–2030. 2014. Ministry for Primary Industries, Wellington.

³⁸ Environment Canterbury Navigation Safety Bylaws 2005 (Incorporating Amendments) under the Local Government Act 2002.

Numerous unformed legal roads pass through public conservation in the basins, but have no effective activity controls. Where negotiable by four-wheel drive vehicles or motorbikes, these legal roads can result in anomalies in terms of integrated management of the adjoining conservation lands and waters.

Easy road access to much of the basins, ground-based public use, and vulnerable wildlife are factors that preclude aircraft landings on most public conservation lands in the basins.

Mackenzie Basin

Five priority ecosystem units are on public conservation lands and waters within this basin. Bio-climatically Canterbury's most distinct inter-montane basin, with predominantly intact sequences of nationally rare, glacial-derived ecosystems, it is a national stronghold for dryland biodiversity and threatened and/or at-risk species.

Islands (see Appendix 3) in the basin's lakes provide degrees of refuge for indigenous plants and animals. They include Motuariki and Little Motuariki Islands in Lake Tekapo (Takapo), and 12 islands within Lake Benmore (Te Ao Mārama). All are considered Multiple Use islands.³⁹ Only the Motuariki Islands are administered by the Department, and Ngāi Tahu has a strong cultural interest in all the islands.

A 2011 decision of the Environment Court ruled that the basin has outstanding natural features that are of national importance.⁴⁰ For many visitors the basin is breath-taking and easily viewed from State Highways 8 and 80, and regularly features in publications and promotions. The landscape is naturally a brown, tussock- and grassland one, interspersed with shrublands, lakes and braided shingle riverbeds, with seasonal variations from flowering vegetation, snow cover and frosts. Within this natural setting there is now a mix of dry- and irrigated-land farming.

The threats facing the drylands landscape are generating considerable community interest from within the basin and Canterbury, and nationally. The vision of protected ecosystems and landscape features, within an area of mixed land use and land tenures, is held by many people. The widespread indigenous biodiversity and landscape values across many land tenures favour a whole landscape and community approach; this is being sought by a Mackenzie Country Trust implementing 'The Mackenzie Agreement'.⁴¹

Community action groups (e.g. Ohau Conservation Trust) and volunteers are active in the basin, and there is scope to increase this involvement. The Upper Waitaki Zone Committee for the Canterbury Water Management Strategy, and others, are (at 2013) taking a cautious approach to further irrigation development, in part triggered by concerns about nutrient loadings within the basin's waters.

Prominent within the basin are the canals, rivers, lakes and infrastructure of the Waitaki Power Scheme. The scheme is regionally and nationally significant for electricity generation, although resulting in a modified environment and some adverse effects for conservation values. Resource consent processes have brought mitigations where practicable, such as Project River Recovery, Ohau River flows, and periodic Tekapo River flows for white-water kayaking.

For recreation, the basin provides access to Aoraki/Mount Cook National Park and the five conservation parks, and serves the accommodation bases at Lake Tekapo (Takapo), Twizel

³⁹ Refer Offshore and Outlying Islands Strategy (2009).

⁴⁰ Interim Decision No. [2011] NZEnvC 387. Confirmed on appeal, by High Court in 2013.

⁴¹ Upper Waitaki Shared Vision Forum. 2013. The Mackenzie Agreement: a shared vision and strategy, and a proposal for a Mackenzie Country Trust.

and smaller locations. Numerous day-visitor opportunities exist for walking, cycling, boating and four-wheel driving, including to historic sites. Fishing is popular, in a wide variety of waters. The Alps 2 Ocean Cycle Trail passes through the basin. Increased public access to lake-edges is occurring as tenure reviews eventuate. Mackenzie District Council-administered reserves, and public conservation lands, provide for bach accommodation at Lake Alexandrina, serviced camping areas, and numerous freedom camping opportunities.

Transpower transmission lines pass across parts of the public conservation lands and waters within the basin.

Upper Rangitata and Ashburton River/Hakatere (Ō Tū Wharekai)

This basin is known as Ō Tū Wharekai, as part of Arawai Kākāriki, a wetland restoration programme focusing on three very different, nationally important wetlands: Whangamarino (Waikato), Awarua/Waituna (Southland), and Ō Tū Wharekai. Launched in 2007, the programme aims to restore these three wetland complexes with community assistance, and to learn more about restoration management for use elsewhere.

The project has an integrated catchment management approach, with an ‘intensive management area’ set within a ‘catchment influence area’ for the upper Rangitata River and the 12 Ashburton lakes. To see the full management picture for the catchments, see also 2.2 Southern Conservation Parks Place.

The Ō Tū Wharekai intensive management area includes public conservation lands and waters, Crown river- and lake-beds administered by Land Information New Zealand, and high-country stations, along with Ashburton District Council-administered legal roads, Lake Camp Recreation Reserve and the Lake Clearwater huts settlement.

Four priority ecosystem units are on public conservation lands and waters within this basin. Wetland restoration work has included willow removal from streams, indigenous revegetation around lake edges, stock-exclusion fencing and vehicle control.

Historic sites include the former Hakatere Station buildings and the former Mount Harper ice-skating rink.

Camping in the basin occurs at non-departmental basic-facility campsites at Lakes Clearwater and Heron, and by freedom camping. The Lake Heron campsite (on nature reserve, legal road and pastoral lease) requires the resolution of land status and long-term occupancy. Additional camping opportunities in the basin could be considered.

In managing Ō Tū Wharekai, the Department works with Te Rūnanga o Arowhenua, Environment Canterbury, Central South Island Fish and Game Council, Ashburton District Council, Royal Forest and Bird Protection Society, Rangitata Landcare Group, Land Information New Zealand, Lake Clearwater hut owners, landowners and recreational groups, as well as many interested individuals. Continuing Ngāi Tahu and community interest is anticipated.

Lake Heron and its tributary streams are covered by the National Water Conservation (Rakaia River) Order 1988, which requires that the quantities and levels of natural water be retained in their natural state. The Rangitata River and its tributaries are covered by the Water Conservation (Rangitata River) Order 2006, which provides protection for a variety of outstanding characteristics and features from the damming and alterations of riverflows and form (see also 2.6 Braided Rivers/Ki Uta Ki Tai Place).

Both Lake Heron and Maori Lakes are nature reserves by means of a translation from a pre-Reserves Act 1977 status. They do not warrant the permit-only public entry that that status requires.

Waimakariri Basin

Four priority ecosystem units are on public conservation lands and waters within this basin.

The basin provides part of the route for those using State Highway 73 (the Great Alpine Highway) and the Midland Railway (the TranzAlpine route). The route, highly travelled by New Zealanders and overseas visitors, passes through a remarkable ecological transition from eastern drylands and beech forests, through alpine environments, to West Coast (Tai Poutini) rainforests.

The basin has been identified as an Outstanding Natural Feature and Landscape.⁴² The Selwyn District Plan 2015 recognises much of this feature and landscape, and the panoramic views from State Highway 73 and the Midland Railway.

Wildfires have been frequent within the basin, arising from railway operations, farm burn-offs and along roadsides. Wilding conifers, in part from historical soil conservation planting trials, have spread on public conservation and other lands. The Waimakariri Ecological and Landscape Restoration Alliance has formed to coordinate funding for wilding tree management, part of an aim to restore and maintain the landscape and indigenous biodiversity values.

The basin is highly accessible from State Highway 73 for day trips from Christchurch and elsewhere, and from camping and accommodation bases from Springfield through to Arthur's Pass. It is highly visible, but not otherwise accessible, from the TranzAlpine train.

On the State Highway 73, frontages to Arthur's Pass National Park and Korowai Torlesse Tussocklands and Craigieburn Forest conservation parks are distinctive stopping points at Porters Pass, Lake Lyndon, Craigieburn and Goldney Saddle. Kura Tāwhiti Scenic Reserve, Cave Stream and Lake Pearson (Moana Rua) provide more substantial destinations alongside State Highway 73, while Lake Grasmere is just a short walk away.

Large group activities (e.g. feature filming, music festivals, sporting events, weddings, corporate functions) are held within the basin, mostly on lands other than public conservation lands. Landowners have provided specific facilities and vehicle access. There is little necessity for these activities to occur on the relatively small areas of public conservation lands.

In the basin and into the adjoining Craigieburn Conservation Park, and potentially into the Korowai Torlesse Tussocklands Conservation Park, a largely community initiative is developing mountain bike tracks that link existing ski field roads and recreational and educational facilities. The tracks could potentially extend from Lake Pearson (Moana Rua) to Lake Lyndon, avoiding State Highway traffic. Natural and historic values and existing recreational and educational activity are matters needing particular recognition and/or protection with these track developments.

Kura Tāwhiti Scenic Reserve has been identified as a more specific Outstanding Natural Feature and Landscape within the wider basin.⁴³ It is a refuge for distinctive limestone flora and uncommon plant species, including several threatened species. Lance McCaskill Nature Reserve is nestled within the tors.

⁴² Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional and district policy statements and plans should be consulted for their consideration of this landscape review.)

⁴³ The Castle Hill / Kura Tāwhiti site within the Canterbury Regional Landscape Study Review. Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch.

The reserve has a long ancestral association for Ngāi Tahu and is a Tōpuni and Deed of Recognition site, although these statuses apply only to the public conservation land as existed in 1998. Māori rock art is one of the Ngāi Tahu values present.

The tors are a geopreservation site (see Appendix 9) that has long attracted attention for its scenic and somewhat mystical limestone tors.

Grazing has recently been excluded from most of the reserve and some revegetation undertaken. However, the open grassland setting of the reserve is valued as it accentuates the grandeur of the tors and facilitates exploration by visitors. A car park was provided in 2007 to avoid State Highway 73 roadside parking, but is already often crowded.

Since the 1990s the tors have become a rock climbing site of international recognition. This activity has caused damage to the tors and vegetation, but in recent years more-respectful use has developed, primarily by bouldering.⁴⁴ National and international competition events have been held here. The removal of non-approved steel fixed anchors and the appropriateness of any fixed anchors within the reserve or climbing activity on the high tors are all matters needing guidance.

The reserve's location alongside State Highway 73 and its multiple values regularly attract high numbers of visitors. These high numbers are at present mainly absorbed by the 'intricate' nature of the tors landscape, but care is needed with the provision of facilities, in dealing with large groups or events, and in any fostering of recreational use, to ensure that the reserve's values and recreational opportunities are not harmed. Monitoring of this location is needed.

Cave Stream Scenic Reserve also has distinctive limestone flora, including several threatened species, and its distinctive geological feature—a stream channel through a cave. It has high cultural value for Ngāi Tahu. Māori rock art is present.

As a Gateway destination it is popular with visitors. Wading and climbing through the cave is possible, but most visitors just enjoy the cave entrance and stream, and the reserve's visual setting within a backdrop of limestone tors and gorge cliffs on the adjoining Flock Hill Station. Cave trips require care and fatalities have occurred.

The reserve entrance, car park and walking tracks were upgraded in 2008. Perhaps even more so than Kura Tāwhiti, given the comparative lack of 'intimate' areas, care is needed with the provision of facilities, in dealing with large groups or events, and in fostering recreational use. This is to ensure that the reserve's values and recreational opportunities are not adversely affected.

Lake Pearson Conservation Area and Lake Pearson (Moana Rua) Wildlife Refuge variously cover 11 ha of lake head land, the lake and its riparian edge. Wildlife refuge status was applied primarily in recognition of crested grebe/kāmana breeding. To avoid grebe/kāmana disturbance, a 5 knot boat speed restriction came with the refuge gazettal, consistent with Environment Canterbury navigational safety bylaws, and motorised craft are non-complying on the lake under the Selwyn District Plan 2015.

The lake is a Statutory Acknowledgement and Deed of Recognition site, and is a Ngāi Tahu mahinga kai site, primarily for eeling.

At the lake head, a matagouri shrub and lakeside willow setting provides sheltered picnicking and basic camping and watercraft launching. The lake is popular for sports fishing. Three unauthorised private accommodation huts are within the conservation area.

⁴⁴ Bouldering is a style of rock climbing undertaken without a rope and normally limited to very short climbs over a crash pad (called a bouldering mat) so that a fall will not result in serious injury.

Community volunteers assist with crested grebe/kāmana monitoring and protection. Willow management (in part providing grebe/kāmana nest sites), dog control and toilet facilities are ongoing issues for the reserve.

Enys Scientific and Lance McCaskill Nature reserves arose from early protection advocacy by Canterbury botanists and the reserves' names acknowledge John Enys (runholder and naturalist, 1870s) and Lance McCaskill (outstanding conservationist 1920s–1985). Both reserves are valued for their vegetation, threatened and at-risk plants, undisturbed soils, invertebrates, and their scientific, historic and education interest. Enys Reserve may be vulnerable from future State Highway 73 realignment, but could also become more accessible as a result.

Lance McCaskill Nature Reserve is subject to the Castle Hill Nature Reserve Management Plan 1980 and has permit-only entry. The current reserve boundary fence does not blend well with the surrounding Kura Tāwhiti Scenic Reserve landscape.

Arthur's Pass National Park is itself covered by 2.1 National Parks Place. The Arthur's Pass National Park Management Plan 2007 proposes that reserve land alongside the Waimakariri River (the Hawdon/Riversdale Flats) be added to the park. The inclusion of these reserve lands within the basin's Outstanding Natural Feature and Landscape reinforces the value of this proposed park extension.

OUTCOME

The Outstanding Natural Feature and Landscape values of these basins, within their wider setting of public conservation lands and waters and high-country farmland, are intact.

Priority ecosystem units are recovering or are in a healthy functioning state as a result of integrated programmes that include intensive plant and animal pest management. Removal of stock grazing and avoidance of fire are enabling ecosystem recovery. Further extinctions of threatened species have not occurred and populations are improving where intensive management is occurring either on or off public conservation lands. Elsewhere, threatened and at-risk species continue to face causes of decline. Community programmes and partnerships with businesses using the resources of the basins, working with priority ecosystem units or threatened and at-risk species are underway or developing.

Wilding trees are at zero density under sustained control, or there is community action working towards this.

Waterbodies have retained their high water quality or have actions underway to re-establish high water quality.

A network of Local Treasure and Backcountry destinations providing access and accommodation facilities is maintained by the Department and community organisations in accordance with departmental facility provision priorities and design requirements.

Visitor encounters with aircraft are rare and landings do not adversely affect the ecological or cultural values or the experience of visitors.

Mackenzie Basin

Public conservation lands, along with other protected ecosystems and landscape features within an area of mixed land use and land tenures, encompass representative altitudinal ecosystems from basin-floor to higher altitude public conservation lands and waters. Public conservation lands and waters maintain intact indigenous ecosystems and demonstrate indigenous ecosystem recovery.

Project River Recovery, with support from hydropower companies, continues to increase knowledge of braided river ecosystems, and their species and management. This knowledge is being applied through braided river management, including for water extraction and impoundment, throughout Canterbury and elsewhere.

Lake Ohau retains its currently consented and largely unmodified lake-level regime and intact riparian vegetation, within a wider setting of public conservation lands and waters and sustainable high-country farming.

Glentanner Scenic Reserve has been incorporated into Aoraki/Mount Cook National Park to better encompass the Tasman River valley approach to Aoraki/Mount Cook, including the past and present glaciation and braided river land-forming processes, and to preserve the ecosystems and scenic grandeur that evolved with those processes.

The remnant indigenous biodiversity values of Motuariki Islands are valued alongside Ngāi Tahu cultural values and public recreational use, with Ngāi Tahu involved in the islands' management. Management of the 12 islands within Lake Benmore (Te Ao Mārama) protects remnant indigenous biodiversity values and provides for public recreational use.

The Twizel and Lake Tekapo (Takapo) areas are the focus for day-visitors, with opportunities to enjoy nearby public conservation lands and waters and multiple land tenure facilities like the Alps 2 Ocean Cycle Trail. These opportunities heighten appreciation of the landscape and conservation values of the basin and encourage community action to support protection of those values.

Transpower transmission lines follow an authorised defined route across the public conservation lands and waters.

Ō Tū Wharekai

Visitors entering the basin at Hakatere corner or above the Rangitata River gorge are greeted by wide vistas of intact tussock- and shrub-lands interspersed with sustainable high-country farming. River, stream and wetland systems are intact and largely free of plant pest species.

On public conservation lands and waters, significant recovery of ecosystems has occurred and streams are willow free. All landowners within the basin are involved in a collaborative programme between the Department and the wider community in conservation effort on and off public conservation lands and waters, with a high level of community management of pest plants.

Water quality in lakes and streams meets high standards. Research has increased the understanding of and informed improvements in wetland management.

The Hakatere corner historic buildings provide visitor information in conjunction with local community and commercial use, and departmental staff accommodation.

Opportunities for public recreation and use are extensive, with vehicle access to key sites, and land and water access beyond these sites by non-motorised means. Facilities ranging from backcountry huts on public conservation lands to commercial accommodation elsewhere, in and near the basin, provide for overnight visitors.

Waimakariri Basin

Visitors experience the Outstanding Natural Feature and Landscape values and the east-west ecological transition as they travel along State Highway 73/The Alpine Highway and the Midland Railway.

Lakes in the basin and their inflowing streams have high water quality and well-protected riparian margins.

An integrated set of visitor opportunities is provided on and off public conservation lands and waters alongside State Highway 73 from Porters Pass to Arthur's Pass National Park, with overnight facilities other than standard camping being provided off public conservation lands. Opportunities for conservation interpretation and public recreational access from the TranzAlpine train have been considered. Mountain bike tracks may link long-established facilities in the Craigieburn Forest Park area and may extend between Lakes Pearson (Moana Rua) and Lyndon.

Visitors to all sites can expect frequent encounters with other visitors. In parts of the reserves and conservation areas, however, and at some times of the day, visitors can find quieter and less crowded areas.

At **Kura Tāwhiti Scenic Reserve** the Ngāi Tahu cultural values, as recognised by the Kura Tāwhiti (Castle Hill) Tōpuni but applied to the whole reserve, are recognised and protected and are accurately portrayed to visitors in public information and discreet on-site interpretation.

Threatened and at-risk species and distinctive limestone-associated vegetation and habitats at Kura Tāwhiti Scenic Reserve are protected, with some restoration planting but maintaining an overall grassland setting.

Day visitors to Kura Tāwhiti Scenic Reserve walk through and enjoy the limestone outcrops landscape and may experience a spiritual connection and a sense of discovery. Except during an annual rock-climbing event, visitors do not encounter large groups of visitors. Damage to the tors and associated natural features is insignificant, and sites of significance to Ngāi Tahu are respected.

Only essential visitor facilities consistent with the Outstanding Natural Feature and Landscape that cannot be located outside the reserve are provided. Reserve interpretation is discreet and encourages personal discovery of the values of the reserve.

Management is adapted to address adverse effects revealed through monitoring visitor use and impacts.

Cave Stream Scenic Reserve enables the viewing of a limestone landscape largely surrounding the reserve and provides day visitors with an opportunity to picnic and view or explore an underground river cave, while being well-informed about risks and safety issues. Ngāi Tahu cultural values are respected.

Lake Pearson (Moana Rua) has high water-quality, with managed willow and indigenous vegetation riparian habitats providing for crested grebe/kāmana breeding. Visitors picnic along the lake edge, stay overnight in a standard campsite at the head of the lake, and enjoy fishing and boating in slow-moving watercraft. Ngāi Tahu utilise the lake as a mahinga kai eeling site. Private accommodation and structures within the reserve have been or are being phased out.

Enys Scientific Reserve has open public entry, and protects its indigenous biodiversity values for their intrinsic worth and for scientific research and education. State Highway 73, when realigned, provides easier viewing and foot access, but does not impact on the reserve.

Lance McCaskill Nature Reserve has restricted public entry, and fencing of the reserve blends with the landscape of the surrounding Kura Tāwhiti Scenic Reserve.

POLICIES

(See also 2.6 Braided Rivers/Ki Uta Ki Tai Place policies regarding the braided rivers within the basins.)

- 2.4.1 Work with Mackenzie District Council and Land Information New Zealand to maintain wildlife refuge values for those wildlife refuges not on public conservation lands and waters, at Lakes Alexandrina (Takamoana) and McGregor (Whakarukumoana).
- 2.4.2 Investigate restoration of native-only fishery waterbodies within the Mackenzie Basin and Ō Tū Wharekai, in consultation with Central South Island Fish and Game Council, and Ngāi Tahu.
- 2.4.3 Should allow vehicles only on the roads purposely formed and maintained for vehicle use, and the vehicle access identified in Table 8.
- 2.4.4 Should allow horses and other pack-animals only as identified in Table 9.
- 2.4.5 Should allow aircraft access only within the public conservation lands in accordance with Map 4 and Policies 3.6.1–3.6.9.
- 2.4.6 In respect of legal roads, where actual or potential activity on or near these legal roads creates difficulties in achieving integrated management of adjoining public conservation lands and waters, work with Land Information New Zealand, New Zealand Walking Access Commission, territorial local authorities, other agencies and the public to:
 - a) seek that the public voluntarily manage their use of legal roads running through public conservation lands and waters in a way that is compatible with or recognises adjoining public conservation lands and waters management; or
 - b) enable the Department to manage the roads and facilitate recreation on them in a way that is compatible with or recognises adjoining public conservation lands and waters management; or
 - c) seek that local authorities actively manage the roads and facilitate recreation on them in a way that is compatible with or recognises adjoining public conservation lands and waters management; or
 - d) stop or resume legal roads running through public conservation lands and waters and add the stopped or resumed road lands to the lands, except where the adjoining lands and waters are stewardship areas under the Conservation Act 1987 (unless those adjoining lands and waters are part of an action or policy to confer additional protection or preservation under section 18 Conservation Act 1987 or under the National Parks Act 1980 or the Reserves Act 1977).
- 2.4.7 Seek the stopping or resumption of unformed legal roads edging Lake Heron and Maori Lakes.
- 2.4.8 Where Crown river and lake beds extend into, or are surrounded by public conservation lands and waters, work with Land Information New Zealand to achieve integrated management across the combined lands, or the inclusion of the river and lake beds within public conservation lands and waters.
- 2.4.9 Work with Environment Canterbury to maintain navigational safety bylaws consistent with reserve and wildlife refuge watercraft controls.

Mackenzie Basin

- 2.4.10 Protect the outstanding natural feature and landscape values of the Mackenzie Basin by providing advice for tenure reviews, engaging in community forums (including

Canterbury Water Management Strategy processes and the Mackenzie Country Trust), and undertaking statutory advocacy under the Resource Management Act 1991.

- 2.4.11 Work with the community through the Ohau Conservation Trust on the management and protection of landscape and biodiversity values within the Lake Ohau environment.
- 2.4.12 Work with Land Information New Zealand and the community to encourage management of indigenous biodiversity values and public recreation on the 12 islands within Lake Benmore (Te Ao Mārama).

Ō Tū Wharekai

- 2.4.13 Support Ngāi Tahu cultural monitoring for Ō Tū Wharekai, in partnership with Te Rūnanga o Arowhenua.
- 2.4.14 Further the aims of the Ō Tū Wharekai programme, by providing a forum for community participation in the programme, engaging in other community forums (including Canterbury Water Management Strategy processes), undertaking statutory advocacy under the Resource Management Act 1991, and providing advice for tenure reviews.
- 2.4.15 Manage the historic Hakatere Station buildings in accordance with a memorandum of understanding with the Hakatere Heritage Committee.
- 2.4.16 Work with Ashburton District Council and Arrowsmith Station to clarify the land tenure boundaries at the Lake Heron campsite, and establish appropriate land status and administration for the campsite.
- 2.4.17 Work with Ashburton District Council and the Lake Clearwater huts community to prevent the introduction of new, and the control of existing, pest plant species in the area, and encourage the use of indigenous species for future plantings.
- 2.4.18 Investigate with Ashburton District Council the feasibility of additional camping opportunities in the basin, while avoiding any adverse effects on wildlife refuges.
- 2.4.19 Seek that access without a permit is enabled to Lake Heron and Maori Lakes nature reserves in accordance with section 57(2) of the Reserves Act 1977.

Waimakariri Basin

- 2.4.20 Work with the community, including through the Waimakariri Ecological and Landscape Restoration Alliance and the Waimakariri Ecological and Recreation Committee, on wilding tree management and protection of landscape and biodiversity values.
- 2.4.21 Work with the New Zealand Transport Agency in respect of State Highway 73, in accordance with the Memorandum of Understanding between the New Zealand Transport Agency and Department of Conservation (2014), to achieve safe traffic movements to and from public conservation lands, to maintain views of reserves from the highway, and to avoid roadside camping adjoining Kura Tāwhiti Scenic Reserve and Lake Pearson (Moana Rua).
- 2.4.22 Implement, with New Zealand Rail, opportunities for conservation interpretation as the TranzAlpine train passes through public conservation lands and waters, and explore options for additional access from the train to public conservation lands.
- 2.4.23 In providing recreation opportunities along State Highway 73, seek coordination between the Department and other providers.

- 2.4.24 Contain camping within public conservation lands in the basin, outside of Arthur's Pass National Park and the Craigieburn and Korowai Torlesse Tussocklands conservation parks, to the Lake Pearson (Moana Rua) camping area.
- 2.4.25 Manage Kura Tāwhiti Scenic Reserve as if the Kura Tāwhiti Tōpuni values apply to the whole reserve.
- 2.4.26 Notwithstanding Policy 3.23.1 in Part Three, will assess in partnership with Ngāi Tahu all fixed anchors within Kura Tāwhiti Scenic Reserve as at 10 June 2016. All existing fixed anchors at Kura Tāwhiti should be removed, except where existing or replacement fixed anchors currently or will meet the following criteria:
 - a) the number, location and material of the fixed anchors is approved by Ngāi Tahu;
 - b) the replacement fixed anchors are consistent with the Reserves Act 1977 and the outcome sought for the 2.4 High-Country Basins Place; and
 - c) the number and location of replacement anchors will not have, or enable, adverse effects.
- 2.4.27 Implement, in partnership with Ngāi Tahu and in consultation with recognised climbing groups, a code of practice for recreational use, including rock climbing and bouldering, within Kura Tāwhiti Scenic Reserve, to extend the knowledge of and avoid adverse effects on Ngāi Tahu cultural values, indigenous vegetation, invertebrates and rock art sites. The code of practice will be supported with bylaws if necessary.
- 2.4.28 Should not permit new fixed anchors in Kura Tāwhiti Scenic Reserve, other than in accordance with Policy 2.4.26.
- 2.4.29 Should discourage abseiling from the high tors in Kura Tāwhiti Scenic Reserve.
- 2.4.30 May allow an annual bouldering event, under the auspices of the New Zealand Alpine Club, in the southern part of Kura Tāwhiti Scenic Reserve, subject to conditions to protect natural, historic and Ngāi Tahu cultural values.
- 2.4.31 Should not authorise, other than in accordance with Policy 2.4.28, sporting or concession events, or other activities within Kura Tāwhiti or Cave Stream scenic reserves, which involve more than 50 visitors, notwithstanding the criteria in Appendix 12.
- 2.4.32 Promote safety awareness for visitors to the cave of Cave Stream Scenic Reserve by using interpretation and other methods.
- 2.4.33 Phase out private-only use of the private accommodation and related facilities from Lake Pearson Recreation Reserve, in accordance with Policies 3.11.2–3.11.6.
- 2.4.34 Continue to require permit-only access to Lance McCaskill Nature Reserve, and revoke the Castle Hill Nature Reserve Management Plan 1980.
- 2.4.35 Take action to include within Arthur's Pass National Park the Hawdon/Riversdale Flats lands and waters, in accordance with the Arthur's Pass National Park Management Plan 2007.
- 2.4.36 May, in working with community groups and giving effect to the criteria of Policy 3.3.4, authorise the development of mountain bike tracks, and assess their potential use by electric power-assisted pedal cycles, linking existing ski field roads and recreational and educational facilities on public conservation lands and waters within the Craigieburn Forest Park area, and potentially extending between Lakes Pearson (Moana Rua) and Lyndon, subject to:
 - a) consideration of other recreational and educational use of the public conservation lands and waters; and
 - b) having regard to Objective 1.5.3.12.

Table 8: Vehicle access⁴⁵ within High-Country Basins Place

LAND AND WATER AREA	VEHICLE ACCESS (In some cases this access may use legal road, or additional adjoining legal road access may exist, in which cases see policy 2.4.6.)
Mackenzie Basin	<p>Mountain bikes: as limited by topography and vegetation, but not within the Tekapo or Bendhu Scientific reserves except on the Cowan Hill walkway, nor within the Wairepo wetland part of the Ribbonwood Conservation Area.</p> <p>Four-wheel drive vehicles: Glentanner Scenic Reserve in accordance with the Glentanner Station Ltd 2015 concession.</p> <p>Electric power-assisted pedal cycles: Alps 2 Ocean Cycle Trail – on public conservation lands excluding Aoraki/Mount Cook National Park.</p>
Ō Tū Wharekai	<p>All vehicles: Hakatere Heron Road to Lake Heron car park; Lake Emma access easement.</p> <p>Four-wheel drive vehicles: controlled,⁴⁶ seasonal access from Lake Heron car park to Harrisons Bight; Lake Clearwater western (inlet) and eastern/northern access; Paddle Hill Creek access; Lake Emma to Balmacaan Stream access; Forest Creek and Mistake Flat Hut (both access primarily on Crown riverbed).</p> <p>Mountain bikes: as limited by topography and vegetation, but primarily on former farm tracks, avoiding wetlands and kettle holes.</p> <p>Watercraft: Lakes Camp, Clearwater, Emma and Heron, and Maori Lakes, consistent with the Environment Canterbury Navigation Safety Bylaws, which reflect the wildlife refuge gazettals on all but Lakes Camp and Emma.</p>
Waimakariri Basin	<p>All vehicles: access to Lake Grasmere and Lake Lyndon Lodge.</p> <p>Mountain bikes: as limited by topography and vegetation, and on tracks provided for by Policy 2.4.35, but not within the Enys Scientific, Kura Tāwhiti Scenic or Lance McCaskill nature reserves.</p> <p>Electric power-assisted pedal cycles: on tracks as may be provided for by Policy 2.4.36.</p> <p>Watercraft: Lakes Pearson (Moana Rua) and Grasmere, consistent with the Environment Canterbury Navigation Safety Bylaws, which reflect the wildlife refuge gazettals.</p>

Table 9: Horse and pack-animal access within High-Country Basins Place

Land and water area	Horse and pack-animal access
Mackenzie Basin	As for vehicles within Table 8, except not within the Tekapo or Bendhu scientific reserves, nor within the Wairepo wetland part of the Ribbonwood Conservation Area.
Ō Tū Wharekai	Access roads, four-wheel drive vehicle roads, mountain bike tracks, otherwise as limited by park topography but primarily on former farm tracks; avoid wetlands and kettle holes.
Waimakariri Basin	As for vehicles within Table 8.
All marginal strips	As limited by topography and vegetation, but avoiding wetlands.

MILESTONES—OUTPUTS**Achieved by the end of Year 3 after CMS approval (2019)**

- Protection of the landscape and ecosystem features of the Mackenzie Basin.
- Implementation of a code of practice for rock climbing and bouldering within Kura Tāwhiti Scenic Reserve.
- Assessment of fixed anchors within Kura Tāwhiti Scenic Reserve in accordance with Policy 2.4.26.

⁴⁵ The provisions for four-wheel drive vehicles also apply to motorbikes and electric power-assisted pedal cycles.

⁴⁶ 'Controlled' access is where public vehicle access is allowed, but with conditions such as obtaining a key for a locked gate and/or seasonal restrictions due to snow/wet or fire risk.

Achieved by the end of Year 5 after CMS approval (2021)

- Monitoring results of visitor use and impacts on natural, historic and Ngāi Tahu cultural values at Kura Tāwhiti Scenic Reserve.
- Increased protection of the landscape and ecosystem features of the Mackenzie Basin.
- Removal of the Lake Heron and Maori Lakes nature reserves' public access permit requirement.

Achieved by the end of Year 10 after CMS approval (2026)

- Further increased protection of the landscape and ecosystem features of the Mackenzie Basin.
 - Completion of a section 8 National Parks Act 1980 action on the Hawdon/Riversdale Flats lands and waters addition to Arthur's Pass National Park.
-

2.5 Foothills Place

Description

The pockets of indigenous vegetation scattered within this Place (see Map 5.5), throughout the lowlands, foothills, and North Canterbury coastal area, provide an insight to the past. They represent a wide variety of the forest, shrubland and grassland types that once covered the humid and warmer hills and coastal environments of Canterbury (Waitaha), along with indigenous grasslands induced by historic human activity. The forest areas are collectively recognised as a Place because of their high biodiversity values and representative nature as remnants of the pre-human and human-induced landscape. They bridge the mountain and coastal environments. They are also valued for their historical, cultural and recreational values.

Two of the reserves (Weka Pass and Raincliff) were previously forested and while now protected for their Māori rock art have some indigenous vegetation restoration.

The forest remnants include a diverse range of hardwood and podocarp forest types set amongst often highly modified landscapes. They are typically characterised by high species diversity and often comprise second growth hardwood forest and shrubland components. Included are significant areas of limestone, such as on Mount Cass, as well as coastal forest reserves such as at Napenape. Several plant species reach their distributional limits throughout these forests, and include population strongholds for several threatened plant species. These forest remnants are also important as refuges for forest fauna, including the threatened long-tailed bat/pekapeka.

Thirteen priority ecosystem units are wholly or partly within this Place.

The remnants of the 'old forests' have high value for Ngāi Tahu for mahinga kai (including for medicinal plants and wood-working) and spiritual connections, and as locations on ara tawhito (ancient trails) extending back in time to the Rapuwai and Waitaha people.

The Māori name for Mount Peel is Tarahaoa. Legend has it that Chief Tarahaoa and his wife Hua-te-kerekere were washed ashore at Shag Point while trying to migrate north from south Otago. They wandered inland and lived the remainder of their lives where they could always see the sun go down. They prayed to their gods that on their death they should be changed into mountains. The gods obliged and Mount Peel and Little Mount Peel/Huatakerekere are really Tarahaoa and Hua-te-kerekere, inseparably linked to each other. Their grandchildren became the Four Peaks, the mountain range adjoining Mount Peel and Little Mount

Peel/Huatakereke. Specific tōtara trees within the forest are acknowledged as their children.

Appendix 15 lists the larger conservation units, ecosystems and historic values within this Place. There are numerous additional indigenous vegetation areas in private and council ownership, some covenanted with Queen Elizabeth the Second National Trust or as conservation covenants resulting from Crown pastoral lease tenure reviews. Council-administered reserves include Waitohi Bush Recreation Reserve, Claremont Scenic Reserve and Upper Pareora River Scenic Reserve.

The forested areas in particular, being typically small and isolated remnants in modified landscapes, are vulnerable to edge effects (e.g. wind damage, stock trespass, herbicide drift, rural fires, roading and invasive plants) and ecological change. With some exceptions, such as Peel Forest Park Scenic Reserve, while they may survive as forest remnants, they may be too small to maintain a full range of the original ecology of the forest type.

Some of the forests are within Outstanding Natural Features and Landscapes (Puketeraki Range, Mount Somers and Mount Peel (Tarahaoa) and Four Peaks)⁴⁷ (see Appendix 9).

Management of the areas' biodiversity includes monitoring of their state, plant and animal pest control and fencing for stock exclusion, all according to national priorities (as determined by priority ecosystem unit status). With their dispersed locations, long boundaries and edge effects, the forests can be demanding to manage. Management intervention is focused on working cooperatively with the community, including adjoining landowners and local authorities, to address issues including edge effects. In open areas wilding trees can spread and pose a threat to the indigenous biodiversity of this Place.

Several of the forests help protect catchments or straddle waterways that provide for domestic water supplies.

District and regional councils have some responsibility for indigenous biodiversity under the Resource Management Act 1991. In their regulatory role they can regulate the adverse effects of adjacent land use (e.g. wilding trees from seed-spreading conifer plantations).

Some of the forested areas provide a network of visitor facilities (e.g. Kelceys Bush, Mount Oxford and the Gateway destinations of Talbot Forest, Peel Forest, and Glentui and Wooded Gully within Mount Thomas), including huts and camping sites, or particular activity sites (e.g. the Sharplin Falls entrance to the Mount Somers Track and area). Adjoining Mount Thomas, and near to Talbot Forest, are the Ashley Gorge and Geraldine Domain recreation reserves respectively, with their regional campgrounds. Close proximity to Christchurch and other urban areas, together with a good roading network in Canterbury, means that the more accessible forests with good track networks experience high recreational use in the summer months.

Other forests tend to have hill and gully topography which inhibits public use and generally few facilities are provided. Sometimes the small and isolated nature of these forests means that public access is difficult to achieve, with practical access needing to be negotiated with adjoining private landowners. Non-forested hilltop areas are easier to access and provide rewarding views both seaward and inland.

Fourteen of the public conservation land and water areas, mostly being the non-forested areas, are managed to allow aircraft access, and in these areas, visitors might expect occasional aircraft.

⁴⁷ Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional and district policy statements and plans should be consulted for their consideration of this landscape review.)

A potential four-wheel drive road opportunity exists to Blue Mountain and Tripps Peak, but would require access approval to pass through adjoining freehold land.

Facilities in the areas are maintained at national standards, or programmed for this. Periodic weather effects (e.g. heavy snow and strong winds) require intensive maintenance works within forests.

A Talbot Forest Scenic Reserve Management Plan 1980⁴⁸ is still operative. Regard has been given to this plan during the preparation of this CMS but it is intended that the plan will be revoked once this CMS is approved. Talbot Forest is a priority ecosystem unit (part of the Geraldine Forest Remnant type).

Recreational hunting, under a permit, occurs in many of the areas.

Covering the Mount Thomas and Oxford Forest conservation areas, the Oxford Recreational Hunting Area (RHA) was gazetted in 1982 and a Wild Animal Control Plan⁴⁹ prepared. The plan has detailed 'prescriptions' including that it be reviewed at 5-yearly intervals—a timetable that has proved to be impracticable. Only one monitoring report has been prepared, in 1989, which acknowledged the RHA as a valued recreational resource. While no formal assessment of animal numbers has been done since this time, numbers are estimated to be low to moderate. No ecosystem monitoring has occurred.

Recreational hunters highly value the opportunity to hunt within the RHA without the presence of commercial wild animal recovery operators. The Department values recreational hunting for its contribution to wild animal control where recreational hunting is effective; commercial Wild Animal Recovery Operations⁵⁰ are not allowed here. The Department consults with recreational and commercial hunters on how hunting opportunities might be better provided for.

OUTCOME

Lowland and hill-country indigenous vegetation remnants are prominent protected features within the Canterbury (Waitaha) landscape, both on public conservation and private lands. They are healthy examples of indigenous vegetation, providing refuges for indigenous flora and fauna including threatened and at-risk species, illustrating the forest environments that were widespread prior to land settlement and development, and the hilltop shrub and grassland environments largely resulting from forest clearance, and retaining Ngāi Tahu cultural site values, including for otara.

Priority ecosystem units are recovering or are in a healthy functioning state as a result of integrated programmes that include intensive plant and animal pest management, and fencing. Removal of stock and avoidance of fire are also enabling ecosystem recovery. Further extinctions of threatened species have not occurred and populations are improving where intensive management is occurring either on or off public conservation lands and waters. Elsewhere, threatened and at-risk species continue to face causes of decline. Community programmes working with priority ecosystem units or threatened and at-risk species are making a positive difference.

⁴⁸ Department of Lands and Survey. 1980: Talbot Forest Scenic Reserve management plan. Department of Lands and Survey, Christchurch.

⁴⁹ Griffiths, A.D. 1982: Oxford Recreational Hunting Area wild animal control plan. Prepared for J.W. Levy, Conservator of Forests. New Zealand Forest Service, Christchurch.

⁵⁰ As defined by the Wild Animal Control Act 1977.

Indigenous vegetation remnants off public conservation lands are protected and managed by landowners, Queen Elizabeth the Second National Trust, and territorial local authorities, with support from the Department.

The more-accessible areas are well used by day walkers, trampers and hunters and less-accessible areas provide a quieter, less-developed experience. A controlled four-wheel drive opportunity may occasionally occur in the Blue Mountain Conservation Area. Day-use public activities are predominant but some forests provide camping areas and hut facilities.

A network of Local Treasure and Backcountry access and accommodation facilities are provided and maintained by the Department and community organisations in accordance with departmental facility provision priorities, and design requirements. Regionally significant campgrounds on adjoining reserves administered by district councils provide accommodation bases for visitors to use the public conservation lands and waters.

Visitors can expect encounters with aircraft to be rare within scenic reserves except where adjoining larger conservation areas, and rare within public conservation lands and waters within the Oxford Recreational Hunting Area, but visitors occasionally encounter aircraft in other reserves and conservation areas.

Improved public access is being achieved, where practicable, through cooperation between landowners, territorial local authorities, the New Zealand Walking Access Commission and the Department.

Prominent ridges and hilltops within the foothills remain natural and unmodified.

Peel Forest Park Scenic Reserve and adjacent public conservation lands

Peel Forest Park Scenic Reserve is in good health, and the Department, Ngāi Tahu and the community (including the Blandwood Residents Association) are working actively together to achieve biodiversity gains in the area, including through plant pest control on adjacent land. The Peel Forest Park Enhancement Group is an advocate for conservation within the local community.

The Scenic Reserve plus adjacent public conservation lands and waters are well known and utilised for environmental education, and provide an insight into the history of timber milling in the region.

A serviced campground provides visitors with a quality camping experience. Te Wanahu Flat is well utilised and enjoyed by day visitors, and the various tracks in the scenic reserve cater for a wide range of users from people of a range of abilities, to family groups and to fit trampers.

Talbot Forest Scenic Reserve

The Talbot Forest Working Group, the Department, and the wider Geraldine community are working together and achieving the rehabilitation and protection of the scenic reserve, including long-tailed bats/pekapeka. The health of the forest is improving, and the regeneration and healing process is ongoing. Edge effects are minimised through working with the Timaru District Council and adjoining landowners. Valued by the local community, it contains managed tracks, picnic areas, and is a focus of educational outreach on both conservation and wider environmental issues. Council water reservoirs are present.

Hurunui Coastal Reserves

Visitors enjoy the basic campsites at Napenape and Manuka Bay.

In conjunction with Hurunui District Council and local community, a coastal walk extends from Hurunui River to Manuka Bay as part of integrated walking opportunities through various public lands between Cheviot and Napenape.

The efforts of community weed-busters and restoration planters are evident in regenerating indigenous vegetation.

Oxford Recreational Hunting Area

The Oxford RHA provides the recreational hunting community a location for the enjoyment of recreational hunting where animal numbers are not causing unacceptable adverse effects on indigenous biodiversity values.

Weka Pass and Raincliff historic reserves

Māori rock art within these reserves is protected while providing for public access and appreciation, with indigenous vegetation restoration where compatible with protecting the rock art.

POLICIES

- 2.5.1 Improve the ecological resilience of the remnant indigenous vegetation areas on public conservation lands and waters, by:
 - a) seeking supportive management of adjoining areas to minimise adverse effects, including edge effects;
 - b) building relationships with adjoining landowners; and
 - c) encouragement of community care initiatives and actions.
- 2.5.2 Encourage landowners of non-protected indigenous vegetation to seek and implement practical and statutory protection measures.
- 2.5.3 Only introduce plants to the public conservation lands that are sourced from native species that naturally occur within each area, or native plants that occur in a similar environment (soils, climate, etc.) from within the relevant ecological district for the area.
- 2.5.4 Where practicable, manage the foothill forests' scenic reserves in an integrated manner with any adjoining conservation parks and areas.
- 2.5.5 Ensure that visitor facilities enhance, benefit and give enjoyment to visitors in a way that avoids or minimises adverse effects on the intrinsic values and impacts on ecosystems and species, and increases understanding of why the foothills' indigenous vegetation areas are important.
- 2.5.6 Ensure there are clear directional and locality name signs and, at a minimum, public foot access into the foothills' public conservation lands.
- 2.5.7 Should allow vehicles only on the roads purposely formed and maintained for vehicle use, and the vehicle access identified in Table 10 and in Policy 2.5.24.
- 2.5.8 Should allow horses and other pack-animals only as identified in Table 10.
- 2.5.9 Should allow aircraft access only within the public conservation lands in accordance with Map 4 and Policies 3.6.1–3.6.9 in Part Three.

- 2.5.10 May allow camping, including within vehicles, within the reserves and conservation areas, unless not permitted under bylaws or the Freedom Camping Act 2011 provisions.
- 2.5.11 May allow access for Ngāi Tahu customary use, in particular to extract wind-fall tōtara from public conservation lands.

Talbot Forest and Peel Forest Park scenic reserves

- 2.5.12 Progressively remove non-local indigenous and exotic plant species from Talbot Forest Scenic Reserve.
- 2.5.13 Investigate and develop, in consultation with Ngāi Tahu and the community and local agencies (including Timaru District Council), additional recreation opportunities in and adjacent to Talbot Forest Scenic Reserve, where consistent with the outcomes for this Place.
- 2.5.14 Work to develop interpretation and education resources that support the educational outreach role of the scenic reserves, with Ngāi Tahu and the community, including the Timaru District Council.
- 2.5.15 May provide authorisation for the existing Council reservoirs and piped water systems within Talbot Forest Scenic Reserve.
- 2.5.16 Ensure that visitor facilities within Peel Forest Park Scenic Reserve enhance the benefit, enjoyment and use of the reserve in a way that avoids or minimises adverse effects on the intrinsic values and on ecosystems and species, and increases understanding of why they are important.
- 2.5.17 Should not allow camping in Talbot Forest Scenic Reserve, or in Peel Forest Park Scenic Reserve other than within the campground, and ensure that the design and location of the Peel Forest Park campground facilities are consistent with the scenic reserve setting.
- 2.5.18 Reclassify conservation areas adjacent to Peel Forest Park Scenic Reserve and amalgamate them with the reserve.
- 2.5.19 Revoke the Talbot Forest Scenic Reserve Management Plan 1980.

Oxford Recreational Hunting Area

- 2.5.20 Manage as an area where recreational hunting is given priority for wild animal control.
- 2.5.21 Monitor the impact of the deer population on biodiversity values and adapt management in response to findings.
- 2.5.22 Commercial wild animal control operations should not be permitted within the recreational hunting area unless monitoring reveals unacceptable impacts on ecosystems or indigenous species.
- 2.5.23 Assess the Mount Oxford Recreational Hunting Area for its effectiveness and its role in providing for recreational hunting as part of a Canterbury-wide assessment, with the Game Animal Council and relevant stakeholders.

Blue Mountain Conservation Area

- 2.5.24 Should allow four-wheel drive vehicle access within the Blue Mountain Conservation Area only:
 - a) along the Four Peaks Range summit ridge four-wheel drive road;
 - b) with written approval, given in consultation with adjoining landowner(s); and

c) subject to conditions to avoid adverse effects on indigenous vegetation and to the four-wheel drive road.

Weka Pass and Raincliff historic reserves

- 2.5.25 Work with the Ngāi Tahu Rock Art Trust on the integrated management of rock art sites at Weka Pass and Raincliff historic reserves and other sites on and off public conservation lands.

Table 10: Vehicle, horse and pack-animal access within Foothills Place

PUBLIC CONSERVATION LAND AND WATER UNIT	MOUNTAIN BIKES	HORSE AND PACK-ANIMAL ACCESS
Hoods Bush Scenic Reserve	On existing tracks as signposted at site, but excluding Mount Richardson, Bypass and Grey River Nature Walk.	Nil
Coopers Creek Conservation Area		
Lords Bush Scenic Reserve		
Lottery Bush Scenic Reserve		
Mount Grey/Maukatere Conservation Area (subject to access through adjoining commercial forest)		Yes
Mount Thomas Forest Conservation Area, Richardson and Blowhard Tracks		As limited by topography and vegetation.
Oxford Forest Conservation Area		As limited by topography and vegetation.
Otarama Recreation Reserve		Nil
Puketeraki Forest Conservation Area		As limited by topography and vegetation.
Rockwood Conservation Area (East & West)		Nil
Seaward Forest Conservation Area		Via Seaward River only.
Terako Downs Scenic Reserve		Nil
The Den Retirement Conservation Area		As limited by topography and vegetation.
View Hill Scenic Reserve		Wharfedale Track
Hunter Hills Scenic Reserve		Nil
Blue Mountain, Four Peaks Range Tops, Chetwynd, Mount Dalgety, Hunter Hills, Kirkliston Range and Mount Studholme Conservation Areas	As limited by topography and vegetation.	As limited by topography and vegetation.
Studholme Bush Scenic Reserve	Proposed track.	Nil
All marginal strips		As limited by topography and vegetation, but avoiding wetlands.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Extension of Peel Forest Park Scenic Reserve.

Achieved by the end of Year 5 after CMS approval (2021)

- Assessment of the Oxford Recreational Hunting Area status for its effectiveness and need.
- Talbot Forest Scenic Reserve rehabilitation and protection in conjunction with the community.
- Establishment, with the community, of coastal walking and camping provisions within the Hurunui coastal reserves.

Achieved by the end of Year 10 after CMS approval (2026)

- Nil
-

2.6 Braided Rivers/Ki Uta Ki Tai Place

Braided rivers (see Map 5.6) are a defining feature of the Canterbury (Waitaha) landscape, which has the majority of New Zealand's braided rivers. They spill out of the Southern Alps/Kā Tiritiri o te Moana and outlying ranges to form mosaics of river channels meandering within their beds across the high-country basins, through spectacular gorges, and across the Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha). Internationally, they are rare river systems, found only in countries with young, eroding mountains.

Although containing limited public conservation lands and waters, Canterbury's braided rivers, including their gorges, are included as a 'Place' because of their importance in the landscape, the habitat they provide to many specialised and distinctive native plants and animals, their recreational values, and their focus for the Department's advocacy and community relationship work. The Place is closely linked to 2.2 Southern Conservation Parks Place, 2.3 Northern High-Country Place, 2.4 High-Country Basins Place and 2.9 Coastal Land and Marine/Ki Tai Place.

In Canterbury, rapid tectonic uplift along the Southern Alps/Kā Tiritiri o te Moana, together with easily-eroded greywacke rock and impressive rainfall, have created some of the best examples of gravel-based braided rivers in the world. Over tens of thousands of years these forces have worked in concert with glacial action to build the wide alluvial plains and to create beaches, spits and barriers and other shoreline features (see 2.9 Coastal Land and Marine/Ki Tai Place).

Braided rivers are recognised as supporting a diversity of plants and animals adapted to living in a highly dynamic environment including major floods and ephemeral water-channels. Seventeen priority ecosystem units (see Appendix 4) have been identified on public conservation lands and waters wholly or partly in this Place, along the Hurunui South Branch, Rakaia, Rangitata, Godley, Tasman and Ahuriri rivers, in the headwaters of the Waiau Toa/Clarence, Mathias, Ashburton/Hakatere and Ahuriri rivers, and at the river mouths of the Ashley/Rakahuri, Waimakariri and Opihi rivers.

Braided rivers and their gorges are home to many plants and animals found only in New Zealand, and some only in Canterbury, making these ecosystems internationally unique. Many of these are threatened or at-risk species.

Management of braided rivers since early 1900s has focused on energy production, water and gravel extraction, the confinement of rivers for flood protection, and waste disposal, all to the detriment of ecological sustainability. The Waitaki Power Scheme, the Rangitata Diversion Race and the Lake Coleridge Station have long provided regionally and nationally important hydroelectricity generation, and since the mid 1900s a series of irrigation schemes has been developed, all having varying degrees of ecological impact. Occasionally, braided river natural and ecological values have been upheld (e.g. through water conservation orders and reduced point-source waste discharges). In recent times there has been an upswing in public and agency support for a wider range of river values, for sustaining river ecosystems and indigenous species, and for recreation.

Within Canterbury's Outstanding Natural Features and Landscapes⁵¹ (see Appendix 9) braided rivers occur in all the high-country areas, with both the lower Waimakariri and Rakaia rivers occurring in the lowland areas.

Water plays a unique role in the traditional economy and culture of Ngāi Tahu and the braided rivers (awa) are integral to Ngāi Tahu identity within region, as expressed in the Ngāi Tahu Freshwater Policy 1999. All of the awa are significant for their values as ara tawhito and mahinga kai. They have collective and individual significance as whenua tūpuna. The particular significance of some of the rivers, where public conservation lands and waters are involved, is recognised by Deeds of Recognition for the Hakataramea, Hakatere (Ashburton), Hekeao (Hinds), Hurunui, Kowai, Rangitata, Tūtae Putaputa (Conway), Waiau Uwha and Waitaki rivers, and by nohoanga alongside rivers and lakes (see section 1.4). Ngāi Tahu tūpuna had considerable knowledge of whakapapa, ara tawhito and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the rivers, the relationship of people with the rivers and their dependence on them, and tikanga for the proper and sustainable utilisation of resources.

The rivers were an integral part of a network of trails used to ensure safe journeys and incorporated locations for activities including camping and gathering kai, as often expressed in ingoa tawhito (ancient names). Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga.

The Place name phrase, ki uta ki tai (from the mountains to the sea), expresses the Ngāi Tahu long-held integrated ecological approach to management.

Indigenous species

Many threatened and at-risk wading birds, terns and gulls (see Appendix 5) migrate inland to nest, feed and raise their young on the open gravel expanses and waterways of braided rivers, and their associated wetlands. The best known and most threatened are black-fronted tern/tarapirohe, black-billed gull/tarāpunga, kakī/black stilt and wrybill/ngutu pare. Different species have different habitat needs; for example, the wrybill/ngutu pare nests only on uniformly-sorted, bare, flat gravel, while other species rely on gravel bars, side channels and wetlands to feed and breed. Occasionally, Asian migrants such as the white-winged black tern are also seen.

Many native fish (see Appendix 5) live and breed in the braided river channels and spring-fed tributaries, and have a variety of habitat needs. Tuna/longfin eel migrate from far inland to the sea where they spawn. Other fish spawn in freshwater or riparian margins and larvae wash downstream to the sea before migrating back (e.g. whitebait/kōaro, banded kōkopu, and inanga), while lowland and upland longjaw galaxias spend their entire lives in

⁵¹ Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional and district policy statements and plans should be consulted for their consideration of this landscape review.)

freshwater. Species such as the bignose galaxias are now restricted to fragmented habitats of their former distribution due to land use change and competition by other species.

Braided riverbeds support a diverse but poorly known terrestrial invertebrate community. While several notable macro-invertebrates have been described and many others require further taxonomic work, there have been no large-scale surveys of braided river terrestrial invertebrate fauna. The threatened robust grasshopper was rediscovered in the early 1980s and is known from only a few sites in the upper Waitaki catchment. A short-horned grasshopper (*Brachaspis nivalis*) is endemic to the Mackenzie Basin and North Otago where it is found among lichen-encrusted cobbles and boulders on older terraces. A recent invertebrate survey in the Tasman River bed has confirmed a diversity of species, including many new or undescribed species.

Native plants, mosses and lichens form mosaics of communities on braided river floodplains. Pioneer species including lichens, mosses, cushion plants, willow herbs and native grasses form blankets of plant cover over time while tussocks and woody shrubs slowly establish and in turn become dominant plants. The whole process is dynamic, often disrupted by changing river channels and scouring floods.

A 2007 vegetation survey of upper Waitaki catchment braided rivers identified new populations of threatened plants and a complex vegetation pattern where climate, disturbance history and proximity to human activity all influence plant communities. Trends are for plant communities in the headwaters to be more natural with mostly indigenous plant cover and more frequent occurrence of threatened and/or at-risk plants. The lower reaches and margins tend to be dominated by exotic plants but also contain uncommon native species or ones not found in upper reaches (e.g. the Rakaia Island kākara forest and Ealing springs remnants).

Recreation

Recreational use of braided rivers, including their gorges, is widespread and varied, with strong features being the extensive and popular sports fisheries, jet boating, kayaking and rafting, and simple enjoyment through swimming and picnicking. The Department's role in this is primarily through its common interests with Canterbury's three fish and game councils, under the Conservation Act 1987, regarding freshwater fisheries and wildlife habitat and threats to those. River recreation groups are often strong advocates, alongside or separate from the Department, for the protection and good management of braided rivers.

In mainly upper catchment areas the Department has visitor facilities on public conservation lands adjoining rivers and enabling river-based recreation, such as vehicle access ways, bridges, huts/shelters and toilets (see 2.2 Southern Conservation Parks Place and 2.3 Northern High-Country Place).

Recreational activities in riverbeds, such as walking to fishing spots, can have negative impacts on fragile vegetation or disrupt nesting birds and other fauna. The increasing and indiscriminate use of four-wheel drive vehicles in riverbeds is of particular concern.

There is a low level of aircraft use on the public conservation lands along the braided rivers and their headwaters, mainly for the positioning of recreationalists. The mixed land tenure of many of the riverbeds means aircraft landings may occur at different levels than the Department provides for.

Management issues and opportunities

The braided rivers of Canterbury (Waitaha) and the indigenous species and sports fisheries they support are facing many impacts from development and public use activities. River management is complex, with multiple land tenures and agencies involved. Relatively few parts of rivers are protected.

The ecology of braided river ecosystems is not well understood. More baseline assessments are needed of braided river ecology and ecosystem function to assess protection requirements and address management issues. Also needed are improved models for flow requirements needed to maintain habitat for birds on all braided rivers.

The adverse effects of development are increasingly well recorded and researched, and include water abstraction de-watering braided river habitats, water control altering flood and seasonal flows and their seasonality, and river engineering works constraining the river. Dams and other structures can hinder fish migration and interrupt down-river and coastal sediment flows.

The combination of these effects can result in changes in riverbed morphology, plant pest spread into riverbeds, an overall reduction in the amount and quality of braided river habitat, and disrupted species life cycles. The effects extend from alpine wetlands to river-mouth ecosystems and to some marine fisheries.

Land use intensification and pastoral development have resulted in a massive loss of wetlands and drylands in Canterbury and displaced whole sections of alluvial riverbed succession sequences. Stock intensification has increased nutrient levels in waterways, which affects habitats. In addition, more people are using upper river headwaters areas, often for recreation, increasing vehicle and people impacts on braided rivers and their species.

Pest animals (see Appendix 5) are a threat for braided river fauna, eating invertebrates, lizards, nesting adult birds, eggs and chicks. For many species the level of sustained predation is affecting population viability as rates of adult mortality exceed replacement by juveniles.

Pest plants (see Appendix 5) pose another threat, increasing in flow-modified rivers and with more intense human activity along river margins. Gravel extraction from plant pest-infested sites or the use of vehicles within riverbeds increases the threat. Many problem pest plants are colonising species able to out-compete and displace native plants, causing stabilisation and increased channelisation of the riverbed; both effects reduce habitat for native animals adapted to open, sparsely vegetated riverbeds.

Other biosecurity threats such as from didymo (first found in Southland in 2004; now in many South Island rivers) also affect river ecosystems, species and recreation. Control is often difficult once established, so surveillance for early detection of new threats is desirable along with stopping any spread.

Many reaches of Canterbury's riverbeds are bordered by freehold lands subject to *ad medium filum aquae* (AMF) rights (i.e. potential title to the centre line of the river), and/or a 'movable freehold' water boundary at the river edge. A consequence being that under the Land Transfer Act 1952 landowners can claim 'accretion' to their land, which is then developed, with the loss of riverbed floodplain and the river's ability to maintain natural meander patterns. Under the Land Information New Zealand Guidelines for Accretion Claims (2007),⁵² the Department and councils have the ability to comment on accretion claim proposals.

⁵² Land Information New Zealand. 2007: Guidelines for accretion claims. Land Information New Zealand, Wellington.

Water storage development is sometimes seen as presenting biodiversity and recreation opportunities, but such opportunities may already be well-provided and could be at the cost of losing irreplaceable values and opportunities due to modification of peak flow regimes.

Statutory management and protection

Braided rivers and their riparian margins within public conservation lands and waters are largely limited to the upper reaches of the Tasman, Godley and Waimakariri rivers within Aoraki/Mount Cook and Arthur's Pass national parks, and lands adjoining the lower Waitaki and Rangitata rivers; only small parts of other reaches are similarly protected. Most upper reaches are Crown Land riverbed, and some river control reserves are administered by Environment Canterbury in mid to lower reaches. The remaining riverbeds are subject to AMF rights (see above). River-mouth areas are included within the coastal marine area (see 2.9 Coastal Land and Marine/Ki Tai Place).

The Rakaia (1988), Ahuriri (1990) and Rangitata (2006) rivers have water conservation orders in place which give some protection against the adverse impacts of damming and water abstraction. The status of protection this mechanism provides has changed with the enactment of the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010.

The Department manages Project River Recovery in the Mackenzie Basin, which aims to protect and enhance braided river ecosystems and their associated wetlands. Established under a compensatory funding agreement with Meridian Energy Ltd, it recognises the adverse biodiversity effects of hydroelectric power development. The agreement lasts for the term of the resource consents which expire in 2025. River Life, a teaching resource on braided rivers in the Mackenzie Basin, has been developed as part of Project River Recovery.

Braided rivers are addressed by a variety of agency and community processes, including:

- Fish and game council sports fish and game management plans, approved by the Minister of Conservation
- Community-based river care groups for several rivers (e.g. Ashley/Rakahuri River Care Group). These community groups and others have also formed a Canterbury-based group Braided River Aid (BRaid), which aims to protect, enhance and restore braided river ecosystems
- An upper Rangitata River valley group which works to keep the valley broom and lupin free (see 2.4 High-Country Basins Place)
- Local authority individual biodiversity strategies and implementation programmes, and a multi-agency Canterbury biodiversity strategy⁵³
- Environment Canterbury regional park strategies or plans for the Ashley River/Rakahuri⁵⁴ and Waimakariri River.⁵⁵

Where the Department is involved in managing pest plants and animals in riverbeds, it works cooperatively with Land Information New Zealand, which has responsibility for many riverbeds.

Driven by wide community concern about the declining quality of waterbodies and their ecosystems, and the availability of water for farming and other development, the Canterbury

⁵³ Environment Canterbury. 2008: A biodiversity strategy for the Canterbury Region. Environment Canterbury, Christchurch.

⁵⁴ Environment Canterbury. 2008: Ashley River/Rakahuri management strategy: a community vision. Environment Canterbury, Christchurch.

⁵⁵ Environment Canterbury. 2009: Waimakariri River regional park management plan. Environment Canterbury, Christchurch.

Water Management Strategy 2009 has a 10-year vision and sets goals to 2040 to sustainably manage water resources and deal with adverse effects resulting from water use. Given statutory effect through the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010, the ongoing programme may halt the decline in waterbody health, but to be successful will require both long-term community action and statutory provisions.

One focus of the strategy is the natural character, processes and ecological health of braided rivers. The strategy has initiated numerous biodiversity protection and restoration projects, including for lowland wetlands (see 2.9 Coastal Land and Marine/Ki Tai Place). The protection and restoration of the upper Rangitata and Rakaia braided rivers is a 'regional flagship' project under the Immediate Steps programme of the strategy.

In past years, proposals have been made for a World Heritage Area and a Wetland of International Importance status for Canterbury braided rivers. The major rivers or parts thereof almost certainly meet the standard for either status.

OUTCOME

Braided river ecosystems are valued and recognised as a defining and internationally significant feature of Canterbury (Waitaha).

Priority ecosystem units on all braided rivers are better understood and are recovering or are in a healthy functioning state as a result of integrated programmes that include intensive animal and plant pest management. Further extinctions of threatened species have not occurred and populations are improving where intensive management is occurring either on or off public conservation lands and waters. Elsewhere, threatened and at-risk species continue to face causes of decline. Community programmes working with priority ecosystem units or threatened and at-risk species are underway or developing.

Braided river ecosystems and their headwater catchments benefit from a high level of protection within public conservation lands and waters, and an increased diversity of braided river ecosystems is represented within public conservation lands and waters. The value of the natural water storage and moderation of riverflows provided by the existing and regenerating indigenous vegetation cover within headwater areas is recognised for its contribution to the regional and national economy.

Outside of public conservation lands and waters, braided river ecosystems are being sustainably managed to ensure they remain viable. Smaller, more highly modified rivers are managed to retain their residual ecosystem values and restore lost values where practicable. Riparian protection and indigenous riparian forest restoration have progressed, particularly where public conservation lands, council reserves, and Ngāi Tahu lands adjoin braided rivers crossing the Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha). Activities in braided riverbeds, including vehicle use, are managed to avoid adverse effects on ecosystems and species. These sustainability actions are being enabled by community action and Canterbury Water Management Strategy programmes.

Aircraft landings occur occasionally along some braided rivers and their headwaters. Aircraft landings are rare across the wider Place and do not adversely affect ecological or cultural values or the experience of visitors.

Research and monitoring of braided river ecosystems and species have increased the knowledge and understanding of these rivers, including of their collective value for migratory birds and fish.

At least three water conservation orders are retained on Canterbury braided rivers (including on the Rakaia, Ahuriri and Rangitata rivers) in recognition of their national significance. In addition, international recognition is gained through World Heritage Area and/or Wetland of International Importance status for at least one river that enjoys a high level of existing protection through land status and/or RMA provisions.

The riverbed of at least one river is protected from its source to the sea through a combination of public conservation lands and waters, council reserves, protected private land and coastal marine area status.

The Department and the hydroelectric power generation companies within the upper Waitaki catchment have successfully negotiated the continuation of Project River Recovery as a compensation agreement, through the resource consents 'renewal' process, to mitigate the ongoing adverse effects of the power scheme and to safeguard the progress of Project River Recovery since 1991, complemented by Canterbury Water Management Strategy programmes.

Intact freshwater fish habitats provide nationally and regionally important recreational fisheries, facilitated by access through public conservation and other lands.

POLICIES

- 2.6.1 Seek braided river ecosystem protection through:
 - a) maintaining Project River Recovery as set out in its strategic plan (currently 2005);
 - b) preserving of braided river ecosystems within national and conservation parks; and
 - c) implementing fish passage and other responsibilities under the Freshwater Fisheries Regulations 1983, in liaison with fish and game councils and Environment Canterbury.
- 2.6.2 Work with Ngāi Tahu, statutory agencies and the community to:
 - a) maintain sustainable populations of threatened and at-risk species;
 - b) encourage community involvement in braided river management, including keeping upper-catchments free of pest plants;
 - c) maintain surveillance for and stopping the spread of threats;
 - d) support Environment Canterbury's regional parks for the Waimakariri River and Ashley River/Rakahuri;
 - e) engage with Canterbury Water Management Strategy programmes where consistent with outcomes at place in this strategy;
 - f) assist and improve technical and interpretation advice on braided river habitats and species, and braided riverbed ownership; and
 - g) support the control of riverbed off-road vehicle activity, including through four-wheel drive driver education.
- 2.6.3 Prioritise statutory advocacy for:
 - a) the implementation of the New Zealand Coastal Policy Statement 2010, in particular the retention of riverflows that maintain natural river-mouth opening cycles and natural coastal processes;
 - b) the protection of priority ecosystem units and threatened and at-risk species, including through seeking improved modelling of riverflow requirements for native birds, fish and invertebrates;
 - c) district and regional plan provisions to address braided river ecosystem functioning and protection;

- d) the maintenance of fish passage for indigenous and sports fish, and avoiding their diversion into artificial water systems; and
 - e) maintaining the integrity of water conservation order provisions.
- 2.6.4 Engage with Meridian Energy and Genesis Energy, or their successors, prior to the 2025 date for upper Waitaki catchment hydroelectric power resource consents 'renewal', to ensure the continuation of a compensation agreement (currently called Project River Recovery) in response to the ongoing adverse effects of the power scheme and to maintain mitigation achievements since 1991.
- 2.6.5 Where Crown riverbeds extend into or are surrounded by public conservation lands, work with Land Information New Zealand to achieve integrated management across the combined lands, or the inclusion of the riverbeds within public conservation lands and waters. Also to seek recognition of the dynamic short- and long-term nature of braided river morphology, when considering accretion claims under the Land Transfer Act 1952.
- 2.6.6 Seek the protection of the Tasman riverbed within an extended Aoraki/Mount Cook National Park (see 2.1 National Parks Place).
- 2.6.7 Should not grant grazing authorisations for public conservation lands near rivers, or in riparian margins, where (see also Policy 3.15.1 in Part Three):
- the lands include priority ecosystem units;
 - the lands provide surrogate indigenous species habitat and habitat corridors, albeit with exotic vegetation, that provide potential future restoration possibilities;
 - the lands are buffer zones between river ecosystems and highly developed farmland;
 - grazing would impede public access;
 - grazing would be inconsistent with regional and district plans; or
 - grazing would be inconsistent with agreements with Environment Canterbury regarding the management of flood protection works.
- 2.6.8 Support international status recognition (either World Heritage Area or Wetland of International Importance) for at least one of the high-naturalness high-country braided rivers (e.g. Tasman, Godley, upper Rangitata rivers), and support recognition also for one complete river system, ki utu ki tai, potentially the Rangitata River if integrated with statutory river protection measures.
- 2.6.9 Should allow aircraft access only within the public conservation lands in accordance with Map 4 and Policies 3.6.1–3.6.9.
- 2.6.10 Work with landholders, the New Zealand Walking Access Commission, fish and game councils, and through tenure review processes to retain existing and achieve negotiated legal public access to rivers.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Assessment of the effectiveness of statutory advocacy and the implementation of the Canterbury Water Management Strategy on braided river conservation outcomes.

- Assessment of the extent and condition of public conservation lands near rivers or within riparian margins, including those grazed or formerly grazed under concession.

Achieved by the end of Year 5 after CMS approval (2021)

- Population trends known for threatened braided river species.
- Assessment of any change in effectiveness of statutory advocacy and the implementation of the Canterbury Water Management Strategy on braided river conservation outcomes.
- Improved management of public conservation lands near rivers or within riparian margins, and the improved conservation outcomes in former grazing concession areas.

Achieved by the end of Year 10 after CMS approval (2026)

- Population trends known for threatened braided river species.
 - Assessment of any change in effectiveness of statutory advocacy and the implementation of the Canterbury Water Management Strategy on braided river conservation outcomes.
 - An ongoing compensation agreement (currently Project River Recovery) successfully negotiated.
 - Improved management of public conservation lands near rivers or within riparian margins, and the improved conservation outcomes in former grazing concession areas.
 - World Heritage Area or Wetland of International Importance for at least one Canterbury braided river.
-

2.7 Christchurch City/Ōtautahi Place

Description

Two of the national conservation outcomes, as listed in 1.5 Canterbury (Waitaha) by 2026, are 'Recreation' and 'Community engagement'. This section (see Map 5.7) is about applying those outcomes to a city that has minimal public conservation lands and waters, but is the main population centre of and the stepping-off point for many visitors to South Island public conservation lands and waters. There are enormous opportunities to engage residents and visitors in activities that connect them to conservation and the natural, cultural and historic environments. With an international airport and busy harbour port, biosecurity and the international CITES⁵⁶ agreement are also important aspects of the Department's work to protect conservation values.

The Christchurch City rebuild following the devastating 2010 and 2011 earthquakes provides opportunities for conservation to be included into many aspects of the rebuild and residents' lives.

Ngāi Tahu is prominent in the city rebuild processes, highlighting the historical interconnected network of wetlands, streams and tributaries which were highly treasured for mahinga kai, serving the main areas of Ngāi Tahu settlement from Kaiapoi to Taumutu and

⁵⁶ CITES = Convention on International Trade in Endangered Species.

on Banks Peninsula, and highlighting the opportunities to protect and restore some of this network and to further promote conservation to the community.

The public conservation lands and waters in and near Christchurch include the Awaroa/Godley Head Historic Icon destination, the Port Hills walks, Otamahua/Quail Island and Christchurch to Little River Rail Trail Gateway destination sites, and the Motukarara Conservation Nursery.

Ōtukaikino, a wetland Gateway destination, sits at the northern motorway⁵⁷ entrance to Christchurch. A partnership between the Department, Lamb & Hayward Funeral Directors, Te Ngāi Tūāhuriri Rūnanga and the Christchurch City Council provides a prominent introduction to Christchurch and its wetland habitats.

The 2.8 Banks Peninsula/Te Pātaka o Rākaihautū Place, while almost entirely within the Christchurch City boundaries, is covered separately from Christchurch City/Ōtautahi Place, but is closely linked to it.

