

Date: Wednesday 2 September 2026
Time: 9:00 a.m.
Venue: Council Chamber, Dunedin Public Art Gallery, the Octagon, Dunedin

Council
OPEN ATTACHMENTS
UNDER SEPARATE COVER

ITEM	TABLE OF CONTENTS	PAGE
12	Notice of Intent - Draft Hereweka Harbour Cone Management Plan	
A	Draft Hereweka Harbour Cone Management Plan 2026	2
B	Hereweka Harbour Cone Statement of Proposal and Submission Form	84
C	Memorandum of Understanding - Hereweka Harbour Cone Management Trust Board - 28 July 2015	90
D	Hereweka / Harbour Cone Management Plan 2012	124

Draft Hereweka Harbour Cone Management Plan 2026

Introduction	4
1.1 Preamble	4
1.2 Vision	8
1.3 Legal Descriptions	8
1.4 Hereweka Harbour Cone — Key Historical Timeline	10
1.5 Management Zones	12
2.0 Purpose of the Management Plan	14
2.1 Development of the Management Plan	14
2.2 Aims, Objectives and Policies	15
2.3 Statutory Review Requirements	15
2.4 Consideration of Other Documents	16
3.0 Hereweka Harbour Cone Property Values	20
3.1 Kāi Tahu Values	20
3.2 Historic Values	21
3.3 Landscape and Land Use Values	22
3.4 Ecological Values	22
3.5 Recreation and Public Appreciation Values	23
4.0 Hereweka Harbour Cone Management Zones	25
4.1 Bacon Street Zone	25
4.2 Smiths Creek Zone	26
4.3 Hereweka Harbour Cone Zone	28
4.4 Peggys Hill Zone	29
4.5 Stewarts Creek Zone	30
5.0 Legal Protection, Governance and Administration	32
5.1 Legal Protection and Reserve Status	32
5.2 Disposal and Boundary Adjustments	33
5.3 Governance and Management Arrangements	33
5.4 Resourcing and Funding	34
5.5 Plan Governance and Implementation	34
6.0 Landscape and Land Use	37
6.1 Visual Landscape and Land Use	37
6.2 Land Use and Catchment Functions	39
6.3 Sustainable Farm Management	41
6.4 Local Food Economies	44
6.5 Forest Woodlot Management	45
7.0 Ecology	48

7.1 Ecology Management Zones and Priorities	48
7.2 Existing Indigenous Vegetation and Habitats	49
7.3 Habitat Restoration.....	50
7.4 Management of Rare and Threatened Species	53
7.5 Weed and Pest Plant Management	54
7.6 Pest Animal Control	57
8.0 Heritage and Cultural Landscape	59
8.1 Recognition of Mana Whenua Values.....	59
8.2 Historic Sites, Structures, and Cultural Landscape	61
9.0 Visitor and Commercial Use.....	64
9.1 Recreation Use.....	64
9.2 Visitor Use	65
9.3 Visitor Infrastructure.....	67
9.4 Signage and Interpretation	69
9.5 Authorisations, Commercial and Exclusive Use, Special Events and Occupation Agreements ..	70
Appendix 1. Land Use Actions and Management.....	73
Appendix 2. 2GP Planning Map.....	74
Appendix 3. Existing Vegetation Map.....	75
Appendix 4. Heritage Sites Map.....	76
Appendix 5. Recreation Routes and Access Map.....	77
Appendix 6. Discussion: The Potential for Reintroduction of Buff Weka (Gallirallus australis)	78
Appendix 7. Statutory Acknowledgement	79
Appendix 8. Bibliography	82

Introduction

1.1 Preamble

Landscape Setting and Physical Context

The 328-hectare Hereweka Harbour Cone property, located at 1299 Highcliff Road, Otago Peninsula, occupies a central and elevated position on the Otago Peninsula, straddling the main ridgeline behind Broad Bay and Portobello. The property encompasses the summit of Peggys Hill—the Peninsula’s second-highest point—and Harbour Cone, one of the region’s most distinctive and recognisable volcanic landforms. From these high points, expansive views are afforded across Otago Harbour to the west and Hoopers Inlet and the Pacific Ocean to the east, reinforcing the prominence of Hereweka as both a visual landmark and a place of long-standing cultural significance.

The landscape is organised around two principal catchments: Smiths Creek draining westward toward Otago Harbour, and Stewarts Creek flowing eastward toward Hoopers Inlet. These catchments have influenced both natural processes and historic land use, shaping the location of farmsteads, tracks, quarrying activity, and areas of shelter and cultivation.

Highcliff Road forms the primary access route and public viewing corridor through the property, tracing the Peninsula ridgeline and providing panoramic vistas across the surrounding landscape. Additional access points occur where the property adjoins Camp Road, Sandymount Road, and Bacon Street. The Hereweka Harbour Cone block encircles three sides of Larnach Castle and adjoins land administered by the Otago Peninsula Trust on Sandymount Road, including the site of the historic lime kilns. This spatial relationship underscores the close historical and functional connection between Hereweka, Larnach’s estate, and surrounding rural settlements.

Geological Foundations and Landscape Evolution

The physical character of Hereweka Harbour Cone reflects the broader geological history of the Otago Peninsula, which is dominated by volcanic formations associated with the Dunedin Volcanic Group. Peggys Hill and Harbour Cone are formed from resistant basaltic lava flows that have weathered more slowly than surrounding materials, resulting in their pronounced relief and distinctive profiles.

Much of the surrounding land is underlain by volcanic ash and rubble that readily weathers into clay-rich colluvium. This material, together with loess (wind-blown silt) mantling much of the Peninsula, has contributed to widespread slope instability in the form of slips, slumps, and earthflows. A fault scarp defining the eastern face of Peggys Hill further emphasises the dynamic geological processes at work in the area. At the southern end of the property, a narrow band of sedimentary rock, including limestone, is exposed near Stewarts Creek—an outcrop that underpinned the development of local lime quarrying and burning operations.

These geological processes have produced the steep, rugged topography that characterises Hereweka Harbour Cone. They have also shaped patterns of human occupation, influencing where buildings could be safely constructed, where roads and tracks could be formed, and where quarrying and farming were viable.

Mana whenua connection and hītori (history)

Hereweka forms part of the wider cultural landscape of the Otago Peninsula (also known in recent times as Muaupoko), which has been occupied and utilised by Waitaha, Kāti Mamoe, and Kāi Tahu for centuries prior to European arrival. Permanent and seasonal settlements were concentrated around the Peninsula's bays and inlets, where kai moana and other resources were abundant. The interior ridgelines and hills, including Hereweka, were integral components of this wider network of travel, mahika kai sites and cultural association.

The name Hereweka is commonly interpreted as meaning "catch weka" or "swift weka," referencing the significance of the weka as a food source and situating the place firmly within a Māori cultural framework. Hereweka also features in Kāi Tahu oral traditions, including the Tarewai narrative, in which the landform is associated with refuge, survival, and endurance following inter-iwi conflict in the late eighteenth century.

Although no pre-European archaeological sites have been formally recorded within the Hereweka Harbour Cone property itself, this absence does not diminish its cultural significance. Māori use of the landscape did not depend solely on fixed sites; rather, the land functioned as part of an interconnected cultural system extending across the Peninsula. The potential for undiscovered archaeological material remains, and the area continues to hold cultural meaning for mana whenua as part of the wider Otago Peninsula landscape.

European Settlement and Agricultural Transformation

European engagement with the Otago Peninsula intensified in the early nineteenth century following sealing and whaling activities, with the first permanent European settlement established at Weller's Rock in 1831. In 1844, the Otago Association purchased the Otago Block from Kāi Tahu, initiating systematic colonial settlement based on agricultural development and structured land tenure.

The Hereweka Harbour Cone area was surveyed for individual land titles in 1863, and by the early 1870s most of the land had been taken up. Early farms were typically small, reflecting the steep terrain and the Wakefield ideal of a closely settled, independent farming community. Clearing the dense native forest that once covered the Peninsula was one of the most demanding tasks faced by settlers, with timber from tōtara, rimu, and mataī used for buildings, fencing, and fuel.

As farming progressed, a distinctive rural landscape emerged. Small dairy units were established across the slopes, each with a modest dwelling, cow byre, barns, and ancillary structures. Dry-stone walls were constructed from stones cleared from paddocks, serving as durable boundary markers and enduring symbols of agricultural "improvement." Shelter plantings—most notably macrocarpa—were established around farmsteads and along roads to mitigate exposure to wind and weather.

Industry, Infrastructure, and Community Life

Agriculture at Hereweka Harbour Cone was closely integrated with local industry and infrastructure. Dairy farming formed the economic backbone of the area, supported by cooperative enterprises such as the Harbour Cone Cheese Factory (established in 1877) and later creameries that linked Peninsula farmers to Dunedin and overseas markets.

Lime quarrying and lime-burning represented another important industry, exploiting the limestone outcrops near Stewarts Creek. The remains of lime kilns, tramways, and processing areas provide tangible evidence of this activity and its role in supplying building materials and agricultural lime to the wider region.

The construction of Highcliff Road in the late 1860s was pivotal in connecting the Harbour Cone farms to Portobello, Broad Bay, and Dunedin. Historic farm tracks, bridle paths, and internal roads remain legible across the property, illustrating how people and goods moved through what was once a densely settled rural community.

Prominent individuals, including William Larnach and Walter Riddell, exerted a strong influence on the area's development. Larnach's Camp Estate dominated landholding patterns and employment opportunities, while Riddell played a key role in the establishment of Peninsula dairy processing and associated infrastructure. Their farmsteads and associated features remain important reference points within the historic landscape.

Ecological Change and Contemporary Landscape Character

Historically, Hereweka Harbour Cone would have supported extensive native forest cover, much of which was progressively cleared during the nineteenth century to make way for farming. Today, only a few remnants of original forest remain, alongside areas of largely regenerating vegetation, interspersed with pasture and exotic plantings. Several significant native bush remnants persist and have been identified as Areas of Significant Biodiversity Value under the Dunedin City District Plan (2GP).

Grazed pasture remains the dominant land cover, reflecting a transition from early dairy farming to predominantly sheep farming. While exotic scrub occurs in places, the property has generally been well managed and remains relatively free of major pest plant infestations such as gorse and broom. The evolving ecological restoration programme sits alongside the historic farming landscape, adding another layer to the site's complexity and value.

Heritage Significance and Public Experience

One of the most notable aspects of Hereweka Harbour Cone is the strength and clarity of its historic cultural landscape. Derelict dwellings, dry-stone walls, farm tracks, paddock boundaries, and shelter plantings are widespread and, collectively, remarkably intact. The Archaeological Assessment Scoping Report describes the area as "a pristine archaeological landscape of historic occupation," offering rare insight into nineteenth- and early-twentieth-century settlement patterns on the Otago Peninsula. The property has been identified as a place of national significance as a relict landscape¹, reflecting the survival of historic landscape patterns and features.

The public is drawn to Hereweka Harbour Cone because it provides an unusual opportunity to explore the interior of the Peninsula in a setting where public access is actively supported and encouraged. Visitors can experience dramatic volcanic landforms, evolving ecological restoration, and a dense concentration of historic features within a working rural landscape.

¹ Middleton, A. (2012)

A network of tracks support walking, cycling, and other low-impact recreation. The property's proximity to urban Dunedin enhances accessibility, and for residents of Broad Bay and Portobello it sits directly on their doorstep as a valued community asset and an iconic part of the local landscape.

Together, these elements make Hereweka Harbour Cone a place of learning, reflection, and recreation—where natural processes, cultural memory, and historic land use remain visibly and meaningfully intertwined.

The Hereweka Harbour Cone property provides a unique and richly layered setting that enhances people's enjoyment, awareness, and understanding of environmental stewardship, conservation, sustainability, and heritage. It offers exceptional opportunities for community learning and for exploring the role of community-based land use in shaping the social, cultural, and environmental wellbeing of citizens.

The significance of Hereweka Harbour Cone arises from the following core values:

- The history, cultural significance, and enduring connection for mana whenua.
- The intactness and integrity of the archaeological landscape.
- The outstanding natural landscape and its distinctive landforms.
- The presence of areas with significant conservation value
- The diverse recreational opportunities and ease of access to open space for Dunedin residents.
- The potential of the property as a place for community learning and as an exemplar of sustainable land management practice.

Given the breadth and importance of these values, it is essential that the management of Hereweka Harbour Cone protects its natural, cultural, and heritage qualities while enabling appropriate public use and appreciation.

1.2 Vision

The vision for the Hereweka Harbour Cone property is:

To maintain the working landscape while enhancing the ecological, recreational, cultural, and heritage values of the Hereweka Harbour Cone property.

This vision acknowledges the property's diverse and significant values and provides a clear direction and framework for the Hereweka Harbour Cone Management Plan, guiding the development of objectives, policies, and implementation actions.

1.3 Legal Descriptions

The Hereweka Harbour Cone property, located at 1299 Highcliff Road, Dunedin, comprises multiple land parcels held under the following Records of Title: OT268/197, OT124/180, OT124/181, OT156/197, OT268/188.

OT268/194, OT268/195, OT268/196, OT44/78,

OT170/139, OT14B/1180.

In addition, a Conservation Covenant (COV 10588903.1) is registered against the land contained in RT 824231, being Dunedin City Council recreation reserve land. This covenant forms part of the legal framework applying to the wider Hereweka Harbour Cone property.

Hereweka Harbour Cone – Land Parcels / Titles

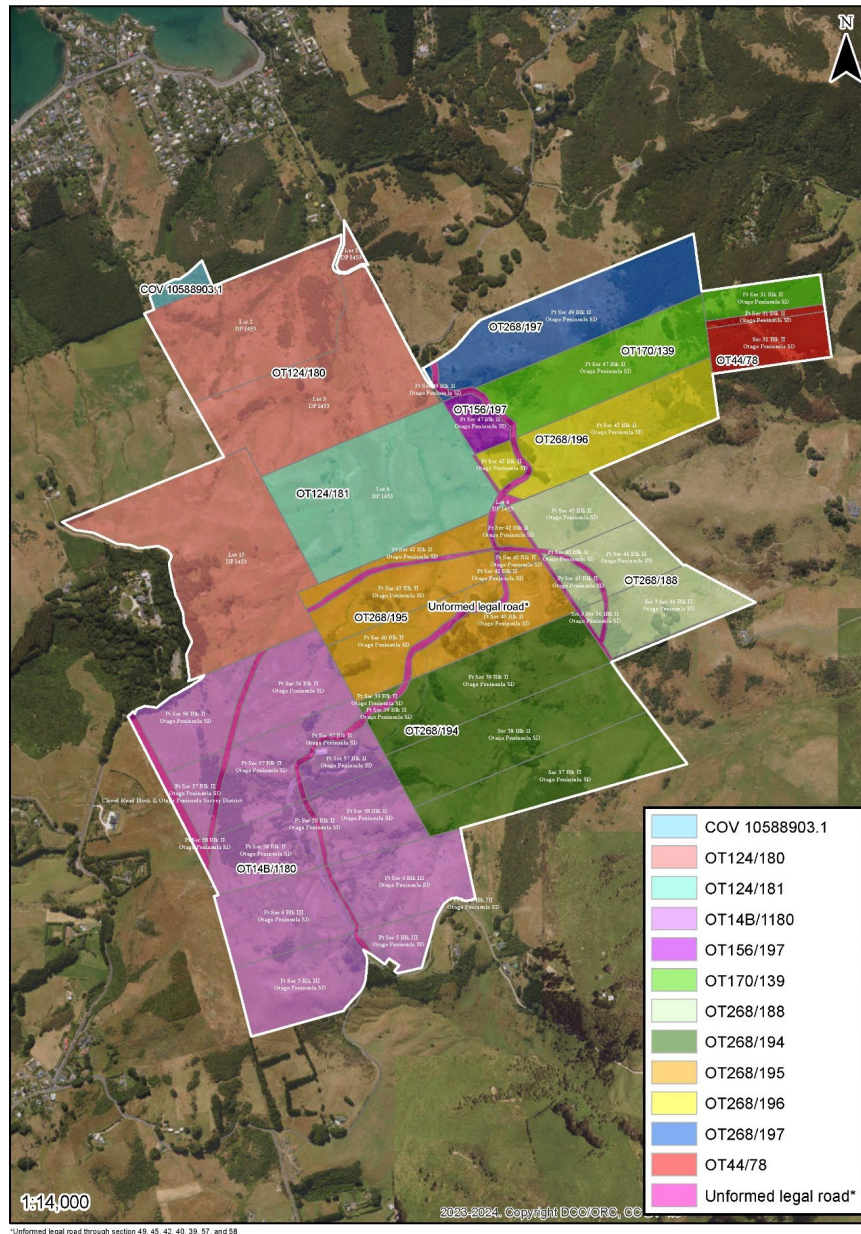


Figure 1. Hereweka Harbour Cone Land Parcels / Titles



1.4 Hereweka Harbour Cone — Key Historical Timeline

Pre-Colonial era (centuries before 1831)

- The earliest known inhabitants of Ōtepoti were Kāti Hāwea and Te Rapuwai, who settled Te Wai Pounamu following migration from Polynesia. Later migrations included Waitaha, Kāti Māmoe, Kāti Kuri, and Kāti Tūhaitara, whose descendants became known as Kāti Tahu during the seventeenth and eighteenth centuries.
- **1700:** Tarewai battles with Kāti Māmoe.
- **1795:** Kāti Tahu has its first contact with sealers and whalers around 1795.
- **Pre-1831:** Extensive use of Otago Peninsula by Waitaha, Kāti Māmoe and Kāti Tahu. Hereweka functions as a prominent mauka/landmark within Muaupoko and is part of the wider mahika kai landscape (coastal and inland seasonal use).

Early European contact and settlement context (1831–1862)

- **1831:** First permanent European settlement on the Otago Peninsula at the whalers' base at Weller's Rock.
- **1835:** Whaling and sealing stations begin to be established onshore under the authority of local rakatira.
- **1840:** Korako and Karetai sign the Treaty of Waitangi on Takiharuru (Pilots Beach) at Pukekura.
- **1844:** The Otago Association purchases the Otago Block (144,600 acres), establishing the framework for European settlement and land subdivision.

Survey, roading, and first farm blocks (1863–1876)

- **1863:** Harbour Cone area is surveyed, and individual properties defined.
- **1864:** Walter Riddell is recorded as the first to take up property around Harbour Cone.
- **1865:** Sandymount lime industry begins. Walter Riddell helps James McDonald erect the first Sandymount lime kiln.
- **1866:** Robert Roger purchases 116 acres (sections 56–58, Block 11, Portobello Survey District).
- At the time, Highcliff Road had not yet been formed, indicating early and relatively isolated farm development.
- **1868–1869:** Highcliff Road is formed through the block, materially improving access and enabling greater farm consolidation and market connection.
- **1872:** William Larnach purchases three sections.
- **1872:** Sandymount School established (a key social anchor for the valley and farming community).

Dairying expansion and rural industry (1877–1888)

- **1877:** William Leslie establishes a cooperative dairy factory on the slopes of Harbour Cone.
- **1879:** The factory reports that it produced 2.5 tons of cheddar cheese in 1879 (a significant marker of industrial rural activity in the valley).
- **1879:** Robert Roger advertises for pit sawyers to cut 10,000–12,000 feet of boards and scantlings ("near Sandy School, Peninsula").

- **1881:** The Harbour Cone cheese factory and three houses are destroyed by the October 1881 bushfire with extensive detail recorded in the Otago Daily Times.
- **1888:** After Larnach's death, the Camp Estate is surveyed for subdivision, marking a significant land tenure and development shift in the wider Harbour Cone landscape.

Mature farmstead period and built heritage (c. 1885–1905)

- **c. 1885:** Roger's byre is constructed.
- **1895:** Roger becomes a director of the Taieri and Peninsula Milk Supply Company, demonstrating integration into Peninsula dairy governance and supply systems.
- **1905:** Robert Roger dies suddenly while travelling to Dunedin (stroke or heart attack), reported in the Otago Daily Times.

20th century: Continuity, transport change, and lime industry decline (1906–1939)

- **1913:** A photograph shows the former Captain Leslie's house, with occupants identified (David and Ida Arnott family), illustrating continued settlement patterns and valley social networks.
- **1939:** Sandymount lime quarries and kilns are last used, marking the end of an important rural industrial phase.

Mid-20th century

- The Stewarts purchase Roger's farm and move from Stewarts Creek to live in Roger's house.
- Roger's house is noted as the only house on the block lived in until the 21st century, later leased by Akapatiki A Block.
- **2008:** Archaeologist Angela Middleton records the farmstead sites.

DCC ownership and formal conservation planning (2008–2024)

- **2008:** Dunedin City Council purchases the Hereweka Harbour Cone block. This is the key governance turning point from private farming block to public ownership and structured conservation management.
- **2009:** Peggys Hill Bush old growth forest is fenced to exclude grazing stock.
- **2010:** Stewarts Creek old growth forest is fenced to exclude grazing stock.
- **2012:** STOP (Save The Otago Peninsula) commences development of the Future Forest.
- **2019–2020:** Heritage Conservation Plan authors undertake systematic site visits to recorded sites, revising and updating Middleton (2008) records and adding additional sites.
- University of Otago archaeology work contributes to mapping and clearing sites, and specialist input informs stone structures and ruins.
- **2021:** Hereweka Harbour Cone Conservation Plan is completed, establishing the key heritage framework and chronology for the block.
- **2022:** Rutherford's Bush old growth forest is fenced to exclude grazing stock.
- **2025:** The Hereweka Track is established.

1.5 Management Zones

Given the size and complexity of the Hereweka Harbour Cone property, the effective protection and enhancement of its many values requires a structured and well-resourced approach. To support future operational management, the property has been divided into five management zones. These zones provide a practical framework for organising work, prioritising actions, and implementing tasks at a manageable scale.

The zones are not intended to operate in isolation. Rather, they form an integrated management system in which activities within individual zones support and reinforce outcomes across the wider property. By breaking down the landscape into clearly defined areas, staff and community partners can plan and deliver work more efficiently, ensuring that objectives are met progressively and coherently.

The basis for the five proposed management zones is illustrated in **Figure 2** below.

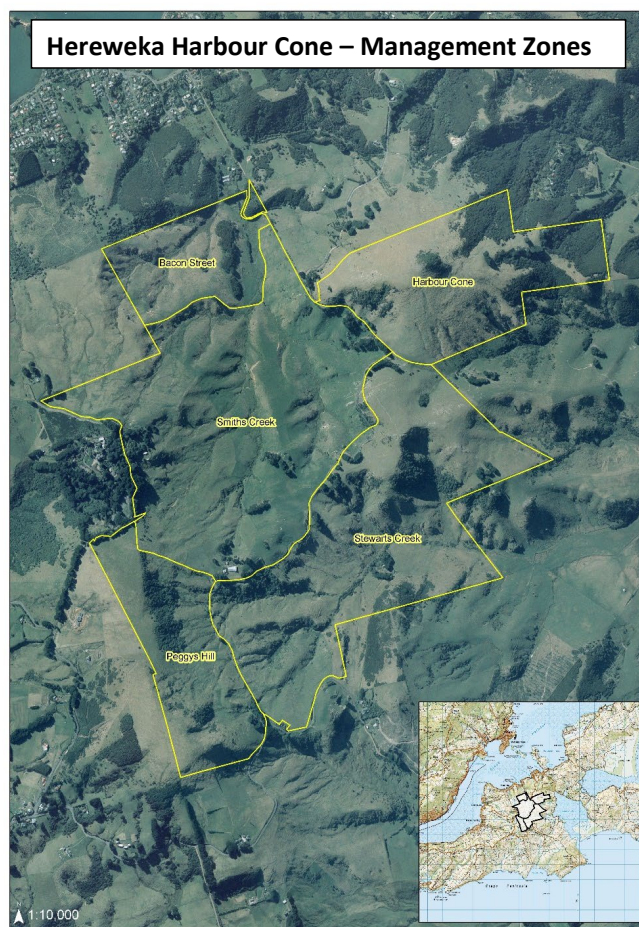


Figure 2. Hereweka Harbour Cone management zones

Short-term management actions and zone-specific implementation steps are outlined in the **Hereweka Harbour Cone Implementation Plan** (*implementation plan will be finalised alongside final plan*), which accompanies this Management Plan.

2.0 Purpose of the Management Plan

The whole-of-property Management Plan for the Hereweka Harbour Cone property establishes a coherent policy framework that strategically integrates the many objectives and expectations the Dunedin community holds for this landscape. It is intended as a guiding document for all partners and stakeholders involved in the property's use and care— including those responsible for day-to-day management, mana whenua partners, community groups, and organisations undertaking conservation, heritage, cultural, recreational, or educational projects.

Future decision-making will be directed by this Management Plan, ensuring that management activities, enhancement works, and public use are based on sound principles and remain aligned with the property's values and with the aims, objectives, and policies set out in this document.

The Management Plan provides clear guidance and direction on several key issues, including:

1. Ensuring the protection and perpetual visitor access, engagement, and enjoyment of the property and its values.
2. Minimising potential conflicts between the property's values and the various uses of the land.
3. Facilitating public access for a range of users and activities, while safeguarding high-value areas.
4. Supporting appropriate community involvement and stewardship.
5. Supporting engagement with mana whenua, incorporating relevant kōrero and cultural values, and giving regard to Te Taki Haruru in the management of the property.
6. Minimising built infrastructure and ensuring that any required structures are designed to protect and enhance the property's values.
7. Ensuring existing infrastructure is compatible with these values and remedying or mitigating adverse effects where necessary.
8. Ensuring any new infrastructure is consistent with long-term protection of landscape, natural, cultural, and heritage values.
9. Considering adaptive reuse of existing buildings where this contributes positively to the property and its values.

A key future priority is for Council to consider whether the land should be gazetted under the Reserves Act 1977 (the Act) and, if so, what reserve classification or combination of classifications would be most appropriate. Currently, only a small portion of the land is classified as reserve (see COV 10588903.1, page 9).

This Management Plan has been prepared to be broadly consistent with the purpose and principles of the Act, so that it can support any future transition to reserve status. Unless and until the land is gazetted and formally classified, it is not subject to the statutory requirements of the Act.

2.1 Development of the Management Plan

The development of the Management Plan has been undertaken to provide a clear, long-term framework for the management of the property, consistent with its landscape, ecological, cultural, heritage, recreational, and land-use values. The planning process has assisted in identifying

priorities, clarifying management intent, and resolving potential uncertainty or conflict between different uses, expectations, and stakeholder interests.

The initial 2012 Management Plan was developed through a comprehensive, community-centred process and prepared as if the land were a reserve administered under the Act, despite not being formally gazetted at that time. Community input shaped the plan through an open workshop and themed working groups addressing heritage, recreation, land use, and ecology, supported by specialist technical advice and iterative review by Dunedin City Council to ensure alignment with statutory obligations and operational considerations. Further public engagement and formal consultation under the Local Government Act 2002 informed the final plan adopted for the property in May 2012.

2.2 Aims, Objectives and Policies

The aims, objectives and policies in this Management Plan provide the core framework for managing the Hereweka Harbour Cone property. They have been developed in response to the property's identified cultural, heritage, ecological, landscape, recreational and working landscape values, as well as the adopted vision statement and relevant statutory and non-statutory guidance. Their purpose is to support an integrated management approach that safeguards the property's significant values over the long term, while allowing appropriate use, enhancement, restoration, recreation, farming, community involvement and public engagement.

The Management Plan recognises that Hereweka Harbour Cone is a single interconnected landscape, rather than a collection of separate management areas or issues. For that reason, the aims, objectives and policies are intended to be read and applied together. Decisions about activities, development, infrastructure, restoration, access, events or other management actions should consider how different values interact, what cumulative effects may arise, and whether the proposal is consistent with the overall direction of the Plan. This ensures that individual actions do not undermine the property's wider purpose, significance or long-term management outcomes.

The management aims describe the long-term outcomes sought for the property and provide a strategic basis for assessing future proposals. The objectives identify the actions and approaches needed to achieve those aims, including how values should be protected, enhanced and managed. The policies then translate those objectives into practical guidance for decision-making and day-to-day management. Together, the aims, objectives and policies provide a consistent, transparent and adaptive framework for Council, any authorised governing body, partners and the community to guide the stewardship of the Hereweka Harbour Cone property over time.

2.3 Statutory Review Requirements

This Management Plan has been prepared in accordance with section 41 of the Act, which requires administering bodies to prepare and maintain management plans for reserves and to keep those plans under continuous review.

Under the Act, a management plan must provide for the use and enjoyment, maintenance, protection, preservation, and overall control and management of the reserve in accordance with its classification and purpose.

The Act requires the management plan to be kept under continuous review and adapted as necessary to changing circumstances or increased knowledge. Circumstances that may prompt Council to consider a review or amendment include, but are not limited to:

1. Significant changes in reserve use, demand or visitor patterns
2. Changes in environmental, cultural or heritage values
3. Legislative or policy changes affecting reserve management
4. New information, such as ecological or archaeological assessments
5. Unforeseen management issues or opportunities

Where Council resolves to undertake a comprehensive review, it must follow the public notification and consultation procedures set out in the Act. Where a proposed change does not involve a comprehensive review, Council may determine whether public notification and consultation are appropriate, having regard to the nature and significance of the change.

2.4 Consideration of Other Documents

Statutory and Policy Context

Reserve management planning does not occur in isolation and must be undertaken within a broader statutory and policy framework. The preparation of this Management Plan has therefore been informed by a range of national, regional, and local planning documents and legislative requirements.

District Plan and Land-Use Planning Framework

The Resource Management Act 1991 (RMA) requires the Council to prepare a district plan under section 73. The purpose of district plans is to assist the Council in carrying out its functions under section 31, in order to achieve the Act's purpose of promoting the sustainable management of natural and physical resources.

The Dunedin City Second Generation District Plan (2GP) guides land use and development across the city. The Hereweka Harbour Cone property at 1299 Highcliff Road is zoned Rural under the 2GP and is located partly within the Hill Slopes Rural Zone and partly within the Peninsula Coast Rural Zone. The property is also subject to multiple landscape, natural environment, and cultural overlays.

The Hereweka Harbour Cone landform is identified in the 2GP as an Outstanding Natural Feature (ONF), and a large part of the wider property lies within the Otago Peninsula Outstanding Natural Landscape (ONL) overlay. The property's lower slopes are located within the Inner Peninsula Bays Significant Natural Landscape (SNL) overlay. These overlays include rules and assessment criteria intended to protect against inappropriate development, and to ensure the values of these areas are maintained or enhanced. Further information is provided in Section 10 and Appendix A3 (Landscape Values) of the 2GP.

The property contains several areas mapped as Areas of Significant Biodiversity Value (ASBV). These areas are identified as C123 – Harbour Cone Parks land and are managed through the 2GP's indigenous biodiversity provisions. Further information is provided in Section 10 and Appendix A1.2 of the 2GP.

Parts of the property are also covered by two Wāhi Tupuna Mapped Areas, consisting of Pukemata (Harbour Cone) and the Upper Slopes and Peaks of the Otago Peninsula. Wāhi tupuna are landscapes and sites that embody the ancestral, spiritual and religious traditions of all the

generations prior to European settlement. Certain activities in Wāhi Tupuna mapped areas are managed to ensure that the identified values of these areas are protected. Further information is provided in Section 14 (Mana whenua) and Appendix A4 of the 2GP. As the property is within a Wāhi Tupuna Mapped Area, mana whenua engagement is essential when plans or management processes affecting Hereweka Harbour Cone are developed or amended.

Hereweka Harbour Cone is also covered by the 2GP archaeological alert layer, which identifies places with a high likelihood of containing archaeological remains.

A small number of watercourses on the property are mapped in the 2GP as Esplanade Strips, which are a mechanism used to protect riparian margins adjacent to certain waterways (refer to Section 10 of the 2GP).

A map showing Hereweka Harbour Cone 2GP zones and features is included in **Appendix 2**.

Reserves Management Planning Framework

The Dunedin City Council Reserves Management Plan – General Policies (2025) has been used to inform the development of this plan and applies as the default policy framework for matters not explicitly addressed within the Hereweka Harbour Cone Management Plan. The General Policies provide city-wide direction for the day-to-day administration, use, development, and protection of Council-managed parks and reserves, including matters such as access, structures, commercial activities, leases, licences, and community use.

Where specific provisions are included in this Management Plan, they take precedence over the General Policies for the Hereweka Harbour Cone property.

Te Taki Haruru – DCC’s Māori Strategic Framework 2025

Te Taki Haruru – DCC’s Māori Strategic Framework was adopted to guide how the Dunedin City Council engages with mana whenua and Māori communities and embeds mātauraka Māori and intergenerational wellbeing into Council planning, decision-making, and implementation. The framework was created using the principles and values of mana whenua and mātauraka Māori in Ōtepoti Dunedin. At its core, the framework calls for strengthened connections between people, place, and environment and sets out principles and values to support culturally grounded outcomes across civic strategies and policies. Reading the Hereweka Harbour Cone Management Plan alongside Te Taki Haruru ensures that management actions for the mauka — including cultural interpretation, environmental restoration, visitor engagement, and governance processes — are aligned with Council’s commitments to meaningful partnership with mana whenua, recognition of takata whenua values, and the promotion of Māori wellbeing and identity within Ōtepoti Dunedin. The Hereweka Harbour Cone Management Plan applies across all four pou (pillars) of Te Taki Haruru - Autūroa, Auora, Autikaka, and Autakata – with particular alignment to the environment, cultural, and social key directions of those pou, and the opportunity to align with some of the economic key directions.

Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020

Provides the national policy framework for protecting and restoring indigenous biodiversity and is directly relevant to the management of Hereweka Harbour Cone. The Strategy sets a long-term



vision of thriving indigenous ecosystems, strengthened ecological resilience, and active partnership with takata whenua, with priorities including landscape-scale restoration, predator control, ecosystem connectivity, and community stewardship. Its emphasis on mātauranga Māori, integrated management, and adaptive practice aligns closely with Hereweka Harbour Cone's objectives for ecological restoration, pest management, and cultural recognition. Importantly, Te Mana o te Taiao is supported by a national monitoring and reporting framework that tracks biodiversity outcomes and system performance over time. This monitoring focus reinforces the need for measurable indicators, baseline data, and ongoing evaluation within the Management Plan to ensure restoration actions are evidence-based and contribute to broader national biodiversity goals.

Kāi Tahu statutory acknowledgements and cultural associations

The Ngāi Tahu Claims Settlement Act 1998 contains statutory acknowledgements and other mechanisms that formally recognise Ngāi Tahu cultural, spiritual, historic and traditional associations with specified areas.

Schedule 103 of the Ngāi Tahu Claims Settlement Act records the statutory acknowledgement for Te Tai o Arai Te Uru—the Otago Coastal Marine Area. Although the statutory area does not include the Hereweka Harbour Cone property itself, the acknowledgement provides relevant cultural and environmental context, particularly where activities on the property may affect downstream or coastal environments.

A ki uta ki tai (from the mountain to the sea) approach recognises the interconnectedness of the land and sea and supports consideration of how the management and use of Hereweka Harbour Cone may affect the wider environment, including the surrounding coastal area.

The statutory acknowledgement has specific legal effects under the Ngāi Tahu Claims Settlement Act. These include requirements for consent authorities and certain other decision-makers to have regard to the acknowledgement in the circumstances specified in that Act. It does not impose a general requirement to have regard to the acknowledgement in every Council decision or when preparing this Management Plan.

The statutory acknowledgement is identified in **Appendix 7**. Together with engagement with mana whenua and other relevant information concerning Kāi Tahu values and associations, it has informed the management approach adopted for Hereweka Harbour Cone.

Zero Carbon Plan

Dunedin City Council's Zero Carbon Plan is the Council's commitment to significantly reduce greenhouse gas emissions from its own operations and help lead the wider city transition to a low-emissions future. The programme focuses on energy efficiency, renewable energy, sustainable transport, waste reduction, and increasing natural carbon sequestration through land management and restoration. In the context of Hereweka Harbour Cone, the plan is relevant through opportunities for indigenous revegetation, improved catchment health, erosion control, biodiversity restoration, and land management practices that can contribute to long-term carbon storage while protecting the property's outstanding landscape and ecological values.

Archaeological and Heritage Protection

All archaeological sites in New Zealand are protected under the Heritage New Zealand Pouhere Taonga Act 2014, regardless of whether they are recorded or scheduled in a district plan. An archaeological site is defined as any place associated with pre-1900 human activity that may be investigated through archaeological methods.

Within the Hereweka Harbour Cone property, more than forty historic archaeological sites and structures have been identified and recorded in the New Zealand Archaeological Association Site Recording Scheme, based on surveys and assessments undertaken by Walton (1999) and Middleton (2008). These sites include farmsteads, dry-stone walls, historic tracks, lime-burning infrastructure, and associated features. While many of these sites are not individually scheduled in the District Plan, they are nevertheless protected under national legislation, and any modification or disturbance requires an archaeological authority from Heritage New Zealand Pouhere Taonga.

Non-Statutory Information Sources

In addition to statutory documents, this Management Plan has been informed by a range of non-statutory reports, technical assessments, and historical studies. These sources are referenced in the bibliography and provide important contextual, ecological, archaeological, and historical information to support informed and integrated management of the Hereweka Harbour Cone property.

3.0 Hereweka Harbour Cone Property Values

3.1 Kāi Tahu Values

Hereweka Harbour Cone is a culturally significant mauka within the Otago Peninsula and forms part of the ancestral cultural landscape of Kāi Tahu, with Te Rūnanga o Ōtākou holding mana whenua and kaitiakitaka in this area. Kāi Tahu have a long-standing association with Otago Peninsula and its prominent landforms through customary use, oral tradition, and whakapapa, reflecting an enduring relationship between people, land, and sea.

Traditionally, permanent Kāi Tahu settlements were concentrated (but not solely) around the coast and harbours of the Peninsula, reflecting reliance on the marine environment for transport and access to abundant mahika kai resources. Numerous mahika kai sites were distributed across the Peninsula, enabling seasonal movement throughout the rohe to gather food and materials and to support toolmaking and trade. This practice of seasonal mobility was central to Kāi Tahu lifeways and to the sustainable use of resources across the wider cultural landscape.

The tidal bays and estuaries of the Otago Peninsula and Otakou Awa (Otago Harbour) provided rich food resources, including tuaki (cockle), pātiki (flounder), and pāteke (duck). Other species harvested included hoka (red cod) and kōkiri / puamorua (leather jacket). Marine mammals were also important seasonal resources, with pakake (sea lion) being sought in accordance with customary practice. These resources supported both permanent settlements and temporary camps across the Peninsula and reinforced the close relationship between land-based and marine environments.

The name Hereweka, commonly translated as “catch weka” or “swift weka,” reflects the importance of the weka as a customary food resource and reinforces the cultural association between the landform and food-gathering practices. Prior to widespread clearance, the slopes of the Peninsula, including Hereweka, were cloaked in native forest and scrub that supported birdlife and other resources. Māori land-use practices shaped these environments while maintaining their productivity, with later European land-use change resulting in significant alteration of the cultural landscape.

Hereweka also features in Kāi Tahu oral tradition, notably in accounts associated of Ōtākou tupuna Tarewai. According to tradition recorded by Te Rūnanga o Ōtākou and in published sources, Tarewai escaped captivity following conflict with Kāti Māmoe in the late eighteenth century and sought refuge in the dense bush of the Otago Peninsula. Hereweka is identified as the mauka where Tarewai hid and recovered. This narrative strengthens the cultural and historical significance of Hereweka as a place of refuge, endurance, and connection to the whenua through tipuna.

While no Māori archaeological sites have been formally recorded within the Hereweka Harbour Cone property itself, numerous archaeological sites are recorded elsewhere on the Otago Peninsula in proximity to Hereweka, including at Little Papanui, Puketuroto (Hoopers Inlet), Makahoe (Papanui Inlet and Beach), Pīpikāretu, Pukekura (Taiaroa Head), and Tarewai Point. These sites have yielded material evidence of long-term Māori occupation and resource use, including moa, seal, bird, and fish remains. Coastal erosion continues to expose additional archaeological material in some areas of the Peninsula, highlighting the dynamic and evolving nature of the archaeological record.

The absence of recorded archaeological sites within the Hereweka property does not diminish its cultural significance. Māori cultural landscapes were understood and used as interconnected systems, rather than as isolated sites. Cultural values are not limited to locations where physical evidence has been recorded, and landscapes associated with pūrākau, customary use, and

prominent natural features may retain cultural sensitivity regardless of the presence or absence of identified archaeological remains.

As a prominent mauka overlooking Ōtākou Awa, Hereweka holds cultural significance beyond its historical use as a resource area. Within Kāi Tahu worldview, mauka are understood as ancestral presences that contribute to identity, orientation, and a sense of place within the wider landscape. Hereweka continues to hold cultural value for Kāi Tahu today as part of an enduring cultural landscape, contributing to contemporary expressions of identity, whakapapa, and kaitiakitaka.

3.2 Historic Values

The post-colonial historic value of the Hereweka Harbour Cone property lies in its largely intact archaeological landscape, which is representative of nineteenth- and early twentieth-century settlement patterns on the Otago Peninsula. It has been noted as a relict landscape of national importance. This landscape reflects both the small ten-acre dairy farms that once dominated the area and the larger estate developed by William Larnach.

Following the 1844 Otago-acquisition from Kai Tahu, the Hereweka Harbour Cone area was subdivided into land titles in 1863. Many of the dry-stone walls present on the property were constructed along these original survey boundaries and remain clearly legible today.

At the time of subdivision, the land was heavily forested. Early European settlers undertook extensive forest clearance to establish pasture for farming. Settlement patterns were characterised by small family-run dairy holdings operating within a largely subsistence-based economy. Farmsteads typically included a dwelling, dairy, cow byre for overwintering stock, and supporting gardens. Households commonly maintained a small number of cows, poultry, and pigs, with surplus produce occasionally sold.

The opening of the Sandymount creamery in 1892 marked a significant shift in dairy operations, enabling farmers to deliver milk for centralised processing in Dunedin. Daily travel to the creamery became a focal point of community interaction and a defining aspect of daily life, despite the time and effort required to transport milk over challenging terrain.

At its peak, the Sandymount creamery served approximately 30 dairy farms. Over time, dairy farming declined, due to the unsuitability of dairy farming on this land, and was progressively replaced by sheep farming, with only a small number of dairy operations remaining by the early twentieth century.

The upper reaches of Sandymount Road, within the Hereweka Harbour Cone property boundary, formed the core of the Harbour Cone community's infrastructure and industrial activity. Beyond the property boundary, key community facilities included the Sandymount School, limestone kilns, and the Sandymount creamery. Within the property itself were the Sandymount post office and a lime crushing plant, both of which played important roles in community life.

William Larnach began acquiring land on the Peninsula in 1870 and by the mid-1880s had consolidated holdings into what became known as the Camp Estate. Within the Hereweka Harbour Cone property lies Larnach's "Model Farm," constructed as an exemplar of contemporary dairy farming. Accessed through a grand arched entranceway, the farm complex included a byre, stable, barn, dairy, and the farm manager's house, forming the operational heart of Larnach's estate.



Larnach is also likely to have constructed, or commissioned the construction of, a number of the stone boundary walls on the property and was an early adopter of wire fencing. Following his death in 1898, the Camp Estate was progressively subdivided and sold to other landowners.

3.3 Landscape and Land Use Values

The elevated position of the Hereweka Harbour Cone property, together with its role as a backdrop to many surrounding settlements and coastal areas, contributes significantly to the character, legibility, and sense of place of the wider Otago Peninsula landscape. The distinctive conical form of Hereweka Harbour Cone is a prominent landmark and landform of high significance. It is widely recognised as an iconic element of Dunedin's landscape and features prominently in artworks and visual representations of the Peninsula.

The largely uniform pasture cover that characterises the property allows the underlying landform to be clearly expressed. Rocky outcrops, remnant tree stumps from earlier forest clearance, and the contours shaped by volcanism and erosion remain readily visible. This clarity enables the geological history of the landscape to be read directly from the land itself. Remnant native bush areas, generally confined to the steepest or wettest slopes unsuitable for grazing, further reinforce landform patterns and contribute to the perceived naturalness of the landscape.

The history of small-scale dairy farming is similarly legible. The continuity of pasture cover highlights historic shelter plantings, dry-stone walls, farm tracks, and building ruins, which together form a coherent and highly readable cultural landscape.

The continuation of pastoral farming plays a key role in maintaining the open character and large-scale patterns of the landscape. Appropriate pastoral use is therefore important not only for preserving landscape character, but also for supporting a broader range of ecosystem services and environmental outcomes.

One of the most significant values of the Hereweka Harbour Cone property is its potential to demonstrate a multi-functional approach to land use. This model seeks to deliver a range of interrelated benefits, including food production, landscape character, clean water, flood mitigation, water management, wildlife habitat, protection of cultural and heritage features, and strengthened relationships with local communities.

As a community-owned asset, the property provides a valuable opportunity to explore how land use can contribute to social and cultural wellbeing. In an increasingly carbon-constrained world, priorities such as health, access to nature, open space, local recreation, and local food production have increasing relevance alongside, and not in opposition to, traditional land uses. Under a multi-functional framework, these outcomes are mutually reinforcing and together form a resilient and integrated landscape.

The property also provides an important setting for increasing public awareness and understanding of environmental, conservation, sustainability, and heritage issues. Community-led initiatives that enhance these values should be encouraged where they are consistent with the purpose and objectives of this Management Plan and deliver tangible benefits to the local community.

3.4 Ecological Values

The Hereweka Harbour Cone property contains five areas of indigenous forest that have been assessed as ecologically significant (Wildland Consultants, 2008a–e). Two of these areas are located

on Harbour Cone, two within the upper reaches of Stewarts Creek, and one on the northeast face of Peggys Hill. Additional areas of kānuka treeland and forest occur in the northern part of the property, adjoining more extensive indigenous forest on neighbouring land (refer **Appendix 3**). Smaller patches of broadleaved forest and shrubland are also scattered across the property.

The property supports a range of indigenous species, including several that are locally important or nationally classified as At Risk. Notably, the site contains moist forest habitat that is uncommon on the Otago Peninsula and supports a high diversity of indigenous fern species.

The indigenous forest remnants provide important food and habitat resources for native bird species and form part of a wider network of forest fragments across this part of the Peninsula. Their proximity to larger forest areas on adjoining land, including Dicksons Hill and the northern and eastern flanks of Hereweka / Harbour Cone, facilitates the movement of indigenous flora and fauna between habitats and enhances ecological resilience.

The lower reaches of Smiths Creek support five indigenous fish species (Banded kōkopu (*Galaxias fasciatus*), Inanga (*Galaxias maculatus*), Redfinned bully (*Gobiomorphus huttoni*), Longfin tuna (eel) (*Anguilla dieffenbachii*), Shortfin tuna (eel) (*Anguilla australis*), making it a significant freshwater habitat. While stream conditions across the property are generally good, opportunities exist to further enhance ecological values through improved riparian management and the removal or mitigation of barriers to fish passage.

The principal threats to ecological values on the property are stock browsing and weed invasion. While three significant forest patches have been fenced to exclude stock, other areas remain unfenced and are experiencing ongoing decline as a result of grazing pressure. Woody weeds are present in most indigenous forest areas and require active management. There is considerable potential for further indigenous vegetation restoration across the property, building on recent work undertaken within fenced areas. Future restoration efforts should be prioritised where ecological gains are greatest.

3.5 Recreation and Public Appreciation Values

The Hereweka Harbour Cone property is widely regarded as a special place by Otago Peninsula residents and the wider Dunedin community. Its expansive open landscape, elevated position, and rural character are central to its public appeal.

The public is drawn to the property because it offers a rare opportunity to explore the interior of the Peninsula in a setting where public access is actively supported. The scale of the property, the absence of modern development, grazing stock, and long uninterrupted views contribute to a strong sense of openness and remoteness. From higher points, panoramic views extend across the Peninsula interior, Otago Harbour, Hoopers Inlet, and the open ocean.

A distinctive aspect of the property is the presence of historic stone walls, ruins, and mature macrocarpa trees. On closer inspection, historic roads, farmsteads, boundary features, hedgerows, and orchard remnants reveal layers of past settlement. The ability to physically explore and interpret this heritage landscape offers a rich and engaging visitor experience.

The property's proximity to urban Dunedin makes it readily accessible, and for residents of Broad Bay and Portobello it lies directly on their doorstep as a valued community asset. A network of multi-use tracks supports a range of recreational opportunities, while infrastructure has been designed to facilitate access in a manner that protects the property's values.

Flatter areas near entrances and points of interest provide opportunities for passive recreation and are accessible to people with reduced mobility or limited time. In contrast, steeper terrain and extended track networks cater to visitors seeking more physically demanding experiences.

Encouraging public access supports greater appreciation of the property's landscape, cultural, heritage, and ecological values. In turn, this fosters a sense of stewardship and shared responsibility. The scale and quality of the landscape, combined with opportunities for recreation and community involvement, contribute positively to visitor wellbeing and quality of life.

The open rural countryside, expansive views, rich cultural layers, and sense of isolation offered by Hereweka Harbour Cone combine to create a powerful visitor experience—one that evokes both solitude and exhilaration, and a strong connection to a place of significance.

4.0 Hereweka Harbour Cone Management Zones

4.1 Bacon Street Zone

The Bacon Street zone covers the lower reaches of Smiths Creek and the adjacent gullies and western hill slopes. It includes a mosaic of lowland alluvial flats, riparian margins, gullies, and drier hill-slope landforms. A narrow strip of kānuka forest lines parts of the Smiths Creek riparian corridor, while larger kānuka treeland patches occupy the surrounding slopes. These treeland areas are currently subject to stock pressure, although natural kānuka regeneration is occurring on the drier hill slopes below the main stands. Scattered gorse is present across the slopes, forming mixed scrub with regenerating indigenous vegetation along parts of the northern boundary. The alluvial flats are largely pasture with rush-land in wetter depressions, and sedge-lands occupy parts of the wetter gully floors. The lower reaches of Smiths Creek support five indigenous fish species making it a significant freshwater habitat. Riparian planting has been undertaken to enhance and protect their habitat.