Christchurch (Ōtautahi) contributes directly to indigenous threatened and other species management with captive rearing and holding of birds, fish and reptiles by the Isaac Conservation and Wildlife Trust, Willowbank Wildlife Reserve and Orana Wildlife Park. It also honours indigenous species through events such as the seasonal welcome and farewell to bar-tailed godwits/kuaka, maintaining a predator-free Riccarton Bush (Pūtaringamotu) lowland forest remnant, and in small ways like the bronze-sculptured tuna/eels in the water-feature at the city council's civic office.

The Department's education programmes in Canterbury are expanding in accordance with the National Education Strategy 2010–2030 and through working cooperatively with other education providers. The Department is a founding partner of the Enviroschools Canterbury programme and oversees its implementation in partnership with Environment Canterbury and the Waimakariri, Selwyn, Christchurch and Timaru councils. Over 65 early childhood centres and primary and secondary schools are (as at 2012) involved in the programme, with 48 per cent of Enviroschools in the region being in the Christchurch area. Te Aho Tū Roa, the Māori strand of the Enviroschools programme developed to support Kura and bilingual schools, provides opportunity for the Department to work with the Enviroschools Foundation and Ngāi Tahu. Interest in a marae-based education programme working with Ngāi Tahu is also emerging. Education also forms part of the Department's involvement with community conservation trusts such as the Otamahua/Quail Island Ecological Restoration Trust (see 2.8 Banks Peninsula/Te Pātaka o Rākaihautū Place). Partnerships with other conservation education providers (e.g. Orana Wildlife Trust, LEOTC⁵⁸ programmes, and Te Ara Kākāriki⁵⁹) extend the Department's reach.

Christchurch secondary schools are active with lodges and outdoor programmes using public conservation lands and waters. Schools are keen to extend these programmes to include more conservation action and education.

Closer relationships and opportunities to collaborate with the tertiary sector continue to be explored. Beyond the school environment, the Department is keen to engage with youth in conservation management, including in decision-making, in part reflecting the Department's statutory function⁶⁰ 'To promote [conservation] to present and future generations...'

⁵⁷ In the future this will also be the confluence of the proposed Northern Arterial and Western Belfast Bypass.

⁵⁸ LEOTC: Learning Experience Outside The Classroom – a Ministry of Education curriculum support project.

⁵⁹ Te Ara Kākāriki / Greenway Canterbury Trust.

⁶⁰ Section 6(c) of the Conservation Act 1987.

Raising the profile of conservation is critical to success and the Department recognises that adults and children experiencing and learning together is a powerful mechanism for behaviour change. In Canterbury there is a desire to increase the number of the family-based programmes such as Kiwi Guardians. Providing positive experiences through school and family programmes ensures conservation has a strong place back in the city where these experiences can be carried back into their whānau/family and private lives.

The Department in Christchurch runs one of three national Gateway visitor centres, desirably re-established within the city's central business district.

Recent years have seen fluctuating trends in backcountry activities and levels of visitor use, and a stronger front-country use focus. Christchurch still has large numbers of people who use the backcountry and who contribute through volunteer effort and community groups. Christchurch is also 'base-camp' for many long-standing and newer backcountry recreation clubs.

Many heritage features in the city have been lost and indigenous biodiversity impacted along waterways and at the Estuary of the Heathcote and Avon Rivers/Ihutai. Volunteer effort was strong in responding to earthquake damage and is continuing with some conservation 'repair' programmes. There may also now be a wider interest in community projects such as Nature Play and Urban Living Wall, and the proposed city-to-the-sea Avon River Park.

The earthquakes have also revealed that environmental considerations were not sufficiently recognised in Christchurch's urban development and that there may be renewed interest in river and estuary margins, and ecological corridors along the rivers from headwaters to the sea.

Numerous post-earthquake conservation opportunities exist. There is heightened awareness of nature 'in the raw' with the need to respect lowland rivers and wetlands, the Port Hills, and coastal environments. Christchurch's concern for its water supply aquifers has seen careful management of the western city drylands above the aquifers. Together, these environments provide scope for indigenous ecosystem protection and recreational settings around and through the city. The rebuild also provides opportunities to collaborate more widely with all agencies, business and community entities to develop and expand conservation in the city.

The people of Christchurch value highly the Estuary of the Heathcote and Avon Rivers/Ihutai, and the estuary's recovery from earthquake siltation, upheavals and emergency wastewater discharges is being closely monitored. The suggestion for the estuary to be declared a Wetland of International Importance may arise again (see 2.9 Coastal Land and Marine/Ki Tai Place).

As the urban base for Te Rūnanga o Ngāi Tahu and several Papatipu Rūnanga, Environment Canterbury, tertiary institutions, Canterbury Museum, and many other organisations and businesses, as well as the city council, Christchurch (Ōtautahi) provides a common meeting ground. Many of these organisations have their own programmes around indigenous biodiversity and open space recreation and education and collaborate together.

Christchurch Botanic Gardens events, the city council's protection of whitebait spawning sites on the city's rivers, and learning about Antarctic exploration and research at Canterbury Museum and other city sites are all examples of activities that connect to the Department's work and to public conservation lands and waters near the city.

Christchurch International Airport is a national entry and exit point for raising the understanding of endangered species trade restrictions and, with the port of Lyttelton, for minimising biosecurity risks to indigenous species.

OUTCOME

Cooperation between Christchurch City Council, Ngāi Tahu, Environment Canterbury, the Department and the community is protecting and enhancing indigenous biodiversity within the urban and near-urban environment. Indigenous habitats are showcased at strategic entrances and other locations around and through the city.

Conservation education programmes on the values of indigenous habitats and species are a feature of Christchurch City (Ōtautahi). Ngāi Tahu marae are involved in the programmes, integrating them with environmental restoration and understanding Ngāi Tahu values. At sites such as the proposed Avon River Park, Ōtukaikino, Otamahua/Quail Island, Riccarton Bush (Pūtaringamotu), Motukarara Conservation Nursery, Canterbury Museum, Christchurch Botanic Gardens, Orana Wildlife Park and Te Ara Kākāriki sites, the Department contributes to and complements programmes offered by other organisations.

Historical education linkages are made between Otamahua/Quail Island and Canterbury Museum on Antarctic exploration and science, and between Awaroa/Godley Head, Ripapa Island, nearby pā and other sites on defensive sites and military history.

Practical, creative and community actions all variously recognise and assist indigenous habitats and species within the city. Through this recognition and in working collaboratively with others involved in the Christchurch rebuild and environs, the state of indigenous biodiversity improves within the city. Motukarara Conservation Nursery serves the city by providing habitat- and genetic-specific plants for restoration programmes.

Christchurch citizens and visitors value conservation as part of their lives and are regular volunteers to a variety of biodiversity enhancement and recreation programmes, both within the city and beyond. From their club and other 'base camps' within the city they are active in the protection, use and management of public conservation lands and waters and facilities, and are active in education and training of other users.

A South Island Visitor Centre Gateway destination in the Christchurch central business district provides information and advice to visitors about New Zealand's public conservation lands and waters, and on opportunities for volunteering.

New immigrants to Christchurch are introduced and welcomed to the New Zealand outdoor environment and the conservation values that New Zealanders hold for that environment, its ecosystems and indigenous species.

Christchurch-based schools and recreation clubs are supported in gaining conservation knowledge through educational and recreational use and benefit of their lodges and huts, located on and adjoining public conservation lands and waters.

At Christchurch International Airport, visitors receive a raised understanding about trade in endangered species, the importance of protecting New Zealand's wildlife and, including at the port of Lyttelton, minimising biosecurity risks to indigenous ecosystems and species.

POLICIES

- 2.7.1 Work with Ngāi Tahu, Christchurch City Council, Environment Canterbury and the community to showcase indigenous habitats typical of the Christchurch area, in prime entrance or other highly visible locations, continuing the example of Ōtukaikino and including the development of the Avon River Park.

- 2.7.2 Work with other Government agencies, Christchurch International Airport and Lyttelton Port Company on public awareness and enforcement of CITES and the Wildlife Act.
 - 2.7.3 Re-establish a Christchurch (Ōtautahi)/South Island Visitor Centre in the central business district.
 - 2.7.4 Seek cooperative opportunities and increased support for the implementation of the Enviroschools and other conservation education programmes.
 - 2.7.5 Seek opportunities to partner with businesses and others to increase conservation actions within the city.
-

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Measures to assess the number of youth, students and families connecting to nature through conservation experiences.
- Trialling and evaluation of innovative ways to connect urban audiences with conservation.

Achieved by the end of Year 5 after CMS approval (2021)

- An increase in the number of youth, students and families connecting to nature through conservation experiences.
- Christchurch (Ōtautahi)/South Island Visitor Centre re-opened within the Christchurch central business district.
- Initiation of an intern programme engaging youth with the Department and contributing to conservation decision-making.
- Recognition of the Department as an active partner, working with Ngāi Tahu, other agencies and the community in promoting conservation and the natural environment, within the Christchurch City (Ōtautahi) rebuild.

Achieved by the end of Year 10 after CMS approval (2026)

- A further increase in the number of youth, students and families connecting to nature through conservation experiences.
 - Recognition of the Department as an active partner, working with Ngāi Tahu, other agencies and the community in promoting conservation and the natural environment, within the Christchurch City (Ōtautahi) rebuild.
-

2.8 Banks Peninsula/Te Pātaka o Rākaihautū Place

Description

Banks Peninsula/Te Pātaka o Rākaihautū Place (see Map 5.8), comprising the Peninsula and the Christchurch Port Hills, is a dramatic and well-documented geomorphic, landscape, cultural and historic feature within Canterbury (Waitaha). It is a place where the future looks good for protecting and promoting its conservation values through strong community initiatives.

The Peninsula's volcanic origin geography (isolation from the inland hills, radiating hills and valleys, a varied coastline, volcanic soils) and weather patterns have led to significantly

different ecosystems, indigenous species and land use from the adjoining Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha), with greater retention of indigenous vegetation. Over 100 isolated, short, steep catchments have led to high diversity in native fish species, and the presence of endemic invertebrates.

The Banks distinct ecological region has three ecological districts and comprehensive ecological reports (e.g. Wilson 1992⁶¹). Christchurch City Council is working through an ecological survey with the community as part of the Banks Peninsula District Plan process and has its own biodiversity strategy.⁶²

The Department manages many, mostly small, parts of the Peninsula. Within these are seven priority ecosystem units (see Appendix 4) as well as numerous threatened and at-risk species (see Appendix 5), all mostly within the scenic reserves and Wairewa Conservation Area.

Peninsula-edge marine species include the New Zealand fur seal/kekeno, with around 20 breeding colonies (see also 2.9 Coastal Land and Marine/Ki Tai Place). Community initiatives are underway to boost and/or reintroduce once-abundant bird species, currently New Zealand pigeon/kererū, petrels/tītī, tūī, little penguin/kororā and weka.

The name Te Pātaka o Rākaihautū (the food storage house of Rākaihautū) is a testament to the traditional captain of Te Waka Uruao that brought the first peoples to occupy Te Waipounamu, and who created a more liveable landscape, including the lakes Te Waihora and Lake Forsyth (Wairewa).

Successions of Waitaha, Kāti Māmoe and Ngāi Tahu settled in the bays and on the headlands of the Peninsula. The mahinga kai of the Peninsula has been and continues to be highly valued by mana whenua and forms an important part of the identity of the Ngāi Tahu hapū that whakapapa to the area today. Numerous sites of pā, kāinga, mahinga kai, wāhi ingoa, wāhi taonga and wāhi tapu contribute to the whenua tūpuna, for example, Ōnawe Pā in Akaroa Harbour and Ōruaka Pā beside Lake Forsyth (Wairewa), both historic reserves vested in Ngāi Tahu. Ōnuku marae, at The Kaik on the shore of Akaroa Harbour, was one of the three South Island sites for the signing of the Treaty of Waitangi/Te Tiriti o Waitangi.

Today this history shows itself in the takiwā of six Rūnanga (Ngāti Wheke, Koukourārata, Wairewa, Ōnuku, Taumutu and Tūāhuriri), an abundance of cultural sites, and with the Department and others playing an active part in Peninsula conservation.

European settlement saw much of the Peninsula deforested but many of the current scenic reserves were protected by early preservation actions. Historic sites are plentiful, and on public conservation lands Awaroa/Godley Head with its World War II defensive sites is a Historic Icon destination. Other historic coastal defensive sites, from either or both Māori and post-European contact periods, include Ripapa Island, Ōruaka, Ōnawe, Mount Pleasant, Battery Point and Magazine Bay.

The entire Banks Peninsula and the upper parts of the Christchurch Port Hills have been identified as an Outstanding Natural Feature and Landscape, including for all the features mentioned above.⁶³

⁶¹ Wilson, H.D. c1992. Banks ecological region—Port Hills, Herbert and Akaroa ecological districts. Protected Natural Areas Programme Survey Report No 21. Department of Conservation, Canterbury.

⁶² Christchurch City Biodiversity Strategy 2008–2035 (June 2008).

⁶³ Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional policy statements and regional and district plans should be consulted for their consideration of this landscape review.)

While pastoral farming is still a dominant activity on the Peninsula, in recent years there has been considerable land use change towards combinations of 'lifestyle' blocks, holiday homes, forestry, indigenous vegetation restoration, and smaller-scale intensive agriculture.

As well as being home to its residents, the Peninsula is often regarded as an accessible recreation area at the 'backdoor' of Christchurch City. Visitor use of the Peninsula, however, needs to be viewed in the context of other recreational opportunities within the region reached in similar travel times from Christchurch. The Port Hills, Lyttelton Harbour/Whakaraupō and Akaroa Harbour basins, Little River and some eastern bays provide intensively used areas, but elsewhere quite remote settings can still be experienced.

In addition to the Awaroa/Godley Head Icon destination, the Port Hills Walks, Otamahua/Quail Island and the Christchurch to Little River Rail Trail are Gateway destinations. Awaroa/Godley Head and the Port Hills require careful management and safety awareness following the 2010–2011 Christchurch earthquakes. The Sign of the Packhorse Hut within the Scenic Reserve is popular as a family-friendly overnight summit-ridge destination at the junction of walking and cycling tracks. The privately operated Banks Peninsula Track, circling east from Akaroa, is nationally renowned.

Some horse trekking occurs, but the multiple land ownership can pose access problems at boundary and other fences.

Concessionaire activity currently involves guided walking, access to island wharves and guided tours of Ripapa Island (see below). Telecommunication facilities occupy some scenic reserve hilltops, often less discreet than is desirable or may be possible with modern technology.

The Department's emerging priorities for Banks Peninsula (Te Pātaka o Rākaihautū) in recent years have included:

- Protection and public use of the coastal environment through marine conservation (see 2.9 Coastal Land and Marine Place), coastal-edge conservation (working with the community on remnant petrel/tītī populations, expanding penguin populations, freshwater fishery management, New Zealand fur seals/kekeno, and threatened species protection), RMA actions (servicing the Minister of Conservation's role with the Regional Coastal Environment Plan for the Canterbury Region and advocacy in respect of coastal development), and maintaining an inshore boat capability for varied conservation purposes.
- Whole-peninsula threat management in conjunction with councils, the Banks Peninsula Conservation Trust and the wider community (e.g. for goats, possum, Darwin's barberry, fire).
- Islands management.
- Actions under RMA processes for recognition and protection of indigenous biodiversity on private lands.
- Working with Ngāi Tahu on the management of vested reserves (Ōnawe, Ōruaka), taonga species (e.g. kererū, tītī, tūi, weka), and Rūnanga projects (e.g. the Ōnuku stream).
- Indigenous biodiversity management in existing reserves and integration with other-agency and private reserves, threatened species habitat management (e.g. crested grebe/kāmana at Kaituna River), and the provision of technical expertise (e.g. for Nature Heritage Fund, Overseas Investment Commission, and community trusts).

- Prioritised reserve acquisition focusing on threatened ecosystems and habitats, alongside Christchurch City Council's 'Key Biodiversity Clusters' approach, and the Banks Peninsula Conservation Trust and Queen Elizabeth the Second National Trust covenants.
- Reduced involvement in public access issues off public conservation lands, but still working with Selwyn District and Christchurch City Councils, the Rod Donald Banks Peninsula Trust and the New Zealand Walking Access Commission to maintain and develop access linkages between public conservation lands, including a proposed 'Spine of the Lizard' network from Gebbies Pass to Hilltop to Bossu Road.

In meeting these priorities the Department's strengths have been in providing a national perspective, indigenous biodiversity technical and funding advice, and recreation information and interpretation advice.

Aircraft landings are precluded from most public conservation lands on the Peninsula, due to factors including easy road access, vegetation cover, ground-based public use, and vulnerable wildlife, but a low level of activity would not be incompatible with the purposes for which some areas are held.

The Wildside Project: south-eastern bays

A collaborative project is underway between community trusts, councils and the Department for the protection of the long-recognised special biodiversity of the south-eastern bays, from outer eastern Akaroa Harbour to Le Bons Bay.

This part of the Peninsula has a concentration of existing formally and informally protected areas. Catchment streams are often unmodified, with reasonably intact aquatic and terrestrial invertebrate populations and indigenous fisheries, and coastal cliff and islet refuges for plants and wildlife. New Zealand's largest mainland little penguin/kororā colony and the largest hoiho/yellow-eyed penguin colony north of Otago are both found here, as are extensive New Zealand fur seal/kekeno colonies, and the adjoining Pohatu and Akaroa marine reserves.

Animal and plant pest control programmes and good dog control are important in this area. Sheep grazing, by reducing rank grass cover, may assist in reducing mustelid predation of penguins.

In the Banks Peninsula context this area is notable for its remoteness, as recognised most recently in the Public Open Space Strategy 2010–2040.⁶⁴ An implication of this is that current access road standards will remain. Visitor access is primarily by walking or by watercraft, and by experienced road-user tourist operators, with a variety of landowner involvement. Pohatu Marine Reserve at Pōhatu/Flea Bay, for example, is not an easily-accessible reserve for educational or intense public use, and the road-end public use area and facilities require shared landowner, Council and Department management.

Lake Forsyth (Wairewa)

The bed and periodically inundated edge of Lake Forsyth (Wairewa) is mostly public conservation land (conservation unit 2797834), with a variety of adjoining land tenures including Māori land and the Ōruaka Historic Reserve. The lake, a naturally brackish coastal lagoon with periodic openings to sea, has since human settlement been progressively distanced from the sea by an accreting coastline. Two main catchments feed into the lake

⁶⁴ Christchurch City Council. 2010: Public open space strategy 2010–2040. Christchurch City Council, Christchurch.

and have migratory fish communities. European settlement in the catchment saw the removal of most indigenous vegetation and development of farmland, and a Little River township and transport linkages on the valley floodplain. The result has been increased sediment and nutrient inflow to a lake held at lower average lake levels, with higher salinity levels and increasing difficulties in opening the lake to sea. A consequence has been eutrophic lake waters and toxic algae blooms, at times killing birds, fish and livestock and strongly discouraging recreational use.

The Lake Forsyth (Wairewa) public conservation land has several threatened and at-risk indigenous plants within freshwater and brackish habitats. The lake is also a winter refuge for the threatened Australasian crested grebe/kāmana. Since 2006 the Christchurch to Little River Rail Trail has passed along the former railway embankment beside the lake.

The lake has an exclusive Ngāi Tahu tuna/eel fishery, excluded from commercial eeling. The Wairewa/Lake Forsyth Mātaitai includes the lake and the lower reaches of the Takiritawai River. Concerned at the declining lake fishery, Wairewa Rūnanga have a vision for a better-controlled lake-opening that reduces sea-water inflows and improves fish migration, with improved water quality and the possibility of freshwater fish farming and recreational facilities, and aspirations for lake-bed management. This vision has environmental and statutory challenges that are being researched and applied.

In recent years farming has reduced in the catchment, indigenous vegetation has increased, and there is movement towards improved nutrient control and reduced sedimentation. Along with improved lake and lake-opening management, a whole-catchment approach to the health of the lake ecosystem is needed.

Statutory management and protection

The Department manages over 65 scenic, historic, recreation and other reserves and conservation areas on Banks Peninsula, plus two adjoining marine reserves (see 2.9 Coastal Land and Marine Place). Most of these reserves are small, isolated, fragmented and most represent upper shady slope habitats.

Additionally, there are numerous ‘reserves’⁶⁵ managed by Ngāi Tahu or Christchurch City Council, as well as Hinewai Private Reserve (1230 ha), Orton Bradley Park (1600 ha), Mount Vernon Park (235 ha) and a Grehan valley reserve (190 ha), which are managed privately or by trust boards. Ongoing changes in farm management and subdivision to smaller mixed-use landholdings are seeing increased regeneration of indigenous vegetation, with or without protective land status.

The Queen Elizabeth the Second National Trust and the Banks Peninsula Conservation Trust are both covenanting authorities for the Peninsula, with over 100 covenants between them.

Christchurch City Council has secured an extensive reserve complex on the Port Hills, alongside community purchases such as the Mount Vernon Park. In 2006 Banks Peninsula District became part of Christchurch City and Council extended its reserves programme into the former district, for water catchment, biodiversity protection, historic and public use purposes.

The Peninsula is almost entirely ringed by mostly unformed legal road along the cliff tops and along mean high water mark in the bays, often with cliff slopes and rock platforms that remain unalienated Crown Land. These legal roads and Crown Land areas are often intensive biodiversity sites as indigenous plant, bird, reptile and invertebrate refuges and for

⁶⁵ Not all these are gazetted reserves under the Reserves Act 1977.

New Zealand fur seal/kekeno colonies. In areas like Awaroa/Godley Head, coastal walking tracks are located variously on the legal road and the landward public conservation lands.

Elsewhere on the Peninsula, public walking tracks, sometimes called walkways but seldom legalised as such, occupy unformed legal roads, private land and public conservation lands. Some of these tracks are also now used as mountain bike tracks. With the advent of the New Zealand Walking Access Commission, there is a need and an opportunity for agency and community coordination in the management of these tracks and unformed roads.

A Christchurch City Council controlled organisation, the Rod Donald Banks Peninsula Trust, has a mandate to further develop recreational walking, cycling and affordable camping, building on the network of existing Peninsula tracks and giving effect to Council's Public Open Space Strategy 2010–2040.

Dan Rogers reserve is a nature reserve by means only of a translation from an earlier Reserves Act status and may not warrant the permit-only public entry that is currently required. The entry restriction could be amended.

See also 2.9 Coastal Land and Marine/Ki Tai Place regarding the Peninsula-edge wetlands of the Opara Stream (Okains Bay (Ōkeina)) and Le Bons Stream estuaries, several open-coast islands managed by the Department, the Pohatu and Akaroa marine reserves, and marine mammal matters.

Te Ara Whānui o—the islands of Lyttelton Harbour/Whakaraupō and Port Levy (Potiriwi)/Koukourarata

Within Banks Peninsula's enclosed waters, these islands include Ripapa Island, Otamahua/Quail Island and King Billy Island (Aua) within Lyttelton Harbour/Whakaraupō, and Pukerauarauhe (Brownes) and Horomaka Islands within Port Levy (Potiriwi)/Koukourarata. All have international, national and/or Ngāi Tahu rohe importance for their historic and cultural values, and are of regional importance for their recreational, landscape and indigenous biodiversity values.

Ripapa Island

Ripapa Island (1.6 ha), occupied as a Ngāi Tahu defensive pā (circa 1820s), was used as a quarantine station from 1873–1885, then developed as a military fortress from 1885–1913 with use in the period from the perceived threat of a Russian invasion through to World War II. The island has Tōpuni status in recognition of its outstanding value to Ngāi Tahu.

The island retains its historic setting within a marine and rural farmland coastal environment in outer Lyttelton Harbour/Whakaraupō, despite adjoining land development pressures in recent years.

Public access is physically limited by the nature of the island and its fort walls, and primarily occurs through a concessionaire ferry and guiding service. There are no current legal access restrictions.

The island is a historic reserve, surrounded by an Area of Significant Natural Value identified within the Regional Coastal Environment Plan for the Canterbury Region 2005, the latter helping retain the island's ecological and historic setting.

Otamahua/Quail Island

Otamahua/Quail Island (81 ha) has a broad cultural history involving Ngāi Tahu food gathering, farming from 1851, ship ballast quarries, a quarantine station for animals and people (new immigrants from 1875 and during the 1917–1918 influenza epidemic), Antarctic

expeditions during 1901–1929, New Zealand’s only leprosy quarantine colony 1906–1925, and a ships’ graveyard on the adjoining seabed.

The island is a recreation reserve subject to the Quail Island Recreation Reserve Management Plan 1982 and a Gateway destination.

From the 1980s the island began to receive ecological restoration. In 1998 the Otamahua/Quail Island Ecological Restoration Trust was formed and an extensive restoration programme is underway in accordance with the Reserve Management Plan, a restoration plan, a management agreement with the Department, and in conjunction with Te Hapū o Ngāti Wheke.

The island is serviced by regular commuter ferry and concessionaire services, is a popular destination for watercraft visitors, and hosts mainly education group camping trips. The Restoration Trust involves many community volunteer visitors.

A variety of historic and more-recent buildings and structures are managed, as are recreation opportunities generally, by the Department. Management facilities, with the exception of a former boatshed, are grouped away from public use areas. Limited public overnight accommodation use of a historic cottage is a possibility. The sea wall and beach at Whakamaru/Swimmers Beach on the southern shore of the island is subject to wave erosion and, in time, the wall and adjoining structures will be further threatened by sea-level rise and tsunami.

The foreshore and seabed adjoining the south-western two-thirds of Otamahua/Quail Island and all of King Billy Island (Aua) are within an Area of Significant Natural Value identified within the Regional Coastal Environment Plan for the Canterbury Region 2005, which helps retain the islands’ ecological and historic settings.

King Billy Island (Aua)

King Billy Island (Aua) is a much smaller island (0.4 ha) but is significant to Ngāi Tahu and is important for nesting of black-backed gull/karoro and pied shag/kōau (both taonga species⁶⁶), and as a ‘predator trap’ stepping-stone island between Otamahua/Quail Island and the mainland at Moepuku Point.

The island is a scenic reserve. Visitors are occasional, using small watercraft, or by low-tide walking.

Horomaka and Pukerauaruhe (Brownes) Islands

Horomaka Island is small (1.5 ha), with rock bluffs, shrub and grassland cover and a former Ngāi Tahu occupation site. Pukerauaruhe (Brownes) Island is a smaller island (0.3 ha) of rock bluffs and grassland, and again is significant to Ngāi Tahu because of its former occupation. European historic names and occupation sites also exist. Some public use via watercraft occurs and both islands are scenic features within Port Levy (Potiriwi)/Koukourarata. Some indigenous vegetation planting has occurred on the islands and Te Rūnanga o Koukourarata is keen to see this continued. Scouts New Zealand has a 1916-built hut of historic interest on Horomaka Island but its future needs resolving.

Both islands are recreation reserves. Given that Ngāi Tahu values for the islands rate alongside their recreation values, and the vegetation restoration aims, it is appropriate to consider placing the islands’ management with Rūnanga and the community, while still allowing for public access.

⁶⁶ Refer Appendix 13.

OUTCOME

Banks Peninsula (Te Pātaka o Rākaihautū)

The natural values of the Peninsula remain prominent as an Outstanding Natural Feature and Landscape, particularly in the coastal environment and on the ridgelines. The community is active in indigenous biodiversity protection and is encouraging and achieving whole-catchment management and protection through integrated reserves, covenants and sustainable land management. The representation, size and connectivity of protected areas are improving towards that required to sustain the full range of Peninsula indigenous species.

Priority ecosystem units are better understood and are recovering or in a healthy functioning state, with threatened species also recovering, as a result of integrated programmes that include plant and animal pest control, and predator-proof fencing where necessary.

Little penguin/kororā populations are recovering at managed sites, and guided visitor viewing opportunities of the penguins occur where it is compatible with penguin population recovery.

Ground-nesting birds, reptiles and New Zealand fur seals/kekeno are surviving well in their interactions with people and domestic animals, despite pest animals.

The Wildside Project: south-eastern bays area in particular has seen the coordinated protection of a summit-crest to marine ecological sequence, within a recreation setting emphasising walking access.

The Banks Peninsula scenic reserves remain natural and unmodified when viewed from afar and from within.

The historic coastal defensive sites of Banks Peninsula retain their historic values and are well interpreted to visitors by the Department, Ngāi Tahu, community groups and concessionaires, in an integrated manner.

Awaroa/Godley Head, in part a Historic Icon site, is being carefully managed by the Department and Christchurch City Council from its post-2010–2011 earthquakes state towards an open-space and historic site recreation facility integrated with adjoining beach and sea opportunities.

Significant conservation gains are being made by the Department working with the five Rūnanga with takiwā on the Peninsula, with frequent interactions and joint projects, and clear recognition of Ngāi Tahu values.

Coastal recreation is increasing in ways that enhance public understanding and appreciation of coastal ecosystems and species and their vulnerabilities within Canterbury (Waitaha), and that avoid adverse effects on those ecosystems and species.

Public conservation areas on Banks Peninsula, in conjunction with a multitude of publicly accessible protected areas and legal roads, are fostered as an extensive network of recreational opportunities primarily for walking, cycling and passive recreation. Walking and cycling tracks climb to and link the summit-crest reserves, with basic backcountry accommodation options within some reserves. Guided opportunities are encouraged, along with the ongoing Banks Peninsula Track showcasing conservation values, and may involve discreetly located accommodation lodges outside of reserves. Occasional sporting events occur in this Banks Peninsula (Te Pātaka o Rākaihautū) Place on the mainland and Otamahua/Quail Island.

Visitor encounters with aircraft landing on public conservation lands are rare.

Lake Forsyth (Wairewa) (see also 2.9 Coastal Land and Marine/Ki Tai Place)

A community approach to whole-catchment waterways and nutrient run-off, and a lake-opening system and lake-bed management that may better provide for the natural and Ngāi Tahu mahinga kai values for the lake, is improving the lake ecosystem. Threatened and at-risk species are protected from developments adverse to them. Public vehicle access is maintained across the lake-opening canal.

Te Ara Whānui o

This diverse group of islands, all managed for multiple use,⁶⁷ are protected for their collective scenic, historic, archaeological, biological, geological, other scientific features, indigenous flora or fauna or wildlife, and recreational values.

Both Canterbury people and other visitors can have island experiences involving outdoor recreation and education within a diverse marine and land environment, and in which historic and cultural sites of importance internationally, nationally and to Ngāi Tahu, are interpreted. Concessionaires are adding value to the visitor experiences of the islands.

Ngāi Tahu Rūnanga are actively involved in management and are proud to mihi to these well-managed islands. Community groups, working for conservation, also feature strongly in management of the islands, working both for the public of today and on long-term habitat restoration and historic resource protection for future generations.

Ripapa Island

As a historic reserve with overlying Tōpuni status, surrounded by an open-space marine and farmland landscape, this island showcases its European military defensive fort and re-affirms its earlier life as a Ngāi Tahu pā. The historic structures and access wharf are actively conserved. Public visits are primarily guided by concessionaires, with priority wharf access and involvement in the island's management.

Otamahua/Quail Island

As a Gateway destination and recreation reserve, Otamahua/Quail Island provides an easily-accessible island for outdoor recreation, using concessionaire and ferry services and private watercraft.

On the island, walking-only access links scenic views and historic sites, within the setting of an island ecosystem restoration project, and avoids vulnerable wildlife habitats. Visitor use, including by education groups and concessionaires, is encouraged for recreation and to contribute to the island's ecological restoration project.

Historic buildings are conserved at their current locations. The historic barracks and cottage provide island interpretation, and the Department's facilities enable visitors to enjoy the island as a day-visitor destination, along with camping managed at one site and the historic cottage potentially providing limited accommodation for overnight visitors. Basic shore facilities for watercraft users are provided where they are compatible with overall island management.

Recreation facilities and historic sites are managed by the Department, and the Otamahua/Quail Island Ecological Restoration Trust manages the ecological restoration project, both with the involvement of Te Hapū o Ngāti Wheke.

⁶⁷ Refer Appendix 3 and The Islands Strategy (2010).

A combination of restored indigenous forest and shrubland, exotic woodland, and grassland provides habitats for bird, reptile and invertebrate species that have colonised or been reintroduced to the island. Biosecurity risks are being managed.

The island is a highly regarded example of a community-driven conservation project, widely supported and used by the people of Canterbury and elsewhere. The restored ecosystems of Otamahua/Quail Island are a nucleus for sustaining diverse birdlife around the Lyttelton Harbour/Whakaraupō basin.

Fire prevention and control for the protection of island ecosystems may at times affect the extent and type of visitor and management access on the island.

Exotic tree management distinguishes between self-sown and/or isolated trees to be removed and, as part of the historic landscape, trees to be retained or replaced with like species.

Management buildings, including accommodation for intermittent management workers, are in an unobtrusive, grouped locality. These, and the public buildings, also support scientific research, education and volunteer activities.

Adjoining marine areas, including the historic ships' graveyard, are protected for their natural and historic values, including providing a high quality marine setting and recreation area around the island. Rising sea levels and tsunami risks are factored into island management.

King Billy Island (Aua)

This small scenic reserve island is valued for its seabird roosting and nesting habitat, within and under both exotic and indigenous trees. Visitor use is low and avoids the nesting season, but the island provides a point of interest for visitors using small watercraft. The island has an intermediate pest control role for the nearby Otamahua/Quail Island. Customary use activities occur for the nearby Te Hapū o Ngāti Wheke marae.

Horomaka and Pukerauaruhe (Brownes) Islands

These islands, as historic reserves, are managed by Te Rūnanga o Koukourārata and the local community, supported by the Department, with an islands ecosystem restoration programme and compatible visitor use.

POLICIES

Banks Peninsula (Te Pātaka o Rākaihautū)

- 2.8.1 Work collaboratively with Papatipu Rūnanga, Christchurch City Council, Banks Peninsula Conservation Trust and other community groups on indigenous biodiversity projects.
- 2.8.2 Work with Christchurch City Council, Land Information New Zealand, adjoining landowners and others to achieve indigenous biodiversity protection on the coastal-edge unformed legal roads and unalienated Crown Land areas.
- 2.8.3 Should avoid the establishment of new structures on skylines within the Banks Peninsula scenic reserves, and effort should be made to minimise the impact of any existing telecommunication structures as concessions expire.
- 2.8.4 Work with Ngāi Tahu and others to achieve an integrated story based around the Māori and post-European contact defensive sites of Ripapa Island, Ōnawe, Ōruaka, Awaroa/Godley Head, Mount Pleasant, Battery Point and Magazine Bay, with adjoining sites at Te Waihora and Pā Island (Te Puke ki Waitaha).

- 2.8.5 Prepare an Awaroa/Godley Head historic site conservation plan and, consistent with this plan, seek concessionaire and/or voluntary group partnerships for public use of buildings within the historic site.
- 2.8.6 Seek that vulnerable wildlife (particularly ground-nesting birds and New Zealand fur seals/kekeno) are able to carry out their natural behaviours without human or domestic animal disturbance.
- 2.8.7 Achieve, with and in support of Christchurch City Council, New Zealand Walking Access Commission, Rod Donald Banks Peninsula Trust, landowners and community groups, the integrated provision of walking and mountain-bike tracks, both on and off and between public conservation lands, including opportunities for additional summit-ridge hut backcountry accommodation.
- 2.8.8 Seek a multi-agency and landowner approval process for guided recreation of walking and mountain-biking opportunities on the Peninsula.
- 2.8.9 Seek that access without a permit is enabled to Dan Rogers Nature Reserve in accordance with section 57(2) of the Reserves Act 1977.
- 2.8.10 Should allow aircraft access within the public conservation lands only in accordance with Map 4 and Policies 3.6.1–3.6.9.
- 2.8.11 Should allow vehicles only on the roads purposely formed and maintained for vehicle use, and the vehicle access identified in Table 11.
- 2.8.12 May allow horses within conservation area status lands where, in conjunction with adjoining landowners, practical solutions can be found for passing through boundary and stock-control fences.
- 2.8.13 Prioritise statutory advocacy for the implementation of the New Zealand Coastal Policy Statement 2010 and the protection of priority ecosystem units and threatened and at-risk species.

Pōhatu/Flea Bay

- 2.8.14 Work with landowners adjoining and within the catchment of Pohatu Marine Reserve to protect penguin colonies and avoid adverse effects on the marine and terrestrial reserves.
- 2.8.15 May allow low-intensity sheep grazing of the Pohatu Wildlife Refuge where, by reducing rank grass cover, it is effective in reducing mustelid predation of penguins.
- 2.8.16 Work with landowners and Christchurch City Council at Pōhatu/Flea Bay to retain access to and around the Pohatu Marine Reserve within a secluded rural setting, but avoiding unauthorised use of private land and disturbance of wildlife.

Lake Forsyth (Wairewa)

- 2.8.17 Work with Wairewa Rūnanga, and Christchurch City Council, Environment Canterbury, Banks Peninsula Conservation Trust and the wider community on whole-catchment sustainable management, including protection of threatened and at-risk species and mahinga kai.

Te Ara Whānui o

All the islands

- 2.8.18 Should not allow vehicles on the islands other than for management purposes.
- 2.8.19 Advocate through RMA coastal and navigation safety bylaws processes to protect the coastal environment's natural values and settings, for the islands and their adjacent mainland, and to have compatible foreshore and seabed and water-surface activity.
- 2.8.20 Encourage concessionaire activity, consistent with the outcomes at Place for the islands.
- 2.8.21 Seek statutory control of commercial and public watercraft use of the Department's Ripapa and Otamahua/Quail Islands wharves.

Ripapa Island

- 2.8.22 Actively involve Ngāi Tahu in management decisions for the island.
- 2.8.23 Manage the historic structures/buildings in accordance with a historic site conservation plan.
- 2.8.24 Encourage public access primarily under the control and guidance of concessionaires, including wharf use priority and respect for Ngāi Tahu associations with the island.
- 2.8.25 Should not allow camping or provide accommodation facilities on Ripapa Island.

Otamahua/Quail and King Billy (Aua) Islands

- 2.8.26 Manage historic structures and buildings, and replica historic buildings, and their use, in accordance with historic site conservation plans and an integrated Otamahua/Quail Island historic sites plan.
- 2.8.27 Manage the ecological restoration project by the Otamahua/Quail Island Ecological Restoration Trust in accordance with the Otamahua/Quail Island Restoration Plan 2015, with that plan reviewed and re-approved by the Department by 2025. The restoration plan should continue to cover King Billy Island (Aua).
- 2.8.28 Camping may occur adjoining Whakamaru/Swimmers Beach on Otamahua/Quail Island, managed to minimise conflict with day-visitor use, but should not occur on King Billy Island (Aua).
- 2.8.29 Should apply the following criteria if adapting part of the historic cottage to provide for overnight public accommodation:
 - a) consistency with a historic conservation plan for the cottage, on the same footprint of the cottage;
 - b) retention of the current front room for education and interpretation purposes;
 - c) a maximum accommodation capacity of nine persons; and
 - d) operation by the Department through a public booking system.
- 2.8.30 Should, in addition to current historic and replica historic buildings, site buildings for management purposes only within the reserve. Management purposes buildings should be sited only within a management area that includes the existing staff quarters, waste-water disposal field, workshops, and their intervening and directly adjoining areas. Consideration should be given to removing the 1970s boatshed from the Whakamaru/Swimmers Beach area, or relocating and adapting it for use within the 'Management Area'.

- 2.8.31 Management of coastal-edge structures and buildings should take into account rising sea levels, the retention of a beach at Whakamaru/Swimmers Beach, and the avoidance, removal or relocation of structures adjoining Whakamaru/Swimmers Beach that interrupt natural coastal processes.
- 2.8.32 Should revoke the Quail Island Recreation Reserve Management Plan 1982.

Horomaka and Pukerauaruhe (Brownes) Islands

- 2.8.33 Work with Te Rūnanga o Koukourārata and the Port Levy (Potiriwi)/Koukourarata community on indigenous vegetation restoration, historic site protection and public recreational use of the islands.
- 2.8.34 Reclassify Horomaka and Pukerauaruhe (Brownes) Islands as historic reserves and place their management with Te Rūnanga o Koukourārata and the Port Levy (Potiriwi)/Koukourarata community.

Table 11: Vehicle access within Banks Peninsula/Te Pātaka o Rākaihautū Place

CONSERVATION UNIT	VEHICLE ACCESS
Awaroa/Godley Head, reserves along the summit ridge from the Purau Port Levy Road to Mount Fitzgerald Scenic Reserve/Hilltop, Akaroa Head Scenic Reserve	Mountain bikes: existing signposted tracks.
Te Waihora Joint Management Plan Area	Mountain bikes and electric power-assisted pedal cycles: Motukarara to the Christchurch to Little River Rail Trail.
Awaroa/Godley Head WWII defensive sites area	All vehicles: roads, for utility operators and Boulder Bay bach owners.
Okains Bay Conservation Area	Mountain bikes: proposed estuary-edge track.
Lake Forsyth (Wairewa) Conservation Area	All vehicles to, from and including a bridge over the lake-opening canal.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Ecological restoration of Otamahua/Quail Island in accordance with stages identified in the Restoration Plan 2015.

Achieved by the end of Year 5 after CMS approval (2021)

- Ripapa Island historic sites stable and not deteriorating.
- Integrated community and agency implementation of summit-ridge tracks and accommodation.
- Removal of the Dan Rogers Nature Reserve's public access permit requirement.
- A statutory control mechanism for commercial and public watercraft use of island wharves.
- Further ecological restoration of Otamahua/Quail Island in accordance with stages identified in the Restoration Plan 2015.

Achieved by the end of Year 10 after CMS approval (2026)

- Review and re-approval of the Otamahua/Quail Island Restoration Plan.
- Reclassification of Horomaka and Pukerauaruhe (Brownes) Islands reserves.

2.9 Coastal Land and Marine/Ki Tai Place

Description

The Coastal Land and Marine/Ki Tai Place (see Map 5.9) includes Canterbury's marine habitats (sub-tidal, intertidal, estuarine, lagoon and coastal flat), the coastal spits and barriers, and open-coast islands. It extends seaward to the 12 nautical mile (22.32 km) limit and for marine mammals to the 200 nm (370.4 km) Exclusive Economic Zone limit. As happens in the natural environment, there is some overlap with the 2.6 Braided Rivers/Ki Uta Ki Tai and 2.8 Banks Peninsula/Te Pātaka o Rākaihautū places.

Ngāi Tahu values for this coastal place are extensive, reflecting traditional stories, coastal travel routes, tauranga waka, settlements, mahinga kai places and food, and wāhi tapu. The naming of various features reflects the succession of explorers and iwi who travelled the coastline. The whole of the coastal area offered a bounty of mahinga kai, including sea and freshwater fish, marine mammals, birds and their eggs, and plant resources.

Marine ecosystems

Canterbury's marine environment includes parts of the East Coast South Island Coastal and Southern South Island marine biogeographic regions.⁶⁸

The coast is characterised by long, uninterrupted mixed sand and gravel beaches to the south of Banks Peninsula, the extensive sandy beaches of Pegasus Bay, and composite sand and gravel beaches of North Canterbury. Extensive rocky reefs occur around Banks Peninsula, Timaru and along the North Canterbury coast. The composition of flora and fauna is influenced by the Southland Current and is typical of southern New Zealand waters, with an offshore transition zone created by the Southland Front (the convergence of subantarctic and subtropical surface waters).

Banks Peninsula is a special feature of the Canterbury (Waitaha) coastal environment, with its spectacular rock stacks, harbours and small bays (see 2.8 Banks Peninsula/Te Pātaka o Rākaihautū Place). Canterbury has few islands but they and the Peninsula are important breeding grounds for penguins and other seabirds, and New Zealand fur seals/kekeno.

Recent years have seen increased interest in off-shore marine farms and mineral (including oil and gas) exploration, both requiring careful assessment for potential adverse marine ecosystem effects. Shipwrecks and other oil spill risks are an ongoing risk for which there are multi-agency contingency plans.

Marine species

Twenty-six marine mammal species have been recorded from Canterbury. Hector's dolphins/tūpoupou and New Zealand fur seals/kekeno have resident populations, whereas others such as southern right whales, humpback whales and orca transit through the region. Leopard seals and elephant seals haul-out seasonally along the coast.

Other protected marine species present include leatherback turtles, most seabirds, white pointer (great white) sharks/mangō taniwha, basking sharks/mangō reremai and spotted-black grouper. The many seabirds include little penguin/kororā (also known as little blue, blue or white-flipped penguin); spotted shag/pārekareka; white-fronted tern/tara; hoiho/yellow-eyed penguin; red-billed gulls/akiaki; black shag/kōau; fairy prion/tītī wainui;

⁶⁸ Ministry of Fisheries and Department of Conservation. 2008: Marine protected areas: classification, protection standard and implementation guidelines. Ministry of Fisheries and Department of Conservation, Wellington.

white-faced storm petrel/tītī; banded dotterel/pohowera; variable oystercatcher/tōrea; pied oystercatcher/tōrea; and Caspian tern/tara.

Threatened fish species occurring regularly in Canterbury's marine area include white pointer (great white) sharks/mangō taniwha and basking sharks/mangō reremai. White pointer sharks/mangō taniwha migrating from aggregation sites in southern New Zealand to tropical regions pass through the region but it is not known if any areas in Canterbury support semi-resident populations of this species. Inshore and offshore waters were formerly a national hotspot for basking sharks/mangō reremai with large seasonal aggregations regularly observed in Pegasus Bay and off Te Waihora. Sightings of basking sharks/mangō reremai have become rare in the region's coastal waters and elsewhere since the late 1990s.

Almost the entire marine area within this Place is habitat for the threatened species basking sharks/mangō reremai and Hector's dolphins.

Marine mammal strandings and deaths occur in Canterbury every year, the most common species including Hector's dolphin, Gray's beaked whale, and New Zealand fur seal/kekeno.

New Zealand fur seal/kekeno distribution and breeding colonies are rapidly increasing around Banks Peninsula and along the North Canterbury coast; a recent census recording at least 10,000 seals. As seal numbers increase, the interactions with humans also increase. This provides opportunities for education about marine mammals, but also poses some risks with the seals' territorial behaviour, and some human and farm livestock health risks.

Open-coast islands and islets

Canterbury's open-coast islands are few but significant as mostly pest-free ecological refuges for indigenous coastal species largely lost from the mainland.

Of about 140 marine islands in Canterbury most are no more than wave-washed rocks, only seven retain topsoil and vegetation, and while few have New Zealand Geographic Board names, most have local and/or Māori names.

Five of the eight largest marine islands are in enclosed waters covered by the 2.5 Banks Peninsula/Te Pātaka o Rākaihautū Place. The three remaining are the open-coast islands of Shag Rock (0.5 ha), Motunau Island (3.8 ha) and Pā Island (Te Puke ki Waitaha) (0.7 ha).

Motunau Island is a threatened species site supporting significant populations of little penguin/kororā, white-faced storm petrel/tītī, other seabirds and lizards. The island is free of mammalian pests. Management is primarily pest surveillance and plant pest control. The island has been identified as an Outstanding Natural Feature and Landscape.⁶⁹

Access to Motunau Island is difficult and entry to it, as a nature reserve including the foreshore, requires a permit. People movement on the island is difficult without disturbing birdlife and nesting burrows. The Motunau Island Nature Reserve Management Plan 1980 does not allow for non-management visits to the island. It is intended that this plan's provisions be covered by this CMS from now on.

The numerous small islets around Banks Peninsula are home for the last Canterbury population of the Nationally Endangered Cook's scurvy grass, and coastal birds such as fairy prion/tītī wainui, white-fronted terns/tara and penguins. Reptiles are present, including a threatened skink species. Several islets have not been surveyed. For many of these islets, in particular those burrowed by seabirds, visitors arriving by any means are a potential threat to wildlife.

⁶⁹ Environment Canterbury. 2010: Canterbury regional landscape study review. Environment Canterbury, Christchurch. (Regional and district policy statements and plans should be consulted for their consideration of this landscape review.)

Both Motunau Island Nature Reserve and Pā Island/Te Puke ki Waitaha Historic Reserve are islands managed by the Department. The legal status of islets is uncertain, but may be Māori customary land.

Coastal wetlands, spits and barriers

Canterbury's combination of rivers, eroding river fans and along-shore sediment drift have formed a series of estuaries, lagoons and other wetlands, with gravel and sand spits or barriers separating them from the ocean. While not unique to Canterbury, they are defining features and are some of the best examples globally.

The wetlands vary in extent and type (including estuarine, brackish or freshwater) from the largest—the lagoon Te Waihora—to the smaller lagoons of Wainono, Washdyke (Waitarakao), Coopers Lagoon/Muriwai and Lake Forsyth (Wairewa); the river-mouth lagoons/hāpua of the large braided rivers; the river-mouth estuaries of the Opihi River/Orakipaoa Creek and Ashley River/Rakahuri/Saltwater Creek; the 'true' estuaries of the Heathcote and Avon Rivers/Ihutai, Opara Stream (Okains Bay (Ōkeina)) and Le Bons Stream; and the many small and often temporary lagoons wherever smaller rivers such as the Pareora and Otaio rivers reach the coastline. Often associated with these open-waterbodies are swamp and bog wetlands.

Highly unusual and globally rare along the mid-Canterbury coastal cliffs (particularly between the Hinds (Hekeao) and Rakaia rivers) are small, relict gully features called dongas, which often have lagoons and wetlands at their mouths.

Six priority ecosystem units cover most of the public conservation lands and waters within the Coastal Land and Marine/Ki Tai Place, reflecting the paucity of public conservation lands and waters in lowland areas. Numerous threatened and at-risk species (see Appendix 5) are present.

Te Waihora, Kaitorete Spit and Wainono Lagoon have been identified as Outstanding Natural Features and Landscapes,⁷⁰ along with the Waimakariri and Rakaia rivers, including their river mouths (see 2.6 Braided Rivers/Ki Uta Ki Tai Place).

The spits and barriers vary in extent and type, reflecting or determining their associated wetlands, and the species found on them. The largest, Kaitorete Spit, has indigenous biodiversity protection programmes, but the largely pīngao-covered dunes have an inadequate land status as marginal strip. Natural river-mouth openings and cycles through these barriers are an important part of the river-mouth lagoon ecology.

Being at the bottom end of developed-land catchments, the wetlands suffer from sedimentation and nutrient enrichment, reduced surface- and ground-water inflows, often reduced natural connection between freshwater and marine, and transferred water flows between waterways.

Collectively the coastal wetlands and spits/barriers contain some of the most threatened environments in Canterbury, including last remnants of coastal and lowland indigenous habitats and species. These remnants may be a last chance to protect and partially restore some threatened environments. The wetlands also provide an ecological corridor for the passage of wildlife (birds, migratory freshwater fish, invertebrates) and plants along the coastline and/or to and from the sea.

The New Zealand Government is a signatory to the Convention on the Conservation of Migratory Species of Wild Animals (1999), which promotes conserving endangered

⁷⁰ Ibid.

migratory species and their habitats, and preventing other migratory species from becoming endangered. Canterbury's coastal wetlands provide habitat for international and national migratory birds, including the Nationally Vulnerable wrybill/ngutu pare and banded dotterel/pohowera).

Te Waihora and southern coastal lagoons are home to a small population of the protected mute swan.

Māori land occurs at Waihao River/Wainono Lagoon; Opihi River/Orakipaoa Creek; Coopers Lagoon/Muriwai; Te Waihora; and Ashley/Rakahuri/Saltwater Creek; and there are Ngāi Tahu coastal provisions under the Ngāi Tahu Claims Settlement Act 1998 at Waihao/Wainono; Opihi/Orakipaoa; Rakaia; Te Waihora; Lake Forsyth (Wairewa); Okains Bay (Ōkeina); Ashley/Rakahuri/Saltwater; and Waipara.

Te Waihora has a largely Ngāi Tahu controlled tuna/eel fishery. Lake Forsyth (Wairewa) has an exclusive Ngāi Tahu tuna/eel fishery and, along with the Waihao River/Wainono Lagoon and Washdyke (Waitarakao) Lagoon catchments, and parts of Te Waihora, are excluded from commercial tuna/eel fishing. Flounder, inanga (whitebait) and mullet are also valued customary fisheries in these coastal environments.

Māori archaeological sites are prolific on Kaitorete Spit and elsewhere, with Ngāi Tahu involved in their management on public conservation lands. Historic sites and values include the Wainono Lagoon meeting place of Edward Shortland and Bishop Selwyn (1844), Waihao Box and the former coastal shipping settlement at North Canterbury's Saltwater Creek.

Common features of virtually all the wetland and spit/barrier features are their multiple land tenures and ownership, and multiple agency and landowner control, often confused by historic river diversions and river 'protection' works that have cut across land titles.

These features are further complicated by the dynamic coastline, eroding along much of the South Canterbury coast, accreting in other parts (e.g. eastern Kaitorete Spit and some Banks Peninsula bays), and in others (e.g. the Southshore spit) a cyclic accretion/erosion process. Sea level is rising and Government climate change advice predicts a 0.5 to 0.8 m rise this century. This rise may lead to further coastal erosion, the inland migration of spits/barriers and wetlands, and an altered frequency of barrier breaches.

Recreational use of the wetlands and spits/barriers is considerable and varied, often with access by watercraft and off-road vehicles. Aircraft access is mainly for management purposes. Illegal off-road vehicle use is damaging ecological and historic values within coastal dunes on Kaitorete Spit and the Pegasus Bay coastline. The whitebaiting season can impose considerable people-pressure and conflict in some river-mouth locations.

For parts of the coastline from the Waitaki to Taumutu, the land management response to coastal erosion has been the 'managed retreat' of protective stopbanks and drains, with the loss of pasture land seaward of the stopbanks, and an ongoing process of small, ribbon wetlands being created and destroyed. The larger lagoons like Wainono, Washdyke (Waitarakao) and Coopers Lagoon/Muriwai have progressively been reduced as their barriers retreat while land drainage and stopbanking have been used to resist movement of the lagoons inland.

In 2012 Wainono Lagoon became a 'flagship project' under the Canterbury Water Management Strategy, with initial funding and community commitment towards protection and restoration of the lagoon and its tributaries. The Canterbury CMS (2000) sought wildlife management reserve status for this lagoon but as at 2016 this has not been achieved.

The degree of statutory protection to these wetlands, spits and barriers, either by protective land status or through RMA controls or Canterbury Water Management Strategy actions, is mixed, but some of the larger areas are within public conservation lands and waters. Areas within the coastal marine area have some degree of protection, as foreshore and seabed, through the Regional Coastal Environment Plan for the Canterbury Region 2005—see ‘Coastal statutory management and protection’, below. Many areas, however, particularly the smaller ones, have little or no protection, or protection is limited to that given by landowners, or they have an uncertain land status.

Environment Canterbury has an Ashley River/Rakahuri management strategy⁷¹ that covers some of the coastal wetlands. A non-statutory North Pegasus Bay Coastal Management Plan 2008 by councils, the Department and the community provides guidance to protect and enhance the coastal environment, including recreation and vehicle use controls.⁷²

Coastal statutory management and protection

Marine protected areas

The Department seeks to protect marine biodiversity in various ways, including a national network of marine protected areas representative of New Zealand’s marine ecosystems and habitats. This network may use protective measures ranging from marine reserves to trawling restrictions. The Department has mapped Canterbury’s marine habitats according to a habitat classification scheme.

In 2014 a South-East Marine Protection Planning Forum/Roopu Manaaki ki te Toka was established, to report by 2016 to the Ministers of Conservation and Primary Industries, for an area that includes the Canterbury coastline south of the port of Timaru.

Canterbury does have some existing and potential marine protection through the following provisions, including two marine reserves.

Pohatu Marine Reserve

Pohatu Marine Reserve, created in 1999, is representative of the habitat and community types of the Banks Peninsula south-eastern bays.

The reserve includes Pōhatu/Flea Bay and Island Nook and extends from mean high water springs out 500 metres to sea. At 215 hectares it is New Zealand’s smallest marine reserve. It surrounds but does not include two islets.

South-eastern Banks Peninsula⁷³, encompassing Pōhatu/Flea Bay, is an area of dramatic coastal features (cliffs, rock stacks, caves, rock platforms) and close access to the deeper off-shore waters and their more-abundant marine life. This accessible marine life supports the area’s little penguin/kororā and hoiho/yellow-eyed penguin populations, residual fairy prion/titī wainui colonies, New Zealand fur seal/kekeno colonies, basking sharks/mangō reremai, white pointer sharks/mangō taniwha and Hector’s dolphins.

Compliance, enforcement, and gathering baseline data on the reserve’s marine life are complicated by its isolation, the very low water clarity common to much of Canterbury, and by the changeable sea conditions. These factors result in longer monitoring timescales than for other marine reserves.

⁷¹ Environment Canterbury. 2008: Ashley River/Rakahuri management strategy: a community vision. Environment Canterbury, Christchurch.

⁷² Northern Pegasus Bay Bylaw(s) 2015. Waimakariri District Council, Rangiora, and Hurunui District Council, Amberley.

⁷³ Refer also the Wildside Project in 2.8 Banks Peninsula/Te Pātaka o Rākahautū Place.

Together with the adjoining terrestrial reserves and carefully managed farmland, the marine reserve and off-shore marine area is part of a significant land summit to marine ecological sequence of varying degrees of protection.

The reserve may be accessed by boat from the open sea (weather and sea conditions permitting) with Akaroa and Wainui, about 15 km away, being closest for launching and mooring; by boat from land, primarily either public or the Pōhatu/Flea Bay-based concessionaire sea kayakers; by road of about 9 km from Akaroa and in part recommended for four-wheel drive vehicles only; or by walking the Banks Peninsula Track.

Pōhatu/Flea Bay is in the outer reaches of the permit area for marine mammal interactions for Akaroa boats, and is not often visited. The bay provides one of the few relatively sheltered yacht anchorages for south-eastern Banks Peninsula but is used infrequently.

Access by all means is influenced by weather, sea and road conditions. The highest proportion of visitors to the reserve is drawn by the Banks Peninsula Track and the Pōhatu/Flea Bay sea kayaking concessionaire.

Pohatu Marine Reserve is currently identified as an education field trip site. Though used by local schools, its remoteness, low water clarity and variable sea conditions do not make it ideal as an education site.

Marine reserves nationally are priority marine areas for avoiding exotic species introduction. The proximity to Akaroa and Lyttelton/Whakaraupō Harbours and to boat passage between them does expose the reserve to invasive species, such as *Undaria*, currently present and spreading in both Lyttelton/Whakaraupō and Akaroa Harbours.

A 12 March 1999 'Agreement' between all parties involved in the establishment of the reserve records that 'The reserve will not allow any marine life to be taken for consumption purposes and no fishing regulations will be advanced.'

The Regional Coastal Environment Plan for the Canterbury Region 2005 has an Area of Significant Natural Value (Redcliffe Nook to Damons Bay) that overlaps the marine reserve area but does not extend as far seaward. This status has more-restrictive rules for resource consents. The plan records the marine reserve as something to have regard to.

Akaroa Marine Reserve

Akaroa Marine Reserve, created in 2014, is representative of the habitat and community types of the exposed Banks Peninsula coastal environment. Other key features of the reserve include underwater topography consisting of cliffs and bluffs falling vertically to the seabed and colonised by a rich diversity of plant and animal communities, spectacular underwater scenery, providing some continuum of land-sea protection in areas adjacent to reserves, and scientifically interesting reefs and species communities around Gateway Point and Haylocks Bay.

The reserve sits at the eastern side of the entrance to Akaroa Harbour and extends between 532 and 1897 metres seaward of mean high water springs. At 512 hectares it is a small- to medium-sized marine reserve. It surrounds but does not include an islet, The Long Boat, and adjoins the Dan Rogers Nature Reserve and the Akaroa Head and Palm Gully scenic reserves. Underwater caves into the adjoining lands are not part of the marine reserve.

Outer Akaroa Harbour is an area of dramatic coastal features (cliffs, rock stacks, caves, rock platforms) and close access to both deeper off-shore and shallower up-harbour waters and their varied marine life. Various high-order predators frequent these waters including little penguin/kororā, shag species, New Zealand fur seal/kekeno, white pointer shark/mangō taniwha and Hector's dolphin/tūpoupou.

Some baseline data exists on the reserve's marine life, but the very low water clarity common to much of Canterbury and the area's changeable sea conditions will make ongoing surveying and monitoring challenging. Furthermore, biological recovery rates are expected to be slow due to the area's low levels of natural productivity. Monitoring timescales are therefore expected to extend over decades.

Together with the adjoining terrestrial reserves, Crown Land cliffs and managed farmland, the marine reserve and off-shore marine area are part of a significant cliff top to marine ecological sequence of varying degrees of protection.

The reserve is predominantly only accessible by and from boats (weather and sea conditions permitting); the adjoining shores being cliffs and wave-cut rock platforms. Akaroa and Wainui, about 7 km away, are closest for boat launching and mooring. There is limited land access from Akaroa Head Scenic Reserve via Haylocks Bay.

The reserve is within the permit area for marine mammal interactions for Akaroa boats, and is often visited by commercial operators and public boats.

Marine reserves nationally are priority marine areas for avoiding exotic species introduction. The location within Akaroa Harbour and boat passage between Akaroa and Lyttelton/Whakaraupō Harbours does expose the reserve to invasive species, such as *Undaria*, currently present and spreading in both harbours.

The Regional Coastal Environment Plan for the Canterbury Region 2005 has an Area of Significant Natural Value (Nikau Palm Gully to Akaroa Head) that largely overlaps the marine reserve. This status has more-restrictive rules for resource consents.

Marine Mammals Protection Act 1978 and Banks Peninsula Marine Mammal Sanctuary 1988

All marine mammals are fully protected in New Zealand waters under the Marine Mammals Protection Act 1978, which the Department administers. Commercial activities to view or come into contact with marine mammals require a permit.

The Banks Peninsula Marine Mammal Sanctuary, providing protection measures for Hector's dolphins/tūpoupou, extends from the Rakaia River mouth, around Banks Peninsula to north of the Ashley River/Rakahuri mouth, and out to the 12 nm territorial sea limit. Research has shown the sanctuary is effective, but the Hector's dolphin population growth may still be insufficient to adequately protect the population.

Akaroa Harbour is the marine mammal interaction 'hub' for Canterbury, based around a resident Hector's dolphin population and increasing numbers of New Zealand fur seals/kekeno and more recently, whales. Recent research findings suggest that current levels of visitor interactions with Hector's dolphins are in excess of what the dolphin population can tolerate but further research is needed to confirm this.

A moratorium on new permits, under the Marine Mammals Protection Regulations 1992, was used while awaiting the above research findings, but expired in 2012. Preventing non-permitted commercial activity is an issue while a moratorium is in place. It is likely that a maximum amount of visitor viewing or contact with Hector's dolphins, and hence commercial operations, will need to be specified.

Kaikōura (Te Tai o Marokura) Marine Management Act 2014 and the Te Rohe o Te Whānau Puha/Kaikōura Whale Sanctuary

Te Rohe o Te Whānau Puha/Kaikōura Whale Sanctuary, a whale sanctuary to protect whales and their habitat from the potential risks of seismic survey activities, and which benefits the tourism industry, extends in Canterbury (Waitaha) to the Jed River mouth and seaward approximately 50 km. It has an inner sanctuary area, with gazetted seismic survey restrictions, that extends to about the Medina River mouth and seaward approximately 40 km.

Taiāpure and mātaimai

While in themselves taiāpure and mātaimai are not marine protected areas, their management provisions may qualify as providing marine protection.

Ngāi Tahu Rūnanga and community action has resulted in the Akaroa Harbour Taiāpure (under the Fisheries Act 1996), enabling the local community to be involved in the management of the harbour fisheries through a fishery management committee and recreational fishing regulations.

Ngāi Tahu Rūnanga have also obtained mātaimai reserves (under the Fisheries Act 1996) which allow them to further recognise and provide for customary food gathering and the special relationship of Ngāi Tahu with areas at Rāpaki Bay, Port Levy (Potiriwi)/Koukourarata, Lake Forsyth (Wairewa) and the adjoining coastline (Te Kaio) to Robin Hood Bay, and Waihao (including Wainono Lagoon). Proposals are under consideration for Washdyke Lagoon (Waitarakao), lower Orari and Opihi rivers and coastal lagoons and catchment.

Ngāi Tahu seeks to resolve the complex land ownership of the Opihi River/Orakipaoa Creek coastal lagoon and has aspirations for river and lagoon-bed and riparian land management in conjunction with the proposed mātaimai.

Wildlife Act 1953

Most indigenous bird and some fish species are protected, including from disturbance of birds' nests, under the Wildlife Act 1953. Protected fish found in Canterbury are whale shark, basking shark/mangō reremai, white pointer shark/mangō taniwha and spotted black grouper. Whale sharks and spotted-black grouper are tropical-warm temperate species and only occur as vagrants.

Resource Management Act 1991 (RMA) and related coastal management provisions

The New Zealand Coastal Policy Statement 2010 sets objectives and policies to achieve the purposes of the RMA in relation to the coastal environment.

The Regional Coastal Environment Plan for the Canterbury Region 2005 lists 30 Areas of Significant Natural Value and has a variety of other provisions to preserve or protect coastal natural character, historic and Ngāi Tahu cultural values.⁷⁴

The Areas of Significant Natural Value cover many of the wetlands and parts of the spits and barriers where they lie within the coastal marine area, but as the coastal marine area inland boundary for these areas is often hard to define, achieving cross-boundary management consistency between district plans and the regional plan has been difficult.

⁷⁴ These include 99 Areas of High Natural, Physical, Heritage or Cultural Value, 21 Areas of Value to Tangata Whenua or having Particular Tangata Whenua Values, and 18 Areas [bays] of Banks Peninsula to be maintained in their present natural state, free of additional structures.

Flowing from RMA requirements, most councils now have an indigenous biodiversity strategy, and in addition to statutory plan requirements are recognising the complexity of coastal margin area management by working with local communities to support local ownership of their area issues and collectively achieve solutions. Examples of this include the Waihao-Wainono Water Users Group, Avon Heathcote Estuary/Ihutai Trust, councils' Waimakariri River Regional Park and North Pegasus Bay Coastal Management Plan processes, the Ashburton Rivermouth/Hakatere Hut Settlement Group, and the Waihora Ellesmere Trust, in addition to the emerging zone committees under the Canterbury Water Management Strategy.

Te Waihora Water Conservation Order and Joint Management Plan

The Te Waihora lagoon and wetland system has its own water conservation order, and is largely covered by a conservation management plan. The National Water Conservation (Te Waihora/Lake Ellesmere) Order 1990 was amended in 2011 to better provide for Ngāi Tahu values and indigenous fisheries. The Te Waihora Joint Management Plan 2005, jointly prepared by the Department and Ngāi Tahu as required by the Ngāi Tahu Claims Settlement Act 1998, covers the public conservation lands and waters and Ngāi Tahu freehold at Te Waihora, and in respect of the Department's responsibilities is a conservation management plan under the Conservation Act 1987.

The trophic state of Te Waihora has long been criticised and concern expressed at the impact of catchment land-use intensification. In 2011 long-term and multi-million dollar programmes were initiated by Government, councils, Ngāi Tahu, the dairy farming industry and community groups. Linked to the Canterbury Water Management Strategy, the programmes aim to restore and rejuvenate the mauri and ecosystem health of Te Waihora by funding clean-up work and riparian planting, initiating changes to farm practices in the lagoon's catchment, and establishing relationship agreements to keep the work programme on track. A plan for this work (Whakaora Te Waihora) has been prepared by Ngāi Tahu and Environment Canterbury. The Department has a role in these programmes where public conservation lands and waters are involved, in accordance with the Te Waihora Joint Management Plan.

Wetlands of International Importance

Two sites, Te Waihora and the Estuary of the Heathcote and Avon Rivers/Ihutai, have been suggested and would meet the criteria for Wetlands of International Importance under the international Ramsar Convention on Wetlands (1971). The Te Waihora Joint Management Plan 2005 seeks clear action on improved management before a Wetlands of International Importance status nomination review in 2015. While a community trust may nominate the Estuary of the Heathcote and Avon Rivers/Ihutai, this may depend on recovery of the estuary from the effects of the 2010–2011 earthquakes.

OUTCOME

Marine ecosystems and species

The identification and establishment of a comprehensive and representative marine protected area network within Canterbury (Waitaha) has been initiated for ecosystems, habitats and species requiring protection.

The Hector's dolphin/tūpoupou population is rebuilding, assisted by protection measures within the Banks Peninsula Marine Mammal Sanctuary and research-based controls and education on

viewing or contacting marine mammals. New Zealand fur seals/kekeno are doing well in their interactions with people and domestic animals.

Commercial operator numbers viewing and interacting with Hector's dolphins, whales and other marine mammals are limited to what is tolerable for the mammals. Permit holders operate mostly from Akaroa Harbour and from Kaikōura just north of Canterbury (Waitaha), and provide high-quality interpretive and educational information to their clients.

Off-shore mineral exploration and other developments avoid adverse effects on marine ecosystems, and on marine mammals and their passage along the coast, particularly within the Te Rohe o Te Whānau Puha/Kaikōura Whale Sanctuary.

Open-coast islands

The integrity of open-coast islands as refuges for indigenous ecosystems and species, and for their Ngāi Tahu cultural values, is maintained and enhanced in partnership with Ngāi Tahu.

Motunau Island Nature Reserve is an undisturbed and largely pest-free ecosystem recovery island and threatened species site, primarily for little penguin/kororā, white-faced storm petrel/tītī, other seabirds and lizards. Human visitors, including to the foreshore, are for management, research and filming fostering an appreciation of the island's reserve values. An Area of Significant Natural Value assists in buffering the reserve from activities adverse to the reserve's values.

Coastal wetlands, spits and barriers

The complex of wetlands, large and small, along the Canterbury coastline is protected and sustainably managed and provides an ecological and migratory wildlife corridor and a pathway between freshwater and the marine environments. Sea-level rise effects have been planned for on public conservation lands and, for other lands, the community is planning for coastal ecosystem retreat.

Priority ecosystem units are recovering or are in a healthy functioning state, as a result of integrated programmes that include intensive plant and animal pest management. Further extinctions of threatened species have not occurred and populations are improving where intensive management is occurring either on or off public conservation lands and waters. Elsewhere, threatened and at-risk species continue to face causes of decline. Community programmes working with priority ecosystem units or threatened and at-risk species are underway or developing.

All public conservation lands and waters within the Coastal Land and Marine/Ki Tai Place are being protected, restored and often managed in conjunction with adjoining lands as the last remnants of the indigenous lowland coastal ecosystems of Canterbury. At Opihi River/Orakipaoa Creek these actions complement the proposed mātaimai.

Māori archaeological sites, in particular those on public conservation lands on Kaitorete Spit, are monitored and managed in conjunction with Ngāi Tahu, including site investigations in response to coastal erosion.

Public conservation lands in their entirety on and adjoining the Kaitorete Spit dunes have their landscape, indigenous biodiversity and historic values recognised by scientific reserve status. With councils, Ngāi Tahu and other landowners, the whole Spit is managed in conjunction with Te Waihora as an Outstanding Natural Feature and Landscape. University of Canterbury operates an atmospheric research station on public conservation land while minimising adverse effects on indigenous biodiversity and historic values.

Coastal recreational use is increasing in ways that enhance public understanding and appreciation of coastal ecosystems and species and their vulnerabilities within the region, and

avoids adverse effects on those ecosystems and species. Any vehicle use avoids wildlife disturbance, vulnerable ecosystems, historic sites and visitor conflict.

Visitor encounters with aircraft are rare.

The complex cultural and conservation values, and land ownership and administration, of Canterbury's coastal wetlands and their spits and barriers are better managed due to the cooperative working style of all interested parties.

At Te Waihora, Ngāi Tahu cultural identity is restored through the rejuvenation of the mauri and life-supporting capacity of Te Waihora; the Joint Management Plan Area is managed in an integrated manner for 'mahinga kai, conservation and other purposes', in a way that enhances the enjoyment of the wetland for all New Zealanders; and management of the Joint Management Plan Area provides an example that can be encouraged for the management of the entire lake margin and the adjoining inflowing tributaries and their wetlands.

The international significance for wetland species, including migratory species, of both Te Waihora and the Estuary of the Heathcote and Avon Rivers/Ihutai is recognised.