Proximity to the Broad Bay community makes this zone one of the most accessible and popular parts of the property for informal recreation. Historically, it has served as a convenient and attractive destination for picnics, day trips, and local gatherings. Today, open space, shelter, and gentle gradients support a range of everyday recreational activities.

The Future Forest loop-track provides visitors with an opportunity to experience a regenerating native forest landscape that has been progressively established through extensive community-led planting and restoration. The surrounding catchment has been fenced to exclude stock, with large areas of former pasture now replanted in native trees and shrubs, particularly along stream margins and steeper slopes, creating a developing riparian and hillside forest system. A small community orchard has been established near the track, and new boardwalks and creek crossings now enable safe access through wetter areas, providing visitors with an easily accessible walk in which they can observe different stages of native regeneration.

A formal marked track connecting to Highcliff Road and the wider track network also begins in the Bacon Street zone. Future opportunities include developing a multi-use track that could accommodate walking, mountain-biking, and horse riding.

The zone's accessibility, sheltered aspect, and relatively gentle terrain make it an ideal location for community-led initiatives. Potential restoration activities include trialling best-practice approaches for fostering kānuka regeneration and undertaking native planting to restore podocarp-rich forest and indigenous riparian vegetation.

Bacon Street Zone – Summary

Key Values

- Riparian kānuka forest along Smiths Creek
- Smith Creek - fresh water creek supporting indigenous fish population
- Lowland alluvial flats, gullies, and wetland pockets (rush-land and sedge-land)
- Accessible open space near Broad Bay

- Popular historical community recreation area

Issues / Threats

- Stock browse in kānuka treeland
- Scattered gorse and exotic scrub
- Pest plants that have established
- Wetland areas vulnerable to erosion

Management Priorities

- Protect and enhance riparian vegetation
- Manage scattered gorse and support natural kānuka regeneration
- Surveillance and control of pest plants
- Maintain open pasture areas where appropriate while gradually improving ecological resilience
- Develop accessible recreational opportunities including walking circuits and potential multi-use tracks

Opportunities

- Facilitate appropriate community-based restoration and education initiatives.
- Establishment of a multi-use track (walking, biking, horse riding)
- Establishment of accessible tracks, suitable for wheelchairs and strollers
- Gateway node for wider visitor network

4.2 Smiths Creek Zone

The Smiths Creek zone encompasses the remainder of the Smiths Creek catchment below Highcliff Road. It is dominated by dry hill-slope landforms interspersed with gullies. Indigenous vegetation is scarce, with the majority of the zone being maintained as pasture. Small pockets of dry broadleaved forest persist on steep slopes and within gullies and represent important ecological remnants that require priority fencing and protection.

Stands of exotic trees, including sycamore, occur around the zone margins, and sycamore is actively spreading upslope. Hawthorn is scattered throughout the catchment, while gorse remains relatively sparse. A high-priority invasive species in this zone is Chilean flame creeper, which is present in several locations and requires active control.

The cultural landscape values within this zone are particularly strong. The uniform pasture cover highlights historic farming patterns, making relic shelter plantings, stone walls, farm tracks and building ruins highly legible. This zone also contains the historically important site of Larnach's model dairy farm, a key heritage feature.

Extensive historical clearance of indigenous forest and subsequent farming practices have contributed to widespread erosion across these slopes. Re-establishing woody vegetation is therefore an ecological and landscape priority, both for slope stabilisation and for improved

waterway health. As riparian restoration progresses downstream in the Bacon Street zone, there is an opportunity for a catchment-scale, staged revegetation programme extending upstream through the Smiths Creek catchment. Over time, this approach would support improved habitat for indigenous fish species and enhance ecological connectivity across the property.

Careful forest management within this zone will help enhance biodiversity, protect waterways, and slow erosion. Over time, restored areas will create a cohesive framework of woody vegetation that provides ecological structure and landscape context within an otherwise pastoral setting.

Given the proximity of the zone to nearby Peninsula settlements, enhancing recreational opportunities is also a priority. The presence of large open areas that are generally free from highly sensitive ecological or historic features creates opportunities for a broader range of recreation users, including horse riders and mountain bikers, alongside walkers.

The woolshed located on the ridge between the Smiths and Stewarts Creek catchments remains central to the property's farming operations due to its strategic position. This location also presents future potential as a visitor hub, supporting environmental and outdoor education, community learning, and the provision of basic visitor amenities.

Smiths Creek Zone – Summary

Key Values

- Intact archaeological landscape (shelter plantings, stone walls, homestead sites)
- Historic site of Larnach's model dairy farm
- Small remnants of dry broadleaf forest

Issues / Threats

- Widespread erosion on dry slopes
- Sycamore, hawthorn, and Chilean flame creeper spread
- Establishment of banana passionfruit and Bomarea
- Minimal surviving indigenous vegetation
- Stock access to vulnerable forest remnants
- Increase in rabbit numbers

Management Priorities

- Fence and protect indigenous remnants
- Targeted control of invasive woody weeds and pest vines
- Slope-stabilisation planting (woody vegetation)
- Strengthen riparian restoration up the catchment

Opportunities

- Catchment-wide riparian restoration linking to Bacon Street
- Enhancement of recreational opportunities such as horse riding and mountain biking



- Interpretation of historic farm landscapes
- Demonstration of erosion-control replanting techniques

4.3 Hereweka Harbour Cone Zone

This zone encompasses the summit and moderately steep flanks of Hereweka Harbour Cone, including associated ridges and gully heads extending eastward. The landform is characterised by dry hill slopes and the highly distinctive conical summit. Hereweka Harbour Cone is a major cultural landmark and landscape feature, with high levels of significance that require careful protection from adverse activities.

This zone contains two significant stands of indigenous broadleaved forest and the most extensive kānuka forest on the property. Broadleaved forest remnants are currently affected by stock browse, while kānuka is regenerating naturally in rough pasture on the southern and eastern flanks. Fencing part of the cone's western flank to exclude stock may assist natural kānuka regeneration and enable kānuka cover to extend towards the summit. Scattered gorse is present across the grassland slopes and is actively invading from the southern boundary. Excluding stock from the broadleaved forest remnants is an ecological priority, supported by targeted restoration planting in fenced gaps, where appropriate.

Hereweka Harbour Cone already attracts large numbers of visitors, drawn by expansive views across valleys, the Peninsula, and the open sea, and by the strong presence of an intact cultural landscape. Opportunities exist to strengthen recreational connections, including linking existing tracks with neighbouring routes toward Hoopers Inlet and Portobello to create walking circuits between Broad Bay and Portobello.

Hereweka Harbour Cone Zone – Summary

Key Values

- Iconic conical summit and major landscape landmark
- Kāi Tahu cultural associations and oral history
- Significant broadleaved forest stands and extensive kānuka forest

Issues / Threats

- Stock browsing in broadleaved forest and regenerating kānuka
- Increasing gorse presence on slopes
- Establishment of pest vines, including banana passionfruit and Bomarea
- High visitor pressure due to popularity
- Increase in rabbit numbers

Management Priorities

- Exclude stock from broadleaved forest remnants where applicable
- Restore broadleaved forest gaps



- Control gorse advancing from southern margins
- Manage recreation impacts (track durability, erosion)

Opportunities

- Provide interpretive information that reflects Kāi Tahu narratives, values, and connections with the site
- Protect and frame long views, open vistas, and the heritage landscape character
- Provide targeted fencing to support and protect areas of natural kānuka regeneration as part of a 'rewilding' trial

4.4 Peggys Hill Zone

The Peggys Hill zone includes the steep eastern slopes, terraces, and the relatively flat summit of Peggys Hill above Highcliff Road. Unlike many other parts of the property, this area has a moist hill-country character, with several springs emerging on the eastern face and multiple areas of visible landslide activity. A scatter of sub-fossil tree trunks on the summit likely represents former Hall's tōtara forest cover.

The zone contains a large and ecologically important stand of moist indigenous broadleaved forest on the eastern slopes and a smaller stand to the south. Gorse has extensively invaded non-forest areas and has previously been subjected to aerial control, which has also affected regenerating native trees. Pasture dominates the remaining lands, with scattered exotic trees such as macrocarpa and radiata pine.

The largest area of indigenous forest—and extensive surrounding grassland—has been fenced to exclude stock. An ecological restoration programme began here in 2009 aiming to restore indigenous forest cover in pastoral areas, with further phases planned. The protection of this site and community involvement in planting has fostered a strong sense of local stewardship.

The fenced area, being insulated from farming operations, provides an ideal space for trialling ecological restoration techniques, including building soil organic matter and carbon. These activities will also help protect the catchment's headwaters.

The Peggys Hill ridgeline can be accessed from Camp Road and provides 360-degree views across the Otago Peninsula and surrounding ocean. However, tracks along the ridgeline and connecting links to Smiths Creek are poorly marked and may require improved wayfinding and maintenance to enhance visitor safety, accessibility, and the overall recreation experience.

Peggys Hill Zone – Summary

Key Values

- Moist hill-country character with springs and wetlands
- Significant moist broadleaved forest remnant
- Evidence of historic forest (sub-fossil Hall's tōtara)
- Active community restoration area

Issues / Threats

- Extensive gorse invasion
- Establishment of pest plants
- Landslide-prone terrain
- Vulnerability of headwaters

Management Priorities

- Continue stock exclusion fencing
- Surveillance and control of Chilean flame creeper and other pest plants
- Support and expand ongoing restoration planting
- Trial restoration methods (direct seeding, soil-building, carbon initiatives)
- Protect headwaters and hydrological features through land stabilisation initiatives

Opportunities

- Community restoration project and demonstration area
- Ridge tracks offering 360° views and educational value
- Linking restoration with Stewarts Creek ecological programme
- Increase recreation value through improvements to track condition and wayfinding.

4.5 Stewarts Creek Zone

The Stewarts Creek zone comprises the Stewarts Creek catchment below Highcliff Road. While the lower valley floor includes narrow alluvial flats, the majority of the zone is characterised by steep hill slopes, with gentler terrain only in the upper Battery Creek headwaters. The upper tributary directly below Peggys Hill supports moist forest, while most of the catchment consists of dry hill slopes.

Pasture dominates this zone but is interspersed with significant stands of moist and dry indigenous broadleaved forest, as well as scattered patches of shrubland. Moist forest is confined to the upper catchment; elsewhere, dry broadleaved forest—often with kōwhai in the canopy—occupies slopes. Gorse is widespread, including almost continuous linear strips occupying the low-elevation riparian margins. Gorse has previously been aerially controlled in parts of the zone. Rock outcrops are present, along with groves of mature macrocarpa and radiata pine. The moist forest remnant in this zone has been fenced to exclude stock and is part of the wider ecological restoration programme linking with Peggys Hill. The 5.7 ha of dry forest shrublands known as Rutherford's Bush was fenced to exclude stock in 2022.

More distant from Broad Bay and Portobello, the Stewarts Creek zone evokes a sense of rural remoteness. Several archaeological features heighten the cultural significance of the area, including nearby lime kilns, the remains of the Stewart family homestead, and the enclosed Rutherford farmstead. Rutherford's Road, a historic stone-lined route, is still intact and provides an inviting entry point for recreational users exploring the Peninsula's past. The combination of strong landforms, natural vegetation, and cultural heritage makes this zone particularly suitable for reflective and immersive visitor experiences.

A community-led ecological restoration project began in this zone in 2010 and continues to expand. Stock exclusion along riparian margins, together with restoration planting, is progressively establishing a strong vegetated framework that supports freshwater quality, improves riparian function, and strengthens the resilience of indigenous fish habitat. The accessible and relatively flat valley floor may also be suitable for carefully managed native tree woodlots, where these are designed and maintained as part of the broader restoration framework. Any woodlot activity should protect waterways, enhance indigenous biodiversity, and contribute to catchment-wide ecological restoration outcomes, rather than operate as a conventional production forestry activity.

Stewarts Creek Zone – Summary**Key Values**

- Significant moist and dry broadleaved forest, both undergoing rapid regeneration.
- Remote rural character and strong landforms
- Archaeological sites: Stewart house ruins, Rutherford farmstead, lime kilns (adjacent)
- Historic formed route (Rutherford's Road)

Issues / Threats

- Extensive gorse, especially along riparian margins
- Establishment of pest vines, including banana passionfruit and Bomarea
- Stock impacts on unfenced indigenous areas
- Erosion on steep slopes
- Spread of exotic pines and macrocarpa

Management Priorities

- Continue riparian fencing and restoration
- Control linear gorse infestations along waterways
- Continue programme of Chilean flame creeper control in affected areas
- Surveillance and control of plants
- Re-establish woody vegetation for erosion control
- Protect forest remnants and expand ecological buffers

Opportunities

- Native woodlots for carbon sequestration, land stabilisation, waterway protection, and biodiversity
- Enhanced recreational use of Rutherford's Road as a heritage route
- Catchment-scale restoration linked with Peggys Hill
- Reflective, nature-based visitor experiences

5.0 Legal Protection, Governance and Administration

The Hereweka Harbour Cone property was purchased by the Dunedin City Council to protect its outstanding landscape, ecological, heritage and cultural values, and in recognition of its importance for recreation and community stewardship.

The property is owned in fee simple by the Dunedin City Council. Day-to-day management of the property is currently undertaken by the Hereweka/Harbour Cone Management Trust Board Incorporated (the Trust), operating under a Memorandum of Understanding (MOU) with the Dunedin City Council signed on 28 July 2015. This MOU records Council's appointment of the Trust as its special agent to manage the property, in accordance with this management plan and the terms contained in the MOU. This Management Plan provides the overarching policy and management framework within which both the Council and the Trust carry out their respective roles and responsibilities.

5.1 Legal Protection and Reserve Status

Council will initiate a process to consider whether all or part of the Hereweka Harbour Cone property should be gazetted as reserve under the Reserves Act 1977. That process will assess the benefits, implications and available classification options before any formal decision is made.

Recreation reserve classification is one option that may be considered because of the broad range of recreational, landscape, cultural, heritage, ecological, biodiversity restoration, working landscape and community values associated with the property.

Section 17 of the Act relates to recreation reserves. Although recreation reserves are held principally for recreation and sporting activities and the welfare and enjoyment of the public, section 17(2)(b) also provides for the conservation of scenic, historic, archaeological, biological, geological and other scientific features, and indigenous flora, fauna and wildlife. These provisions indicate that recreation reserve classification may provide an appropriate framework for both public recreation and the protection of the property's wider values. Its suitability, including whether other classifications or a combination of classifications would be more appropriate, will be considered as part of the gazettal process.

Any reserve classification would determine the statutory purposes for which the land is held and influence the activities that may be authorised. It would also establish a statutory framework for future decision-making and long-term stewardship.

This Management Plan has been prepared in a manner broadly consistent with the purpose, principles and management-planning requirements of the Act. This will enable it to inform the gazettal and classification process and provide a foundation for any future reserve management plan. If the land is gazetted, Council will consider whether this Plan can be adopted, amended or otherwise used to satisfy the applicable requirements of the Act, including any required public consultation.

If the property, or any part of it, is gazetted as reserve, Dunedin City Council would remain the administering body unless another arrangement were made in accordance with the Act. As administering body, Council would retain statutory responsibility for approvals, authorisations and other decisions required under the Act. Council could delegate or authorise particular management

functions where permitted and appropriate, while retaining responsibility for functions that cannot lawfully be delegated.

Where land remains outside reserve status, or where tenure arrangements change, Council will consider whether additional legal mechanisms, such as covenants or easements, are necessary to protect the property's values and maintain public access.

5.2 Disposal and Boundary Adjustments

Any proposed disposal or boundary adjustment may be considered only where it is consistent with:

1. The requirements of the Reserves Act 1977, if applicable;
2. The objectives and policies of this Management Plan;
3. The legal status of the land; and
4. The protection of the property's identified values.

Any proposal to dispose of land must be assessed against this Management Plan prior to initiating any disposal process. Public consultation will form a necessary part of any disposal or boundary adjustment process, in accordance with statutory requirements and Council policy.

5.3 Governance and Management Arrangements

The Hereweka/Harbour Cone Management Trust Board Incorporated (the Trust) provides day-to-day management of the property, including coordination of volunteers, implementation of restoration projects, community engagement, monitoring, and operational activities, in accordance with this Management Plan, Trust Deed, and the MOU with the Dunedin City Council (including any variation or replacement MOU).

The Trust operates as a management body, working collaboratively with the Council to:

1. Implement this Management Plan;
2. Advocate for and promote the values of the property;
3. Coordinate management activities; and
4. Seek and support funding and partnership opportunities.

The MOU between the Trust and the Dunedin City Council sets out:

1. Roles and responsibilities;
2. Decision-making processes;
3. Reporting and accountability requirements; and
4. Matters requiring formal Council approval.

While the Trust undertakes day-to-day management, statutory approvals, legal authorisations, and matters requiring Council approval remain with the Dunedin City Council, unless expressly delegated or authorised in accordance with the MOU and relevant legislation.

5.4 Resourcing and Funding

Implementation of this Management Plan may be supported through a combination of:

1. Council resources, including staff expertise, statutory and administrative processes, asset management and approved funding; and
2. External funding obtained by the Trust.

The Trust may seek contestable funding, grants, sponsorship and partnerships for projects and activities relating to the property, including biodiversity restoration, heritage conservation, research and community initiatives. Any such project or activity must be consistent with the purposes of the Trust, this Management Plan, the purpose of the land and, where applicable, its classification under the Act. It must also comply with applicable legislation, funding conditions and all required Council, landowner and statutory approvals.

Council funding will be considered through its Long-Term Plan, Annual Plan and other applicable funding processes. Funding priorities may include access, public safety, asset management, maintenance, protection and other activities necessary to give effect to the purposes and policies of this Management Plan.

If the property, or any part of it, becomes subject to the Act, activities and expenditure affecting that land must be consistent with the Act, its reserve classification and Council's responsibilities as administering body. Money received or held by Council in its capacity as administering body must be managed and applied in accordance with the financial provisions of the Act.

Any sponsorship or funding arrangement that would confer naming, advertising, occupation, commercial-use or other rights over the land must be separately authorised in accordance with any legislation and Council policy.

5.5 Plan Governance and Implementation

Regardless of the management structure, management of the Hereweka Harbour Cone property will be undertaken in accordance with this Management Plan.

This section focuses on governance and implementation arrangements. Other administrative matters (including commercial use and permitting processes) are addressed in relevant sections of the Plan.

Throughout this Management Plan, the term "appropriate approvals" refers to the consents, authorisations or endorsements required for a particular activity. Depending on the nature of the activity, these may include approvals from:

- The Dunedin City Council (as landowner and administering body);
- The Trust (under the MOU);
- Any leaseholders;
- Statutory agencies;
- Mana whenua partners, as represented by Te Rūnanga o Ōtākou;
- Other relevant parties.

Clear protocols for processing management decisions and obtaining appropriate approvals will be maintained and updated as required.

Aims

1. The Hereweka Harbour Cone property is administered in accordance with this Management Plan.
2. The Hereweka Harbour Cone property is legally protected using mechanisms that protect its values in perpetuity.

Objectives

1. To ensure efficient, effective, and lawful delivery of the aims, objectives and policies of this Plan, consistent with the property's values.
2. To maintain a governance and management structure that protects the property's values in perpetuity.
3. To secure long-term legal protection of the property to ensure appropriate public use and value protection in perpetuity.
4. To ensure the Management Plan remains current and responsive to changing circumstances and increased knowledge.

Policies

1. Initiate the process of considering whether all or part of the property should be gazetted as reserve under the Reserves Act 1977, to support the long-term recognition, protection and management of its landscape, cultural, historic, ecological and recreational values.
2. All statutory authorities and legal approvals will be issued by the Dunedin City Council, unless otherwise formally delegated or agreed.
3. Any consideration of disposal or boundary adjustment must be assessed in accordance with the objectives of this Management Plan, and any statutory requirements.
4. Consult with Te Rūnanga o Ōtākou on all matters that may affect cultural values, including ecological restoration, species management, and public access.
5. Where applicable, public notification and consultation in accordance with the requirements of the Reserves Act 1977 will be undertaken for boundary adjustments or disposal of property, if this became necessary.
6. Day-to-day management of the property will be undertaken by the Trust under a Memorandum of Understanding with the Dunedin City Council, unless formally replaced with an alternative governance option.
7. Clear protocols between the Trust and the Dunedin City Council will guide decision-making and approvals.
8. The Trust will meet regularly to oversee management and implementation of this Plan.

9. The Trust will actively seek funding and partnerships to support implementation of this Plan.
10. This Management Plan will be kept under continuous review, in accordance with legislation.

6.0 Landscape and Land Use

6.1 Visual Landscape and Land Use

The Hereweka Harbour Cone property makes a substantial contribution to the distinctive landscape character of the Otago Peninsula. The landscape clearly expresses its formative processes through a combination of natural landforms and cultural features. Extensive pasture cover across much of the property, together with the relative absence of fragmented or disjointed vegetation patterns, allows the underlying volcanic landform to remain highly legible. Rocky outcrops and remnant stumps from earlier forest cover are readily visible and illustrate the site's volcanic origins and subsequent erosion processes. Remaining bush areas further enhance the perceived naturalness and visual quality of the landscape.

The visual values of the property are significant both within the site itself and across the wider peninsula. Due to its elevated position, much of the property forms an important backdrop to surrounding settlements and landscapes. Its predominantly natural and rural character contributes strongly to the overall sense of place and landscape quality of the Otago Peninsula. The distinctive conical form of Hereweka Harbour Cone is an iconic landmark of high significance to the Dunedin community.

The Hereweka Harbour Cone property retains exceptionally low levels of artificial light intrusion and offers high-quality night sky visibility. The absence of urban lighting, combined with elevated ridgelines and expansive horizons, contributes to a strong sense of natural darkness and reinforces the property's rural character and experiential values. In addition to supporting nocturnal species and natural behavioural cycles, the preservation of dark sky conditions enables low-impact night-time recreation, including stargazing and astrophotography, within a high-quality landscape setting.

The property's land-use history, particularly its past small-scale dairy farming, remains highly legible. This is largely attributable to the continued dominance of pasture cover, which enables historic features such as shelter plantings, stone walls, and building remnants to remain visible in the landscape. Notably, the property is largely free of modern development, reinforcing its visual coherence and heritage values.

Hereweka Harbour Cone and the wider Otago Peninsula are of high significance to mana whenua and form part of what has been described as a "pristine archaeological landscape of historic occupation" associated with early European settlement in Dunedin (Middleton, 2008). Furthermore, Hereweka Harbour Cone is recognised as a Wāhi Tupuna under the 2GP. As such, the property and its surrounds are recognised as an important cultural landscape with layered cultural and historic associations.

Given these values, minimising the visual and landscape impacts of structures, plantings, earthworks, and other forms of development is critical. Enhancement projects must be carefully considered to ensure they do not inadvertently compromise key landscape values, landform legibility, or the pastoral character that underpins the property's significance.

Several areas within the Hereweka Harbour Cone property require more detailed spatial planning to ensure that activities and enhancements are undertaken in a coordinated and sensitive manner, and within the context of the property's overall values. This is particularly important in locations where public use may be concentrated or where multiple values and uses intersect. Priority areas include the Bacon Street Management Zone, the main entrance within the Stewarts Creek Management Zone, the historic site of Larnach's model dairy farm within the Smiths Creek Management Zone and



the existing woolshed site in the Smiths Creek Management Zone, which has potential for development as a Visitor Hub.

The Bacon Street Management Zone, for example, has multiple overlapping values, including ecological restoration potential, provision of open space for local residents, opportunities for community initiatives such as orchards, and its role within wider recreational networks. Rather than considering these values and initiatives in isolation, it is essential that they are planned collectively—both at the Management Zone scale and in relation to the wider property. This integrated approach enables potential interactions and cumulative effects to be identified and managed in a way that supports the overall aims of this Management Plan.

Aim

1. The Hereweka Harbour Cone visual amenity, natural character, and heritage landscape values are protected and enhanced in accordance with the long-term vision of this Management Plan.

Objectives

1. To protect and enhance the visual amenity values of the property, with particular emphasis on maintaining the visual coherence and legibility of the natural landform.
2. To protect and enhance the natural landscape character values of the property.
3. To protect and enhance the heritage and cultural landscape character values of the property.
4. Acknowledge and promote the nocturnal visual environment/dark sky as an integral part of the landscape and as an asset for current and future generations.
5. Identify provisions to safeguard, protect and enhance the dark sky above Hereweka and Otago Peninsula.
6. To minimise potential conflict between the property's values and the uses of the property.
7. To enhance land use and landscape values through coordinated consideration of developments, activities, and initiatives at specific sites across the property.

Policies

1. Avoid significant earthworks that detract from the natural landform and landscape character; where earthworks are necessary, ensure they are designed to integrate with and respond to natural landforms.
2. Protect existing areas of indigenous vegetation and enhance their extent and natural character.
3. Provide for new planting and revegetation in a manner that integrates with or highlights natural landforms and is responsive to site-specific conditions and natural processes.

4. Locate and design buildings, structures, fencing and other built elements to minimise their visual impact on the natural and rural character of the property.
5. Protect natural night sky values by avoiding unnecessary artificial lighting and ensuring that any new lighting is low-intensity, shielded, and designed to prevent upward or horizontal light spill.
6. Ensure that all enhancement activities and developments are compatible with sustaining the cultural and heritage landscape values of the property, including minimising adverse effects from modern structures and maintaining an appropriate pastoral character.
7. Protect and appropriately manage structures, plantings, and features that contribute to the heritage landscape character of the property.
8. Ensure that all property enhancements are sensitive to the full range of the property's values and are consistent with this Management Plan and any relevant secondary plans.
9. Require detailed and integrated planning for specific sites where public use may be concentrated or where activities may conflict with landscape, cultural, or heritage values.

6.2 Land Use and Catchment Functions

A key value of the Hereweka Harbour Cone property lies in its potential to implement and demonstrate a multifunctional land-use model. Multifunctional land use seeks to deliver a broad range of environmental, cultural, social, and economic benefits from the same landscape. For Hereweka Harbour Cone, these benefits include food production, protection and enhancement of landscape character, improved water quality, flood attenuation and water management, wildlife habitat, protection of cultural features, and strengthened relationships with local communities.

Central to this approach is the development of a resilient landscape capable of regeneration and adaptation over time. The historic replacement of complex indigenous ecosystems with simplified pastoral farming systems has reduced the landscape's capacity to self-regenerate and diminished its ability to provide the full suite of ecosystem services that were once naturally present, including healthy stream ecology and stable soil systems.

Effective catchment management requires an integrated approach to soil and water management. This includes maintaining soil structure to support rainfall infiltration, establishing vegetation to slow surface water movement on slopes, maintaining year-round vegetative ground cover, and protecting and restoring natural vegetation in riparian margins, wetlands, and other strategically important areas of the catchment. A well-managed rural landscape of this nature can play a critical role in moderating the impacts of extreme weather events, including flooding.

Waterways are a fundamental component of the Hereweka Harbour Cone and wider Otago Peninsula landscape. They function as vital ecological connectors, linking hill systems to the coast and supporting both terrestrial and aquatic ecosystems. Permanent and seasonal wetlands and waterways provide an essential framework for sustainable land management on the property. Prioritising these areas as ecological corridors supports the re-establishment of indigenous flora and fauna, enhances natural processes and connectivity, and provides a strong natural structure within which pastoral land use can continue in a more sustainable form. Restored waterways also help reinforce the long-term ecological integrity of the property.

Historic clearance of tall woody vegetation on steep slopes to create pasture has increased the rate and visibility of soil erosion across the property. While land sliding and erosion are natural processes

that have shaped the landscape over thousands of years, deforestation has accelerated these processes. Shallow soil erosion associated with pastoral land use is particularly evident and results in the loss of fertile topsoil, increased sedimentation of waterways, and downstream impacts on communities and natural environments.

Climate change is expected to increase the frequency and intensity of extreme weather events such as windstorms, rainfall and flooding (NIWA, 2024), further elevating erosion risk across the property. Approximately 50 percent of the Hereweka Harbour Cone property consists of erodible hill country, which is likely to become increasingly vulnerable under future climate conditions.

The establishment of trees and scrub on the most erosion-prone landforms is therefore a priority. Steep gullies, unstable slopes, and exposed faces vulnerable to erosion will be progressively planted with appropriate indigenous and, where necessary, exotic species. This will be undertaken in conjunction with adaptive grazing management, including reduced stocking rates or the exclusion of livestock in high-risk areas. In areas subject to significant erosion risk, the rapid establishment of woody vegetation with deep root systems is essential to reduce the likelihood and severity of further erosion. While the re-establishment of woody vegetation can substantially slow erosion processes, it is acknowledged that land sliding and erosion cannot be entirely prevented.

Aim

1. To enhance critical catchment functions and ecosystem services, including flood attenuation, climate regulation, soil stability, and water purification.

Objectives

1. To protect and enhance the values of the property by minimising the risk of flooding, land instability, and soil erosion.
2. To reduce sedimentation within waterways on the property and adjoining downstream catchments.
3. To protect and improve the natural character, ecological health, and function of waterways, streams, and wetlands.

Policies

1. Develop and implement a revegetation programme to establish appropriate tree and shrub species on erosion-prone slopes and gully systems, including areas with a high risk of sheet or gully erosion.
2. Promote slope stability improvements through collaboration with relevant agencies, research institutions, and tertiary education providers to integrate best-practice geotechnical, ecological, and land management expertise.
3. Develop and progressively implement measures to protect and restore waterways, streams, and wetlands, including fencing, riparian planting, and buffer establishment, in conjunction with Section 7 of this Management Plan.

4. Where practicable, progressively remove or modify engineered stormwater systems and reinstate natural waterway functions, provided this does not place existing infrastructure at risk.
5. Avoid the construction of permanent facilities and structures in areas prone to flooding, land instability, or erosion risk.

6.3 Sustainable Farm Management

Grazed pasture is the dominant vegetation cover across the Hereweka Harbour Cone property, reflecting its history of dairy farming and, more recently, sheep farming. Ongoing farming operations play a key role in maintaining the property's rural character and expansive open landscapes. Sheep farming, in particular, provides a cost-effective and low intensity means of retaining these open space values while remaining broadly compatible with the property's wider natural, cultural, and recreational values.

Rather than prioritising maximum production or revenue, farm management will emphasise a multifunctional land-use approach. This includes the maintenance of landscape character, facilitation of safe public recreation, and the progressive protection and restoration of riparian margins, wetlands, steep gully systems, natural ecosystems, and cultural heritage sites. These outcomes will be supported through appropriate fencing, stock management, and the exclusion of grazing from areas of high ecological, cultural, or heritage value.

The working farm also provides an important opportunity for urban communities—particularly children—to experience an operational rural environment. To protect heritage values, minimise soil compaction and erosion, and ensure public safety around livestock, sheep farming is considered the only appropriate form of grazing on the property.

At the time of adoption of this Management Plan, the property is licensed for grazing purposes. Grazing contributes to the management of vegetation, helps maintain the property's working-landscape character, and may support other management objectives, including access, biodiversity restoration and fire-risk reduction, where appropriately managed. The licence recognises the presence of public walking tracks and provides for public access, with seasonal restrictions during lambing where necessary. The Trust and Council will continue to engage with the licensee regarding farm management during the license term and to ensure that grazing activities remain aligned with the objectives and policies of this Management Plan and, where applicable, the requirements of the Act. Given the multiple and overlapping values of the property, it is essential that the farm licensee has a clear understanding of these values and of the potential for farming practices to positively or negatively affect them. The careful provision and placement of infrastructure—such as gates, stiles, and fencing—will support compatibility between farming operations, public access, biodiversity enhancement, and heritage protection. Ongoing communication and collaboration between the Trust and the licensee will be critical to the success of this integrated management approach.

Many existing farm-related structures on the property remain essential to ongoing operations and should be retained where practicable. The woolshed and yards at 1299 Highcliff Road function as the operational hub of the farming enterprise. Over time, some farming structures may become redundant as management needs evolve. Before any decision is made to remove or dispose of buildings or infrastructure, their potential future value to the property must be carefully assessed.

High standards of animal welfare are a fundamental component of sustainable farm management and are both a legal and ethical obligation. Livestock must be provided with adequate shelter from

adverse weather conditions and extremes of temperature. This may be achieved through the retention and enhancement of existing shelterbelts, the protection of historic plantings, and the establishment of new vegetation where appropriate, including for erosion control and biodiversity outcomes.

Climate change considerations are increasingly relevant to agricultural land management. As national climate policy continues to evolve, the agricultural sector will be required to better account for and manage greenhouse gas emissions. To demonstrate leadership in sustainable land use, the farm licensee will be required to monitor emissions associated with farming activities, seek opportunities to reduce emissions over time, and comply with relevant legislative requirements. These emissions should be considered alongside carbon sequestration benefits arising from revegetation and biodiversity restoration across the property.

Aims

1. To ensure that farm operations contribute positively to, and enhance, the multiple values of the Hereweka Harbour Cone property.
2. To implement farming practices that align with best-practice sustainable land management principles, high standards of animal welfare, and environmental stewardship.
3. To support farming systems that build social capital and encourage community connection with food production and land management.

Objectives

1. To operate a farming system that actively supports the enhancement of the property's natural, cultural, heritage, and recreational values through a multifunctional management approach.
2. To apply sustainable farming practices that reflect and reinforce the multifunctional management objectives of the property.
3. To maintain farming operations that meet or exceed best-practice standards in animal husbandry, animal welfare, and environmental care.
4. To recognise, monitor, and progressively reduce carbon emissions associated with farming activities on the property.
5. To encourage farming systems that enable community participation and deliver wider social benefits.

Policies

1. Retain pastoral farming across the property, except in areas subject to heritage conservation requirements, sites of significance to mana whenua, approved revegetation or environmental programmes, or agreed community initiatives.



2. Regularly review the spatial extent of farming across the property, with stock being permanently excluded from areas where approved ecological, heritage, or community initiatives are established.
3. Continue to work collaboratively with the farm licensee to ensure that farm management planning:
 - a. Demonstrates sustainable farming practices that support the protection and enhancement of the property's landscape, ecological, cultural, heritage, and recreational values;
 - b. Reflects best practice in animal welfare and husbandry;
 - c. Recognises the public good role of the property and the primary non-farming uses of parts of the land;
 - d. Maintains appropriate stocking rates and grazing management to minimise soil compaction, erosion, and sediment runoff, and to protect recreational and cultural heritage values;
 - e. Avoids or mitigates adverse impacts on areas of recognised ecological, cultural, or heritage value, including fenced conservation areas, waterways, wetlands, and planted tree crops;
 - f. Supports a collaborative approach to understanding, monitoring, and where practicable reducing greenhouse gas emissions associated with farming activities on the property, including the provision of relevant emissions data to Council where reasonably required for organisational reporting or statutory purposes;
 - g. Encourages the identification and implementation of practical measures, developed in consultation with the lessee, to improve environmental and emissions outcomes over time.
4. The Trust will consult with the licensee where revegetation, infrastructure, or development proposals may affect farming operations.
5. DCC will liaise with the licensee regarding public access arrangements during lambing periods to balance animal welfare and public safety.
6. On expiry or review of any grazing lease, assess the most appropriate mechanisms for retaining farming operations that complement and enhance the objectives of this Management Plan.
7. Provide and maintain infrastructure that supports compatibility between farming operations and the property's other values, in accordance with policies elsewhere in this Management Plan.
8. Retain and maintain property infrastructure where practicable and desirable. Removal or disposal of infrastructure will only be considered where it:
 - a. Adversely affects natural or heritage values;
 - b. Is not of historic or cultural significance;
 - c. Is not of importance to mana whenua;

- d. Is no longer required for any approved or reasonably foreseeable future use; and
 - e. Is demonstrably uneconomic to retain, upgrade, or operate.
- 9. Give favourable consideration to farming systems and initiatives that deliver positive outcomes for the local community.

6.4 Local Food Economies

Pastoral farming has historically been undertaken on the Hereweka Harbour Cone property as a commercial land use. As Council considers whether all or part of the property should be gazetted as reserve, opportunities may also be considered for limited, locally focused food-production initiatives that contribute to land management, stewardship, community involvement and public understanding of the property's working-landscape values.

Any such initiative must remain ancillary to the principal purposes and values of the property and must not compromise public access or its landscape, cultural, historic, ecological or recreational values. If the relevant land becomes subject to the Act, any farming or food-production activity must be consistent with the reserve classification, this Management Plan and all applicable statutory approval, leasing and licensing requirements. There is growing community interest in locally produced food sourced from landscapes with which people have a strong cultural and social connection. As a prominent public property and community asset, Hereweka Harbour Cone has potential to support carefully managed initiatives that reflect this interest, provided they are compatible with the property's primary purposes, do not confer exclusive private benefit, and do not compromise landscape, ecological, cultural, heritage, or recreational values.

Small-scale community or cottage initiatives—whether commercial or non-commercial—may be considered where they are clearly secondary to the primary farming and open space functions of the property. Such initiatives can contribute to public engagement, education, and stewardship. Examples may include beekeeping or a community orchard, where these activities remain low-impact, publicly accessible in nature, and consistent with property values.

Supporting local food initiatives within a public land context is primarily about strengthening community relationships with the land, rather than maximising production or profit. Initiatives should foster understanding of sustainable land use, encourage environmentally responsible consumption, and reinforce the role of the property as a shared public asset held for present and future generations.

Aims

1. Food production systems that support local consumption are encouraged.
2. Local communities derive social, educational, and cultural benefit from compatible small-scale initiatives on the property.

Objectives

1. To support small-scale, non-intensive cottage industries and community initiatives where they are compatible with existing property uses and values.
2. To ensure any local food initiatives enhance public benefit, stewardship, and connection to the property, rather than private or exclusive use.

Policies

1. Proposals for cottage industries may be considered, provided applications demonstrate an understanding of the property's values and the compatibility of the proposed activity with those values, including an assessment of any actual or potential adverse effects and the actions proposed to avoid, remedy, or mitigate those effects.
2. All initiatives require the appropriate approvals of the administering body and, where applicable, must be authorised through a lease, licence, or concession in accordance with the Act.
3. Support local food initiatives on the property only where they demonstrably enhance public benefit, community stewardship, and connection to the property, and do not result in private appropriation or exclusive use.
4. Support research into the property's potential to accommodate local food production systems that directly supply local consumers.
5. The sections *Commercial Use* and *Occupation Agreements (leases, licenses and easements)*, and other relevant provisions of the Dunedin City Council Reserves Management Plan – General Policies, must be read in conjunction with this section.

6.5 Forest Woodlot Management

The Hereweka Harbour Cone property currently contains very limited planted woodlots. The establishment and management of forest woodlots must primarily serve public purposes, including environmental protection, biodiversity enhancement, land stability, landscape integration, and education, consistent with the purpose of the property and the Act, where applicable.

New forest woodlots—whether indigenous or exotic—may be considered where they provide clear ecosystem services and are compatible with landscape, ecological, cultural, and heritage values. Woodlots will not be established primarily for commercial forestry purposes.

The Council's Zero Carbon Plan identifies the growth of carbon sequestration that aligns with mana whenua and community values as one means of supporting climate objectives. On this property, any sequestration initiative should therefore focus on indigenous revegetation and restoration that also strengthens biodiversity, improves landscape quality, supports erosion control, enhances recreation, and contributes to long-term ecological resilience. Carbon storage is recognised as one outcome of successful restoration rather than the sole purpose of land use change.

Carbon accounting, registration, verification, or crediting frameworks may provide useful tools to measure, recognise, and attribute carbon sequestration outcomes from eligible restoration or forest areas. These frameworks may assist in demonstrating climate benefits, attracting external funding or investment, supporting long-term restoration maintenance, and enabling organisations to contribute to verified carbon removal outcomes. Use of any such framework should be assessed on its merits to ensure it supports biodiversity, landscape, cultural, recreational, and intergenerational values associated with this whenua, and is consistent with the objectives of this Management Plan.

Woodlot design and layout must prioritise protection and restoration of waterways, erosion-prone slopes, and landscape coherence. Species selection will favour trees suited to local conditions and capable of delivering multiple benefits, including habitat provision, erosion control, and, where appropriate, small-scale local use of timber or firewood. In steep or inaccessible areas, preference will be given to species and management approaches that minimise the need for heavy machinery and reduce environmental disturbance.

Forest management will follow best-practice principles, with continuous cover forestry preferred to maintain canopy cover, support natural regeneration, and minimise visual and ecological impacts. Clearfelling will not be supported except where required for safety, biosecurity, or ecological restoration purposes.

As a publicly owned property, Hereweka Harbour Cone offers opportunities for long-term research into indigenous forestry, ecological restoration, and alternative forest management models that can inform best practice elsewhere.

Erosion-control plantings (including poplar, willow, and eucalyptus) may also contribute to biodiversity outcomes where livestock exclusion and appropriate management allow indigenous understory regeneration to occur.

Tree removal will be undertaken where necessary to manage public safety risks or to progressively remove wilding or inappropriate species. Tree management at heritage or archaeological sites requires appropriate statutory approvals.

Given the open character and high landscape values of the property, any proposal for new woodlots will be subject to rigorous assessment, including consideration of landscape and visual effects.

Aim

1. To establish and manage forest woodlots that deliver environmental and educational benefits while remaining consistent with the purposes of a reserve under the Reserves Act 1977.

Objectives

1. To plan and manage woodlots primarily for biodiversity enhancement, land stability, waterway protection, research, education, and limited local resource use where consistent with property values.
2. To ensure woodlot design and management enhances ecological connectivity and indigenous biodiversity across the property.
3. To ensure carbon sequestration initiatives deliver positive outcomes for biodiversity, landscape, cultural, recreational, and other property values, while supporting the wider objectives of this Management Plan.

Policies

1. Establish woodlots only where they provide demonstrable environmental and public benefit and are consistent with the property's values.
2. Locate native and/or exotic woodlots to enhance ecological connectivity and landscape coherence.
3. Promote age and species diversity within woodlots to improve ecological resilience and long-term stability.
4. Apply continuous cover forest management to maintain canopy cover and minimise environmental and visual impacts.
5. Retain existing woodlots and shelterbelts where they contribute to land stability, amenity, heritage, or ecological values.

6. Manage exotic woodlots to encourage indigenous understory regeneration where appropriate.
7. Analyse the costs, benefits, risks, and long-term implications of any carbon sequestration registration, accounting, crediting, or funding arrangement associated with eligible forest or restoration areas, ensuring that any participation is consistent with the property's values and contributes to long-term restoration, biodiversity, landscape, and public management outcomes.
8. Ensure removal of tree species identified as weeds seeks full utilisation of material where appropriate and obtains necessary approvals, particularly near heritage sites.
9. Require landscape and visual impact assessments for all proposed new woodlots to ensure appropriate integration within the property.

7.0 Ecology

7.1 Ecology Management Zones and Priorities

The Hereweka Harbour Cone property is a large and complex landscape. The protection and enhancement of its ecological values require sustained investment over long timeframes, and it is unlikely that all desirable management actions can be undertaken simultaneously. A clear distinction between *necessary* and *desirable* actions provides a practical framework for prioritising ecological management in a manner consistent with available resources and property values.

Immediate priorities focus on the protection of existing indigenous vegetation and the control of high-threat ecological weeds. This approach recognises that existing indigenous forest remnants are continuing to decline through attrition, and that early intervention in weed control is generally more effective and cost-efficient than attempting control once weeds become widespread.

Indigenous restoration should initially prioritise infilling and buffering of existing forest remnants, followed by restoration of indigenous vegetation on new sites. Once indigenous habitats have been stabilised and enhanced, consideration may be given to appropriate species reintroductions.

The division of the property into management zones supports effective operational planning by enabling ecological objectives to be addressed at a manageable scale. The basis for the five management zones is described in **Section 1.4**. Short-term actions and priorities are set out in the Hereweka Harbour Cone Property Implementation Plan, which sits as a secondary document to this Management Plan.

Aim

1. Ecological values are managed in a coordinated, systematic, and prioritised manner across the property.

Objectives

1. To manage ecological values within clearly defined management zones.
2. To regularly review and update ecological priorities in response to monitoring, research, and resource availability.
3. To prioritise restoration actions that respond to landform, hydrology, slope stability, and visual landscape coherence.
4. To progressively implement restoration at a catchment scale, with particular emphasis on upper catchments and headwaters.
5. To ensure restoration priorities are aligned with available funding mechanisms and long-term maintenance capacity.

Policies

(in order of priority)

1. Protect and enhance small indigenous forest remnants and control sycamore and Chilean flame creeper, banana passionfruit and Bomarea within the Smiths Creek Management Zone.

2. Control Chilean flame creeper within the Stewarts Creek and Peggys Hill Management Zones.
3. Protect and enhance dry forest remnants within the Harbour Cone and Stewarts Creek Management Zones.
4. Prioritise damp gully systems and ephemeral drainage lines for stock exclusion and planting, recognising their high ecological value and role in slope stability.
5. Promote indigenous forest regeneration within areas of sprayed gorse in the Peggys Hill Management Zone, including seeding with fast-growing fleshy-fruited species such as poroporo (*Solanum laciniatum*).
6. Facilitate natural indigenous forest regeneration within the Harbour Cone and Bacon Street Management Zones, including gorse control, but excluding aerial herbicide spraying.
7. Restore podocarp-dominant forest and indigenous riparian vegetation on low-elevation alluvial landforms within the Bacon Street and Stewarts Creek Management Zones.
8. Plan and implement restoration planting at a catchment scale, including restoration to the upper extents of the Smiths Creek catchment, to improve hydrological function and ecological connectivity.
9. Align restoration initiatives with available funding mechanisms and confirmed long-term maintenance capacity, ensuring projects are realistically resourced, deliver measurable outcomes, and do not create unfunded future liabilities for the property.

7.2 Existing Indigenous Vegetation and Habitats

Only a small proportion of the Otago Peninsula retains indigenous forest or shrubland cover. While the Hereweka Harbour Cone property retains a higher proportion than much of the surrounding landscape, indigenous woody vegetation remains fragmented and largely confined to steep, rocky, or otherwise marginal landforms.

Most existing indigenous forest and shrubland on the property has been heavily modified by historic grazing, resulting in suppressed regeneration, depleted understorey, and reduced ground cover. These conditions increase vulnerability to wind damage and edge effects, leading to progressive canopy dieback and long-term conversion to grassland if not addressed.

Some moist forest areas on Peggys Hill and in the upper Stewarts Creek catchment have been fenced to exclude stock, retaining intact canopies and showing rapid understory regeneration after 10 years². In contrast, the dry forest remnants of Rutherford's Bush, fenced in 2022, shows recovery of ferns, shrubs and tree saplings. Other dry forest remnants remain unfenced and are typically more fragmented, with internal canopy gaps.

Mature indigenous forest provides disproportionately high ecological value and is significantly easier to retain than to recreate. Accordingly, protection and enhancement of existing indigenous vegetation is a primary ecological priority for the property.

Management of forest remnants should be closely integrated with restoration initiatives, including buffering and infill planting, to reduce edge effects such as wind exposure, weed invasion, and stock browse.

Further detail on existing vegetation patterns is provided in **Appendix 3**.

² Nature Positive Ltd. 2021



Aim

1. Existing indigenous vegetation and habitats are protected and enhanced to improve ecological function and long-term viability.

Objective

1. To maintain and improve the condition of existing indigenous vegetation to support high-quality habitat for indigenous flora and fauna.
2. To improve the resilience of existing indigenous vegetation through appropriate replacement planting and buffering.

Policies

1. Protect existing indigenous vegetation from adverse effects arising from farming, public use, and other activities.
2. Develop indigenous vegetation and habitat management approaches within each management zone.
3. Monitor the ecological condition of existing indigenous vegetation and habitats at intervals of five to ten years.
4. Ensure enhancement activities are consistent with the property's cultural, landscape, or heritage values.
5. Ensure enhancement activities do not adversely affect indigenous fauna.
6. Enable the trialling of low-cost, low-intervention ecological restoration techniques that support natural regeneration of indigenous vegetation, provided such approaches are consistent with property values and are monitored to assess effectiveness.

7.3 Habitat Restoration

The existing pattern of indigenous forest on the Hereweka Harbour Cone property provides insight into historic vegetation patterns, which were strongly influenced by elevation, landform, aspect, and microclimate. On Peggys Hill (401m above sea level, the second highest hill on the Otago Peninsula) and in the upper Stewarts Creek catchment, the influence of fog and drizzle from prevailing north-east and south-east weather systems creates relatively moist conditions. Forest in these areas supports plant species not present in drier environments, including crown fern (*Blechnum discolor*), *Blechnum colensoi*, soft tree fern (*Cyathea smithii*), *Rumohra adiantiformis*, filmy ferns (*Hymenophyllum* spp.), and *Trichomanes venosum*. Peggys Hill and upper Stewarts Creek are among the most significant sites for damp-habitat ferns on the Otago Peninsula. The emergent podocarp miro (*Prumnopitys ferruginea*), which favours moist forest, is present in these areas and is otherwise absent from the Peninsula. The moist forest canopy is characterised by fuchsia (*Fuchsia excorticata*) and māhoe (*Melicactus ramiflorus*), with *Coprosma rotundifolia* and soft tree fern prominent in the understorey.

Elsewhere, on steep mid-slopes and rocky areas, dry forest communities typical of the Peninsula are present. These are characterised by narrow-leaved lacebark (*Hoheria angustifolia*) and/or kōwhai

50

(*Sophora microphylla*) in the canopy, with *Coprosma crassifolia* in the understorey and dry forest ferns such as *Asplenium hookerianum* and *A. flabellifolium*. Low-elevation alluvial forest, once likely widespread across valley floors, is no longer present on the property. Historically, these areas would have supported tall podocarps such as kahikatea (*Dacrycarpus dacrydioides*), matai (*Prumnopitys taxifolia*), and tōtara (*Podocarpus totara*), together with lowland ribbonwood (*Plagianthus regius*), kōwhai, and narrow-leaved lacebark along stream margins. The lower sections of Smiths Creek and Stewarts Creek (below approximately 60m elevation) provide suitable habitat for this forest type and are a priority for re-establishment.