Pohatu and Akaroa marine reserves

Pohatu and Akaroa marine reserves sustain diverse and recovering populations of indigenous flora and fauna.

Scientific study demonstrates the positive effects of a protected marine environment and allows comparison with adjoining marine environments being managed under other statutory provisions. Scientific study is encouraged at all levels (school educational to national science institutes) but due to challenging sea conditions and the natural low productivity of the area, study and monitoring timeframes are expected to be longer term.

For Pohatu Marine Reserve, due to access difficulties, school educational and other visits are at low levels. At Akaroa Marine Reserve, school educational and other visits are at moderate levels, primarily boat-based and often via concessionaire operations.

Management of the reserves is not allowing any marine life to be taken or its natural habitat disturbed. Reserve boundaries are marked where practicable, clearly signed at nearby boat launching sites and advised on internet sites.

At Pohatu Marine Reserve visitor use, consistent with marine reserve status, is in keeping with the remote setting of Pōhatu/Flea Bay. Visitors are mostly Banks Peninsula Track walkers and sea kayaking concessionaire clients, with lesser numbers of independent or commercial boat visitors, and leave the marine reserve with an enhanced appreciation of the value of long-term protection of the marine environment.

At Akaroa Marine Reserve, visitors are both domestic and international and leave the marine reserve with an enhanced appreciation of the value of long-term protection of the marine environment.

At Pōhatu/Flea Bay, the Department and landowners are active in the use and management of land within the catchment, to reduce land-based effects on the marine reserve. Biosecurity measures are established where practicable and maintained to prevent the establishment of viable populations of marine pests within the marine reserve. Boats occasionally anchor within the reserve but this is a low-impact activity.

Collection permits are for research purposes only for increased knowledge of the marine reserves.

The Department, Ngāi Tahu and the community are actively involved in the management of the Pohatu and/or Akaroa marine reserves.

POLICIES

Marine ecosystems and species

- 2.9.1 Engage in collaborative processes to build a nationally representative network of marine protected areas, taking into account the marine habitats and ecosystems listed in Appendix 8, and the outcomes of Marine Protected Areas Forums as they may affect Canterbury.
- 2.9.2 Support research and monitoring of the impacts of human interactions with marine mammals.
- 2.9.3 Take a precautionary approach to the number of commercial operators involved in marine mammal operations in the area, including seeking a moratorium on the issuing of new permits if research and monitoring indicate that this is required.
- 2.9.4 Issue permits, applying a precautionary approach, for viewing or interacting with Hector's dolphin within Akaroa Harbour until, at least, research is completed to confirm an acceptable level of permit activity.
- 2.9.5 Should limit permits within Canterbury to the Akaroa Harbour only, for swimming with Hector's dolphins, unless research supports a wider permit area.
- 2.9.6 Provide information on means and opportunities to view marine mammals without disrupting the animals' natural behaviour.
- 2.9.7 Require commercial operators viewing marine mammals to provide a high standard of education and interpretation to their clients.
- 2.9.8 Seek that vulnerable wildlife (particularly ground-nesting birds) and New Zealand fur seals/kekeno are able to carry out their natural behaviours without human or domestic animal disturbance.

Open-coast islands

- 2.9.9 Clarify the open-coast islands' ownership and administration where it is 'Uncertain' (see Appendix 3).
- 2.9.10 Should issue concessions for the purposes of research and filming on Motunau Island only where this fosters an appreciation of the island's reserve values, and to require that such visitors be accompanied by Department staff when this is necessary to ensure that the island's nature reserve values are protected.
- 2.9.11 Should not allow aircraft landings and take-offs on the public conservation lands islands, other than where consistent with Policy 2.9.10, and seek no aircraft landings and take-offs on other islands where there are vulnerable wildlife and their habitats.
- 2.9.12 Revoke the Motunau Island Nature Reserve Management Plan 1980.

Coastal wetlands, spits and barriers

- 2.9.13 Work with Ngāi Tahu, Land Information New Zealand, district and regional councils, and the community to research, recognise and where possible resolve the management of the complex land ownership of the coastal wetlands, spits and barriers, and to assess and protect their indigenous biodiversity and sports fish and game bird values.
- 2.9.14 Work with others to undertake integrated catchment management around estuaries, and coastal lagoons and lakes, to restore intertidal ecosystems and habitats, to reduce

the impact of habitat fragmentation, and to protect indigenous species including migratory species and their migratory flyways.

- 2.9.15 Work with Ngāi Tahu, Environment Canterbury, Fonterra, Fish and Game, Waihora Ellesmere Trust, Lincoln and Canterbury Universities, and others to restore and rejuvenate the mauri and ecosystem health of Te Waihora.
- 2.9.16 With Ngāi Tahu, manage the Te Waihora Joint Management Plan Area in accordance with its conservation management plan.
- 2.9.17 Support the seeking of Wetlands of International Importance status under the Ramsar Convention on Wetlands for Te Waihora (in accordance with the Te Waihora Joint Management Plan) and for the Estuary of the Heathcote and Avon Rivers/Ihutai.
- 2.9.18 Monitor and report on meeting the Government's obligations under the Convention on the Conservation of Migratory Species of Wild Animals (1999), in respect of Canterbury coastal margin wildlife migrations.
- 2.9.19 Should allow vehicles only on the roads purposely formed and maintained for vehicle use, and the vehicle access identified in Table 12.
- 2.9.20 Should allow aircraft access within the public conservation lands only in accordance with Map 4 and Policies 3.6.1–3.6.9.
- 2.9.21 May allow a concession to University of Canterbury for the operation of an atmospheric research station on part of scientific reserve (conservation unit 2796176), with measures to protect the reserve's indigenous biodiversity and historic values.
- 2.9.22 Classify the Kaitorete Spit marginal strips and conservation areas (conservation units 2796171, 2796182, 2796183 and 2796185) as a scientific reserve.
- 2.9.23 Classify Wainono Lagoon Conservation Area (conservation unit 2806710) as a wildlife management reserve.

Pohatu and Akaroa marine reserves

- 2.9.24 Advise visitors to Pohatu and Akaroa marine reserves that marine life within and for some species, adjoining the reserve, are protected.
- 2.9.25 Notify the public of the seaward and landward boundaries of the Pohatu and Akaroa marine reserves.
- 2.9.26 Undertake and encourage research and monitoring in the Pohatu and Akaroa marine reserves that support and inform its management, and increase knowledge of the wider marine environment.
- 2.9.27 Work with the Ministry for Primary Industries, other agencies and the local community to ensure effective compliance and law enforcement within the Pohatu and Akaroa marine reserves.
- 2.9.28 Provide low-key on-site interpretation and public use information, backed by website information, for Pohatu Marine Reserve.
- 2.9.29 Provide public use information, backed by website information, and promote Akaroa Marine Reserve as a regional educational site for marine conservation.
- 2.9.30 Monitor boating activity (e.g. speeds, anchoring, penguin and marine mammal disturbance) and hull cleanliness (to assess invasive species risk) and seek or introduce further education measures and/or controls if required.
- 2.9.31 Review the Akaroa Marine Reserve after 10 years (i.e. in 2024).

Statutory advocacy

2.9.32 Prioritise statutory advocacy for:

- a) the implementation of the New Zealand Coastal Policy Statement 2010;
- b) the protection of Areas of Significant Natural Value;
- c) the protection of priority ecosystem units and threatened and at-risk species;
- d) consistent district and regional plan provisions to address cross-boundary issues for the coastal marine area; and
- e) upholding the integrity of the National Water Conservation (Te Waihora/Lake Ellesmere) Order 1990.

Table 12: Vehicle and horse access within Coastal Land and Marine/Ki Tai Place

CONSERVATION UNIT	VEHICLE AND HORSE ACCESS
Conservation units within the area from north of Waipara River to the north bank of the Waimakariri River	All vehicles and horses: Waimakariri District: access in accordance with the Northern Pegasus Bay Bylaw 2016 of Waimakariri District Council. Hurunui District: access to the beach from Kings Road, Ashworths Beach Road, the northern end of Leithfield Beach settlement, and at three points along Amberley Beach, in accordance with the vehicle and horse use conditions, for the adjoining coastal areas, as are set out in the Northern Pegasus Bay Bylaw 2015 of Hurunui District Council.
Te Waihora Joint Management Plan Area	All vehicles: as specified in the Te Waihora Joint Management Plan 2005. Mountain bikes and electric power-assisted pedal cycles: Motukarara to the Christchurch to Little River Rail Trail.
Kaitorete Spit conservation units	All vehicles: University of Canterbury vehicles within 2796176 scientific reserve; access road and route through 2796176 and 2796185 to beach below mean high water spring; access road and route to beach below mean high water spring or to landward side of the dunes at the eastern end of 2796173.
Wainono Lagoon conservation units	Mountain bikes: track south from Hook Beach Road to the Waihao River mouth.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Initiation of review, with Ngāi Tahu, of the Te Waihora Joint Management Plan 2005, including the seeking of Wetland of International Importance status.
- Classification of the Kaitorete Spit marginal strips and conservation areas as a scientific reserve if statutory requirements are met.
- Resolution of the control of commercial operators viewing and interacting with Hector's dolphins in Akaroa Harbour.
- Assessment of the effectiveness of the implementation of the Canterbury Water Management Strategy on coastal conservation outcomes.
- Implementation, as it affects Canterbury, of outcomes resulting from the South-East Marine Protection Planning Forum/Roopu Manaaki ki te Toka.

Achieved by the end of Year 5 after CMS approval (2021)

- Assessment of any change in effectiveness of the implementation of the Canterbury Water Management Strategy on coastal conservation outcomes.

Achieved by the end of Year 10 after CMS approval (2026)

- Assessment of any change in effectiveness of the Canterbury Water Management Strategy on coastal conservation outcomes.
 - Classification of Wainono Lagoon conservation areas as wildlife management reserve.
 - Assessment of the extent of New Zealand fur seal/kekeno colonies and any associated public activity issues.
 - Review of the Akaroa Marine Reserve.
-

Part Three—Specific policy requirements for Canterbury (Waitaha)

This section implements the requirements of the Conservation General Policy 2005, the General Policy for National Parks 2005 and other legislative requirements. The policies of this section apply to all public conservation lands and waters covered by this CMS. Where the provisions in Part Three are more specific than the provisions in Part One, or where there is any ambiguity between provisions, then the more specific provisions of Part Three prevail. Where the provisions in Part Two—Places are more specific than the provisions in Part Three, the more specific provisions in Part Two prevail.

Changes to this CMS may be required from time to time during its term. This may require changes to be made by the amendment or review processes under sections 17H or 17I of the Conservation Act 1987. These situations may include where an additional land area is to be managed under a CMS, or limitations changed on an activity that occurs on lands or waters managed under the CMS.

3.1 General

- 3.1.1 Will follow the relevant process under the provisions of the Conservation Act 1987 where a change to the CMS is required, including to impose or increase limits on any use or activity or include new species or land.
- 3.1.2 Consider changing the classification of public conservation land and water where required for the effective management or protection of its values.
- 3.1.3 Restrict or close access to:
 - a) national parks where necessary for the preservation of native plants and animals or the welfare in general of the park;
 - b) reserves where necessary consistent with the conditions and restrictions of use of the reserve, and
 - c) conservation areas where necessary for reasons of public safety or emergency or to:
 - i) protect natural, historic or cultural values;
 - ii) control biosecurity risks;
 - iii) enable the control or eradication of pests using aerial bait operations;
 - iv) allow military exercise operations; or
 - v) allow tree felling.
- 3.1.4 When undertaking work or activities that are covered by Appendix 1, determine if they meet the requirements of section 4(3) of the Resource Management Act 1991 for exemption from land use consents.
- 3.1.5 Manage recreational opportunities, including those provided by concessionaires, in accordance with the visitor management zones shown in Map 3 and as described in Appendix 12.
- 3.1.6 Establish and review bylaws and regulations where necessary to enable better management of public conservation lands and waters (including departmental wharves).

- 3.1.7 Encourage people and businesses undertaking activities on public conservation lands and waters to comply with activity-specific minimum impact codes (care codes) as notified from time to time on the Department's website.
- 3.1.8 Work to resolve issues with legal roads running through public conservation lands and waters, in accordance with Policies 2.2.15–2.2.16, 2.3.25–2.3.26, and 2.4.6–2.4.7.

Authorisations (general)

Unless enabled by other legislation,⁷⁵ anyone wishing to undertake an activity for specific gain or reward (including carrying out a trade, occupation or business) on public conservation lands and waters, or undertake other activities such as research or collection of resources of any kind, requires an authorisation. The most common authorisation is a concession under Part 3B of the Conservation Act 1987. The Department aims to allow for a range of authorisations that are consistent with relevant legislation and policy, the protection of natural resources and historic and cultural heritage, and the recreational settings and planned outcomes and policies for specific Places (see Part Two). Authorisations can add value to visitors' experiences by connecting them with natural, historic and cultural heritage and providing opportunities to visit places that may not otherwise be easily accessible.

Authorisations in Canterbury (Waitaha) have been wide-ranging in purpose (public utilities to tourist development) and scale (small guided walking groups to major ski fields).

The monitoring of authorised activities is required. Where emerging or cumulative effects on the environment or other users are becoming unacceptable, it may be necessary to establish limits for authorisations.

Policies

- 3.1.9 Process authorisations in accordance with the relevant legislation, this CMS and the provisions of the Conservation General Policy 2005 and the General Policy for National Parks 2005.
- 3.1.10 Monitor authorised activities and their effects, including cumulative effects, on a regular and ongoing basis.
- 3.1.11 Should not grant authorisations that are inconsistent with the objectives, outcomes and policies in Parts One, Two and Three.
- 3.1.12 May grant an authorisation for sporting events or filming activity that does not meet the criteria for the Yellow, Green or Orange aircraft access zones and/or the prescriptions for visitor management zones in Appendix 12 based on its merits and subject to an assessment of:
 - a) the activity being consistent with the purposes for which the lands and waters concerned are held;
 - b) the activity being consistent with the outcome and policies for the Place in which it is proposed to occur;
 - c) the adverse effects and the extent to which it is possible to avoid, remedy or mitigate those effects—examples of mechanisms that may be used to address any adverse effects include:
 - i) informing neighbours and potential visitors to the site that the activity is to occur or is occurring;

⁷⁵ Examples are the Electricity Act 1992 and Cadastral Survey Act 2002.

- ii) avoiding peak visiting times; and
 - iii) avoiding or protecting sites with high natural or historic values;
 - d) cumulative effects on the values at the site;
 - e) the activity being consistent with Policy 2.2.18 if the activity is within the Adams Wilderness Area; and
 - f) the need for public notification.
- 3.1.13 Manage (including when considering concession applications) those parts of Canterbury that are within Te Wāhipounamu—South West New Zealand World Heritage Area, in accordance with the criteria for which the World Heritage Area was nominated and the statement of outstanding universal value (see Appendix 14).
- 3.1.14 Manage (including where considering concession applications) those parts of Canterbury that are identified as Wetlands of International Importance under the Convention of Wetlands of International Importance 1971 (also referred to as the Ramsar Convention) in accordance with the criteria for which those wetland(s) of international importance were nominated and New Zealand's obligations under the Convention.

3.2 Vehicles

Vehicle use is part of the range of recreation opportunities that are only allowed on public conservation lands and waters in locations identified in this CMS. In this context, vehicles include motorised and non-motorised land vehicles; fixed-wing, helicopter and non-powered aircraft; and motorised and non-motorised watercraft. Further discussion about vehicle use can be found in Part Two.

Motorised vehicles (general, other than aircraft and watercraft)

Motorised vehicle⁷⁶ use is not generally allowed off formed roads on public conservation lands and waters. Motor vehicle access opportunities on public conservation lands in Canterbury (Waitaha) primarily involve well-formed access roads to car parks and picnic areas. Some four-wheel drive road opportunities also exist, but most four-wheel drive access to backcountry public conservation lands and waters involves a mixture of other lands (e.g. Crown Land riverbeds, pastoral leases and unformed legal roads).

Vehicle use away from formed access has minor to severe impacts on indigenous terrestrial and freshwater ecosystems, and on other recreational users, and potentially on historic and Ngāi Tahu cultural values. For Canterbury's topography that is easy to traverse by vehicle, grass/tussocklands and riverbeds, the control of vehicle use can be difficult. Most backcountry public conservation land, however, is simply unsuited to vehicle use due to the vegetation cover and topography, and motorised vehicle use is not usually allowed off formed roads on public conservation land. Care codes have been developed for various forms of vehicle use, e.g. the Braided River Care Code and general four-wheel drive code.

Controlled, concessionaire, or club event vehicle use may have less adverse effect and more conservation benefit than open public use, but various forms of controlled access (e.g. permit or key-only access) can also deliver successful public use outcomes.

⁷⁶ Note: Any motor vehicle (which includes trail and quad bikes, and over-snow vehicles) taken on to public conservation lands must be registered and/or licensed where it is required to be registered and/or licensed under the Land Transport Act 1998.

Motorised vehicles include over-snow vehicles. In Canterbury a form of these vehicles, snowmobiles, is provided for in 2.2 Southern Conservation Parks Place, Policy 2.2.4 and Table 3 (Oteake).

Policies

- 3.2.1 Should allow motorised vehicles only on the roads (including designated parking areas) identified in:
 - a) Part Two—Places; and
 - b) Aoraki/Mount Cook and Arthur’s Pass national park management plans, the Molesworth Management Plan and the Te Waihora Joint Management Plan.
- 3.2.2 Consider provision for use of motorised vehicles outside areas provided for by Policy 3.2.1 only where such use is identified at sites listed in Part Two—Places and subject to Policy 3.2.4.
- 3.2.3 May allow motorised vehicles on public conservation lands and waters for the construction, operation and/or maintenance of authorised utilities, farming operations, and restoration activities.
- 3.2.4 Should follow the statutory amendment or review process when considering the use of motorised vehicles on public conservation lands and waters other than in accordance with Policies 3.2.1 and 3.2.3 and apply the following criteria to the activity:
 - a) is consistent with the purposes for which the lands and waters are held;
 - b) is consistent with the outcome and policies for the Place where the road or site is located;
 - c) is consistent with the visitor management zones on Map 3 and as described in Appendix 12;
 - d) adverse effects (including cumulative adverse effects) on the road or site and surrounding natural, historic or cultural values are, or can be, avoided, remedied or mitigated;
 - e) adverse effects (including cumulative adverse effects) on the safety and enjoyment of other recreational users are, or can be, avoided, remedied or mitigated (including conflicts between motorised vehicles/mountain bikes and horses);
 - f) risks of fire and biosecurity are avoided or otherwise carefully managed; and
 - g) the ongoing management implications of providing motorised vehicle access (e.g. in terms of ongoing maintenance costs) are taken into account.
- 3.2.5 Liaise with four-wheel drive and other motorised vehicle user groups to identify opportunities for involvement with conservation programmes, and may enable these groups to maintain the roads that they are permitted to use.
- 3.2.6 Monitor the effects of motorised vehicles on natural, historic and cultural values, and on other recreational users.
- 3.2.7 Review motorised vehicle use on roads where monitoring shows that adverse effects are occurring, in consultation with relevant motorised vehicle user club(s) and the community.
- 3.2.8 May restrict motorised vehicle access at any time in the following situations:
 - a) there is a health and safety risk;
 - b) there is a fire risk;
 - c) adverse effects are evident on conservation resources;

- d) priorities change for the provision of the formed road or designated vehicular route; or
 - e) where damage to the structure of the road is evident or likely.
- 3.2.9 Work with councils, the New Zealand Police and relevant agencies to manage motorised vehicle use on beaches and riverbeds to protect conservation values.

3.3 Mountain bikes (non-motorised)⁷⁷

Multiple opportunities exist for mountain biking on public conservation lands in Canterbury (Waitaha), using existing walking, purpose-built and vehicle roads, including farm tracks from ex-pastoral lease lands, and to some degree cycling across country where vegetation and topography allow and vulnerable conservation values are not threatened.

There is a range of views about mixed pedestrian and cycling use of tracks, and caution is needed where visibility is restricted and with higher-speed and higher-impact downhill cycling. Where the means exist (e.g. ski field roads, helicopters, gondola/ski lifts) to easily take (shuttle) downhill mountain bikers to higher altitudes, this can result in increased adverse effects (e.g. multiple tracking, vegetation damage, collisions with other users) and more caution should be exercised in considering this activity.

Policies

- 3.3.1 Should allow independent mountain biking, and may allow guided mountain biking or mountain bike events, only on the tracks and roads or other areas listed for mountain biking in the following, subject to the criteria specified in Policy 3.3.4:
 - a) Tables 3, 6, 8, 10 and 11 in Part Two—Places; and
 - b) Aoraki/Mount Cook (2004) and Arthur's Pass (2007) national park management plans, the Te Waihora Joint Management Plan 2005 and the Molesworth Management Plan 2013.
- 3.3.2 Where mountain biking is restricted to identified tracks or roads, advise users that they must remain on the track or road formation at all times.
- 3.3.3 Promote opportunities for mountain bike use on tracks, and other areas, identified in this CMS as being available for mountain bike use on public conservation lands and waters via the Department's website; and through liaison with tourism information providers and cycling advocates.
- 3.3.4 Should follow the statutory amendment or review process when considering further opportunities for mountain bike use on public conservation lands and waters during the term of this CMS, undertake consultation with cycling clubs, adjoining landowners, tramping clubs, other interested parties and the public, and apply the following criteria for the activity:
 - a) is consistent with the purposes for which the lands and waters concerned are held;
 - b) is consistent with the desired outcome and policies for the Place where the track or road is, or is proposed to be located;
 - c) adverse effects (including cumulative effects) of mountain bike use on natural, historic or cultural values and other recreational users of the track or road are, or can be, avoided, remedied or mitigated; and

⁷⁷ The term 'mountain' is used loosely here as some biking opportunities on public conservation lands are usable by multi-purpose bikes, although likely not by 'road' bikes. Mountain bikes excludes electric power-assisted pedal cycles.

- d) measures can be applied to manage the use of mountain bikes, which may include (but are not limited to) trial periods, restricted seasons, daylight riding only, limits on numbers, and one-way flow, and there is the ability to provide necessary facilities, including those that may be associated with overnight mountain bike opportunities.
- 3.3.5 Monitor the effects of mountain bike use on natural, historic or cultural values, and on other recreational users.
- 3.3.6 Review mountain bike use on tracks or at sites where monitoring shows unacceptable adverse effects are occurring.
- 3.3.7 Should provide for mountain biking activities such as downhill, freestyle and dirt jumping on public conservation lands and waters only where:
 - a) the activity is consistent with the desired outcome and policies for a Place; and
 - b) adverse effects, including cumulative effects, on natural, historic or cultural values, and on other recreation users, can be avoided, remedied or mitigated.
- 3.3.8 Liaise with mountain bike clubs, concessionaires, and other organisations, to identify opportunities for involvement with conservation programmes, and may enable these groups to maintain tracks that they use.

3.4 Electric power-assisted pedal cycles

The use of electric power-assisted pedal cycles (e-bikes), which is distinct from motorised vehicle and mountain bike use, is a relatively new activity that may be compatible with other uses at locations where non-motorised vehicles are allowed. Their use may enable people with lesser cycling skills, experience and fitness to cycle tracks used by mountain bikes. However their use is subject to factors including compatibility with the cycling experience provided (for example, beginner mountain biking opportunities may be suitable circumstances for e-bike use), management of conflicts with other users, and where ‘enjoying nature on its own terms’ without assistance from motorised vehicles is important.

Due to minimal levels of use in Canterbury (Waitaha) pre-2012, electric power-assisted pedal cycles received little attention in the draft CMS process. This lack of public debate, and some concerns about the potential for e-bike technology development and potential use conflicts, suggests a cautious approach to providing for e-bikes until such time as a fuller public debate has occurred, which may result in CMS amendments.

Policies

- 3.4.1 Should allow independent electric power-assisted pedal cycle use, and may allow guided electric power-assisted pedal cycling, only on the tracks and roads or other areas listed in Part Two—Places, subject to the criteria specified in Policies 3.4.2–3.4.5.
- 3.4.2 Should follow the statutory amendment or review process when considering further opportunities for electric power-assisted pedal cycle use on public conservation lands and waters during the term of this CMS, undertake consultation with cycling clubs, adjoining landowners, tramping clubs, other interested parties and the public, and apply the following criteria:
 - a) undertake consultation with cycling clubs, adjoining landowners, tramping clubs, other interested parties and the public;
 - b) is consistent with the purposes for which the lands and waters concerned are held;

- c) is consistent with the desired outcome and policies for the Place where the track or road is, or proposed to be located;
 - d) adverse effects (including cumulative effects) of electric power-assisted pedal cycle use on natural, historic or cultural values (including natural quiet) and other recreational users of the track or road are, or can be, avoided, remedied or mitigated; and
 - e) measures can be applied to manage the use of electric power-assisted pedal cycles which may include (but are not limited to) trial periods, restricted seasons, daylight riding only, limits on numbers, limits on speed and one-way flow, and there is the ability to provide necessary facilities, including those that may be associated with overnight power-assisted cycling opportunities.
- 3.4.3 Monitor the effects of electric power-assisted pedal cycle use on natural, historic and cultural values, and on other recreational users.
- 3.4.4 Review electric power-assisted pedal cycle use on tracks or at sites where monitoring shows that unacceptable adverse effects are occurring.
- 3.4.5 Liaise with bike clubs, concessionaires and other organisations, to identify opportunities for involvement in conservation programmes, and may enable the groups to maintain tracks where electric power-assisted pedal cycles are used.

3.5 Other means of transport

Watercraft

Most watercraft-usable waterbodies within Canterbury (Waitaha) are not themselves part of the public conservation lands and waters, and watercraft control by the Department is currently limited to within wildlife refuges. Outside of these refuges, other watercraft controls exist through Environment Canterbury's water safety bylaws and district council surface water activity controls.

Policies

- 3.5.1 Meet the following criteria when considering watercraft use on public conservation lands and waters:
- a) is consistent with the purpose for which the lands and waters concerned are held;
 - b) is consistent with the outcome and policies for the Place where watercraft use is proposed to occur;
 - c) is consistent with the visitor management zones shown on Map 3 and as described in Appendix 12;
 - d) adverse effects on the natural, historic or cultural values are avoided, or otherwise minimised; and
 - e) adverse effects on the safety and enjoyment of other recreational users on and off the water are avoided, remedied or mitigated.
- 3.5.2 May restrict access across public conservation lands for watercraft where adverse effects associated with watercraft use may occur to public conservation lands and waters or wildlife.
- 3.5.3 Advocate for the management of watercraft use on waters not managed by the Department in a manner which is consistent with Parts One and Two of this CMS.

3.6 Aircraft

All aircraft require a concession to land on, take off from, or hover above (collectively referred to as landings) any public conservation lands and waters that is not a certified aerodrome, other than for a number of activities, such as: search and rescue; departmental management purposes; emergency situations; maritime navigational-aid management; land survey work; aircraft operated by the New Zealand Defence Force or the Civil Aviation Authority; or any mining activity authorised under the Crown Minerals Act 1991.⁷⁸ The Department, acting under delegated authority from the Minister, manages aircraft landing concessions under provisions of the National Parks Act 1980, the Reserves Act 1977 and the Conservation Act 1987, including in accordance with Part 3B of the Conservation Act 1987 (in particular, section 17ZF).

Both recreational and commercial aircraft can facilitate the use and enjoyment of public conservation lands and waters by providing access to difficult-to-reach places and for people with limited time. They are also an important tool for the Department's management of public conservation lands and waters, and for search and rescue.

Conversely, aircraft (particularly powered aircraft) activity—including scenic flights and remotely piloted aircraft that do not involve landings—can have adverse effects on public conservation lands and waters, including on its users, impacting on values such as amenity, natural quiet, wildlife and remoteness. Effects most often relate to the presence, behaviour and frequency of the activity, and for powered aircraft, their noise characteristics. Aircraft landings can also cause conflicts between people and their activities where some have used aircraft for access and others have not.

To manage the effects of aircraft landings on public conservation lands and waters there are four, nationally consistent, aircraft access zones (as shown on Map 4). These zones reflect the different management methodologies required, and the likelihood of granting concessions for aircraft landings:

- Red Zone—areas where a concession application to land an aircraft would most likely be declined. However, concessions may be granted for aircraft landings associated with the construction, operation or maintenance of equipment (e.g. meteorological, seismic) or utilities (e.g. communication systems, transmission lines) that have been authorised by the Department, or to support research authorised by the Department. This zone may apply where:
 - i) legislation provides strong direction that concessions should not be granted for aircraft landings (e.g. gazetted wilderness areas);
 - ii) an area is adjacent to (parts of) a national park where there are no aircraft landings;
 - iii) adverse effects on conservation, including recreation, values need to be avoided (e.g. nature and scientific reserves, threatened species habitat, high-use picnic and camping areas);
 - iv) the area is readily accessible by other means; or
 - v) aircraft activity may interfere with management activities.
- Yellow Zone—areas where a concession application to land an aircraft is likely to be granted where it meets the nationally consistent limits for this zone. This zone may apply where there is a need to restrict aircraft use; either where visitors expect a low

⁷⁸ The effects of aircraft use are assessed in accordance with section 61 of the Crown Minerals Act 1991.

level of encounters with aircraft or where values of natural quiet predominate, particularly in backcountry and remote areas.

- **Green Zone**—areas where a concession application to land an aircraft is likely to be granted, subject to any relevant outcome and/or the criteria in the relevant policies. This zone may apply where:
 - i) conservation, including recreation, values are unlikely to be affected by landings;
 - ii) there are natural limits on sites where landings can actually occur (e.g. forest cover, steep terrain); or
 - iii) there is likely to be little demand for aircraft access over the life of this CMS.
- **Orange Zone**—areas where there are complex issues to be managed, which require the use of limits and/or other criteria to guide whether concessions for aircraft landings may be granted. This zone may apply:
 - i) in situations that involve limited opportunities, areas of intensive aircraft activity or where a precautionary approach is required;
 - ii) where there are historic or legal reasons for an approach that does not fit within the other three zones;
 - iii) to provide for a specific recreational activity (e.g. heli-skiing, heli-fishing, ground-based hunting);
 - iv) to only allow specific types of aircraft (e.g. non-powered aircraft);
 - v) where there are variations in seasonal use;
 - vi) to protect visitor experiences; or
 - vii) where landings do not fit within the circumstances described in the other three zones.

The application of these aircraft access zones manages aircraft landings on public conservation lands and waters. As a result, there is a spectrum of aircraft landings and overflights (aircraft encounters) that may be experienced by visitors to public conservation lands and waters, as described in Table 13 below. Outcomes and/or policies may specify numeric limits for aircraft landings (e.g. daily, monthly, annually), or may use the words ‘rare’, ‘occasional’, ‘regular’ or ‘frequent’ to describe the overall level of aircraft encounters and therefore the visitor experience expected in each aircraft access zone (or part thereof).

Table 13: Spectrum of aircraft encounters on public conservation lands and waters

	<div style="display: flex; justify-content: space-between; align-items: center;"> Low High </div>			
Average percentage of time that aircraft are likely to be encountered	1% or less	5%	25%	50% or more
Likely visitor management zone	Remote and/or backcountry zones		Backcountry and/or front country zones	
Word used in outcomes/policies to describe and achieve this	Rare	Occasional	Regular	Frequent

This spectrum does not take into account aircraft landings associated with the construction, operation and/or maintenance of equipment or utilities authorised by the Department, or

wild animal control activities (see section 3.20 and the associated policies). As the Department cannot directly manage over-flights (while aircraft are in the airspace above public conservation lands and waters), there is a need to advocate to aircraft operators to minimise effects on users of public conservation lands and waters, consistent with the aircraft access and visitor management zones.

Within an area of public conservation land and water, aircraft may be able to land anywhere, subject to: the capabilities of the aircraft; the vegetation cover; the terrain; and the conditions of use for the relevant aircraft access zone. For example, helicopters do not need a designated landing site and some fixed-wing aircraft do not need a formed airstrip to land. However, in some areas aircraft landings may be restricted to formed airstrips and/or designated landing sites (e.g. adjacent to huts) in accordance with the aircraft access zone criteria.

A concession to land an aircraft does not include any other activities, such as vegetation removal or earthworks, associated with maintaining an airstrip or designated landing site. A separate authorisation is required for other activities, including airstrip/landing site maintenance, in accordance with the purposes for which the land is held, the provisions in Part Two—Places and any relevant Part Three policies. The construction of a new airstrip or designated landing site would also need to take into account the relevant aircraft access zone; such that, it is unlikely that a concession would be granted for a new airstrip/landing site within a Red zoned area. Former airstrips/landing sites that are no longer maintained may eventually become unusable due to vegetation growth or other changes. Table 14 identifies the current and proposed airstrips within Canterbury outside of national parks.

Table 14: Current and proposed airstrips in Canterbury outside Aoraki/Mount Cook and Arthur's Pass national parks

NAME OF AIRSTRIP	LOCATION	COMMENTS
Ada	St James Conservation Area	
Ahuriri	Ahuriri Conservation Park	Farming concessionaire approval required prior to landings
Lake Ohau	Ruataniwha Conservation Park	
Lake Ohau East (Flanagan Pass)	Ruataniwha Conservation Area	
Muddy Lakes	St James Conservation Area	See Policy 2.3.20
The Growler	Te Kahui Kaupeka Conservation Park (formerly Mesopotamia Pastoral Lease)	See Table 15

Policies

- 3.6.1 Should apply (but not be limited to) the following criteria when assessing concession applications for all aircraft landings⁷⁹:
- a) is consistent with the outcome and policies for the Place in which the activity is proposed to occur, and Table 13;
 - b) is consistent with the aircraft zoning provisions in this CMS and the aircraft access zones on Map 4;
 - c) is consistent with the purposes for which the lands and waters are held;
 - d) adverse effects on conservation values, including adverse effects on natural quiet, are avoided, remedied or mitigated;

⁷⁹ This includes landings, take offs and hovering.

- e) adverse effects on other visitors (taking into account the size of the zone and the proximity of other ground users) are avoided, remedied or mitigated;
 - f) the need for monitoring the activity using global positioning systems and newer technologies;
 - g) landings near tracks, huts and car parks (unless otherwise specified in an outcome or policy for a Place) are avoided; and
 - h) the need to hold or comply with certification in a noise management scheme approved by the Department, in specified locations.
- 3.6.2 Should not grant concessions for aircraft landings in the Red Zone except:
- a) for the construction, operation and/or maintenance of equipment (e.g. meteorological, seismic) or utilities (e.g., communication systems, transmission lines) authorised by the Department; or
 - b) to support research or collection authorised by the Department.
- 3.6.3 Should grant concessions for aircraft landings in the Yellow Zone only where the landings meet the criteria (a) and (c)–(h) in Policy 3.6.1 and are in accordance with the following limits:
- a) for commercial purposes, two landings per concession per day at any one site (defined as any landing site within a 1-kilometre radius of the initial landing site) and a maximum of 20 landings per site per concession per year; and
 - b) for recreational purposes, two landings per aircraft per day at any one site (defined as any landing site within a 1-kilometre radius of the initial landing site) and a maximum of 20 landings per aircraft per site per year.
- 3.6.4 May grant concessions for aircraft landings in the Green Zone that meet the criteria (a) and (c)–(h) in Policy 3.6.1.
- 3.6.5 May grant concessions for aircraft landings in the Orange Zone that meet the criteria in (a) and (c)–(h) in Policy 3.6.1 and as set out in Table 15. Any heli-skiing concession that is approved should be on a one operator per block basis, and may be allocated via a limited opportunity process.

Table 15: Aircraft—Orange Zone Criteria

CONSERVATION UNITS (Listed generally north to south)	CRITERIA
Part Molesworth Recreation Reserve	In accordance with Molesworth Management Plan 2013.
Part The Hossack Conservation Area (eastern Hanmer Range)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing block. From 1 October to 30 April as for Yellow Zone.
Part Lochiel Conservation Area (Tekoa Range)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing block. From 1 October to 30 April as for Yellow Zone.
Arthur's Pass National Park	In accordance with Arthur's Pass National Park Management Plan 2007.
Part Craigieburn Forest Park	During the operative skiing season as for Green Zone to allow for ski field activities in accordance with Broken River and Craigieburn ski field concessions. Outside this season as for Yellow Zone in accordance with Broken River and Craigieburn ski field concessions.

CONSERVATION UNITS (Listed generally north to south)	CRITERIA
Part Conservation Area Castle Hill	During the operative skiing season as for Green Zone to allow for ski field activities in accordance with Cheeseman ski field concessions. Outside this season as for Yellow Zone in accordance with Cheeseman ski field concessions.
Part Conservation Area Castle Hill and Part Porter Heights Conservation Area	During the operative skiing season as for Green Zone to allow for ski field activities in accordance with Porters ski field concessions. Outside this season as for Yellow Zone in accordance with Porters ski field concessions.
Part Rangitata/Rakaia Headwaters Conservation Area, Part Hakatere Conservation Park, Rakaia Forest Conservation Area, and Part Te Kahui Kaupeka Conservation Park (Ragged to Big Hill to Cloudy Peak ranges, and northern Two Thumb Range from Graf Spee to Mount Toby)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing blocks. From 1 October to 30 April as for Yellow Zone. For the whole year the specific conditions of the Manuka Point Station Company Ltd concessions apply.
Part Double Hill Conservation Area and Part Hakatere Conservation Park (Palmer to Old Man ranges)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing block. From 1 October to 30 April as for Yellow Zone.
Part Mount Hutt Conservation Area and Hakatere Conservation Park (Mount Hutt Range)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing block. During the operative skiing season as for the Green Zone for ski field activities in accordance with Mount Hutt ski field concessions. Outside this season as for Yellow Zone in accordance with Mount Hutt ski field concessions.
Public conservation lands and waters within the Te Waihora Joint Management Plan Area	In accordance with Te Waihora Joint Management Plan Area 2005.
Part Mount Potts Conservation Area (Potts Range)	During the operative skiing season as for Green Zone to allow for ski field activities in accordance with Mount Potts ski field concessions. Outside this season as for Yellow Zone in accordance with Mount Potts ski field concessions.
Part Te Kahui Kaupeka Conservation Park (formerly Mesopotamia Pastoral Lease – Camp Creek to Bush Stream catchment and Sinclair Range to Forest Creek)	That the Department consults with Mesopotamia Station on any concession application until 8 September 2018; thereafter as for Yellow Zone.
Part Te Kahui Kaupeka Conservation Park (Mistake Flats and Hut)	Landings for the purposes of positioning (dropping off and picking up) recreationists who are individually fully equipped for hunting or mountaineering or cross country skiing, and for staying overnight in an alpine environment.
Part Te Kahui Kaupeka Conservation Park (Two Thumb Range in Round Hill – Mount Misery and Dobson Peak vicinities)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing blocks. During the operative skiing season as for the Green Zone for ski field activities in accordance with Mount Dobson and Round Hill ski field concessions. Outside this season as for Yellow Zone in accordance with Mount Dobson and Round Hill ski field concessions.
Aoraki/Mount Cook National Park	In accordance with Aoraki/Mount Cook National Park Management Plan 2004.

CONSERVATION UNITS (Listed generally north to south)	CRITERIA
Godley Peaks Conservation Area (Hall Range and Haszard Ridge)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing block. From 1 October to 30 April as for Yellow Zone.
Liebig Range/Upper Jollie/Cass Conservation Area (Liebig Range)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing blocks. From 1 October to 30 April as for Yellow Zone. [NB Within this general area are two Green Zone sites for frequent scenic landings, on Liebig Range at Jollie Ridge/Liebig Dome and Ridge Glacier.]
Braemar Conservation Area (Gamack Range)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing block. From 1 October to 30 April as for Yellow Zone.
Part Mount Cook Station Conservation Area (Burnett Mountains)	From 1 May to 30 September as for Green Zone for heli-skiing and other aircraft activity within the mapped heli-skiing block. From 1 October to 30 April as for Yellow Zone.
Part Ruataniwha Conservation Area	During the operative skiing season as for Green Zone to allow for ski field activities in accordance with Ohau ski field concessions. Outside this season as for Yellow Zone in conjunction with Ohau ski field concessions. For two areas adjoining Aoraki/Mount Cook National Park, all-year Red Zones except for activities in accordance with the Glentanner Park Ltd concession.

- 3.6.6 May grant concessions for aircraft landings associated with sporting events or filming activities that do not meet the limits and/or criteria for the Yellow, Green or Orange Zones and/or the prescriptions for visitor management zones in Appendix 12, in accordance with Policy 3.1.12 and an assessment of mechanisms that may be used to address any adverse effects, such as:
- a) the use of a remotely piloted aircraft; and
 - b) low-level flying (i.e. hovering) but no actual landing on the ground.
- 3.6.7 May grant concessions for aircraft landings on public conservation lands and waters for:
- a) the construction, operation and/or maintenance of equipment (e.g. meteorological, seismic) or utilities (e.g. communications systems, transmission lines) authorised by the Department; or
 - b) wild animal control activities covered by Policies 3.20.1–3.20.6
- that do not meet the limits and/or criteria for an aircraft access zone and/or the prescriptions for visitor management zones in Appendix 12.
- 3.6.8 Advocate to aviation controllers and aircraft operators to manage flight paths to avoid adverse effects on public conservation lands and waters.
- 3.6.9 Undertake a collaborative approach with aircraft operators overflying public conservation lands and waters, to establish voluntary codes of conduct that reflect the requirements of visitor management zones for those lands and waters.

3.7 Animals

(See also sections 3.14, 3.20 and 3.21 for sports fish and game bird hunting, wild animal control activities and game animals.)

Animals cannot be taken onto public conservation lands and waters unless this is consistent with legislation and provided for in a CMS or a conservation management plan. This may include giving authorisation by way of signage or other such public notification. Domestic animals and pets can have adverse effects on the natural, historic and cultural values of public conservation lands and waters, and can detract from visitor appreciation and enjoyment. Potential effects include killing wildlife, introducing pest plants, introducing disease (such as by dogs to seals), browsing indigenous vegetation, increasing erosion and conflicting with other user groups.

Policies

- 3.7.1 Should not permit livestock, other than horses (and pack animals) in accordance with Policies 3.9.1–3.9.4, on public conservation lands unless under a grazing concession or management agreement.
- 3.7.2 Should not permit any other types of animals, including pets, other than dogs in accordance with Policies 3.8.1–3.8.7, on public conservation lands or waters.

3.8 Dogs

The Department controls the use of dogs for recreational and other activities, including hunting, on public conservation lands and waters, to protect both indigenous wildlife and people's rights of use and enjoyment. It is illegal to take a dog onto public conservation lands and waters without a permit unless the area is identified as an 'open dog area' where no permit is required pursuant to Part 5C of the Conservation Act 1987. Open dog areas have yet to be established in Canterbury (Waitaha). In the meantime, the Department will use signage or other public notice to identify where dogs can or cannot go on public conservation land.

The only dogs that do not require permits on public conservation lands and waters are those used for police, customs, management and search and rescue purposes, and disability assist dogs. To facilitate the recognition of disability assist dogs, the Department prefers such dogs to wear a Disability Assist Dog identification tag and be registered with the New Zealand Companion Animal Register. Being accompanied by a disability assist dog does not exempt a person from obtaining a permit for entry where these are required (e.g. a nature reserve).

A dog used for hunting must be properly trained, under the control of its handler and authorised by a hunting permit. Hunting dogs, and farm dogs on lands adjacent to known habitat for ground-dwelling or nesting indigenous species, are sought to be avian-aversion trained.

Policies

- 3.8.1 Identify through the Department's website and through the use of signs and provision of information where people are permitted to take dogs onto public conservation lands and waters and under what conditions.
- 3.8.2 Should ensure that if specific permits are required to take dogs onto public conservation lands and waters, these contain conditions that protect the values for which those lands and waters are held.

- 3.8.3 May include the following conditions in a permit to take a dog onto public conservation lands and waters:
 - a) owners must keep the dog under control at all times;
 - b) dogs must not go into or be under public buildings, including huts;
 - c) dogs must be currently certified by an approved avian-aversion trainer where there are ground-dwelling or ground-nesting birds; and
 - d) owners are to comply with any identified access arrangements between the Department and adjoining landowners.
- 3.8.4 Should allow disability assist dogs onto public conservation land without permit provided the person the dog is accompanying keeps the dog under control at all times and complies with reasonable conditions set in relation to the entry and presence of the disability dog.
- 3.8.5 Educate the community about the threats that dogs can pose to conservation values.
- 3.8.6 Work with local and regional authorities to ensure consistency in dog control in areas containing protected wildlife and important wildlife habitats.
- 3.8.7 Will apply the relevant provisions in the Aoraki/Mount Cook National Park Management Plan 2004 and Arthur's Pass National Park Management Plan 2007 regarding the taking of dogs into the national parks.
- 3.8.8 May run a public process in the future to establish controlled and open dog areas on public conservation lands and waters, in areas other than Aoraki/Mount Cook and Arthur's Pass national parks.
- 3.8.9 Inform the public of the location of controlled and open dog areas on public conservation lands and waters through the Department's website.

3.9 Horses and pack animals

In some cases, the use of animals such as horses can enhance the recreational experience of visitors. However, they can also have adverse effects as identified above (see 'Animals'). Authorisation, which may be by way of signage or other information, is required to take horses and pack animals onto public conservation lands and waters.

Recreational horse riding, including by concessionaires, has long occurred across the high-country lands now largely included within the conservation parks (see 2.2 Southern Conservation Parks Place, and 2.3 Northern High-Country Place).

Policies

- 3.9.1 Should allow the use of horses (and pack animals) only in accordance with Policy 2.8.12 or at identified sites listed in Tables 4, 7, 9 and 10 in Part Two—Places.
- 3.9.2 Meet the requirements of the following criteria when considering the use of activities utilising horses (and pack animals) on public conservation lands and waters:
 - a) is consistent with the purposes for which the lands and waters concerned are held;
 - b) is consistent with the outcome and policies for the Place where the road, track or site is located;
 - c) the potential for horses to introduce or spread pest plant species into the area is avoided;
 - d) the potential for horses to accelerate erosion or cause other damage to the area is avoided;

- e) adverse effects on the natural, historic or cultural values are avoided, remedied or mitigated ; and
 - f) adverse effects on the safety and enjoyment of other recreational users, and potential for conflict with other users of the area are avoided, remedied or mitigated.
- 3.9.3 Liaise with horse riding groups to identify opportunities for involvement with current or proposed conservation programmes, and may enable these groups to maintain the tracks or routes they use.
- 3.9.4 Should monitor the scale and effects of the presence and use of horses and other pack animals on public conservation lands and waters. If monitoring indicates that there are adverse effects on the natural, historic and cultural values or experience of other users, will consider options to manage this activity so as to avoid, remedy or mitigate these effects.

3.10 Structures and utilities

Most structures on public conservation lands and waters relate to one of the following purposes:

- the Department's operational requirements;
- the public's appreciation and enjoyment of the intrinsic values of natural, historic and cultural heritage consistent with the purposes for which the land concerned is held; or
- utilities.

Utilities are facilities that provide essential public services, such as: telecommunications; energy generation and transmission; sewerage; water supply and flood control; oil and gas transmission; roads and airstrips; hydrological and weather stations; and seismic monitoring.

Structures and utilities can be temporary or intended for long-term use. They can share space (usually a public facility) or require exclusive occupation of space (usually a private facility). Both may be either commercial or non-commercial in nature. Regardless of the nature of the structure, the rationale for the establishment of a structure requiring exclusive occupation on public conservation land and at a specific location needs to be clearly established.

There are numerous utilities on public conservation lands and waters in Canterbury (Waitaha). Suitable sites for telecommunication facilities are limited and tend to be on high-altitude land that is unmodified and has important landscape values, and many of these high-altitude areas have significant Ngāi Tahu cultural values.

Policy

- 3.10.1 Should apply the following criteria when considering applications to erect or retain structures or utilities, or for the adaptive reuse of existing structures on public conservation lands and waters:
- a) the purposes for which the lands and waters concerned are held;
 - b) the outcomes and policies for the Place where the activity is proposed to occur;
 - c) whether the structure could reasonably be located outside public conservation lands and waters;
 - d) whether the structure could reasonably be located in another location where fewer adverse effects would result from the activity;

- e) whether the structure adversely affects conservation, including recreational, values;
- f) whether the structure is readily available for public use;
- g) whether the structure is consistent with the visitor management zone on Map 3 and as described in Appendix 12;
- h) whether the activity promotes or enhances the retention of a historic structure;
- i) whether the activity is an adaptive reuse of an existing structure;
- j) whether the policies for private accommodation and related facilities should be applied (see Policies 3.11.1–3.11.7); and
- k) whether any proposed road in a national park is provided for in the relevant national park management plan.

3.11 Private accommodation and related facilities

Existing structures on public conservation lands and waters include some private accommodation and related facilities that are not available for use by the general public. Some of these structures have been authorised, but many have been erected and used unlawfully (see Table 16). Under the Conservation General Policy 2005, the use of private accommodation and related facilities, including encampments solely for private purposes, is to be phased out, except where specifically provided for or allowed in legislation.

The situation with regard to private accommodation on public conservation lands and waters within Canterbury (Waitaha) is described in Table 16.

Table 16: Authorised and unauthorised private accommodation and related facilities on public conservation land in Canterbury (Waitaha)

LOCATION	NUMBER	AUTHORISED	EXCEPTION APPLIES ⁸⁰	RIGHT OF RENEWAL	NOTES
St James Conservation Area	2	Yes – expire 2043	No	Yes – till 2073	The St James conservation area purchase agreement (2008) allowed the previous landowners to retain two existing private homesteads, and to build a third, at the Ada homestead site.
Loch Katrine Recreation Reserve	50+	No	No	No	To be removed in accordance with the provisions of the Loch Katrine Recreation Reserve Management Plan 1999, now transferred to CMS Policies 2.3.7–2.3.10.
Lake Sumner Forest Park and/or Loch Katrine Marginal Strip	3	No	No	No	At northern loch edge.
Lake Pearson Conservation Area	3	No	No	No	Adjoining SH73.
Hamilton Peak Club (Craigieburn Forest Park)	10	Yes – expire 2022	Yes	No	Authorised by lease until 2022, but uncertainties remain around public membership of the club and public availability of the lodges.

⁸⁰ Section 7(2) Conservation Amendment Act 1996, section 11(2) Reserves Amendment Act 1996 or section 5(3) National Parks Amendment Act 1996.

LOCATION	NUMBER	AUTHORISED	EXCEPTION APPLIES ⁸⁰	RIGHT OF RENEWAL	NOTES
Ski Touring Club (Craigieburn Forest Park)	5	Yes – expired 2014	Yes	No	Authorised by lease until January 2014, but uncertainties remain around public membership of the club and public availability of the lodges.
Lower Selwyn Huts Conservation Area	58	Yes – expire 2019	Yes	Yes – till 2024	Authorised by specific leases since the settlement was established in the 1920s, and now in accordance with the Te Waihora Joint Management Plan 2005.
Lake Heron Nature Reserve	9?	No	No	No	Unclear land status, see 2.4 High-Country Basins Place.
Pareora Huts (Pareora Riverbed Conservation Area)	8	No	No	No	Occupation of flood plain means a proposed reserving of the land and vesting it in the Waimate District Council is unlikely.
The Kaik Huts–Waitaki River Mouth, Kaik Fishing Reserve	50+	Yes	Yes	N/A	Historic authorisations consequent upon land status.
Otamatapaio Recreation Reserve	1	No	No	No	
Round Bush Recreation Reserve (Lake Ohau)	1	No	No	No	
North Bank Rangitata River	3(?)	No	No	No	Status unclear.
Ruataniwha Conservation Area	3	No	No	No	
Waiau Conservation Area and Recreation Reserve	2?	No	No	No	One to be confirmed by GPS.

Policies

- 3.11.1 Should not authorise new private accommodation and related facilities, including encampments, on public conservation lands and waters.
- 3.11.2 Should phase out all existing private accommodation and related facilities, including encampments, on public conservation lands and waters that are not otherwise authorised under section 50 of the National Parks Act 1980⁸¹ or specifically provided for or allowed in legislation⁸² by either:

⁸¹ The exception in section 50 of the National Parks Act 1980 relates to accommodation in a public sense. The only private accommodation it deals with is for staff quarters.

⁸² Such as section 7(2) of the Conservation Amendment Act 1996, section 11(4) of the Reserves Amendment Act 1996, or section 5(3) of the National Parks Amendment Act 1996.

- a) phasing in public use of the building(s) (see Policy 3.11.4a); or
 - b) removing the building(s) at the end of the phase-out period (see Policy 3.11.4b), unless retained by the Department for public use.
- 3.11.3 Should consult the Canterbury Aoraki Conservation Board and the concession applicant when assessing a concession application for existing private accommodation and related facilities, including encampments, to determine whether a concession may be granted and, if so, and where relevant, which of the two phase-out methods (Policy 3.11.2a or 3.11.2b) should be applied.
- 3.11.4 Should specify the following concession conditions if private accommodation and related facilities, including encampments, are to be authorised, in accordance with Policy 3.11.2:
 - a) in the case of Policy 3.11.2(a), the building(s) are to be made available for use by the public—with specific conditions on how this requirement will be phased in over time stated in each individual concession, including the requirement that any costs charged to the public are reasonable; or
 - b) in the case of Policy 3.11.2(b), the building(s) are to be removed⁸³ within 18 months of the death of the person named on the authorisation as at 26 June 2013, or within 20 years of approval of this CMS, whichever occurs first; and
 - c) the style and character of all buildings are to remain essentially unmodified; and
 - d) the floor area and footprint of all buildings are not to increase beyond that existing at the time of CMS approval; and
 - e) all buildings must comply with the Building Act 2004 and local authority requirements; and
 - f) transfer/assignment of the concession to another party should not be authorised; and
 - g) an indemnity to protect the Department is given by the concessionaire and the concessionaire holds adequate insurance (e.g. general public liability insurance, statutory liability insurance, and for the removal of buildings) to cover this indemnity.
- 3.11.5 Should, where an existing authorisation contains a right of renewal, grant the renewal⁸⁴ of authorisations for private accommodation and related facilities, including encampments, on public conservation lands and waters only to the existing authorisation holder,⁸⁵ if:
 - a) the right of renewal is exercised by the authorisation holder before the existing authority expires⁸⁶; and
 - b) (subject to the terms of the authorisation) the person holding the authorisation has complied with all of the terms and conditions of the authorisation.
- 3.11.6 Should not authorise the substantial repair or replacement of private accommodation and related facilities, including encampments, if:

⁸³ Unless retained by the Department for public use/active management of historic and cultural heritage values.

⁸⁴ Where the existing/previous authorisation does not contain a right of renewal and is due to expire (or has expired) and the authorisation holder applies for a new concession, the application should be considered against the other policies in this section and the relevant general policy.

⁸⁵ I.e. should not grant transfers/assignments to other parties.

⁸⁶ In accordance with section 17ZAA of the Conservation Amendment Act 1996.

- a) a building falls into substantial disrepair, so that it needs work requiring a building consent under the Building Act 2004;⁸⁷ or
- b) a building is destroyed or so damaged by an event (e.g. fire, flood) as to render it untenable.

3.11.7 Remove unauthorised buildings from Loch Katrine Recreation Reserve, in accordance with the Loch Katrine Recreation Reserve Management Plan 1999 and Policies 2.3.7–2.3.9, notwithstanding Policies 3.11.2–3.11.6.

3.12 Marine mammal viewing

Marine mammals are protected under the Marine Mammals Protection Act 1978 and the Marine Mammals Protection Regulations 1992. Commercial activities involving marine mammals must be authorised by the Director-General of Conservation. See 2.9 Coastal Land and Marine/Ki Tai Place for details on marine mammal management in Canterbury (Waitaha).

Policy

3.12.1 Manage marine mammal viewing in accordance with Policies 2.9.3–2.9.8.

3.13 Commercial eeling

The Department is responsible for protecting and preserving tuna/eel and their habitat within public conservation lands and waters as far as practicable. Tuna/eel have an important role to play in ecosystem functioning, being the top predators in freshwater ecosystems. Commercial eeling, habitat loss and hydrodevelopment can all have potential adverse effects on tuna/eels. Longfin eels are At risk – Declining (see Appendix 5).

The Ministry for Primary Industries manages commercial eeling under the Fisheries Act 1996, the Fisheries (Commercial Fishing) Regulations 2001 and other associated regulations. Commercial eel fishers require a concession to access public conservation lands and/or take tuna/eels from waters whose beds are public conservation lands. Within areas administered under the Conservation Act 1987, legislative requirements can limit the ability to lawfully grant concessions for commercial tuna/eel fishing. For example, a section 21 ecological area must be ‘managed as to protect the [ecological] value for which the land is held’. Areas held under the Conservation Act 1987 in general are required to be managed so that their natural resources are protected, and tuna/eels are part of those natural resources where they are present. The only current provision allowing for commercial eeling on public conservation land within Canterbury (Waitaha) is at Te Waihora in accordance with the Te Waihora Joint Management Plan 2005.

The commercial take of indigenous fauna such as tuna/eels from reserves administered under the Reserves Act 1977 is also subject to exceptions contained within section 50(1) of that Act. For reserves gazetted in Canterbury up until 2013 the exceptions do not apply, hence commercial take of tuna/eels cannot be authorised within those reserves.

Commercial eeling in national parks is effectively prohibited. National park management plans identify any exceptional circumstances that may exist that enable the consideration of an application for commercial eeling in national park waters consistent with their preservation in the park. Neither Aoraki/Mount Cook’s nor Arthur’s Pass national park management plan identifies any such exceptional circumstances.

⁸⁷ Minor repair and maintenance using comparable materials does not generally require building consent under this Act.

Policies

- 3.13.1 Should not grant concessions for commercial eeling on public conservation lands or waters, to ensure the preservation of tuna/eel species, other than on public conservation lands and waters at Te Waihora, in accordance with the Te Waihora Joint Management Plan 2005.
- 3.13.2 Work cooperatively with the Ministry for Primary Industries, Ngāi Tahu, commercial eelers and the community to protect indigenous tuna/eel populations and their habitats on and off public conservation lands and waters.

3.14 Sports fish and game bird hunting

Waters on public conservation lands are often recognised as a valuable recreational asset for anglers. Where sports fish are legally present, they may be retained. However, in certain circumstances they may be eradicated or controlled with the agreement of the relevant regional fish and game council. The Department is working with the Central South Island Fish and Game Council towards achieving 'native only' status for some waterbodies, with tools including trout barriers (see section 2.4 High-Country Basins Place).

The North Canterbury, Central South Island and Nelson/Marlborough Fish and Game Councils also manage game bird hunting. The Minister, however, has a responsibility to regulate game bird hunting on public conservation lands and waters where such hunting is consistent with the purposes for which the lands and waters are held, and which does not have adverse effects on protected indigenous species.

Policies

- 3.14.1 Work with the North Canterbury, Central South Island and Nelson/Marlborough fish and game councils to:
 - a) preserve indigenous freshwater fisheries;
 - b) protect recreational freshwater fisheries and freshwater fish habitats at risk of loss or decline; and
 - c) provide for sports fishing and game bird hunting on public conservation lands and waters.
- 3.14.2 May permit the hunting of game birds on public conservation lands and waters, where such hunting:
 - a) is consistent with the purposes for which the lands and waters are held;
 - b) is consistent with provisions within the Aoraki/Mount Cook National Park Management Plan 2004, the Arthur's Pass National Park Management Plan 2007, and the Te Waihora Joint Management Plan 2005;
 - c) subject to the above criteria, does not have adverse effects on absolutely protected species or on populations of indigenous species.

3.15 Grazing and farming

In 2012 there were over 60 concessions for stock grazing and farming on public conservation land in Canterbury (Waitaha), primarily adjoining or near waterways on the Plains, or along the coast. Some of these are on lands with currently low indigenous biodiversity value; others are in the nature of management agreements where grazing is being used for exotic vegetation control. Some are in a transitional phase from grazing permissions inherited by

the Department in 1987, to a no-grazing future, or are associated with pastoral lease tenure review processes.

Grazing concessions, or management agreements for exotic vegetation control, must be consistent with Policy 11.2 of the Conservation General Policy 2005. Given the degraded state, and the Ngāi Tahu cultural values, of lowland indigenous ecosystems, habitats and species in Canterbury (see Part One), the justification for any grazing of lowland public conservation land is questionable.

Policy

- 3.15.1 May consider authorisations for grazing and farming on public conservation lands, where consistent with Policy 2.6.7, and in accordance with Part 3B of the Conservation Act 1987, the provisions of this CMS and Policy 11.2 of the Conservation General Policy 2005, and any other relevant consideration, including having regard to waterway protection measures with the Canterbury Natural Resources Regional Plan.⁸⁸

3.16 Mining

Under the Crown Minerals Act 1991, the Minister of Conservation has an approval role for access arrangements and minimum impact activities for all public conservation lands and waters. The Minister of Energy and Resources also has an approval role for access arrangements that relate to Tier 1 permits (as defined in the Act) and significant variations to those access arrangements. No access arrangements are allowable for land in Schedule 4 of the Act (which includes, but is not restricted to, all national parks, wilderness areas, nature reserves, scientific reserves and marine reserves), except in very limited circumstances which are set out in the Act.

Policies

- 3.16.1 Consider applications for access arrangements on a case-by-case basis, in accordance with the criteria set out in the relevant section (i.e. s61 or s61A and s61B) of the Crown Minerals Act 1991.
- 3.16.2 Review the conditions of access arrangements under the Crown Minerals Act 1991, if monitoring reveals that the effects of mining activities on conservation values and recreation opportunities are greater than expected or additional effects become apparent.

3.17 Sand and shingle extraction

Sand and shingle extraction from riverbeds and beaches is managed and allocated by regional councils under the Resource Management Act 1991. On public conservation lands and waters, however, these activities also require authorisation from the Department.

Within Canterbury (Waitaha), sand and shingle extraction from riverbeds in particular is a major source of roading and building material and extraction sites often adjoin state highways and roads, with consequent high impact on the natural character of the riverbed as most viewed by the public. In conjunction with Environment Canterbury, criteria to avoid, remedy or mitigate adverse effects on indigenous ecosystems have been developed for extraction sites.

⁸⁸ Environment Canterbury. 2009: Canterbury natural resources regional plan. Environment Canterbury, Christchurch.

Riverbeds and beaches are not extensive within public conservation land in Canterbury, but some are potentially suitable for sand and gravel extraction, with attention to the matters covered in 2.6 Braided Rivers/Ki Uta Ki Tai Place.

Policies

- 3.17.1 Should allow sand and/or shingle extraction from public conservation lands and waters only where adverse effects can be avoided, remedied or mitigated.
- 3.17.2 Should use the following criteria when considering sand and/or shingle extraction from public conservation land and waters:
 - a) is consistent with the purposes for which the lands and waters are held;
 - b) is consistent with the outcome and policies for the Place where the activity is proposed to occur;
 - c) is consistent with the visitor management zone Map 3, and as described in Appendix 12;
 - d) adverse effects on the natural, landscape, historic or cultural values are avoided, remedied or mitigated; and
 - e) adverse effects on the safety and enjoyment of other recreational users of the area are avoided, remedied or mitigated.
- 3.17.3 Should work with Environment Canterbury on integrated management of sand and/or shingle extraction on and off public conservation lands and waters.
- 3.17.4 May seek mitigation to assist in indigenous ecosystem management.

3.18 Commercial filming and photography

Commercial filming and photography (filming activity) is any photography or filming undertaken on public conservation lands and waters for any specific gain or reward. Filming activities can include the involvement of some or all of the following – cast, crew, film equipment, vehicles, aircraft, animals, sets and special effects.

Filming involves a range of activities, which may include feature films, documentaries, television commercials or television series. Location filming typically involves different scales of activity. Filming on public conservation lands and waters tends to be of small to medium scale, with some feature films also being shot.

Conservation General Policy 2005 states that filming should be subject to the same assessment processes and conditions as other uses, and that particular care should be taken so that filming does not adversely affect the values of sites of significance, including those of significance to tangata whenua. Issues with filming include the use of aircraft and animals, and the management of any conflict with other users of public conservation lands and waters.

In parts of Canterbury (Waitaha), notably the Mackenzie Basin, filming is a significant economic activity which makes use of the spectacular alpine areas, most of which are within Aoraki/Mount Cook National Park and other public conservation lands and waters.

Filming activities within Aoraki/Mount Cook National Park and Arthur's Pass National Park are managed according to their respective national park management plans.

The policies below are additional to the policies that apply to all authorisations and do not replace them.

Policies

- 3.18.1 Should grant concessions for commercial filming and photography (filming activity) on public conservation lands and waters located outside national parks only where the following criteria are met:
- a) any conflicts between recreation/tourism uses and filming activity are avoided (e.g. separated in space and time), remedied or mitigated;
 - b) any adverse effects from filming and associated activities, on conservation values, including sites of significance to Ngāi Tahu, are avoided, remedied or mitigated;
 - c) aircraft use for filming activity complies with the aircraft policies 3.6.1–3.6.6 and 3.6.8;
 - d) vehicle use for filming activity complies with Policies 3.2.1–3.2.3. and 3.2.3–3.2.5 (Motorised vehicles), 3.3.1–3.3.2 and 3.3.5–3.3.7 (Mountain bikes) and 3.4.1 and 3.4.3–3.4.4 (Electric power-assisted pedal cycles);
 - e) animal use for filming activity complies with Policies 3.7.1–3.7.2 (Animals), 3.8.1–3.8.2, 3.8.4 and 3.8.7 (Dogs) and 3.9.1–3.9.2 and 3.9.4 (Horses and pack animals); and
 - f) the filming activity is consistent with the outcomes and policies for Places in which the activity is proposed to occur.
- 3.18.2 May grant concessions for filming activities that do not meet the prescriptions for the visitor management zones in Appendix 12 only in accordance with Policy 3.1.12.
- 3.18.3 Should apply the provisions in section 4.3.10 of the Aoraki/Mount Cook National Park Management Plan, and section 6.4.9 of the Arthur’s Pass National Park Management Plan to any filming activity in Aoraki/Mount Cook and Arthur’s Pass national parks respectively.
- 3.18.4 Should include reference to and require compliance with the latest version of the *Code of Practice: Filming on Public Conservation Lands*⁸⁹ in all concessions for filming activity.
- 3.18.5 Draw the attention of filming concession applicants to *A Guideline for Filming within the Takiwa of Ngāi Tahu* (2010).⁹⁰

3.19 Collection of materials

Applications for the collection of material for research and information needs are addressed in, and must be consistent with the Conservation General Policy 2005 (section 12, Research and information needs).

Policy

- 3.19.1 Should allow the collection of material from public conservation lands or waters only in accordance with:
- a) the Conservation General Policy 2005, section 12; and
 - b) the outcomes and policies for Places within Part Two of this CMS.

⁸⁹ Jointly developed by the Department of Conservation and Film New Zealand.

⁹⁰ Te Rūnanga o Ngāi Tahu and Screen Producers and Directors Association of New Zealand. 2010: A guideline for filming within the takiwa of Ngāi Tahu.

3.20 Wild animals

Wild animals are introduced animals that are managed to achieve the purpose of the Wild Animal Control Act 1977. The Minister of Conservation has responsibility for the Wild Animal Control Act 1977 through the granting of:

- concessions for commercial wild animal recovery operations involving aircraft under the Conservation Act 1987;
- permits for commercial and recreational hunting; and
- permits for holding of wild animals in captivity in safari parks or deer farms.

Where wild animals are held alive in captivity, further permits may be required from the Director-General of Conservation in accordance with the Wild Animal Control Act 1977 requirements. Permits are required to convey any deer species, chamois or tahr outside a species feral range where it is to be kept for the purposes of public display, research, private use, and keeping prior to export.

This CMS is one of several mechanisms the Minister must consider when making a decision on applications for commercial wild animal recovery activities. The primary decision-making tool is the Wild Animal Control Act 1977. Consequently, policies in this CMS are considered alongside the Wild Animal Control Act 1977 when making decisions on applications. Any requirements or regulations promulgated under the Game Animal Council Act 2013 are also relevant.

There is a variety of commercial wild animal control activities, each with its own management issues. The Department has grouped these into three main categories according to the management issues and potential effects associated with each activity. This categorisation was developed in consultation with the industries and stakeholders involved. The three categories are:

1. Deer, pig, chamois and goat carcass recovery and live capture;
2. Tahr carcass recovery and live capture; and
3. Aerially-assisted trophy hunting.

Concessions are issued separately for the three types of activity. All have been occurring over many years in Canterbury (Waitaha). However all three types of activity above are assessed similarly against the criteria in the Wild Animal Control Act 1977 and other relevant legislation. Other concessions may be required under the Conservation Act 1987; for example, for aircraft access for recreational hunting.

The effects of deer carcass recovery are well known and understood. There is evidence that there has been an expansion of feral deer into places they have not been seen in for many years. Management prescriptions for some priority ecosystem units include aerial wild animal control as an appropriate tool at some sites, with ground control (including recreational hunting) also deemed appropriate at some sites. The Department works with other agencies in a cooperative manner in order to better manage wild animal recovery operations and compliance issues around it.

Policies

Deer, chamois, pig and goat carcass recovery and deer and chamois live capture

- 3.20.1 Should assess concession applications for deer, chamois, pig and goat carcass recovery, and deer and chamois live capture on public conservation lands and waters under the Wild Animal Control Act 1977 against the following criteria:

- a) the contribution to concerted action to control wild animals (to achieve the purposes of the Wild Animal Control Act 1977);
 - b) the purposes for which the lands and waters concerned are held;
 - c) adverse effects on conservation values, including priority ecosystem units and species, surrounding lands, and natural quiet;
 - d) the outcome and policies for the Places where the activity is proposed to occur;
 - e) effects on visitors;
 - f) cumulative effects;
 - g) the frequency, timing and location of the activity;
 - h) the effect of granting the concession on other authorisations; and
 - i) other relevant matters, including the applicant's ability to obtain required accreditations or certifications from other agencies.
- 3.20.2 Should grant concessions under the Wild Animal Control Act 1977 for chamois live capture on public conservation lands and waters only as one-off permits.

Tahr live capture and carcass recovery

- 3.20.3 Should assess concession applications for tahr live capture and carcass recovery activities on public conservation lands and waters under the Wild Animal Control Act 1977 against the following criteria:
- a) the contribution to concerted action to control wild animals (to achieve the purposes of the Wild Animal Control Act 1977);
 - b) the Himalayan Thar Control Plan 1993 made under the Wild Animal Control Act 1977;
 - c) the purposes for which the lands and waters concerned are held;
 - d) adverse effects on conservation values, including priority ecosystem units and species, surrounding lands, and natural quiet;
 - e) the outcome and policies for the Place where the activity is proposed to occur;
 - f) effects on visitors;
 - g) cumulative effects;
 - h) frequency, timing and location of the activity;
 - i) the effect of granting the concession on other authorisations; and
 - j) other relevant matters, including the applicant's ability to obtain required accreditations or certifications from other agencies.
- 3.20.4 Should grant concessions under the Wild Animal Control Act 1977 for tahr live capture and carcass recovery on public conservation lands and waters only as one-off permits.

Aerially-assisted trophy hunting

- 3.20.5 Should assess concession applications for aerially-assisted trophy hunting on public conservation lands and waters against the following criteria:
- a) the contribution to concerted action to control wild animals (to achieve the purpose of the Wild Animal Control Act 1977);
 - b) the Himalayan Thar Control Plan 1993 made under the Wild Animal Control Act 1977;
 - c) the purposes for which the lands and waters concerned are held;

- d) adverse effects on conservation values, including priority ecosystem units and species, surrounding lands, and natural quiet;
- e) the outcome and policies for the Places where the activity is proposed to occur;
- f) effects on visitors;
- g) cumulative effects;
- h) frequency, timing and location of the activity;
- i) the effect of granting the concession on other authorisations; and
- j) other relevant matters.

Wild animal control activities within the Adams Wilderness Area

3.20.6 May grant concessions for wild animal control activities under the Wild Animal Control Act 1977 in the Adams Wilderness Area where necessary or desirable for the preservation of the area's indigenous natural resources. A concession that meets this test will:

- a) occur where the density of tahr, chamois or red deer in the Adams Wilderness Area exceeds management intervention densities in animal control plans or thresholds set for ecosystem management;
- b) demonstrate its contribution to concerted action against the adverse effects of wild animals by showing that the wild animal control operation is necessary for, or will actively benefit, the preservation of the area's indigenous natural resources;
- c) consider the outcome and policies for 2.2 Southern Conservation Parks Place;
- d) identify any sites or times where the operation should not occur;
- e) demonstrate that no visitor group is likely to have their wilderness experience adversely affected by the activity, including through cumulative effects of other similar activities; and
- f) demonstrate the effectiveness of the hunting by providing the Department with an assessment and analysis of numbers killed and estimated animal densities.

3.21 Game animals (see also Wild animals)

Game animals are those animals defined as such in the Game Animal Council Act 2013 for the purposes of the Act, i.e. chamois, deer, tahr and wild pigs. Game which are birds are defined in Schedule 1 of the Wildlife Act 1953. The Minister of Conservation may designate any species of game animal in a specified area on public conservation lands to be a herd of special interest if the required criteria are met, including that the Minister considers that:

- (i) the animals are of special interest to hunters; and
- (ii) the animals can be managed for hunting purposes; and
- (iii) management of the animals for hunting purposes is consistent with the overriding considerations (see Glossary for definition).

A herd management plan is developed for each herd of special interest proposed for designation, setting out the objectives and strategies for the management of the herd to achieve the expected benefits to be gained from managing the animals for hunting purposes.

As at March 2016 no herds of special interest within Canterbury have been gazetted under the Game Animal Council Act 2013.

The Game Animal Council has a range of functions associated with the hunting of game animals. In relation to herds of special interest to hunters specifically, and hunting generally, the Department will work with the Council for the effective management of game animals in a manner that is compatible with the management of public conservation land and resources generally.

Policy

- 3.21.1 Work with the Game Animal Council to facilitate the hunting of game animals on public conservation land as defined by the Game Animal Council Act 2013⁹¹ to achieve the purposes of the Wild Animal Control Act 1977 and the Game Animal Council Act 2013.

3.22 Sporting and other competitive events

Competitive sporting events, including endurance races, multi-sport or orienteering events, may traverse public conservation lands and waters. These events are part of the spectrum of recreational opportunities and may be well suited to the extensive high-country conservation parks of Canterbury (Waitaha). Consideration of applications for these events is likely to focus on whether their effects can be managed in a way that is consistent with this CMS and specifically, where relevant, the outcomes for the Places that the events may traverse. These events present an opportunity to educate participants about conservation values, such as through pre-race information and briefings.

Current knowledge about the adverse effects to the ground and vegetation during sporting events indicates that these tend to be minor when confined to well-maintained track systems or open bare-gravel/rock riverbeds in dry conditions, and if not taking place on steep slopes or vulnerable areas such as wetlands. These ideal conditions are seldom available for a whole event route on every occasion. Avoidance and remedial measures may be required, including event route change, postponement or cancellation. Adverse effects on wildlife and other users can be variable, again depending on the activities undertaken, location, size and timing of the event.

In managing such events, the goal is to avoid or minimise damage to indigenous plants and wildlife, historic and cultural values, facilities (e.g. tracks) and conflict with other users of the public conservation lands and waters. On those occasions where event organisers do not disclose routes to participants until race day itself, additional conditions may need to be met to ensure that any potential effects are fully quantified, assessed, and avoided, remedied or mitigated. Monitoring of all events is essential.

Policies

- 3.22.1 May authorise organised sporting or other competitive events where:
- a) the activity is consistent with the purposes for which the lands and waters are held;
 - b) the activity is consistent with the outcome and policies for the Place(s) where the activity is proposed to occur;
 - c) any adverse effects on natural, historic or cultural values are avoided, remedied or mitigated;
 - d) any adverse effects on recreational opportunities in the areas are avoided, remedied or mitigated;

⁹¹ For the purposes of the Game Animal Council Act 2013, 'Public conservation land' means land that is: Held, managed, or administered by the Department of Conservation under the Conservation Act 1987 or an enactment listed in Schedule 1 of that Act; and Owned by the Crown.

- e) the requirements of policies for associated activities (such as use of vehicles, aircraft, animals and structures) are met; and
 - f) it can be demonstrated that adequate public notification of the event can occur before the event.
- 3.22.2 May authorise sporting or other competitive events that do not meet the prescriptions for the visitor management zones in Appendix 12 in accordance with Policy 3.1.12.
 - 3.22.3 May waive or reduce the requirement for public notification in circumstances where the details of a sporting or other competitive event are not disclosed to participants in advance, if it is satisfied that the adverse effects will be minimal and following consultation with the Canterbury Aoraki Conservation Board.
 - 3.22.4 May require the concessionaire to require participants in a sporting or other competitive event to comply with a code of conduct developed with the concessionaire.
 - 3.22.5 Should require monitoring of effects on natural, historic and cultural values.
 - 3.22.6 Should require fire safety contingencies in high fire risk areas, which may include event authorisations being cancelled at short notice.
 - 3.22.7 Should require opportunities for conservation education and interpretation; including for Ngāi Tahu cultural values in consultation with Ngāi Tahu.

3.23 Recreation activities using fixed anchors

The practice of placing fixed anchors into rock (sometimes also called bolting) is used for roped access activities such as rock climbing, abseiling, caving and canyoning. These anchor points are usually drilled or glued in place and remain permanently on the rock-face. Management issues around this practice include:

- the effects of the activity on the remote experience and accepted ethos of self-management of risk as part of this experience;
- the adverse effects on natural, historic and cultural values, not necessarily from the installation of the anchors themselves, but by the popularisation of areas, resulting in trampling, removal of plants, introduction of pest plants, erosion of landforms and potential for desecration of wāhi tapu;
- the potential liability of the Department and others for the safety of users where fixed anchors have been installed by members of the public;
- relationships between users, the Department and others regarding the installation and maintenance of fixed anchors at sites; and
- the adverse and/or beneficial effects on recreational values and the ability to provide for a spectrum of opportunities.

The Department works with the New Zealand Alpine Club as a representative advocate for climbers on these issues. The club has developed a *Position on Bolting* (2010) and *Bolting Technical Guidelines* (2005) to help ensure safe and consistent bolting and environmental responsibility. Liaison with other recreation groups also occurs through authorisation processes.

Policies

- 3.23.1 May authorise the placement of fixed anchors for recreation on public conservation lands and waters, subject to the following processes and criteria:
 - a) Liaison with the New Zealand Alpine Club (NZAC) and other recreation groups as relevant to determine those areas where new or additional fixed anchors are either

acceptable or unacceptable to the relevant recreation community and the Department, based on criteria including:

- (i) avoidance of adverse effects on priority ecosystem units, threatened or at-risk species, and geopreservation sites;
 - (ii) avoidance of adverse effects on sites of significance to Ngāi Tahu;
 - (iii) the outcome and policies for the Place;
 - (iv) consideration of historical recreation use patterns;
 - (v) addressing safety and ongoing maintenance concerns; and
 - (vi) providing for a range of recreational experiences.
- b) For areas where fixed anchors are authorised for climbing, NZAC should be informed and encouraged to take the lead on fixed-anchor management in consultation with the Department and the local climbing community, and with recognition of NZAC's *Position on Bolting* (2010) and *Bolting Technical Guidelines* (2005).
 - c) For areas where fixed anchors are authorised for uses other than climbing, a relevant organisation should be encouraged to take the lead on fixed-anchor management in consultation with the Department.

3.23.2 Should remove unauthorised or unsafe fixed anchors as part of fixed-anchor management.

3.24 Fire management

Under the Forest and Rural Fires Act 1977, the Minister of Conservation is a rural fire authority for all state areas, which generally include all public conservation lands and waters, and a 1-kilometre safety margin around some state areas. Some Crown and public conservation lands and waters have been included within Rural Fire Districts, bringing them under the jurisdiction of the two Rural Fire District Committees in Canterbury (Waitaha) rather than the Minister as the rural fire authority. This has occurred where conservation values are not threatened and provides for more effective fire management.

Fire is a significant threat to natural, cultural, historic and recreational values. Fire fuel reduction can be a preventative measure to reduce fire threat. Fire can also be used as a means of ecological management, but this is not anticipated for Canterbury ecosystems.

The Department in Canterbury has completed a Canterbury Wild Fire Threat Analysis that quantifies risks (fire cause), values (conservation and other), and hazards (damage potential) including to neighbouring properties to public conservation lands and waters. The analysis is based on scientific and research-based programmes, adapting international best practice to New Zealand and Canterbury vegetation, climate and people-activity situations. The Department has a number of Strategic/Tactical Fire Management Plans, identifying localities of highest threat and those localities where mitigation work would reduce fire ignition and/or the consequences of wild fire. These analyses and plans are integrated with other threats, within biodiversity action plans, recreation planning and concessions management.

Canterbury (Waitaha) is one of the higher-risk regions for fire. Fire-fighting is a significant operational activity for staff, both for fires within the Department's fire control area, and in support of other rural fire management agencies due to a cooperative agency approach to fire management. Climate change predictions are for drier conditions and a consequent higher fire risk in much of Canterbury. Increased populations in some rural areas and increases in certain types of recreation (e.g. four-wheel drive vehicles) are also heightening

the fire risk situation. Many small public conservation lands are extremely vulnerable to fire from neighbouring properties. An active public education programme promotes awareness of fire risk and fire permit requirements, identifies and works with groups undertaking at-risk activities (e.g. four-wheel drive vehicle use, railway maintenance, farm fires). The Department also undertakes enforcement work under the Conservation or Forest and Rural Fires Acts.

Policies

- 3.24.1 Undertake a Wildfire Threat Analysis and maintain Strategic/Tactical Fire Management Plans.
- 3.24.2 Undertake actions (assessments and implementations) to reduce fire fuels, such as mowing, clearing bare-earth fire breaks or small-scale prescribed burning.
- 3.24.3 Should require fire safety contingencies when authorising gatherings of large numbers of people, such as sporting events, in high fire risk areas such as grasslands; such contingencies may include event permits being cancelled at short notice.
- 3.24.4 Seek increased community awareness of fire threat.

3.25 Ski fields

Of the 15 ski fields in Canterbury (Waitaha), the 12 on public conservation land are some of the most intensive visitor use locations on those lands, but they are vulnerable to climate change and rising operational costs. Increasingly, the larger commercial fields will become more reliant on snow-making and will seek better visitor access and closer visitor accommodation. Smaller fields may survive as largely club and volunteer-run fields, but some will not survive or may operate intermittently. All fields may look to expanding their winter and summer visitor activities both on the fields and nearby.

These changes will start taking effect during the term of this CMS but may take decades to become fully apparent. In response, both a precautionary and a partnership approach may be needed: precautionary to avoid the risk of abandoned structures and adverse landscape effects; partnership to maintain a ski field's recreational opportunity. Both 2.2 Southern Conservation Parks Place and 2.3 Northern High-Country Place set out outcomes and policy on this.

The ski fields, in drawing visitors to higher-altitude areas, also have potential for wide-ranging conservation education, additional to their community engagement with backcountry recreation.

Policy

- 3.25.1 Manage ski fields in accordance with Policies 2.2.9 and 2.3.21.
- 3.25.2 Process all applications for renewals of existing expired authorisations for ski fields as concessions.

3.26 Gemstone fossicking

See 2.2 Southern Conservation Parks Place, in regard to the Mount Somers and Mount Barossa area within Hakatere Conservation Park.

MILESTONES—OUTPUTS

Achieved by the end of Year 3 after CMS approval (2019)

- Inventory and as-built record of private accommodation located on public conservation lands.

Achieved by the end of Year 5 after CMS approval (2021)

- An assessment of the effectiveness of aircraft management provisions within this CMS.
- Assessment of levels and effects of electric power-assisted pedal cycles on allowed tracks within Canterbury.

Achieved by the end of Year 10 after CMS approval (2026)

- An assessment of the effectiveness of aircraft management provisions within this CMS.
 - Review of levels and effects of electric power-assisted pedal cycles on allowed tracks within Canterbury.
 - Bylaws and/or regulations over public conservation lands and waters (including departmental wharves) established or reviewed where necessary.
 - Completion of CMS review.
-

Part Four—Implementation monitoring and reporting, and review

The Department of Conservation uses many different tools to implement CMSs, including:

- the Department's business planning processes, where decisions are made about priorities and resourcing for the departmental activities undertaken;
- decisions on concessions and other authorisations; and
- advocacy for conservation outcomes.

Monitoring implementation will assist in determining the success of the provisions of this CMS. The Department reports regularly to the Canterbury Aoraki Conservation Board and Ngāi Tahu on the implementation of this strategy, and the Conservation Board, in turn, reports annually to the New Zealand Conservation Authority. Additional monitoring is identified in the Department's Statement of Intent and annual reports.

This CMS will have effect for 10 years, or until formally amended or reviewed in full or in part. The term of this CMS is from 2016 to 2026.

OBJECTIVES

- 4.1.1 To report at least annually on progress in achieving the milestones of the Canterbury (Waitaha) CMS to the Canterbury Aoraki Conservation Board and Ngāi Tahu as a means of monitoring and reporting on its implementation of this CMS.
 - 4.1.2 To identify, at least annually, in a report to the Canterbury Aoraki Conservation Board any additional priority ecosystem units and threatened and at-risk species included in this CMS for which work programmes have been approved; and report progress thereafter in meeting outputs identified in the work programme.
-

Glossary

Actively conserved historic site

Historically significant site that is managed by the Department to preserve and maintain its historic features.

Activity

Includes a trade, business, or occupation (section 2, Conservation Act 1987).

Aerially-assisted trophy hunting

1. A wild animal recovery operation activity, authorised under the Wild Animal Control Act 1977 (whether or not for hire or reward) to carry out the activity of aerially-assisted trophy hunting, where an aircraft is used for all of the following purposes and no other:
 - a) to carry by aircraft recreational hunter(s), their guide(s), associated firearms/ammunition; and
 - b) the active searching by aircraft for wild animals with trophy potential; and
 - c) the on-the-ground guiding of the client and killing of the wild animal; and
 - d) the recovery by aircraft of such wild animals.
2. The activity is still considered to be aerially-assisted trophy hunting if one or more of the above components is performed or achieved.

Note: this definition excludes the following activities:

- a) live capture and carriage of wild animals.
- b) the killing of any deer species during the period 23 March to 9 April plus, when it falls outside this period, the 4 days of Easter.
- c) the killing and recovery of wild animals or any part thereof for supply to a New Zealand Food Safety Authority-approved processing facility.
- d) the carriage or use of a shotgun.

Aircraft

Any machine that can derive support in the atmosphere from the reactions of the air otherwise than by the reactions of the air against the surface of the earth (Civil Aviation Act 1990, section 2). This includes, but is not limited to, the following types of aircraft: powered and non-powered; recreational and commercial; fixed-wing and rotary-wing; manned and remotely piloted aircraft systems; and any other aircraft that may become regulated by Civil Aviation Rules from time to time.

See also ***Aircraft, non-powered*** and ***Aircraft system, remotely piloted***.

Aircraft, control line model

A model aircraft primarily controlled in flight by a single or multiple wire system operated by the person flying the aircraft and restricted to circular flight about a central point.

Aircraft, free flight model

A model aircraft with a maximum wing loading of 62 g/dm² (20 oz/ft²), with a flight path that, once launched, is uncontrollable.

Aircraft, non-powered

Any machine not driven by a powered device, that can derive support in the atmosphere from the reactions of the air otherwise than by the reactions of the air against the surface of the earth. This is an inclusive definition that includes non-powered gliders, non-powered hang gliders, parachutes, balloons and any other non-powered aircraft that may become regulated by Civil Aviation Rules from time to time.

See also ***Aircraft***.

Aircraft, remotely piloted

An unmanned aircraft that is piloted from a remote station and:

- a) includes a radio controlled model aircraft, but
 - b) does not include a control line model aircraft or a free flight model aircraft;
- or as regulated by Civil Aviation Rules from time to time.

Airstrip

Any specified area of public conservation land specifically maintained for the landing and take-off of fixed-wing aircraft, which may also be used by rotary-wing aircraft. It does not include a certified aerodrome as defined by the Conservation Act 1987 or an airport as defined by the Airport Authorities Act 1966.

Animal

Any mammal, bird, reptile, amphibian, fish (including shellfish) or related organism, insect, crustacean, or organism of every kind; but does not include a human being (Reserves Act 1977, section 2; National Parks Act 1980, section 2). Any member of the animal kingdom other than a human being (Conservation Act 1987, section 2).

Archaeological site

Subject to section 42(3) Heritage New Zealand Pouhere Taonga Act 2014:

- a) any place in New Zealand, including any building or structure (or part of a building or structure), that:
 - (i) was associated with human activity that occurred before 1900; or is the site of the wreck of any vessel where the wreck occurred before 1900; and
 - (ii) provides, or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
- b) includes a site for which a declaration is made under section 43(1) Heritage New Zealand Pouhere Taonga Act 2014.

(Heritage New Zealand Pouhere Taonga Act 2014, section 6.)

At risk (species)

Taxa that do not meet the criteria for any of the 'Threatened' species categories, but are declining (though buffered by a large total population size and/or a slow decline rate), biologically scarce, recovering from a previously threatened status, or survive only in relictual populations. (NZ Threat Classification System Manual 2008).

Authorisation

Collective term for all types of approvals by the Minister and the Director-General of Conservation provided for in a statutory process (Conservation General Policy 2005).

Authorised

Approved in a statutory process.

Backcountry destination

Destination which provides for more challenging adventures, including popular walks and tramps, within the body of large-scale natural settings.

Biodiversity

The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems (Conservation General Policy 2005).

Biogenic reefs

Elevated structures on the seabed constructed of living and dead organisms. Includes fragile erect bryozoans and other sessile suspension feeders. Examples are bryozoan beds, rhodolith beds, tube worm mounds, sponge gardens and cold-water corals. These communities develop in a range of habitats from exposed open coasts to estuaries, marine inlets and deeper offshore habitats, and may be found in a variety of sediment types and salinity regimes (Marine Protected Areas: Classification, Protection Standard and Implementation Guidelines 2008).

Biosecurity

The exclusion, eradication or effective management of risks posed by pests and diseases to the economy, environment and human health (Conservation General Policy 2005). The Department has functions which it performs under the Biosecurity Act 1993.

Building

Has the same meaning as given to it by sections 8 and 9 of the Building Act 2004 (Conservation General Policy 2005).

Bylaw

A bylaw made by the Minister of Conservation, under section 56 of the National Parks Act 1980 or section 106 of the Reserves Act 1977. Bylaws may apply to national parks and reserves, whereas regulations may apply to reserves and conservation areas.

Commercial hunting

Means hunting undertaken by professional hunters for their livelihood and intended to maximise the take or kill of animals. It does not include guided recreational hunting, transportation of recreational hunters, or other means of assistance for recreational hunting for which a consideration is paid (General Policy for National Parks 2005).

Community

Any individual or group (whether statutory or non-statutory, formal or informal, commercial or non-commercial) having an interest in a particular conservation issue.

Concession

A lease, licence, permit or easement, granted under Part 3B of the Conservation Act 1987, section 49 of the National Parks Act 1980, section 59A of the Reserves Act 1977, section 22 of the Wild Animal Control Act 1977 or section 14AA of the Wildlife Act and includes any activity authorised by the concession document.

Concessionaire

A person granted a concession by the Minister of Conservation for a lease, license, permit or easement.

Conservation

The preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations (Conservation Act 1987, section 2).

Conservation board

Conservation boards are established under section 6L of the Conservation Act 1987. The primary functions and powers of conservation boards are set out in sections 6M and 6N of the Conservation Act 1987 and section 30 of the National Parks Act 1980. Their functions include overseeing the preparation of conservation management strategies and national park management plans for their areas, approval of conservation management plans (e.g. for conservation parks), and advising the New Zealand Conservation Authority or Director-General of the Department of Conservation on conservation matters of importance in their area. They also have an important conservation advocacy role. The relevant conservation board for this Canterbury (Waitaha) CMS is the Canterbury Aoraki Conservation Board.

Conservation General Policy

A policy prepared under section 17C of the Conservation Act 1987 to provide unified policy for the implementation of the Conservation, Wildlife, Marine Reserves, Reserves, Wild Animal Control and Marine Mammals Protection Acts. It provides guidance for the administration and management of all lands and waters and all natural and historic resources managed for the purposes of those Acts, excluding reserves administered by other agencies under the Reserves Act 1977. It also provides guidance for consistent management planning for the wide range of places and resources administered or managed by the Department, including the preparation of conservation management strategies, conservation management plans and sports fish management plans.

Conservation legislation

A term that applies collectively to the statutes administered by the Department, including the Conservation Act 1987 (and the legislation listed in Schedule 1 of that Act), the Reserves Act 1977, the Wildlife Act 1953, the Marine Reserves Act 1971 and the National Parks Act 1980.

Conservation management

Any activity that is carried out by the Minister or the Director-General (and their contractors and authorised agents) in the exercise of their functions, duties or powers under conservation legislation.

Conservation management plan

A plan for the management of natural and historic resources and for recreation, tourism and other conservation purposes which implements a conservation management strategy and establishes detailed objectives for integrated management within a place or places specified in a conservation management strategy (derived from Conservation Act 1987, section 17E).

Conservation management strategy (CMS)

The purpose of a conservation management strategy is to implement general policies and establish objectives for the integrated management of natural and historic resources, including any species, managed by the Department under the Wildlife Act 1953, the Marine Reserves Act 1971, the Reserves Act 1977, the Wild Animal Control Act 1977, the Marine Mammals Protection Act 1978, the National Parks Act 1980, the Hauraki Gulf Marine Park Act 2000 or the Conservation Act 1987, and for recreation, tourism, and other conservation purposes (Conservation Act 1987, section 17D).

Control line model aircraft

See ***Aircraft, control line model***.

Convention on Biological Diversity

An international agreement on biological diversity that came into force in December 1993 following a meeting of governments in Rio de Janeiro. The objectives of the Convention are the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.

Cultural

Societal values with an emphasis on New Zealand/European history and tikanga Māori that are handed down through the generations (General Policy for National Parks 2005).

Cumulative effect

An effect which arises over time or in combination with other effects (Resource Management Act 1991, section 3).

Customary use

Gathering and use of natural resources by tangata whenua according to tikanga (Conservation General Policy 2005).

Department, the

The Department of Conservation.

Destination management

A programme aimed at increasing the number of people enjoying public conservation lands and waters. It focuses the Department on five key areas for success: understanding what people want; delivering quality experiences; optimising resources; working with others; and improving marketing and promotion. Destinations are a geographic area and/or group of facilities that are the focus of a single typical visitor trip, and are categorised into Icon, Gateway, Local Treasure and Backcountry destinations. Destination management is the coordinated management of all the elements that make up a destination including its values, attractions, people, infrastructure, access and how the destination is marketed.

Director-General

The Director-General of Conservation.

Disability assist dog

A dog certified by one of the following organisations as being trained to assist (or as being in training to assist) a person with a disability:

- a) Hearing Dogs for Deaf People New Zealand
- b) Mobility Assistance Dogs Trust
- c) New Zealand Epilepsy Assist Dogs Trust
- d) Royal New Zealand Foundation of The Blind
- e) Assistance Dogs New Zealand
- f) Perfect Partners Assistance Dogs Trust
- g) An organisation specified in an Order in Council made under section 78D

(Dog Control Act 1996, section 2).

Downhill

An extreme form of mountain biking involving riding down steep slopes, including over obstacles, drops and sharp turns, at maximum speed.

Ecological integrity

The full potential of indigenous biotic and abiotic factors, and natural processes, functioning in sustainable habitats, ecosystems and landscapes. (Conservation General Policy 2005).

Ecosystem

A biological system comprising a community of living organisms and its associated non-living environment, interacting as an ecological unit (Conservation General Policy 2005).

Ecosystem services

A wide range of conditions and processes through which natural ecosystems, and the species that are part of them, help sustain and fulfil life (Conservation General Policy 2005).

Effect

The term effect includes:

- a) any positive or adverse effect; and
- b) any temporary or permanent effect; and
- c) any past, present, or future effect; and
- d) any cumulative effect which arises over time or in combination with other effects—
regardless of the scale, intensity, duration, or frequency of the effect, and also includes—
- e) any potential effect of high probability; and
- f) any potential effect of low probability which has a high potential impact

(Conservation Act 1987, section 2 and Resource Management Act 1991, section 3).

Electric power-assisted pedal cycle

A pedal cycle to which is attached one or more auxiliary electric propulsion motors having a combined maximum power output not exceeding 300 watts.

Emergency (for an aircraft)

A situation where a concession is not required in accordance with section 17ZF of the Conservation Act 1987 only as a result of:

- a) a mechanical or structural or operational defect in the aircraft or its equipment; or
- b) weather conditions or other causes not under the control of the pilot in command.

Encampment

Non-designated site used for the purpose of shelter or camping on either:

- a) a permanent or semi-permanent basis by private individuals or groups; or
- b) for more than short-term use by private individuals or groups

(Conservation General Policy 2005).

Endemic

A species that is native to, as well as restricted to, a particular natural area (General Policy for National Parks 2005).

Eradicate

To remove completely (Conservation General Policy 2005).

Facilities, recreational

Facilities erected on or adjoining public conservation lands and waters by the Department or others that enable people to enjoy a range of recreational opportunities, including (but not limited to): visitor and information centres, camping areas, tracks and walkways, bridges, backcountry huts, roads, car parking areas, toilets, picnic areas, signs and interpretation panels, viewing platforms, wharves and boat ramps (based on Conservation General Policy 2005).

Faunistic reserve

Water or waters declared to be a faunistic reserve under the Freshwater Fisheries Regulations 1983. The water(s) are to be kept in their natural state (with no introduction or taking of species from the water(s)). The exception to this is where written consent may be given for scientific investigation only (Freshwater Fisheries Regulations 1983).

Fish

Includes all species of finfish and shellfish, at any stage of their life history, whether living or dead (Fisheries Act 1996).

Fish and Game Council

Statutory body with functions pertaining to the management, maintenance and enhancement of the sports fish and game resource in the recreational interests of anglers and hunters (Conservation Act 1987, section 26Q(1)).

Fishery

One or more stocks or parts of stocks or one or more species of freshwater fish or aquatic life that can be treated as a unit for the purposes of conservation or management (Conservation Act 1987, section 2).

Foreshore

Such parts of the bed, shore, or banks of a tidal water as are covered and uncovered by the flow and ebb of the tide at mean spring tides (Conservation Act 1987, section 2).

Four-wheel drive road

A road that can be traversed by a four-wheel drive vehicle capable of handling conditions including grade and side slopes, width, surface material, waterway fords, entry and exit angles to fords and depressions, and seasonal snow and ice, without causing adverse effects to the adjoining areas or the road. The road, through maintenance and managed traffic densities and/or seasonal closures, can be retained at this four-wheel drive standard, and can be shared with other vehicles, including trail bikes and mountain bikes. See also **Road**.

Free flight model aircraft

See **Aircraft, free flight model**.

Freshwater fish

Includes all species of finfish of the Classes Agnatha and Osteichthyes, and all shellfish of the Classes Mollusca and Crustacea, that must, at any time in the life history of the species, inhabit freshwater; and includes any part thereof and such finfish and shellfish that seasonally migrate into or out of freshwater (Conservation Act 1987, section 2).

Game (other than **Game animal**—see separate definition below)

The wildlife declared to be game specified in the First Schedule to the Wildlife Act 1953. As at the date of the approval of this CMS, all game species are birds, viz: black swan (*Cygnus atratus*), chukar (*Alectoris chukar*), kuruwhegi/Australasian shoveler (*Anas rhynchotis*), pārerā/grey duck (*Anas superciliosa*), mallard duck (*Anas platyrhynchos*), pūtangitangi/paradise shelduck (*Tadorna variegata*), partridge (*Perdix perdix*), red-legged partridge (*Alectoris rufa rufa*), peihana/pheasant (*Phasianus colchicus*), pūkeko (*Poryphio*

poryphio melanotus), Bobwhite quail (*Colinus virginianus*), Brown quail (*Coturnix ypsilophora*), and koera/Californian quail (*Callipepla californica*).

Game animal (for the purposes of the Game Animal Council Act 2013 only—see also *Wild animal* and *Herd of special interest* and *Overriding considerations*)

(a) Means:

- i) any chamois, deer, or tahr;
- ii) any pig that is living in a wild state and is not being herded or handled as a domestic animal or kept within an effective fence or enclosure for farming purposes; and

(b) Includes the whole or any part of the carcass of the animal.

(Game Animal Council Act 2013, section 4).

Gateway destination

A destination that helps to introduce New Zealanders to the outdoors and allows them to learn about conservation. These destinations may provide for a diverse range of activities and include many traditional camping and tramping destinations.

General Policy for National Parks

A policy prepared under section 44 of the National Parks Act 1980 to provide unified policy for the implementation of the Act.

Guide dog

A dog certified by the Royal New Zealand Foundation of the Blind as being a guide dog or a dog under training as a guide dog (Conservation Act 1987, section 2).

See also ***Disability assist dog***.

Habitat

The environment within which a particular species or group of species lives. It includes the physical and biotic characteristics that are relevant to the species concerned (Conservation General Policy 2005).

Heli-skiing

Heli-skiing involves the use of an aircraft, usually a helicopter, to position and re-position a guided group on a mountain slope for the purpose of skiing multiple runs on a single day.

Herd of special interest

A species of game animal in a specified area designated by the Minister of Conservation as a herd of special interest under section 16 of the Game Animal Council Act 2013 (Game Animal Council Act 2013, section 4).

Historic and cultural heritage

Any building or other structure, archaeological site, natural feature, wāhi tapu, or object, associated with people, traditions, events or ideas, which contribute to an understanding of New Zealand's history and cultures.

Historic area

An area of land that:

- a) contains an inter-related group of historic places; and
- b) forms part of the historical and cultural heritage of New Zealand; and
- c) lies within the territorial limits of New Zealand

(Heritage New Zealand Pouhere Taonga Act 2014, section 6).

Historic place

- a) Any of the following that forms part of the historical and cultural heritage of New Zealand and that lies within the territorial limits of New Zealand:
 - i) land, including an archaeological site; or part of an archaeological site;
 - ii) a building or structure (or part of a building or structure);
 - iii) any combination of land, buildings, structures, or associated buildings or structures (or parts of buildings, structures, or associated buildings or structures); and
- b) Includes any thing that is in or fixed to land described in paragraph (a)

(Heritage New Zealand Pouhere Taonga Act 2014, section 6).

Historic resource

Means a historic place within the meaning of the Heritage New Zealand Pouhere Taonga Act 2014; and includes any interest in a historic resource (Conservation Act 1987, section 2).

Hover

An aircraft flight at a constant height and position over a surface.

Hovercraft

A motorised vessel that derives full or partial support in the atmosphere from the reaction of air against the surface of the land or water over which it operates.

Icon destination

A high-profile, popular destination that underpins national and international tourism, and provides memorable visitor experiences in New Zealand.

Indigenous species

Plants and animals that initially established in New Zealand without the assistance of human beings, and without the assistance of vehicles or aircraft. This includes species that are unique to New Zealand as well as those that may be found elsewhere in the world. The words 'indigenous' and 'native' have the same meaning in this CMS (based on the Conservation General Policy 2005).

Integrated conservation management

The management of natural resources, and historical and cultural heritage, and existing or potential activities in a manner which ensures that priorities are clear and that the effects of each activity on others are considered and managed accordingly (Conservation General Policy 2005).

International Council on Monuments and Sites (ICOMOS)

An international, non-governmental organisation of heritage professionals engaged in the conservation of places of cultural heritage value and dedicated to the conservation of the world's historic monuments and sites. ICOMOS acts as an advisory body to the World Heritage Committee alongside the International Union for the Conservation of Nature and Natural Resources (IUCN) for natural heritage (www.icomos.org.nz, viewed September 2012).

International Council on Monuments and Sites New Zealand Charter, Te Pūmanawa o ICOMOS o Aotearoa Hei Tiaki I Ngā Taonga Whenua Heke Iho o Nehe

A set of guidelines on cultural heritage conservation, produced by ICOMOS New Zealand. The New Zealand Charter is widely used in the New Zealand heritage sector and forms a recognised benchmark for conservation standards and practice. It is used by central government ministries and departments, by local bodies in district plans and heritage management, and by practitioners as guiding principles (www.icomos.org.nz/nzcharters.html; viewed September 2012).

Interpretation

Conveying information about the origin, meaning or values of natural, historic or cultural heritage via live, interactive or static media in a way that stimulates interest, increased understanding and support for conservation.

Intrinsic value

A concept which regards the subject under consideration as having value or worth in its own right independent of any value placed on it by humans (Conservation General Policy 2005).

Kaik

An encampment; literally a place where fire has burnt. (Ngāi Tahu southern dialect form of kāinga.)

Kaitiaki

Guardian (Conservation General Policy 2005).

Kaitiakitanga

The exercise of guardianship by the tangata whenua of an area in accordance with tikanga. In relation to a resource this includes the ethic of stewardship based upon the nature of the resource itself (Conservation General Policy 2005).

Livestock

Any ass, cattle or other browsing animal (not being a deer or goat or a marine mammal, fish or shellfish), horse, mule, sheep, or swine, of whatever age or sex and whether or not neutered; and includes any animal, of whatever age or sex and whether or not neutered, of a class declared to be livestock for the purposes of this Act by the Governor-General by Order in Council (Conservation Act 1987, section 2).

Local Treasure destination

Locally important, vehicle-accessible, location that provides recreation opportunities for, and grows connections with, nearby communities.

Mahinga kai

The customary gathering of food and natural materials and the places where those resources are gathered (Ngāi Tahu Claims Settlement Act 1998, section 167).

Mana

Prestige, authority (Conservation General Policy 2005).

Marine mammal

A marine mammal includes:

- a) any mammal which is morphologically adapted to, or which primarily inhabits, any marine environment; and
- b) all species of seal (Pinnipedia), whale, dolphin, and porpoise (Cetacea), and dugong and manatee (Sirenia); and
- c) the progeny of any marine mammal; and
- d) any part of any marine mammal

(Marine Mammals Protection Act 1978, section 2).

Marine protected area

An area of sea especially dedicated to or achieving the protection and maintenance of biodiversity at the habitat or ecosystem level, and managed through legal or other effective means (Conservation General Policy 2005). Includes marine reserves.

Marine reserve

A marine area constituted as a marine reserve under the Marine Reserves Act 1971 (Conservation General Policy 2005).

Mātaitai reserve

A management tool created under Part IX of the Fisheries Act 1996 to recognise use and management practices of Māori in the exercise of non-commercial fishing rights. Tangata whenua may apply to the Minister of Fisheries to establish a mātaitai reserve on a traditional fishing ground for the purpose of recognising and providing for customary management practices and food gathering.

Mātuaranga Māori

Māori traditional knowledge. (Conservation General Policy 2005).

Mauri

Essential life force, the spiritual power and distinctiveness that enables each thing to exist as itself (Conservation General Policy 2005).

Milestone

A specific action that is a measurable step towards achieving an objective or outcome.

Mining

- a) Means to take, win or extract by whatever means:
 - i) a mineral existing in its natural state in land; or
 - ii) a chemical substance from a mineral existing in its natural state in land; and
- b) Includes:
 - i) the injection of petroleum into an underground gas storage facility; and
 - ii) the extraction of petroleum from an underground gas storage facility; but
- c) Does not include prospecting or exploration for a mineral or chemical substance referred to in paragraph (a) (Crown Minerals Act 1991, section 2).

Motor vehicle (includes motorised vehicle)

Means:

- (a) A vehicle drawn or propelled by mechanical power and includes a trailer, but does not include:
 - i) vehicle running on rails; or
 - ii) repealed;
 - iii) a trailer (other than a trailer designed solely for the carriage of goods) that is designed and used exclusively as part of the armament of the New Zealand Defence Force; or
 - iv) a trailer running on one wheel and designed exclusively as a speed measuring device or for testing the wear of vehicle tyres; or
 - v) a vehicle designed for amusement purposes and used exclusively within a place of recreation, amusement or entertainment to which the public does not have access with motor vehicles; or
 - vi) a pedestrian-controlled machine; or
 - vii) a vehicle that the Agency has declared under section 168A is not a motor vehicle; or
 - viii) a mobility device.

(Land Transport Act 1998, section 2).

Note 1: any motor vehicle (which includes trail and quad bikes, and over-snow vehicles) taken onto public conservation lands must be registered and/or licensed where it is required to be registered and/or licensed under the Land Transport Act 1998.

Note 2: For the purposes of this CMS, a motor vehicle does not include any electric power-assisted pedal cycle delivering up to 300 watts of power.

Mountain bike

A non-motorised bicycle that can be used off formed roads.

Nationally iconic species

A plant or animal species that New Zealanders value as nationally significant and contributing to New Zealand's national identity.

Natural

Existing in or produced by nature (Conservation General Policy 2005).

Natural character

The qualities of an area that are the result of natural processes and, taken together, give it a particular recognisable character. These qualities may be ecological, physical, spiritual or aesthetic in nature (Conservation General Policy 2005).

Natural quiet

Natural ambient conditions in a natural area; the sounds of nature (Conservation General Policy 2005).

Natural resources

Plants and animals of all kinds, and the air, water, and soil in or on which any plant or animal lives or may live, and landscape and landform, and geological features, and systems of interacting living organisms, and their environment, and includes any interest in a natural resource (Conservation Act 1987, section 2).

Natural state

Unmodified by human activity or introduced plants or animals (Conservation General Policy 2005).

New Zealand Biodiversity Strategy

A government-approved national strategy (2000) providing an integrated response to New Zealand's declining indigenous biodiversity, prepared in part to meet a commitment under the Convention on Biological Diversity (Conservation General Policy 2005).

Ngāi Tahu

For the purposes of this CMS, includes Te Rūnanga o Ngāi Tahu and the Papatipu Rūnanga as set out in Te Rūnanga o Ngāi Tahu Act 1996.

Nohoanga

Nohoanga are entitlements to occupy, temporarily and exclusively, an area of lakeshore or riverbank for the purposes of lawful fishing and the gathering of other natural resources (Ngāi Tahu Claim Settlement Act 1998). See section 1.4 and Appendix 13 of this CMS.

Outcome

A goal or end result of a conservation action or series of actions (Conservation General Policy 2005).

Overriding considerations (for the purposes of the Game Animal Control Act 2013)

- a) the welfare and management of public conservation land and resources generally;
- b) any statement of general policy that is made, or has effect as if it were made, under:
 - i) section 17B of the Conservation Act 1987
 - ii) section 44 of the National Parks Act 1980
 - iii) section 15A of the Reserves Act 1977

- iv) section 14C of the Wildlife Act 1953
 - c) any conservation management strategy made under section 17D of the Conservation Act 1987;
 - d) any conservation management plan made under:
 - i) section 17E of the Conservation Act 1987
 - ii) section 40B of the Reserves Act 1977
 - e) any management plan made under:
 - i) section 47 of the National Parks Act 1980
 - ii) section 41 of the Reserves Act 1977
 - f) any wild animal control plan made under section 5 of the Wild Animal Control Act 1977;
 - g) any pest management strategy, pest management plan, pathway management plan, or operational plan made under the Biosecurity Act 1993.
- (Game Animal Council Act 2013, section 4).

Over-snow vehicle

A motorised vehicle that is primarily designed to travel on snow or ice by means of skis, tracks, belts, cleats, or low pressure tyres, or a combination of these means. This includes snowmobiles, snow coaches or buses, and snow cats.

See ***Snowmobile***.

Papatipu Rūnanga

Means the Papatipu Rūnanga of Ngāi Tahu Whānui referred to in section 9 of Te Rūnanga o Ngāi Tahu Act 1996 (see Table 1 of this CMS).

Participation

The contribution of effort, information and ideas towards the work of the Department. (Conservation General Policy 2005).

Partnership

The relationship between individuals or groups that is characterised by mutual cooperation and responsibility for the achievement of a specific goal (Conservation General Policy 2005).

Personal mobility device

A device designed to transport one person, that is propelled by hand or a propulsion system with a maximum speed of 15 km per hour, and is ridden by a disabled person (Conservation General Policy 2005). For the purposes of this CMS, this does not include electric power-assisted pedal cycles.

Pest

Any organism, including an animal, plant, pathogen or disease, capable or potentially capable of causing unwanted harm or posing significant risks to indigenous species, habitats and ecosystems or freshwater fisheries (Conservation General Policy 2005).

Place

An area identified in a conservation management strategy or plan for the purposes of integrated conservation management. It may include any combination of terrestrial, freshwater and marine areas and may be determined by a range of criteria including but not limited to: ecological districts, geological features, catchments, internal departmental, regional or district council or rohe/takiwā boundaries, land status, major recreation or tourism destinations, commonality of management considerations, or unique management needs (Conservation General Policy 2005).

For the purposes of the Canterbury (Waitaha) CMS, the Places are National Parks; Southern Conservation Parks; Northern High-Country; High-Country Basins; Foothills; Braided Rivers/Ki Uta Ki Tai; Christchurch City/Ōtautahi; Banks Peninsula/Te Pātaka o Rākaihautū; and Coastal Land and Marine/Ki Tai.

Preservation

In relation to a resource, means the maintenance, so far as is practicable, of its intrinsic values (Conservation Act 1987, section 2).

Priority ecosystem unit

An ecosystem unit identified through the Department's natural heritage prioritising processes as being one of the most effective locations to work to ensure that a representative range of ecosystems is protected.

Private accommodation

Place to live or lodge which is not available to the general public on an open basis (Conservation General Policy 2005).

Protected areas

Terrestrial, freshwater and marine areas that are protected primarily for the purposes contained in the conservation legislation, including the conservation of natural resources and historical and cultural heritage, using a range of legal mechanisms that provide long-term security of tenure, status or land use purpose, either privately or publicly owned (based on Conservation General Policy 2005).

Protection

In relation to a resource, means its maintenance, so far as is practicable, in its current state; but includes:

- a) its restoration to some former state; and
- b) its augmentation, enhancement, or expansion

(Conservation Act 1987, section 2).

Public accommodation

Place to live or lodge in that is open to or shared by all people (General Policy for National Parks 2005).

Public conservation lands and waters

Lands and waters administered by the Department of Conservation for their respective legislative purpose, including the preservation and protection of natural and historic

resources of those areas covered by this CMS. Reserves administered by other agencies are not included in this definition.

Ramsar Convention (Convention on Wetlands of International Importance especially as Waterfowl Habitat)

An intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

Recreational freshwater fisheries

Any freshwater fisheries where the fishing of sports fish and indigenous freshwater fish is lawfully carried out for recreational purposes (Conservation General Policy 2005).

Regulations

A regulation made by the Governor-General, by Order in Council, under the relevant section of the conservation legislation.

Related facilities

Any structure or piece of equipment that is used in conjunction or association with accommodation. Examples include garages, outhouses, and outdoor showers.

Relict

Population of a species whose distribution has been severely modified and disturbed with dispersed fragments remaining.

Remotely piloted aircraft

See *Aircraft, remotely piloted*.

Reserve

Has the meaning given to the term reserve in section 2 of the Reserves Act 1977 and includes the following categories of reserves: recreation, historic, scenic, nature, scientific, government purpose, local purpose.

Restoration

The active intervention and management of modified or degraded habitats, ecosystems, landforms and landscapes in order to restore indigenous natural character, ecological and physical processes and their cultural and visual qualities; or for historic heritage, to return a place as nearly as possible to a known earlier state (Conservation General Policy 2005).

Road

Means:

- a) a road that is formed and maintained for vehicle use by the public;
- b) a route that is marked by the Department for vehicle use by the public or identified in a conservation management strategy or conservation management plan for use by vehicles generally or for a particular type of vehicle (for example a bicycle) or as a vehicle parking area (Conservation General Policy 2005).

A road may or may not pass over a defined legal road.

See also *Four-wheel drive road*.

Rohe

Geographical territory of an iwi or hapū (Conservation General Policy 2005).

Site

A defined area within a wider place (Conservation General Policy 2005).

Snowmobile

An over-snow vehicle that:

- a) has a gross weight of less than 500 kilograms; and
- b) is designed to transport no more than two people.

Species

A group of organisms that has evolved distinct common inheritable features and occupies a particular geographical range, and which is capable of interbreeding freely but not with members of other species (Conservation General Policy 2005).

Sports fish

Every species of freshwater fish that the Governor-General may declare to be sports fish for the purposes of the Conservation Act 1987; examples are trout and salmon (Conservation General Policy 2005).

Statement of Intent (SOI)

A document that sets out a rolling five-year direction for the Department. Its primary purpose is to enable Ministers, select committees, and the central and audit agencies that support them, to assess the performance of government departments.

Structure

Any building, equipment, device or other facility made by people and which is fixed to land; and includes any raft (Resource Management Act 1991, section 2).

Taiāpure

A taiāpure is a local management tool established in an area that has customarily been of special significance to an iwi or hapū as a source of food or for spiritual or cultural reasons (section 174 of the Fisheries Act).

Taiāpure can be established over any area of estuarine or coastal waters to make better provisions for rangatiratanga and for the rights secured under Article Two of the Treaty of Waitangi. Taiāpure provisions are contained within sections 174–185 of the Fisheries Act 1996.

Takiwā

Place or territory used by or associated with an iwi, hapū or whānau (Conservation General Policy 2005).

Tangata whenua

Iwi or hapū that has customary authority in a place (Conservation General Policy 2005).

Taonga

Valued resources or prized possessions held by Māori, both material and non-material. It is a broad concept that includes tangible and intangible aspects of natural and historic resources of significance to Māori, including wāhi tapu and intellectual property (Conservation General Policy 2005).

Tenure review

Tenure review of pastoral leases and other Crown lands is a process run by Land Information New Zealand (LINZ). It allows for the transfer to freehold title of lands for farming or other purposes subject to the protection of significant inherent values and the securing of public access to those lands or other public conservation lands and waters. Protection of significant inherent values is achieved by return to full Crown ownership as public conservation land, by covenanting, and, in the case of public access, by access easements.

The Department's role in tenure review is to provide advice to LINZ on the identification of significant inherent values, including public access, and recommendations for their protection and management. The Department does not have a statutory decision-making role in the process, but the outcomes for formal protection and management of significant inherent values and public access predominantly occur under the Conservation Act 1987 and Reserves Act 1977.

Threatened (species)

Includes all species categorised as 'Nationally Critical', 'Nationally Endangered' or 'Nationally Vulnerable' under the New Zealand Threat Classification System 2008.

Tikanga

Māori custom, obligations and conditions (Conservation General Policy 2005).

Tōpuni

Tōpuni has a number of meanings for Ngāi Tahu, including references to both a type of dog skin cloak and the associated custom of placing such a cloak over an object or individual so as to confer the rangatiratanga of the cloak's owner upon those things. Ngāi Tahu has adopted an additional meaning for the word: that of confirming and placing an 'overlay' of Ngāi Tahu values upon a piece of land owned and/or managed by the Crown, while not overriding the powers of land owned and/or managed by the Crown, to manage that land for the purpose for which it is held from time to time.

Translocation

Movement by human intervention of a species from place to place usually with the intention of improving the status of the species.

Urupā

Burial ground.

Utilities

Includes but not limited to these facilities based over or under the ground: structures and infrastructure for telecommunications; energy generation and transmission; sewerage; water supply and flood control; oil and gas; roads and airstrips; hydrological and weather stations (based on the Conservation General Policy 2005).

Vehicle

A contrivance equipped with wheels, tracks, or revolving runners on which it moves or is moved. Includes a hovercraft, a skateboard, in-line skates, and roller skates; but does not include:

- a) A perambulator or pushchair;
- b) A shopping or sporting trundler not propelled by mechanical power;
- c) A wheelbarrow or hand-trolley;
- d) A pedestrian-controlled lawnmower;
- e) A pedestrian-controlled agricultural machine not propelled by mechanical power;
- f) An article of furniture;
- g) A wheelchair not propelled by mechanical power;
- h) Any other contrivance specified by the rules not to be a vehicle for the purposes of this definition;
- i) Any rail vehicle

(Based on Land Transport Act 1998, section 2).

Note: any motor vehicle (which includes trail and quad bikes, and over-snow vehicles) taken onto public conservation land must be registered and/or licensed where it is required to be registered and/or licensed under the Land Transport Act 1998.

Visitor

For the purpose of this CMS, visitors are people using areas and facilities managed by the Department. They include adults and children from both New Zealand and overseas, and they may either arrange their own visit or use the services of a concessionaire.

Wāhi tapu

A place sacred to Māori in traditional, spiritual, religious, ritual or mythological senses (Heritage New Zealand Pouhere Taonga Act 2014, section 6).

Wetland of International Importance

A wetland designated under the Ramsar Convention of Wetlands (1971) as meeting the Criteria for Identifying Wetlands of International Importance; either sites containing representative, rare or unique wetland types, or sites of international importance for conserving biological diversity.

Wetlands

Permanent or intermittently wet areas, shallow water or land-water margins. They include swamps, bogs, estuaries, braided rivers, and lake margins (Conservation General Policy 2005).

Whenua tūpuna

Large or small contiguous or non-contiguous areas, routes, or other linear landscapes (tangible and intangible) of significance to Ngāi Tahu who are linked to them by virtue of their whakapapa (ancestry). Attributes of whenua tūpuna include natural features, physical formations, cultural features, ara tawhito (traditional trails), mahinga kai (resource gathering places and practices), mātauranga (knowledge), wāhi tapu (sacred places), taonga (treasures), spiritual values, cultural values, traditions and associations.

Wild animal

Has the meaning set out in the Wild Animal Control Act 1977 and includes: deer, tahr, wild goats, wild pigs, and chamois. It does not include an animal that is part of a herd designated to be a herd of special interest under section 16 of the Game Animal Council Act 2013. (Wild Animal Control Act 1977, section 2).

See also ***Game Animal***.

Wilderness Area

Any conservation area set aside as a Wilderness Area under section 18 of the Conservation Act 1987, or any part of a National Park set aside as a Wilderness Area under section 14 of the National Parks Act 1980.

Wildlife

Any animal (as defined as in the Wildlife Act 1953) that is living in a wild state; and includes any such animal or egg or offspring of any such animal held or hatched or born in captivity, whether pursuant to an authority granted under the Wildlife Act 1953 or otherwise; but does not include wild animals subject to the Wild Animal Control Act 1977 (Wildlife Act 1953, section 2).

World Heritage Area

A site designated under the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Convention as being of outstanding universal value as a site of cultural or natural heritage (Conservation General Policy 2005).

Appendix 1

Work or activities of the Department of Conservation that it considers meets the requirements of Section 4(3) of the Resource Management Act 1991 for exemptions from land use consents

This table is presented to meet the requirements for enabling exemptions under section 4(3) of the Resource Management Act 1991 (RMA). It does not exclude the need to meet all departmental requirements for the assessment of effects or responsibilities under other legislation (e.g. Building Act, Heritage New Zealand Pouhere Taonga Act 2014). This table does not imply that the facilities included within it will be managed in perpetuity.

Note: Activities within Aoraki/Mount Cook National Park are not covered by this table as (i) they are covered by the Aoraki/Mount Cook National Park Management Plan, and (ii) the Mackenzie District Council specifically allows such activities as permitted uses under the Mackenzie District Plan.

Activity scope	Management actions	Environmental impacts	Location ⁹²
Tracks, roads and car parking areas for visitor purposes			
1. Upgrade of existing tracks and roads to meet current departmental service standards using current alignment.	1. Construction of tracks and roads using cut to fill excavation, cut to waste excavation and levelling using hand tools, motorised equipment and machinery.	1. Soil disturbance, including disturbance of the duff layer and subsoil. Disturbance and soil compaction in fill areas.	Waimakariri area: <ul style="list-style-type: none"> St James Track and associated tracks, structures and buildings St James Cycle Trail and associated tracks, structures and buildings Waiau, Edwards and Stanley river valleys Lewis Pass and surrounding area Hanmer and Amuri ranges Hanmer Springs and surrounding area The Nina and Doubtful river valleys and surrounding areas Hope River valley and surrounding area The Doubtful Range, Crawford Range, Nelson Tops and Studleigh Range Lake Sumner Forest area The Rangitata and Rakaia rivers headwaters Wilberforce and Avoca river valleys and surrounding area Hogs Back mountain bike track
2. Service standard upgrades of existing tracks and roads through partial or complete realignment to take advantage of better grades, and terrain features or to incorporate elements of natural or historic landscape.	2. Excavation of batter slopes to a maximum height of 1.5 metres.	2. Surface water runoff including modification of existing natural watercourses, and control and redirection of surface water using various means such as culvert pipes, drainage sumps, cut-outs and cross boards.	
3. Construction of new tracks as agreed in consultation with the community.	3. Vegetation removal from the full width of the track corridor and discretionary removal of any vegetation beyond the track and road corridor that is considered hazardous that may adversely impact upon track components such as batter slopes, drainage or track surface materials.	3. Alterations to land contours and slopes during track construction and upgrade.	
4. Improvements to any existing track as considered necessary to mitigate any environmental	4. Aggregate surfacing, including placement and compaction of local and imported materials	4. Removal of vegetation from track corridor and from immediately adjacent to asset corridor.	
		5. Disturbance of archaeological and historic features, including	

⁹² These locations are the public conservation land at the listed locations and sorted by the Department's area office jurisdictions as at 2016.

Activity scope	Management actions	Environmental impacts	Location ⁹²
<p>impact, health and safety concern or visitor risk or to provide improved access for any management purpose.</p>	<p>(from approved, weed-free sources).</p> <p>5. Use of local materials in the vicinity of the asset corridor where necessary for obtaining fill/surfacing materials.</p> <p>6. Ground works of in-ground timber steps including formation and levelling, drainage and timber construction.</p> <p>7. Construction of drainage and redirection of surface water from the track surface to existing natural contours using various means such as culvert pipes, drainage sumps, cut-outs and cross boards.</p> <p>8. Re-formation and widening of roads to provide safe access for two vehicles and road stability to the required standards. Drainage improvement to prevent erosion and deterioration of the road surface and structure and to provide safe vehicle access.</p> <p>9. Maintenance of historic heritage features associated with the track or road maintained to ensure that they are not adversely impacted.</p>	<p>historical botanicals on or in the immediate vicinity of the track or road.</p>	<ul style="list-style-type: none"> • Cass-Lagoon circuit • Ski field access roads and associated bridges and structures: <ul style="list-style-type: none"> – Craigieburn ski field – Broken River ski field – Cheeseman ski field – Porter Heights ski field – Temple Basin ski field • Castle Hill basin, including the Craigieburn Range • Kura Tāwhiti Scenic Reserve • Arthur's Pass village • Torlesse Range • Candlesticks and Dampier Range, including Lochinvar Forest • Puketeraki Range • Mount Grey • Mount Thomas • Oxford Forest • Ashley River/Rakahuri bed • Rockwood Conservation Area • Peak Hill • All marginal strips within the Waimakariri area • Te Araroa Trail <p>Mahaanui area:</p> <ul style="list-style-type: none"> • Waiau Uwaha River mouth • Conway Village conservation areas • Leader River marginal strip • Shag Rock • Gore Bay • Manuka Bay • Napenape • Boundary Creek area • Cranky Tom Stream and surrounding area • Evesham conservation area • Mount Cass and surrounding area

Activity scope	Management actions	Environmental impacts	Location ⁹²
			<ul style="list-style-type: none"> • Tiromoana • Leithfield Beach • Selwyn River bed • Rakaia River bed • Hororata River • Motunau River and surrounding area • Amberley Beach • Ashley River/Rakahuri • Ohoka Stream • Coutts Island • Otukaikino • Motunau Island • Otamahua/Quail Island • Ripapa Island • Horomaka Island • Lyttelton hill reserves and surrounding area • Awaroa/Godley Head and all associated tracks, structures, buildings and historic infrastructure • Wairewa Conservation Area • Adderley Head • Christchurch to Little River Rail Trail • Pigeon Bay • All other public conservation land on Banks Peninsula • All associated marginal strips <p>Raukapuka area:</p> <ul style="list-style-type: none"> • Mathias and Rakaia rivers and surrounding areas • Havelock, Frances and Lawrence river valleys • Two Thumb and Sinclair ranges including Bush Stream and Mount Dobson • Cameron River valley

Activity scope	Management actions	Environmental impacts	Location ⁹²
			<ul style="list-style-type: none"> • Lake Heron basin including Lake Heron, Maori Lakes, Clent Hills, Taylor Range and Mount Somers Range • Mount Somers (including Mount Somers Track and associated tracks, buildings and structures) • North Ashburton including Double Hill and Glenariffe/Winterslow areas • Swift River valley including Mount Alford • Mount Hutt Range including ski field and Pudding Hill • Lake Clearwater and surrounding areas including Paddle Hill, Boundary Creek, Mount Potts and Big Hill Range • Other lakes and public conservation land within the Ashburton Lakes basin • Rangitata River headwaters and surrounding areas including Harper and Moorhouse ranges • Te Araroa Trail • Lower Rakaia River and surrounding areas • Mount Peel and Peel Forest • Geraldine including Talbot Forest • Orari, Waihi, and Hae Hae Te Moana rivers, gorges and surrounding areas • Four Peaks Range • Lower Opihi River and surrounding areas including Milford Lagoon • South Canterbury Coastal Lagoons including Washdyke and Wainono • Lower Rangitata River and surrounding areas • Lower Waitaki River and surrounding areas • Dalgety Range • Opihi River including Pioneer Park, Raincliffe, and Kakahu Bush

Activity scope	Management actions	Environmental impacts	Location ⁹²
			<ul style="list-style-type: none"> • North Opuha River catchment • Hunter Hills including Mount Nimrod, Otaio Gorge, Waihao Bush, Gunns Bush, Kelceys Bush, and other areas near Waimate <p>Twizel area:</p> <ul style="list-style-type: none"> • Two Thumb and Sibbald ranges, including McCauley River valley, Camp Stream, and Roundhill • Godley River and surrounding areas • Lake Tekapo (Takapo) and surrounding areas including Lake Alexandrina • Sections of Te Araroa on public conservation land • Alps 2 Ocean Cycle Trail • Cass and Jollie river valleys • Liebig Range • Lower Tasman River and surrounding areas • Tekapo River and surrounding areas including Simons Hill • Areas surrounding Lake Pukaki and Pukaki River including Ben Ohau and Ruataniwha • Benmore Range, Lake Benmore (Te Ao Mārama), and surrounding areas • Lower Ahuriri River and Omarama plains including Ben Dhu and Quailburn • Kirkliston Range • Lakes Aviemore and Waitaki and surrounding areas • Hunters Hills • Oteake including Mount Ida, Mount Buster, Hawkdun Range and Otamatapaio • Longslip Mountains, Lindis Pass and surrounding areas • Ben Ohau Range and surrounding areas

Activity scope	Management actions	Environmental impacts	Location ⁹²
			<ul style="list-style-type: none"> • Lake Ohau and surrounding area • Temple River valley • Dobson, Hopkins and Huxley rivers valleys and associated tracks, buildings and structures • Ahuriri River valley including Canyon Creek, Snowy Gorge, Birchstream, Avonburn and Ben Avon • Wether Range including Killermont and Manuka Creek
Structures⁹³ and buildings for visitor purposes			
<ol style="list-style-type: none"> 1. Upgrade of existing structures and buildings to meet departmental service standard so that visitor group requirements are met, such as minimum access widths and safety barrier heights. 2. Scheduled 'like for like' (substantially similar structures and buildings built on the same foot-print or within the immediate vicinity) replacement of existing structures and buildings as these reach the end of their projected/economic life. 3. Construction of new structures and buildings required to meet service standards for existing tracks, roads, amenity areas and campsites. 	<ol style="list-style-type: none"> 1. Preparatory site works such as vegetation removal, formation and levelling of structure and building footprints, and excavation of piles and footings. 2. Works associated with water reticulation and sewage containment/treatment. 3. Construction of drainage and redirection of surface water from structure and building footprint to existing natural contours using various means such as culvert pipes, drainage sumps and cut-outs. 4. Construction of structures and buildings such as bridges, boardwalks, stairs, handrails, safety barriers, viewing platforms, huts, shelters, toilets and ladders in accordance with requirements of SNZ HB 8630:2004 for the relevant visitor group. 	<ol style="list-style-type: none"> 1. Soil disturbance, including disturbance of the duff layer and subsoil. Disturbance and soil compaction in fill areas. 2. Surface water runoff, including modification of existing natural watercourses and control and redirection of surface water using various means such as culvert pipes and drainage sumps. 3. Alterations to land contours and slopes during structure and building construction. 4. Removal of vegetation from structure and building footprint and immediate surroundings. 5. Aesthetic impact and altered sight-lines from artificial structures in natural areas. 6. Disturbance of archaeological and historic features, including historic botanicals, and aesthetic impact on historic landscapes. 	<ul style="list-style-type: none"> • Refer to locations for 'Tracks, roads, and car parking areas for visitor purposes' above.

⁹³ Structures for visitor purposes include viewing platforms, steps/stairs, boardwalks, bridges, handrails, safety fences, stiles, signage, etc.

Activity scope	Management actions	Environmental impacts	Location ⁹²
<p>4. Construction of new structures and buildings as a component of development work for new tracks, roads, amenity areas and campsites.</p> <p>5. Improvements to any existing structure and building considered necessary in order to mitigate any environmental impact and health and safety concern or to provide improved access for any management purpose.</p>	<p>5. Maintenance of historic heritage features associated with the structure or building maintained to ensure that their integrity is not adversely impacted.</p>		
Campsites and amenities for visitor purposes			
<p>1. Upgrade of existing campsites and amenities to meet departmental service standard to meet visitor group requirements for campsites and amenity areas.</p> <p>2. Scheduled 'like for like' (substantially similar campsites and amenities built on the same footprint or within the immediate vicinity) replacement of existing campsite and amenity assets as these reach the end of their projected economic life.</p> <p>3. Construction of new campsites and amenities required to meet service standards for existing campsites and amenity areas.</p> <p>4. Construction of new assets such as structures and</p>	<p>1. Preparatory site works such as vegetation removal, formation and levelling of campsite and amenity footprint, and excavation of piles and footings.</p> <p>2. Works associated with water reticulation and sewage containment, treatment including effluent dispersal fields and in-ground waste tanks</p> <p>3. Construction of drainage and redirection of surface water from building and structural campsite and amenity footprint to existing natural contours using various means, such as culvert pipes, drainage sumps and cut-outs.</p> <p>4. Construction of campsites and amenities such as bridges, boardwalks, stairs, handrails, safety barriers, shelters, toilets, showers and ladders in</p>	<p>1. Soil disturbance, including disturbance of the duff layer and subsoil. Disturbance and soil compaction in fill areas.</p> <p>2. Surface water runoff, including modification of existing natural watercourses and control and redirection of surface water using various means such as culvert pipes and drainage sumps. Fill materials not normally found on the site may be imported (e.g. scoria).</p> <p>3. Alterations to land contours and slopes during campsite and amenity construction.</p> <p>4. Removal of vegetation from the asset footprint and from immediately around the campsite and amenity.</p>	<ul style="list-style-type: none"> Refer to locations for 'Tracks, roads, and car parking areas for visitor purposes' above.

Activity scope	Management actions	Environmental impacts	Location ⁹²
<p>buildings as a component of development work for new campsites and amenity areas.</p> <p>5. Improvements to any existing asset or establishment of new assets considered necessary in order to manage, meet regulatory requirements, and mitigate any environmental impact, or health and safety concerns or to provide improved access for any management purpose.</p>	<p>accordance with requirements of SNZ HB 8630:2004 and any other applicable service standard for the visitor group.</p> <p>5. Maintenance of the historic heritage features including historical botanicals associated with the campsite or amenity maintained to ensure that they are not adversely impacted.</p>	<p>5. Aesthetic impact and altered sight-lines from man made structures in natural areas.</p> <p>6. Noise from increased usage of campsite and amenity sites.</p> <p>7. Increased water take for operation of campsite and amenities.</p> <p>8. Disturbance of archaeological and historic features including historical botanicals on or in the immediate vicinity of the campsite or amenity.</p>	
Historic assets, remedial work and maintenance			
<p>1. Maintenance of historic places to departmental service standards and ICOMOS and HNZPT standards and guidelines.⁹⁴</p> <p>2. Maintenance and improvement to tracks allowing public access to heritage places.</p> <p>3. Construction of new assets to support, improve, interpret or improve access to historic places.</p> <p>4. Stabilisation of condition of historic assets by conservation treatments and land stabilising, e.g. construction of retaining walls.</p>	<p>1. Vegetation management, maintenance and improvement of tracks to and around historic places, maintenance of drainage channels, and management of safety issues including barrier construction, and installation of interpretative panels.</p> <p>2. Repairs and conservation treatments as scheduled to concrete, masonry, timber and earthwork structures.</p> <p>3. Maintenance of historic heritage features including historic botanicals, associated with the historic asset to ensure that they are not adversely impacted.</p>	<p>1. Minor soil disturbance of the duff layer and subsoil. Disturbance and soil compaction in fill areas.</p> <p>2. Surface water runoff, including modification of existing natural watercourses and control and redirection of surface water using various means such as culvert pipes and drainage sumps.</p> <p>3. Removal of vegetation from assets and immediate vicinity.</p>	<ul style="list-style-type: none"> Refer to locations for 'Tracks, roads, and car parking areas for visitor purposes' above.

⁹⁴ ICOMOS = International Council on Monuments and Sites. HNZPT = Heritage New Zealand Pouhere Taonga.

Activity scope	Management actions	Environmental impacts	Location ⁹²
Signs			
1. Erect signage on or within close proximity to public conservation land for the purpose of providing information and interpretation to the public. 2. Erection of signage on and off public conservation land for the purpose of informing people about fire lighting restrictions.	1. Works associated with the erection of signage.	1. Aesthetic impact from artificial structures in natural areas. 2. Removal of vegetation from sign footprint and from immediate vicinity.	<ul style="list-style-type: none"> All public conservation land within Canterbury (Waitaha).
Biodiversity tracks, roads and structures (including staff accommodation)			
1. Refer to 'Activity scope' for: 'Tracks, roads and car parking areas for visitor purposes', 'Structures and buildings for visitor purposes' and 'Campsites and amenities for visitor purposes'. Note: Not all visitor standards noted above will apply to biodiversity tracks, roads and structures (including staff accommodation). In some cases a lesser standard may apply.	1. Refer to 'Management actions' for 'Tracks, roads and car parking areas for visitor purposes', 'Structures and buildings for visitor purposes' and 'Campsites and amenities for visitor purposes'. Note: Not all visitor standards noted above will apply to biodiversity tracks, roads and structures (including staff accommodation). In some cases a lesser standard may apply.	1. Refer to 'Environmental impacts' for 'Tracks, roads and car parking areas for visitor purposes', 'Structures and buildings for visitor purposes' and 'Campsites and amenities for visitor purposes'.	<ul style="list-style-type: none"> All public conservation land in Canterbury (Waitaha) where conservation programmes are being undertaken.
Other management related activities			
1. Erection of fences on public conservation land and its boundaries. 2. Habitat enhancement. 3. Pest control and/or eradication.	1. Vegetation removal to provide clear lines for fences. 2. Some animal pest operations (note: discharge permits will be required for operations utilising pesticides). 3. Earthworks and vegetation clearance associated with habitat	1. Vegetation removal. 2. Soil disturbance, including disturbance of the duff layer and subsoil. 3. Contamination of soil by poison contained within pellet bait,	<ul style="list-style-type: none"> All public conservation land in Canterbury (Waitaha) where conservation programmes are being undertaken.

Activity scope	Management actions	Environmental impacts	Location ⁹²
4. Airstrips for fire fighting purposes.	enhancement (e.g. pond/drain creation or re-alignment) and fire management. 4. General access required to undertake the activity.	4. Death and likely eradication of target mammalian pests; possible death of non-target species.	
Hazardous goods			
1. Use, transportation, storage and disposal of hazardous substances.	1. Storage, transport and application of hazardous substances including but not limited to treated timber, flammable liquids, pesticides and herbicides.	1. Will comply with all relevant legislative requirements.	<ul style="list-style-type: none"> • All public conservation land in Canterbury (Waitaha) where conservation programmes are being undertaken.

Appendix 2

Ecosystem and habitat types within Canterbury (Waitaha)

This list has been taken from the Department's national list of around 1000 ecosystem units⁹⁵, which represent the full range of New Zealand's terrestrial and freshwater ecosystems (including priority and non-priority units both on and off public conservation lands and waters).

The list is accurate as at the date of approval of this CMS. Its contents may be amended or reviewed during the term of this CMS.

Ecosystem/habitat		Significant values	Pressures/ threats	Administrative status	Management response
Frost flats	Bog, mountain celery and silver pine scrub/forest	Montane podocarp scrub and low forest with several local variants including toatoa, bog pine locally with silver pine, pink pine, yellow silver pine, pāhautea, Westland tōtara and often with divaricating shrubs and <i>Dracophyllum</i> species.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Dogs.	Scenic Reserve, Conservation Park, Ecological Area, Local Purpose Reserve, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.
	Bog pine, mountain celery pine scrub/forest	Bog pine and/or mountain celery pine scrub/low forest, with species of <i>Dracophyllum</i> , <i>Leucopogon</i> , <i>Coprosma</i> , <i>Hebe</i> , <i>Olearia</i> , <i>Pittosporum</i> , <i>Gaultheria</i> , <i>Pimelea</i> , tauhinu, korokia, mountain wineberry, snow tōtara and porcupine shrub. Early successional derivatives include short tussock grasslands of species of <i>Poa</i> , <i>Festuca</i> , <i>Deyeuxia</i> , <i>Rytidosperma</i> with inter-tussock prostrate herbfield species.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Scenic Reserve, Conservation Park, Scientific Reserve, Marginal Strip, Stewardship Area, National Park.	Biosecurity surveillance and management. Pest plants and animals control. Advocacy, consultation and partnerships.
	<i>Coprosma</i> , <i>Olearia</i> scrub	Alluvial scrub of two different types: scrub on free-draining stony soils with species including <i>Carmichaelia</i> , <i>Coprosma</i> .	Biosecurity of pest plants and animals. Human impacts.	Wilderness Area, Scenic Reserve, Conservation	Biosecurity surveillance and management.

⁹⁵ For more information about the classification of New Zealand's terrestrial ecosystems, refer to Singers, N.J.D.; Rogers, G.M. 2014: A classification of New Zealand's terrestrial ecosystems. *Science for Conservation* 325. Department of Conservation, Wellington. 87 p.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
		<i>Olearia</i> , <i>Hebe</i> and <i>Corokia cotoneaster</i> , mānuka, matagouri and lianes <i>Muehlenbeckia</i> , <i>Rubus</i> , <i>Clematis</i> spp.; and shrubland on poor-draining silty soils of species such as <i>Coprosma</i> (<i>C. propinqua</i> , <i>C. pedicillata</i>), <i>Pittosporum obcordatum</i> , <i>Olearia</i> (<i>O. polita</i> , <i>O. virgata</i>). Early alluvial successions are dominated by short tussock grasslands (<i>Poa</i> , <i>Festuca</i> , <i>Deyeuxia</i> , <i>Rytidosperma</i> spp.).	Resource use activities. Fire. Dogs.	Park, Ecological Area, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.	
	Kānuka, <i>Olearia</i> scrub/treeland	Scrub and treeland of species of kānuka, <i>Olearia</i> , <i>Carmichaelia</i> and <i>Melicytus</i> , with <i>Corokia cotoneaster</i> , matagouri, <i>Ozothamnus</i> , <i>Sophora prostrata</i> and lianes (e.g. <i>Muehlenbeckia</i>) and locally <i>Leonohebe cupressiodes</i> . Early successional derivatives include short tussock grasslands of species of <i>Poa</i> , <i>Festuca</i> , <i>Deyeuxia</i> , <i>Rytidosperma</i> , with inter-tussock prostrate herbfield species.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Historic Reserve, Scenic Reserve, Conservation Park, Nature Reserve, Scientific Reserve, Marginal Strip, Stewardship Area.	Biosecurity surveillance and management. Pest plants and animals control. Advocacy, consultation and partnerships.	
	Red tussockland	Red tussock grasslands in montane/sub-alpine temperature inversion basins with inter-tussock herbfield/short tussockland and prostrate shrub species. Early alluvial successions are dominated by short tussockland of <i>Poa</i> , <i>Festuca</i> , <i>Deyeuxia</i> , <i>Rytidosperma</i> species. Typically includes an embedded complex mosaic of bog and fen wetlands on organic soils.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Vehicles. Dogs.	Wilderness Area, Scientific Reserve, Stewardship Area, National Park.	Advocacy, consultation and partnerships.	
Cool climate forest	Hall's tōtara, mountain toatoa, broadleaf forest	Mid-slope and foothill forests of Hall's tōtara, mountain toatoa and broadleaf. Locally includes matai and kōwhai at lower altitudes and Southern rātā is also present at Mount Peel, South Canterbury.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Scenic Reserve, Conservation Park, Nature Reserve, Scientific Reserve, Government Purpose Reserve.	Biosecurity surveillance and management. Pest plants and animals control.	