Active restoration will be required across much of the property to rebuild indigenous forest cover. Riparian zones are a strategic priority due to their ecological importance, water-quality benefits, and alignment with historic alluvial forest landforms. Restoration in these areas will also enhance connections with indigenous forest remnants on and beyond the property. Habitat restoration can improve connectivity between vegetation patches, increase effective habitat size, support larger and more resilient fauna populations, and reduce fragmentation. There are particular opportunities to strengthen connections in the Bacon Street, Harbour Cone, and Stewarts Creek management zones. Additional priorities include addressing internal and external gaps within dry forest patches on steep slopes in Stewarts Creek, and restoring canopy gaps in fenced forest areas following stock exclusion.

Peggys Hill is of particular restoration significance due to its existing moist forest, high fern diversity, presence of miro, and potential role in reducing landslide instability on lower slopes. Treated gorse on steep slopes may function as a temporary nurse environment for regenerating indigenous species. Indigenous regeneration could be facilitated by seeding dead gorse stands with fast-growing, fleshy-fruited species that attract frugivorous birds and promote natural seed dispersal.

Natural regeneration is occurring in limited areas. On the eastern and northern slopes of Harbour Cone, kānuka (*Kunzea* spp.) is expanding into rough grassland, while mingimingi (*Coprosma propinqua*) is establishing on dry forest margins in Stewarts Creek. These browse-resistant indigenous species may assist in improving canopy cover where grazing pressure remains. Facilitating regeneration in pastoral areas will require careful management and gradual reduction of grazing pressure, and in some locations, stock exclusion. Where regeneration occurs near significant archaeological or heritage sites, vegetation management will be guided by whole-property archaeological assessments and relevant conservation management plans. The Hereweka Harbour Cone Property Implementation Plan provides further detail on processes for encouraging natural regeneration, identifying restoration priorities, and selecting appropriate species for different landforms and habitats across the property.

Aim

1. Indigenous vegetation and habitats are progressively restored, increasing the extent and resilience of indigenous cover.

Objectives

1. To progressively restore indigenous vegetation while integrating protection of existing forest remnants.
2. To re-establish lowland podocarp forest on suitable sites.
3. To restore indigenous riparian vegetation and associated in-stream ecological values.
4. To enhance connectivity between indigenous habitats within and beyond the property.
5. To facilitate natural regeneration where practicable.

6. To establish larger, contiguous areas of indigenous vegetation to improve habitat quality, reduce fragmentation, and enhance landscape-scale ecological function.
7. To ensure restoration planting uses a diverse mix of species appropriate to each habitat type, including canopy trees, small trees, and shrub species.

Policies

1. Develop and implement a Habitat Restoration Plan based on management zones.
2. Regularly review restoration priorities based on ecological outcomes and monitoring results.
3. Maintain and protect restoration projects established prior to adoption of this Management Plan.
4. Protect restoration areas from adverse effects of farming, public use, and other adverse activities.
5. Undertake experimental trials to identify effective and cost-efficient restoration techniques.
6. Monitor restoration outcomes and use results to inform future projects.
7. Facilitate natural regeneration where appropriate.
8. Manage grazing pressure, including stock exclusion where necessary, to support regeneration.
9. Advocate for indigenous vegetation protection and restoration on adjacent land.
10. Maintain appropriate pasture curtilage around historic farmsteads, with vegetation management near heritage sites informed by archaeological assessments.
11. Implement restoration planting to create contiguous areas of indigenous vegetation within and between management zones, reducing habitat fragmentation and improving ecological connectivity.
12. Ensure restoration planting extends from lower riparian areas to upper catchment slopes where practicable, to restore full catchment function.
13. Use restoration planting as a tool for slope stabilisation and slip prevention where this aligns with ecological and landscape objectives.
14. Require restoration planting mixes to include an appropriate balance of canopy trees, sub-canopy species, and shrub species, recognising the ecological importance of shrub-dominated communities for local biodiversity.
15. Establish and support a voluntary tree donation scheme, enabling community members and organisations to contribute financially to restoration projects on the property.
16. Ensure all restoration projects include provision for post-planting maintenance, including weed control, plant replacement, and protection from grazing, for a sufficient period to ensure successful establishment.

7.4 Management of Rare and Threatened Species

The Hereweka Harbour Cone property currently provides habitat for several locally important species and some nationally important species. These include the locally important trees miro, narrow-leaved lacebark, kōwhai, lowland ribbonwood, Hall's tōtara, *Melicope simplex*, *Streblus heterophyllus*, and the mistletoe *Ileostylis micranthus*, and the nationally At Risk – Declining climber *Brachyglottis sciadophila*. The Hereweka Harbour Cone property is also the location of a historical record of the Threatened – Nationally Vulnerable tree *Olearia fimbriata*, which has not been recently seen at the site, but which could be reintroduced. Another species that could be considered for introduction to the property is *Helichrysum selago* var. *tumidum*, which is currently known from rock outcrops at Cape Saunders and Lovers Leap, but which could potentially grow on marble outcrops at the Hereweka site.

Hereweka means 'catch weka' and refers to the area being a place where weka, as a food source, were found. Buff weka (*Gallirallus australis hectori*) were historically indigenous to the eastern South Island and Southland but became locally extinct from the South Island. Buff weka are a taoka species to Kāi Tahu. Papatipu rūnaka, including Te Rūnanga o Ōtākou, have supported its reintroduction to islands in Lakes Wakatipu and Wānaka, and to the adjacent Stevenson's Peninsula. Te Rūnanga o Ōtākou are strong advocates for the reintroduction of buff weka to the Hereweka Harbour Cone property. A discussion on the factors requiring assessment when considering the reintroduction of locally and nationally important species is attached in **Appendix 6**.

The South Island rifleman (At Risk - Declining) is known to be present in forest adjacent to Hereweka Harbour Cone and are likely to utilise kānuka forest on the property from time to time. As forest cover in this part of the property increases in extent, rifleman are likely to become more common.

Both Smiths Creek and Stewarts Creek are known to support populations of the threatened freshwater invertebrate kōura (*Paranephrops zelandicus*; Chronically Threatened - Gradual Decline) which suggests that current habitat quality in these streams is reasonably good. Stewarts Creek has not been fully surveyed for fish, and this represents an information gap. At least one barrier to fish passage exists in Smiths Creek and other barriers may be present. Improvement of stream habitats through removal of barriers to fish passage and planting of appropriate riparian vegetation may result in other locally or nationally important fish species colonising these streams, including giant kōkopu (*Galaxias argenteus*).

Translocations of threatened species, either to the site or away from it, need to be undertaken according to Department of Conservation processes and in consultation with iwi.

Aims

1. Populations of locally and nationally important species are stable or improving.
2. New populations of locally and nationally important species are established where feasible.

Objectives

1. To maintain or improve existing populations of significant species.
2. To support recovery or re-establishment of appropriate species in suitable habitats.
3. To improve habitat quality to enable natural colonisation from adjacent land.
4. To ensure any translocation, reintroduction, or removal of indigenous species is undertaken in accordance with legislative requirements, best practice, and in partnership with mana whenua, as represented by Te Rūnanga o Ōtākou, and relevant agencies.

Policies

1. Document the status of locally and nationally important species present on the property.
2. Work collaboratively with Te Rūnanga o Ōtākou and iwi in partnership, and expert stakeholders on species management and reintroduction.
3. Survey aquatic habitats in Stewarts Creek, including assessment of fish passage barriers.
4. Reassess species populations at intervals of five to ten years.
5. Facilitate regeneration of kanuka forest in the Harbour Cone Management Zone to improve habitat for South Island rifleman.
6. Any translocation, reintroduction, augmentation, or removal of indigenous species on the property must be planned and undertaken in accordance with relevant legislation, including the Reserves Act 1977, Wildlife Act 1953, Conservation Act 1987, and any applicable regulations.
7. Translocations must follow current Department of Conservation best-practice guidance, including preparation of a translocation proposal, ecological feasibility assessment, and post-release monitoring plan, and must obtain all necessary approvals and permits prior to implementation.
8. Translocation proposals must demonstrate that suitable habitat exists or will be established prior to release, that threats have been adequately managed, and that the action will not adversely affect existing species, ecological communities, or property values.
9. All translocation activities must be undertaken in consultation with mana whenua, recognising taoka species and mātauraka Māori, and must have the support of relevant rūnaka, particularly where species are of cultural significance.
10. Translocations must align with the objectives of this Management Plan and be consistent with the primary purposes of the property, with priority given to species historically present in the area or to species that will materially contribute to the restoration of indigenous ecosystems.
11. Translocations will not proceed where there is significant uncertainty or unacceptable risk to ecological integrity, public safety, or cultural values, or where ongoing management and monitoring cannot be adequately resourced.

7.5 Weed and Pest Plant Management

Hereweka Harbour Cone contains extensive areas of indigenous forest, regenerating shrubland, and riparian restoration plantings that are vulnerable to invasion by pest plants and ecological weeds. These pressures reflect historic land use, reduced grazing, ongoing propagule pressure from surrounding land, and the property's diverse landforms and microclimates.

Several ecological weeds are present at Hereweka and include sycamore (*Acer pseudoplatanus*), hawthorn (*Crataegus monogyna*), gorse (*Ulex europaeus*), elder (*Sambucus nigra*), radiata pine (*Pinus radiata*), macrocarpa (*Cupressus macrocarpa*), gooseberry (*Ribes uva-crispa*), Scotch broom (*Cytisus scoparius*), Darwin's barberry (*Berberis darwinii*) and blackberry (*Rubus fruticosus*). Of these species, gorse and hawthorn are widespread and relatively abundant, while elder is widespread at low density. Sycamore is present at only a few sites but is actively spreading. The remaining species are at relatively low abundance in indigenous vegetation. Weeds also include the non-local indigenous species rangiora (*Brachyglottis repanda*), which is present in the upper part of Stewarts Creek. Climbing weeds such as Chilean flame creeper (*Tropaeolum speciosum*) are also present.

Other climbing weeds such as old man's beard (*Clematis vitalba*), banana passion fruit (*Passiflora tripartita*), and bomarea (*Bomarea caldasii*) appear to be absent or at very low abundance at Hereweka. However, banana passionfruit has become well-established in the Bacon Street management zone. These and other ecological weeds with the potential to invade the site should be subject to surveillance, so that any new weed incursions can be swiftly detected.

If unmanaged, weed and pest plant species pose significant risks to indigenous biodiversity, ecological processes, restoration outcomes, public access, and fire safety.

Weed and pest plant management on the property shall align with the Otago Regional Council Regional Pest Management Plan (RPMP), including the Otago Peninsula site-led pest plant programme. Management will emphasise early detection, rapid response, progressive containment, and eradication where practicable, recognising that long-term surveillance is essential due to ongoing reinfestation risk from adjacent land.

Aims

1. Ecological weeds and pest plants are controlled to levels that do not threaten indigenous biodiversity, ecological processes, public access, or public safety.
2. The establishment and spread of new pest plant species is prevented through early detection and response.
3. Long-term ecological restoration, access protection, and fire-risk reduction is supported through integrated and prioritised weed management.

Objectives

1. To protect and enhance indigenous species, habitats, and ecological processes through appropriate and timely weed and pest plant management.
2. To give effect to the Otago Regional Council RPMP, including eradication or progressive containment of designated pest plant species.
3. To reduce long-term management costs and ecological impacts through regular surveillance, monitoring, and early intervention.

Policies

1. Weed and pest plant management on the Hereweka Harbour Cone property shall align with the Otago Regional Council Regional Pest Management Plan and give priority to ORC-designated Site-Led Pest Plants.
2. The following ORC Site-Led Pest Plants shall be targeted for **eradication where present**, and for ongoing surveillance to prevent re-establishment:
 - Banana passionfruit (*Passiflora tripartita*)
 - Chilean flame creeper (*Tropaeolum speciosum*)
 - Darwin's barberry (*Berberis darwinii*)
 - Chilean rhubarb (*Gunnera tinctoria*)
 - Tradescantia (*Tradescantia fluminensis*)



3. Sycamore (*Acer pseudoplatanus*) shall be subject to **progressive containment and eradication**, recognising its high invasion risk, wind-dispersed seed, and capacity for rapid spread, particularly within the Smiths Creek catchment and on Peggy's Hill.
4. Bomarea (*Bomarea caldasii*) and old man's beard (*Clematis vitalba*) shall be managed in accordance with occupier responsibilities under the RPMP. **Any plants found on the property shall be prioritised for eradication**, recognising ongoing reinfestation risk from bird- and wind-dispersed seed sources on adjacent land.
5. The following species shall be **progressively reduced** due to their capacity to displace indigenous vegetation or inhibit restoration:
 - Hawthorn (*Crataegus monogyna*)
 - Elder (*Sambucus nigra*)
 - Flowering currant
 - Gooseberry
6. The following species shall be **eradicated where detected**, recognising that early intervention is critical to avoid future management escalation:
 - Great bindweed (*Calystegia sylvatica*)
 - Aluminium plant (*Lamium galeobdolon*)
 - Cotoneaster species
 - Himalayan honeysuckle (*Leycesteria formosa*)
 - Barberry (*Berberis glaucocarpa*)
 - Balm of Gilead (*Cedronella canariensis*)
 - Montbretia (*Crocasmia × crocosmiiflora*)
7. Rangiora (*Brachyglottis repanda*) and lacebark (*Hoheria sextylosa*), while indigenous to other regions, shall be eradicated where present, as they do not occur naturally on the Otago Peninsula and may displace locally indigenous vegetation.
8. Gorse (*Ulex europaeus*) and broom (*Cytisus scoparius*) shall be controlled to low levels across the property, with intensified control where:
 - Spread is rapid or unmanaged
 - Access tracks are being encroached upon
 - Fire risk is increasing
 - Indigenous regeneration or restoration is being inhibited

Gorse may be temporarily retained where it is demonstrably facilitating indigenous regeneration, subject to active and documented management.
9. Weed and pest plant management shall be prioritised in areas where unmanaged spread poses a demonstrable risk to indigenous biodiversity, public access, or safety. Where weed control intersects with heritage values, integrated solutions shall be sought; however, ecological risk shall not be deferred indefinitely for heritage considerations.
10. Annual surveillance shall be undertaken across all management zones of the Hereweka Harbour Cone property to detect new weed incursions or expansion of existing infestations, recognising that ongoing reinvasion is inevitable due to adjacent seed sources.

11. Weed and pest plant control activities shall be spatially recorded, including GPS mapping, species treated, methods used, and outcomes achieved, to support adaptive management, accountability, and reporting.
12. Weed management responsibilities of any grazing or land-use licence holders shall be coordinated with wider pest plant management across the property.
13. Weed and pest plant control shall be coordinated with neighbouring landowners, community groups, and relevant agencies where practicable, to reduce cross-boundary reinfestation and improve landscape-scale outcomes.
14. Public education and community engagement initiatives shall be supported to improve awareness of pest plant identification, impacts, and reporting pathways.
15. Sustainable funding sources for weed and pest plant management shall be actively sought, including grants, partnerships, volunteer programmes, and alignment with regional initiatives.

7.6 Pest Animal Control

Pest animals present on the Hereweka Harbour Cone property place ongoing pressure on indigenous vegetation, fauna, and ecological processes. Effective pest animal management is essential to achieving restoration objectives and supporting the potential reintroduction or recovery of locally significant species.

The Otago Peninsula Biodiversity Group (OPBG) has been a cornerstone of community-led predator control on the Otago Peninsula since its formation in 2008 by local residents with a vision of removing introduced mammalian predators to help native wildlife and ecosystems recover. One of their flagship efforts has been the long-term possum eradication programme, which has seen volunteers and staff remove tens of thousands of possums from the peninsula, laying extensive trap networks and engaging landowners and residents in monitoring and reporting.

In recent years, OPBG's possum work has transitioned into a broader collaborative initiative under the Predator Free Dunedin partnership, established in 2018 to connect conservation efforts across the wider Dunedin region with a shared long-term goal of eliminating predators such as possums, rats, and stoats by mid-century. Predator Free Dunedin is responsible for the Otago Peninsula's Possum Free Biosecurity Plan which includes ongoing assurance surveillance across the entire peninsula, while OPBG continues to contribute its local expertise and volunteer base.

Pest animal control at Hereweka Harbour Cone will address a range of introduced mammalian predators and browsers, including rodents, mustelids, hedgehogs, and other species as identified through monitoring. Control programmes will be undertaken using integrated, multi-species approaches to avoid unintended ecological effects and to maximise biodiversity gains. Management will be coordinated with Predator Free Dunedin and other relevant partners to ensure alignment of methods, data sharing, resourcing, and reinvasion prevention, recognising that effective predator suppression requires a sustained, landscape-scale response across the Otago Peninsula.

Aims

1. Pest animals are controlled to levels that do not threaten indigenous biodiversity or ecological processes.
2. Pest control contributes to landscape-scale biodiversity outcomes across the Otago Peninsula.
3. Pest management supports the potential reintroduction and long-term viability of indigenous fauna.

Objectives

1. To protect and enhance indigenous species, habitats, and ecological processes through coordinated pest animal management.
2. To integrate pest control on the property with wider predator reduction initiatives.

Policies

1. Develop and implement a pest animal control programme that specifies priority species, control methods, measurable targets, and monitoring indicators linked to biodiversity outcomes.
2. Pest animal management on the property shall be aligned with the national **Predator Free 2050** vision and **Predator Free Dunedin**, recognising the benefits of shared expertise, operational coordination, and access to funding and resources.
3. Pest control programmes shall consider interactions between pest species and apply integrated control approaches to avoid unintended ecological outcomes such as predator release.
4. Pest animal control shall be used as a foundational tool to support the potential reintroduction of appropriate indigenous species, subject to feasibility assessments and statutory approvals.
5. Monitoring of pest control outcomes will be undertaken to assess effectiveness and inform adaptive management.
6. Where practicable, pest control efforts will be supported and encouraged on adjoining private properties through partnerships, information-sharing, and alignment with wider initiatives, recognising that reinvasion undermines on-site control.
7. Public information will be provided on pest control objectives, methods, and outcomes, including the role of pest control in achieving wider biodiversity and restoration goals.

8.0 Heritage and Cultural Landscape

The Hereweka Harbour Cone property forms part of a layered cultural landscape shaped by long-standing Kāi Tahu occupation and later Pākehā settlement. Management of the property must recognise, protect, and actively interpret this cultural landscape as a whole, rather than treating individual sites in isolation. This includes acknowledging both Māori and European histories, their points of intersection, and the enduring relationships between people, land, and resources.

8.1 Recognition of Mana Whenua Values

The landscape now known as Ōtepoti Dunedin is part of the wider ancestral landscape under the mana and rakatirataka of Kāi Tahu whānui. The original inhabitants of the area were Kāti Hāwea and Te Rapuwai, who settled Te Wai Pounamu from Polynesia. Over time, further groups migrated and settled here, including the Waitaha people who are known to have arrived on the waka Uruao. A well-known tribal ancestor of Waitaha was Rākaihautū, who carved out the lakes and rivers of Te Wai Pounamu with his kō Tūwhakaroria, a supernatural digging implement.

Further migration and settlement by groups from the North Island occurred in the seventeenth and eighteenth centuries, including Kāti Māmoe from the Hastings area, and Kāi Tahu from the East Cape of the North Island. Through conquest and intermarriage, these different whakapapa lines are referenced by the phrase ‘Kāi Tahu Whānui’ encompassing the broader ancestral connections underpinned by this history of migration and settlement.

Kāi Tahu have a long association with Otago Peninsula and the mauka Hereweka (Harbour Cone). The seasonal practice of **mahika kai**, involving the gathering of food and materials across the rohe, was central to the lives of Kāi Tahu tūpuna. Hereweka formed part of an interconnected network of trails and food-gathering places and was likely used for hunting and resource collection.

The name *Hereweka* means “catch weka” and reflects the historic presence of weka as a valued food source. The mauka also features in Kāi Tahu oral history as a place where Ōtākou tupuna Tarewai sought refuge during conflict with Kāti Māmoe. These narratives reinforce the cultural significance of Hereweka as a place of sustenance, shelter, and identity.

Hereweka Harbour Cone is part of the wider cultural landscape of the Otago Peninsula and must be understood and managed in that context. Recognising and interpreting this broader landscape—including its trails, viewpoints, and relationships to surrounding land and seascapes—is an important objective for mana whenua.

As the mauka is within Te Rūnanga o Ōtākou rohe and is a Wāhi Tupuna Mapped Area (Pukemata), Hereweka and its immediate setting should remain free from inappropriate development. Enhancement of this cultural landscape includes restoration of indigenous vegetation, particularly fruiting species associated with mahika kai, and consideration of future species reintroductions where appropriate.

A partial assessment of Māori archaeological sites has been undertaken, but further work is required. A cultural opportunities mapping exercise with Te Rūnanga o Ōtākou will identify opportunities for cultural expression, education, and practice, including planting of rongoā species and culturally significant harakeke varieties.

The statutory acknowledgement for Te Tai o Arai Te Uru (Otago Coastal Marine Area) under the Ngāi Tahu Claims Settlement Act is relevant to the property and reinforces the need to recognise Kāi Tahu cultural, spiritual, historic, and traditional associations with the wider landscape.

Aim

1. The Hereweka Harbour Cone property is managed in a manner that recognises, protects, and actively expresses its cultural significance to mana whenua.

Objectives

1. To identify, protect, and conserve sites and landscapes of cultural significance to mana whenua.
2. To support appropriate cultural access and use by mana whenua, including the harvest of cultural materials where appropriate.
3. To ensure enhancement and restoration activities are consistent with the cultural values of mana whenua and the wider cultural landscape.
4. To ensure mana whenua are genuinely represented in governance, planning, and decision-making relating to land management.

Policies

1. Protect and conserve wāhi tapu, wāhi taoka, and other sites of cultural significance in a culturally appropriate manner and in partnership with mana whenua.
2. Complete a comprehensive cultural assessment of the property, including development of an inventory of sites and landscapes of significance to mana whenua.
3. Undertake a cultural opportunities mapping exercise with Te Rūnanga o Ōtākou to guide cultural expression, planting, interpretation, and access.
4. Encourage the consistent use and promotion of traditional place names, including Hereweka, across signage, interpretation, and publications.
5. Provide for traditional trail routes and cultural access by mana whenua where appropriate.
6. Apply relevant provisions of the Dunedin City Council Reserves Management Plan – General Policies relating to the harvest of cultural materials.
7. Ensure the Hereweka Harbour Cone property remains free from inappropriate development and that all activities are consistent with its cultural significance.
8. Consult with Te Rūnanga o Ōtākou on all matters that may affect cultural values, including ecological restoration, species management, and public access.
9. Ensure all archaeological discoveries of Māori origin are notified to the Ministry for Culture and Heritage and mana whenua.
10. Recognise and uphold the role of mana whenua as kaitiaki of taoka tūturu in accordance with the Protected Objects Act 1975.
11. Acknowledge and give effect to the statutory acknowledgement for Te Tai o Arai Te Uru in relevant management decisions.
12. Provide interpretative signage and educational material explaining Māori history, traditions, mahika kai practices, and kaitiakitaka values associated with the property.

8.2 Historic Sites, Structures, and Cultural Landscape

Numerous historic sites and structures associated with early Pākehā settlement have been identified within the Hereweka Harbour Cone property and recorded in the New Zealand Archaeological Association Site Recording Scheme. While none are currently entered on the Heritage New Zealand Pouhere Taonga List/Rārangi Kōrero, these places are archaeological sites protected under the Heritage New Zealand Pouhere Taonga Act 2014, and any modification or disturbance requires appropriate statutory authority.

An initial archaeological survey was completed in 2008 by Angela Middleton, providing baseline recording of sites and features across the property and identifying multiple areas of heritage significance. Subsequent, more targeted investigations have included detailed recording of the Larnach farmstead barn prior to its dismantling in 2018 under an archaeological authority from Heritage New Zealand Pouhere Taonga, and a 2019 condition assessment of the Rutherford's Farm complex, focusing on the state of stone structures and associated features.

The Hereweka Harbour Cone Conservation Plan (2020) identifies sixty heritage items across the property and documents their historic function and significance. It also evaluates their current condition, integrity, and the principal risks affecting their long-term conservation, providing a framework for prioritising protection and restoration efforts.

While all heritage structures are valued components of the Hereweka cultural landscape, it is acknowledged that finite resources and practical constraints mean not all structures can be fully restored or maintained in perpetuity. Prioritisation will therefore be required, with conservation efforts focused on structures of highest significance or vulnerability, and where restoration is not feasible, alternative approaches — such as the careful salvage and reuse of historic materials to support the conservation of other heritage sites — may be considered.

The historic landscape of Hereweka Harbour Cone extends beyond the property boundary and is best understood as part of a wider pastoral and cultural landscape. This includes early farm infrastructure, boundary walls, access routes, plantings, and spatial relationships with neighbouring estates. In particular, historic and functional associations with Larnach Castle and its former landholdings form part of the broader heritage context and should be recognised in management and interpretation.