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
	Podocarp, ribbonwood kōwhai forest	Kahikatea, matai, tōtara forest with ribbonwood, narrow-leaved lacebark, kōwhai and a wide variety of divaricating shrubs on free draining soils.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Advocacy, consultation and partnerships.
	Red-silver beech forest	Red-silver beech forest locally with podocarp/broadleaved species with at least three local variants: 1. Raukūmara-Urewera ranges; red, silver beech with tāwari and locally quintinia, kāmahī, Hall's tōtara and at lower altitudes rimu and miro 2. North Island/South Island red, silver beech forest locally with black/mountain beech, Hall's tōtara, pāhautea, kāmahī, hard beech and at lower altitudes rimu, miro and matai 3. Eastern with red, silver, black/mountain beech		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Dogs. Wasps.	Scenic Reserve Conservation Park, Ecological Area, Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.
	Silver-mountain beech forest	New unit added to allow better discrimination of montane forests—interim, with further description required		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Dogs. Wasps.	Conservation Park, Ecological Area, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
Cold climate forest	Mountain beech forest	Mountain beech forest with divaricating <i>Coprosma</i> spp., weeping matipo, mountain toatoa, snow tōtara, broadleaf, three-finger, putaputawētā and locally Hall's tōtara.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Wasps.	Scenic Reserve, Conservation Park, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Biosecurity surveillance and management. Pest plants and animals control. Advocacy, consultation and partnerships.	
	<i>Olearia</i> , <i>Pseudopanax</i> , <i>Dracophyllum</i> scrub	Sub-alpine scrub of wide range of local variants with a range of species of <i>Olearia</i> , <i>Brachyglottis</i> , <i>Pseudopanax</i> , <i>Dracophyllum</i> , <i>Hebe</i> , <i>Coprosma</i> , <i>Hoheria</i> , montane podocarp trees, mānuka and wharariki.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Dogs.	Wilderness Area, Scenic Reserve, Conservation Park, Ecological Area, Marginal Strip, Stewardship Area, National Park.	Biosecurity surveillance and management. Pest plants and animals control. Advocacy, consultation and partnerships.	
	Pāhautea, Hall's tōtara, mountain toatoa and broadleaf forest	Beech gap montane forests of pāhautea, Hall's tōtara, mountain toatoa and broadleaf.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Conservation Park, Stewardship Area, National Park.	Pest animal control	
Dunelands	Oioi, knobby clubrush sedgeland	Dune plains of several local variants with both dry and ephemerally wet communities of range of successional stages. Dominant species include <i>Carex pumila</i> , species of <i>Gunnera</i> , <i>Selliera</i> , <i>Isolepis</i> , <i>Epilobium</i> , <i>Ranunculus</i> , <i>Leptinella</i> , <i>Lobelia</i> , <i>Colobanthus</i> , <i>Geranium</i> , <i>Hydrocotyle</i> and locally <i>Lilaeopsis novae-zelandiae</i> , <i>Myriophyllum votschii</i> and <i>Triglochin striata</i> , <i>Limosella lineata</i> and other turf-forming species with older stages developing into oioi, knobby club rush, toetoe, harakeke, locally <i>Cyperus ustulatus</i> , <i>Lepidosperma australe</i> , silver	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Vehicles.	Scenic Reserve, Scientific Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.	

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
High alpine			tussock and <i>Raoulia</i> spp. Locally includes <i>Coprosma propinqua</i> and mānuka in older successions.			
	Pīngao sedgeland		Pīngao sedgeland foredune with scattered knobby clubrush, <i>Carex pumila</i> , shore bindweed, sand tussock, sand coprosma, <i>Muehlenbeckia complexa</i> , <i>Euphorbia glauca</i> , <i>Sonchus kirkii</i> and locally <i>Pimelea lyallii</i> , <i>Carex testacea</i> , <i>Acaena</i> spp., silver tussock, holy grass grading into rear semi-stable dunes with scattered dune scrub. In west grades into abundant harakeke, mānuka, <i>Olearia avicenniifolia</i> while in east matagouri, <i>Carmichaelia</i> spp., akeake and ngaio.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Canada geese. Vehicles.	Scenic Reserve, Nature Reserve, Ecological Area, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.
	Spinifex, pīngao grassland/sedgeland		Spinifex, pīngao sedgeland/grassland foredune with occasional shore bindweed, sand coprosma, tauhinu, sand daphne, grading into rear semi-stable dunes with open scattered dune scrub of bracken, <i>Muehlenbeckia complexa</i> , toetoe, harakeke, and cabbage trees. Locally includes matagouri, mānuka, kānuka, tutu and <i>Olearia solandri</i> .	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Canada geese. Vehicles.	Scenic Reserve, Conservation Park, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.
	'Fellfield', gravelfield/stonefield		Fellfield of at least two regional types (Eastern Southern Alps and Kaikōura) with a sparse covering of vegetable sheep, subshrubs (<i>Hebe</i> spp.), <i>Celmisia</i> , and herbs with extensive areas of rock pavement, boulderfield, bluffs and limited areas of snow banks.	Fire. Grazing lease. Human impacts. Invasive species. Vegetation clearance. Vehicles. Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire.	Conservation Park, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Gravelfield/stonefield, cushionfield		Wet fellfield with areas of rock pavement, talus, boulderfield and bluffs and locally	Biosecurity of pest plants and animals.	Wilderness Area, Conservation	Pest plants and animals control.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
			cushionfield and snow banks. At least two regional types (Western Nelson, Western Alps/Northern Fiordland), includes a diversity of small herbs and sub-shrubs including <i>Aciphylla</i> , <i>Agrostis</i> , <i>Brachyscome</i> , <i>Brachyglottis</i> , <i>Celmisia</i> , <i>Epilobium</i> , <i>Gaultheria</i> , <i>Gentianella</i> , <i>Hebe</i> , <i>Ourisia</i> , <i>Poa</i> , <i>Ranunculus</i> , <i>Trisetum</i> and cushion genera and snow banks of <i>Chionochloa oreophila</i> , <i>Poa colensoi</i> with <i>Celmisia hectorii</i> .	Human impacts. Resource use activities. Fire. Vehicles.	Park, Nature Reserve, Stewardship Area, National Park.	Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Permanent snow and ice			Ground cover weeds. Human impacts.	Wilderness Area, Conservation Park, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
Inland cliff	<i>Pachystegia</i> , <i>Carmichaelia</i> shrubland/tussockland/rockland		Mosaics of scrub, shrub, fern and grass species including; wharariki, species of <i>Pachystegia</i> , <i>Brachyglottis</i> , <i>Carmichaelia</i> , <i>Heliohebe</i> , <i>Hebe</i> , <i>Helichrysum</i> , <i>Coprosma</i> , <i>Coriaria</i> and locally tauhinu, <i>Aciphylla</i> aurea and hard, silver and <i>Chionochloa</i> tussock grasses. Locally includes scrub of broadleaf, <i>Olearia paniculata</i> , kowhai, akeake and ferns, herbs, sedges, grasses in association with seepages. Locally endemics on weakly weathered calcareous parent materials limestone.	Pest animals and plants, Fire, human impacts, quarrying, vegetation clearance	Scenic Reserve, Conservation Park, Stewardship Area.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
Lake	Generic Lake		A body of standing water with no current. These provide a huge range of habitats depending on their physical characteristics and how they were formed (natural	Adjacent land uses. Catchment impacts. Human impacts. Hydrological alteration. Impeded	Wilderness Area, Scenic Reserve, Conservation Park, Nature Reserve,	Pest plants and animals control.
	Glacial					

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
	Landslide	depression, geological change or event or coastal or river change).		fish passage. Invasive species. Lake macrophytes. Pest fish. River nutrients. Salmonids. Sediments and nutrients. Water gravel extraction. Hydrological alteration.	Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Riverine					
	Shoreline					
	Swamp					
Low alpine	Mid-ribbed, broad-leaved, red and carpet tussockland/shrubland	Chionochloa pallens, C. flavescens (subsp. lupeola and subsp. hirta) and locally C. rubra, C. australis tall tussock grassland/shrubland and low scrub with areas of talus, boulderfield and bluffs.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Canada geese. Vehicles. Dogs.	Scenic Reserve, Conservation Park, Ecological Area, Stewardship Area, National Park.	Pest plants and animals control. Biosecurity surveillance and management.
	Mid-ribbed and narrow-leaved snow tussockland/shrubland	Chionochloa pallens subsp. pilosa locally with C. rigida subsp. amara and C. crassiuscula tall tussock grassland, low scrub with areas of talus, boulderfield and bluffs.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Canada geese. Vehicles.	Wilderness Area, Scenic Reserve, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Narrow-leaved and slim snow tussockland/shrubland	Chionochloa rigida subsp. rigida, C. macra tall tussock grassland/shrubland of species of Hebe and Dracophyllum with areas of talus, boulderfield and bluffs. At least two regional variants: 1. Eastern/Central Otago mountains 2. Eastern Alps		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Canada geese. Fire. Grazing lease. Vehicles.	Scenic Reserve, Conservation Park, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Slim and mid-ribbed snow tussockland/shrubland	Chionochloa macra and/or C. pallens tall tussock grassland/shrubland with species		Biosecurity of pest plants and animals.	Scenic Reserve, Conservation	Pest plants and animals control.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
			of <i>Hebe</i> , <i>Brachyglottis</i> and <i>Dracophyllum</i> and with areas of talus, boulderfield and bluffs. At least two regional variants: 1. Northern Alps with <i>C. oreophila</i> and/or <i>C. australis</i> at high altitude close to the main divide 2. Kaikōura with <i>C. flavescens</i> subsp. <i>brevis</i> , bristle and blue tussock	Human impacts. Resource use activities. Fire. Canada geese. Grazing lease. Vehicles.	Park, Marginal Strip, Stewardship Area, National Park.	Advocacy, consultation and partnerships. Biosecurity surveillance and management.
Mild climate forest	Black beech forest	Black beech forest of at least two variants: 1. Black beech, podocarp broadleaved forest with abundant black beech, occasional matai, tōtara, locally tītoki, hīnau, black maire, kōwhai, rewarewa, hard and red beech with kahikatea, kāmahī and Northern rātā in sub-humid to humid areas 2. Abundant black beech with rare podocarp and broadleaved trees		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Dogs. Wasps.	Historic Reserve, Scenic Reserve, Conservation Park, Stewardship Area.	Pest plants and animals control. Biosecurity surveillance and management.
	Kahikatea forest	Kahikatea forest locally with matai and a sparse sub-canopy of ribbonwood, hoheria, locally kōwhai, pōkākā, māhoe, lemonwood and divaricating shrubs on alluvial Holocene flood plains.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Scenic Reserve, Conservation Park, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Matai, tōtara, kahikatea broadleaved forest	Podocarp broadleaved forest of two regional variants: 1. Northern—occasional emergent rimu, matai, miro, tōtara, rewarewa, with hīnau, locally maire, tītoki and abundant māhoe 2. Southern—emergent matai, tōtara, kahikatea with broadleaf, ribbonwood, narrow-leaved lacebark, tarata, māhoe,		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Scenic Reserve, Conservation Park, Scientific Reserve, Sanctuary Area, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
			fivefinger, kaikōmako and locally pōkākā, Southern rātā and rimu in humid microclimates			
Open water	Open water			Adjacent land uses. Catchment impacts. Human impacts. Hydrological alteration. Impeded fish passage. Invasive species. Lake macrophytes. Pest fish. River nutrients. Salmonids. Sediments and nutrients. Water gravel extraction.	Scenic Reserve, Conservation Park, Nature Reserve, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
Exotic	Pasture				Scenic Reserve, Conservation Park, Nature Reserve, Scientific Reserve, Government Purpose Reserve, Sanctuary Area, Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
Exotic	Plantation				Scenic Reserve, Conservation Park, Nature Reserve, Scientific Reserve,	Pest plants and animals control. Advocacy, consultation and partnerships.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
River	River	Flowing water which provides a variety of local mosaic habitats for aquatic plants, invertebrates and vertebrates.		Adjacent land uses. Catchment impacts. Human impacts. Hydrological alteration. Impeded fish passage. Invasive species. Pest fish. River nutrients. Salmonids. Sediments and nutrients. Water gravel extraction.	Scenic Reserve, Conservation Park, Scientific Reserve, Government Purpose Reserve, Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
Saline	Searush, oioi, glasswort and sea primrose rushland/herbfield	Rushland, herbfield of sea grass, glasswort, sea primrose, locally with shell barrier and or gravel beach ridges, grading into sea rush, oioi, locally with <i>Baumea juncea</i> and <i>Schoenoplectus</i> spp. with areas of coastal herbfield, e.g. shore celery, half star, bachelor's button, arrow grass and grading into a fringe of coastal scrub of salt marsh ribbonwood, <i>Olearia solandri</i> , <i>Coprosma propinqua</i> , and pōhuehue.		Canada geese. Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Vehicles.	Scenic Reserve, Conservation Park, Scientific Reserve, Government Purpose Reserve, Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Shore bind weed, knobby clubrush gravelfield/stonefield	Stone and gravelfield with halophytic herbs, sedges and vines including glasswort, half star, shore celery, arrow grass, shore spurge, knobby club rush, shore bindweed grading into coastal scrub-vineland of <i>Coprosma</i> , <i>Muehlenbeckia</i> , and locally <i>Meliccytus</i> , <i>Pimelea</i> , <i>Ozothamnus</i> species, harakeke and further inland on		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Canada geese. Vehicles.	Scenic Reserve, Nature Reserve, Scientific Reserve, Government Purpose Reserve, Local Purpose Reserve, Marginal Strip,	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.

Ecosystem/habitat		Significant values		Pressures/ threats		Administrative status	Management response
			older beach ridges, with open treeland locally including ngāio, taupata, akeake.			Stewardship Area, National Park.	
Rock, gravel and stone dominated communities	Scree, gravel field		Loose mobile gravel field of predominantly shattered greywacke and argillite on slopes of between 35 and 40 degrees and include 26 species of specialised scree plants and associates commonly including <i>Stellaria roughii</i> , <i>Epilobium pycnostachyum</i> , <i>Lignocarpa carnosula</i> and <i>Hebe epacridea</i> .	Biosecurity of pest plants and animals. Human impacts. Resource use activities.		Scenic Reserve, Conservation Park, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Braided rivers, hard tussock, scabweed gravel field/stonefield		Stonefield, gravel field with a mosaic of prostrate herb field of scabweed, mats and short lived herbs, e.g. <i>Raoulia</i> spp., <i>Epilobium</i> spp., <i>Pimelea prostrata</i> and <i>Muehlenbeckia axillaris</i> , grading into short-tussock grasslands on fresh alluvium with silver tussock, hard tussock, blue wheat grass and plume grass and matagouri scrub (inland South Island) or kānuka scrub on older more stable soils. Locally includes inland dunes.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Vehicles. Water gravel extraction.		Scenic Reserve, Conservation Park, Government Purpose Reserve, Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Braided rivers, scabweed gravel field/stonefield		Stonefield, gravel field with a mosaic of prostrate herb field of scabweed and willowherb species, including <i>Raoulia tenuicaulis</i> , <i>R. hookeri</i> and <i>Epilobium microphyllum</i> on bare gravels grading into short tussock grassland at higher altitude and/or <i>Cortaderia</i> spp. tall tussock grasslands, with species of <i>Hebe</i> , <i>Coprosma</i> , <i>Carmichaelia</i> , <i>Coriaria</i> , mānuka scrub on recent alluvial flood plains. Locally may also include <i>Olearia avicenniifolia</i> especially at higher altitudes in Westland.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs. Vehicles. Water gravel extraction.		Wilderness Area, Scenic Reserve, Conservation Park, Ecological Area, Government Purpose Reserve, Local Purpose Reserve, Wildlife Management Area, Marginal Strip, Stewardship	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
Regenerating	Broadleaved scrub & shrubland	Regenerating broadleaved scrub & shrubland		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire.	Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	<i>Dracophyllum</i> scrub	Regenerating <i>Dracophyllum</i> scrub		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire.	Scenic Reserve, Conservation Park, Nature Reserve, Marginal Strip, Stewardship Area.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Mānuka or kānuka scrub	Regenerating mānuka or kānuka scrub		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire.	Historic Reserve, Scenic Reserve, Conservation Park, Nature Reserve, Ecological Area, Scientific Reserve, Government Purpose Reserve, Sanctuary Area, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
	Short-tussock grassland	Regenerating short-tussock grassland	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Canada geese. Vehicles.	Scenic Reserve, Conservation Park, Ecological Area, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.	
Ultramafic	Tussockland/stonefield/rockland	Two local variants. Boulderfield with scattered Chionochloa defracta tall tussock grassland, shrubland with tauhinu, Dracophyllum pronum, D. filifolium and locally mānuka and with D. pronum, blue tussock, bristle tussock, Poa spp.	Biosecurity of pest plants and animals. Fire. Human impacts. Vegetation clearance. Vehicles.	Conservation Park, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships.	
Warm climate forest	Tītoki ngaio forest	Coastal broadleaved forest of tītoki, ngaio, māhoe, five-finger, māpou, kaikōmako, kōwhai, akeake, akiraho, locally occasional matai, tōtara and kahikatea and locally nīkau, tawa and rewarewa in northern and central part of range.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Historic Reserve, Scenic Reserve, Scientific Reserve, Local Purpose Reserve, Marginal Strip, Stewardship Area.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.	
	Tōtara matai ribbonwood forest	Tōtara, matai forest with occasional kahikatea, tītoki, ribbonwood, kōwhai and a wide range of divaricating shrubs. Locally includes occasional tawa, tītoki and maire in northern and moister part of range. Early successional derivatives on younger alluvial sites include kānuka, kōwhai treeland and forest.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Dogs.	Scenic Reserve, Conservation Park, Scientific Reserve, Marginal Strip, Stewardship Area.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.	
Wetland	‘Alpine seepages/flushes’ Schoenus pauciflorus sedgeland	Low stature sedgeland, mossfield, herbfield with abundant mosses, liverworts, sedges and a wide range of herbs, including	Biosecurity of pest plants and animals. Human impacts.	Conservation Park, Stewardship	Pest plants and animals control.	

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
		<i>Schoenus pauciflorus</i> , <i>Carpaea alpina</i> , and locally <i>Epilobium</i> , <i>Montia</i> , <i>Ranunculus</i> , <i>Schizaeilema</i> , <i>Hydrocotyle</i> and <i>Gentianella</i> spp.		Resource use activities. Canada geese. Hydrological alteration. Invasive species. Quarrying. Sediments and nutrients. Vehicles.	Area, National Park.	Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	‘Ephemeral wetland’ herbfield	Herbfield and or low sedgeland dominated by a wide range of predominantly montane short statured herbs, grasses and species. Dominants may include species of <i>Leptinella</i> , <i>Lobelia</i> , <i>Hydrocotyle</i> , <i>Euchiton</i> , <i>Epilobium</i> , <i>Plantago</i> , <i>Ranunculus</i> , <i>Myriophyllum</i> , <i>Elatine</i> , <i>Glossostigma</i> , <i>Isolepis</i> , <i>Eleocharis</i> , <i>Carex</i> , <i>Deschampsia</i> .		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Canada geese. Dogs. Hydrological alteration. Invasive species. Quarrying. Sediments and nutrients. Vehicles.	Historic Reserve, Scenic Reserve, Conservation Park, Nature Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	‘Lakeshore turf’ herbfield	Short-statured herbfield of broadly two variants: 1. Coastal 2. Inland often with species in common to both variants Coastal are often brackish and commonly include <i>Selliera radicans</i> , <i>Isolepis</i> spp., <i>Limosella</i> , and <i>Lilaeopsis</i> and grade into salt marsh with increasing salinity. Inland variant commonly includes <i>Glossistigma elatinoideis</i> , species of <i>Lilaeopsis</i> , <i>Carex</i> , <i>Eleocharis</i> , <i>Lobelia</i> , <i>Centrolepis</i> , <i>Hydrocotyle</i> , <i>Myriophyllum</i> , <i>Plantago</i> , <i>Ranunculus</i> , <i>Crassula</i> and other herb species.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Canada geese. Dogs. Hydrological alteration. Invasive species. Quarrying. Sediments and nutrients. Vehicles.	Scenic Reserve, Conservation Park, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	<i>Carex</i> , <i>Schoenus</i> sedgeland	Montane sedgeland with a high water table dominated by complex mosaics of a wide variety of <i>Carex</i> species including <i>C. secta</i> ,		Biosecurity of pest plants and animals. Human impacts.	Conservation Park, Nature Reserve,	Pest plants and animals control.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
		<i>C. virgata</i> , <i>C. diandra</i> , <i>C. coriacea</i> , <i>C. sinclairii</i> , <i>C. gauchichaudiana</i> and <i>Schoenus pauciflorus</i> with locally small pools, and lakes often with a fringe of raupō. At higher altitude <i>Schoenus</i> becomes more abundant while at lower altitude harakeke may be present. Intact examples have margins of wetland scrub.		Resource use activities. Canada geese. Dogs. Fire. Hydrological alteration.	Government Purpose Reserve, Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	<i>Chionochloa</i> tussockland	<i>Chionochloa</i> tussockland with wirerush, tangle fern and scattered shrubland locally including mānuka, pink-pine, yellow silver pine and <i>Dracophyllum</i> spp. on blanket peat (irrespective of slope). Several variants locally with <i>Chionochloa acicularis</i> , <i>C. juncea</i> , <i>C. teretifolia</i> .		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Catchment impacts. Dogs. Hydrological alteration. Sediments and nutrients. Vehicles.	National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Flaxland	Flaxland dominant swamps often with toetoe, species of <i>Carex</i> (e.g. pūkio) and <i>Baumea</i> , kiokio and occasional wetland scrub, treeland of cabbage tree, <i>Coprosma</i> spp., mānuka, and locally weeping matipo and <i>Olearia virgata</i> . Areas with high water tables may be dominated by pūkio. May grade into wetland carr with emergent cabbage trees.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Canada geese. Dogs. Hydrological alteration. Sediments and nutrients.	Scenic Reserve, Conservation Park, Scientific Reserve, Government Purpose Reserve, Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Oioi restiad rushland/reedland	Oioi restiad rushland, locally with large <i>Baumea</i> , <i>Bolboschoenus</i> spp., kuta and lake clubrush often with occasional raupō, scattered harakeke grading into wetland scrub on margins.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Canada geese. Dogs. Fire.	Historic Reserve, Scenic Reserve, Scientific Reserve, Government Purpose Reserve,	Pest plants and animals control. Advocacy, consultation and partnerships.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
				Hydrological alteration. Sediments and nutrients.	Local Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Biosecurity surveillance and management.
	<i>Oreobolus</i> cushionfield	Cushionfield with species of <i>Oreobolus</i> , <i>Donatia</i> , <i>Gaimardia</i> , <i>Centrolepis</i> , <i>Carpha alpina</i> and <i>Phyllachne</i> and often <i>Androstoma empetrifolia</i> , <i>Pentachondra pumila</i> and <i>Lepidothamnus laxifolius</i> . Locally includes scattered treeland with mānuka, pink pine, mountain beech, yellow silver pine.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Canada geese. Dogs. Fire. Hydrological alteration. Sediments and nutrients.	Scenic Reserve, Conservation Park, Nature Reserve, Scientific Reserve, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Raupō reedland	Raupō reedland of abundant raupō, locally with species of <i>Bolboschoenus</i> , <i>Schoenoplectus</i> , and <i>Baumea articulata</i> , pūkio, harakeke and where unmodified with a margin of scrub of <i>Coprosera</i> species, and locally <i>Olearia virgata</i> and mānuka and locally scattered kahikatea. Often occurs on lake margins or includes small ponds with shallow water/pools with floating/rafted aquatics such as milfoils, buttercups, willowherbs, species of <i>Potamogeton</i> and <i>Isolepis</i> , <i>Azolla</i> , <i>Lemna</i> and spiked-sedges.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Canada geese. Dogs. Hydrological alteration. Sediments and nutrients.	Scenic Reserve, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
	Red tussock, <i>Schoenus</i> tussockland	Red tussockland locally with localised cushionfield, sedgeland and shallow pools with <i>Schoenus pauciflorus</i> , <i>Oreobolus</i> spp., <i>Carpha alpina</i> , <i>Carex coriacea</i> , <i>C. sinclairii</i> and locally sphagnum, wire rush and scattered shrubs, e.g. <i>Hebe odora</i> and bog pine.		Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Canada geese. Dogs. Hydrological alteration.	Scenic Reserve, Conservation Park, Nature Reserve, Government Purpose Reserve, Marginal Strip, Stewardship	Pest plants and animals control. Advocacy, consultation and partnerships.

Ecosystem/habitat		Significant values		Pressures/ threats	Administrative status	Management response
				Sediments and nutrients.	Area, National Park.	Biosecurity surveillance and management.
	Wire rush, tangle fern restiad rushland/fernland		Restiad rushland dominated by wire rush, tangle fern and sedges including <i>Baumea tenax</i> , <i>Lepidosperma australe</i> often with <i>Sphagnum</i> spp. and tussock grasses. May include pools and gradations to shrub bogs (especially small podocarp trees), mānuka, <i>Dracophyllum</i> spp. and tauhinu or red tussock fens.	Biosecurity of pest plants and animals. Human impacts. Resource use activities. Fire. Canada geese. Dogs. Hydrological alteration. Sediments and nutrients.	Scenic Reserve, Conservation Park, Nature Reserve, Ecological Area, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Biosecurity surveillance and management.
	<i>Baumea</i> sedgeland		Sedgeland, rushland with a high water table dominated by species of <i>Baumea</i> , <i>Lepidosperma</i> , <i>Eleocharis</i> , <i>Juncus</i> , often scattered harakeke, <i>Carex</i> spp. Locally includes oioi, tangle fern and <i>Gahnia</i> spp. which can be locally dominant. Lagg margins often grade into mānuka, <i>Coprosma</i> scrub fens.	Pest animals and plants, adjacent land uses, Canada geese, dogs, human impacts, hydrological alteration, river nutrients, quarrying, sediments and nutrients, vegetation clearance,	Scenic Reserve, Conservation Park, Ecological Area, Scientific Reserve, Government Purpose Reserve, Marginal Strip, Stewardship Area, National Park.	Pest plants and animals control. Advocacy, consultation and partnerships. Biosecurity surveillance and management.
Exotic	Willow				Government Purpose Reserve, Marginal Strip, Stewardship Area.	Pest plants and animals control. Biosecurity surveillance and management.

Appendix 3

Islands in Canterbury (Waitaha)

Island	Administrative status	Island classification ⁹⁶	Mammalian pests	Issues	Size (ha)
Motunau	Nature reserve	Ecosystem recovery	Nil	<ul style="list-style-type: none"> Threatened species site Pest surveillance Weed control, particularly boxthorn and tree mallow Outstanding Natural Feature and Landscape Area of Significant Natural Value Management and documentary access only (no public access) Potential defensible site for restoration of original coastal vegetation communities 	3.8
Ripapa	Historic reserve	Multiple use	Mice and rats	<ul style="list-style-type: none"> Tōpuni site Area of Significant Natural Value Independent public access to fort not encouraged 	1.6
Otamahua/Quail Island	Recreation reserve	Multiple use	Mice, rats, possible stoats and ferrets	<ul style="list-style-type: none"> Quail Island Recreation Reserve Management Plan 1982 and Otamahua/Quail Island Ecological Restoration Trust Area of Significant Natural Value Sea-level rise impact on historic and management structures Site of active restoration of original plant and animal communities in the harbour basin Significant potential for public involvement in conservation work 	84.3

⁹⁶ The island classification is aligned with the 10-year term of this strategy and represents the desired future state of the island (Department of Conservation 2010: The island strategy: guidelines for managing islands administered by the Department of Conservation. Department of Conservation, Wellington). The island classification is intended for guidance only, and needs to be read in conjunction with the outcome and policies for Places in Part Two of this strategy.

Island	Administrative status	Island classification ⁹⁶	Mammalian pests	Issues	Size (ha)
Horomaka	Recreation reserve	Multiple use	Mice, rats, possible stoats and ferrets	<ul style="list-style-type: none"> Significance to Ngāi Tahu Vegetation restoration Management and role of existing Scout hut 	2.1
Pa Island/Te Puke ki Waitaha	Historic reserve	Multiple use	Mice		2
Motuariki (Lake Tekapo)	Proposed reserves	Multiple use	Most pests probably present given proximity to shore	<ul style="list-style-type: none"> Significance to Ngāi Tahu Currently managed by Meridian Energy & Mckenzie District Council 	22.3
Little Motuariki (Lake Tekapo)	Proposed reserves	Multiple use	Most pests probably present given proximity to shore	<ul style="list-style-type: none"> Significance to Ngāi Tahu Currently managed by Meridian Energy & Mckenzie District Council 	1.3
Shag Rock (North Canterbury)	Uncertain	Protection	Unknown	<ul style="list-style-type: none"> Protection of species refuge values 	0.5
King Billy (Aua)	Scenic reserve	Multiple use	Mice, rats, possible stoats and ferrets	<ul style="list-style-type: none"> Significance to Ngāi Tahu Quail Island Recreation Reserve Management Plan 1982 and Otamahua/Quail Island Ecological Restoration Trust. Management of pest animals to safeguard Otamahua/Quail Island from incursions 	0.8
Pukerauaruhe (Browns)	Recreation reserve	Multiple use	Mice, rats, possible stoats and ferrets	<ul style="list-style-type: none"> Significance to Ngāi Tahu Recreational use Vegetation restoration 	0.3
Banks Peninsula rock stacks (e.g. Island Nook & Crown Island)	Uncertain	Open sanctuary	Mice, rats, possible stoats and ferrets	<ul style="list-style-type: none"> Protection of species refuge values 	0.9 0.6
Twelve islands ⁹⁷ in Lake Benmore (Te Āo Mārama)	Crown land	Multiple use	Most pests present	<ul style="list-style-type: none"> Managed by Land Information New Zealand Black Jacks important refuge historically for scree skinks <i>Leiopeltis otagensis</i> from <i>waimatense</i>, until overwhelmed by wilding pines. 	Up to 25

⁹⁷ Nine of the islands have unofficial names: Oar, Madak, Xmas Tree, Paddle, Gooseneck, Cook View, Black Jacks, Junction or Easter, and Turnagain. Department of Lands and Survey 1984; Lake Benmore islands management plan. Department of Lands and Survey, Dunedin.

Appendix 4

Priority ecosystem units on public conservation lands and waters in Canterbury (Waitaha) identified by the Department through natural heritage prioritising processes in September 2013

This list has been compiled from the Department's national list of around 1,000 ecosystem units, which represent the full range of New Zealand's terrestrial and freshwater ecosystems and excludes units or parts of units on private land. Please note the table does not necessarily list all nationally significant ecosystems present in Canterbury (Waitaha). The list is accurate as at the date of approval of this CMS. Its contents may be amended or reviewed during the term of this CMS.

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
2.1 National Parks Place			
Godley River	<ul style="list-style-type: none"> Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 	Conservation park, conservation area, marginal strip, national park	1858.6
Lake Minchin	<ul style="list-style-type: none"> Lake Wetland: alpine seepages/flushes 	National park	2.2
Mount White (East Branch Poulter/Mounds of Misery)	<ul style="list-style-type: none"> Wetland: 'Ephemeral wetland' herbfield Frost flats: bog, mountain celery and silver pine scrub/forest 	National park, conservation area	174.7
Tasman River	<ul style="list-style-type: none"> High alpine: permanent snow and ice Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 	Local purpose reserve, conservation area, national park, recreation reserve	2541.0
2.2 Southern Conservation Parks Place			
Ahuriri—east	<ul style="list-style-type: none"> Lake Wetland: <i>Oreobolus</i> cushionfield Rock, gravel and stone dominated communities: screes, gravelfield Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield Regenerating: mānuka or kānuka scrub 	Local purpose reserve, conservation area, marginal strip, scenic reserve	23759.6

⁹⁸ These are the names given to the management units in the Department's Natural Heritage Management System, they are not necessarily the locations of the unit themselves. All or parts of these sites are within public conservation land.

⁹⁹ See Appendix 2 for further information on ecosystem and habitat types within Canterbury (Waitaha).

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
	<ul style="list-style-type: none"> • Regenerating: short-tussock grassland • Wetland: 'Ephemeral wetland' herbfield • Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland • Cool climate forest: mountain beech forest • Cool climate forest: <i>Olearia</i>, <i>Pseudopanax</i>, <i>Dracophyllum</i> scrub • Frost flats: bog pine, mountain celery pine scrub/forest • Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub • High alpine: 'Fellfield', gravelfield/stonefield • Low alpine: narrow-leaved and slim snow tussockland/shrubland 		
Ahuriri—west	<ul style="list-style-type: none"> • Frost flats: bog pine, mountain celery pine scrub/forest • Cool climate forest: mountain beech forest • Cool climate forest: <i>Olearia</i>, <i>Pseudopanax</i>, <i>Dracophyllum</i> scrub • High alpine: 'Fellfield', gravelfield/stonefield • High alpine: permanent snow and ice • Lake • Low alpine: narrow-leaved and slim snow tussockland/shrubland • Rock, gravel and stone dominated communities: screes, gravelfield • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield • Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland 	Conservation park, local purpose reserve, conservation area, marginal strip, scenic reserve	21333.9
Alford Forest	<ul style="list-style-type: none"> • Cool climate forest: mountain beech forest • Low alpine: narrow-leaved and slim snow tussockland/shrubland • Mild forest: black beech forest • Regenerating: mānuka or kānuka scrub • Regenerating: short-tussock grassland 	Conservation park, local purpose reserve, conservation area, marginal strip, recreation reserve, scenic reserve	5761.0
Arrowsmith—Ashburton River	<ul style="list-style-type: none"> • Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub • High alpine: permanent snow and ice 	Conservation park, conservation area, marginal strip,	29224.6

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
	<ul style="list-style-type: none"> • Lake • Low alpine: narrow-leaved and slim snow tussockland/shrubland • Low alpine: slim and mid-ribbed snow tussockland/shrubland • Exotic: pasture • Rock, gravel and stone dominated communities: screes, gravelfield • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield • Wetland: 'Alpine seepages/flushes' <i>Schoenus pauciflorus</i> sedgeland • Wetland: 'Ephemeral wetland' herbfield • Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland • Wetland: red tussock, <i>Schoenus</i> tussockland 	government purpose reserve, recreation reserve	
Ben Ohau tōtara forest remnants	<ul style="list-style-type: none"> • Cool climate forest: Hall's tōtara, mountain toatoa, broadleaf forest • Rock, gravel and stone dominated communities: screes, gravelfield • Regenerating: short-tussock grassland 	Conservation park	1348.9
Lake Heron	<ul style="list-style-type: none"> • Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub • Lake • Wetland: 'Ephemeral wetland' herbfield • Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland • Wetland: red tussock, <i>Schoenus</i> tussockland 	Conservation park, conservation area, nature reserve	3713.6
Lake Lyndon	<ul style="list-style-type: none"> • Wetland: 'Lakeshore turf' herbfield 	Local purpose reserve, marginal strip, recreation reserve	4.4
Lawrence River scrublands	<ul style="list-style-type: none"> • Rock, gravel and stone dominated communities: screes, gravelfield • Rock, gravel and stone dominated communities: bare rock, including sandstone pavements associated with coal measures, and exfoliating granite • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 	Conservation park, conservation area, marginal strip	1090.4

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
	<ul style="list-style-type: none"> • Regenerating: short-tussock grassland • Frost flats: bog, mountain celery and silver pine scrub/forest • Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub • Cool climate forest: mountain beech forest • Low alpine: narrow-leaved and slim snow tussockland/shrubland 		
Mathias	<ul style="list-style-type: none"> • Lake • High alpine: 'Fellfield', gravelfield/stonefield • High alpine: permanent snow and ice • Low alpine: narrow-leaved and slim snow tussockland/shrubland • Rock, gravel and stone dominated communities: screes, gravelfield • Cool climate forest: <i>Olearia</i>, <i>Pseudopanax</i>, <i>Dracophyllum</i> scrub • Cool climate forest: pajautea, Hall's tōtara, mountain toatoa and broadleaf • Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield • Regenerating: short-tussock grassland 	Conservation area	10989.2
Mount Hutt	<ul style="list-style-type: none"> • Cool climate forest: <i>Olearia</i>, <i>Pseudopanax</i>, <i>Dracophyllum</i> scrub • High alpine: 'Fellfield', gravelfield/stonefield • Low alpine: narrow-leaved and slim snow tussockland/shrubland • Mild climate forest: black beech forest • Exotic: pasture • Rock, gravel and stone dominated communities: screes, gravelfield 	Conservation park, recreation reserve, scenic reserve	5709.9
Upper Rangitata River bed	<ul style="list-style-type: none"> • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield • Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland 	Conservation park, local purpose reserve, conservation area, easment, marginal strip	1321.6
Upper Rakaia River	<ul style="list-style-type: none"> • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 	Local purpose reserve, conservation area, marginal strip, local purpose reserve	303.6

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
2.3 Northern High-Country Place			
Hurunui South Branch	<ul style="list-style-type: none"> • Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub • Cool climate forest: <i>Olearia</i>, <i>Pseudopanax</i>, <i>Dracophyllum</i> scrub • Cool climate forest: red-silver beech forest • Cool climate forest: silver-mountain beech forest • Low alpine: slim and mid-ribbed snow tussockland/shrubland • Rock, gravel and stone dominated communities: screes, gravelfield • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield • Regenerating: short-tussock grassland 	Conservation park, marginal strip	8062.4
Lake Marion	<ul style="list-style-type: none"> • Lake 	Conservation park	10.0
Lake Paget	<ul style="list-style-type: none"> • Lake 	Conservation area	0.4
St James—Eastern	<ul style="list-style-type: none"> • Bog pine, mountain celery pine scrub/forest • Red tussockland 	Conservation area	280.3
Upper Hurunui River bed	<ul style="list-style-type: none"> • Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 	Conservation park, local purpose reserve, marginal strip	33.9
Waiau/Clarence Headwaters	<ul style="list-style-type: none"> • Wetland: 'Ephemeral wetland' herbfield • Wetland: 'Lakeshore turf' herbfield • Wetland: wire rush, tangle fern restiad rushland/fernland • Frost flats: bog pine, mountain celery pine scrub/forest • Cool climate forest: mountain beech forest • Cool climate forest: <i>Olearia</i>, <i>Pseudopanax</i>, <i>Dracophyllum</i> scrub • High alpine: gravelfield/stonefield, cushionfield • Lake • Low alpine: mid-ribbed, broad-leaved, red and carpet tussockland/shrubland • Low alpine: slim and mid-ribbed snow tussockland/shrubland 	Conservation area, recreation reserve, scenic reserve	10967.9

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
	<ul style="list-style-type: none"> Rock, gravel and stone dominated communities: screes, gravelfield Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 		
2.4 High-Country Basins Place			
Ahuriri River – lower river bed	<ul style="list-style-type: none"> Frost flats: bog pine, mountain celery pine scrub/forest Exotic: pasture Exotic: willow Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 	Local purpose reserve, conservation area, marginal strip	242.2
Arrowsmith–Ashburton River	<ul style="list-style-type: none"> Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub High alpine: permanent snow and ice Lake Low alpine: narrow-leaved and slim snow tussockland/shrubland Low alpine: slim and mid-ribbed snow tussockland/shrubland Exotic: pasture Rock, gravel and stone dominated communities: screes, gravelfield Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield Wetland: ‘Alpine seepages/flushes’ <i>Schoenus pauciflorus</i> sedgeland Wetland: ‘Ephemeral wetland’ herbfield Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland Wetland: red tussock, <i>Schoenus</i> tussockland 	Conservation park, conservation area, marginal strip, government purpose reserve, recreation reserve	29925.8
Ben Omar wetland	<ul style="list-style-type: none"> Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland 	Government purpose reserve	164.8
Goldney Saddle	<ul style="list-style-type: none"> ‘Alpine seepages/flushes’ <i>Schoenus pauciflorus</i> sedgeland 	National park	2.2
Lake Emma	<ul style="list-style-type: none"> Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland Wetland: red tussock, <i>Schoenus</i> tussockland Lake Low alpine: narrow-leaved and slim snow tussockland/shrubland 	Conservation park, government purpose reserve	543.0

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
Lake Heron	<ul style="list-style-type: none"> Frost flats: <i>Coprosma</i>, <i>Olearia</i> scrub Lake Wetland: 'Ephemeral wetland' herbfield Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland Wetland: red tussock, <i>Schoenus</i> tussockland 	Conservation park, conservation area, nature reserve	3713.6
Lake Ohau	<ul style="list-style-type: none"> Lake 	Conservation park, scenic reserve, conservation area, marginal strip	44.9
Lake Ohau moraine tarn complex	<ul style="list-style-type: none"> Frost flats: bog pine, mountain celery pine scrub/forest Lake Wetland: 'Ephemeral wetland' herbfield 	Conservation park, conservation area, marginal strip	2059.9
Lake Pearson (Moana Rua)	<ul style="list-style-type: none"> Lake 	Conservation area	201.7
Tūi Stream (Deep Stream, Mesopotamia)	<ul style="list-style-type: none"> Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland 	Conservation park	11.8
Upper Rangitata River bed	<ul style="list-style-type: none"> Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield Wetland: <i>Carex</i>, <i>Schoenus</i> sedgeland 	Conservation park, local purpose reserve, conservation area, easment, marginal strip	1321.6
Godley River	<ul style="list-style-type: none"> Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield 	Conservation park, conservation area, marginal strip, national park	1858.6
2.5 Foothills Place			
Alford Forest	<ul style="list-style-type: none"> Cool climate forest: mountain beech forest Low alpine: narrow-leaved and slim snow tussockland/shrubland Mild climate forest: black beech forest Regenerating: mānuka or kānuka scrub Regenerating: short-tussock grassland 	Conservation park, local purpose reserve, conservation area, marginal strip, recreation reserve, scenic reserve	5785.2
Geraldine forest fragments (Talbot Forest SR, Orari Gorge SR and Waihi Gorge SR)	<ul style="list-style-type: none"> Mild climate forest: mataī, tōtara, kahikatea broad-leaved forest Warm climate forest: tōtara mataī ribbonwood forest 	Scenic reserve	156.1

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
Gore Bay	<ul style="list-style-type: none"> • Titoki ngāio forest 	Recreation reserve, scenic reserve	62.5
Hunter Hills (including Hook Bush CA, part Mount Studholme CA)	<ul style="list-style-type: none"> • Low alpine: narrow-leaved and slim, snow tussock land/shrubland • Mild climate forest: mataī, tōtara, kahikatea broadleaved forest • Regenerating: broad-leaved scrub and shrubland • Regenerating: short-tussock grassland 	Conservation area	9011.1
Kirkston Range	<ul style="list-style-type: none"> • Low alpine: narrow-leaved and slim snow tussockland/shrubland 	Conservation area	7489.4
Lottery Bush (Lottery Bush SR, Wandle Bush CA, Wairangi SR, Terako Downs SR)	<ul style="list-style-type: none"> • Mild climate forest: black beech forest • Exotic: pasture • Regenerating: mānuka or kānuka scrub 	Conservation area, scenic reserve	363.8
Mount Cass (Tirimoana SR)	<ul style="list-style-type: none"> • Mild climate: mataī, tōtara, kahikatea broad-leaved forest • Exotic: pasture 	Scenic reserve	24.9
Mount Hutt	<ul style="list-style-type: none"> • Cool climate forest: <i>Olearia</i>, <i>Pseudopanax</i>, <i>Dracophyllum</i> scrub • High alpine: 'Fellfield', gravelfield/stonefield • Low alpine: narrow-leaved and slim snow tussockland/shrubland • Mild climate forest: black beech forest • Exotic: pasture • Rock, gravel and stone dominated communities: braided rivers, scree, gravelfield 	Conservation park, recreation reserve, scenic reserve	5709.9
Mount Oxford	<ul style="list-style-type: none"> • Cool climate forest: mountain beech forest • Low alpine: slim and mid-ribbed snow tussockland/shrubland • Mild climate forest: black beech forest 	Conservation area	1866.8
Peel Forest	<ul style="list-style-type: none"> • Cool climate forest: podocarp, ribbonwood kōwhai forest • Exotic: pasture • Regenerating: short-tussock grassland 	Conservation area, scenic reserve	762.7
Waiau Uwha Mouth	<ul style="list-style-type: none"> • Warm climate forest: tītiki ngāio forest 	Conservation area, scenic reserve	164.0
Woodstock (Otarama Recreation Reserve)	<ul style="list-style-type: none"> • Warm climate forest: tōtara mataī ribbonwood forest 	Recreation reserve	2.2

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
2.6 Braided Rivers/Ki Uta Ki Tai Place			
Godley River	See National Parks Place	Conservation park, conservation area, marginal strip, national park	1858.6
Tasman River	See National Parks Place	Local purpose reserve, conservation area, national park, recreation reserve	2541.0
Ahuriri—east	See Southern Conservation Parks Place	Local purpose reserve, conservation area, marginal strip, scenic reserve	23759.6
Ahuriri—west	See Southern Conservation Parks Place	Conservation park, local purpose reserve, conservation area, marginal strip, scenic reserve	21333.9
Ahuriri River—lower river bed	See High-Country Basins Place	Local purpose reserve, conservation area, marginal strip	242.2
Arrowsmith—Ashburton River	See Southern Conservation Parks Place	Conservation park, conservation area, marginal strip, government purpose reserve, recreation reserve	29224.6
Lawrence River scrublands	See Southern Conservation Parks Place	Conservation park, conservation area, marginal strip	1090.4
Mathias	See Southern Conservation Parks Place	Conservation area	10989.2
Upper Rangitata River bed	See Southern Conservation Parks Place	Conservation park, local purpose reserve, conservation area, easment, marginal strip	1321.6
Lower Rakaia River bed	See Southern Conservation Parks Place	Conservation area, marginal strip, government purpose reserve, local purpose reserve, recreation reserve	998.8
Upper Rakaia River	Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravelfield/stonefield	Local purpose reserve, conservation area, marginal strip, local purpose reserve	303.6
Hurunui South Branch	See Northern High-Country Place	Conservation park, marginal strip	8062.4

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
Upper Hurunui River bed	See Northern High-Country Place	Conservation park, local purpose reserve, marginal strip	33.9
Waiau/Clarence Headwaters	See Northern High-Country Place	Conservation area, recreation reserve, scenic reserve	10967.9
Ashley Lagoon	See Coastal Land and Marine/Ki Tai Place	Conservation area, conservation reserve, local purpose reserve, recreation reserve	153.5
Brooklands	See Coastal Land and Marine/Ki Tai Place	Conservation area	0.2
Opihi Rivermouth	See Coastal Land and Marine/Ki Tai Place	Conservation area	22.4
2.8 Banks Peninsula/Te Pātaka o Rākaihautū Place			
Banks Peninsula—Akaroa (Petit Carenage Recreation Reserve)	Mild climate forest: mataī, tōtara, kahikatea broad-leaved forest	Recreation reserve	4.2
Banks Peninsula—central cool forest remnants (Morice Settlement SR, Mount Fitzgerald SR, Mount Sinclair SR, Whatarangi SR, Glenralloch SR, Montgomery Park SR, Goodwin SR, Mount Pearce SR)	Cool climate forest: Hall's tōtara, mountain toatoa, broadleaf forest	Scenic reserve	197.2
Banks Peninsula—cool forest eastern (Ellangowan SR and Otepatotu SR)	Cool climate forest: Hall's tōtara, mountain toatoa, broadleaf forest Plantation	Scenic reserve	351.2
Banks Peninsula—Herbert (Sign of the Packhorse SR, Mount Herbert SR, Kaituna Spur SR)	Cool climate forest: Hall's tōtara, mountain toatoa, broadleaf forest	Scenic reserve	370.3
Banks Peninsula—Southern (Magnet Bay SR, Te Oka SR, Devils Gap SR, Carews Peak SR, Peraki Saddle SR, Long Bay SR)	Mild climate forest: mataī, tōtara, kahikatea broadleaved forest	Scenic reserve	288.9

Name of ecosystem unit ⁹⁸ SR = scenic reserve CA = conservation area	Predominant ecosystem and habitat types ⁹⁹ included within the ecosystem unit	Administrative status	Area (ha in public conservation lands)
Opara Stream	Saline: searush, oioi, glasswort and sea primrose rushland/herbfield	Conservation area	0.2
Quail Island (Otamahua/Quail Island and King Billy (Aua) Island)	Exotic: pasture Exotic: plantation	Recreation reserve, scenic reserve	80.8
2.9 Coastal Land and Marine/Ki Tai Place			
Ashley Lagoon	Dunelands: oioi restiad rushland/reedland Wetland: raupō reedland Wetland: oioi, knobby clubrush sedgeland Dunelands: spinifex, pīngao grassland/sedgeland Open water Exotic: pasture Intertidal Exotic: plantation Saline: searush, oioi, glasswort and sea primrose rushland/herbfield Saline: shore bind weed, knobby clubrush gravellyfield/stonefield Rock, gravel and stone dominated communities: braided rivers, hard tussock, scabweed gravellyfield/stonefield	Conservation area, conservation reserve, local purpose reserve, recreation reserve	153.5
Kaitorete Spit	Dunelands: oioi, knobby clubrush sedgeland Dunelands: pīngao sedgeland Saline: shore bind weed, knobby clubrush gravellyfield/stonefield	Conservation area, marginal strip, historic reserve, local purpose reserve, recreation reserve, scientific reserve	897.1
Brooklands	Dunelands: oioi, knobby clubrush sedgeland Saline: searush, oioi, glasswort and sea primrose rushland/herbfield Wetland: oioi restiad rushland/reedland Exotic: plantation	Conservation area	0.2
Te Waihora	Lake Exotic: pasture River Saline: searush, oioi, glasswort and sea primrose rushland/herbfield Wetland: flaxland Wetland: oioi restiad rushland/reedland Wetland: raupō reedland	Conservation area, scientific reserve, wildlife management reserve	2534.3

Opihi Rivermouth	Wetland: flaxland Open water Saline: searuch, oioi, glasswort and sea primrose rushland/herbfield	Conservation area	22.4
Wainono Lagoon	Lake Saline: shore bind weed, knobby clubrush gravelfield/stonefield Wetland: flaxland Wetland: oioi restiad rushland/reedland	Conservation area	446.0

Appendix 5

Threatened and at-risk indigenous flora and fauna present in Canterbury (Waitaha)

Several thousand indigenous species are present in Canterbury (Waitaha). This Appendix lists a selection of these: i.e. vascular plants, freshwater fish, vertebrate animals and invertebrates that are currently classified as ‘Threatened’ or ‘At Risk’ in accordance with the New Zealand Threat Classification System Manual 2008.

Threatened/At-risk species

Table A5.1. Flora (vascular plants)

Threatened species		
Threat status ¹⁰⁰	Common name	Scientific name
Nationally Critical	Moonwort	<i>Botrychium lunaria</i>
	Grassland daisy	<i>Brachyscome pinnata</i>
	Bitter cress	<i>Cardamine</i> (a) (CHR 312947; ‘tarn’)
	Awahokomo bitter cress	<i>Cardamine</i> (c’) (CHR 500569; Awahokomo)
	Waitaki Broom, Whip Broom	<i>Carmichaelia curta</i>
	Holloways broom	<i>Carmichaelia hollowayi</i>
	Herb	<i>Ceratocephala pungens</i>
	Limestone myrrh	<i>Chaerophyllum basicola</i>
	Cushion bog myrrh	<i>Chaerophyllum colensoi</i> var. <i>delicatum</i>
	Fish-guts plant	<i>Chenopodium detestans</i>
	Woollyhead	<i>Craspedia</i> (j) (CHR 516302; Lake Heron)
	Crassula	<i>Crassula peduncularis</i>
	Grass	<i>Deyeuxia lacustris</i>
	Hairy willowherb	<i>Epilobium hirtigerum</i>
	Waipara Gentian	<i>Gentianella calcis</i> subsp. <i>waipara</i>
	Awahokomo Gentian	<i>Gentianella calcis</i> subsp. <i>calcis</i>
	Manahune Gentian	<i>Gentianella calcis</i> subsp. <i>manahune</i>
	Pareora Gentian	<i>Gentianella calcis</i> subsp. <i>taiko</i>
	Rush	<i>Juncus holoschoenus</i> var. <i>holoschoenus</i>
	Awahokomo Koeleria	<i>Koeleria</i> aff. <i>novozelandica</i> (AK 252546; Awahokomo)
	Cook’s scurvy grass	<i>Lepidium aegrum</i>
	Button daisy	<i>Leptinella conjuncta</i>
	Slender button daisy	<i>Leptinella filiformis</i>
	Pygmy button daisy	<i>Leptinella nana</i>
	Castle Hill forget-me-not, NZ forget-me-not	<i>Myosotis colensoi</i>
	Lyttelton forget-me-not	<i>Myosotis lytteltonensis</i>
	Forget-me-not	<i>Myosotis oreophila</i>
	Canterbury Plains tree daisy	<i>Olearia adenocarpa</i>
	Cress	<i>Pachycladon exile</i>

¹⁰⁰Threat status may change over time.

Threatened species		
Threat status ¹⁰⁰	Common name	Scientific name
	Awahokomo poa Cudweed Castle hill buttercup Waihao buttercup Manahune buttercup Mat daisy Sebaea Fireweed Banks Peninsula forkfern Marsh arrow grass Awahokomo Trisetum	<i>Poa spania</i> <i>Pseudognaphalium ephemerum</i> <i>Ranunculus paucifolius</i> <i>Ranunculus</i> aff. <i>royi</i> (CHR 513327; Waihao) <i>Ranunculus</i> aff. <i>stylosus</i> (CHR 515131; Manahune) <i>Raoulia</i> (a) (CHR 79537; "K") <i>Sebaea ovata</i> <i>Senecio scaberulus</i> <i>Tmesipteris horomaka</i> <i>Triglochin palustris</i> <i>Trisetum</i> aff. <i>lepidum</i> (CHR 251835; Awahokomo)
Nationally Endangered	Limestone wheat grass Sedge Canterbury Pink Broom Sneezeweed Kaitorete woollyhead Crassula Creeping cudweed Mt Brown gingidia Gunnera Armstrong's Whipcord hebe Whipcord hebe Weka Pass sun hebe Lily Papataniwha Cypress whipcord Kawareau cress Inland Cress Shrubby tororaro, Forget-me-not New Zealand mouse tail Deciduous tree daisy Pitpat Buttercup Buttercup Hook sedge	<i>Australopyrum calcis</i> subsp. <i>optatum</i> <i>Carex uncifolia</i> <i>Carmichaelia torulosa</i> <i>Centipeda minima</i> susp. <i>minima</i> <i>Craspedia</i> (c) (CHR 529115; Kaitorete) <i>Crassula multicaulis</i> <i>Euchiton ensifer</i> <i>Gingidia</i> aff. <i>enysii</i> (CHR 283817; Mt Brown) <i>Gunnera densiflora</i> <i>Hebe armstrongii</i> <i>Hebe salicornioides</i> <i>Heliohebe maccaskillii</i> <i>Iphigenia novae-zelandiae</i> <i>Lagenifera montana</i> <i>Leonohebe cupressoides</i> <i>Lepidium sisymbrioides</i> <i>Lepidium solandri</i> <i>Muehlenbeckia astonii</i> <i>Myosotis cheesemanii</i> <i>Myosurus minimus</i> subsp. <i>novae-zelandiae</i> <i>Olearia hectori</i> <i>Pittosporum patulum</i> <i>Ranunculus acreaus</i> <i>Ranunculus brevis</i> <i>Uncinia strictissima</i>
Nationally Vulnerable	Gossamer grass Jersey fern, annual fern Buchanan's orache Curly Sedge Grassy mat sedge Sedge Slender coral broom Limestone broom Broom	<i>Anemanthele lessoniana</i> <i>Anogramma leptophylla</i> <i>Atriplex buchananii</i> <i>Carex cirrhosa</i> <i>Carex inopinata</i> <i>Carex rubicund</i> <i>Carmichaelia crassicaulis</i> subsp. <i>racemosum</i> <i>Carmichaelia astonii</i> <i>Carmichaelia juncea</i>

Threatened species		
Threat status ¹⁰⁰	Common name	Scientific name
	Climbing broom	<i>Carmichaelia kirkii</i>
	Native carrot	<i>Daucus glochidiatus</i>
	Herb	<i>Gratiola concinna</i>
	Pareora hebe	<i>Hebe pareora</i>
	Climbing everlasting daisy	<i>Helichrysum dimorphum</i>
	Herb	<i>Hypericum rubicundulum</i>
	Pygmy clubrush	<i>Isolepis basilaris</i>
	Clubrush	<i>Isolepis fluitans</i> var. <i>fluitans</i>
	Kirkianella	<i>Kirkianella novae-zelandiae</i> f. <i>novae-zelandiae</i>
	Coastal wind grass	<i>Lachnagrostis tenuis</i>
	Herb	<i>Lepilaena bilocularis</i>
	Mt Peel edelweiss	<i>Leucogenes tarahaoa</i>
	Dwarf musk	<i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> f. <i>impolitus</i>
	Forget-me-not	<i>Myosotis brevis</i>
	Forget-me-not	<i>Myosotis glauca</i>
	Tree daisy	<i>Olearia fimbriata</i>
	Cress	<i>Pachycladon cheesemanii</i>
	Heart-leaved kohuhu	<i>Pittosporum obcordatum</i>
	Zombie	<i>Rachelia glaria</i>
	Buttercup	<i>Ranunculus ternatifolius</i>
	Slender bristle grass	<i>Rytidosperma merum</i>
	Fireweed	<i>Senecio dunedinensis</i>
	Lady's tresses	<i>Spiranthnes novae-zelandiae</i>

At-risk species		
Threat status	Common name	Scientific name
Declining	Bidibid	<i>Aceana buchananii</i>
	Grassland Spaniard	<i>Aciphylla subflabellata</i>
	Yellow mistletoe, pirita, piriraki	<i>Alepis flavida</i>
	Water brome	<i>Amphibromus fluitans</i>
	Limestone aniseed	<i>Anisotome patula</i>
	Climbing groundsel	<i>Brachyglottis sciadophila</i>
	White sedge	<i>Carex albula</i>
	Coastal sedge	<i>Carex litorosa</i>
	Sedge	<i>Carex tenuiculmis</i>
	Mat broom	<i>Carmichaelia corrugata</i>
	Coral broom	<i>Carmichaelia crassicaulis</i> subsp. <i>crassicaulis</i>
	Dwarf broom	<i>Carmichaelia nana</i>
	Dwarf broom	<i>Carmichaelia uniflora</i>
	Mat broom	<i>Carmichaelia vexillata</i>
	Prostrate bluegrass	<i>Connorochloa tenuis</i>
	Trailing bindweed	<i>Convolvulus verecundus</i>
	Sand coprosma	<i>Coprosma acerosa</i>
	Faint coprosma	<i>Coprosma intertexta</i>
	Coprosma	<i>Coprosma obconica</i>
	Violet coprosma	<i>Coprosma pedicellata</i>

At-risk species		
Threat status	Common name	Scientific name
	Weeping coprosma	<i>Coprosma virescens</i>
	Bloodwood	<i>Coprosma wallii</i>
	Woollyhead	<i>Craspedia uniflora</i> var. <i>maritime</i>
	Tufted hair-grass	<i>Deschampsia cespitosa</i>
	Sand spike sedge	<i>Eleocharis neozelandica</i>
	Sea holly	<i>Eryngium vesiculosum</i>
	Shore spurge	<i>Euphorbia glauca</i>
	Pingao	<i>Ficinia spiralis</i>
	Gunnera	<i>Gunnera arenaria</i>
	Banks Peninsula sunhebe	<i>Heliohebe lavaudiana</i>
	Shore cress	<i>Lepidium tenuicaule</i>
	Lobelia	<i>Lobelia ionantha</i> (was <i>Hypsella rivularis</i>)
	Dwarf woodrush	<i>Luzula celata</i>
	Leafless mahoe	<i>Melicytus crassifolius</i>
	Leafless mahoe	<i>Melicytus flexuosus</i>
	Scree pea	<i>Montigena novae-zelandiae</i>
	Leafless pohuehue	<i>Muehlenbeckia ephedroides</i>
	Fragrant tree daisy	<i>Olearia fragrantissima</i>
	Tree daisy	<i>Olearia lineata</i>
	Tarn speedwell	<i>Parahebe canescens</i>
	Scarlet mistletoe, pirita	<i>Peraxilla colensoi</i>
	Red mistletoe, pirita	<i>Peraxilla tetrapetala</i>
	Daphne	<i>Pimelea aridula</i> subsp. <i>aridula</i>
	Cushion daphne	<i>Pimelea sericeo-villosa</i> subsp. <i>pulvinaris</i>
	Daphne	<i>Pimelea sericeo-villosa</i> subsp. <i>sericeo-villosa</i>
	Hairy daphne	<i>Pimelea villosa</i>
	Sand tussock	<i>Poa billardierii</i>
	Greenhood	<i>Pterostylis tanypoda</i>
		<i>Pterostylis tristis</i>
	Haast's buttercup	<i>Ranunculus haastii</i>
	Mat daisy	<i>Raoulia</i> aff. <i>hookeri</i> (AK 239529; 'coast')
	Grassland mat daisy	<i>Raoulia monroi</i>
	Tarn bristle grass	<i>Rytidosperma telmaticum</i>
	Poroporo	<i>Solanum aviculare</i> var. <i>aviculare</i>
	Shore puha, sow thistle	<i>Sonchus kirkii</i>
	Teuclidium	<i>Teuclidium parvifolium</i>
	Traversia	<i>Traversia baccharoides</i>
	Taapia, pirita, white mistletoe, tupia	<i>Tupeia antarctica</i>
	Swamp nettle	<i>Urtica linearifolia</i>
Naturally Uncommon	Petries needle grass	<i>Achnatherum petriei</i>
	Spaniard	<i>Aciphylla montana</i> var. <i>gracilis</i>
	Spaniard	<i>Aciphylla multisecta</i>
	Grass	<i>Agrostis imbecilla</i>
	Grass	<i>Agrostis petriei</i>
	Grass	<i>Agrostis subulata</i>
	New Zealand anemone	<i>Anemone tenuicaulis</i>

At-risk species		
Threat status	Common name	Scientific name
	Wheat grass	<i>Anthosachne falcis</i>
	Wheat grass	<i>Anthosachne sacandros</i>
	Cushion	<i>Argyrotegium nitidulum</i> (was <i>Euchiton nitidulus</i>)
	Parsley fern	<i>Botrychium australe</i>
	Bittercress	<i>Cardamine</i> (c) (CHR 65058; Reporoa Bog)
	Bittercress	<i>Cardamine bilobata</i>
	Berggren's Sedge	<i>Carex berggrenii</i>
	Sedge	<i>Carex capillacea</i>
	Sedge	<i>Carex carsei</i>
	Sedge	<i>Carex devia</i>
	Enys's sedge	<i>Carex enysii</i>
	Sedge	<i>Carex lachenallii</i>
	Sedge	<i>Carex pterocarpa</i>
	Sedge	<i>Carex trachycarpa</i>
	Kaitorete broom	<i>Carmichaelia appressa</i>
	Wetland daisy	<i>Celmisia graminifolia</i>
	Banks Peninsula daisy	<i>Celmisia mackau</i>
	Centrolepis	<i>Centrolepis minima</i>
	Snow tussock	<i>Chionochloa vireta</i>
	Clematis	<i>Clematis petriei</i>
	Pin cushion	<i>Colobanthus brevisepalus</i>
	Shingle convolvulus	<i>Convolvulus fracto-saxosa</i>
	Crassula	<i>Crassula mataikona</i>
	Crassula	<i>Crassula ruamahanga</i>
	Grass	<i>Deyeuxia youngii</i>
	Sprawling inaka	<i>Dracophyllum uniflorum</i> var. <i>Frondosum</i>
	Eiandia Tarn willowherb	<i>Einadia allanii</i>
	Willowherb	<i>Epilobium angustum</i>
	Willowherb	<i>Epilobium brevipes</i>
	Willow herb	<i>Epilobium forbesii</i>
	Willow herb	<i>Epilobium petraeum</i>
	Wilson's willowherb	<i>Epilobium purpuratum</i>
	Cudweed	<i>Epilobium wilsonii</i>
	Cudweed	<i>Euchiton paludosus</i>
	Banks Peninsula fescue	<i>Euchiton polylepis</i>
	Tussock	<i>Festuca actae</i>
	Gentian	<i>Gentianella lilliputiana</i>
	Geum	<i>Geum divergens</i>
	Aniseed	<i>Gingidia baxterae</i>
	Aniseed	<i>Gingidia enysii</i> var. <i>enysii</i>
	Aniseed	<i>Gingidia enysii</i> var. <i>peninsulare</i>
	Aniseed	<i>Gingidia gisea</i>
	Aniseed	<i>Gingidia trifoliolata</i>
	Hebe	<i>Hebe amplexicaulis</i> f. <i>amplexicaulis</i>
	Hebe	<i>Hebe amplexicaulis</i> f. <i>hirta</i>
	Hebe	<i>Hebe macrocalyx</i> var. <i>macrocalyx</i>
	Hebe	<i>Hebe pimeleoides</i> subsp. <i>faucicola</i>

At-risk species		
Threat status	Common name	Scientific name
	Hebe	<i>Hebe strictissima</i>
	Orchid	<i>Helichrysum plumeum</i>
	Filmy fern	<i>Hymenophyllum atrovirens</i>
	Dwarf mistletoe	<i>Korthalsella clavata</i>
	Dwarf mistletoe	<i>Korthalsella salicornioides</i>
	Swamp wind grass	<i>Lachnagrostis uda</i>
	Herb	<i>Lagenifera barkeri</i>
	Whipcord hebe	<i>Leonohebe tetrasticha</i>
	Banks Peninsula button daisy	<i>Leptinella minor</i>
	Dryland button daisy	<i>Leptinella serrulata</i>
	Dwarf heath	<i>Leucopogon nanum</i>
	Native musk	<i>Mimulus repens</i>
	Hidden Spider Orchid	<i>Molloybas cryptanthus</i>
	Montia	<i>Montia angustifolia</i>
	Montia	<i>Montia erythrophylla</i>
	Forget-me-not	<i>Myosotis expanata</i>
	Forget-me-not	<i>Myosotis goyenii</i>
	Forget-me-not	<i>Myosotis spathulata</i>
	Forget-me-not	<i>Myosotis tenericaulis</i>
	River bed forget-me-not	<i>Myosotis uniflora</i>
	Spider orchid	<i>Nematoceras</i> aff. <i>trilobum</i> (CHR 534742; Trotters)
	Tree daisy	<i>Olearia quinquevulnera</i>
	Mountain foxglove	<i>Ourisia remotifolia</i>
	Dune oxalis	<i>Oxalis</i> aff. <i>rubens</i> (AK 234308; 'scree')
	Martins parahebe	<i>Parahebe martinii</i>
	Daphne	<i>Pimelea pseudolyallii</i>
	Plantago	<i>Plantago obconica</i>
	Blanket fern	<i>Pleurosorus rutifolius</i>
	Limestone poa	<i>Poa acicularifolia</i> subsp. <i>acicularifolia</i>
	Tiny poa	<i>Poa pygmaea</i>
	Fierce lancewood	<i>Pseudopanax ferox</i>
	Greenhood	<i>Pterostylis foliata</i>
	Walker's saltgrass	<i>Puccinellia walkeri</i>
	Graham's buttercup	<i>Ranunculus grahamii</i>
	Buttercup	<i>Ranunculus maculatus</i>
	Mat daisy	<i>Raoulia</i> (c) (CHR; 'M')
	Beauverd's mat daisy	<i>Raoulia beauverdii</i>
	Petrie's scabweed	<i>Raoulia petriensis</i>
	Bristle grass	<i>Rytidosperma horrens</i>
	Sedge	<i>Schoenus caespitans</i>
	Daisy	<i>Senecio carnosulus</i>
	Bluff daisy	<i>Senecio glaucophyllus</i> subsp. <i>basinudus</i>
	Kowhai	<i>Sophora longicarinata</i>
	Grass	<i>Stenostachys enysii</i>
	Grass	<i>Stenostachys laevis</i>
	Fennel-leaved pondweed	<i>Stuckenia pectinata</i>

At-risk species		
Threat status	Common name	Scientific name
	New Zealand spinach	<i>Tetragonia tetragonoides</i>
	Sun orchid	<i>Theymitra formosa</i>
	Handsome hook sedge	<i>Uncinia elegans</i>
	Hook sedge	<i>Uncinia longifructus</i>
	Tussock hook sedge	<i>Uncinia purpurata</i>
	Scree nettle	<i>Urtica aspera</i>
	Akaroa harebell	<i>Wahlenbergia akaroa</i>
Relict	Orache, saltbush	<i>Atriplex australasica</i>
Recovering	Mt Cook lily	<i>Ranunculus godleyanus</i>
Data Deficient	Wheat grass	<i>Anthosachne multiflora</i>
	Sedge	<i>Carex decurtata</i>
	Willowherb	<i>Epilobium insulare</i>
	Vegetable sheep	<i>Haastia pulvinaris</i> var. <i>minor</i>
	Porcupine bush	<i>Melicytus</i> aff. <i>alpinus</i> (d) (CHR 541567; “dark”)
	Porcupine shrub	<i>Melicytus</i> aff. <i>alpinus</i> (f) (CHR 530143; Brockie)
	Forget-me-not	<i>Myosotis suavis</i>
	Marlborough rock daisy	<i>Pachystegia</i> aff. <i>insignis</i> (CHR; Lowry)
	Daphne	<i>Pimelea declivis</i>
	Small knotweed	<i>Polygonum plebeium</i>
	Mt Peel butercup	<i>Ranunculus</i> aff. <i>reflexus</i> (d) (CHR 394270; Mount Peel)
	Swamp buttercup	<i>Ranunculus macropus</i>
		<i>Schizeilema pallidum</i>
	Sinclairs hook sedge	<i>Uncinia sinclairii</i>

Table A5.2. Fauna (freshwater fish).

Threatened species		
Threat status*	Common name	Scientific name
Nationally critical	Lowland longjaw galaxias (Waitaki River)	<i>Galaxias</i> aff. <i>cobitinis</i> ‘Waitaki’
	Canterbury mudfish	<i>Neochanna burrowsius</i>
Nationally vulnerable	Bignose galaxias	<i>Galaxias macronasus</i>
	Upland longjaw galaxias (Canterbury, West Coast)	<i>Galaxias prognathus</i>
	Upland longjaw galaxias (Waitaki River)	<i>Galaxias</i> aff. <i>prognathus</i> ‘Waitaki’
	Northern flathead galaxias (Marlborough, Nelson, West Coast)	<i>Galaxias</i> ‘northern’
At-risk species		
Threat status*	Common name	Scientific name
Declining	Tuna, longfin eel	<i>Anguilla dieffenbachii</i>
	Torrentfish	<i>Cheimarrichthys fosteri</i>
	Giant kōkopu	<i>Galaxias argenteus</i>
	Kōaro	<i>Galaxias brevipinnis</i>
	Dwarf galaxias (Nelson, Marlborough, and North Island)	<i>Galaxias</i> aff. <i>divergens</i> ‘northern’

	Inanga/whitebait	<i>Galaxias maculatus</i>
	Canterbury galaxias	<i>Galaxias vulgaris</i>
	Lamprey	<i>Geotria australis</i>
	Bluegill bully	<i>Gobiomorphus hubbsi</i>
	Redfin bully	<i>Gobiomorphus huttoni</i>
Naturally Uncommon	Alpine galaxias (Canterbury, Marlborough, West Coast)	<i>Galaxias paucispondylus</i>
	Stokell's smelt	<i>Stokellia anisodon</i>

Table A5.3. Fauna (vertebrates)

Threatened species		
Threat status ¹⁰¹	Common name	Scientific name
Nationally Critical	Pāraera, grey duck	<i>Anas superciliosa superciliosa</i>
	Kākāriki karaka, orange-fronted parakeet	<i>Cyanoramphus malherbi</i>
	Kotuku, white heron	<i>Egretta alba modesta</i>
	Kakī, black stilt	<i>Himantopus novaezelandiae</i>
	Rangitata skink	<i>Oligosoma</i> aff. <i>longipes</i> 'Rangitata'
	Pekapeka, long-tailed bat	<i>Chalinolobus turburculatus</i>
Nationally Endangered	Matuku-hūrepo, bittern	<i>Botaurus poiciloptilus</i>
	Tarapirohe, black-fronted tern	<i>Chlidonias albobristatus</i>
	Karoro, black-billed gull	<i>Larus bulleri</i>
	South Island kākā	<i>Nestor meridionalis meridionalis</i>
	Tuke, rock wren	<i>Xenicus gilviventris</i>
Nationally Vulnerable	Ngutuparore, wrybill	<i>Anarhynchus frontalis</i>
	Roroa, great spotted kiwi	<i>Apteryx haastii</i>
	Pohowera, banded dotterel	<i>Charadrius bicinctus bicinctus</i>
	Tūturiwhatu, New Zealand dotterel	<i>Charadrius obscurus</i>
	Gibson's albatross	<i>Diomedea antipodensis gibsoni</i>
	Reef heron (white phase)	<i>Egretta sacra</i>
	Mātukutuku, reef heron	<i>Egretta sacra sacra</i>
	White-flipped penguin	<i>Eudyptula minor albosignata</i>
	Kārearea, New Zealand falcon	<i>Falco novaeseelandiae</i>
	Taranui, Caspian tern	<i>Hydroprogne caspia</i>
	Kōwhiowhio, whio, Blue duck	<i>Hymenolaimus malachorhynchus</i>
	Tarāpunga, Akiaki, red-billed gull	<i>Larus novaehollandiae scopulinus</i>
	Hōiho, yellow-eyed penguin	<i>Megadyptes antipodes</i>
	Mōhua, yellowhead	<i>Mohoua ochrocephala</i>
	Spotted skink 'Central Canterbury'	<i>Oligosoma</i> aff. <i>lineoocellatum</i> 'central Canterbury'
	Spotted skink, Mackenzie Basin skink	<i>Oligosoma</i> aff. <i>lineoocellatum</i> 'Mackenzie Basin'
	Kawau paka, pied cormorant	<i>Phalacrocorax varius varius</i>
	Kāmana, Australasian crested grebe	<i>Podiceps cristatus australis</i>

¹⁰¹ Threat status may change over time.

	Weweia, New Zealand dabchick Tara, white-fronted tern Salvin's albatross (mollymawk)	<i>Poliocephalus rufopectus</i> <i>Sterna striata</i> <i>Thalassarche salvini</i>
At-risk species		
Threat Status	Common name	Scientific name
Declining	Titi pounamu, South Island rifleman Pihoihoi, New Zealand pipit Kororā, little penguin Weka, western weka Tōrea, South Island pied oystercatcher Poaka, pied stilt Gecko Jewelled gecko New Zealand rough gecko Mackenzie skink Green skink Scree skink Light-mantled sooty albatross White-chinned petrel Toanui, flesh-footed shearwater Tītī, sooty shearwater Tītī, Hutton's shearwater White-capped albatross (mollymawk)	<i>Acanthisitta chloris chloris</i> <i>Anthus novaeseelandiae novaeseelandiae</i> <i>Eudyptula minor minor</i> <i>Gallirallus australis australis</i> <i>Haematopus finschi</i> <i>Himantopus himantopus leucocephalus</i> <i>Hoplodactylus</i> aff. <i>maculatus</i> 'Canterbury' <i>Naultinus gemmeus</i> (McCann, 1955) <i>Naultinus rudis</i> (Fischer, 1882) <i>Oligosoma</i> aff. <i>lineoocellatum</i> 'Mackenzie Basin' <i>Oligosoma chloronoton</i> (Hardy, 1977) <i>Oligosoma waimatense</i> (McCann, 1955) <i>Phoebastria palpebrata</i> <i>Procellaria aequinoctialis</i> <i>Puffinus carneipes</i> <i>Puffinus griseus</i> <i>Puffinus huttoni</i> <i>Thalassarche steadi</i>
Recovering	Tōrea-pango, variable oystercatcher	<i>Haematopus unicolor</i>
Relict	Kakariki Red-crowned parakeet Weka, buff weka Tītī Wainui, fairy prion Pararā, broad-billed prion Kuaka, common diving petrel Koitareke, marsh crake Pūweto, spotless crake Kōruru, mottled petrel Pakahā, fluttering shearwater	<i>Cyanoramphus novaezelandiae novaezelandiae</i> <i>Gallirallus australis hectori</i> <i>Pachyptila turtur</i> <i>Pachyptila vittata</i> <i>Pelecanoides urinatrix urinatrix</i> <i>Porzana pusilla affinis</i> <i>Porzana tabuensis plumbea</i> <i>Pterodroma inexpectata</i> <i>Puffinus gavia</i>
Naturally Uncommon	Hākoakoa, brown (subantarctic) skua Snares Cape petrel Antipodean albatross Toroa, southern royal albatross Toroa, northern royal albatross Koekoeā, long-tailed cuckoo Erect-crested penguin Pāngurunguru, northern giant petrel Kea Fulmar prion Kāwau, black cormorant Kāwau pākā, little cormorant	<i>Catharacta antarctica lonnbergi</i> <i>Daption capense australe</i> <i>Diomedea antipodensis</i> <i>Diomedea epomophora</i> <i>Diomedea epomophora sanfordi</i> <i>Eudynamys taitensis</i> <i>Eudyptes sclateri</i> <i>Macronectes halli</i> <i>Nestor notabilis</i> <i>Pachyptila crassirostris</i> <i>Phalacrocorax carbo novaehollandiae</i> <i>Phalacrocorax melanoleucos brevirostris</i>

	Kāwau pākā, little black cormorant	<i>Phalacrocorax sulcirostris</i>
	Kotuku – ngutupapa, royal spoonbill	<i>Platalea regia</i>
	Tāiko, Westland petrel	<i>Procellaria westlandica</i>
	Grey ternlet	<i>Procelsterna cerulea albivittata</i>
	Buller's shearwater	<i>Puffinus bulleri</i>
	Moho-pererū, banded rail	<i>Rallus philippensis assimilis</i>
	Buller's albatross (mollymawk)	<i>Thalassarche bulleri</i>

Table A5.4. Invertebrates

Threatened species		
Threat status ¹⁰²	Common name	Scientific name
Nationally Critical	Moth	<i>Australothys volatilis</i>
	Moth	<i>Euxoa cerapachodes</i>
	Moth	<i>Heterocrossa maculata</i>
	Eyrewell ground beetle	<i>Holcaspis brevicula</i>
	Moth	<i>Orocrambus fugitivellus</i>
	Moth	<i>Scythris 'stripe'</i>
	Moth	<i>Xanthorhoe bulbulata</i>
Nationally Endangered	Moth	<i>Asaphodes stinaria</i>
	Grasshopper	<i>Brachaspis 'lowland'</i>
	Mackenzie Basin grasshopper	<i>Brachaspis robustus</i>
	Canterbury knobbled weevil	<i>Hadramphus tuberculatus</i>
	Moth	<i>Kiwaia 'plains jumper'</i>
	Moth	<i>Kiwaia jeanae</i>
	Moth	<i>Kupea electilis</i>
	Beetle	<i>Megadromus 'Omarama'</i>
	Beetle	<i>Megadromus antarcticus</i> sub sp. 1
	Moth	<i>Orocrambus 'Mackenzie Basin'</i>
Nationally Vulnerable	Nil	
At-risk species		
Threat Status	Common name	Scientific name
Declining	Katipō spider	<i>Latrodectus katipo</i>
	Grasshopper	<i>Sigaia 'minutus'</i>
	Moth	<i>Theoxena scissaria</i>
	Snail	<i>Wainuia edwardi</i>
Recovering	Nil	
Relict	Grasshopper	<i>Brachaspis 'Hunter Hills'</i>
	Wētā, bluff wētā	<i>Deinacrida elegans</i>
	Wētā, ground wētā	<i>Hemiandrus 'Porters'</i>
	Wētā, Canterbury tree wētā	<i>Hemideina ricta</i>
	Moth	<i>Helastia expolita</i>
Naturally Uncommon	Large speargrass weevil	<i>Lyperobius carinatus</i>

¹⁰² Threat status may change over time.

Table A5.5. Marine fish and mammals

Threatened species		
Threat status	Common name	Scientific name
Nationally Endangered	Hector's dolphin	<i>Cephalorhynchus hectori</i>
At-risk species		
Declining	Mango taniwha, white pointer (great white) shark	<i>Carcharodon carcharias</i>
	Mango rermi, basking sharks	<i>Cetorhinus maximus</i>

Sources

Bats: O'Donnell, C.F.J.; Christie, J.E.; Lloyd, B.; Parsons, S.; Hitchmough, R.A. 2013. Conservation status of New Zealand bats, 2012. *New Zealand Threat Classification Series 6*. Department of Conservation, Wellington. 8 p.

Birds: Robertson, H.A.; Dowding, J.E.; Elliot, G.P.; Hitchmough, R.A.; Miskelly, C.M.; O'Donnell, C.F.J.; Powlesland, R.G.; Sagar, P.M.; Scofield, R.P.; Taylor, G.A. 2013. Conservation status of New Zealand birds, 2012. *New Zealand Threat Classification Series 4*. Department of Conservation, Wellington. 22 p.

Reptiles: Hitchmough, R.; Anderson, P.; Barr, B.; Monks, J.; Lettink, M.; Reardon, J.; Tocher, M.; Whitaker, T. 2013. Conservation status of New Zealand reptiles, 2012. *New Zealand Threat Classification Series 2*. Department of Conservation, Wellington. 16 p.

Invertebrates: Excel files from Ian Stringer (DOC S&R), leader of threat classification re-ranking exercise.

Fish: Goodman, J.M.; Dunn, N.R.; Ravenscroft, P.J.; Boubee, J.A.T.; David, B.O.; Griffiths, M.; Nicholas Ling, N.; Hitchmough, R.A.; Rolfe, J.R. 2014. Conservation status of New Zealand freshwater fish, 2013. *New Zealand Threat Classification Series 7*. Department of Conservation, Wellington. 12 p.

Vascular plants: de Lange, P.J.; Rolfe, J.R.; Champion, P.D.; Courtney, S.P.; Heenan, P.B.; Barkla, J.W.; Cameron, E.K.; Norton, D.A.; Hitchmough, R.A. 2013. Conservation status of New Zealand indigenous vascular plants, 2012. *New Zealand Threat Classification Series 3*. Department of Conservation, Wellington. 70 p.

Appendix 6

Threats or pests and wild animals present in Canterbury (Waitaha)

Table A6.1. Pest animals and wild animals.

Note: where a herd of certain wild animals has been designated as a herd of special interest to hunters under section 16 of the Game Animal Council Act 2013, the terminology changes to 'game animal' (see Glossary definition of Game Animal).

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Birds				
Canada geese <i>Branta canadensis</i>	Breeding, roosting and moulting aggregations distributed from the high country to coast, in rural and urban contexts	Principally an agricultural and aviation nuisance but can cause localised trampling and fouling in valuable or sensitive aquatic systems	Enable control on public conservation lands by the principal beneficiaries of management; otherwise site-led control of problem populations for conservation purposes by DOC	Based on ecosystem and species management priorities and amenity values
Common mynas <i>Acridotheres tristis</i>	Incidental reports of presence in the Port Hills, Christchurch; highly localised distribution if present	Strongly territorial; competes aggressively with other species for breeding and foraging resources; predated valued reptiles, invertebrates and the nests of native species	Eradication	Wherever found in Canterbury
Rooks <i>Corvus frugilegus</i>	Considered close to eradication in Canterbury but constant immigration	Principally an agricultural pest	Subject to the total eradication policies of local authorities	Wherever found in Canterbury
Magpies <i>Gymnorhina tibicen</i>	Widespread throughout Canterbury	Aggressively territorial; predate nests and native birds, reptiles and invertebrates	Localised, site-led control to low densities	Based on ecosystem and species management priorities and amenity values
Black-backed gulls <i>Larus dominicanus</i>	Common throughout Canterbury, but particularly near urban centres and the coast	Densities increased by land-use changes and other human activities; moderately significant predator of valued ground-nesting birds, reptiles and invertebrates;	Localised site-led control to low densities	Based on ecosystem and species management priorities and amenity values

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
		hazard to aircraft near airports		
Harriers <i>Circus approximans</i>	Widespread throughout Canterbury	Predator of critically threatened black stilts in the Mackenzie Basin	Control to low densities locally by live capture and euthanasia	Godley River, Cass River
Freshwater fish				
Rudd <i>Scardinius erythrophthalmus</i>	Patchy in Canterbury—mostly greater Christchurch area (Woodend to Te Waihora, incl.); 10 known populations	Direct impacts on aquatic invertebrates and macrophytes through predation and grazing; indirect impacts on fish through removal of food and habitat occupation; general impacts on ecosystems through trophic level interactions and water quality changes	Control to low densities at ecologically important sites; surveillance at sites with suitable habitat and high risk of incursion; monitoring of previously eradicated sites; agency interactions and public advocacy	Catchments of high biodiversity value; sites with high risk of incursion
Invertebrates				
Argentine ants <i>Linepithema humile</i>	Still highly localised at eight known sites in Christchurch (both light industrial and residential areas); expected to colonise new sites through natural and human-assisted spread (especially with relocation of earthquake debris)	May threaten native invertebrates through competition for resources and may impact natural ecosystems, through trophic-level interactions	Current eradication methods only viable for relatively small sites (with low to nil risk of re-incursion); attempts to control spread through collaboration with other agencies failed through lack of resources; recent decision to stop eradication and site control work so programme could focus on surveillance at sites of high conservation value and likely ant incursion	If ants can survive winters, then several sites of ecological value may be at risk from ant invasion; these include eastern honeydew beech forests, Banks Peninsula and Kaitorete Spit
German wasp <i>Vespula germanica</i> Common wasp <i>V. vulgaris</i>	Subject to seasonally variable irruptions in density, especially in the beech forests of	Threaten amenity values; disturb ecological balance in natural communities through predation and aggressive	Local intervention where necessary to destroy nests with registered wasp toxins	Based on ecosystem and species management

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
	western and alpine Canterbury	competition for food resources		priorities and amenity values
False katipō <i>Steatoda capensis</i>	Common throughout New Zealand, particularly in drier climates	Competitive exclusion of katipō spiders in coastal dune systems	Monitoring katipō and <i>Steatoda</i> numbers when found together; katipō-specific artificial habitats may be effective	Kaitorete Spit, Dorie, Orari River mouth
Mammals				
Cats (feral and domestic) <i>Felis catus</i>	Widespread throughout urban, peri-urban, rural and backcountry Canterbury	Major extinction pressure through non-selective predation of valued native birds, reptiles and invertebrates	Monitoring for presence and impacts; control to low densities through kill-trapping, live capture and shooting	Based on ecosystem and species management priorities
Dogs (feral and domestic) <i>Canis lupus familiaris</i>	Occasional wild or stray, or accompanying visitors	Predation and disturbance of ground-nesting birds, bird colonies, resting sea birds and seals	Define dog-control and dog-accessible areas, exclude from national parks, may require permit-only entry and bird aversion training, public education	Based on ecosystem and species management priorities and areas where dogs not permitted by legislation or Bylaws
Chamois <i>Rupicapra rupicapra</i>	Widespread throughout alpine Canterbury	Browsing pressure on alpine plant species (some threatened) that are not evolutionarily adapted to cope	Control through opportunistic shooting, occasional commercial harvest and helicopter hunting for trophy animals Biodiversity off-set culls and fostering of recreational hunting	Based on ecosystem and species management priorities
Red deer <i>Cervus elaphus</i>	Widespread throughout Canterbury alps and foothills and Banks Peninsula; escapes from deer farms	Damage to forest and shrubland structures, composition and animal communities through browsing on plant species (some threatened) that are not evolutionarily adapted to cope	Control through ground and aerial shooting, wild animal recovery concessions and the fostering of recreational hunting	Based on ecosystem and species management priorities
Fallow deer <i>Dama dama</i>	Small isolated populations; occasional	Damage to forest and shrubland structures through browsing on	Control through ground shooting and the fostering	Based on ecosystem and species

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
	escapes from deer farms	plant species (some threatened) that are not evolutionarily adapted to cope	of recreational hunting; vigilance for new populations	management priorities
Ferrets <i>Mustela putorius furo</i>	Widespread throughout Canterbury, particularly in rural regions	Major extinction pressure for native vertebrate taxa, through predation of eggs, young and adults	Monitoring for presence and impacts; control by kill-trapping, live capture and poisoning	Based on ecosystem and species management priorities
Goats <i>Capra hircus</i>	Small feral populations scattered throughout Canterbury; escapes from farms	Concentrated browsing and trampling in forests and shrublands, modifying structures and composition in valued plant communities	Monitoring for presence and impacts; control by ground shooting	Based on ecosystem and species management priorities
Hares <i>Lepus europaeus</i>	Widespread in Canterbury, especially in alpine, sub-alpine and coastal dune areas	Browsing pressure which reduces plant growth and inhibits regeneration in valued habitats; prey of harmful mammalian predators such as cats and mustelids	Control by shooting and netting	Kaitorete Spit (Birdlings Flat ecosystem site), Eyrewell Scientific Reserve
Hedgehogs <i>Erinaceus europaeus</i>	Widespread in lowlands and dry inland basins of Canterbury	Predation on ground-nesting birds and nest contents	Monitoring for presence and impacts; control to low densities by kill-trapping	Based on ecosystem and species management priorities
Horses <i>Equus ferus caballus</i>	Ada Valley	Trampling and grazing of sensitive riparian communities	Monitoring for impact	Lake Paget
Mice <i>Mus musculus</i>	Widespread throughout terrestrial systems in Canterbury	Predation of valued native fauna, and retarding of regeneration in plant communities	Monitoring for presence and impact; eradication through registered vertebrate toxins	Based on ecosystem and species management priorities
Pigs <i>Sus scrofa</i>	Widespread throughout Canterbury from the foothills to the coast	Predation of valued native fauna, and damage to plant communities through browsing, grazing and ground disturbance	Control to low densities	Based on ecosystem and species management priorities
Possum <i>Trichosurus vulpecula</i>	Widespread	Affects a wide range of habitats by killing indigenous vegetation; preys on	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
		indigenous birds, chicks and eggs		priorities and amenity values
Rabbits <i>Oryctolagus cuniculus</i>	Very high densities in suitable dryland habitats in Canterbury;	Principally an agricultural pest; exert severe browsing pressure on valued native plant systems; vital prey source for mammalian predators	Control to very low densities on public conservation lands (below 3 on the Modified McLean Scale) to protect conservation values and for 'good-neighbour' reasons	Based on ecosystem and species management priorities; public conservation land where required to comply with Regional Pest Management Strategy
Tahr <i>Hemitragus jemlahicus</i>	Confined principally to designated feral range in Canterbury	Extensive browsing pressure on sensitive alpine flora and fauna	Control methods in accordance with the Himalayan Thar Control Plan	In accordance with the Himalayan Thar Control Plan and based on ecosystem and species management priorities and amenity values
Rats	Widespread throughout terrestrial and some freshwater systems in Canterbury	Prey sustaining higher-order mammalian predators.	Monitoring for presence and impact; eradication or control through registered vertebrate toxins	Based on ecosystem and species management priorities
Stoats	Widespread throughout terrestrial systems at all altitudes in Canterbury	Very significant predators of valued native fauna	Monitoring for presence and impact; eradication or control through registered vertebrate toxins and trapping	Based on ecosystem and species management priorities
Weasels	Widespread though not densely distributed throughout terrestrial systems in Canterbury	Predators of valued native fauna	Monitoring for presence and impact; eradication or control through registered vertebrate toxins and trapping	Based on ecosystem and species management priorities
Wallabies (Bennett's)	Feral range generally between Rangitata and Waitaki rivers, including Two Thumb Range, but	Browsing pressure on valued native plant systems; also an agricultural pest	Control to target densities within feral range; eradication outside of this range	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
	also occurring south of the Waitaki and north-east of Lake Pukaki; also being moved illegally			

Table A6.2. Pest plants

Climbers

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Banana passionfruit <i>Passiflora mollissima</i>	Isolated populations	Smothers canopy and prevents recruitment; birds and mammals disperse it widely	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Blackberry <i>Rubus fruticosus</i>	Widespread	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Chilean flame creeper <i>Tropaeolum speciosum</i>	Localised populations	Smothers and displaces native species	Target priority ecosystem units	Banks Peninsula, Canterbury foothills
Climbing alostromeria <i>Bomarea caldasii</i>	Localised populations	Smothers and kills all plants to highest canopy and prevents recruitment	Eradication or control on public conservation land	Governors Bay
German ivy <i>Senecio mikanioides</i>	Common	Smothers small trees and lower vegetation preventing recruitment; it often enables the establishment of more aggressive vine species	Target priority ecosystem units	Based on ecosystem and species management priorities
Ivy <i>Hedera helix</i>	Isolated populations	Forms dense long-lived mats and smothers the canopy, sub-canopy and forest floor	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Japanese honeysuckle <i>Lonicera japonica</i>	Localised populations	Smothers plants from ground to medium canopy and can cause canopy collapse	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Old man's beard <i>Clematis vitalba</i>	Localised populations	Smothers and kills all plants to highest canopy and prevents recruitment	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Periwinkle <i>Vinca major</i>	Isolated populations	Prevents regeneration in lowland scrub/forest communities	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Smilax <i>Asparagus asparagoides</i>	Localised populations	Smothers and kills all plants to highest canopy and prevents recruitment	Eradication or control on public conservation land	Kaitorete Spit, Selwyn Huts, Sumner, Amberley beaches, Christchurch

Grasses, rushes and sedges

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
African feather grass <i>Pennisetum macrourum</i>	Localised populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication	Based on ecosystem and species management priorities
African feather grass <i>Pennisetum macrourum</i>	Localised populations	Displaces native species within drylands	Eradication	Based on ecosystem and species management priorities
Chilean needle grass <i>Nassella neesiana</i>	Localised populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Heath rush <i>Juncus squarrosus</i>	Localised	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Nasella tussock <i>Nassella trichotoma</i>	Localised populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Pampas <i>Cortaderia selloana</i>	Common	Forms dense stands; prevents regeneration of native species and can provide habitat for introduced animals	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Purple pampas <i>Cortaderia jubata</i>	Common	Forms dense stands prevents regeneration of native species and can provide habitat for introduced animals	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Reed sweetgrass <i>Glyceria maxima</i>	Localised populations	Forms monoculture stands preventing native regeneration, particularly in wetlands	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Spartina <i>Spartina</i> spp.	Isolated populations	Estuarine grass which out-competes and displaces native plants by inhibiting regeneration	Eradication	Lyttelton Harbour/ Whakaraupō, Brooklands Lagoon, McCormicks Bay

Herbaceous species

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Bur daisy <i>Calotis lappulacea</i>	Isolated populations	Displaces native species within drylands	Eradication	Based on ecosystem and species management priorities
Chilean rhubarb <i>Gunnera tinctoria</i>	Localised populations	Forms monoculture stands preventing native regeneration	Target priority ecosystem units and prevent spread into new sites	Rangiora, Banks Peninsula, Port Hills, Christchurch
Coltsfoot <i>Tussilago farfara</i>	Localised populations	Smothers and displaces native species	Eradication	Arthur's Pass, Eyre River
Kahili ginger <i>Hedychium gardnerianum</i>	Localised populations	Becomes well established in forest and scrub and dominates the plant community	Eradication or control on public conservation land	Port Hills
Nodding thistle <i>Carduus nutans</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Purple loosestrife <i>Lythrum salicaria</i>	Localised populations	Riparian communities, pasture; out-competes and displaces native plants by inhibiting regeneration	Contain existing sites and prevent establishment on public conservation land	Christchurch, Rangiora, Woodend, Leeston, Tai Tapu, Okuku
Ragwort <i>Jacobea vulgaris</i>	Widespread	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Saffron thistle <i>Carthamus lanatus</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication	Based on ecosystem and species management priorities
Selaginella <i>Selaginella kraussiana</i>	Isolated populations	Prevents regeneration in lowland scrub/forest communities	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Variegated thistle <i>Silybum marianum</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
White-edged nightshade <i>Solanum marginatum</i>	Isolated populations	Prevents regeneration in lowland scrub/forest communities	Eradication	Based on ecosystem and species management priorities
Wild thyme <i>Thymus vulgaris</i>	Widespread	Smotheres and displaces native species	Target priority ecosystem units	Based on ecosystem and species management priorities
Yellow burr-daisy <i>Calotis lappulacea</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication	Based on ecosystem and species management priorities

Trees and shrubs

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Alder <i>Alnus</i> spp	Localised populations	Forms monoculture stands preventing native regeneration	Target priority ecosystem units	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Baccharis <i>Baccharis halimifolia</i>	Localised populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication	Based on ecosystem and species management priorities
Bell heather <i>Erica cinerea</i>	Localised populations	Forms monoculture stands preventing native regeneration	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Bishop Pine <i>Pinus muricata</i>	Localised populations	Forms monoculture stands preventing native regeneration	Target priority ecosystem units and prevent spread into new sites	Waimakariri Basin, Korowai, Lake Ohau
Boneseed <i>Chrysanthemoides monilifera</i> subsp. <i>monilifera</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Box thorn <i>Lycium ferocissimum</i>	Isolated populations	Forms impenetrable cover, smothers native vegetation and suppresses regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Bright bead cotoneaster <i>Cotoneaster glaucophyllus</i>	Widespread	Forms dense thickets, replacing desirable species along forest margins, shrubland, short tussock grasslands and other low-growing habitats	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Broom <i>Cytisus scoparius</i>	Widespread throughout	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Buddleia <i>Buddleja davidii</i>	Localised populations adjacent to rivers and streams	Forms dense stands, prevents regeneration of native species and can provide habitat for introduced animals	Target priority ecosystem units and prevent spread into new sites	Conway River Tūtae Putaputa), Ashley River /Rakahuri

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Cherry <i>Prunus avium</i>	Localised populations	Forms monocultural stands preventing native regeneration threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Common barberry <i>Berberis glaucocarpa</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Port Hills, Banks Peninsula, Christchurch, Rangiora, Lake Ohau
Common heather <i>Calluna vulgaris</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Lake Coleridge (Whakamataua, Riversdale Flats)
Corsican pine <i>Pinus nigra</i> subsp. <i>larico</i>	Localised populations	Forms monocultural stands preventing native regeneration threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Waimakariri Basin, Korowai/Torlesse, Lake Ohau
Cotoneaster <i>Cotoneaster simonsii</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Crack willow <i>Salix fragilis</i>	Widespread	Out-competes and displaces native plants; dense stands can cause blockages, flooding and structural change to waterways, leading to erosion and increased sedimentation	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Darwin's barberry <i>Berberis Darwin</i>	Widespread	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Port Hills, Banks Peninsula, Christchurch, Rangiora, Gore Bay, Sheffield, Waimakariri Gorge, Hanmer, Lake Coleridge

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Douglas Fir <i>Pseudotsuga menziesii</i>	Localised populations	Forms monocultural stands preventing native regeneration, threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Waimakariri Basin, Korowai Torlesse, Lake Ohau
Elaeagnus <i>Elaeagnus x reflexa</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Elderberry <i>Sambucus nigra</i>	Widespread	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units	Based on ecosystem and species management priorities
European ash <i>Fraxinus excelsior</i>	Widespread throughout	Out-competes and displaces native plants by inhibiting regeneration	Contain existing sites and prevent establishment on public conservation land	Based on ecosystem and species management priorities
Flowering current <i>Ribes sanguineum</i>	Localised populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Franchet's cotoneaster <i>Cotoneaster franchetii</i>	Isolated populations	Forms dense thickets, replacing desirable species along forest margins, shrubland, short tussock grasslands and other low growing habitats	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Gorse <i>Ulex europaeus</i>	Widespread	Competes with native plants, alters soil condition by rising nitrogen levels; however, can protect regrowth of native woody species and dies back as native regeneration proceeds	Target priority ecosystem units	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Grey willow <i>Salix cinerea</i>	Widespread	Out-competes and displaces native plants; dense stands can cause blockages, flooding and structural change to waterways, leading to erosion and increased sedimentation	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Holly <i>Ilex aquifolium</i>	Widespread	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Hydrangea <i>Hydrangea macrophylla</i>	Isolated populations	Out-competes and displaces native plants by inhibiting regeneration	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Larch <i>Larix decidua</i>	Localised	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Waimakariri Basin, Korowai Torlesse, Lake Ohau
Lodgepole pine <i>Pinus contorta</i>	Localised populations	Forms monocultural stands preventing native regeneration; threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Waimakariri Basin, Korowai Torlesse, Lake Ohau
Maritime Pine <i>Pinus pinaster</i>	Localised populations	Forms monocultural stands preventing native regeneration; threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Mountain pine <i>Pinus mugo</i>	Localised populations	Forms monocultural stands preventing native regeneration; threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Plectranthus <i>Plectranthus ciliatus</i>	Isolated populations	Prevents regeneration in lowland scrub/forest communities	Eradication or control on public conservation land	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Privet <i>Ligustrum sinense</i>	Localised populations	Forms dense stands that prevent regeneration of native species; poisonous berries may impact on native fauna	Eradication or control on public conservation land	Based on ecosystem and species management priorities
Radiata pine <i>Pinus radiata</i>	Localised populations	Forms monocultural stands preventing native regeneration; threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Rowan <i>Sorbus aucuparia</i>	Widespread on the mainland	Out-competes and displaces indigenous plants by inhibiting regeneration	Target priority ecosystem units	Based on ecosystem and species management priorities
Russell lupin <i>Lupinus polyphyllus</i>	Isolated populations in braided rivers	An aggressive weed which invades braided rivers, dense stands shade out and displaces native plants and create unsuitable habitats for wading birds	Target priority ecosystem units	Based on ecosystem and species management priorities
Scots pine <i>Pinus sylvestris</i>	Localised populations	Forms monocultural stands preventing native regeneration; threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Silver birch <i>Betula pendula</i>	Localised populations within wetlands	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Spanish heath <i>Erica lusitanica</i>	Localised populations	Forms monoculture stands preventing native regeneration	Target priority ecosystem units and prevent spread into new sites	Banks Peninsula, Port Hills, Lees Valley
Spindleberry <i>Euonymus europaeus</i>	Localised populations	Forms monoculture stands preventing native regeneration, particularly in wetlands	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Sweet briar <i>Rosa rubiginosa</i>	Localised populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Sycamore <i>Acer pseudoplatanus</i>	Widespread	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Banks Peninsula, Christchurch
Tree lupin <i>Lupinus arboreus</i>	Localised populations	Out-competes and displaces native plants by inhibiting regeneration	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities
Western yellow pine <i>Pinus ponderosa</i>	Localised populations	Forms monocultural stands preventing native regeneration; threat to landscape character	Target priority ecosystem units and prevent spread into new sites	Based on ecosystem and species management priorities

Aquatic species

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
Didymo <i>Didymosphenia geminata</i>	Found in many rivers and lakes	Forms thick layer that smothers submerged plants and other materials	Prevent spread into new sites	High-value freshwater sites and at-risk species habitats
Egeria <i>Egeria densa</i>	Isolated populations	Submerged aquatic plant displaces native macrophytes	Eradication	Based on ecosystem and species management priorities
Entire marshwort <i>Nymphoides geminate</i>	Isolated populations	Submerged/emergent aquatic plant	Eradication	Based on ecosystem and species management priorities
Hornwort <i>Ceratophyllum demersum</i>	Isolated populations	Submerged aquatic plant displaces native macrophytes	MPI-led total eradication ¹⁰³	Based on ecosystem and species management priorities
Horsetail <i>Equisetum arvense</i>	Isolated populations	Perennial aquatic herb, marginal zone	Eradication	Christchurch, Oxford
Horsetail	Isolated populations	Perennial aquatic herb, marginal zone	Eradication	Based on ecosystem and species

¹⁰³ MPI = Ministry for Primary Industries

Common and scientific name	Distribution	Pressures/threats	Management response	Priority places for action
<i>Equisetum hyemale</i>				management priorities
Lagarosiphon <i>Lagarosiphon major</i>	Isolated populations	Submerged aquatic plant displaces native macrophytes	Eradication	Based on ecosystem and species management priorities
Parrot's feather <i>Myriophyllum aquaticum</i>	Isolated populations	Submerged/emergent aquatic plant	Eradication	Based on ecosystem and species management priorities
Phragmites <i>Phragmites australis</i>	Isolated populations	Perennial aquatic herb, marginal zone	Eradication	Based on ecosystem and species management priorities
Senegal tea <i>Gymnocoronis spilanthoides</i>	Isolated populations	Perennial aquatic herb, marginal zone	Eradication	None (previously in Waimakariri River Regional Park)
Yellow flag iris <i>Iris pseudocorus</i>	Localised populations	Perennial aquatic herb, marginal zone	Eradication	Based on ecosystem and species management priorities
Yellow water lily <i>Nuphar lutea</i>	Localised populations	Submerged/emergent aquatic plant	Eradication	Based on ecosystem and species management priorities

Appendix 7

Nationally iconic species in Canterbury (Waitaha)

These nationally iconic species were identified using a combination of web-based and phone-based public surveys in which participants were asked what species they thought were quintessentially kiwi, contributing to their identity as New Zealanders. The ten species named most often have been identified as nationally iconic.

This table includes only the nationally iconic species that are found in Canterbury (Waitaha).

	Common name	Scientific name
Flora	Rimu	<i>Dacrydium cupressinum</i>
	Kōwhai	<i>Sophora</i> spp.
	Ferns	Various species
Fauna	Kiwi	<i>Apteryx</i> spp.
	Tūī	<i>Prothemadera novaeseelandiae</i>
	Kea	<i>Nestor notabilis</i>

Appendix 8

Marine habitats and ecosystems in Canterbury (Waitaha)

The coastal Classification and Mapping Scheme depth zones: shallow—0–30 m; deep—30–200 m; upper slope—200–500 m; mid slope—500–1000 m; lower slope—1000–4000 m.

Ecosystem	Habitat type	Significant values	Pressures/threats	Protected areas ¹⁰⁴
East Coast South Island bioregion				
North Canterbury (Conway River to Waipara River)	Moderate Rocky shore	<p>Coastal zone strongly influenced by Southland Current. Weak, seasonal influence of eddies from East Cape Current. Productive coastal ecosystem supporting a mix of widespread species and those typical of southern New Zealand. Some species more common in northern New Zealand also present.</p> <p>Important seabird feeding and breeding area:</p> <ul style="list-style-type: none"> • Black-fronted tern/tarapirohe over-winter at Waiau Uwha River mouth. • White-faced storm petrels/tītī (c. 50% of the world's breeding population), sooty shearwaters/tītī, little penguins/kororā (<i>Eudyptula minor</i>), fairy prions/tītī wainui, black-backed gulls/karoro and pied shags/kawau nest on Motunau Island. <p>Large numbers of New Zealand fur seals/kekeno use the coast between Waiau Uwha River and Napenape for hauling out and breeding. These animals probably forage along the outer shelf, including the Conway Trough.</p> <p>A small, resident population of Hector's dolphins occurs off Motunau.</p> <p>Dusky and common dolphin habitat.</p>	<p>Large inputs of fine terrestrially derived sediments.</p> <p>Fishing.</p> <p>Removal of epifauna and habitat homogenisation by mobile fishing gear.</p>	<p>Motunau Island Nature Reserve foreshore.</p> <p>Areas of Significant Natural Value within the Regional Coastal Plan for Canterbury Region.</p>
	Moderate beach			
	Sheltered beach			
	Sheltered shallow reef			
	Moderate shallow reef			
	Shallow sand			
	Shallow mud			
	Shallow gravel			
	Deep sand			
	Deep mud			
	Deep gravel			
	Deep reef			
	Upper slope			
	Mid slope			
	Water column			

¹⁰⁴ Areas marked with an * may not qualify as marine protected areas under the Marine protected areas: classification, protection standard and implementation guidelines (Ministry of Fisheries and Department of Conservation. 2008), depending on the management controls implemented for the particular area.

Ecosystem	Habitat type	Significant values	Pressures/threats	Protected areas ¹⁰⁴
		Large whales migrate through the northern part of this coastal unit.		
Canterbury shelf (Waipara River–Caroline Bay, Timaru)	Rocky shore and shallow reef (exposure to ocean swell changes around Bank's Peninsula) Saltmarsh intertidal sand and mudflats Sand and gravel beaches Shallow sands, muds and gravels Deep sand Deep mud Deep reef High current Shallow sand High current Deep sand High current Deep mud Water column	<p>Broad continental shelf with extensive soft sediment habitats supporting a productive inshore ecosystem. Benthic invertebrate assemblages are poorly known. High current areas east and southeast of Bank's Peninsula are predicted to contain suitable habitat for up to eight habitat-forming bryozoans species.</p> <p>The Canterbury shelf represents critical habitat for elephantfish (<i>Callorhynchus milii</i>) along the east coast South Island. Major spawning and mating areas are located in shallow water in Pegasus Bay and Canterbury Bight. Tagging studies indicate little movement of elephantfish between these areas. Stokell's smelt (<i>Stokellia anisodon</i>) is a diadromous fish endemic to the east coast of South Island. Major spawning runs of this species occur in Rakaia, Ashburton/Hakatere, and Rangitata rivers (Canterbury Bight). Small spawning runs of this species have also been recorded in Waipara and Waimakariri rivers (Pegasus Bay).</p> <p>Coastal currents flow predominantly northeast past Bank's Peninsula, sometimes generating a counter clockwise gyre in Pegasus Bay. Upwelling and mixing of water masses over the outer shelf results in high pelagic productivity. Predator-prey dynamics are poorly known but Canterbury Bight is the principal spawning ground for sprat (<i>Sprattus</i> spp.) in South Island, and a variety of protected species including basking sharks, at least 18 species of seabird and several marine mammals forage in the area. The waters around Banks Peninsula represent critical Hector's dolphin habitat. Prey species most commonly consumed by Hector's dolphin are red cod (<i>Pseudophycis bachus</i>), ahuru (<i>Auchenoceros punctatus</i>), arrow squid (<i>Nototodarus</i> sp.),</p>	<p>Large inputs of fine terrestrially derived sediments.</p> <p>Removal of epifauna and habitat homogenisation by mobile fishing gear.</p> <p>Set netting and trawling are threats to Hector's dolphins and protected shark species.</p>	<p>Banks Peninsula Marine Mammal Sanctuary.</p> <p>Trawling ban area, near-shore from Waimakariri River to Katawa Head (Le Bons Bay).</p> <p>Banks Peninsula Salmon Conservation Area, south from East Head (Okains Bay).</p> <p>Pohatu Marine Reserve (Flea Bay).</p> <p>Akaroa Marine Reserve</p> <p>Akaroa Taiapure*.</p> <p>Te Kaio Mātaitai*.</p> <p>Te Waihora Joint Management Plan Area (beach area).</p> <p>Bank's Peninsula Salmon Conservation Area (seasonal closure to large trawlers–East Head and 7 nm out to sea).</p> <p>Public conservation lands extending over beaches to mean high water spring (e.g. Opihi River and Washdyke Lagoon/Waitaraka).</p> <p>Areas of Significant Natural Value within the</p>

Ecosystem	Habitat type	Significant values	Pressures/threats	Protected areas ¹⁰⁴
		<p>sprats, sole (<i>Peltorhamphus</i> sp.) and stargazer (<i>Crapatalus</i> sp.).</p> <p>Sea birds nesting on Bank's Peninsula include fairy prion/titi wainui, sooty shearwater/titi, white-fronted tern/tara, black shag/kōau, hoiho/yellow-eyed penguin and white-flipped penguin/kororā. During the breeding season many of these species forage in the waters immediately adjacent the peninsula. White-flipped penguins/kororā probably forage in the upper water column within 5–10 km of the coast and 15 km of their colony. At least 48 breeding colonies of this regional endemic are located on Banks Peninsula. In contrast hoiho/yellow-eyed penguins are benthic feeders and may forage up to 57 km away from their nests, and between 13–25 km from shore.</p> <p>Approx 3000 New Zealand fur seals/kekeno haul out and breed on Banks Peninsula, the largest colonies occurring between Hickory Bay and Long Lookout Pt.</p> <p>Brooklands Lagoon, Ashley River/Rakahuri – Saltwater Creek estuary and Washdyke Lagoon/Waitarakao contain significant shore and wading bird habitats.</p>		Regional Coastal Plan for Canterbury Region.

Ecosystem	Habitat type	Significant values	Pressures/threats	Protected areas ¹⁰⁴
<p>Estuary of the Heathcote and Avon Rivers/Ihutu</p>	<p>Intertidal Sand and Mudflats Saltmarsh (remnants) Estuarine Mud</p>	<p>Important wading and shore bird habitat. Twelve saltmarsh vegetation types. Flatfish nursery habitat: juvenile flatfish settling in the estuary eventually recruit to the Pegasus Bay fishery. High recreational use.</p>	<p>Impacted by fine sediments, pathogens, nutrients and other contaminants in river inflows and non-point source discharges. Excess nutrients may cause seasonal blooms of <i>Ulva</i> sp. resulting in anoxic sediments. Habitat loss due to urban encroachment, stopbanking, reclamation and impoundment, but rectified in part by urban retreat following 2011 earthquakes. Chronic disturbance of wildlife. The 2011 Christchurch earthquakes changed the estuary bed heights and hydrology. The temporary discharge of raw effluent exaggerated nutrient enrichment, and liquefaction silt buried benthic organisms. The estuary will adjust naturally to its new regime, but long-term effects on wildlife values are difficult to predict.</p>	<p>Area of Significant Natural Value within the Regional Coastal Plan for Canterbury Region. Trawling ban area.</p>

Ecosystem	Habitat type	Significant values	Pressures/threats	Protected areas ¹⁰⁴
Lyttelton Harbour/ Whakaraupō	Sheltered rocky shore Tidal sand and mudflats Estuarine sand Estuarine mud Shallow gravel and sand Shallow mud High current Shallow mud Estuarine reef Sheltered shallow reef	<p>Relatively healthy harbour with abundant and relatively diverse inshore fish fauna.</p> <p>Four major soft sediment benthic communities have been identified in the upper harbour:</p> <ul style="list-style-type: none"> • <i>Macrophthalmus hirtipes</i>–<i>Virgularia gracillima</i> on fine muds • <i>Zeacolpus vittatus</i>–<i>Pectinaria australis</i> on sand • <i>Tiostrea chilensis</i>–<i>Sigapatella novaezelandiae</i> on solid shell fragments • Cockles (<i>Austrovenus stutchburyi</i>) on medium to fine sediments <p>Faunal diversity is reportedly highest in Charteris Bay and lowest off Rāpaki and close to Otamahua/Quail Island.</p> <p>Sheltered to moderate exposure rocky intertidal and subtidal species assemblages. Stands of <i>Macrosystis pyrifera</i>, <i>Carpophyllum</i> spp. and <i>Ecklonia radiata</i> are conspicuous in the shallow subtidal (< 8 m depth).</p> <p>Important shore and sea bird habitat:</p> <ul style="list-style-type: none"> • Hoiho/yellow-eyed penguin breeding reported on Otamahua/Quail Island. • Little penguin/kororā colonies in outer harbour and Otamahua/Quail Island. • Pied and black shag breeding and feeding area. • The coastline between Purau Bay and Port Levy is a variable oystercatcher breeding and wintering area. 	<p>Coastal development.</p> <p>Infilling by fine sediments.</p> <p>Pathogens and other contaminants in point source and non-point source discharges.</p> <p>Invasive marine species, including: <i>Styela clava</i>, <i>Cancer charybdis japonica</i>, <i>Cancer gibbosulus</i>, <i>Ficopomatus enigmaticus</i>, <i>Sabella spallanzanii</i>, <i>Bugula flabellata</i>, <i>B. neritina</i>, <i>Tricellaria inopinata</i>, <i>Cryptosula pallasiana</i>, <i>Conopeum seurati</i>, <i>Watersipora subtorquata</i>, <i>Haliplanella lineata</i>, <i>Apocorophium acutum</i>, <i>Monocorophium acherusicum</i>, <i>Monocorophium sextonae</i>, <i>Jassa slatteryi</i>, <i>Stenothoe</i> sp. and <i>Theora lubrica</i>.</p> <p>Chronic disturbance to wildlife.</p>	<p>Banks Peninsula Marine Mammal Sanctuary.</p> <p>Rāpaki and Koukourārata Mātaihai*.</p> <p>Trawling ban area.</p> <p>Areas of Significant Natural Value within the Regional Coastal Plan for Canterbury Region.</p>

Ecosystem	Habitat type	Significant values	Pressures/threats	Protected areas ¹⁰⁴
Akaroa Harbour	Sheltered rocky shore Tidal sand and mudflats Estuarine sand Estuarine mud Shallow sand High current Shallow sand Estuarine reef Sheltered shallow reef Exposed shallow reef	Healthy, sheltered marine environment. Intertidal and subtidal benthic communities characterised by species widespread around the South Island. Diversity varies from site to site, generally increasing towards the open sea. In places shading by coastal cliffs influences community composition. Hector's dolphin habitat.	Little evidence of long-term anthropogenic effects on benthos but historical baselines missing. Invasive marine species. Sediments, nutrients, pathogens and other contaminants contained in point source and non-point source discharges.	Banks Peninsula Marine Mammal Sanctuary. Akaroa Marine Reserve. Akaroa Taiapure*. Areas of Significant Natural Value within the Regional Coastal Plan for Canterbury Region.
Southern South Island bioregion				
Caroline Bay, Timaru— Waitaki River	Moderate rocky shore Moderate shallow reef Shallow sand Shallow gravel Shallow mud Deep sand Deep gravel Deep mud Deep reef Water column	Rocky reef assemblages characteristic of southern New Zealand. Broad continental shelf with extensive soft sediment habitats supporting a productive inshore demersal ecosystem. Offshore benthic invertebrate assemblages poorly known. Stokell's smelt habitat—small runs in Waitaki River Area of moderate to high demersal fish diversity and consistently high catch rates southeast of Timaru in about 100 m depth. Basking shark/mangō reremai habitat. Hector's, dusky and common dolphin habitat. Wainono Lagoon contains important shore and wading bird habitats.	Large inputs of fine terrestrially derived sediments. Removal of epifauna and habitat homogenisation by mobile fishing gear. Invasive marine species, e.g. <i>Undaria pinnatifida</i> , <i>Antithamnionella ternifolia</i> , <i>Polysiphonia senticulosa</i> , and <i>Striaria attenuata</i> .	Various public conservation lands (e.g. at Wainono Lagoon) extend over beaches to mean high water spring. Areas of Significant Natural Value within the Regional Coastal Plan for Canterbury Region.

References

- Anderson, O.F.; Bagley, N.W.; Hurst, R.J.; Francis, M.P.; Clark, M.R.; McMillan, P.J. 1998: Atlas of New Zealand fish and squid distributions from research bottom trawls. *NIWA Technical Report 42*. 303 p.
- Beentjes, M.P.; Stevenson, M.L. 2009: Inshore trawl survey of Canterbury Bight and Pegasus Bay, May–June 2008 (KAH0806). New Zealand Fisheries Assessment Report 2009/57. 105 p.
- Benn, J. 2009: Canterbury marine resource: a tool for marine planning, conservation and education. Department of Conservation, Christchurch. CD-ROM.
- Bonnett, M.L. 1992: Distribution and freshwater residence of Stokell's smelt, *Stokellia anisodon* (Stokell), in the South Island, New Zealand. *New Zealand Journal of Marine and Freshwater Research* 26: 213–218.
- Bräger, S.; Stanley, S. 1999. Near-shore distribution and seasonal abundance of white-flipped penguins (*Eudyptula minor albosignata*) at Banks Peninsula, New Zealand. *Notornis* 46: 365–372.
- (Colman 1979; Smith & Robertson 1981)
- Dendy, A. 1896: Art. XIX.—On *Virgularia gracillima* in Lyttelton Harbour. *Transactions and Proceedings of the Royal Society of New Zealand* 29: 256–257.
- Department of Conservation and the Ministry of Fisheries 2011: Coastal marine habitats and marine protected areas in the New Zealand territorial sea: a broad scale gap analysis. Vols. 1–3. Department of Conservation and the Ministry of Fisheries, Wellington.
- Fenwick, G.D. 2004: Marine ecology of Akaroa Harbour: rocky shore and subtidal soft bottoms. NIWA Client Report CHC2004-056, NIWA Project ENC04511. National Institute of Water & Atmospheric Research Ltd., Christchurch. 41 p.
- Hart, D.; Marsden, I.D.; Francis M.P. 2008. Chapter 20. Coastal Systems. Pp 653–684 in Winterbourn, M.; Knox, G.; Burrows, C.; Marsden, I. (eds.), *The Natural History of Canterbury*. 3rd Edition. Canterbury University Press, Christchurch. 924 pp.
- Hart, D.E.; Marsden, I.D.; Todd, D.J.; de Vries, W.J. 2008: Mapping of the bathymetry, soft sediments, and biota of the seabed of Upper Lyttelton Harbour. *Estuarine Research Report* 36, ECan Report 08/35. Environment Canterbury, Christchurch. 59 p.
- Hurst, R.J.; Bagley, N.W.; Anderson, O.F.; Francis, M.P.; Griggs, L.H.; Clark, M.R.; Paul, L.J.; Taylor, P.R. 2000: Atlas of juvenile and adult fish and squid distributions from bottom and midwater trawls and tuna longlines in New Zealand waters. *NIWA Technical Report 84*. 162 p.
- Jupp, K.L.; Partridge, T.R.; Hart, D.E.; Marsden, I.D. 2007: Ecology of the Avon-Heathcote Estuary: comparative salt marsh survey 2006–2007. *Estuarine Research Report* 34. Avon-Heathcote Estuary Ihutai Trust. 79 p.
- Leathwick, J.R.; Elith, J.; Francis, M.P.; Hastie, T.; Taylor, P. 2006: Variation in demersal fish species richness in the oceans surrounding New Zealand: an analysis using boosted regression trees. *Marine Ecology Progress Series* 321: 267–281.
- Shears, N.T.; Babcock, R.C. 2007: Quantitative description of mainland New Zealand's shallow subtidal reef communities. *Science for Conservation* 280. Department of Conservation, Wellington. 128 p.
- Shears, N.T.; Smith, F.; Babcock, R.C.; Duffy, C.A.J.; Villouta, E. 2008: Evaluation of biogeographic classification schemes for conservation planning: application to New Zealand's coastal marine environment. *Conservation Biology* 22(2): 467–481.
- Wood, A.C.L.; Rowden, A. A.; Compton, T.J.; Gordon, D.P.; Probert, P.K. 2013. Habitat-forming bryozoans in New Zealand: their known and predicted distribution in relation to broad-scale environmental variables and fishing effort. *PLoS ONE* 8(9): e75160. doi:10.1371/journal.pone.0075160
- Zeldis, J.; Skilton, J.; South, P.; Schiel, D. 2011: Effects of the Canterbury earthquakes on Avon-Heathcote Estuary/Ihutai ecology. Report No. U11/14. Environment Canterbury, Christchurch. 27 p.

Appendix 9

Significant geological features, landforms and landscapes in Canterbury (Waitaha)

Type	Geological feature/ landform/ landscape	Significance (international, national or regional including significance to tangata whenua)	Pressures/ threats	Protected areas on public conservation land
Representative public conservation areas	Aoraki/Mount Cook National Park	Of national significance because of their protected land status (and international significance for Aoraki/Mount Cook National Park due to World Heritage Area status)	Refer national park management plans	See 2.1 National Parks Place
	Arthur’s Pass National Park			See 2.1 National Parks Place
	Lewis Pass National Scenic Reserve		Ecosystem management; use of site.	See 2.3 Northern High-Country Place
	Kaitorete Spit reserves & conservation areas		Weed control; lack of knowledge; natural processes, vandalism; use of site	See 2.9 Coastal Land and Marine/Ki Tai Place
	Motunau Island Nature Reserve		Weed control; unauthorised visits	See 2.9 Coastal Land and Marine/Ki Tai Place
	Lake Alexandrina Scenic Reserve		Weed control; use of site; vandalism	See 2.4 High- Country Basins Place
Geopreservation sites	Rakaia River braids	Of international and national significance	Lack of knowledge; development of site; lack of statutory protection; natural processes; vandalism; use of site	See 2.6 Braided Rivers/Ki Uta Ki Tai Place
	Tasman Glacier			See 2.1 National Parks Place
	Tasman River			See 2.6 Braided Rivers/Ki Uta Ki Tai Place
	Rangitata River			
	Land formation examples (×66)	Of international and national significance (also 180 of regional significance)		In some cases
	Fossil locations/beds (×52)			In some cases
	Volcanic features (×7)			In some cases
	Historic stone/earth buildings (×3)			In some cases
	Historic rock drawing sites (×2)			In some cases
	Landscapes	Molesworth		Of at least regional or national significance given identification in Canterbury Regional
Lake Sumner and Lewis Pass Area		See 2.3 Northern High-Country Place		

Type	Geological feature/ landform/ landscape	Significance (international, national or regional including significance to tangata whenua)	Pressures/ threats	Protected areas on public conservation land
	Arthur's Pass National Park	Landscape Study plus international recognition of Aoraki, and parts of Mackenzie Basin, Ahuriri as within World Heritage Area	of statutory protection	See 2.1 National Parks Place
	Waimakariri Basin			See 2.4 High- Country Basins Place
	Castle Hill/Kura Tāwhiti			See 2.4 High- Country Basins Place
	Torlesse Range			See 2.4 High- Country Basins Place
	Upper Rakaia Valley			See 2.2 Southern Conservation Parks Place, 2.4 High- Country Basins Place, and 2.6 Braided Rivers/Ki Uta Ki Tai Place
	Upper Rangitata Valley			See 2.2 Southern Conservation Parks Place, 2.4 High- Country Basins Place, and 2.6 Braided Rivers/Ki Uta Ki Tai Place
	Lake Heron and Ashburton Lakes			See 2.4 High- Country Basins Place
	Mount Somers			See 2.2 Southern Conservation Parks Place and 2.5 Foothills Place
	Mount Peel and Four Peaks Range			See 2.5 Foothills Place
	Two Thumb, Hall and Gammack ranges			See 2.2 Southern Conservation Parks Place and 2.4 High- Country Basins Place
	Mackenzie Basin			See 2.2 Southern Conservation Parks Place and 2.4 High- Country Basins Place
	Aoraki/Mount Cook National Park			See 2.1 National Parks Place
	Hopkins and Dobson Valleys			See 2.2 Southern Conservation Parks Place
	Lindis and Ahuriri			See 2.2 Southern Conservation Parks Place and 2.4 High-

Type	Geological feature/ landform/ landscape	Significance (international, national or regional including significance to tangata whenua)	Pressures/ threats	Protected areas on public conservation land
				Country Basins Place
	Hawkdun and St Marys ranges/Oteake			See 2.2 Southern Conservation Parks Place
	Weka Pass			Very little
	Motunau Island			See 2.9 Coastal Land and Marine/Ki Tai Place
	Lower Waimakariri River and Gorge			See 2.4 High-Country Basins Place and 2.5 Foothills Place
	Banks Peninsula and Port Hills			See 2.7 Christchurch City/Ōtautahi Place and 2.8 Banks Peninsula/Te Pātaka o Raukaihautū Place
	Lake Ellesmere/Te Waihora and Kaitorete Spit			See 2.8 Banks Peninsula/Te Pātaka o Raukaihautū Place and 2.9 Coastal Land and Marine/Ki Tai Place
	Lower Rakaia River and Gorge			See 2.6 Braided Rivers/Ki Uta Ki Tai Place and 2.9 Coastal Land and Marine/Ki Tai Place
	Wainono Lagoon			See 2.9 Coastal Land and Marine/Ki Tai Place
Representative sites of significance to Ngāi Tahu	Maunga teitei ('lofty mountains')	Nationally or at least regionally significant because of size of Ngāi Tahu rohe		In some cases
	Wāhi tapu sites, e.g. Ōnawe Peninsula			In some cases
	Rock outcrops containing Māori rock art			In some cases
	Marae landscape settings			In some cases
Other	The historic and geologically significant Wilberforce catchment quartz/gold reefs and historic road to and over Browning Pass/Noti Raureka		Mineral prospecting	See 2.2 Southern Conservation Parks Place

Type	Geological feature/ landform/ landscape	Significance (international, national or regional including significance to tangata whenua)	Pressures/ threats	Protected areas on public conservation land
	The recreational, educational and geological significance of the Mount Somers volcanics and their gemstone deposits		Recreational use and facility development; gemstone fossicking.	See 2.2 Southern Conservation Parks Place

Appendix 10

Actively conserved historic places on public conservation lands and waters in Canterbury (Waitaha)

Place	Location	Heritage topics and significance	Pressure/threats	Destination management category/access
1st Ball Hut Site	Tasman Valley, Aoraki/Mount Cook National Park	Recreation/mountaineering/tourism; significant archaeological site	Visitor impact; erosion	Backcountry; accessible by foot from the Tasman Valley Rd end
Birch Hill Homestead sites	Aoraki/Mount Cook; Birch Hill Conservation Area	Pastoral farming; significant archaeological site	Visitor impact	Local Treasure; accessible by foot from SH80
Hooker Hut	In storage, Aoraki/Mount Cook National Park	Recreation/mountaineering; significant mountain recreation/tourism site	Visitor impact; erosion; hut to be relocated	Backcountry; accessible by foot
Alpine Memorial	Hooker Valley, Aoraki/Mount Cook National Park	Recreation, memorial to climbers; significant recreation/tourism site	Visitor impact (vandalism); erosion	Part of Icon; accessible by foot
Sawyer Stream Hydro Power Scheme	Sawyer Stream Aoraki/Mount Cook National Park	Tourism—supplied power to 2nd and 3rd Hermitage; significant industrial site	Visitor impact; erosion—rock falls/floods	Local Treasure; accessible by foot
Sefton Bivvy	Aoraki/Mount Cook National Park	Recreation/mountaineering; significant mountain recreation site	Visitor impact; weather; erosion	Backcountry; accessible by foot
Old Ball Hut road and Pack Track	Tasman Valley, Aoraki/Mount Cook National Park	Tourism/recreation; significant archaeological site	Visitor impact; erosion	Local Treasure; accessible by foot
First Hermitage site and stables	White Horse Hill, Aoraki/Mount Cook National Park	Tourism/recreation; significant archaeological recreation/tourism site	Visitor impact; erosion	Icon; accessible by foot
Empress Hut	Aoraki/Mount Cook Visitor Centre	Recreation/mountaineering; significant mountain hut, and first to be flown to a site in the park	Visitor impact (vandalism)	Part of Gateway; accessible by foot
Red Hut	Hopkins Valley, Ruataniwha Conservation Park	Tourism/recreation; significant recreation/tourism hut	Visitor impact; flood	Backcountry; accessible by foot
Quailburn historic area	Quailburn Road Ahuriri Conservation Park	Pastoral farming; Collection of high-country run buildings	Visitor impact	Local Treasure; accessible by car
Quailburn Pack Track	Quailburn Road Ahuriri Conservation Park	Pastoral farming; Historic pack and access track to East Ahuriri	Visitor impact; erosion	Backcountry; accessible by foot
Hideaway Hut	Lower Ahuriri Valley, Ahuriri Conservation Park	Pastoral farming; mustering hut	Visitor impact; fire	Backcountry; accessible by foot

Place	Location	Heritage topics and significance	Pressure/threats	Destination management category/access
Climbers Memorial	At Monument Hut, Lower Hopkins Valley Ruataniwha Conservation Park	Recreation/tourism memorial	Visitor impact	Backcountry; accessible by 4WD
Little's Hut	Jollie Tasman, Mount Cook Station Conservation Park	Pastoral farming; mustering hut	Visitor impact	Backcountry; accessible by foot
Freehold Creek historic sites	Ahuriri Conservation Park	Early timber extraction; early bullock snig tracks and Benmore Station outstation ruins	Visitor impact; erosion; beech regeneration	Local Treasure; accessible by foot
East Branch Ahuriri Hut (Quailburn Hut)	East Branch Ahuriri, Ahuriri Conservation Park	Pastoral farming; mustering hut	Visitor impact; erosion; flooding; fire	Backcountry; accessible by foot
Kennedy Memorial	Dobson Valley, Ruataniwha Conservation Park	Wild animal control; memorial to a Department of Internal Affairs deer culler killed in an avalanche	Visitor impact; erosion	Backcountry; accessible by 4WD
Reardon Hut	Dobson Valley, Ruataniwha Conservation Park	NZFS ¹⁰⁵ wild animal control; deer cullers hut	Visitor impact; erosion; vegetation	Backcountry; accessible by foot
Dasler Biv	Dasler Pinnacles Hopkins Valley, Ruataniwha Conservation Park	NZFS wild animal control; deer cullers hut	Visitor impact	Backcountry; accessible by foot
Birdcage Hut	Cass River Valley, Godley Peaks Conservation Area	Pastoral farming; mustering hut	Visitor impact	Backcountry; accessible by 4WD
Double Hut	Swin River South Branch, Hakatere Conservation Park	Pastoral farming; mustering hut	Visitor impact	Backcountry; accessible by foot
Staveley Lime Kilns	Hakatere Conservation Park, close to Staveley township	Mineral extraction and industrial site; two kilns to produce burnt lime	Visitor impact; earthquakes; site has suffered from earthquake damage	Local Treasure; accessible by foot
Potts Hut	Potts River, Hakatere Conservation Park	Pastoral farming; mustering hut	Visitor impact; flooding	Backcountry; accessible by foot
Raincliff Historic Reserve	Middle Valley Rd; Raincliff	Māori rock art shelters	Visitor impact	Local Treasure; accessible by car
Burkes Cottage remains and Cob Chimney Shelter	Pioneer Park; Raincliff	Pastoral farming; homestead remains	Visitor impact; vegetation	Local Treasure; accessible by car
Comyns Hut	North Branch Ashburton River, Hakatere Conservation Park (Glenariffe Easement)	Pastoral farming; mustering hut	Visitor impact; vegetation	Backcountry; accessible by foot

¹⁰⁵ NZFS = New Zealand Forest Service

Place	Location	Heritage topics and significance	Pressure/threats	Destination management category/access
Mount Harper Ice Rink Complex	Rangitata River, Hakatere Conservation Park	Recreation; extensive remnants of a once popular ice skating complex	Regeneration/wilding trees; visitor impact	Backcountry; accessible by foot
Lake Emma Shelter	Lake Emma, Hakatere Conservation Park	Pastoral farming; possible homestead and later mustering hut; recreation	Visitor impact; lake level rise	Local Treasure; accessible by 4WD on a seasonal basis
Monavale Historic Reserve	Monavale Road, Cave, South Canterbury	Education; school building and grounds established when large Canterbury Runs were subdivided and balloted; HNZPT ¹⁰⁶ Category II registration	Visitor impact; maintenance capability	Local Treasure; accessible by car
Richmond Shelter	Bush Stream, Mesopotamia, Te Kahui Kaupeka Conservation Park	Pastoral farming; sub-alpine mustering hut	Visitor impact; maintenance capability	Backcountry; accessible by foot
Lawrence Biv	Lawrence River, Hakatere Conservation Park	NZFS Wild Animal Control; Deer cullers hut	Visitor impact; maintenance capability	Backcountry; accessible by foot
Jeanie Colliers Gravesite	Jeanie Colliers Gravesite Historic Reserve, South Canterbury	Pastoral farming; grave of first woman to take up a pastoral run	Visitor impact and stock damage	Local Treasure; accessible by car
Hakatere Heritage Area	Hakatere Corner, Hakatere Conservation Area	Pastoral farming; registered historic area	Visitor impact; maintenance capability	Local Treasure; accessible by car
Dr Sinclair's grave site	Dr Sinclair's Cemetery Reserve, Ashburton Lakes area	Explorer/botany; grave of Dr Sinclair who drowned in the Rangitata River	Visitor impact	Local Treasure; accessible by car
Saw pit	Dennistoun Bush, Peel Forest Scenic Reserve	Timber extraction; examples of early Canterbury saw pits	Visitor impact; maintenance	Local Treasure; accessible by foot
Saw pits	Clarke Flat Conservation Area, Peel Forest	Timber extraction; examples of early Canterbury saw pits	Visitor impact; maintenance capability	Part of Gateway; accessible by foot
Big Tree Walk—various; Clarks tramway cutting and embankment	Peel Forest Park Scenic Reserve	Timber extraction; examples of early Canterbury milling logging tramway	Visitor impact; storm damage and maintenance capability; re-growth of vegetation	Part of Gateway; accessible by foot
Weka Pass Rock Art Shelter	Weka Pass Historic Reserve, off SH7, Waikari	Māori rock art shelter	Visitor impact; vegetation	Local Treasure; accessible by foot

¹⁰⁶ HNZPT = Heritage New Zealand Pouhere Taonga.

Place	Location	Heritage topics and significance	Pressure/threats	Destination management category/access
Urquhart's Hut	Wilberforce River, Rangitata/Rakaia Headwaters Conservation Area	Government Depression work scheme by Ashburton County Council; 1930s gold prospecting hut	Visitor impact; maintenance capability	Backcountry; accessible by car
Bealey Hotel Site	Old Bealey Hotel Picnic Area, Arthur's Pass National Park	Transport—coaching; archaeological site	Visitor impact; maintenance capability	Local Treasure; accessible by foot
Mansons Creek Coaching Stop	Mansons Creek, Flock Hill, edge of Craigieburn Forest Park	Transport—coaching; archaeological site	Visitor impact; maintenance capability	Local Treasure; accessible by foot
Kura Tāwhiti/Castle Hill	Kura Tāwhiti/Castle Hill, Waimakariri	Māori rock art; pastoral farming & transport—coaching	Visitor impact; vegetation	Gateway; accessible by foot
Felton Grave	Klondyke Corner, Arthur's Pass National Park	Grave site; transport	Vegetation re-growth	Local Treasure; accessible by car
Jacks Hut	SH 73 Arthur's Pass National Park	Transport—coaching; Roadman's Hut	Visitor impact; vandalism; maintenance capability	Part of Gateway; accessible by car
Coaching milestone	Mount White turnoff, Arthur's Pass National Park	Transport—coaching	Visitor impact	Local Treasure; accessible by car
Hurunui No 3 Hut	Harper Pass Track, Lake Sumner Forest Park	Depression Government work scheme; tourism; one of two remaining huts of original five huts built on Harper Pass Route	Visitor impact; maintenance capability	Backcountry; accessible by foot
Old Coach Road	At Greyneys Shelter, Arthur's Pass National Park	Transport—coaching	Visitor impact; maintenance capability; vegetation re-growth	Local Treasure; accessible by foot
Doubtless Hut	Doubtful Valley Track, Lake Sumner Forest Park	NZFS wild animal control; deer cullers hut	Visitor impact; maintenance capability	Backcountry; accessible by foot
Dobson Memorial	SH73 Arthur's Pass Arthur's Pass National Park	Exploration; prominent stone memorial at top of Arthur's Pass	Natural decay; erosion; visitor impact; maintenance capability	Local Treasure; accessible by car
Cave Stream Rock Art Shelter	Cave Stream Scenic Reserve	Māori rock art site	Erosion	Gateway; accessible by foot
Bealey Hut	Cora Lynn, Craigieburn Forest Park	NZFS wild animal control; built as cullers hut, but mostly used as a base hut	Visitor impact; maintenance capability	Backcountry; accessible by foot

Place	Location	Heritage topics and significance	Pressure/ threats	Destination management category/access
West Harper Hut	Harper River, Craigieburn Forest Park	Wild animal control; beech pole framed deer cullers hut built by NZFS Golden Downs woodsmen	Visitor impact; maintenance capability; vegetation	Backcountry; accessible by foot
Trust Poulter Hut	Poulter River, Arthur's Pass National Park	NZFS wild animal control; deer cullers hut	Visitor impact; maintenance capability; vegetation	Backcountry; accessible by foot
Browning Pass dray and pack tracks and prospecting drives	Central Southern Alps, Wilberforce Conservation Area	Māori greenstone trail; transport—road and pack track; gold prospecting and extraction	Visitor impact; maintenance capability; erosion; erosion and earthquakes	Backcountry; accessible by foot
Bealey Spur Hut	Bealey Spur, Arthur's Pass National Park	Pastoral farming; mustering hut	Visitor impact; maintenance capability	Backcountry; accessible by foot
Coaching milestone	Bealey Road Bridge, SH73, Arthur's Pass National Park	Transport—coaching	Visitor impact; riverbank erosion; vegetation	Backcountry; accessible by car
Back Basins Hut	Avoca Valley, Craigieburn Forest Park	NZFS wild animal control; beech pole framed deer cullers hut built by NZFS Golden Downs woodsmen	Visitor impact; maintenance capability	Backcountry; accessible by foot
Avoca Homestead	Broken River, Korowai Torlesse Tussocklands Park	Pastoral farming; remote 1906 high-country run corrugated iron clad homestead	Visitor impact; maintenance capability; vegetation	Backcountry; accessible by foot
Adderley Head Signal Station	Adderley Head Scenic Reserve, Banks Peninsula	Maritime; 1867 signal station; archaeological site	Significant loss as a result of earthquakes June 2011; vegetation	Backcountry; accessible by foot
Akaroa Head Scenic Reserve	Akaroa, Banks Peninsula	Maritime; remains of lighthouse station; archaeological site	Visitor impact; erosion; maintenance capability; vegetation	Local Treasure; accessible by car
Balmoral Fire Lookout	Hurunui Bridge SH7, Conservation Area, Hurunui	Forestry and timber industry; NZFS fire lookout on hilltop	Visitor impact; maintenance capability; vegetation	Local Treasure; accessible by foot
St James Station	Waiau Uwha River valley and its tributaries, Mailing Pass to Charlies Saddle	Pastoral farming; mustering hut and homestead sites; transport (pack tracks) NZFS wild animal control huts—deer culling; Rabbit Board pest control—rabbit fencing; extensive archaeological sites	Visitor impacts; maintenance capability; vegetation	Backcountry; accessible by 4WD to Waiau Uwha River via Mailing Pass or Edwards Valley and then by foot or mountain bike

Place	Location	Heritage topics and significance	Pressure/threats	Destination management category/access
St James Station	Waiau Toa/Clarence valley including Peters & Edwards valleys and Fowlers Pass	Pastoral farming; pack tracks; homestead buildings and former homestead sites in Edwards; hot springs; Rabbit Board pest control—Fowlers Hut and Waiau rabbit fence; extensive archaeological sites	Visitor impacts & maintenance capability; vegetation	Gateway; accessible by car and then by foot
Godley Head Coastal Track Pilgrims Way	Godley Head, Christchurch	Recreation/maritime; coastal track from Taylors Mistake to Boulder Bay; within HNZPT registered historic area	Erosion; earthquakes; visitor impact; vegetation	Icon; Historic Icon; accessible by foot
Godley Head Historic Reserve	Godley Head, Christchurch	Maritime Godley Head Lighthouse; Military WWII; HNZPT registered historic area	Erosion; has suffered earthquake damage; visitor impact; maintenance capability; vegetation	Icon; accessible by car
Horomaka Island Jetty	Horomaka Island, Banks Peninsula	Recreation; reserve was originally a landing reserve	Coastal erosion	Local Treasure; accessible by boat
Sign of the Packhorse Hut	Kaituna Saddle, Banks Peninsula	Recreation	Visitor impact; maintenance capability; earthquakes	Backcountry; accessible by foot or mountain bike
Little River Branch Railway Line—Motukarara to Little River	Te Waihora, Banks Peninsula	Railway infrastructure—station and station sites, embankments, mile posts, bridges and culverts Kaituna railway quarry site; military—home guard sites; recreation	Visitor impact; maintenance capability; lake water erosion; vegetation	Gateway; accessible via the Christchurch to Little River Rail Trail, either by bike or by foot
Mount Pleasant Bluff Track	Tauhinu Korokio Scenic Reserve, Lyttelton, Port Hills	Māori; early farming—dry stone walls, cottage sites & farm tracks; military—WW II heavy anti-aircraft battery	Visitor impact; maintenance; earthquakes	Part of Gateway; accessible by foot
Lyttelton Scenic Reserve	Lyttelton Township to Summit Road, Port Hills	Major Hornbrook Track; military—WW II—two strong points; Lyttelton Quarry and quarry info structure; originally reserved as a botanic garden; recreation	Visitor impact; maintenance capability; earthquakes; vegetation	Part of Gateway; accessible by foot

Place	Location	Heritage topics and significance	Pressure/threats	Destination management category/access
Nikau Palm Dendroglyphs	Nikau Palm Gully track, Akaroa	Recreation	Vegetation; Tree dieback; visitor impact; erosion; fire	Backcountry; accessible by foot or by boat
Otamahua/Quail Island Recreation Reserve	Lyttelton Harbour	Farming; human and animal quarantine sites; quarantine barracks; quarries; Antarctic exploration; leprosy colony; recreation; 1874 barracks; HNZPT Category I registration; HNZPT historic area registration for island pending	Visitor impact; maintenance capability; earthquake; fire coastal erosion; vegetation	Gateway; accessible by boat only
Ripapa Island Historic Reserve	Lyttelton Harbour, Banks Peninsula	Pā; human quarantine station; military—Fort Jervois; recreation by Lyttelton Harbour Board; Navy League training ship & DOC; HNZPT Category I Historic Place & Ngāi Tahu Tōpuni Site	Visitor impact; erosion; vegetation; tsunami; site has suffered from earthquake damage	Local Treasure; accessible by boat only
Te Puke ki Waitaha; Pā Island	Te Puke ki Waitaha Historic Reserve, Banks Peninsula	Māori—pā site	Coastal erosion; vegetation	Local Treasure; accessible by boat only
Transit of Venus Observation Pedestals	Transit of Venus Historic Reserve, Burnham Military Camp	Astronomical observations; historic reserve	Visitor impact	Local treasure; accessible by car, but access consent required from New Zealand Defence Force
Kaitorete Spit/Te Waihora	Kaitorete Spit; Birdlings Flat to Rabbit hut site and scientific reserves	Māori occupation; archaeological sites; transport; farming; military	Visitor impact—off road vehicles; coastal erosion	Local treasure; accessible by car or foot
Mount Somers	Woolshed Creek, Mount Somers Conservation Area	Mineral extraction; coal mining; pastoral farming	Visitor impact; maintenance capability; vegetation	Gateway; accessible by foot

Appendix 11

Icon and Gateway destinations in Canterbury (Waitaha)

This list has been taken from the Department's national list of destinations managed as part of Destination Management, as at July 2013. The list is accurate as at the date of this CMS approval. Its contents may be amended or reviewed during the term of this CMS.