Public access to historic sites presents valuable opportunities for education and interpretation. However, some sites are fragile, archaeologically sensitive, or culturally significant, and access must be carefully planned and managed to prevent physical damage, avoid inadvertent disturbance, and respect mana whenua values.

Further archaeological investigation and condition assessment may be required to better understand the extent, significance, and conservation needs of historic features. Conservation planning will guide protection, stabilisation, restoration, monitoring, and appropriate levels of public access in a manner consistent with statutory requirements and best-practice heritage management.

Interpretation should present a balanced account of both Māori and Pākehā histories, acknowledging their interactions with the land and the layered cultural narratives that shape the Hereweka landscape. This should be supported by robust documentation, research, and public education initiatives that enhance understanding while safeguarding heritage values.

Aim

1. The historic and cultural heritage of the property is understood, protected, and appropriately interpreted.

Objectives

1. To prevent further deterioration of significant archaeological sites and heritage structures.
2. To manage historic sites in accordance with best-practice conservation principles.
3. To conserve and retain the material authenticity of the historic environment by enabling the careful salvage and reuse of heritage building materials, where restoration of original structures is not feasible.
4. To ensure heritage sites are not adversely affected by farming, restoration activities, or public use.
5. To provide safe and appropriate public access to selected heritage sites.
6. To recognise the property as part of a wider historic and cultural landscape.
7. To support community and volunteer involvement in heritage protection.
8. To improve public understanding of the area's Māori and Pākehā settlement history.

Policies

1. Prepare and implement conservation and management plans for priority sites, focusing on areas of high significance or vulnerability.
2. Obtain and comply with all required archaeological authorities for works affecting heritage sites.
3. Recognise mana whenua as kaitiaki of taoka tūturu in accordance with legislation.
4. Manage archaeological sites and heritage structures in accordance with approved conservation and management plans and recognised best practice.
5. Encourage supervised community participation in heritage conservation activities where appropriate.
6. Monitor visitor impacts and restrict access to sensitive sites where necessary.
7. Advocate for recognition and protection of the wider cultural landscape beyond the property boundary.
8. Consider adaptive re-use of historic buildings for visitor or interpretive purposes where this does not compromise heritage values.
9. Consider the salvage and reuse of historic building materials from structures that are demonstrably beyond feasible restoration, where such reuse supports the conservation, stabilisation, or interpretation of other heritage structures on the property.
10. Any salvage of historic materials for reuse must be preceded by appropriate documentation and recording. Salvage must be undertaken in accordance with approved conservation plans and statutory requirements and must not compromise the heritage values of either the donor site or the recipient site.
11. Salvaged materials should be clearly documented, and their provenance retained as part of the site's historical record.
12. Treat vegetation management and tree removal on heritage sites as archaeological activities requiring appropriate approvals.

13. Where existing macrocarpa or other exotic shelterbelts and specimen trees contribute to historic, cultural, or landscape values, consider replacement planting to maintain continuity of shelter, landscape form, and cultural character as trees decline or fail.
14. Integrate replacement planting with indigenous restoration where appropriate, while retaining the recognisable structure and cultural legibility of historic planting patterns.
15. Ensure farming activities do not damage heritage sites or structures.
16. Actively seek funding to support archaeological research, conservation, interpretation, and public education.
17. Prohibit unauthorised searching for or removal of historic objects.
18. Retain historic objects found on the property for future on-site interpretation, subject to statutory requirements.

9.0 Visitor and Commercial Use

9.1 Recreation Use

Public access has been a feature of the Hereweka Harbour Cone property for many years. The property is used by local residents and its proximity to the city means it is also enjoyed by the wider Dunedin community. As the profile of the property increases through improved access, interpretation, and integration with wider peninsula networks, use by visitors and tourists is also likely to increase.

The property's size, landform, and landscape character provide for a spectrum of recreation experiences, from physically demanding ridge routes to lower-gradient connector tracks. Horse riding and mountain biking may be provided on designated routes where gradients, surfaces, stock management, and conflict risk can be appropriately managed. Motorised recreation (including 4WD vehicles and motorcycles) is not permitted, as it is inconsistent with the property's landscape, ecological, and visitor-experience values. Most routes across the property traverse steep and exposed terrain and will be managed to reflect Advanced user experiences under the Dunedin Tracks Plan classification framework. However, a limited number of routes and areas near primary entrances may be developed and managed as Easier Access Areas where terrain and values allow, including consideration of accessible or stroller-suitable connections where feasible (for example, through areas such as Future Forest), without compromising landscape character or ecological and heritage values.

The Hereweka Harbour Cone property is also managed as a working pastoral landscape. Farming operations and grazing management must be designed to be complementary to the property's values and public access. Temporary restrictions may be required for safety and operational reasons, including lambing, but restrictions should be applied only where necessary and for the shortest practicable period.

Dogs are not permitted on the property, except for farm management purposes, in order to protect stock, wildlife, and visitor safety. Dog management will be governed by the Dunedin City Council Dog Control Bylaw and associated policies and will be clearly communicated.

Camping and freedom camping are generally not appropriate within the property due to the lack of suitable facilities, and the risk of adverse effects on ecological, heritage, and farming values. The Dunedin City Council Camping Control Bylaw 2015 regulates freedom camping on land administered by the Council across the city.

Aim

1. The Hereweka Harbour Cone property is available for safe and enjoyable recreation that is consistent with the property's values.

Objectives

1. To support a range of recreation uses that are compatible with the property's landscape, ecological, cultural, heritage, and farming values.
2. To manage multi-use access in a way that reduces conflict between user groups and protects sensitive areas.
3. To provide for improved connectivity within the property and to wider Otago Peninsula recreation networks where compatible with property values.

4. To provide for a limited number of Easier Access Areas where terrain and values allow, including consideration of accessible routes.

Policies

1. Walking is supported across the track network; mountain biking and horse riding are provided for only where routes are specifically assessed and designated as suitable.
2. Motorised recreation is not permitted (excluding management, emergency, and authorised farm vehicles).
3. Public access across most of the property is classified as “Advanced”, except for identified Easier Access Areas.
4. The public are encouraged to remain on marked routes, particularly where sites are sensitive or vulnerable.
5. Visitor impacts and safety will be monitored, and routes may be temporarily or permanently restricted to all users, or to certain uses (e.g., biking or horse riding), where necessary to protect values or manage risk.
6. Any farm-related closure (including lambing) will be applied only where necessary, for the minimum practicable period, and will be clearly communicated through signage and public channels.
7. Applications for bylaw exemptions to permit camping will be considered only where the proposed activity is complementary to the property’s values, is consistent with the other policies of this Plan, and provides wider social or educational benefits.
8. Dogs are prohibited except for farm management purposes, unless otherwise permitted through provisions of a Council dog control bylaw or policy.

9.2 Visitor Use

The Hereweka Harbour Cone property provides an accessible setting in which people can experience and learn about the Otago Peninsula’s natural, cultural, and historic values. Active community participation can strengthen local stewardship and contribute to ecological restoration, heritage protection, education, visitor management, and the ongoing care of projects and public spaces.

Community involvement that supports the objectives and policies of this Plan is encouraged. All activities and works must, however, be appropriately coordinated and undertaken under the supervision of individuals, groups, or organisations with relevant expertise and the necessary approvals. Formal partnerships or agreements may be established where these would support high-quality, enduring outcomes and provide clarity about roles, responsibilities, standards, management, and maintenance.

The property provides strong opportunities for environmental education and outdoor learning, biodiversity restoration, sustainable land management, cultural landscape understanding, and early settlement history. Research projects that improve understanding of the property’s values and inform management will be encouraged, including partnerships with tertiary institutions.

All organised activities, research, or enhancement works (including track works, vegetation works, installation of structures, or works near heritage sites) require appropriate approvals and statutory authorisations.

Aims

1. Community initiatives, participation, and research are supported and underpinned by stewardship.
2. Research increases understanding of the property's values and informs adaptive management.
3. Organisations, groups, and volunteers are able to participate in the protection and enhancement of the property's values.
4. Educational use is supported where it is compatible with the property's values.
5. Local communities benefit through appropriate community initiatives and partnerships.

Objectives

1. To encourage research that informs management and improves outcomes.
2. To support skilled organisations and volunteers to contribute to protection and enhancement works.
3. To support education that increases awareness and understanding of the property's values and the wider environment.
4. To support appropriate community initiatives that contribute to social cohesion, property values, and an ethic of stewardship.
5. To consider provision of a facility for specialised education aimed at increasing knowledge of the environment, sustainability and heritage which could also provide for other community activities and visitor infrastructure.

Policies

1. Support educational use of the property where this is in alignment with property values and uses and can be undertaken within health and safety expectations for this rural property.
2. Support the development of on-site and off-site interpretation, programmes, and online information that educates people on the property's values.
3. Support proposals for initiatives, research, or enhancement works where these include assessment of effects and mitigation measures, are appropriately resourced and will contribute to the values, understanding, or management of the property.
4. Support research and trials that contribute to an understanding of environmental regeneration, sustainable land use, and ecosystem functioning.
5. Encourage partnerships with mana whenua, community groups, and specialist organisations where these support management objectives and provide for long-term stewardship outcomes.
6. Require all organisations, groups, or persons to independently gain all relevant statutory authorities necessary to undertake their activities.
7. Encourage links with tertiary institutions and relevant agencies to promote research and education aligned with management needs.
8. Ensure all volunteer activities are conducted in accordance with the Volunteering and Education section of the Reserves Management Plan General Policies.

9. Work with interested stakeholders in considering the feasibility of an environmental education centre/visitor hub and base for community activities related to this property.

9.3 Visitor Infrastructure

The Hereweka Harbour Cone property is highly valued for its expansive landscape vistas, open space, and rural character, and is an important public amenity for the Dunedin community. Visitor infrastructure is necessary to support safe and meaningful public enjoyment; however, such provision must remain minimal, carefully located, and sensitively designed to protect the property's landscape, cultural, historic, and ecological values.

Public access will be encouraged in areas that showcase significant landscape, cultural, heritage, and biodiversity features. Decisions regarding access and infrastructure will be informed by site vulnerability, terrain, visitor safety, and the need to retain the property's predominantly rural and undeveloped character. Given the steep topography and desire to maintain a low level of modification, most tracks will be classified as 'Advanced' and will generally involve minimal earthworks or structural intervention.

Track development will prioritise the maintenance and improvement of existing routes, the completion of logical circuit connections, and safety enhancements on steep or high-use sections. Opportunities to provide select Easier Access routes, including options for people with limited mobility, will be considered where terrain allows. Connections to wider Otago Peninsula track networks will be supported where compatible with the property's values. Track expansion onto neighbouring private properties may provide opportunities to create additional connections that improve accessibility, and strengthen landscape, recreational, and ecological values. Any such connections will be subject to landowner agreement and formalised through appropriate legal mechanisms, such as easements, licences, or memoranda of understanding. All proposals will require careful assessment of landscape, cultural, ecological, and operational effects prior to implementation.

"Easier Access Areas" will generally be located in more moderate terrain and near primary entrances, such as the Bacon Street access. These areas may accommodate a slightly higher level of infrastructure, including improved fence crossings, drainage works, limited boardwalks, or seating where required.

Any proposal to establish or upgrade tracks must be assessed for effects on biodiversity, archaeological and heritage values, erosion risk, landscape character, potential user conflict, and ongoing maintenance requirements. Mountain biking may be accommodated on selected routes where appropriate, while walking will retain priority in more sensitive areas.

Some multi-use infrastructure may be necessary to reduce user conflict and improve accessibility. This may include installing sprung gates rather than stiles to accommodate horse riders and other authorised users. Visitor amenities such as barbeques and picnic tables are not considered appropriate given the desired character of the property.

Vehicle access and existing car parking currently rely on roadside shoulders, but as visitation increases, additional parking provision may be required. This could include the expansion or formalisation of shoulder parking, where safe and practicable, enhancements at the Bacon Street entrance, or as part of a future visitor hub. Any parking upgrades or vehicle accessways must be carefully assessed to ensure they do not adversely affect landscape character, safety, or neighbouring properties.

Public toilets may be established if necessary, including potential upgrades to the existing facility near the woolshed, noting that public toilets are currently available in Portobello and Broad Bay. The

need for additional facilities will be evaluated in relation to visitor numbers, servicing requirements, and overall effects on the property's character and values.

Signage and interpretation will support route-finding and enhance understanding of the site's landscape, cultural, historic, and ecological values (refer Section 9.4). Any visitor hub should prioritise the adaptive reuse of existing buildings where feasible and be designed and located to avoid adverse effects on landscape character, heritage values, and the rural setting.

Aims

1. Visitor infrastructure supports safe, enjoyable access and protects property values.
2. Visitor infrastructure is minimal and consistent with rural character and landscape values.
3. Tracks support internal circuits and appropriate links to wider peninsula networks.

Objectives

1. To encourage public access into and through the property where appropriate.
2. To provide for connectivity within the property and, where compatible, links to surrounding track networks.
3. To provide Easier Access Areas and accessible-route opportunities where feasible.
4. To provide access points and parking that are safe and fit for purpose, with minimal landscape impact.

Policies

1. Provide visitor infrastructure where it is necessary, and ensure it is low-impact, fit-for-purpose, and consistent with property values.
2. Manage most routes as "Advanced," with Easier Access Areas provided only where terrain and values allow.
3. Maintain and upgrade route marking and track surfaces where necessary for safety, including targeted improvements to routes used by those with limited mobility.
4. Develop track connections and circuits where these improve safety, reduce user conflict, improve accessibility, and protect or enhance values, or recreation outcomes.
5. Track planning and promotion will support connections to wider peninsula walking and cycling networks where consistent with property values, including investigation of multi-day walking/cycling opportunities as part of a broader Otago Peninsula recreation network.
6. Assess proposals for new or upgraded tracks (including MTB and horse routes) against biodiversity, heritage, landscape, erosion, safety, and maintenance requirements, and manage other routes as walking-only where appropriate.
7. Provide and maintain access structures to support multi-use access, reduce conflicts with farming, and support users with reduced mobility where feasible.
8. Provide, promote, and maintain suitable access points for public use, and adequate car parking.

9. Investigate and formalise strategic access connections through private properties that enhance the property's accessibility, values and route continuity, securing them through appropriate legal mechanisms and subject to assessment and any statutory requirements.
10. Do not provide infrastructure inconsistent with the property's character (e.g., picnic facilities or extensive furniture).
11. Consider toilets only if justified by use levels and able to be provided without compromising values, preferably through adaptive reuse of existing assets if practicable.

9.4 Signage and Interpretation

Signage and interpretation will enhance visitors' enjoyment, understanding, and appreciation of the Hereweka Harbour Cone property by highlighting access points, explaining the site's significant landscape, cultural, heritage, and ecological values, and encouraging community stewardship. Well-planned signage will also support effective visitor management by guiding appropriate use, discouraging access to vulnerable areas, and alerting visitors to unusual or significant hazards. Signage will be unobtrusive, consistent in style, limited in quantity, and designed to maintain a low visual footprint, with information consolidated at entrances and key junctions wherever possible.

Property boundary markers will be installed at key locations to define the extent of the property and reduce the likelihood of accidental trespass onto neighbouring private land. A coordinated system of route markers and directional signage at potentially confusing junctions will assist public navigation and enjoyment.

Given the multi-use nature of tracks and the steep terrain, signage will clearly identify permitted uses (such as walking, mountain biking, or horse riding where designated) and indicate where certain activities are not permitted. Information regarding the legal protection of archaeological sites, including guidance relating to taoka tūturu and archaeological protections will be necessary at key access points and significant sites. Signs will also communicate seasonal restrictions and hazard warnings where required. Route marking will rely on simple, durable systems that are appropriate to the landscape character.

Interpretation signage will play a crucial role in communicating the layered Māori and Pākehā histories of the property and the wider cultural landscape. Due to the complexity of the site, specialist input in interpretation planning will be sought to ensure content is accurate, engaging, and culturally appropriate. The style and materials of interpretation signage must be sympathetic to the physical and historical landscape.

Digital platforms will complement on-site signage and serve as the primary source for detailed route information, including multi-use designations and accessibility notes. QR codes may link visitors to online maps and more detailed interpretive content. Additional interpretation opportunities may include a sensitively designed Visitor Hub (refer Section 9.3), brochures, web-based resources, and collaboration with Otago Peninsula community groups to strengthen local connections and shared stewardship.

Aim

1. Signage and interpretation enhance visitor enjoyment, safety, and understanding of the property's values while maintaining a low visual impact and respecting landscape and cultural character.

Objectives

1. To provide interpretation that deepens understanding of the property's landscape, cultural, heritage, and ecological values and promotes community stewardship.
2. To provide clear and effective signage that supports safe access, appropriate use, and protection of sensitive areas.
3. To deliver a high-quality and consistent signage system that integrates on-site information with online resources to support wayfinding and interpretation.

Policies

1. Develop and implement a Signage and Interpretation Plan that is consistent in style, low-impact, and promotes, protects, and enhances the property's landscape, cultural, heritage, and ecological values.
2. Work in partnership with mana whenua to develop and provide bilingual signage at culturally significant sites, ensuring te reo Māori is appropriately represented and content reflects Kāi Tahu narratives, values, and tikanga.
3. Provide boundary markers, entrance signage, route markers and junction signage sufficient to support safe wayfinding and reduce accidental trespass.
4. Provide clear information on permitted uses, including designated mountain bike and horse routes, and walking-only areas where applicable.
5. Provide signage where required to communicate legal protections of cultural and heritage sites, key hazards, and seasonal restrictions.
6. Use QR codes and online sources to provide supplementary wayfinding and interpretive information, reducing the need for additional on-site signage.
7. Support adjoining landowners to manage access interfaces and information where appropriate.
8. Support the development of additional off-site promotional and interpretive materials and investigate future on-site interpretation opportunities, to promote and communicate the property's values.

9.5 Authorisations, Commercial and Exclusive Use, Special Events and Occupation Agreements

Use of areas within the Hereweka Harbour Cone property for organised activities, including commercial operations, exclusive use events, filming, guided tours, and special events, will be supported only where such use does not adversely affect the property's landscape, cultural, heritage, or ecological values, or unreasonably limit casual public access and enjoyment. Applications for permanent or temporary use will require appropriate authorisation and will be considered on their merits, with particular regard to cumulative effects and the ability to appropriately manage impacts.

Council practice is to work in accordance with the provisions of the Act, even where land is not formally subject to that Act. Authorisations may therefore be granted in the form of written approvals, leases, licences, concessions, or occupation agreements issued by the Dunedin City Council as landowner and administering authority. Council will retain responsibility for decisions relating to leases, licences, and other occupation agreements, and will consult with the Trust on

70

proposals and operational matters relevant to the Trust's management role. Proposals will be assessed against the aims, objectives, and policies of this Management Plan, the Dunedin City Council Reserves Management Plan – General Policies, operational practicality, and the cumulative effect of organised uses on the property's values.

Occupation agreements may also be used to formalise ongoing or long-term uses, such as farming, rights-of-way, water rights, stormwater discharge, drainage rights, underground services, or other infrastructure. Low-impact farming and sheep grazing are important management tools for the property. Any licensing or leasing arrangement must be structured to complement the property's objectives, including public access, heritage protection, ecological restoration, and safety. Requests to access land or water will be considered where consistent with this Management Plan and relevant statutory requirements.

Authorisations for commercial activities will generally be granted for a limited term of no more than 14 years (or, in the case of a licence, up to five years) — with provision for annual review to ensure continued compatibility with the property's values. To ensure that management is not burdened with costs associated with such use, authority holders will be required to pay activity fees appropriate to the type of use and meet all costs related to their activity, including any contributions to general visitor infrastructure where applicable. Fees and rentals will be guided by the Dunedin City Council Reserves Management Plan General Policies and the Dunedin City Council Fees and Charges Policy.

The granting of a DCC authorisation or occupation agreement does not remove the holder's responsibility to obtain and maintain any other statutory approvals required for the activity and to comply with all applicable legislation, regulations, bylaws, district plan provisions, resource consent conditions and other legal requirements, including those relating to health and safety and food safety.

Aim

1. Organised or commercial use and occupation are authorised only where compatible with property values and considered not detrimental to casual public enjoyment.

Objectives

1. To provide for organised use where it is compatible with the property's values and other users.
2. To ensure all commercial use and occupation are properly authorised, monitored, and managed.

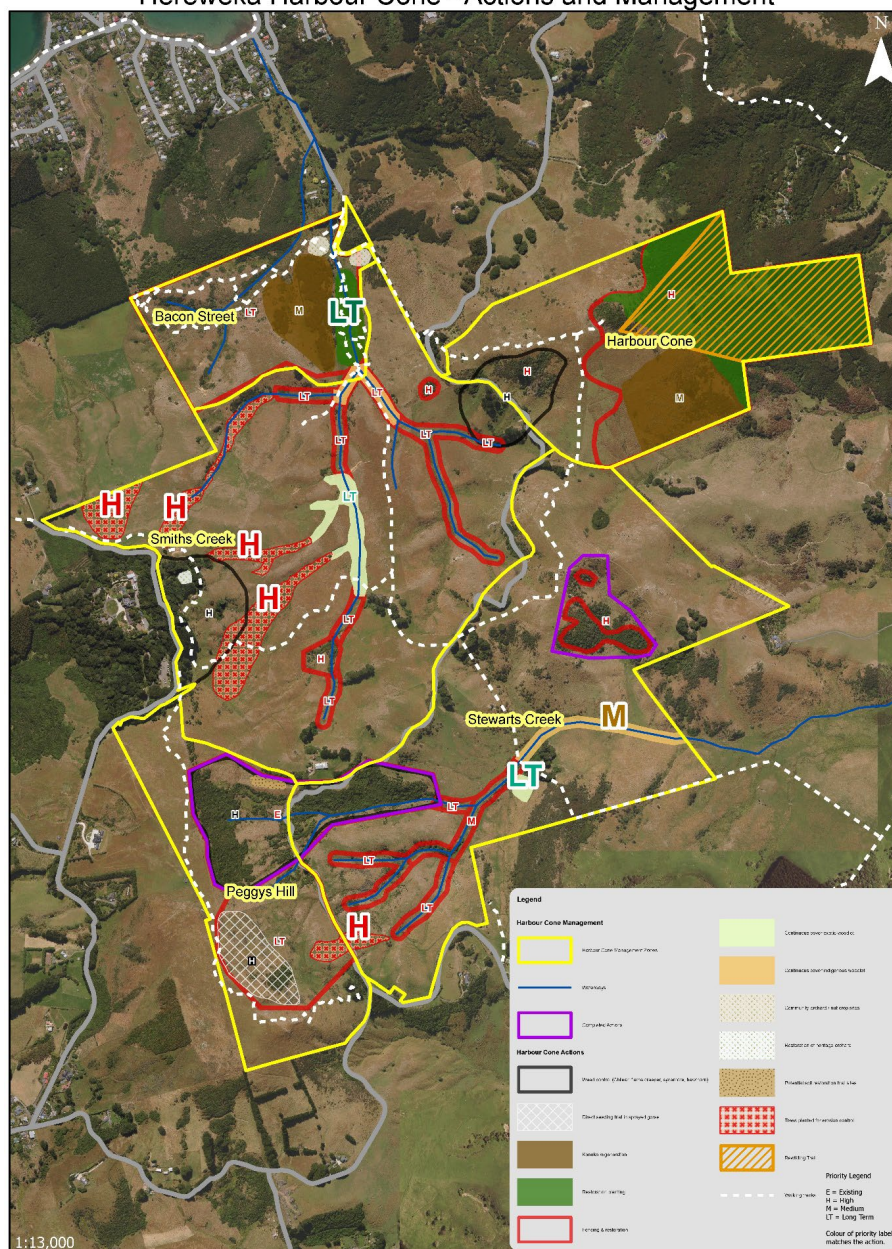
Policies

1. Relevant sections of the Dunedin City Council Reserves Management Plan – General Policies relating to commercial use, exclusive use, special events, and occupation agreements apply and must be read in conjunction with this plan.
2. Assess all proposals for organised use against effects on property values, public access and enjoyment, safety, cumulative impacts, and benefits to the local community.
3. Require applicants to meet all costs associated with their activity, including monitoring and remediation, unless specifically waived by Council.
4. Commercial users may be required to pay an appropriate fee.

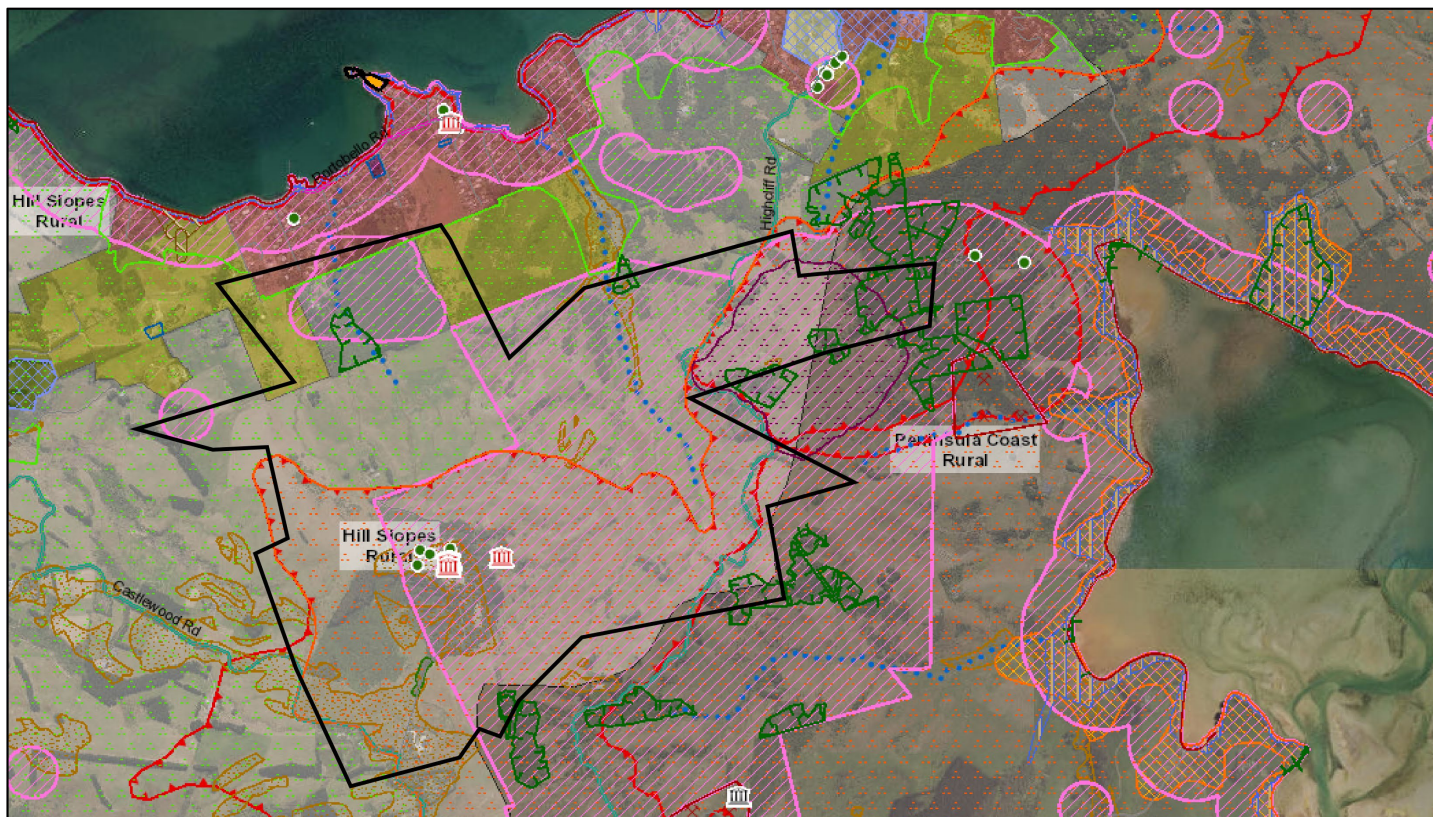
5. Review organised and commercial uses regularly and withdraw approvals where adverse effects cannot be avoided, remedied, or mitigated.
6. Undertake public notification where required or deemed necessary for leases, licences, and occupation agreements.
7. Ensure occupation agreements include clear responsibilities for biosecurity, access interfaces, infrastructure maintenance, and compatibility with ecological and heritage outcomes.
8. Proposed changes to authorisations, informed by the objectives of this plan, will be resolved through discussion between Council and holders of use agreements.
9. Appoint a liaison role through the Trust to coordinate organised uses that have been approved by Council, and to minimise conflicts or operational impacts on Trust activities and other authorised or permitted uses of the property.

Appendix 1. Land Use Actions and Management

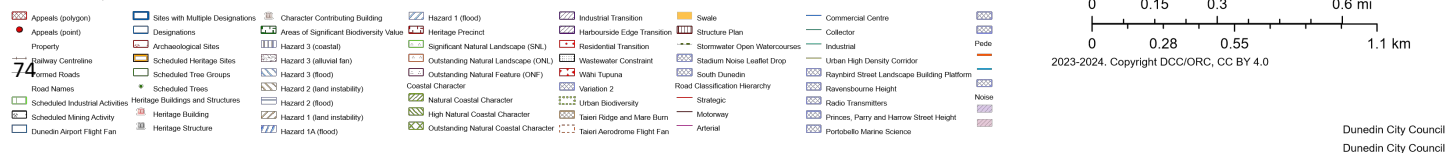
Hereweka Harbour Cone - Actions and Management



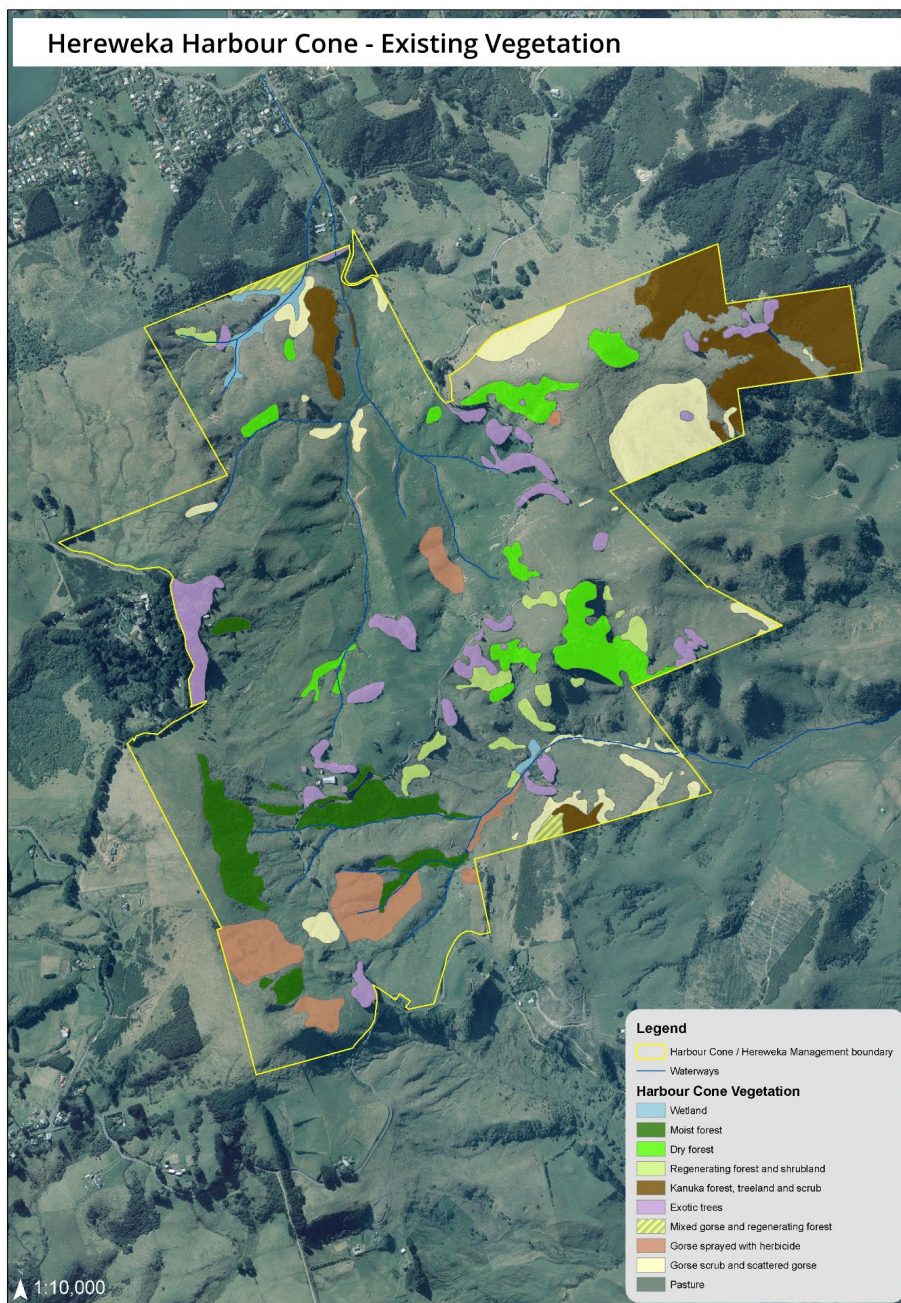
Appendix 2. 2GP Planning Map



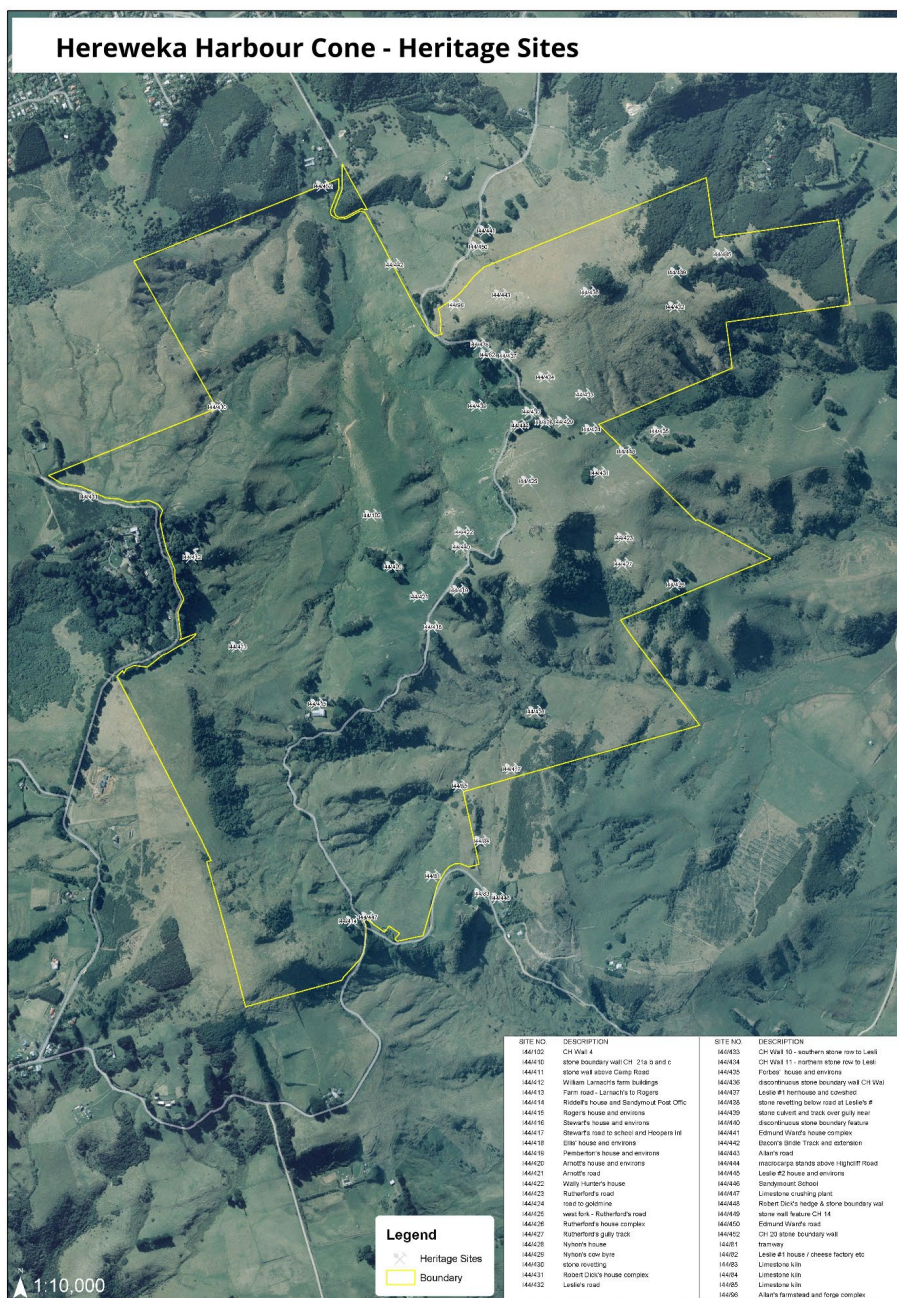
12/05/2026, 12:30:21



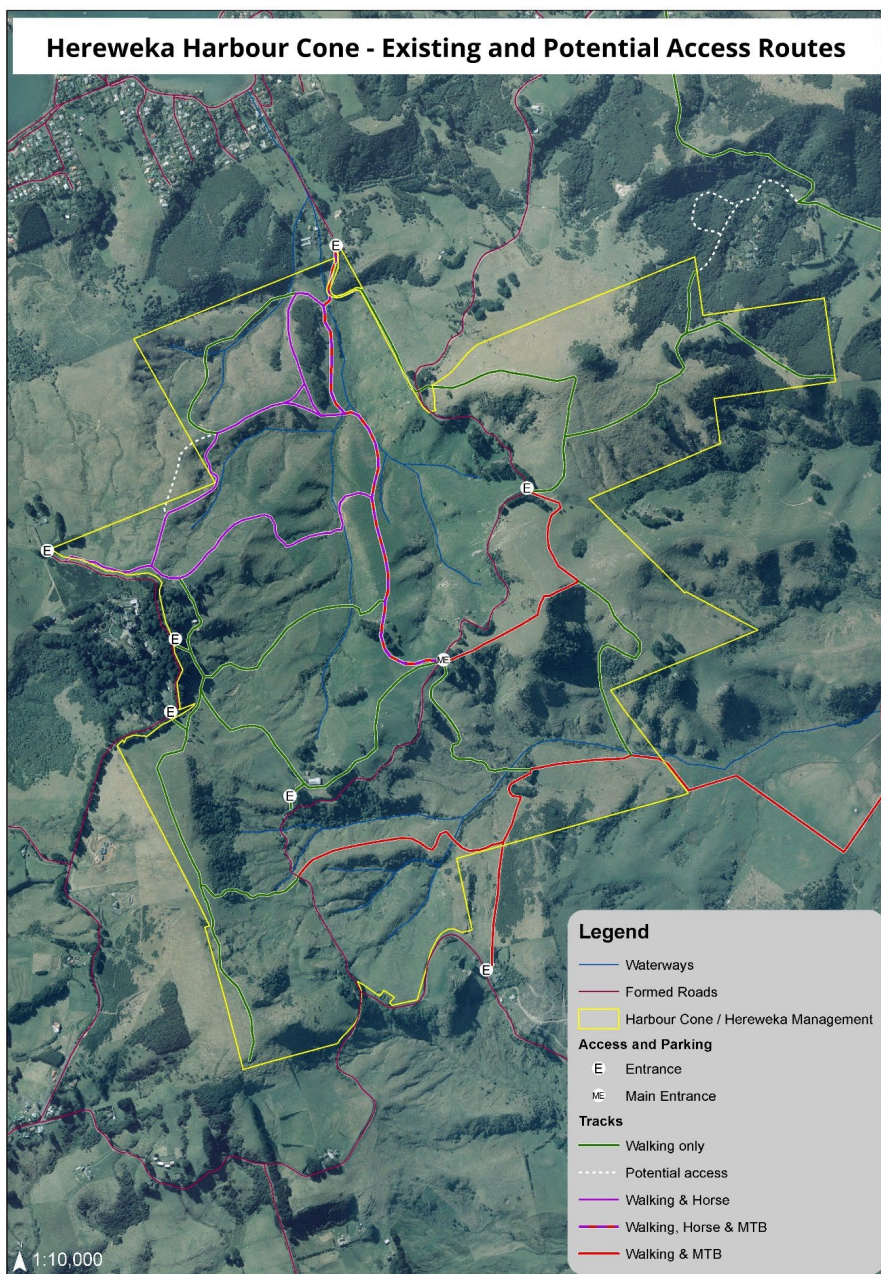
Appendix 3. Existing Vegetation Map



Appendix 4. Heritage Sites Map



Appendix 5. Recreation Routes and Access Map





Appendix 6. Discussion: The Potential for Reintroduction of Buff Weka (*Gallirallus australis*)

This discussion exists as an example of the complex factors requiring assessment when considering the reintroduction of locally and nationally important species. Hereweka means 'catch weka' and refers to the area being a place where the food resource of weka was found.

Buff weka (*Gallirallus australis hectori*) were historically indigenous to the eastern South Island and Southland but became locally extinct from the South Island due to the effects of habitat loss compounded by predation from exotic pest animals. Fortunately, populations of buff weka had been established on Chatham Island and Pitt Island prior to their extinction from the mainland. This Chatham Islands population has been used as the source of buff weka for re-establishment of weka populations in Canterbury and Otago, although these have not always been successful.

Buff weka is a taoka species to Ngāi Tahu. Papatipu rūnaka, including Otākou rūnaka, have supported its reintroduction to islands in Lakes Wakatipu and Wanaka, and to the adjacent Stevenson's Peninsula. Otākou rūnaka are strong advocates for reintroduction of buff weka to the Hereweka Harbour Cone property and would envisage a successful weka reintroduction as one that resulted in colonisation by buff weka of wider Otago Peninsula habitats in sufficient abundance as to sustain a managed harvest, as occurs on the Chatham Islands.

Weka favour landscapes with thickets of ground cover vegetation such as fernland, shrubland, and vineland, including those comprised of weedy species such as gorse and blackberry. However, areas that support abundant fleshy-fruited indigenous trees and shrubs are ideal. They predominantly eat fruits and invertebrates but are also predators of lizards and chicks of other birds, including penguins. Weka form permanent territories, but sub-adult birds disperse so as to establish new territories or replace the territories of other weka that have been killed.

Adult weka are vulnerable to predation by domestic dogs and cats, ferrets and stoats, while eggs and nestlings are vulnerable to predation by hedgehogs and rats. Drought and periods of low rainfall are also factors that periodically reduce weka survival. Many weka are killed in collisions with road traffic. They are also vulnerable to pest control activities such as use of poison baits and leghold traps.

Buff weka would be vulnerable to all of the above influences at the Hereweka Harbour Cone property. Dense ground cover vegetation is absent from most of the site, with the exception of gorse thickets and locally dense vegetation around buildings. Stock browsing in the indigenous forest remnants has resulted in major depletion of ground cover and understorey vegetation. The full range of weka predators is likely to be present on this property. Otago Peninsula experiences periods of low rainfall and drought and the Hereweka Harbour Cone property is bisected by a well-used public road. Pest control activities would need to be designed to avoid weka bykill. On the other hand, weka are opportunistic and adaptable and, where they occur in good conditions with abundant food sources, can breed frequently and rapidly increase in numbers.

A major constraint involving weka is their potential for adverse effects through predation of other threatened indigenous fauna. For example, if buff weka were successfully established on the Hereweka Harbour Cone property and dispersed into the wider area, they could potentially affect valued nesting shorebirds such as penguins.

The issues described above need to be given more consideration. If a feasibility study for buff weka introduction is undertaken, it should address all of the factors and indicators relevant to mainland sites, as specified in Appendix 8 of the Weka Recovery Plan (DOC 1999).

Appendix 7. Statutory Acknowledgement

Ngāi Tahu Claims Settlement Act 1998 Schedule 103

Statutory Acknowledgement for Te Tai O Arai Te Uru (Otago Coastal Marine Area)

The statutory area to which this statutory acknowledgement applies is Te Tai o Arai Te Uru (the Otago Coastal Marine Area), the Coastal Marine Area of the Moeraki, Dunedin Coastal and Molyneux constituencies of the Otago region, as shown on SO Plans 24250, 24249, and 24252, Otago Land District and as shown on Allocation Plan NT 505 (SO 19901).

Preamble

Under section 313, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Te Tai o Arai Te Uru as set out below.

Ngāi Tahu Association with Te Tai o Arai Te Uru

The formation of the coastline of Te Wai Pounamu relates to the tradition of Te Waka o Aoraki, which foundered on a submerged reef, leaving its occupants, Aoraki and his brothers, to turn to stone. They are manifested now in the highest peaks in the Ka Tiritiri o Te Moana (the Southern Alps). The bays, inlets, estuaries and fiords which stud the coast are all the creations of Tu Te Rakiwhanoa, who took on the job of making the island suitable for human habitation.

The naming of various features along the coastline reflects the succession of explorers and iwi (tribes) who travelled around the coastline at various times. The first of these was Maui, who fished up the North Island and is said to have circumnavigated Te Wai Pounamu. In some accounts the island is called Te Waka a Maui in recognition of his discovery of the new lands, with Rakiura (Stewart Island) being Te Puka a Maui (Maui's anchor stone). A number of coastal place names are attributed to Maui, particularly on the southern coast. The great explorer Rakaihautu travelled overland along the coast, identifying the key places and resources. He also left many place names on prominent coastal features. Another explorer, Tamatea, sailed along the Otago coast in the waka Tākitimu. After the waka eventually broke its back off the coast of Murihiku, Tamatea and the survivors made their way overland back to the North Island, arriving at the coast by the place Tamatea named O-amaru (Ōamaru).

Place names along the coast record Ngāi Tahu history and point to the landscape features which were significant to people for a range of reasons. For example, some of the most significant rivers which enter the coastal waters of Otago include: Waitaki, Kakaunui, Waihemo (Shag), Waikouaiti, Kāikrae (Kāikorai), Tokomairiro, Mata-au (Clutha), Pounawea (Catlins). Estuaries include: Waitete (Waitati), Ōtākou (Otago), Makahoe (Papanui Inlet), Murikauhaka (Mate-au and Koau estuaries), Tahaukupu (Tahakopa estuary), Waipātiki (Wapiti Estuary). Islands in the coastal area include Okaihe (St Michaels Island), Moturata Island), (Taieri Paparoa, Matoketoke, Hakinikini, and Aonui (Cooks Head).

Particular stretches of the coastline also have their own traditions. The tradition of the waka (canoe) Arai Te Uru and its sinking at the mouth of the Waihemo (Shag River) has led to the coastal area of Otago being known as Te Tai o Araiteuru (the coast of Arai Te Uru). Accounts of the foundering, the wreckage and the survivors of this waka are marked by numerous landmarks almost for the length of the Otago coast.

The boulders on Moeraki coast (Kai Hinaki) and the Moeraki pebbles are all 63 associated with the cargo of gourds, kumara and taro seed which were spilled when the Arai Te Uru foundered.

For Ngāi Tahu, traditions such as these 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.

Because of its attractiveness as a place to establish permanent settlements, including pā (fortified settlements), the coastal area was visited and occupied by Waitaha, Ngāti Māmoe and Ngāi Tahu in succession, who, through conflict and alliance, have merged in the whakapapa (genealogy) of Ngāi Tahu whānui. Battle sites, urupā and landscape features bearing the names of tūpuna (ancestors) record this history. Prominent headlands, in particular, were favoured for their defensive qualities and became the headquarters for a succession of rangatira and their followers. Notable pā on the Otago coast include: Makotukutuku (Ōamaru), Te Raka-a hineatea (Moeraki), Te Pā Katata, Pā a Te Wera, (Huriawa Peninsula), Mapoutahi (Purakaunui), Pukekura (Taiaaroa Head), Moturata (Taieri Island). The estuaries from the Waitaki River to the Chaslands also supported various hapu.

Tūpuna such as Waitai, Tukiauau, Whaka-taka-newha, Rakiāmoa, Tarewai, Maru, Te Aparangi, Taoka, Moki II, Kapo, Te Wera, Tu Wiri Roa, Taikawa, Te Hautapanuiotu among the many illustrious ancestors of Ngāti Māmoe and Ngāi Tahu lineage whose feats and memories are enshrined in the landscape, bays, tides and whakapapa of Otago.

The results of the struggles, alliances and marriages arising out of these migrations were the eventual emergence of a stable, organised and united series of hapu located at permanent or semi-permanent settlements along the coast, with an intricate network of mahika kai (food gathering) rights and networks that relied to a large extent on coastal resources. Chiefs such as Korako (several), Tahatu, Honekai, Ihutakuru, Karetai, Taiaaroa, Potiki, Tuhawaiki, and Pokene being some among a number who had their own villages and fishing grounds. Otago Peninsula (Muaupoko) had many kaunga nohoanga with a multitude of hapu occupying them. At one time up to 12 kainga existed in the lower Otago harbour, some larger and more important than others.

The whole of the coastal area offered a bounty of mahika kai, including a range of kaimoana (sea food); sea fishing; eeling and harvest of other freshwater fish in lagoons and rivers; marine mammals providing whale meat and seal pups; waterfowl, sea bird egg gathering and forest birds; and a variety of plant resources including harakeke (flax), fern and ti root. In many areas the reliance on these resources increased after the land sales of the 1840s and 1850s, and the associated loss of access to much traditional land based mahika kai.

Many reefs along the coast are known by name and are customary fishing grounds, many sand banks, channels, currents and depths are also known for their kaimoana. One example is Poatiri (Mt Charles — Cape Saunders) the name of which refers to a fishhook. Poatiri juts out into the Pacific, close to the continental shelf, and is a very rich fishing ground. Another example is Blueskin Bay which was once a kohanga (breeding ground) for the right whale, although it is well over 150 years since it has seen this activity.