Note: Local Treasure and Backcountry destinations are not included in this table. They are addressed in general in Parts One and Two. Where specified, these destination types are accurate as at the time of CMS approval, and may be amended or reviewed during the term of this CMS.

Icon destinations	Place
Hooker/Mueller Tracks	2.1 National Parks
Tasman Glacier Walks	2.1 National Parks
Godley Head	2.8 Banks Peninsula/Te Pātaka o Rākaihautū
Gateway destinations	
Aoraki/Mount Cook Village Walks	2.1 National Parks
Arthur's Pass Walks	2.1 National Parks
Mount Somers Track	2.2 Southern Conservation Parks and 2.5 Foothills
Hanmer Picnic Area	2.3 Northern High-Country
St James Track	2.3 Northern High-Country
Cave Stream	2.4 High-Country Basins
Kura Tāwhiti/Castle Hill	2.4 High-Country Basins
Tekapo Walks	2.4 High-Country Basins
Peel Forest	2.5 Foothills
Glentui	2.5 Foothills
Talbot Forest	2.5 Foothills
Wooded Gully	2.5 Foothills
Ōtukaikino	2.7 Christchurch City/Ōtautahi
Christchurch to Little River Rail Trail	2.8 Banks Peninsula/Te Pātaka o Rākaihautū and 2.9 Coastal Land and Marine/Ki Tai
Port Hills Walks	2.8 Banks Peninsula/Te Pātaka o Rākaihautū
Otamahua/Quail Island	2.8 Banks Peninsula/Te Pātaka o Rākaihautū

Appendix 12

Prescriptions for managing visitor management zones

See Volume II for maps of visitor management zones in Canterbury (Waitaha).

Setting	Urban	Rural	Front country	Backcountry: accessible and walk-in	Remote	Wilderness
General description	<ul style="list-style-type: none"> • Areas inside or on the periphery of urban areas • Typically includes a historic or cultural site 	<ul style="list-style-type: none"> • Remnant native forest, wetlands, marine reserves and historic or cultural sites in areas dominated by farmland and plantation forest 	<ul style="list-style-type: none"> • Where the majority of visits occur; typically small areas, scattered within or on the periphery of large relatively natural areas • Includes the vicinity of main 'scenic' roads passing through public conservation lands • Often focused on a particular attraction 	<ul style="list-style-type: none"> • Large-scale natural settings generally accessed first through front country • Includes popular walks and tramps set within large-scale natural settings, and/or that access other settings 	<ul style="list-style-type: none"> • Catchments beyond the backcountry zone, forming the wild lands in the interior of large protected areas, with basic low-use tracks, marked routes and huts 	<ul style="list-style-type: none"> • Gazetted wilderness
Accessibility	<ul style="list-style-type: none"> • Enabled for people of most ages and abilities 	<ul style="list-style-type: none"> • Typically via sealed and unsealed roads, and in some cases by boat • Enabled for people of most ages or abilities 	<ul style="list-style-type: none"> • Readily accessible areas, usually via sealed roads, or scheduled ferry or air services • Mostly by car, but also tour buses and guided parties to some sites • Enabled for people of most ages and abilities 	<ul style="list-style-type: none"> • People will have travelled some distance to reach these settings • 'Backcountry accessible' focuses on unsealed roads, four-wheel drive tracks, navigable waters and aircraft landing sites • Motorised ground access generally restricted to roads 	<ul style="list-style-type: none"> • Typically 5 or more hours travel on foot from front country • Access supported by air or water craft in some areas 	<ul style="list-style-type: none"> • Typically requires passing through backcountry and remote areas to reach the boundary

Setting	Urban	Rural	Front country	Backcountry: accessible and walk-in	Remote	Wilderness
				<ul style="list-style-type: none"> and designated routes • 'Backcountry walk-in' is focused beyond the influence of motorised access 		
Predominant visitor groups	<ul style="list-style-type: none"> • Short-stop travellers and day visitors 	<ul style="list-style-type: none"> • Short-stop travellers, day visitors and over-nighters 	<ul style="list-style-type: none"> • Predominantly short-stop travellers, day visitors and over-nighters • Other visitors in transition to backcountry and remote settings 	<ul style="list-style-type: none"> • Predominantly 'backcountry comfort seekers' and 'backcountry adventurers' 	<ul style="list-style-type: none"> • 'Backcountry adventurers' and 'remoteness seekers' 	<ul style="list-style-type: none"> • 'Remoteness seekers'
Predominant destination categories	<ul style="list-style-type: none"> • Icon, Gateway and Local Treasure 			<ul style="list-style-type: none"> • Predominantly Icon, Gateway and Local Treasure 	<ul style="list-style-type: none"> • Predominantly Backcountry 	<ul style="list-style-type: none"> • If present, Backcountry
Facility setting	<ul style="list-style-type: none"> • High-standard footpaths, cycleways and modified landscapes • High degree of control via information and direction signs, and barriers 	<ul style="list-style-type: none"> • Short walks, campsites and picnic areas, for a range of ages and abilities • High degree of control via information and direction signs, and barriers 	<ul style="list-style-type: none"> • Good-quality facilities, services and easy access • Sometimes the origin for tramping tracks and routes, with signs and information to make this transition clear • High degree of control via information and direction signs, and barriers 	<ul style="list-style-type: none"> • A range of facility standards, including any designated vehicle routes, and popular walks and tramping tracks • Evidence of control limited to essential directional signs and barriers on Great Walks and where there are significant hazards 	<ul style="list-style-type: none"> • Basic huts, bridges, low-use tracks and marked routes • Evidence of control is limited to essential signs 	<ul style="list-style-type: none"> • No facilities
Desired visitor experience and interactions	<ul style="list-style-type: none"> • Varying, from activities with large groups, time with small groups/families, some time away from other groups, and, in some cases, solitude 			<ul style="list-style-type: none"> • Generally some time away from other groups, and, in some cases, solitude 	<ul style="list-style-type: none"> • Reasonable expectation of isolation from sights, sounds and 	<ul style="list-style-type: none"> • Complete isolation from sights, sounds and activities of other people

Setting	Urban	Rural	Front country	Backcountry: accessible and walk-in	Remote	Wilderness
				<ul style="list-style-type: none"> Occasional encounters with organised groups Generally accepting of occasional intrusion of noise 	activities of other people <ul style="list-style-type: none"> Interaction with few other groups Considerable self-reliance on back country skills 	<ul style="list-style-type: none"> Maximum interaction with only one other group is generally acceptable
Preferred maximum party size	<ul style="list-style-type: none"> What is socially appropriate Conforming concessions schedule—15 	<ul style="list-style-type: none"> 50 Conforming concessions schedule—15 	<ul style="list-style-type: none"> 15 50 for periodic tour bus parties Conforming concessions schedule—15 	<ul style="list-style-type: none"> 15 	<ul style="list-style-type: none"> 8 	<ul style="list-style-type: none"> 4
Typical visitor interaction levels	<ul style="list-style-type: none"> What is socially appropriate 	<ul style="list-style-type: none"> 20 or less people seen per hour 	<ul style="list-style-type: none"> 30 or less people seen per visit duration 	<ul style="list-style-type: none"> 15 or less people seen per day for 'backcountry adventurer' tracks 40 or less people seen per day for 'back country comfort seeker' tracks 	<ul style="list-style-type: none"> One other party seen per day 	<ul style="list-style-type: none"> Less than 1 other party seen per week
Concessions operations	<ul style="list-style-type: none"> Concessionaire activity may be permitted in all these visitor management zones, subject to conditions to avoid, remedy or mitigate adverse effects, including compliance with criteria within this table: the outcomes, objectives and policies for Part Two—Places and policies in Part Three apply Concessionaire client activities should not be advantaged or disadvantaged compared with those for non-concessionaire visitors, unless there is a specified reason for different management: the outcomes and policies for Part Two—Places and policies in Part Three apply 			<ul style="list-style-type: none"> Concessions should only be granted for this setting where consistent with the policies for wilderness areas 		
Concessions effects management	<ul style="list-style-type: none"> Avoid, remedy or mitigate adverse effects 			<ul style="list-style-type: none"> Avoid or mitigate adverse effects 	<ul style="list-style-type: none"> Avoid adverse effects Concessions must demonstrate the activity is necessary or 	

Setting	Urban	Rural	Front country	Backcountry: accessible and walk-in	Remote	Wilderness
						desirable for the preservation of the wilderness area's indigenous natural resources
Aircraft management	<ul style="list-style-type: none"> Aircraft access for visitor use purposes should not be approved other than in accordance with this CMS. 					<ul style="list-style-type: none"> Aircraft access for visitor use purposes must be necessary or desirable for the preservation of the wilderness area's indigenous natural resources

Appendix 13

Ngāi Tahu Claims Settlement Act 1998 provisions relating to Canterbury (Waitaha)

13.1 Tōpuni Statements

13.1.1 Tōpuni for Aoraki/Mount Cook (Schedule 80,)

Description of Area

The area over which the Tōpuni is created is the area known as Aoraki/Mount Cook, located in Kā Tiritiri o te Moana, shown as Aoraki on Allocation Plan MS 1 (SO 19831).

Preamble

Under section 239 (clause 12.2.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Aoraki, as set out below.

Ngāi Tahu Values Relating to Aoraki

"In the beginning there was no Te Waipounamu or Aotearoa. The waters of Kiwa rolled over the place now occupied by the South Island, the North Island and Stewart Island/Rakiura. No sign of land existed.

Before Raki (the Sky Father) wedded Papatūānuku (the Earth Mother), each of them already had children by other unions. After the marriage, some of the Sky Children came down to greet their father's new wife and some even married Earth Daughters.

Among the celestial visitors were four sons of Raki who were named Aoraki (Cloud in the Sky), Rakiroa (Long Raki), Rakirua (Raki the Second), and Rārakiroa (Long Unbroken Line). They came down in a canoe, which was known as Te Waka o Aoraki. They cruised around Papatuanuku who lay as one body in a huge continent known as Hawaiiki.

Then, keen to explore, the voyagers set out to sea, but no matter how far they travelled, they could not find land. They decided to return to their celestial home but the karakia (incantation) which should have lifted the waka (canoe) back to the heavens failed and their craft ran aground on a hidden reef, turning to stone and earth in the process.

The waka listed and settled with the west side much higher out of the water than the east. Thus, the whole waka formed the South Island, hence the name: Te Waka o Aoraki. Aoraki and his brothers clambered on to the high side and were turned to stone. They are still there today. Aoraki is the mountain known to Pākehā as Mount Cook, and his brothers are the next highest peaks near him. The form of the island as it now is owes much to the subsequent deeds of Tū Te Rakiwhānoa, who took on the job of shaping the land to make it fit for human habitation.

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and continuity between generations, and document the events which shaped the environment of Te Waipounamu and Ngāi Tahu as an iwi.

The melt-waters that flow from Aoraki are sacred. On special occasions of cultural moment, the blessings of Aoraki are sought through taking of small amounts of its 'special' waters, back to other parts of the island for use in ceremonial occasions.

The mauri of Aoraki represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the mountain.

The saying 'He kapua kei runga i Aoraki, whakarewa whakarewa' ('The cloud that floats aloft Aoraki, for ever fly, stay aloft') refers to the cloud that often surrounds Aoraki. Aoraki does not always 'come out' for visitors to see, just as that a great chief is not always giving audience, or on 'show'. It is for Aoraki to choose when to emerge from his cloak of mist, a power and influence that is beyond mortals, symbolising the mana of Aoraki.

To Ngāi Tahu, Aoraki represents the most sacred of ancestors, from whom Ngāi Tahu descend and who provides the iwi with its sense of communal identity, solidarity and purpose. It follows that the ancestor embodied in the mountain remains the physical manifestation of Aoraki, the link between the supernatural and the natural world. The tapu associated with Aoraki is a significant dimension of the tribal value, and is the source of the power over life and death, which the mountain possesses."

Specific Principles Relating To Tōpuni Area (from Attachment 12.132 of the Deed of Settlement 1997)

The following specific principles are directed at the Minister of Conservation avoiding harm to, or the diminishing of, the Ngāi Tahu Values related to the Tōpuni:

- (a) Encouragement of respect for Ngāi Tahu's association with Aoraki;
- (b) Accurate portrayal of Ngāi Tahu's association with Aoraki; and
- (c) Recognition of Ngāi Tahu's relationship with wāhi tapu, including archaeological sites.

Actions by the Director-General of Conservation in relation to the Specific Principles

Pursuant to clause 12.2.10 of the Deed of Settlement, the Director-General has determined that the following actions will be taken by the Department of Conservation in relation to the specific principles:

- (a) Encouragement of respect of Ngāi Tahu's association with Aoraki
 - Staff, conservation board members, concessionaires and the public will be provided with information about the Ngāi Tahu values and the existence of the Tōpuni over Aoraki;
 - Educational material will be made available to climbers and all climbing guides explaining that to Ngāi Tahu standing on the very top of the mountain denigrates its tapu status;
 - A review of conditions to be applied generally to new concessions will be undertaken;
 - The removal of all rubbish and wastes from Aoraki will be encouraged;
 - The Department will ensure, as far as reasonably practicable, that it disposes of waste, particularly human waste, in a way that minimises risk of contamination of waterways; and
 - Te Rūnanga will be consulted about the siting and design of new huts or other buildings, and particular regard will be had to their views.
- (b) Accurate portrayal of Ngāi Tahu's association with Aoraki

The Department will ensure, as far as reasonably practicable, that Ngāi Tahu's association with Aoraki is accurately portrayed in all of its new public information and interpretative material; and

The Department will consult with Te Rūnanga in provision of its new public information or interpretative material, and as far as reasonably practicable will only use Ngāi Tahu's cultural material with the consent of Te Rūnanga.

- (c) Recognition of Ngāi Tahu's relationship with wāhi tapu, including archaeological sites
Significant earthworks and disturbances of soil and/or vegetation will be avoided wherever possible; and

Where significant earthworks and disturbances of soil and/or vegetation cannot be avoided, Te Rūnanga will be consulted and particular regard will be had to its relevant policies, including those relating to Koiwi Tangata (unidentified human remains) and Archaeological and Rock Art Sites.

13.1.2 Tōpuni for Ripapa Island, Lyttelton Harbour (Schedule 88)

Description of Area

The area over which the Tōpuni is created is the area known as Ripapa Island Historic Reserve located in Whakararaupō, as shown on Allocation Plan MS 29 (S.O. 19834).

Preamble

Under section 239 (clause 12.2.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Ripapa as set out below.

Ngāi Tahu Values Relating to Ripapa

Ripapa is significant to Ngāi Tahu, particularly the rūnanga of Canterbury and Banks Peninsula, for its many urupā (burial places). Urupā are the resting places of Ngāi Tahu tūpuna (ancestors) and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of our tūpuna, and are frequently protected by secret locations.

Ripapa was also a pā (fortress) of Taununu, a leading Ngāi Tahu warrior prominent during the 1820s. Taununu was a Kaikoura chief who had decided to live at Kaiapoi. However, after settling at Kaiapoi, Taununu saw that Ripapa was a better place to live, so he and his people moved on and settled on the island. Taununu fortified Ripapa Island to withstand attacks from tribes armed with muskets.

Taununu eventually became involved in an inter-tribal war and attacked a village at Te Taumutu. Because the Taumutu people were connected to the southern hapū of Ngāi Tahu, a chieftainess and seer called Hine-Haaka was sent south from Te Taumutu to seek reinforcements. Tradition tells that when Hine-Haaka arrived at Ruapuke, near Stewart Island/Rakiura, she composed a song telling Taununu to weep as in the morning he would be killed. Hine-Haaka's kai oreore (a chant that curses) ran thus:

Taununu of Bank's Peninsula
Weep for yourself
On the morning your bones will
be transformed into fishhooks
To be used in my fishing grounds to the South
This is my retaliation, an avenging

for your attacks

All I need is one fish to take my bait

Taununu's pā was attacked from both sea and land by an alliance of related hapū from Southland, Otago and Kaiapoi. Hine-Haaka's vision was proved right. Taununu managed to escape this attack, but was later killed at Wairewa (Little River).

To end the hostilities between the two regions, the southern chiefs arranged for the daughter of Hine-Haaka, Makei Te Kura, to marry into one of the families of Rapaki Ngāi Tahu. This union took place in the mid-1800s, and peace was cemented between Rapaki and Murihiku Ngāi Tahu.

For Ngāi Tahu, histories such as this represent the links and continuity between past and present generations, reinforce tribal identity and solidarity, and document the events which shaped Ngāi Tahu as an iwi.

Specific Principles Relating to Tōpuni (from Attachment 12.143 of the Deed of Settlement 1997)

The following specific principles are directed at the Minister of Conservation avoiding harm to, or the diminishing of, the Ngāi Tahu Values related to the Tōpuni:

- (a) Encouragement of respect for Ngāi Tahu's association with Ripapa;
- (b) Accurate portrayal of Ngāi Tahu's association with Ripapa; and
- (c) Recognition of Ngāi Tahu's relationship with wāhi tapu and wāhi taonga, including archaeological sites.

Actions by the Director-General of Conservation in Relation to the Specific Principles

Pursuant to clause 12.2.10 of the Deed of Settlement, the Director-General has determined that the following actions will be taken by the Department of Conservation in relation to the specific principles:

- (a) Encouragement of respect for Ngāi Tahu's association with Ripapa

Staff, conservation board members, concessionaires and the public will be provided with information about the Ngāi Tahu values and the existence of the Tōpuni over Ripapa;

Educational material will be made available to visitors to Ripapa only explaining that activities such as picnicing on urupā sites denigrates their tapu status;

A review will be undertaken of conditions to be applied generally to new concessions;

The removal of all rubbish and wastes from Ripapa will be encouraged;

The Department will ensure, as far as reasonably practicable, that it disposes of waste, particularly human waste, in a way that minimises the risk of contamination of Whakaraupō (Lyttelton Harbour); and

Te Rūnanga will be consulted about the siting and design of new structures, and particular regard had to its views.

- (b) Accurate portrayal of Ngāi Tahu's association with Ripapa

The Department will ensure, as far as reasonably practicable, that Ngāi Tahu's association with Ripapa is accurately portrayed in all of its new public information and interpretative material; and

The Department will consult with Te Rūnanga in the provision of its new public information or interpretative material, and as far as reasonably practicable, will only use Ngāi Tahu cultural information with the consent of Te Rūnanga.

- (c) Recognition of Ngāi Tahu's relationship with wāhi tapu and wāhi taonga, including archaeological sites

Significant earthworks and disturbances of soil and/or vegetation will be avoided wherever possible; and

Where significant earthworks and disturbances of soil and/or vegetation cannot be avoided, Te Rūnanga will be consulted and particular regard will be had to its relevant policies, including those relating to Koiwi Tangata (unidentified human remains) and Archaeological and Rock Art Sites.

13.1.3 Tōpuni for Kura Tāwhiti (Castle Hill) (Schedule 82)

Description of Area

The area over which the Tōpuni is created is the area known as the Castle Hill Conservation Area¹⁰⁷, as shown on Allocation Plan MS 14 (S.O. 19832).

Preamble

Under section 239 (clause 12.2.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Kura Tāwhiti (Castle Hill) as set out below.

Ngāi Tahu Values Relating To Kura Tāwhiti (Castle Hill)

Kura Tāwhiti (Castle Hill) is located between the Torlesse and Craigieburn Ranges, in the Broken Hill catchment. The name Kura Tāwhiti literally means 'the treasure from a distant land', and is an allusion to the kumara, an important food once cultivated in this region. However, Kura Tāwhiti was also the name of one of the tūpuna (ancestors) who was aboard the Arai Te Uru canoe when it sank off Matakāea (Shag Point) in North Otago.

Kura Tāwhiti was one of the mountains claimed by the Ngāi Tahu ancestor, Tane Tiki. Tane Tiki claimed this mountain range for his daughter Hine Mihi because he wanted the feathers from the kakapō taken in this area to make a cloak for her

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the Gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

This region was a well-used mahinga kai for Kaiapoi Ngāi Tahu. The main food taken from this mountain range was the kiore (polynesian rat). Other foods taken included tuna (eel), kakapō, weka and kiwi.

The tūpuna had considerable knowledge of whakapapa, traditional trails, places for gathering kai and other taonga, ways in which to use the resources of the Kura Tāwhiti, the relationship of people with the land and their dependence on it and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

¹⁰⁷ Note that by section 165 Ngāi Tahu Claims Settlement Act 1998, the name of Castle Hill Conservation Area was changed to Kura Tāwhiti Conservation Area.

Kura Tāwhiti was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai (food). Knowledge of these trails continues to be held by whānau and hapū and are regarded as taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the area.

A particular taonga of Kura Tāwhiti are the ancient rock art remnants found on the rock outcrops. These outcrops provided vital shelters from the elements for the people in their travels, and they left their artworks behind as a record of their lives and beliefs. The combination of the long association with these rock outcrops, and the significance of the artwork on them, give rise to their tapu status for Ngāi Tahu.

The mauri of Kura Tāwhiti represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the area.

Specific Principles Relating To Area (from Attachment 12.140 of the Deed of Settlement 1997)

The following specific principles are directed at the Minister of Conservation avoiding harm to, or the **diminishing of, Ngāi Tahu Values related to the Tōpuni:**

- (a) Encouragement of respect for Ngāi Tahu's association with Kura Tāwhiti;
- (b) Accurate portrayal of Ngāi Tahu's association with Kura Tāwhiti; and
- (c) Recognition of Ngāi Tahu's relationship with wāhi tapu and wāhi taonga, including archaeological sites.

Actions by The Director-General Of Conservation In Relation To The Specific Principles

Pursuant to clause 12.2.10 of the Deed of Settlement, the Director-General has determined that the following actions will be taken by the Department of Conservation in relation to the specific principles:

- (a) Encouragement of respect for Ngāi Tahu's association with Kura Tāwhiti

Staff, conservation board members, concessionaires and the public will be provided with information about the Ngāi Tahu values and the existence of the Tōpuni over Kura Tāwhiti;

Educational material will be made available to rock climbers and all rock climbing guides explaining that, to Ngāi Tahu, climbing the rock outcrops denigrates their tapu status and may damage or destroy rock art remnants;

A review of conditions to be applied generally to new concessions will be undertaken;

The removal of all rubbish and wastes from Kura Tāwhiti will be encouraged;

The Department will ensure, as far as reasonably practicable, that it disposes of waste, particularly human waste, in a way that minimises the risk of contamination of waterways; and

Te Rūnanga will be consulted about the siting and design of new huts or other buildings, and particular regard had to its views.

- (b) Accurate portrayal of Ngāi Tahu's association with Kura Tāwhiti

The Department will ensure, as far as reasonably practicable, that Ngāi Tahu's association with Kura Tāwhiti is accurately portrayed in all of its new public information and interpretative material; and

The Department will consult with Te Rūnanga in the provision of its new public information or interpretative material, and as far as reasonably practicable, will only use Ngāi Tahu cultural information with the consent of Te Rūnanga.

- (c) Recognition of Ngāi Tahu's relationship with wāhi tapu and wāhi taonga, including archaeological sites

Significant earthworks and disturbances of soil and/or vegetation will be avoided wherever possible; and

Where significant earthworks and disturbances of soil and/or vegetation cannot be avoided, Te Rūnanga will be consulted and particular regard will be had to its relevant policies, including those relating to Kōiwi Tangata (unidentified human remains) and Archaeological and Rock Art Sites.

13.2 Deed of Recognition sites that include public conservation lands and waters

- Aoraki/Mount Cook
- Hakataramea River
- Hakatere (Ashburton River)
- Hekeao (Hinds River)
- Hurunui River
- Kōwai River
- Kura Tāwhiti (Castle Hill)
- Moana Rua (Lake Pearson)
- Orakipaoa Wetland
- Ō Tū Wharekai (Ashburton lakes)
- Rangitata River
- Takapo (Lake Tekapo)
- Tūtae Putaputa (Conway River)
- Waiau River
- Wairewa (Lake Forsyth)
- Waitaki River

13.3 Nohoanga entitlements on public conservation land

- Hurunui River
- Lake Alexandrina/Takamoana
- Lake McGregor/Whakarukumoana
- Lake Sumner
- Pareora River (×2)
- Rakaia River (×2)
- Waiau River
- Waihao River
- Ahuriri River
- Ōtamatapio Recreation Reserve
- Lake Ōhau
- Waitaki River Mouth
- Tengawai River

13.4 Taonga species in Canterbury (Waitaha) as per Schedules 97 and 98 of the Ngāi Tahu Claims Settlement Act 1998

Birds

Name in Māori	Name in English	Scientific name
Hoiho	Yellow-eyed penguin	<i>Megadyptes antipodes</i>
Kāhu	Australasian harrier	<i>Circus approximans</i>
Kākā	South Island kākā	<i>Nestor meridionalis meridionalis</i>
Kākāriki	New Zealand parakeet	<i>Cyanoramphus</i> spp.
Kakaruai	South Island robin	<i>Petroica australis australis</i>
Kakī	Black stilt	<i>Himantopus novaezelandiae</i>
Kāmana	Crested grebe	<i>Podiceps cristatus</i>
Kārearea	New Zealand falcon	<i>Falco novaeseelandiae</i>
Karoro	Black-backed gull	<i>Larus dominicanus</i>
Kea	Kea	<i>Nestor notabilis</i>
Kōau	Black shag	<i>Phalacrocorax carbo</i>
	Pied shag	<i>Phalacrocorax varius varius</i>
	Little shag	<i>Phalacrocorax melanoleucos brevirostris</i>
Koekoeā	Long-tailed cuckoo	<i>Eudynamys taitensis</i>
Kōparapara or Korimako	Bellbird	<i>Anthornis melanura melanura</i>
Kororā	Little penguin	<i>Eudyptula minor</i>
Kōtare	Kingfisher	<i>Halcyon sancta</i>
Kōtuku	White heron	<i>Egretta alba</i>
Kōwhiowhio	Blue duck	<i>Hymenolaimus malacorhynchos</i>
Kūaka	Bar-tailed godwit	<i>Limosa lapponica</i>
Kūkupa/Kererū	New Zealand wood pigeon	<i>Hemiphaga novaeseelandiae</i>
Kuruwhengu/Kuruwhengi	New Zealand shoveller	<i>Anas rhynchotis</i>
Matuku moana	Reef heron	<i>Egretta sacra</i>
Miromiro	South Island tomtit	<i>Petroica macrocephala macrocephala</i>
Mohua	Yellowhead	<i>Mohoua ochrocephala</i>
Pākura/Pūkeko	Swamp hen/Pūkeko	<i>Porphyrio porphyrio</i>
Pārera	Grey duck	<i>Anas superciliosa</i>
Pīhoihoi	New Zealand pipit	<i>Anthus novaeseelandiae</i>
Pīpīwharau	Shining cuckoo	<i>Chrysococcyx lucidus</i>
Pīwakawaka	South Island fantail	<i>Rhipidura fuliginosa fuliginosa</i>
Poaka	Pied stilt	<i>Himantopus himantopus</i>
Pūtakitaki	Paradise shelduck	<i>Tadorna variegata</i>
Riroriro	Grey warbler	<i>Gerygone igata</i>
Roroa	Great spotted kiwi	<i>Apteryx haastii</i>
Ruru kōkōu	Morepork	<i>Ninox novaeseelandiae</i>

Name in Māori	Name in English	Scientific name
Tara	Terns	<i>Sterna</i> spp.
Tete	Grey teal	<i>Anas gracilis</i>
Tītī	Sooty shearwater/Muttonbird/Hutton's and shearwater	<i>Puffinus griseus</i> and <i>Puffinus huttoni</i>
	Common diving petrel	<i>Pelecanoides urinatrix</i> and <i>Pelecanoides georgicus</i>
	Westland petrel	<i>Procellaria westlandica</i> and <i>Pachyptila turtur</i>
	Fairy prion	<i>Pachyptila vittata</i> and <i>Pelagodroma marina</i>
	Broad-billed prion	and <i>Pterodroma cookii</i> and
	White-faced storm petrel	<i>Pterodroma inexpectata</i>
	Cook's petrel	
	Mottled petrel	
Tītīpounamu	South Island rifleman	<i>Acanthisitta chloris chloris</i>
Toroa	Albatrosses and Mollymawks	<i>Diomedea</i> spp.
Tūī	Tūī	<i>Prothemadera novaeseelandiae</i>
Weka	Western weka	<i>Gallirallus australis australis</i>
Weka	Buff weka	<i>Gallirallus australis hectori</i>

Plants

Name in Māori	Name in English	Scientific name
Akatorotoro	White rata	<i>Metrosideros perforata</i>
Aruhe	Fernroot (bracken)	<i>Pteridium aquilinum</i> var. <i>esculentum</i>
Harakeke	Flax	<i>Phormium tenax</i>
Horoeka	Lancewood	<i>Pseudopanax crassifolius</i>
Houhi	Mountain ribbonwood	<i>Hoheria lyalli</i> and <i>H. glabata</i>
Kahikatea	Kahikatea/White pine	<i>Dacrycarpus dacrydioides</i>
Kāmahi	Kāmahi	<i>Weinmannia racemosa</i>
Kānuka	Kānuka	<i>Kunzia ericoides</i>
Kāpuka	Broadleaf	<i>Griselinia littoralis</i>
Karaeopirita	Supplejack	<i>Ripogonum scandens</i>
Karaka	New Zealand laurel/Karaka	<i>Corynocarpus laevigata</i>
Karamū	Coprosma	<i>Coprosma robusta</i> , <i>coprosma lucida</i> , <i>coprosma foetidissima</i>
Kātote	Tree fern	<i>Cyathea smithii</i>
Kiekie	Kiekie	<i>Freycinetia baueriana</i> subsp. <i>banksii</i>
Kōhia	NZ Passionfruit	<i>Passiflora tetrandia</i>
Korokio	Korokio Wire-netting bush	<i>Corokia cotoneaster</i>
Koromiko/Kōkōmuka	Koromiko	<i>Hebe salicifolia</i>
Kōtukutuku	Tree fuchsia	<i>Fuchsia excorticata</i>
Kōwahi Kōhai	Kōwhai	<i>Sophora microphylla</i>
Mamaku	Tree fern	<i>Cyathea medullaris</i>
Mānia	Sedge	<i>Carex flagellifera</i>
Mānuka Kahikātoa	Tea-tree	<i>Leptospermum scoparium</i>
Māpou	Red matipo	<i>Myrsine australis</i>

Name in Māori	Name in English	Scientific name
Mataī	Mataī/Black pine	<i>Prumnopitys taxifolia</i>
Miro	Miro/Brown pine	<i>Podocarpus ferrugineus</i>
Ngaio	Ngaio	<i>Myoporum laetum</i>
Nīkau	New Zealand palm	<i>Rhopalostylis sapida</i>
Pānako	(Species of fern)	<i>Asplenium obtusatum</i>
Pānako	(Species of fern)	<i>Botrychium australe</i> and <i>B. biforme</i>
Pātōtara	Dwarf mingimingi	<i>Leucopogon fraseri</i>
Pīngao	Pīngao	<i>Desmoschoenus spiralis</i>
Pōkākā	Pōkākā	<i>Elaeocarpus hookerianus</i>
Ponga/Poka	Tree fern	<i>Cyathea dealbata</i>
Rātā	Southern rātā	<i>Metrosideros umbellata</i>
Raupō	Bulrush	<i>Typha angustifolia</i>
Rautāwhiri/Kōhūhū	Black matipo/Māpou	<i>Pittosporum tenuifolium</i>
Rimu	Rimu/Red pine	<i>Dacrydium cypressinum</i>
Rimurapa	Bull kelp	<i>Durvillaea antarctica</i>
Taramea	Speargrass, spaniard	<i>Aciphylla</i> spp.
Tarata	Lemonwood	<i>Pittosporum eugenoides</i>
Tawai	Beech	<i>Nothofagus</i> spp.
Tētēaweka	Muttonbird scrub	<i>Olearia angustifolia</i>
Tī rākau/Tī Kōuka	Cabbage tree	<i>Cordyline australis</i>
Tikumu	Mountain daisy	<i>Celmisia spectabilis</i> and <i>C. semicordata</i>
Tītoki	New Zealand ash	<i>Alectryon excelsus</i>
Toatoa	Mountain Toatoa, Celery pine	<i>Phyllocladus alpinus</i>
Toetoe	Toetoe	<i>Cortaderia richardii</i>
Tōtara	Tōtara	<i>Podocarpus totara</i>
Tutu	Tutu	<i>Coriaria</i> spp.
Wharariki	Mountain flax	<i>Phormium cookianum</i>
Whīnau	Hīnau	<i>Elaeocarpus dentatus</i>
Wī	Silver tussock	<i>Poa cita</i>
Wīwī	Rushes	<i>Juncus</i> all indigenous <i>Juncus</i> spp. and <i>J. maritimus</i>

Marine mammals

Name in Māori	Name in English	Scientific name
Ihupuku	Southern elephant seal	<i>Mirounga leonina</i>
Kekeno	New Zealand fur seals	<i>Arctocephalus forsteri</i>
Paikea	Humpback whales	<i>Megaptera novaeangliae</i>
Parāoa	Sperm whale	<i>Physeter macrocephalus</i>
Rāpoka/Whakahao	New Zealand sea lion/Hooker's sea lion	<i>Phocarcos hookeri</i>
Tohorā	Southern right whale	<i>Balaena australis</i>

Fish

Name in Māori	Name in English	Scientific name
Kāeo	Sea tulip	<i>Pyura pachydermatum</i>
Koeke	Common shrimp	<i>Palaemon affinis</i>
Kōkopu/Hawai	Giant bully	<i>Gobiomorphus gobioides</i>
Kōwaro	Canterbury mudfish	<i>Neochanna burrowsius</i>
Parki/Ngaiore	Common smelt	<i>Retropinnaretropinna</i>
Piripiripōhatu	Torrentfish	<i>Cheimarrichthys fosteri</i>
Taiwharu	Giant kōkopu	<i>Galaxias argenteus</i>

Shellfish

Name in Māori	Name in English	Scientific name
Pipi/Kākahi	Pipi	<i>Paphies austral</i>
Tuaki	Cockle	<i>Austrovenus stutchburgi</i>
Tuaki/Hākiari, Kuhakuha/Pūrimu	Surfclam	<i>Dosinia anus</i> , <i>Paphies donacina</i> , <i>Mactra discor</i> , <i>Mactra</i> <i>murchsoni</i> , <i>Spisula aequilateralis</i> , <i>Basina yatei</i> , or <i>Disinia subsosa</i>
Tuatua	Tuatua	<i>Paphies subtriangulata</i> , <i>Paphies</i> <i>donacina</i>
Waikaka/Pūpū	Mudsnail	<i>Amphibola crenata</i> , <i>Turbo</i> <i>smaragdus</i> , <i>Zedilom</i> spp.

13.5 Protocols on the Department of Conservation's interaction with Ngāi Tahu on specified issues

(Clause 12.12, Deed of Settlement, 1997)

Notification of the issue of Protocols

Under Section 282 (4) of the Ngāi Tahu Claims Settlement Act 1998 the Minister of Conservation hereby notifies that she has issued Protocols on behalf of the Crown regarding the Department of Conservation's interaction with Ngāi Tahu on specified issues, and that the Protocols as set out in the Schedule hereto were issued on 22 October 1998.

Schedule

1 Introduction

- 1.1 The purpose of the Conservation Act 1987 is to manage natural and historic resources under that Act and the Acts in the First Schedule of the Conservation Act. Section 4 of the Conservation Act requires that the Act be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi.
- 1.2 The Director-General has certain management responsibilities in terms of legislation and can only delegate or share responsibility for decisions s/he makes within the limits of his/her legislation. However, in making such decisions, the Director-General will provide Te Rūnanga the opportunity for input, consistent with section 4, in its policy, planning and decision-making processes on the matters set out in these Protocols.
- 1.3 These Protocols apply across the Ngāi Tahu Takiwā, which spans five conservancies, and the Southern and Central Regional Offices of the Department.
- 1.4 Both the Department and Te Rūnanga are seeking a relationship consistent with the Treaty principle of partnership that achieves, over time, the conservation policies, actions and outcomes sought by both Te Rūnanga and the Department, as set out in this document.

2 Purpose of Protocols

- 2.1 These Protocols are issued pursuant to section 282 of the Ngāi Tahu Claims Settlement Act 1998 and clause 12.12 of the 1997 Deed of Settlement between the Crown and Ngāi Tahu, which specifies the following:

2.1.1 Definitions

Protocol means a statement in writing, issued by the Crown through the Minister of Conservation to Te Rūnanga, which sets out:

- a) how the Department of Conservation will exercise its functions, powers, and duties in relation to specified matters within the Ngāi Tahu Claim Area; and

- b) how the Department of Conservation will, on a continuing basis, interact with Te Rūnanga and provide for Te Rūnanga's input into its decision-making process.

2.1.2 Authority to Issue, Amend or Cancel Protocols

Pursuant to section 282 of the Ngāi Tahu Claims Settlement Act 1998, the Minister of Conservation may, from time to time issue, amend, and cancel Protocols.

2.1.3 Issue of Protocols

On the Settlement Date (as defined in section 8 of the Ngāi Tahu Claims Settlement Act 1998) the Crown has agreed through the Minister of Conservation to issue Protocols in this form on the following matters:

- a) cultural materials;
- b) freshwater fisheries;
- c) culling of species of interest to Ngāi Tahu;
- d) historic resources;
- e) Resource Management Act 1991 involvement; and
- f) visitor and public information.

2.1.4 Protocols subject to Crown Obligations

Pursuant to section 283 of the Ngāi Tahu Claims Settlement Act 1998, the Protocols are issued and amended, subject to, and without restriction upon:

- a) the obligations of the Minister of Conservation and the Department of Conservation to discharge their respective functions, powers, and duties in accordance with existing law and Government policy from time to time; and
- b) the Crown's powers to amend policy, and introduce legislation amending existing law.

This clause is not intended to indicate, and should not be interpreted as indicating, any agreement by Te Rūnanga to any amendment to policy which would adversely affect the redress provided by the Crown pursuant to the Settlement Deed or the ability of either party to fulfil its obligations expressed in the Settlement Deed.

2.1.5 Noting of Protocols on conservation management strategies

Pursuant to section 284 of the Ngāi Tahu Claims Settlement Act 1998:

- a) The existence of Protocols, once issued, and as amended from time to time, including a definition of Protocols as set out in section 281 of the Ngāi Tahu Claims Settlement Act 1998 and a summary of the terms of issue of Protocols, must be noted in conservation management strategies,

conservation management plans and national park management plans affecting the Ngāi Tahu Claim Area; and

- b) Noting of Protocols pursuant to section 284(1) of the Ngāi Tahu Claims Settlement Act 1998 is for the purpose of public notice only and is not an amendment to the relevant strategies or plans for the purposes of section 171 of the Conservation Act 1987 or section 46 of the National Parks Act 1980.

2.1.6 Enforceability of Protocols

Pursuant to section 285 of the Ngāi Tahu Claims Settlement Act 1998:

- a) The Minister of Conservation must comply with a Protocol as long as it remains in force;
- b) If the Minister of Conservation fails unreasonably to comply with a Protocol, Te Rūnanga may, subject to the Crown Proceedings Act 1950, enforce the Protocol by way of public law action against the Minister of Conservation;
- c) Notwithstanding paragraph (b), damages are not available as a remedy for a failure to comply with a Protocol; and
- d) This clause does not apply to any guidelines which are developed pursuant to a Protocol.

2.1.7 Limitation of Rights

Pursuant to section 286 of the Ngāi Tahu Claims Settlement Act 1998, except as expressly provided in the Deed of Settlement, the Ngāi Tahu Claims Settlement Act 1998, or in a Protocol, a Protocol does not, of itself, have the effect of granting, creating, or providing evidence of any estate or interest in, or any rights of any kind whatsoever relating to, land held, managed, or administered under the Conservation Act 1987 or a statute listed in the First Schedule of that Act.

3 Implementation and communication

- 3.1 The Department will seek to establish and maintain communication with Te Rūnanga and its Papatipu Rūnanga on a continuing basis by:
 - a) maintaining at the conservancy level, with the assistance of Te Rūnanga, information provided on Papatipu Rūnanga, their office holders and addresses; and
 - b) providing reasonable opportunities for Te Rūnanga and Papatipu Rūnanga to meet with Department managers and staff.
- 3.2 The Protocols provide for ongoing implementation of a range of matters, as well as Specific Projects which will require resourcing. It is not intended that all of the Specific Projects listed in these Protocols will be implemented in any one year. Implementation will be over time. Where these Protocols refer to Specific Projects that require resourcing, their implementation will be subject to

provision being made in the relevant conservancy business plan. The process for the Department implementing any particular Specific Project in a business year will be as follows:

- a) The Department will meet with Te Rūnanga in each conservancy and at Regional level annually to identify priorities for undertaking Specific Projects as listed in these protocols for the upcoming business year;
- b) The identified priorities will be taken forward by the Department into its business planning process at the conservancy and regional levels and considered along with other priorities;
- c) The decision on whether any Specific Projects will be funded in any business year will be made by the Conservator and the Regional General Manager;
- d) The Department will advise Te Rūnanga of the outcome of this process; and
- e) Te Rūnanga and the Department will then meet again, if required, to finalise a work plan for implementation of the Specific Projects in that business year, in accordance with the resources which have been allocated in the business plan. The Department will apply the allocated resources to give effect to that work plan, subject to unforeseen management requirements which may arise from time to time, such as emergencies, adverse weather, staff shortages or reallocation of resources directed by the Minister.

3.3 The Department will:

- a) Meet with Te Rūnanga to review implementation of these Protocols and to deal with the matters in clause 3.2; four times per annum, unless otherwise agreed, in each conservancy, twice per annum at regional level, and at least once per annum at Chief Executive level;
- b) As far as reasonably practicable, train relevant staff on these Protocols and provide ongoing training as required; and
- c) As far as reasonably practicable, brief Conservation Board and NZCA members on these Protocols and the Ngāi Tahu Settlement, and provide ongoing information as required.

4 Cultural materials

4.1 For the purpose of these Protocols, cultural materials are defined as:

- (i) plants, plant materials; and
- (ii) materials derived from animals, marine mammals or birds,

to the extent to which the Department holds and is responsible for them, and which are important to Ngāi Tahu in maintaining their culture.

4.2 Current legislation means that generally some form of concession or permit is required for any gathering of cultural materials.

4.3 The Department will:

- a) Have particular regard to Te Rūnanga's cultural use policy (Kawa Hua Taiao) as it relates to the Department's activities, and other relevant Te Rūnanga statements of policy produced from time to time.
- b) Consider requests from members of Ngāi Tahu Whānui for the customary use of cultural materials in accordance with the appropriate legislation.
- c) Agree, where reasonably practicable, for Ngāi Tahu to have access to cultural materials which become available as a result of Departmental operations such as track maintenance or clearance or culling of species.
- d) Consult with Te Rūnanga in circumstances where there are competing requests from non-Ngāi Tahu persons or entities for the use of cultural materials, for example for scientific research purposes, to see if the cultural and scientific or other needs can be reconciled before the Department makes a decision in respect of those requests.

4.4 Specific projects

The Department will, subject to clause 3.2, work with Te Rūnanga to:

- a) Develop and implement guidelines for each conservancy within the Ngāi Tahu Takiwā that help define levels of customary use of cultural materials, and set conditions, after consideration of tikanga, to be met for gathering;
- b) Identify local sources of plants and provide advice to Te Rūnanga with respect to the establishment by Te Rūnanga of cultivation sites; and
- c) Establish Departmental cultural materials banks for cultural materials which have come into the Department's possession, and guidelines for their use.

5 Freshwater fisheries

- 5.1 The Department has a statutory role in advocating the conservation of aquatic life and freshwater fisheries generally. Its advocacy for freshwater biota, aquatic habitats and fish passage in all areas is primarily taken via statutory planning processes provided by the Resource Management Act 1991.
- 5.2 Section 48B of the Conservation Act 1987 (inserted by section 305 of the Ngāi Tahu Claims Settlement Act 1998) provides the power to promulgate regulations providing for customary Māori fishing rights with respect to freshwater fisheries within South Island Fisheries Waters. Pursuant to clause 12.14.11(e) of the Deed of Settlement such regulations are to be promulgated as soon as practicable, and in any event no later than two years after Settlement Date. Besides generally consulting with Te Rūnanga and providing for its participation in the conservation and management of customary freshwater fisheries and freshwater fish habitats, the Department will consult with, and have particular regard to the advice of, Te Rūnanga in its capacity as an Advisory Committee appointed under section 56 of the Conservation Act in all matters concerning the management and conservation by the Department of

Conservation of Taonga Fish Species (as defined in section 297 of the Ngāi Tahu Claims Settlement Act 1998) within the Ngāi Tahu Claim Area. This obligation does not derogate from the obligations of the Department under section 4 of the Conservation Act 1998 to give effect to the Treaty of Waitangi.

5.3 Advisory Committee

The Department will, in relation to the Taonga Fish Species and as far as reasonably practicable, provide the Advisory Committee with all relevant information to enable it to give informed advice, and will meet with the Advisory Committee at conservancy level as necessary to give effect to the Deed of Settlement and the Ngāi Tahu Claims Settlement Act 1998.

5.4 Customary freshwater fisheries regulations

The Department will work with Te Rūnanga at Regional and conservancy levels to:

- a) Provide for Te Rūnanga participation in the development and promulgation of customary freshwater fishing regulations by:
 - (i) Establishing a joint working group;
 - (ii) Setting terms of reference for that working group;
 - (iii) Setting timelines for progress; and
 - (iv) Providing information to Te Rūnanga in a timely manner and allowing Te Rūnanga an opportunity to comment.

5.5 Specific projects

The Department will, subject to clause 3.2, work with Te Rūnanga to:

- a) Develop and implement guidelines for the Department with respect to the promotion of compliance with customary freshwater fisheries regulations;
- b) Develop and implement guidelines for the Department with respect to monitoring the efficacy of the customary freshwater fisheries regulations at regular intervals; and
- c) Develop and implement guidelines for the Department with respect to sharing accumulated management information and research data on customary freshwater fisheries with Te Rūnanga.

5.6 Other matters

The Department will work with Te Rūnanga at Regional and conservancy levels to provide for active participation by Te Rūnanga in the conservation, management and research of customary freshwater fisheries and freshwater fish habitats by:

- a) Seeking to identify areas for cooperation in advocacy, consistent with clause 9, focusing on fish passage, minimum flows, protection of riparian vegetation and habitats, water quality improvement and in the restoration,

rehabilitation or enhancement of customary freshwater fisheries and their freshwater habitats; and

- b) Consulting with Te Rūnanga in developing or contributing to research programmes that aim to improve the understanding of the biology of customary freshwater fisheries and their environmental and habitat requirements. The Department confirms that it regards Te Rūnanga as a possible science provider or collaborator for research projects funded or promoted by the Department in the same manner as other potential providers or collaborators.

5.7 Specific projects

The Department will, subject to clause 3.2, work with Te Rūnanga to:

- a) Conduct research to establish and address ecosystem threats to specified customary freshwater fisheries including barriers to migration, habitat loss and exotic species interaction;
- b) Contribute to the resolution of eel management issues, in particular, the administration of the fish passage regulations in the Freshwater Fisheries Regulations, the promotion of the installation of effective fish passes where necessary and monitoring of their effects, by participating in discussions with Te Rūnanga and Te Waka a Māui me ona Toka Mahi Tuna; and
- c) Identify the need for, and where necessary prepare, management plans for freshwater fisheries management.

6 Culling of species of interest to Ngāi Tahu

6.1 As part of an integrated management regime, or because a species population has risen to become an ecological pest, it may from time to time be necessary for the Department to carry out a cull of a protected species under the Wildlife Act 1953. The Department recognises that Te Rūnanga is interested in such operations in the following ways:

- a) the carrying out of such a cull where the species to be culled is causing or is likely to cause ecological damage to species or habitats of particular significance to Ngāi Tahu;
- b) the methods to be used in such culls; and
- c) cultural materials arising from the cull.

6.2 The Department will:

- a) Have regard to any requests initiated by Te Rūnanga for the carrying out of culling operations;
- b) Consult with, and have particular regard to the views of, Te Rūnanga before deciding to carry out a cull of protected species on land administered by the Department, in respect of the reasons for the cull and the method proposed to be used; and

- c) In situations where either a Fish and Game Council or a Regional Council intend to carry out a cull of protected species or game bird and the Department has a statutory role in the process, request the relevant body to consult with Te Rūnanga before carrying out any such cull.

7 Historic resources

- 7.1 The Minister acknowledges the importance to Ngāi Tahu of their wāhi tapu, wāhi taonga and other places of historic significance to them. Liaison with Te Rūnanga is important in the management of those places containing sites of historic and cultural significance to Ngāi Tahu, including places of settlement, horticulture, natural resource harvesting, warfare, communication, and places of cultural and spiritual connection.
- 7.2 The Department notes that non-disclosure of locations of places known to Ngāi Tahu is a practice used by Ngāi Tahu to preserve the sanctity of a place. Respecting the principle of confidentiality brings management difficulties of a particular kind. Where information is not available, management practices which (unintentionally) contravene the cultural value associated with a specific site, may be put in place. Where reasonably practicable, the Department will respect the principle of confidentiality that applies to wāhi tapu, wāhi taonga and places of historic significance to Ngāi Tahu. The primary responsibility for identifying and assessing Ngāi Tahu heritage values rests with Te Rūnanga.
- 7.3 The Department will work with Te Rūnanga at Regional and conservancy levels to:
 - a) Ensure, as far as reasonably practicable, that Ngāi Tahu values attaching to identified wāhi tapu, wāhi taonga and places of historic significance to Ngāi Tahu managed by the Department are respected by the Department, for example, by the Department giving consideration to impacts from visitor numbers, facilities and services;
 - b) Manage, as far as reasonably practicable, wāhi tapu, wāhi taonga and places of historic significance to Ngāi Tahu according to the standards of conservation practice outlined in the ICOMOS New Zealand Charter 1993;
 - c) Ensure, as far as reasonably practicable, that when issuing concessions giving authority for other parties to manage land administered by the Department, those parties manage the land according to the standards of conservation practice outlined in the ICOMOS New Zealand Charter 1993;
 - d) Have particular regard to relevant Te Rūnanga policies, including those relating to Kōiwi Tangata (unidentified human remains) and Archaeological and Rock Art Sites;
 - e) Ensure, as far as reasonably practicable, that it uses Ngāi Tahu's cultural information only with the consent of Te Rūnanga; and
 - f) When issuing concessions to carry out activities on the land administered by the Department, request that the concessionaire consult with Te Rūnanga before using Ngāi Tahu's cultural information.

7.4 Specific projects

The Department will, subject to clause 3.2, work with Te Rūnanga at Regional and conservancy levels to:

- a) Develop and implement guidelines for the identification, inventory and management by the Department of wāhi tapu, wāhi taonga and other places of historic significance to Ngāi Tahu that take into consideration the traditional uses and practices of Ngāi Tahu and are, where reasonably practicable, consistent with Ngāi Tahu tikanga;
- b) Identify and actively protect specified wāhi tapu, wāhi taonga or other places of historic significance to Ngāi Tahu on land administered by the Department;
- c) Develop and implement guidelines for the active protection of wāhi tapu, wāhi taonga and other places of historic significance to Ngāi Tahu;
- d) Identify cooperative projects covering a range of options for the protection and management of wāhi tapu, wāhi taonga and other places of historic significance to Ngāi Tahu;
- e) Develop and implement guidelines relating to the use of Ngāi Tahu's knowledge of wāhi tapu, wāhi taonga and other places of historic significance of Ngāi Tahu, including the use of this information by the Department; and
- f) Consult with and seek participation from Te Rūnanga with respect to research, survey or inventory projects that relate specifically to wāhi tapu, wāhi taonga and other places of historic significance to them.

8 Visitor and public information

- 8.1 In providing public information and interpretation services and facilities for visitors on the land it manages, the Department recognises the importance to Ngāi Tahu of their cultural, spiritual, traditional and historic values.
- 8.2 The Department will work with Te Rūnanga at Regional and conservancy levels to encourage respect for Ngāi Tahu values by:
 - a) As far as reasonably practicable, seeking to raise public awareness of positive conservation partnerships developed between Te Rūnanga, the Department and other stakeholders, for example, by way of publications, presentations and seminars;
 - b) Consulting on the provision of interpretation and visitor facilities (if any) at wāhi tapu, wāhi taonga and other places of historic or cultural significance to Ngāi Tahu;
 - c) Ensuring, as far as reasonably practicable, that Department information on new panels, signs, and visitor publications includes Te Rūnanga perspectives and references to the significance of the sites to Ngāi Tahu,

where appropriate, including the use of traditional Ngāi Tahu place names; and

- d) Encouraging Te Rūnanga participation in the Department's volunteer and conservation events programmes.

8.3 Specific projects

The Department will, subject to clause 3.2, work with Te Rūnanga at Regional and conservancy levels to:

- a) Develop and implement guidelines on the provision of information and interpretation facilities and services for visitors, so as to identify and consider issues of concern to Te Rūnanga;
- b) Consider possibilities for Te Rūnanga to contribute to visitor appreciation of the cultural value of sites of cultural and historic significance to Ngāi Tahu managed by the Department; and
- c) Provide information to education providers, including kohanga reo and kura kaupapa Māori, for the development of educational resources on conservation issues and associated Ngāi Tahu values.

9 Resource Management Act

9.1 Te Rūnanga and the Department both have concerns with the effects of activities controlled and managed under the Resource Management Act. These include effects on:

- a) wetlands;
- b) riparian management;
- c) effects on freshwater fish habitat;
- d) water quality management;
- e) protection of historic resources; and
- f) protection of indigenous vegetation and habitats.

9.2 From time to time, Te Rūnanga and the Department will seek to identify further issues of mutual interest for discussion. It is recognised that their concerns in relation to any particular resource management issue may diverge and that each of them will continue to make separate submissions.

9.3 The Department will work with Te Rūnanga at Regional and conservancy levels to discuss the general approach that will be taken by each of Te Rūnanga and the Department in respect of advocacy under the Resource Management Act, and seek to identify their respective priorities and issues of mutual concern.

9.4 The Department will:

- a) Have regard to the priorities and issues of mutual concern identified in clause 9.3(a) in making decisions in respect of advocacy under the Resource Management Act.

- b) Make non-confidential resource information available to Te Rūnanga to assist in improving the effectiveness of Resource Management Act advocacy work at the Papatipu Rūnanga level.

10 Amendment and review provisions from the Deed

10.1 Amendment and Cancellation of Protocols

Pursuant to section 282 of the Ngāi Tahu Claims Settlement Act 1998:

- a) Protocols may be amended or cancelled by the Minister of Conservation, from time to time at the initiative of either the Crown or Te Rūnanga;
- b) The Minister of Conservation may amend or cancel Protocols only after consulting Te Rūnanga and having regard to its views; and
- c) As soon as reasonably practicable after the amendment, or cancellation of a Protocol, the Minister of Conservation must notify such amendment, or cancellation in the Gazette.

Dated at Wellington this 26 day of July 2001

MATT ROBSON, for SANDRA LEE, Minister of Conservation.

(NZ Gazette 2001, page 2171)

Appendix 14

Statement of Outstanding Universal Value for Te Wāhipounamu—South West New Zealand World Heritage Area¹⁰⁸

Property	Te Wāhipounamu—South West New Zealand
State Party	New Zealand
Id. N°	551
Date of inscription	1990

Brief synthesis

Located in the south-west corner of New Zealand's South Island, Te Wāhipounamu—South West New Zealand covers 10% of New Zealand's landmass (2.3 million hectares) and is spread over a 450km strip extending inland 40–90km from the Tasman Sea. The property exhibits many classic examples of the tectonic, climatic, and glacial processes that have shaped the earth. The great Alpine Fault divides the region and marks the contact zone of the Indo-Australian and Pacific continental plates making it one of only three segments of the world's major plate boundaries on land. Collision between the two tectonic plates constructs the main mountain range, known as the Southern Alps/Kā Tiritiri o te Moana, which rise to nearly 4 000m altitude within a mere 30km from the sea.

Overwhelmingly a mountainous wilderness, including significant piedmont surfaces in the north-west glaciation, both historic and modern, is a dominant landscape feature. Spectacular landforms include: the 15 fiords which deeply indent the Fiordland coastline; a sequence of 13 forested marine terraces progressively uplifted more than 1000m along the Waitutu coastline over the past million years; a series of large lake-filled glacial troughs along the south-eastern margin; the Franz Josef and Fox Glaciers which descend into temperate rainforest; and spectacular moraines of ultramafic rock extending to the Tasman coastline.

As the largest and least modified area of New Zealand's natural ecosystems, the flora and fauna has become the world's best intact modern representation of the ancient biota of Gondwana. The distribution of these plants and animals is inextricably linked to the dynamic nature of the physical processes at work in the property. The region contains outstanding examples of plant succession after glaciation, with sequences along altitudinal (sea level to permanent snowline), latitudinal (wet west to the dry east), and chronological gradients (fresh post-glacial surfaces to old Pleistocene moraines).

It is the combination of geological and climatic processes, the resultant landforms, the unique biota displaying evolutionary adaptation over a diverse range of climatic and altitudinal gradients, all in a relatively pristine state, that give Te Wāhipounamu—South West New Zealand its exceptional and outstanding natural characteristics.

Criterion (vii): Te Wāhipounamu—South West New Zealand contains many of the natural features which contribute to New Zealand's international reputation for superlative landscapes: its highest mountains, longest glaciers, tallest forests, wildest rivers and gorges,

¹⁰⁸ United Nations Educational, Scientific and Cultural Organization. 2012: Convention concerning the protection of the world cultural and natural heritage (pp. 49–51). <http://whc.unesco.org/document/117094>.

most rugged coastlines and deepest fiords and lakes, as well as the remnant of an extinct volcano in Solander Island. The temperate rainforests of the property are unmatched in their composition, extent and intactness by any such forests anywhere in the world.

From the vast wilderness of Fiordland in the south to the spectacular upthrust of the Southern Alps in the north, the landscapes are world class for the sheer excellence of their scenic beauty. It is an area of magnificent primeval vistas: snow-capped mountains, glaciers, forests, tussock grasslands, lakes, rivers, wetlands and over 1000km of wilderness coastline. Only traces of human influence are evident and then mainly in peripheral areas.

Criterion (viii): Te Wāhipounamu—South West New Zealand is considered to be the best modern example of the primitive taxa of Gondwanaland seen in modern ecosystems – and as such the property is of global significance. The progressive break-up of the southern super-continent of Gondwanaland is considered one of the most important events in the earth's evolutionary history. New Zealand's separation before the appearance of marsupials and other mammals, and its long isolation since, were key factors enabling the survival of the ancient Gondwanan biota on the islands of New Zealand to a greater degree than elsewhere. The living representatives of this ancient biota include flightless kiwis, carnivorous land snails, 14 species of podocarp and genera of beech.

The South West is also an outstanding example of the impact of the Pleistocene epoch of earth history. Ice-carved landforms created by these 'Ice Age' glaciers dominate the mountain lands, and are especially well-preserved in the harder, plutonic igneous rocks of Fiordland. Glacier-cut fiords, lakes, deep U-shaped valleys, hanging valleys, cirques, and ice-shorn spurs are graphic illustrations of the powerful influence of these glaciers on the landscape. Depositional landforms of Pleistocene glacial origin are also important, especially in Westland, west of the Alpine Fault. Chronological sequences of outwash gravels, and moraine ridges in elegant curves and loops, outline the shapes of both former piedmont glaciers and Holocene 'post-glacial' valley glaciers.

Criterion (ix): A continuum of largely unmodified habitats, the property exhibits a high degree of geodiversity and biodiversity. Fresh-water, temperate rainforest and alpine ecosystems are all outstandingly well represented over an extensive array of landforms and across wide climatic and altitudinal gradients. Notable examples of on-going biological processes can be found in the large expanses of temperate rainforest, the plant succession after glacial retreat, soil/plant chronosequences on beach ridges, plant succession on alluvial terraces, vegetation gradients around the margins of glacial lakes and ecotypic differentiation of plants on ultramafic soils. The extensive and little modified freshwater habitats, the impressive diversity of alpine ecosystems, extensive alpine plant endemism, and on-going evolution associated with long-standing geographical isolation of animal populations, like the kiwi taxa of South-Westland, are further examples of on-going biological evolution.

While there is little permanent physical evidence of past human interaction with the natural environment, tangata whenua (the indigenous people who have customary authority in a place) have long associations with the area which was significant to them for natural resources, particularly pounamu (nephrite). European associations are more recent and initially based on natural resource exploitation. The predominant human uses today are associated with sustainable tourism.

Criterion (x): The habitats of Te Wāhipounamu contain an extensive range of New Zealand's unusual endemic fauna, a fauna which reflects its long evolutionary isolation and absence of mammalian predators. The property contains the entire wild population of the rare and endangered takahā (*Notornis mantelli*), the entire population of the South Island subspecies of brown kiwi (*Apteryx australis*), New Zealand's rarest Kiwi, the rowi (*Apteryx rowi*), the only

significant remaining populations of the seriously declining mohua / yellowhead (*Mohoua ochrocephala*), the only large populations remaining of kākā and kākārīki / yellow-crowned parakeet, the only remaining population of pateke / Fiordland brown teal in the South Island.

The world's rarest and heaviest parrot, kākāpō (*Strigops habroptilus*) survived in Fiordland until the early 1980s. It is now thought to be extinct on the mainland and its survival depends on careful management of a limited number of offshore island populations.

Integrity

Te Wāhipounamu encompasses many complete 'mountains-to-the-sea' or 'mountains-to-inland basins' landscape sequences. These landscapes cover the full range of erosion and deposition landforms of Pleistocene and modern glacial origin. The 2.3 million hectare property represents the 10 percent of New Zealand that is least disturbed or modified by human settlement, and is largely in its natural state giving it a high degree of integrity. The property boundaries encompass all the values of the property which comprises a nearly contiguous network of reserved land covering much of the south-west of the South Island. The boundaries are closely and realistically aligned with the main features of the area. The property includes four national parks (Fiordland, Mount Aspiring, Mount Cook and Westland) covering 1,725,437 ha, two nature reserves, three scientific reserves, 13 scenic reserves, four wildlife management reserves, five ecological areas, conservation areas and one private reserve (20 ha). Bordered by other protected public conservation land the property has an effective buffer zone providing further protection for the natural values.

The property contains nearly 2 million hectares of temperate rainforest on an extraordinary range of landforms and soils—including altitudinal, latitudinal, west-to east rainfall gradients, and age sequences associated with glacial retreat, prograding coastlines and marine terraces uplifted progressively over the last million years. In particular, the rainforest contains the best examples in the Southern Hemisphere of one of the most ancient groups of gymnosperms, the Podocarpaceae, which range from the densely-packed 50m-high rimus of the South Westland terraces to the world's smallest conifer, the prostrate pygmy pine.

The relatively recent introductions of alien browsing mammals and predators, such as rodents and mustelids, have resulted in localised extinctions, range reductions, and significant declines in abundance of some indigenous biota. These threats will remain, but with ongoing intervention can be managed and should not impact significantly on the integrity of the area. There is some evidence of the effects of global warming on the permanent icefields and glaciers in the region.

The international profile of the area as a visitor destination places pressure on some of the main tourist attractions within the wider site. These pressures are being managed to provide visitor access but only where the conservation values at these sites are protected.

Protection and management requirements

A comprehensive array of statutes and regulations protect the property, the most important being the National Parks Act 1980 and the Conservation Act 1987. These two pieces of legislation along with the Reserves Act 1977 are the principal means of ensuring legal protection for the property. The land encompassed by the boundaries of the property, with one small exception, is Crown (Government and the people of New Zealand) owned and it is administered by the Department of Conservation. The property is a reformulation of two previous property inscribed on the World Heritage List in 1986; Fiordland National Park and Westlands/Mt Cook National Park. This property adds 1.2 million ha of the intervening land, almost doubling the size of the area inscribed in 1986 and including almost 70% of the area

under national park status, and greatly adding to the overall universal value, wilderness quality and integrity of the property.

The Department of Conservation has a legislative mandate for the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations.

The Department of Conservation is obligated through its legislation to give effect to the principles of the Treaty of Waitangi. In practice this implies a partnership agreement with tangata whenua that have manawhenua (prestige, authority over the land) over the area. This involves an annual business planning process with the Ngāi Tahu iwi (the overarching tribal authority for tangata whenua). This process gives Ngāi Tahu the opportunity to engage in and contribute to the operational management of the property.

The particularly high natural values of the property, along with the World Heritage status, mean that this area is a priority area for ongoing management. The Area covers four separate Conservancies, although they all report to one Manager. The Department's organisational structure therefore also provides for integrated management of the area.

There is no single management strategy for the area, although under the National Parks Act, each national park is required to have a national park management plan and there are also a number of conservancy conservation strategies that acknowledge the values of the regions comprising the large site, as well as the property's World Heritage status. Together these planning documents set strategic directions for the integrated management of this property. These are statutory documents formulated through a public consultation process. The national park management plans are prepared by the Department of Conservation (the administering authority for all national parks in NZ) and approved by the New Zealand Conservation Authority, in accordance with the General Policy for National Parks (a policy document that guides the implementation of the National Parks Act, also prepared and administered by the Department of Conservation).

The principal uses of the property are nature conservation, nature based recreation and tourism and sustainable small-scale natural resource utilisation. Impacts from tourism at key sites and introduced species are being addressed by management actions and continue to be a concern. Traditional use of vegetation by native Māori people, fishing for whitebait, recreational hunting and short-term pastoral leases are closely regulated and do not result in significant impacts.

Invasive species are the biggest impact on the property, despite their impacts being restricted to small areas of the property. Population increases of red deer as well as impacts from other browsing mammals such as wapiti, fallow deer, goat, chamois and tahr have caused severe damage in some parts of the property, in particular threatening the integrity of the forest and alpine ecosystems. Commercial hunting activities have assisted in reducing numbers and impacts from these species. Australian brush-tailed possum, rabbits, mustelids and rodents also impact habitats and indigenous birds. The Department of Conservation has control programmes in place and National Parks general policy seeks to eradicate new incursions and eradicate (where possible) or reduce the range of existing invasive species.

Appendix 15

List of larger¹⁰⁹ conservation units, ecosystems and historic values within Foothills Place

Conservation unit SR = scenic reserve HR = historic reserve RR = recreation reserve CA = conservation area	Main ecosystems and historic values
Alford SR	Mixed broadleaved shrub and forest on steep slopes and gullies; beech/tawai-kahikatea forest on terrace
Blue Mountain CA	Tussocklands dominate; small areas of shrubland and scrub in valleys; few hardwood forest remnants; cushionfield, stonefield and rockland on higher peaks
Boundary Creek CA	Gradations of several lowland forest types: mixed black beech and kānuka forest on spurs, ridges (NW of Glendhu Rd) and dissected gully slopes (SE of road); broadleaved forest (with minor podocarp component) on hillsides and gully floors; broadleaved forest in upstream gullies; shrubland on hillslopes on forest margins
Chetwynd CA	Remnant podocarp-hardwood forest in gullies; remnant mountain tōtara forest at higher altitudes; inaka shrub-tussockland, tussockland and rockland at higher altitude
Coopers Creek CA	As for the lower-altitude parts of Oxford Forest CA
Cranky Tom CA	Beech forest; kānuka shrubland
Four Peaks Range Tops CA	Tussockland and mixed shrubland
Gore Bay SR	Broadleaved forest, shrubland on steep slopes of gullies and badlands
Gunns Bush CA	Māhoe and fuchsia-dominated broadleaved forest and scattered podocarp remnants
Hae Hae Te Moana SR	Mixed broad-leaved lowland forest and scrub (vast majority); gorse-broom-Himalayan honeysuckle with native regeneration; small area of pasture
Hoods Bush SR	Mountain beech/tawai forest and shrubs
Hook Bush CA	Māhoe dominated broadleaved forest with scattered podocarps in upper reaches; depleted mixed tussock-scrub-herbfields above fire induced bushline; mature podocarp hardwood forest in lower reaches
Hunter Hills CA	Snow tussockland merging with tussock grassland at lower altitudes; scattered montane shrublands
Hunter Hills SR	Kānuka and mixed-broadleaf forest; dry bluffs; scrub; silver tussock rough pasture; area of non-endemic planted trees and shrubs
Kakahu Bush SR	Fuchsia-dominant mixed broadleaf lowland forest, grey scrub communities and exotic grassland
Kelceys Bush CA	Māhoe and fuchsia-dominated broadleaved hardwood forest with remnant podocarps in valley floor and alluvial terraces
Kirkliston CA	Varied tussocklands; herbfield and screeland; matagouri scrub; remnants of totara forest
Lochinvar Forest CA	Mountain beech/tawai forest

¹⁰⁹ Many smaller public conservation land and water areas are also within this Place, as shown and listed in the Volume II land inventory maps.

Conservation unit SR = scenic reserve HR = historic reserve RR = recreation reserve CA = conservation area	Main ecosystems and historic values
Lords Bush SR	Beech-podocarp-hardwood forest on upper Canterbury plains
Lottery Bush SR	Beech-podocarp forest; mountain beech/tawai forest; mānuka-mountain beech/tawai treeland; rough pasture
Manuka Bay SR	Regenerating podocarp broadleaf forest
Matatā SR	Māhoe and broadleaf/kāpuka dominated mixed broadleaved forest with scattered podocarps; mixed broadleaved forest; <i>Coprosma</i> shrubland; mixed tussock grassland
Monavale HR	Limestone school building built 1912-13, in introduced grassland and trees setting
Mount Alford SR	Tussockland and shrubland in upper basins and on Mount Alford; beech and some podocarp forest in gullies and adjacent to Alford Scenic Reserve
Mount Ararat Rātā Reserve CA	Sparse southern rātā-kānuka and mānuka forest/shrubland
Mount Dalgety CA	Tussockland, shrubland and scree slopes
Mount Grey/Maukatere CA	Mountain beech forest with some podocarp-mixed beech forest with tussock grasslands
Mount Nimrod SR	Māhoe-broadleaf mixed broadleaved forest; ribbonwood/māhoe mixed broadleaved forest on steep colluvial slopes; mixed shrublands; second growth broadleaved terrace forests with scattered podocarps; native tussock and pasture grassland
Mount Peel/Waikari Hills CA	As for parts of Peel Forest Park Scenic Reserve
Mount Studholme CA	Snow tussock-hard tussocklands; mountain flax/wharariki-matagouri shrublands; mixed broadleaved shrubby forest in gullies
Mount Thomas Forest CA	Mountain beech/tawai forest; podocarp-mixed beech forest; lowland scrubland; subalpine scrubland
Napenape SR	Coastal forest on limestone substrate
Ngaroma SR	Regenerating mixed mountain beech/podocarp/broadleaf forest dominates the core of the reserve, with younger kānuka present nearer the perimeter
North Waihao Bush CA	Modified riparian bush, mainly mixed broadleaved, along the margins of the Waihao River and various side creeks
Orari Gorge SR	Kānuka-dominant mixed broadleaved forest; māhoe-dominant mixed broadleaved forest; small area of kahikatea (pole) damp forest
Otaio Gorge SR	Māhoe-fuchsia/kōtukutuku-mixed broadleaf/kāpuka forest with scattered tōtara and matai; stunted mixed hardwood scrub forest; tussock grassland
Oxford Forest CA	Mountain and black beech/tawai forest on hillslopes (dominant); beech podocarp forest, red beech forest and southern rātā shrub forest on bluffs (all patches within main beech forest); subalpine shrubland (minor); mixed hardwood forest on sunny gorge wall sites
Pacific Ocean Foreshore Waiau Rivermouth CA	Kānuka forest; mixed shrubland on forest margin; silver tussock and introduced pasture grassland. See also Waiau Rivermouth CA and SR
Peel Forest Park SR	Snow-tussock shrubland with subalpine herbs; mosaic of kānuka-dominant and mixed-broadleaved hardwood forests; mixed broadleaved forest with patchy podocarps and/or southern rātā; old-growth podocarp/broadleaved forest
Pioneer Park CA	Regenerating kānuka-dominant forest with patches of māhoe-dominant mixed broadleaf forest

Conservation unit SR = scenic reserve HR = historic reserve RR = recreation reserve CA = conservation area	Main ecosystems and historic values
Pudding Hill SR	Mixed broadleaf/kāpuka-mountain beech/tawai forest on slopes; mountain beech-moss forest on ridges
Puketeraki Forest CA	Mountain beech/tawai forest on hillslopes (with variations in understorey species), snow tussockland; subalpine-alpine zone (no data available)
Raincliff HR	Māori rock art in limestone shelters; remnant shrubs, herbs and ferns; native shrub and tree plantings
Raules Gully SR	Fivefinger and fuchsia/kōtututuku mixed broadleaved scrub forest; mixed fern, flax/harakeke and shrubland; subalpine herb tussockland; introduced grassland
Rockwood CA	Mountain beech/tawai forest, low altitude beech-podocarp forest
Seaward Forest CA	Beech forest (low altitude to timberland beech forest types are present)
Shag Rock SR	Coastal broadleaved-hardwood forest with podocarp tree species; hardwood, mānuka and kānuka forest; bracken fernland, silver tussock/wī grassland
Sharplin Falls SR	Almost entirely mountain beech/tawai forest; small pockets of broadleaf/kāpuka-fuchsia/kōtututuku-putaputawētā forest
Studholme Bush SR	Regenerating mixed broadleaf forest, mountain flax and exotic grassland
Talbot Forest SR	Emergent podocarps over māhoe broadleaved forest in core area; second growth mixed māhoe-broadleaf forest
Tasman Smith SR	Mixed-broadleaved forest; pasture with silver tussock/wī and scattered shrubs; snow tussockland; small patch of silver beech/tawai forest
Terako Downs SR	Beech forest with scattered and clustered podocarps; five induced seral communities of kānuka, mānuka and cassinis shrubland and forest; grading into a native pasture ecosystem
The Den Retirement CA	Snow tussockland with patches of bare ground and shrubland; short tussockland; shrubland; mountain beech/tawai forest
The Gorge CA	As for parts of Peel Forest Park Scenic Reserve
Tiromoana SR	Lowland broadleaved-hardwood forest with podocarps; shrub tussockland (small areas included on margin, especially near ridge crest)
View Hill SR	Mountain beech/tawai, rimu (predominant podocarp), matai, kahikatea, pōkākā, <i>Coprosma</i> spp./karamū; mānuka, <i>Celmisia gracilis</i> , lowland flax/harakeke, <i>Bulbinella angustifolia</i> , orchid spp., introduced grasses
Waiau Rivermouth SR	Broadleaved forest with scattered podocarps on hillslopes; podocarp-broadleaved forest on river terrace, valley floor and lower hillslopes; kānuka forest; mixed shrubland on forest margin. See also Pacific Ocean Foreshore Waiau Rivermouth CA
Waiau Rivermouth RR	Mixed shrubland on forest margin; silver tussock and introduced pasture grassland
Waihi Gorge SR	Mixed-broadleaved forest; fuchsia/kōtututuku scrubland; small stands of podocarp terrace forest
Waipara Gorge CA	Black beech/tawai forest with broadleaved understorey on tertiary sediment
Wairangi SR	Beech-podocarp forest; beech forest; regenerating mānuka-beech shrubland
Wandle Bush CA	Beech-podocarp forest; beech forest; regenerating mānuka-beech shrubland
Weka Pass HR	Māori rock art in large limestone shelter; exotic grassland with a few native shrubs and cabbage tree/tī rākau

Appendix 16

Publicly-available huts on public conservation lands and/or managed by the Department within Canterbury (Waitaha)

Please note:

- CMC = Canterbury Mountaineering Club
- CUTC = Canterbury University Tramping Club
- NZAC = New Zealand Alpine Club
- NZDA = New Zealand Deerstalkers' Association (and their branches)

Hut	All huts are managed by the Department unless stated otherwise here
2.1 National Parks Place	
Arthur's Pass National Park	
Anti Crow Hut	
Barker Hut	CMC
Bealey Spur Hut	
Bull Creek Hut	
Candlesticks Bivvy	
Carrington Hut	
Crow Hut	
East Hawdon Bivvy	
Edwards Hut	
Hawdon Hut	
Minchin Bivvy	
Mingha Bivvy	
Poulter Valley Bivvy	
Poulter Hut	
Ranger Bivvy	
Sudden Valley Bivvy	
Trust/Poulter Hut	
Waimakariri Falls Hut	CMC
Worsley Bivvy	
Aoraki/Mount Cook National Park	
Ball Hut	
Barron Saddle Hut	
Copland Shelter	
Eade Memorial Hut	NZDA
Empress Hut	
Godley Hut	NZAC
Haast Hut	
Hooker Hut (temporarily removed)	
Kelman Hut	
Liebig Hut	
Mueller Hut	
Murchison Hut	NZAC

Onslow Hut (Steffan Memorial Hut)	NZDA
Plateau Hut	
Sefton Bivvy	
Tasman Saddle Hut	
2.2 Southern Conservation Parks Place	
A Frame Hut	
Ahuriri Base Hut	
Avoca Homestead	
Avoca Hut	CUTC
Back Basin Hide	
Baikie Hut	
Basins Hut	
Bealey Hut	
Benmore Hut	NZDA
Birdcage Hut	
Boundary Creek Hut	
Brodrick Hut	
Broken River Hut	
Brown Hut	
Burnett Bivvy	
Cameron Hut	CMC
Camp Stream Hut	Mackenzie Alpine Trust
Canyon Creek Bivvy	
Carneys Bivvy No. 1	
Carneys Bivvy No. 2	
Cass Saddle Hut	
Chimney Creek Hut	
Comyns Hut	
Crooked Spur Hut	
Cullers Hut	
Curtis Memorial Hut	
Dasler Biv	
Dodger Hut	
Dog Kennel Bivvy	
Double Hut	
East Branch Ahuriri Hut (Quailburn Hut)	
Elcho Hut	NZAC
Erceg Hut	
Evans Hut	NZDA
Forbes Bivvy	
Green Gully Hut	
Green Point Hut	
Greta Lodge	
Grough Hut	
Growler Hut	
Hagens Hut	
Hamilton Hut	
Harper Hut	
Hideaway Bivvy	

Historic Basins Hut	
Hut Creek Hut	
Huxley Forks Hut	
Ida Railway Hut	
Jellicoe Hut	Manuka Point Station
Jollie Hut	
Kennedy Memorial Hut	
Lagoon Saddle A Frame Hut	
Lagoon Saddle Hut	
Lawrence Bivvy	
Lawrence Hut	
Little's Hut	
Lyell Hut	CMC
Louper Bivvy	
Macaulay Hut	Mackenzie Alpine Trust
Maitland Hut	
Manuka Hut	
Mathias Hut	NZDA
McCoy Hut	
Middle Gorge Hut	
Mistake Flat Hut	
Moa Stream Hut	
Monument Hut	
Murphy's Bivvy	
Officers Hut	
Otamatapaio Hut	
Park Morpeth Hut	CMC
Pinnacles Hut	
Potts Hut	
Reardon Hut	
Red Hut	
Red Stag Hut	NZDA
Reischek Hut	NZDA
Royal Hut	
Shamrock Hut	
Snowy Gorge Hut	
South Huxley Bivvy	
South Opuha Hut	Mackenzie Alpine Trust
South Temple Hut	
Spurs Hut	
St Jacob's Hut	
St Winifred Hut	CMC
Stone Hut	
Tailings Hut	
Top Hut	
Tribulation Hut	
Unknown Stream Hut	
Urquhart's Hut	
Watchdog Hut	
Waterfall Hut	

Weka Burnet Bivvy	
West Harper Hut	
West Mathias Bivvy	
Wire Yards Hut	
Woolshed Creek Hut	
2.3 Northern High-Country Place	
Anne Hut	
Ant Stream Bivvy	
Ant Stream Hut	
Boyle Flat Hut	
Camerons Hut	
Carlyle Hut	
Caroline Creek Bivvy	
Christopher (Ada) Cullers Hut	
Christopher Hut	
Cold Stream Hut	
Devils Den Biv	
Doubtful Hut	
Doubtless Hut	
Evangeline Bivvy	
Gabriel Hut	
Glenrae Bivvy	
Glenrae Hut	
Harper Pass Bivvy	
Hope Halfway Hut	
Hope Kiwi Lodge	
Hurunui Hut	
Hurunui No. 3 Hut	
Jervois Hut	
Jollie Brook Hut	
Lake Guyon Hut	
Lake Man Bivvy	
Lauper Bivvy	
Lochinvar Hut	
Lucretia Hut	
Mackenzie Bivvy	
Mackenzie Hut	
Magdalen Hut	
Nina Hut	
North Esk Hut	
Pool Hut	
Rokeby Hut	
St Jacobs Hut	
Scotties Camp Hut	
Stanley Vale	
Steining Hut	
Stony Stream Bivvy	
Three Mile Stream Hut	
Top Hope Hut	

Turnbull Bivvy	
Tutu Hut	
Upper Nina Bivvy	
Upper South Branch Hurunui Hut	
2.4 High-Country Basins Place	
Telegraph Hut	
2.5 Foothills Place	
Anderson's Hut	
Black Hill Hut	
Bob's Camp Bivvy	
Esk Bivvy	
Lower Salmon Creek Biv	
Pearson Hut	
Pinchgut Hut	
Puketeraki Bivvy	Non-DOC, unknown
Tarn Hut	
Wharfedale Hut	
Youngman Stream Hut	
2.6 Braided Rivers/Ki Uta Ki Tai and 2.7 Christchurch City/Ōtautahi Places	
Waimakariri Gorge Hamilton Hut	Jet Boating NZ
Waimakariri Gorge Walker Hut	Jet Boating NZ
2.8 Banks Peninsula/Te Pātaka o Rāukaihatū Place	
Sign of the Packhorse Hut	
2.9 Coastal Land and Marine/Ki Tai Place	
No huts in this place	

Index

- abseiling, 83, 160
- access arrangements, 54, 63, 146, 153
- accommodation, 37, 40, 42, 46, 51, 53, 54, 61, 62, 65, 66, 74, 76, 78, 79, 80, 88, 101, 103, 111, 113, 114, 162, 180
 - limits to, 43, 110, 112, 115
 - private, 52, 55, 61, 63, 68, 71, 77, 80, 83, 148–51, 163, 180
 - unauthorised, 61, 71, 77, 148, 151
- accretion, 95, 99, 107, 120
- active management, 25, 26, 33, 56, 70, 81
- Adams Wilderness Area, 45, 47–48, 53, 54, 56, 134, 158
- adverse effects, 15, 48, 52, 65, 74, 78, 89, 95, 96, 99, 111, 117, 135, 136, 137, 138, 139, 145, 146, 151, 157, 158, 159, 160, 171
 - addressing, 28, 34, 46, 51, 80, 86, 89, 90, 97, 98, 126, 133, 135, 136, 137, 138, 142, 144, 147, 153, 154, 155, 158, 159
 - avoiding, 53, 65, 77, 82, 83, 91, 97, 114, 126, 127, 139, 144, 152, 154, 161, 162
- advertising, 28, 29, 74
- advocacy, 17, 27, 30, 31, 41, 46, 55, 69, 73, 78, 82, 92, 98, 99, 100, 106, 114, 115, 130, 138, 141, 144, 164, 168
 - community, 88, 94
- agriculture, 22, 106
- Ahuriri, 16, 54, 59
 - River, 56, 92, 96, 98
- aircraft, 44, 54, 60, 88, 127, 163, 165–66, 171
 - access, 51, 55, 56, 60, 62, 65, 66, 67, 81, 86, 89, 99, 114, 120, 129, 139–44, 155, 156
 - access zones, 56, 133, 139–44
 - activities with, 20, 22, 46, 47, 48, 53, 54, 61, 94, 132, 139, 142, 144, 154, 156–58, 160, 165, 173
 - landings, 44, 52, 53, 54, 65, 74, 78, 94, 97, 107, 111, 128, 139–42
 - operators, 141, 144
- Airport Authorities Act 1966, 166
- airstrips, 62, 69, 141, 147, 166
- Akaroa Harbour, 105, 106, 122, 123, 124, 126, 128, 130
- Akaroa Marine Reserve, 107, 122–23, 127, 129, 131
- alpine environments, 19, 30, 42–44, 47, 62, 76, 85, 95, 154, *See also* flora
- Alps 2 Ocean Cycle Trail, 75, 79
- AMF rights, 95, 96
- Angus, Rita, 22
- Antarctica, 22, 102, 103, 109
- Aoraki Mackenzie Dark Sky Reserve, 42
- Aoraki/Mount Cook, 18, 19, 23, 24, 36, 42, 43, 44, 79
 - Village, 42, 43
- Aoraki/Mount Cook National Park, 16, 42–44, 47, 51, 53, 74, 79, 96, 99
 - Management Plan, 8, 28, 42, 43, 44, 135, 136, 146, 151, 152, 154, 155
- aquifers, 18, 21, 102
- ara tawhito, 20, 23, 33, 34, 45, 60, 73, 85, 93
- archaeological sites, 33, 67, 112, 120, 126, 166
- Areas of Significant Natural Value, 109, 110, 122, 123, 124, 126, 130
- Arthur's Pass National Park, 35, 42–44, 60, 76, 80, 83, 85, 96
 - Management Plan, 8, 28, 43, 44, 78, 83, 135, 136, 146, 151, 152, 154, 155
- Ashburton District Council, 75, 82
- Ashburton River/Hakatere, 21, 45, 92, 93
- Ashley River/Rakahuri, 21, 92, 96, 98, 119, 120
 - management strategy, 121
- atmospheric research station, 126, 129
- at-risk species, 167, *See also* threatened and at-risk species
- authorisations, 13, 25, 29, 40, 59, 69, 90, 99, 133–34, 146, 151, 153, 157, 158, 160, 162, 164, 167, *See also* concessions
- Avoca, 33, 46, 52
- Avon River Park, 102, 103
- Awaroa/Godley Head, 18, 33, 101, 103, 106, 109, 111, 113, 114
- backcountry, 35, 44, 46, 102, 111, 114, 140, *See also* recreation
- Backcountry destinations, 13, 35, 36, 37, 44, 51, 65, 78, 88, 167
- Banks Peninsula (Te Pātaka o Rākaihautū), 18, 21, 36, 101, 104–16, 118, 120, 121–23
 - Conservation Trust, 106, 107, 108, 113, 114
 - Marine Mammal Sanctuary, 123, 125
 - Track, 106, 111, 122, 127
- Banks Peninsula/Te Pātaka o Rākaihautū Place, 33, 40, 101, 104–16, 118
- barriers. *See* spits and barriers
- basking shark/mangō reremai, 21, 117–18, 121, 124

beaches, 92, 117, 136, 153

biodiversity, 60, 62, 74, 85, 96, 108, 152, 167
 addressing, 21, 22, 31, 33, 38, 52, 53, 59, 66, 73, 76, 79, 80, 82, 86, 88, 90, 96, 97, 102, 103, 105, 106, 107, 108, 111, 113, 119, 121, 125, 128, 129
 indigenous, 18, 19, 21, 22, 67, 74, 76, 79, 80, 82, 86, 89, 102, 103, 106, 107, 109, 111, 113, 119, 125, 126, 128, 129

biosecurity, 95, 100, 102, 103, 127, 132, 135, 167

Biosecurity Act 1993, 14, 167, 179

birds, 25, 59, 106, 113, 117, 119, *See also*
 seabirds
 game, 38, 128, 152, 172
 indigenous, 98, 108, 124
 migratory, 93, 97, 120
 nesting, 18, 78, 93, 94, 95, 110, 111, 113, 114, 118, 124, 128, 145, 146
 protecting, 32, 59, 95, 105, 113, 124
 threatened and at-risk, 72, 93
 threats to, 73, 94, 95, 108

Blue Mountain, 87, 88

boating, 66, 75, 80, 94

bouldering, 77, 83, 84

Braided Rivers/Ki Uta Ki Tai Place, 45, 72, 92–100, 117

breeding grounds, 105, 117

Browning Pass/Noti Raureka, 33, 45, 52

Building Act 2004, 150, 151, 167

buildings, 62, 146, 167
 free of, 54, 56
 historic, 63, 66, 79, 82, 110, 112, 114, 115, 148, 166
 management, 113, 115

businesses, 9, 133
 contribution of, 27, 35, 39, 40
 working with, 17, 34, 39–40, 78, 102, 104, 152

bylaws, 15, 24, 73, 77, 81, 83, 115, 132, 138, 163, 167

camping, 13, 24, 66, 76, 77, 80, 82, 90, 109, 110, 112, 171
 freedom, 75
 limits to, 82, 83, 90, 115
 sites, 60, 63, 68, 75, 80, 82, 86, 88

Canterbury Aoraki Conservation Board, 9, 11, 29, 36, 150, 160, 164, 168

Canterbury Environmental Trust, 52, 54

Canterbury Museum, 102, 103

Canterbury Natural Resources Regional Plan, 153

Canterbury Plains (Ngā Pākihi Whakatekateka o Waitaha), 18, 20, 21, 30, 32, 52, 92, 97, 105

Canterbury Water Management Strategy, 21, 66, 73, 82, 97, 98, 99, 100, 120, 125, 130, 131
 zone committees, 74, 125

car parks, 77, 135, 142

carbon-fixing credits, 47, 63

care codes, 133, 134

Castle Hill Nature Reserve Management Plan 1980, 78, 83, *See also* Kura Tāwhiti

Cave Stream, 33, 76, 77, 80, 83

caves, 77, 80, 83, 122

children, 38, 102, 184

Christchurch, 18, 19, 76, 86, 106
 City Council, 101, 102, 103, 105, 107, 108, 109, 111, 113, 114
 International Airport, 100, 102, 103, 104
 rebuild, 38, 100, 102, 103, 104

Christchurch City/Ōtautahi Place, 100–104

Christchurch to Little River Rail Trail, 33, 101, 106, 108

Civil Aviation Authority, 139

climate, 42, 59, 60, 72, 87, 94, 104, 161
 change, 17, 20, 46, 55, 59, 63, 67, 69, 120, 161, 162

climbing, 43, 53, 65, 73, 77, 80, 83, 84, 160,
 See also bouldering; mountaineering

coastal defence, 103, 105, 109, 111, 112, 113

coastal environments, 19, 21, 85, 102, 106, 109, 111, 115, 117–31, *See also* ecosystems; wetlands
 retreat from, 18, 120, 126

Coastal Land and Marine/Ki Tai Place, 33, 92, 117–31

coastal marine areas, 96, 98, 121, 124, 130

coastal processes, 21, 98, 116

coastline, 107, 117, 119, 120, 121, 124, 126

Cockayne, Leonard, 22

codes of practice, 46, 83, 84, 144, 155, 160

collaboration, 13, 31, 34, 35, 79, 102, 103, 107, 113, 128, 144

commercial activity, 40, 43, 46, 63, 79, 139, 147, 162, *See also* fishing; hunting; watercraft
 limits to, 68, 87, 90, 108, 115, 116, 120, 123, 126, 128, 130, 133, 142, 151–52, 156

community, 31, 75, 108, 146, 168, 176
 consulting, 13, 90, 135
 contribution of, 19, 20, 21, 32, 35, 39, 45, 51, 52, 53, 66, 67, 76, 78, 79, 82, 87, 88, 89,

- 97, 98, 103, 104, 105, 109, 110, 111, 112, 113, 116, 120, 121, 126, 127
- groups**, 9, 21, 27, 38, 51, 59, 65, 73, 74, 75, 78, 82, 83, 88, 96, 101, 102, 106, 107, 111, 112, 113, 114, 125
- values**, 18, 22, 31, 34, 62, 88, 96
- working with**, 17, 18, 32, 34, 35, 38–39, 65, 66, 67, 68, 71, 81, 82, 86, 88, 90, 92, 98, 102, 103, 104, 106, 114, 116, 125, 128, 129, 152
- compliance**, 38, 121, 129, 133, 142, 146, 150, 155, 156
- concessionaires**, 9, 14, 36, 37, 40, 51, 53, 62, 65, 67, 68, 106, 109, 110, 112, 115, 122, 127, 132, 134, 146, 150, 160, 168, 184
- contribution of**, 19, 32, 37, 66, 67, 111, 112, 137, 138
- working with**, 36, 40, 114
- concessions**, 13, 26, 29, 40, 42, 43, 44, 51, 54, 55, 56, 59, 61, 68, 69, 83, 100, 113, 128, 129, 139–45, 150–52, 155–58, 164, 168, 171
- conflicts of use**, 37, 61, 69, 115, 120, 127, 135, 136, 137, 139, 145, 147, 154, 155, 159
- connectivity**, 18, 21, 31, 47, 64, 111, 119
- conservation**
 - awareness**, 13, 18, 21, 31, 38, 159, 162
 - concept of**, 8, 17, 168
 - contributing to**, 18, 19, 22, 37, 38, 52, 53, 66, 104, 105, 135, 137, 138, 147
 - historic**, 20, 22, 78, 105
 - support for**, 22, 34, 38, 39, 40, 79, 93, 102, 103, 104, 127
 - threats to**, 20, 46, 47, 73, 108, 136, 146, 161
- Conservation Act 1987**, 8, 9, 11, 15, 25, 26, 29, 40, 45, 47, 55, 56, 64, 70, 81, 94, 125, 132, 133, 139, 145, 151, 153, 156, 162, 166, 168, 169, 171, 178, 183, 185
- Conservation General Policy 2005**, 9, 13, 14, 69, 132, 133, 148, 153, 154, 155, 168
- conservation management plans**, 8, 12, 15, 24, 125, 129, 168, 169, 179, 181
- conservation management strategies (CMSs)**, 8, 12, 15, 24, 168, 169, 179, 181
- conservation parks, extending**, 43, 44, 47, 55, 58, 61, 78, 79, 83, 85, 90, 92, 99
- consultation**, 9, 13, 24, 25, 27, 28, 29, 81, 90, 135, 136, 137, 156, 160
- Convention on Biological Diversity**, 16, 169, 178
- Convention on International Trade in Endangered Species of Wildlife Flora and Fauna (CITES)**, 16, 100, 104
- Convention on the Conservation of Migratory Species of Wild Animals**, 16, 119, 129
- Coopers Lagoon/Muriwai**, 119, 120
- covenants**, 20, 62, 86, 108, 111, 183
- Craigieburn**, 45, 47, 52, 55, 76, 80, 83
- crested grebe/kāmana**, 77, 78, 80, 106, 108
- cross-boundary**, 12, 15, 124, 130
- Crown Minerals Act 1991**, 9, 54, 139, 153
- Crown Pastoral Land Act 1998**, 9, 47, 55, 73
- cultural heritage**, 14, 23, 26, 33, 79, 109, 147, 173, 185
 - protecting**, 27, 65, 78, 80, 83, 97, 124, 133, 135, 136, 138, 145, 147, 154, 159, 175
 - threats to**, 134, 160
- cultural sites**, 34, 87, 105, 112
- cumulative effects**, 133, 134, 135, 136, 138, 157, 158, 169
- customary use**, 16, 25–26, 26, 27, 28, 90, 120, 124, 169
- cycling**, 75, 109, 111, *See also* mountain biking
 - tracks**, 63, 66, 67, 75, 79, 106, 111
- Dan Rogers Nature Reserve**, 109, 114, 116, 122
- Deans, Jane**, 22
- Deed of Recognition sites**, 16, 22, 24, 45, 60, 73, 77, 93
- deer**, 47, 51, 59, 90, 156–57, 158, 165, 173, 185
- departmental staff**, 26, 28, 48, 79, 128, 161
- destination management**, 13, 35, 170
- development**, 20, 21, 34, 46, 52, 55, 61, 66, 67, 69, 87, 99, 102, 106, 108, 109, 112, 126, 133, 151
- Director-General of Conservation**, 12, 25, 29, 151, 156, 167, 168, 169
- disabled people**, 37, 145, 146, 170, 179
- disease**, 145, 167
- district plans**, 62, 76, 77, 98, 99, 105, 124, 130, 175
- disturbance**, 21, 55, 73, 77, 94, 114, 118, 124, 127, 128
- dogs**, 78, 107, 145–46, 155, 170, 173
- domestic animals**, 111, 126, 145
- dongas**, 119
- drylands**, 19, 72, 74, 76, 95, 102
- Du Faur, Freda**, 22
- dunes**, 119, 120, 126
- earthquakes**, 18, 22, 38, 100, 102, 106, 125
- ecology**, 21, 64, 86, 95, 105, 119, *See also* restoration
 - corridors**, 21, 102, 119, 126
 - protecting**, 65, 78, 89, 97, 109, 110
 - sequences**, 19, 76, 79, 111, 122, 123
 - threats to**, 93, 120

economy, 18, 19, 20, 21, 39, 59, 69, 97, 154, 167
 traditional, 93

ecosystems, 19, 21, 30–31, 39, 53, 59, 72, 74, 78, 87, 89, 105, 170, *See also* recovery;
 restoration
 coastal, 18, 21, 30, 111, 126
 endemic, 20
 freshwater, 19, 21, 30, 134, 151
 indigenous, 20, 28, 43, 78, 102, 103, 126, 134, 153, 154
 marine, 30, 117, 121, 125, 126
 protecting, 18, 47, 59, 66, 74, 79, 84, 85, 90, 93, 96, 97, 98, 102, 103, 107, 108, 111, 112, 125, 126, 127, 153, 154, 158
 river, 79, 92, 93, 95, 96, 97, 98, 99
 services, 18, 19, 20, 47, 63, 67, 69, 71, 170
 threats to, 20, 61, 73, 90, 96, 134

edge effects, 86, 88, 89

education, 37, 38, 66, 68, 73, 76, 78, 80, 83, 88, 90, 96, 98, 101, 103, 104, 107, 112, 113, 115, 118, 125, 126, 127, 128, 129, 146, 159, 160, 162
 centres, 52, 54, 62, 66
 outdoor, 18, 62, 66, 101, 110, 112, 122
 tertiary, 39, 101, 102

eel. *See* tuna/eel

eeling, 77, 80, 108, 120, 151–52

electric power-assisted pedal cycles, 83, 137–38, 163, 171

Electricity Act 1992, 9

emergencies, 15, 38, 132, 139, 171

endemic species, 94, 105, 171

energy, 93, 147, *See also* hydroelectricity

engagement, 18, 27, 28, 38–39, 101

Environment Canterbury, 21, 73, 75, 77, 81, 96, 98, 99, 101, 102, 103, 114, 121, 125, 129, 138, 153, 154

Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010, 96, 97

Environment Court, 74

Enviroschools Canterbury, 101, 104

Enys Scientific Reserve, 72, 78, 80

Enys, John, 78

erosion, 21, 110, 120, 126, 145, 146, 160

estuaries, 18, 20, 102, 119, 128

Estuary of the Heathcote and Avon Rivers/Ihutai, 102, 119, 125, 127, 129

European history, 22, 45, 105, 108, 110, 169

Exclusive Economic Zone, 117

exploration
 historic, 22, 51, 102, 103, 117
 mineral, 117, 126
 recreational, 52, 77

extinctions, 13
 avoiding, 51, 65, 78, 87, 97, 126

extraction, 93, 95, 153–54

facilities, 35, 36, 37, 46, 60, 61, 62, 76, 77, 78, 80, 83, 86, 87, 89, 90, 94, 107, 108, 110, 112, 159, 171
 related, 148–51, 181

fairy prion/tītī wainui, 117, 118, 121

families, 38, 60, 63, 88, 102, 104, 106

farming, 66, 73, 74, 79, 96, 108, 109, 125, 135, 152–53, *See also* pastoral farming
 aquatic, 108, 117
 impacts of, 76, 108

farmland, 52, 61, 66, 78, 99, 108, 109, 112, 122, 123

fauna, 59, 85, 117, 151
 threats to, 73, 94, 95

fencing, 46, 63, 64, 67, 75, 78, 80, 86, 87, 111, 114

ferry services, 109, 110, 112

filming, 52, 126, 128, 133, 144, 154–55

Fire Service Act 1975, 31

fires, 20, 46, 73, 76
 managing, 31, 45, 46, 47, 51, 62, 78, 87, 106, 113, 135, 160, 161–62

fish, 25, 59, 72, 108, 117, 120, 172
 freshwater, 28, 98, 108, 119, 172, 181
 indigenous, 25, 28, 93, 98, 99, 105, 181
 marine, 21, 117–18, 121, 122, 124
 migratory, 93, 97, 108, 118, 119
 passage, 31, 95, 98, 99, 108
 spawning, 73, 93, 102
 sports, 19, 38, 96, 128, 152, 168, 172, 181, 182
 threatened and at-risk, 21, 118, 151

fish and game councils, 31, 37, 38, 75, 81, 94, 98, 99, 129, 152, 172
 management plans, 96

fisheries, 124, 172
 freshwater, 31, 94, 106, 152, 181
 indigenous, 73, 81, 107, 108, 120, 125, 152
 marine, 95
 recreational, 73, 94, 95, 98

Fisheries Act 1996, 124, 151, 176, 182

fishing, 21, 60
 commercial, 108, 120, 151–52
 customary, 24, 77, 80, 108, 120
 recreational, 63, 65, 66, 73, 75, 77, 80, 152, 172

fixed anchors, 53, 55, 77, 83, 84, 160–61

floods, 92, 93, 94, 95, 99, 147

flora, 25, 67, 107, 117, 119
 alpine, 42, 45, 59
 exotic, 90, 94, 99, 113, 152
 indigenous, 63, 68, 72, 83, 85, 87, 88, 89, 91, 94, 95, 97, 105, 106, 108, 110, 116, 145

- limestone, 72, 76, 77, 80
- protecting, 20, 22, 83, 87, 88, 89, 91
- threatened and at-risk, 72, 76, 77, 78, 85, 94, 108, 118
- threats to, 73, 94, 95, 145, 160
- Fonterra, 129
- foothills, 19–20, 85–92
- Foothills Place, 33, 85–92
- foreshore and seabed, 110, 115, 121
- Forest and Rural Fires Act 1977, 31, 161, 162
- forests, 59, 62, 85–92, 101
 - beech, 30, 45, 59, 62, 76
 - indigenous, 97, 113
 - threats to, 46, 86
- Forests (West Coast Accord) Act 2000, 64
- four-wheel driving, 46, 52, 65, 67, 74, 75, 88, 94, 98, 161, *See also* roads
- Freedom Camping Act 2011, 9, 90
- freshwater, 19, 31, 38, 93, 126, 172, *See also* ecosystems; fish; fisheries; Te Rūnanga o Ngāi Tahu; water
- front-country, 36, 37, 42, 43, 46, 102
- Game Animal Council, 38, 90, 159
- Game Animal Council Act 2013, 9, 61, 68, 156, 159, 173, 185
- Gateway destinations, 13, 35, 36, 37, 42, 43, 53, 60, 62, 65, 77, 86, 101, 102, 103, 106, 110, 112, 173
- gemstone fossicking, 53, 55, 162
- General Policy for National Parks 2005, 9, 42, 43, 132, 133, 173
- Genesis Energy, 99
- geology, 22, 92
 - features, 20, 31, 45, 51, 59, 72, 77, 112, 119, 121, 122
- geopreservation sites, 53, 55, 77, 161
- geothermal springs, 59, 60, 65
- glaciers, 18, 42, 44, 72, 79
- Godley River, 42, 43, 47, 54, 55, 92, 96, 99
- gold, 20, 22, 45, 46, 51, 60
- grasslands, 45, 59, 74, 77, 80, 85, 87, 110, 113, 134, 162
- grazing, 59, 63, 71, 100, 107, 114, 145, 152–53, *See also* livestock
 - removing, 47, 72, 77, 99, 100
- great spotted kiwi/rorua, 25, 59, 65
- Greater Christchurch Regeneration Act 2016, 9, 14
- group sizes, 76, 77, 80, 83
- guiding, 29, 36, 40, 106, 109, 111, 112, 114, 133, 136, 137, 173
- Hakatere, 18, 33, 40, 47, 79, 82, *See also* Ashburton River/Hakatere
- Hanmer, 60
 - Forest Park, 60, 62, 66, 68
 - Springs, 60, 61, 62, 63, 65, 66, 67, 68, 69, 71
- Harper Pass, 60
- Hāwea, 45, 54
- Hector's dolphin/tūpoupou, 18, 21, 32, 117, 118, 121, 122, 123, 125, 126, 128, 130
- helicopters, 46, 136, 141, 173
- heli-skiing, 46, 53, 173
- Heritage New Zealand Pouhere Taonga, 34, 38
- Heritage New Zealand Pouhere Taonga Act 2014, 9, 67, 166, 174
- high country, 18, 19–20, 32, 45, 59–85, 93, 159
 - stations, 60, 61, 62, 63, 64, 67, 69, 75, 82
- High-Country Basins Place, 33, 45, 72–85, 92
- historic heritage, 26, 33–35, 78, 103, 109, 113, 126, 173, 181
 - protecting, 18, 20, 51, 83, 109, 110, 111, 112, 124, 129, 133, 135, 136, 138, 145, 147, 154, 159
 - threats to, 120, 134, 160
- historic sites, 19, 22, 51, 52, 54, 63, 67, 75, 103, 105, 112, 116, 120, 127
 - actively conserved, 33–35, 60, 112, 165
 - conservation plans, 114, 115
 - Icon, 13, 33, 101, 105, 111
 - protecting, 54, 67, 116, 175
- history, 13, 18, 19, 20, 45, 60, 88, *See also* European history; Māori history; Ngāi Tahu
 - military, 103, 105, 109, 112
- hoiho/yellow-eyed penguin, 25, 107, 117, 121
- homesteads, 33, 45, 53, 62, 63, 67, 69
- Hooker/Mueller tracks, 42, 43
- Horomaka Island, 109, 110, 113, 116
- horses, 145, 155
 - access, 54, 64, 67, 70, 81, 89, 114, 146–47
 - herd, 63, 69, 71
 - riding, 46, 52, 54, 60, 63, 65, 66, 73, 106, 146
- human activity, 85, 94, 95, 120, 161
- hunting, 18, 20, 38, 46, 47, 88, 145
 - commercial, 47, 61, 68, 87, 90, 168
 - game, 158–59
 - recreational, 46, 47, 51, 59, 61, 62, 65, 66, 68, 71, 73, 87, 89, 90, 152, 156, 172
 - trophy, 47, 156, 157, 165
- Hurunui, 30, 33, 37
 - College, 59, 65
 - District Council, 62, 67, 68, 69, 89
 - River, 59, 60, 65, 67, 89, 92, 93
- huts, 36, 37, 51, 52, 55, 60, 61, 65, 66, 68, 71, 77, 86, 88, 94, 103, 142, 146

- historic, 33, 45–46, 51, 60, 110
- hydroelectricity, 20, 63, 74, 93, 96, 98, 99, 151
 - companies, 79
- hydrology, 73, 147
- Icon destinations, 13, 35, 36, 37, 42, 46, 101, 105, 106, 174
- iconic species, 13, 31, 177
- Ida Range, 46, 54, 59
- identity, 13, 18, 177
- indigenous species, 15, 19, 20, 21, 27, 28, 31, 74, 82, 87, 92, 93–94, 99, 101, 105, 151, 174
 - protecting, 93, 102, 103, 111, 112, 118, 127, 129, 132, 145, 152, 159
 - threats to, 90, 95
- integrated management, 8, 10, 11, 12, 13, 15, 27, 34, 41, 43, 46, 47, 51, 52, 55, 62, 65, 68, 69, 74, 75, 78, 81, 87, 89, 93, 97, 99, 111, 126, 128, 154, 169, 174, 180
- inter-montane basins, 18, 19, 20, 72–85, 92
- international agreements, 16, 100, 104, 119, 129, 169, 178, 181
- International Council on Monuments and Sites New Zealand Charter, 34, 175
- International Dark-Sky Association, 42
- international significance, 97, 109, 112, 127,
 - See also Wetlands of International Importance
- interpretation, 33, 34, 46, 52, 55, 69, 80, 82, 83, 90, 98, 107, 111, 112, 115, 126, 128, 129, 160, 175
- invasive species, 72, 86, 122, 123, 129
- invertebrates, 78, 83, 94, 107, 113, 119
 - indigenous, 98, 105, 108
 - threats to, 73, 95
- irrigation, 20, 61, 74, 93
- Isaac Conservation and Wildlife Trust, 101
- islands, 32, 74, 79, 82, 106, 109–10, 112, 115–16, 117, 118–19, 126, 128
- iwi, 22, 29, 117
- Jollies Pass, 62, 67
- Kaikōura (Te Tai o Marokura) Marine Management Act 2014, 124
- kaitiakitanga, 10, 16, 18, 19, 22, 23, 26, 27, 73, 175
- Kaitorete Spit, 21, 30, 33, 119, 120, 126, 129, 130
- kakī/black stilt, 25, 72, 93
- Kāti Māmoe, 22, 105
- kayaking, 60, 65, 74, 94
 - sea, 122, 127
- King Billy Island (Aua), 109, 110, 113, 115
- Korowai Torlesse Tussocklands, 47, 52–53, 76, 83
- Kura Tāwhiti, 24, 33, 73, 76, 77, 78, 80, 82, 83, 84, 85
- lagoons, 20, 107, 119–20, 124, 128
- Lake Benmore (Te Ao Mārama), 47, 74, 79, 82
- Lake Clearwater, 75, 82
- Lake Coleridge, 93
- Lake Ellesmere (Te Waihora). See Te Waihora
- Lake Forsyth (Wairewa), 105, 107–8, 112, 114, 119, 120, 124
- Lake Heron, 75, 81, 82, 85
- Lake Lyndon, 52, 76, 80, 83
 - Lodge, 53, 54
- Lake Ohau, 79, 82
- Lake Pearson (Moana Rua), 76, 77, 80, 82, 83
- Lake Sumner (Hoka Kura), 59, 60, 61, 65, 66
 - Forest Park, 61, 62, 65
 - Recreational Hunting Area (RHA), 61, 66, 68
- Lake Tekapo (Takapo), 74, 79
- lakes, 18, 20, 30, 55, 59, 61, 72, 73, 74, 75, 79, 80, 81, 93, 128
 - levels, 61, 66, 108
- Lamb & Hayward Funeral Directors, 101
- Lance McCaskill Nature Reserve, 72, 76, 78, 80, 83
- land
 - mixed tenure, 21, 74, 78, 79, 94, 95, 106, 120, 127, 128
 - pastoral lease, 20, 34, 37, 44, 45, 61, 73, 75, 86, 136, 183
 - private, 98, 106, 109, 114
 - status, 24, 29, 47, 55, 58, 64, 67, 69–70, 71, 75, 77, 82, 90, 98, 108, 109, 114, 119, 121, 126, 129, 130, 131, 132
- Land Act 1948, 63
- Land Information New Zealand, 55, 69, 73, 75, 81, 82, 96, 99, 113, 128, 183
- Land Transfer Act 1952, 95, 99
- Land Transport Act 1998, 177, 184
- land use, 18, 20, 64, 74, 78, 86, 105
 - change, 19, 94, 106, 108
 - intensification, 19, 20, 73, 95, 125
- landforms, 20, 21, 31, 67, 160, 181
- landowners, 36, 76, 86, 87, 88, 89, 90, 107, 120, 121, 136, 137, 146
 - contribution of, 66, 79, 88, 89, 127
 - working with, 31, 75, 86, 88, 113, 114, 126
- landscapes, 19, 22, 24, 61, 62, 64, 74, 78, 85, 86, 92, 109, 112, 126, 147, 181,
 - See also Outstanding Natural Features and Landscapes

- protecting, 19, 31, 37, 43, 46, 51, 52, 65, 74, 76, 82, 84, 85, 87, 154, 162
- threats to, 20, 73, 74
- leprosy colony, 110
- Lewis Pass, 60, 61, 64, 65, 66, 68
- limestone, 32, 33, 72, 77, 80, 85, *See also* flora works, 33, 46
- Lindis Pass, 45, 47, 54, 55, 58, 72
- little penguin/kororā, 105, 107, 111, 117, 118, 121, 122, 126
- livestock, 20, 46, 62, 63, 73, 95, 108, 118, 145, 175
 - excluding, 75, 86
 - removing, 45, 51, 62, 65, 67, 78, 87
- lizards, 59, 73, 95, 118, 126
- local authorities, 31, 36, 37, 39, 55, 56, 70, 81, 86, 88, 90, 95, 96, 101, 106, 107, 121, 125, 126, 128, 136, 146, 150
- Local Government Act 1974, 62
- local residents, 35, 79, 100, 103, 106
- Local Treasure destinations, 13, 35, 36, 37, 43, 51, 65, 78, 88, 176
- Loch Katrine, 59, 61, 65, 66, 68, 71
 - Management Plan, 61, 68, 151
- Longslip, 47, 54, 55, 58
- long-tailed bat/pekapeka, 85, 88
- lowlands, 18, 21, 30, 41, 85, 87, 93, 97, 101, 102, 119, 126, 153
- Lyttelton Harbour/Whakaraupō, 106, 109, 113, 122, 123
 - port, 102, 103
- Lyttelton Port Company, 104
- Mackenzie Basin, 37, 47, 72, 74–75, 78–79, 81, 84, 85, 94, 96, 154
- Mackenzie Country Trust, 73, 74, 82
- Mackenzie District Council, 75, 81
- mahinga kai, 18, 20, 22, 23, 26, 27, 28, 30, 45, 60, 73, 77, 80, 85, 93, 100, 105, 112, 114, 117, 127, 176
- maintenance, 87, 135, 161
 - access for, 135, 139, 140, 141, 142
 - contributing to, 51, 65, 78, 88, 135, 137, 138, 147, 160
- mana whenua, 9, 23, 105
- Māori, 101
 - history, 73, 105
 - land, 107, 120
 - naming, 85, 105, 118
- Maori Lakes, 75, 81, 82, 85
- marae, 101, 103, 105, 113
- marginal strips, 24, 52, 119, 129, 130
- marine environments, 112, 113, 117–31, *See also* ecosystems; fisheries; protected areas
 - species, 18, 21, 117–18, 121, 122, 129
- marine mammals, 18, 21, 25, 32, 105, 117, 123–24, 176
 - interactions with, 118, 122, 123, 126, 128, 130
 - strandings, 27, 118
 - viewing, 126, 128, 130, 151
- Marine Mammals Protection Act 1978, 9, 25, 123, 151, 168, 169
- marine reserves, 31, 108, 176, *See also* protected areas
- Marine Reserves Act 1971, 9, 168, 169, 176
- mātaitai, 108, 124, 126, 176
- mātauranga, 23, 26
- Mathias River, 47, 51, 59, 92
- mauri, 18, 125, 127, 129, 176
- McCaskill, Lance, 78
- Meridian Energy, 96, 99
- migratory species, 120, 126, 127, 129, *See also* birds; fish
- milestones, 11, 29–30, 32–33, 34–35, 37–38, 39, 40, 41, 44, 58–59, 71, 84–85, 92, 99–100, 104, 116, 130–31, 176
- mining, 46, 139, 153, 177
- Minister for Primary Industries, 121
- Minister of Conservation, 9, 12, 15, 24, 25, 96, 106, 121, 139, 152, 153, 156, 158, 161, 167, 168, 169, 173
- Minister of Energy and Resources, 153
- Ministry for Primary Industries, 31, 129, 151, 152
- moa, 22
- modification, 21, 46, 52, 55, 60, 74, 85, 86
- Molesworth, 62, 63–64, 67, 69, 71
 - Management Plan, 8, 63, 135, 136
- monitoring, 11, 26, 29, 55, 59, 63, 68, 69, 71, 77, 78, 80, 82, 85, 86, 87, 90, 97, 102, 121, 123, 126, 127, 128, 129, 133, 135, 137, 138, 142, 147, 153, 159, 160, 164
- Motuariki Islands, 74, 79
- Motukarara Conservation Nursery, 101, 103
- Motunau Island, 118, 126, 128
 - Management Plan, 118, 128
- Mount Cook. *See* Aoraki/Mount Cook
- Mount Peel (Tarahaoa), 85, 86
- Mount Somers, 33, 45, 46, 53, 86
 - tracks, 53, 86
- mountain biking, 46, 52, 54, 65, 67, 73, 114, 177
 - access, 54, 136–37

- tracks, 52, 63, 76, 80, 83, 109, 114, 136–37
- mountaineering, 20, 22, 47, *See also*
 - climbing
- Muddy Lakes, 62, 69
- Napenape, 85, 89
- national park management plans, 8, 12, 24, 42, 44, 148, 151, 168, *See also*
 - Aoraki/Mount Cook National Park;
 - Arthur's Pass National Park
- National Parks Act 1980, 8, 15, 25, 42, 44, 56, 70, 81, 85, 139, 149, 167, 168, 169, 173, 178, 179, 185
- National Parks Place, 33, 40, 42–44, 78
- national significance, 74, 93, 98, 109, 112, 177
- natural character, 18, 61, 97, 124, 153, 178, 181
- natural heritage, 30–33, 113, 185
 - protecting, 13, 18, 20, 83, 135, 136, 138, 145, 147, 154, 159
 - threats to, 160
- natural quiet, 44, 48, 53, 54, 60, 138, 139, 140, 142, 157, 158, 178
- natural resources, 23, 27, 56, 133, 151, 158, 178
 - gathering, 18, 24, 73, 93, 124
- Nature Heritage Fund, 45, 46, 61, 62, 106
- Nelson Lakes National Park, 60, 64, 68
- Nelson/Marlborough, 67, 68
- New Zealand Alpine Club, 46, 83, 160
- New Zealand Coastal Policy Statement
 - 2010, 98, 114, 124, 130
- New Zealand Conservation Authority, 9, 24, 29, 168
- New Zealand Deerstalkers' Association, 46, 62, 66
- New Zealand Defence Force, 139
- New Zealand Forest Service, 46
- New Zealand fur seal/kekeno, 21, 105, 106, 107, 109, 111, 114, 117, 118, 121, 122, 123, 126, 128, 131
- New Zealand Geographic Board, 118
- New Zealand Police, 38, 136, 145
- New Zealand Rail, 82
- New Zealand Threat Classification System, 13, 183
- New Zealand Transport Agency, 38, 68, 82
- New Zealand Walking Access Commission, 36, 38, 55, 69, 81, 88, 99, 107, 109, 114
- Ngāi Tahu, 9–10, 14, 15, 22–30, 75, 80, 87, 93, 111, 134, 164, 178, *See also* Te Rūnanga o Ngāi Tahu
 - access, 28, 90
 - consulting, 25, 27, 81, 90, 160
 - contribution of, 18, 21, 23, 27, 28, 30, 73, 79, 83, 93, 100, 103, 108, 111, 112, 115, 120, 124, 125, 127
 - history, 22, 24, 34, 60, 85, 100, 105, 109, 110, 112
 - identity, 18, 22, 23, 93, 105, 127
 - land, 26, 27, 97, 105, 106, 125
 - links to areas, 19, 23, 24, 27, 28, 29, 30, 34, 42, 45, 66, 73, 74, 77, 80, 85, 105, 108, 109, 110, 112, 115, 117, 124, 126, 147, 153, 155, 161, 183, 185
 - naming, 23, 45, 73, 93, 117
 - stories, 23, 27, 34, 45, 113, 117
 - working with, 17, 18, 26–30, 32, 34, 37, 38, 40, 68, 82, 83, 88, 90, 98, 101, 103, 104, 106, 113, 125, 126, 128, 129, 130, 152
- Ngāi Tahu Claims Settlement Act 1998, 9, 15–16, 23, 24, 25, 26, 27, 28, 29, 45, 73, 120, 125
- Ngāi Tahu Deed of Settlement 1997, 15, 27, 28
- Ngāi Tahu Rock Art Trust, 34, 91
- night sky, 42, 44
- nohoanga sites, 14, 16, 24, 28, 60, 66, 73, 93, 178
- Northern High-Country Place, 33, 40, 45, 59–71, 72, 92
- nutrients, 20, 21, 73, 74, 95, 108, 112, 119
- Ō Tū Wharekai, 72, 73, 75, 79, 81, 82
- objectives, 11, 27, 31–32, 33–34, 36–37, 39, 40, 164
 - national, 30
- oil spills, 117
- Okains Bay (Ōkeina), 119, 120
- Ōnawe, 105, 106, 113
- open dog areas, 145, 146
- Opihi River, 92, 119, 120, 124, 126
- Orana Wildlife Park, 101, 103
- Ōruaka, 105, 106, 107, 113
- Otago, 54, 55, 85, 94
- Otamahua/Quail Island, 18, 33, 101, 103, 106, 109–10, 112–13, 115–16, 116
 - Ecological Restoration Trust, 101, 110, 112, 115
 - Management Plan, 110, 116
 - Restoration Plan, 115, 116
- Oteake, 45, 47, 51, 54
- Ōtukaikino, 101, 103
- outcomes, 11, 41, 43–44, 51–54, 65–67, 78–80, 87–89, 103, 125–27, 178
 - national, 13, 100
- Outstanding Natural Features and Landscapes, 32, 45, 51, 60, 65, 72, 76, 78, 79, 80, 86, 93, 105, 111, 118, 119, 126

- over-flights, 48, 54, 140, 141, 144
- Oxford Recreational Hunting Area (RHA), 87, 88, 89, 90
- pā, 103, 105, 109, 112
- Pā Island (Te Puke ki Waitaha), 113, 118, 119
- Papatipu Rūnanga, 9, 14, 22, 23, 26, 28, 34, 102, 105, 106, 111, 112, 113, 124, 178, 179
- partnerships, 17, 18, 19, 28, 31, 34, 35, 36, 38–40, 65, 66, 71, 78, 82, 83, 101, 104, 114, 126, 162, 179, *See also* Treaty of Waitangi
- pastoral farming, 106
 - historic, 20, 34, 35, 46, 51, 60, 62, 67
 - impacts of, 46, 67, 72, 95
- Peel Forest, 33, 86, 88, 90, 92
- Pegasus Bay, 117, 118, 120
 - Coastal Management Plan, 121, 125
- penguins, 106, 114, 117, 118, *See also* hoiho/yellow-eyed penguin; little penguin/kororā
- permits, 25, 47, 53, 61, 87, 122, 123, 126, 127, 128, 145–46, 156, 157, 162
 - for entry, 75, 78, 82, 83, 85, 109, 114, 116, 118
 - moratorium on, 123, 128
- pest animals, 32, 73, 95, 118
- pest plants, 72, 73, 95, 145, 160
 - control of, 63, 67, 72, 79, 82, 88, 95, 98, 118, 146
- pests, 20, 21, 45, 72, 167, 179
 - control of, 14, 24, 32, 38, 47, 51, 59, 62, 65, 67, 78, 86, 87, 96, 97, 106, 107, 111, 113, 126, 127, 132, 179
- pigs, 47, 156, 158, 173, 185
- Pohatu Marine Reserve, 107, 114, 121–22, 127, 129
- Pōhatu/Flea Bay, 107, 114, 121–22, 127
- policies, 11, 12, 28–29, 41, 44, 54–56, 67–70, 81–83, 89–91, 98–99, 103–4, 113–16, 132–62
- population trends, human, 17, 19, 22, 100, 161
- Port Hills, 18, 101, 102, 105, 106, 108
- Port Levy (Potiriwi)/Koukourarata, 109, 110, 116, 124
- possums, 38, 47, 106
- pounamu, 24
 - trails, 18, 33, 45, 60, 73
- predators, 95, 101, 107, 110, 114, 122, 151
- priority ecosystem units, 13, 21, 30, 31, 32, 33, 42, 43, 45, 47, 51, 52, 53, 55, 59, 61, 62, 63, 65, 72, 74, 75, 76, 78, 85, 86, 87, 92, 97, 98, 99, 105, 111, 114, 119, 126, 130, 156, 157, 158, 161, 164, 180
- Project River Recovery, 73, 74, 79, 96, 98, 99, 100
- protected areas, 107, 180
 - marine, 22, 31, 121–23, 125, 128, 176
- Protected Objects Act 1975, 9
- public access, 20, 24, 38, 51, 61, 65, 67, 68, 74, 78, 80, 89, 98, 99, 107, 110, 111, 114, 122, 183, *See also* aircraft; horses; maintenance; mountain biking; Ngāi Tahu; research; vehicles; walking; watercraft
 - ease of, 18, 21, 51, 60, 67, 74, 76, 86, 88, 107, 112, 133, 139
 - improving, 36, 47, 61, 63, 66, 78, 80, 82, 85, 88, 107, 162
 - limits to, 15, 63, 65, 80, 106, 109, 113, 115, 118, 123, 127, 132, 135, 137, 138
- public benefits, 17, 36, 38, 39, 90
- public notification, 15, 134, 145, 146, 160
- Public Open Space Strategy 2010–2040, 107, 109
- public safety, 15, 66, 77, 80, 82, 83, 106, 132, 135, 138, 147, 160, 161
- public transport, 18, 60
- Pukerauaruhe (Brownes) Island, 109, 110, 113, 116
- quarantine stations, 109
- Queen Elizabeth the Second National Trust, 86, 88, 107, 108
- railway, 43, 76
 - Midland (TranzAlpine), 52, 76, 79, 80, 82
- Raincliff, 18, 33, 85, 89, 91
- Rakaia River, 45, 47, 51, 59, 92, 93, 96, 97, 98, 119, 120
- Rākaihautū, 22
- Ramsar Convention, 16, 125, 129, 134, 181, 184
- rangatiratanga, 9, 19, 22, 23, 27, 182, 183, *See also* tino rangatiratanga
- Rangitata River, 47, 75, 79, 92, 93, 96, 97, 98, 99
- Rapuwai people, 85
- recovery
 - ecosystem, 45, 51, 65, 78, 79, 87, 126
 - operations, 61, 87, 156–57, 165
 - species, 21, 25, 26, 32, 111, 123, 127
- recreation, 18, 20, 21, 35–38, 42, 46, 52, 53, 56, 66, 67, 73, 74, 86, 92, 94, 106, 107, 109, 111, 112, 120, 126, 140, 176
 - backcountry, 18, 20, 22, 36, 45, 102
 - future opportunities for, 18, 20, 22, 36, 37, 39, 46, 51, 52, 62, 65, 79, 82, 90, 96, 103, 109, 160, 162
 - groups, 9, 36, 37, 46, 53, 75, 83, 94, 102, 103, 136, 137, 138, 147, 160, 162

historic, 45, 51, 161
 impacts of, 60, 94, 95, 146
 intensive use, 51, 52, 53, 65, 162
 managing, 13, 15, 35, 45, 82, 132
 protecting, 76, 77, 93, 133, 135, 136, 138, 154, 155, 159
 threats to, 61, 95, 108, 134, 148
 refuges, 20, 32, 74, 76, 77, 81, 82, 85, 87, 107, 108, 118, 126, 138, *See also* sanctuaries
 Regenerate Christchurch, 14
 regeneration, 46, 63, 65, 67, 68, 88, 89, 97, 108
 Regional Coastal Environment Plan for the Canterbury Region 2005, 106, 109, 110, 121, 122, 123, 124
 regional councils, 14, 38, 39, 86, 128, 146, 153
 regional plans, 98, 99, 124, 130
 regional significance, 74, 88, 93, 98, 109
 regulations, 15, 24, 27, 31, 98, 123, 124, 132, 151, 163, 181
 remoteness, 35, 44, 106, 107, 122, 127, 139, 140, 160
 reporting, 11, 32, 34, 37, 87, 105, 121, 129, 164
 reptiles, 108, 111, 113, 118
 research, 20, 22, 28, 52, 69, 71, 73, 80, 95, 102, 108, 113, 125, 128, 129, 133, 155, 156, 161
 access for, 126, 127, 128, 129, 142, 144
 centres, 39, 52
 findings, 79, 97, 123, 127, 128
 Reserves Act 1977, 9, 15, 25, 28, 47, 55, 56, 64, 70, 81, 82, 83, 109, 114, 139, 151, 167, 168, 169, 178, 179, 181, 183
 resource consents, 15, 40, 74, 96, 98, 99, 122, 123, 132
 Resource Management Act 1991 (RMA), 14, 15, 40, 73, 82, 86, 98, 106, 115, 124–25, 132, 153
 restoration, 18, 31, 55, 69, 76, 80, 81, 85, 89, 97, 99, 103, 106, 110, 112, 116, 119, 120, 135, 181
 ecological, 52, 112, 115, 116
 ecosystem, 18, 46, 62, 73, 96, 97, 112, 113, 125, 128, 129, 181
 wetland, 73, 75, 97
 Riccarton Bush (Pūtarīngamotu), 101, 103
 Ripapa Island, 18, 24, 33, 103, 105, 106, 109, 112, 113, 115, 116
 riparian areas, 18, 66, 73, 80, 93, 96, 97, 99, 100, 124, 125
 rivers, 20, 21, 36, 55, 60, 62, 65, 73, 79, 81, 102, 119, 136, 153
 braided, 18, 30, 42, 43, 44, 74, 79, 92–100
 development of, 93, 95–97
 flows, 60, 74, 75, 95, 96, 97, 98
 morphology, 95, 99
 roads, 38, 46, 52, 54, 55–56, 59, 60, 62, 63, 64, 66, 67, 69, 71, 74, 81, 86, 89, 107, 108, 109, 113, 114, 122, 129, 133, 134–38, 146, 147, 148, 153, 181, *See also* state highways
 four-wheel drive, 38, 54, 61, 65, 66, 87, 90, 122, 134, 172
 rock art, 33, 34, 45, 77, 83, 85, 89
 Rod Donald Banks Peninsula Trust, 107, 109, 114
 Royal Forest and Bird Protection Society, 62, 66, 75
 Royal New Zealand Navy, 38
 Ruataniwha, 53
 sanctuaries, 123–24, 125–26, *See also* refuges
 schools, 37, 39, 62, 101, 102, 103, 122, 127
 Scouts New Zealand, 110
 sea conditions, 121, 122, 123, 127
 seabirds, 18, 32, 113, 117, 118, 122, 126
 sea-level rise, 18, 21, 110, 113, 116, 120, 126
 seals, 117, 145, *See also* New Zealand fur seal/kekeno
 search and rescue, 38, 139, 145
 sedimentation, 21, 73, 108, 119
 Selwyn District Council, 107
 Selwyn, Bishop, 120
 settlement, human, 22, 45, 73, 87, 105, 107, 108, 117, 120
 sharks, 21, 117–18, 121, 124
 shellfish, 25
 ships' graveyard, 110, 113
 Shortland, Edward, 120
 shrublands, 45, 59, 72, 73, 74, 79, 85, 87, 110, 113
 signage, 15, 145, 146
 ski fields, 20, 36, 40, 46, 51, 52, 53, 54, 55, 59, 63, 65, 67, 69, 133, 162
 roads, 76, 83, 136
 skiing, 20, 73
 ski-touring, 46, 47, 53
 snowmobiling, 46, 54
 soils, 17, 76, 78
 solitude, 48, 65
 South-East Marine Protection Planning Forum/Roopu Manaaki ki te Toka, 121, 130
 Southern Alps/Kā Tiritiri o te Moana, 18, 42, 48, 64, 72, 92
 Southern Conservation Parks Place, 33, 40, 45–59, 72, 92
 spits and barriers, 92, 117, 119–21, 127, 128–29

sporting events, 40, 52, 66, 76, 77, 80, 83, 111, 133, 136, 144, 159–60, 162

St Andrews College, 52, 54

St James, 61, 62–63, 65, 66, 67, 70, 71
buildings, 33, 40, 60, 67, 69
Track, 60, 63, 64, 65, 67

State Forests, 45, 61

state highways, 37, 72, 74, 153
SH7, 60, 62, 65, 66, 68
SH73, 42, 52, 72, 76, 77, 78, 79, 80, 82

Statement of Intent, 12, 13, 30, 164, 182

statement of outstanding universal value, 44, 54, 134

State-Owned Enterprises Act 1986, 9

Statutory Advisor, 16, 24

structures, 33, 37, 46, 52, 55, 80, 110, 147–48, 160, 162, 166, 182
free of, 52, 68
limits to, 51, 66, 113, 116

sustainability, 19, 21, 22, 38, 79, 97, 111, 114

tahr, 32, 47, 48, 51, 58, 59, 156, 157, 158, 173, 185

taiāpure, 124, 182

Talbot Forest, 86, 88, 90
Management Plan, 87, 90

tangata whenua, 9, 22, 154, 169, 175, 176, 183

taonga, 18, 19, 22, 23, 26, 93, 183
species, 16, 25, 27, 28, 29, 106, 110

Tasman Glacier walks, 42, 43

Tasman River, 42, 43, 44, 47, 54, 55, 79, 92, 94, 96, 99

tauranga waka, 93, 117

TBfree New Zealand, 38, 47

Te Ara Whānui o, 109–10, 112, 115–16

Te Araroa Trail, 46, 54, 60

Te Hapū o Ngāti Wheke, 110, 112, 113

Te Kahui Kaupeka, 43, 47, 53

Te Ngāi Tūāhuriri Rūnanga, 101

Te Rohe o Te Whānau Puha/Kaikōura Whale Sanctuary, 124, 126

Te Rūnanga o Arowhenua, 75, 82

Te Rūnanga o Koukourārata, 110, 113, 116

Te Rūnanga o Ngāi Tahu, 9, 14, 24, 25, 28, 29, 102, 178
Freshwater Policy, 14, 93

Te Rūnanga o Ngāi Tahu Act 1996, 9, 178, 179

Te Wāhipounamu—South West New Zealand World Heritage Area, 16, 42, 44, 53, 54, 134

Te Waihora, 18, 33, 105, 113, 118, 119, 120, 125, 126, 127, 129

Joint Management Plan, 8, 15, 24, 125, 127, 129, 130, 135, 136, 151, 152

telecommunications, 106, 113, 147

tenure reviews, 19, 20, 32, 34, 37, 43, 44, 45, 46, 47, 55, 58, 73, 75, 81, 82, 86, 99, 153, 183

threatened and at-risk species, 13, 21, 30, 31, 32, 33, 43, 59, 72, 74, 85, 87, 92, 98, 100, 105, 118, 119, 126, 164, 183
conservation, 31, 51, 53, 55, 65, 78, 80, 87, 97, 98, 101, 106, 111, 112, 114, 126, 130, 161
threats to, 45, 51

tikanga, 23, 29, 93, 169, 175, 183

Timaru District Council, 88, 90

tino rangatiratanga, 10, 16, 18, 26, 27

Tōpuni, 16, 22, 23, 28, 42, 43, 73, 77, 80, 83, 109, 112, 183

Torlesse Range, 45, *See also* Korowai
Torlesse Tussocklands

tors, 76–77, 80, 83

tourism, 13, 15, 18, 22, 38, 42, 60, 62, 124, 133, 155
historic, 20, 22, 46
sector, 40, 107, 136

tracks, 36, 37, 46, 56, 60, 66, 72, 86, 88, 109, 136–38, 142, 146, 159, 163, *See also* cycling; mountain biking; walking

trails, 56, *See also* ara tarawhito

tramping, 13, 47, 52, 73, 88, 167

transmission lines, 52, 53, 61, 66, 75, 79, 139, 142, 144

Transpower, 52, 53, 61, 66, 75, 79

Treaty of Waitangi, 9, 15, 105, 182
partnership, 10, 16, 17, 18, 22–30

Treaty of Waitangi (Fisheries Claims) Settlement Act 1992, 26

tsunami, 110, 113

Tū Te Rakiwhānoa, 22

tuna/eel, 26, 28, 93, 101, 108, 120, 151–52

tussocklands, 46, 72, 73, 74, 79, 134, *See also* Korowai Torlesse Tussocklands

Twizel, 74, 79

University of Canterbury, 126, 129

Uruao, Te Waka, 105

utilities, 135, 139, 140, 142, 144, 147–48, 184

vehicles, 44, 65, 74, 75, 154, 160, 184
access, 13, 46, 51, 52, 54, 56, 62, 63, 64, 65, 66, 67, 70, 76, 79, 81, 89, 90, 94, 112, 114, 115, 120, 129, 134–44, 155
impacts of, 21, 38, 73, 94, 95, 97, 120, 127, 134
motorised, 65, 134–36, 177
over-snow, 135, 179, 182
user groups, 134, 135

visitor centres, 42, 43, 102, 103, 104
 visitor groups, 35, 158
 visitor management zones, 35, 44, 56, 132, 133, 135, 138, 141, 144, 148, 154, 155, 160
 visitors, 19, 35, 54, 103, 184
 conditions on, 29, 126, 128
 experience, 13, 18, 35, 36, 37, 44, 48, 51, 53, 68, 74, 79, 88, 112, 133, 139, 140
 impacts of, 80, 85, 118
 impacts on, 52, 65, 66, 78, 97, 145, 146, 157, 158
 informing, 33, 51, 52, 79, 80, 83, 103, 129, 133
 international, 13, 18, 76, 127, 184
 number of, 36, 37, 46, 54, 65, 66, 67, 77, 80, 83, 102, 106, 110, 113, 122, 127
 volunteers, 37, 38, 46, 59, 74, 78, 102, 103, 110, 113, 114, 162
 groups, 66, 68
 Von Haast, Julius, 22
 vulnerability, 21, 30, 46, 54, 73, 78, 86, 111, 120, 126, 127, 136, 159, 162, *See also*
 wildlife
 wāhi tapu, 20, 23, 27, 30, 45, 105, 117, 160, 183, 184
 Waiau Toa/Clarence River, 60, 61, 62, 63, 65, 67, 92
 Waiau Uwha River, 21, 60, 63, 64, 65, 66, 67, 93
 Waihao River/Wainono Lagoon, 124
 community group, 125
 Waihora Ellesmere Trust, 125, 129
 Waimakariri Basin, 52, 72, 76–78, 79–80
 Waimakariri District Council, 69
 Waimakariri Ecological and Landscape Restoration Alliance, 52, 76, 82
 Waimakariri Ecological and Recreation Committee, 52, 82
 Waimakariri River, 78, 92, 93, 96, 98, 119
 Regional Park, 125
 Wainono Lagoon, 18, 119, 120, 129, 131, *See also* Waihao River/Wainono Lagoon
 Wairewa Rūnanga, 108, 114
 Waitaha people, 22, 85, 105
 Waitaki River, 47, 93, 96, 120
 Power Scheme, 20, 74, 93, 98, 99
 walking, 20, 51, 52, 65, 66, 67, 73, 75, 88, 89, 106, 109, 111, 114, 127, 167
 access, 51, 89, 107, 110, 111, 112
 tracks, 77, 106, 109, 111, 114
 Walking Access Act 2008, 9
 wallabies, 47, 51, 58, 59
 Washdyke Lagoon (Waitarakao), 119, 120, 124
 waste disposal, 93, 102, 115
 water, 21, 86, 93, 147
 abstraction, 21, 79, 93, 95, 96
 clarity, 121, 122, 123
 conservation orders, 75, 93, 96, 98, 99, 125, 130
 quality, 18, 31, 73, 78, 79, 80, 96, 108
 reservoirs, 88, 90
 storage, 20, 47, 63, 67, 69, 71, 96, 97
 watercraft, 73, 77, 80, 81, 110, 115, 116, 122, 127, 129
 access, 66, 77, 79, 107, 110, 112, 113, 120, 122, 123, 138
 commercial, 115, 116, 123, 126, 127, 128, 130
 motorised, 56, 77
 waterways, 18, 20, 24, 31, 102
 whole-catchment, 108, 111, 112, 114
 Weka Pass, 18, 33, 85, 89, 91
 West Coast (Tai Poutini), 19, 22, 42, 45, 60, 68, 69, 73, 76
 wetlands, 18, 20, 30, 59, 67, 69, 71, 72, 75, 79, 93, 95, 97, 100, 101, 102, 126–27, 184, *See also* restoration
 coastal, 119–21, 124, 128–29
 protecting, 66, 79, 96
 threats to, 46, 95, 159
 Wetlands of International Importance, 97, 98, 99, 100, 102, 125, 129, 130, 134, 184
 Whakamaru/Swimmers Beach, 110, 115, 116
 whakapapa, 23, 45, 93, 105
 whales, 18, 21, 117, 118, 123, 124, 126
 wharves, 106, 112, 115, 116
 departmental, 132, 163
 whenua tūpuna, 20, 23, 26, 34, 93, 105, 185
 white pointer (great white) shark/mangō taniwha, 117, 118, 121, 122, 124
 whitebait, 102, 120
 white-water activities, 60, 65, 74
 Wigley, Harry, 22
 Wilberforce River, 45, 46, 47, 51, 52, 54, 59
 Wild Animal Control Act 1977, 9, 47, 61, 68, 156–59, 165, 168, 169, 179, 185
 wild animals, 20, 46, 47, 185
 control of, 20, 32, 46, 47, 48, 54, 58, 59, 62, 66, 67, 68, 71, 90, 141, 144, 156–58
 control plans, 32, 47, 51, 61, 87, 157, 158, 179
 wilderness, 35, 47, 53
 areas, 139
 wilding trees, 32, 33, 46, 62, 63, 72, 73, 76, 78, 82, 86
 wildlife, 107, 126, 185
 protecting, 73, 103, 112, 114, 119, 145, 146, 159

threats to, 94, 139, 145, 159
vulnerable, 74, 107, 112, 114, 128
Wildlife Act 1953, 9, 25, 104, 124, 158, 168, 169, 179, 185
Wildside Project, 107, 111
Willowbank Wildlife Reserve, 101
World Heritage Areas, 42, 97, 98, 99, 100, 185
World War II, 105, 109
wrybill/ngutu pare, 21, 93, 120
youth, 18, 22, 38, 39, 52, 53, 101, 104