Other resources were also important in the coastal area. Paru (black mud used for dyeing) was obtained from some areas. Some of the permanent coastal settlements, such as those at the mouth of the Mataau (Clutha River), and at Ōtākou and Purakaunui, were important pounamu manufacturing sites. Trading between these villages to the south and north via sea routes was an important part of the economy.



The Otago coast was also a major highway and trade route, particularly in areas where travel by land was difficult. Pounamu and titi were traded north with 64 kumara, taro, waka, stone resources and carvings coming south. Travel by sea between settlements and hapu was common, with a variety of different forms of waka, including the southern waka hunua (double-hulled canoe) and, post-contact, whale boats plying the waters continuously. Hence tauranga waka (landing places) occur up and down the coast in their hundreds and wherever a tauranga waka is located there is also likely to be a nohoanga (settlement), fishing ground, kaimoana resource, rimurapa (bull kelp — used to make the poha, in which titi were and still are preserved) with the sea trail linked to a land trail or mahika kai resource. The tūpuna had a huge knowledge of the coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whānau and hapu and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast. Numerous urupā are being exposed or eroded at various times along much of coast. Water burial sites on the coast, known as waiwhakaheketupapaku, are also spiritually important and linked with important sites on the land. Places where kaitangata (the eating of those defeated in battle) occurred are also wāhi tapu.

Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna and are frequently protected in secret locations.

The mauri of the coastal area 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 coastal area.

Appendix 8. Bibliography

- Bishop, D. G., and Turnbull, I. M. (1996). *Geology of the Dunedin area*. IGNS, Lower Hutt.
- de Lange, P. J., Norton, D. A., Courtney, S. P., Heenan, P. B., Barkla, J. W., Cameron, E. K., Hitchmough, R., and Townsend, A. J. (2008). Threatened and uncommon plants of New Zealand: 2008 revision. *New Zealand Journal of Botany*, 47, 61–96.
- Department of Conservation. (2009). *Weka (Gallirallus australis) recovery plan 1999–2009*. Threatened Species Recovery Plan 29. Department of Conservation, Wellington.
- Johnson, P. N. (2004). *Otago Peninsula plants: An annotated list of vascular plants growing in wild places*. Save the Otago Peninsula Inc., Dunedin.
- Kāi Tahu Ki Otago Limited. (2009). *Dunedin City Council Hereweka/Harbour Cone report: Stage 1*. Unpublished report.
- Leslie, D. M. (1972). *New Zealand Soil Bureau Scientific Report 12*. DSIR, Wellington.
- Middleton, A. (2008). *Harbour Cone project: Archaeological assessment for the Dunedin City Council*. Unpublished report.
- Middleton, A. (2012). Hereweka/Harbour Cone: A relict landscape on the Otago Peninsula. *Australasian Historical Archaeology*, 30.
- Millar, R. (2004). *The next crop: Sustainable planning and management of commercial forestry in the Marlborough Sounds*. Marlborough District Council.
- Nature Positive Ltd. (2021). *Forest recovery on the Otago Peninsula: Measuring 10 years of change, 2011–2021*. Report prepared for the Otago Peninsula Biodiversity Group Trustees, September 2021.
- Wildland Consultants. (2008a). *Site information—natural areas in Dunedin City: Site 25, Harbour Cone summit*. Wildland Consultants Contract Report No. 2059c, prepared for the Dunedin City Council.
- Wildland Consultants. (2008b). *Site information—natural areas in Dunedin City: Site 26, Harbour Cone southwest side*. Wildland Consultants Contract Report No. 2059d, prepared for the Dunedin City Council.
- Wildland Consultants. (2008c). *Site information—natural areas in Dunedin City: Site 49, Peggys Hill north side*. Wildland Consultants Contract Report No. 2059f, prepared for the Dunedin City Council.
- Wildland Consultants. (2008d). *Site information—natural areas in Dunedin City: Site 46, head of Stewarts Creek*. Wildland Consultants Contract Report No. 2059h, prepared for the Dunedin City Council.
- Wildland Consultants. (2008e). *Site information—natural areas in Dunedin City: Site 45, Stewarts Creek*. Wildland Consultants Contract Report No. 2059j, prepared for the Dunedin City Council.



Statement of Proposal

Draft Hereweka Harbour Cone Management Plan 2026

Introduction

The Dunedin City Council (DCC) is seeking submissions on the Draft Hereweka Harbour Cone Management Plan 2026 (the draft Plan). This Statement of Proposal provides background information, outlines what is proposed and the reasons for reviewing the existing Plan, explains how to make a submission, and specifies the consultation period.

The draft Plan provides a policy framework for the use, management, administration and development of the Hereweka Harbour Cone property shown in Appendix A. Most of the property covered by the draft Plan is not currently held or classified as reserve. Council has therefore chosen to follow a consultation process modelled on the comprehensive review procedure in section 41 of the Reserves Act 1977. This is consistent with the approach used for Council's other reserve management plans and provides for a robust public consultation process.

The current Hereweka / Harbour Cone Management Plan 2012, included as Appendix B, has not been comprehensively reviewed since it was adopted. The draft Plan retains the 2012 Plan's central vision of maintaining a working rural landscape while protecting and enhancing the property's landscape, ecological, recreational, cultural and heritage values.

The draft Plan reflects current statutory and policy settings, clarifies the respective roles of Council and the established Hereweka / Harbour Cone Management Trust Board Incorporated, provides for Council to consider whether the land should be gazetted as reserve, strengthens recognition of mana whenua values and partnership, and gives greater emphasis to catchment-scale ecological restoration, catchment health and ecological resilience, heritage prioritisation, and structured recreation and visitor management.

Background

In January 2008, the Dunedin City Council approved the purchase of the 328-hectare property on the Otago Peninsula that has become known as Hereweka, or Harbour Cone. Council purchased the land to protect its significant landscape, ecological, heritage and cultural values, and in recognition of its recreational and tourism potential.

Council adopted the Hereweka / Harbour Cone Management Plan 2012 to provide an integrated policy framework for the multiple objectives the Dunedin community held for the property. The Plan was intended to ensure that management activities and enhancement work were based on sound principles and remained aligned with the property's values.

Management plans are prepared to provide a framework for the use, enjoyment, maintenance, protection, development and preservation of public land, as appropriate. They provide direction for decision-making and help manage potential conflicts between different activities, values and community expectations.

Following adoption of the 2012 Plan, Council determined that an independent charitable trust would be the most appropriate vehicle for undertaking much of the property's day-to-day management in accordance with the Plan. In July 2015, the Dunedin City Council and the Hereweka / Harbour Cone Management Trust Board Incorporated entered into a Memorandum of Understanding.

The Memorandum of Understanding describes the respective roles and responsibilities of Council and the Trust, including responsibilities relating to the administration and review of the Management Plan. It provides that Council and the Trust will jointly lead any review of the Plan. Council retains responsibility for formally considering submissions and adopting the final Management Plan.

What we are proposing

Council is proposing to replace the Hereweka / Harbour Cone Management Plan 2012 with the Hereweka Harbour Cone Management Plan 2026.

Although most of the property covered by the Plan is not currently held or classified as reserve, Council has chosen to follow a consultation process modelled on the comprehensive review procedure in section 41 of the Reserves Act 1977. This will maintain consistency with the review of Council's other reserve management plans and help ensure a robust and transparent public consultation process.

Consistent with that process, Council will publicly notify the draft Plan and invite submissions from interested people and organisations.

In addition to placing a public notice in the Otago Daily Times, Council will notify media outlets and promote the consultation through social media and the DCC website. Parks and Recreation Services staff will also be available to discuss the draft Plan and assist people with the submission process.

Have your say

We would like to know what you think about the Draft Hereweka Harbour Cone Management Plan 2026.

In particular, we are interested in whether the draft Plan:

- appropriately responds to the issues, challenges and opportunities affecting the property;
- adequately protects and enhances its landscape, ecological, cultural and heritage values;
- provides appropriate opportunities for recreation, public access and community involvement; and
- provides clear direction for the property's future use, protection, management and development.

Submissions will help inform the final Plan presented to Council for consideration.

How to make a submission

Fill in the feedback form here:

Or feedback forms can be:

- Emailed to: parksconsulting@dcc.govt.nz
- Posted to:
Draft Hereweka Harbour Cone Management Plan 2026
Parks and Recreation Services
Attention: S Hogg
Dunedin City Council
PO Box 5045
Dunedin 9054
- Delivered to a DCC service centre or library.

For any queries, please email parksconsulting@dcc.govt.nz

What happens next?

- The submission period is from **Thursday, 10 September 2026 until Tuesday, 10 November 2026 at 5pm.**
- Following the close of submissions, hearings will be held to allow submitters to speak to their submissions. The hearing date(s) will be advised directly to submitters.
- After considering submissions and hearings, a final Management Plan will be prepared for consideration by Council.

Please note: Your name and submission will be made public as part of the DCC's decision-making process. This information will be included in papers available to the public and the media but will only be used for the Hereweka Harbour Cone Management Plan consultation.

Late submissions may not be accepted.

[Thank you for your submission.](#)

Appendix 1:

Draft Hereweka Harbour Cone Management Plan Feedback Form

We are seeking your feedback on the Draft Hereweka Harbour Cone Management Plan.

The review of the 2012 Management Plan commenced in July 2025, when the public was invited to provide initial feedback on how the Plan could be improved and how Hereweka Harbour Cone should be used, protected, and managed in the future.

The Draft Management Plan has been prepared with full consideration of the feedback received during that first stage of public consultation.

The current submission period is open from **Thursday, 10 September 2026 until Tuesday, 10 November 2026 at 5pm.**

1. Please provide feedback on the Draft Hereweka Harbour Cone Management Plan. Feedback might include suggestions for improving the Plan, or which policies you support or don't support.

[illegible]

2. Do you have any other comments?

[illegible]



3. Do you wish to be heard by the Hearings Committee in support of this submission?

Y / N

4. Do you want us to update you on the next stages of this project?

Y / N

Your details

If you would like to be contacted for further follow up, or to be updated on this work, please ensure you provide your contact details below:

Name:

Organisation (if applicable):

Email address:

Contact phone number:

Please note: Your name and submission will be made public as part of the DCC's decision-making process. This information will be included in papers available to the public and the media but will only be used for the Hereweka Harbour Cone consultation.

Late submissions may not be accepted.



MEMORANDUM OF UNDERSTANDING

between

Dunedin City Council

and

Hereweka/Harbour Cone Management

Trust Board Incorporated

ANDERSON LLOYD
LAWYERS

SOUTHERN VALUES GLOBAL PERSPECTIVE

Memorandum of Understanding

Date: 28th July 2015

Parties

1. **Dunedin City Council** a Territorial Authority under the Local Government Act 2002 ("Council")
2. **Hereweka/Harbour Cone Management Trust Board Incorporated** a Charitable Trust settled on the 2nd day of October 2014 ("Trust")

Background

- A. The Council owns the land at 1299 Highcliff Road, Dunedin comprised and described in the Certificates of Title attached as Schedule 1 and known as Harbour Cone ("the Land").
- B. The Council commissioned a management plan for the Land dated May 2012 ("the Management Plan"). The primary purpose and vision of the Management Plan is to maintain the working landscape and enhance landscape, ecological, recreation, cultural and heritage values of the Land.
- C. The Council steering committee charged with developing an appropriate management model for the Land determined that the best vehicle to manage the Land in accordance with the Management Plan would be an independent charitable trust.
- D. The Trust was settled on the 2nd day of October 2014 by the Council as Settlor and Michael Leslie Lord, Neville Douglas Peat, Gillian Eileen Hamel, Paul Pope, Lala Athene Frazer, Kevin Joseph Neill and Helen Irene Davidson as Trustees ("the Trust Deed").
- E. The Council and the Trust now wish to enter into this Memorandum of Understanding ("MOU") to record their respective roles and obligations in relation to the Land.

The Parties Hereby Agree as Follows

1. Appointment of the Trust

- 1.1 The Trust expressly acknowledges and agrees that, in carrying out its roles and obligations as set out in this MOU, it is at all times acting as a special agent (and not a general agent) of the Council strictly in accordance with the principles of the laws of agency and in doing so shall not in any way hold itself out to any persons as the owner of the Land.
- 1.2 The Council accordingly appoints the Trust as its special agent to manage the Land in accordance with the Management Plan and this MOU, and the Trust accepts the appointment.
- 1.3 The Trust, in carrying out its roles and obligations as special agent for the Council under this MOU, shall always act in good faith to ensure that the vision of the Management Plan is achieved for the overall benefit of the Council, the Trust and the wider community.

2. Roles of the Trust

- 2.1 The Trust is appointed by the Council pursuant to this MOU:

EJB-0256269-154-20-V9:jmr



- (a) To oversee and co-ordinate implementation of the Management Plan;
- (b) To initiate projects and activities relating to the Land;
- (c) To ensure that projects and activities are undertaken in a manner consistent with the Management Plan;
- (d) To be responsible for the day to day management of the Land;
- (e) To ensure that the Land and all improvements thereon are properly maintained;
- (f) To liaise with, and be the first point of contact for, the Lessee and any future lessees of the Land;
- (g) To jointly lead, with Council, any required review of the Management Plan (a review must be initiated within 10 years of the date of the existing Management Plan, the exact date to be agreed between the Trust and Council);
- (h) To make recommendations to the Council in respect to any proposed actions referred to in clause 8); and
- (i) To undertake fundraising activities and to control the distribution of such funds to the various projects and activities undertaken in respect to the Land.

3. Obligations of the Trust

3.1 In carrying out its roles pursuant to this MOU the Trust must:

- (a) Act in a manner that best advances the aims and objectives of the Management Plan;
- (b) Comply with all lawful requirements;
- (c) Act in a manner which will benefit the reputation of both the Trust and the Council; and
- (d) Comply with all applicable health and safety legislation, regulations and codes of practice.

4. Obligations of the Council

4.1 Council shall have the following obligations:

- (a) To appoint two trustees of the Trust, in accordance with the provisions of the Trust Deed;
- (b) To provide a one-off establishment grant of \$5,000.00;
- (c) To contribute \$500.00 per annum for general running costs of the Trust, such amount to be adjusted by CPI annually;
- (d) To approve the revised Management Plan following each review referred to in clause 2.1(g);
- (e) To receive, and if necessary provide comment on, the Plan referred to in clause 6;
- (f) To provide support from any other Council departments/staff on a case by case basis; and

EJB-0256269-154-20-V9:jmr



- (g) To draft any lease documentation arising from recommendations made by the Trust to the Council in accordance with clause 8.1(a) which are adopted by the Council.

5. Lease

- 5.1 The parties acknowledge that the Land is presently leased to Brendon Cross ("the Lessee") pursuant to a Deed of Lease dated 24 November 2010 ("the Lease").
- 5.2 The Lease is due to expire on 31 March 2016 ("the Expiry Date") and there is no right of renewal contained in the Lease.
- 5.3 At least six months prior to the Expiry Date (i.e. no later than 30 September 2015) the Trust shall, if it believes that continuing to lease all or part of the Land best advances the aims and objectives of the Management Plan, contact the Lessee to determine whether or not the Lessee wishes to enter into a new lease with the Council of all or part of the Land following expiry of the existing Lease. If the Lessee does wish to enter into a new lease with the Council, the Trust shall negotiate the terms and conditions of such new lease with the Lessee and then make a recommendation to the Council in accordance with clause 8.1(a).

6. Plan

- 6.1 The Trust will provide the Council with a written annual plan by the 31st of October in each year (the "Plan"), such Plan to:
- (a) Describe the projects and activities to be undertaken by the Trust for the following year, and explain how they are consistent with the aims and objectives of the Management Plan;
 - (b) Indicate how the Trust intends to fund each project and activity;
 - (c) Identify any matters for which Council approval is or may be required;
 - (d) Identify any matters likely to require support from the Council (whether financial, administrative or other).
- 6.2 Within 8 weeks after receiving the Plan, the Council will (to the extent deemed necessary by Council in its sole discretion) discuss its contents with the Trust and provide comment.

7. Reporting

- 7.1 No later than the 31st of October in each year the Trust will give the Council a comprehensive written report on the management of the Land during the preceding year, such report to be in a form and to include such detail as reasonably required by the Council and notified to the Trust.

8. Recommendations and Approvals

- 8.1 The Trust shall make recommendations to the Council in respect to any of the following matters, acknowledging that such matters can only be authorised and implemented by Council as registered proprietor of the Land:
- (a) Any proposed lease of the Land (whether in whole or in part), or any variation/renewal of any existing lease;

EJB-0256269-154-20-V9:jmr



- (b) The obtaining of any building consents, resource consents and/or any other consents, licences or permits in the Council's name relating to the Trust's proposed activities;
 - (c) Registration of a QEII open space covenant on any one or more of the Certificates of Title comprising the Land; and
 - (d) Any other matter requiring authorisation of the Council as registered proprietor of the Land.
- 8.2 Unless otherwise agreed by the Council and the Trust, ownership of any permanent structures installed on and/or affixed to the Land shall upon completion vest in the Council.
- 9. **Communications**
- 9.1 The Trust will ensure that the Council is aware of any matter relating to the Land and/or the Trust's management of the Land which:
 - (a) Involves an unresolved dispute between the Trust and any lessee of the Land; or
 - (b) Involves an unresolved dispute between the Trust and any contractor.
- 10. **Insurance**
- 10.1 Council's Public, Statutory and Employer's Liability insurance policies will be extended to insure the activities of the Trust (Note: this insurance does not include cover for Trustee liability).
- 11. **Review and Variations**
- 11.1 There will be an annual review by the Council and the Trust of the working of this MOU and any matters contained herein on or before 31st of October in each year.
- 11.2 Either Party may give notice at any time in writing of any amendments proposed to this MOU. Such notice shall set out the reasons for change(s) requested. No amendment shall be permitted unless approved by both Parties and recorded by way of a written variation signed by both Parties.
- 12. **Disputes**
- 12.1 Subject to available time and the exigencies of the situation, should any dispute arise between the Council and the Trust, then such dispute shall be discussed as quickly as possible by the Council and the Trust (on a without prejudice basis) in an attempt to resolve the dispute amicably. If it appears that the matter cannot be resolved amicably by discussion between the Parties, then the matter in dispute shall, subject to available time and the exigencies of the situation, pass to mediation in accordance with clause 12.2 below.
- 12.2 Subject to available time and the exigencies of the situation, should any dispute not be resolved by amicable discussion in accordance with clause 12.1 above, then the Council and the Trust shall make all reasonable attempts in good faith to choose and appoint a mediator to endeavour to bring the dispute to a mutually acceptable conclusion as quickly as possible, the mediator to have the power to establish such procedure as he or she thinks fit.

EJB-0256269-154-20-V9:jmr



- 12.3 If after the procedures in clauses 12.1 and 12.2 above have been followed (or if available time and the exigencies of the situation do not allow those procedures to be followed wholly or in part) and there remains any dispute between the Council and the Trust, the dispute shall be referred to the award of a single arbitrator to be agreed upon between the Council and the Trust and in default of their agreement to be appointed by the President for the time being of the New Zealand Law Society or the President's nominee.
- 12.4 Every stage of the arbitration shall be carried out as expeditiously as possible to ensure minimum delay and the quickest reasonably achievable outcome at minimum reasonable cost.
- 12.5 In the case of any breach or threatened breach of this MOU, nothing in this clause 12 shall prevent any party seeking relief from any Court of competent jurisdiction, including (but not limited to) a temporary or permanent injunction, specific performance or a declaration.

13. Termination

- 13.1 This MOU may be immediately terminated by the Council giving a termination notice in writing:
- (a) If there is a significant default on the part of the Trust and:
 - (i) The Council has provided the Trust with written notice of the default; and
 - (ii) The Council and the Trust have agreed on the manner in which the Trust is required to rectify the default (including as to the timeframe for rectification); and
 - (iii) The Trust has not rectified the default in the manner and within the time agreed pursuant to paragraph 13.1(a)(ii) above.
 - (b) Without any previous notice in writing, in the event of the Trust abandoning its duties.
 - (c) Without any previous notice in writing, if the Trust commits an act of bankruptcy or makes or enters into any arrangement or composition with its creditors or is the subject of a liquidation order by the Court or a receiver is appointed.
- 13.2 For the purposes of this clause 13, a significant default means a default where there has been or is reasonably likely to be a material and significant impact on the value or state of the Land.
- 13.3 This MOU may be terminated by the Trust if the Council fails, after the Council has been given 30 days' notice in writing after default, to make any payment or funding contribution due to the Trust.

14. Consequences of Termination

- 14.1 Upon termination of this MOU for whatever reason, the Trust shall:
- (a) Deliver up to the Council all records, contracts, other papers or property of any kind used in or relating to the Trust's management of the Land;
 - (b) If and when required by the Council, assign to the Council all of its rights under all or any contracts in the name of the Trust relating to the Land;

EJB-0256269-154-20-V9:jmr



- (c) Co-operate with the Council in the transfer of information and disposition of work in relation to any projects and/or activities current and incomplete at the date of termination of this MOU;
 - (d) Comply with all other reasonable requests from the Council.
- 14.2 Any pre-existing liability of one Party to the other shall continue, and each Party's rights and remedies in relation thereto shall continue unaffected by any termination.
- 15. **Partner Representatives**
 - 15.1 The Reserves and Recreation Team Leader of the Council (or in the event that such position is renamed, the person holding such equivalent position) or his/her nominee will liaise with the Trust.
 - 15.2 The Chairperson of the Trust will liaise with the Council.
- 16. **Assignment**
 - 16.1 The appointment by the Council of the Trust pursuant to this MOU is personal to the Trust and may not be assigned or transferred in any manner without the prior written consent of the Council (which consent may be withheld at the sole discretion of the Council).
 - 16.2 If however the Trust (with the consent in writing of the Council) assigns or transfers the whole or any part of its roles and obligations under this MOU, then the obligations of the Trust in respect to such assignment/transfer as set out in this MOU will cease forthwith from the effective date of the assignment/transfer (save in respect to any liability of the Trust which exists or relates to any matter occurring prior to the date of assignment/transfer).
- 17. **Limitation of Trustee Liability**
 - 17.1 The Council and the Trust acknowledge that the Trustees enter into and execute this MOU and covenant as Trustees (and not further in their personal capacity or otherwise) and the liability and obligations of the Trustees under this MOU shall, subject to clause 17.1, at all times be limited to the assets of the Trust.
 - 17.2 If loss is incurred by the Council due to an intentional default or the dishonesty (but not negligence) in breach of trust by a Trustee, that Trustee will be personally liable to the Council.
- 18. **Entire Agreement**
 - 18.1 This MOU constitutes the entire agreement between the parties as to its subject matter and supersedes and cancels any previous agreement, understanding or arrangement whether written or oral.

EJB-0256269-154-20-V9:jmr



Memorandum of Understanding

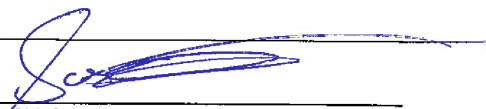
7

19. Indemnity

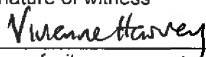
- 19.1 The Trust will indemnify the Council and will keep the Council fully indemnified in respect of any claim, loss, damage or expense of whatever nature incurred by the Council by reason of any breach of this MOU by the Trust.
- 19.2 The Council will indemnify the Trust and will keep the Trust fully indemnified in respect of any claim, loss, damage or expense of whatever nature incurred by the Trust by reason of any breach of this MOU by Council.

Executed

Signed by **CEO on behalf of Council** in
the presence of:


Chief Executive Officer


Signature of witness


Name of witness

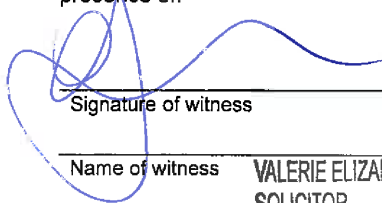
PA
Occupation

Dunedin
Address

Signed by **Hereweka/Harbour Cone
Management Trust Board Incorporated**
as the Trust by all of its Trustees:

Signed by **Michael Leslie Lord** in the
presence of:


Michael Leslie Lord


Signature of witness

Name of witness **VALERIE ELIZABETH FARROW**

SOLICITOR

Occupation **DUNEDIN**

Address

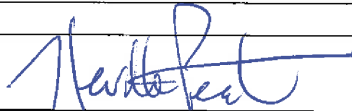
EJB-0256269-154-20-V9:jmr



Memorandum of Understanding

8

Signed by **Neville Douglas Peat** in the
presence of:


Neville Douglas Peat

Signature of witness

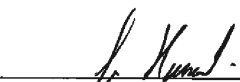
Name of witness

Occupation

Address

VALERIE ELIZABETH FARROW
SOLICITOR
DUNEDIN

Signed by **Gillian Eileen Hamel** in the
presence of:


Gillian Eileen Hamel

Signature of witness

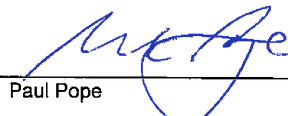
Name of witness

Occupation

Address

VALERIE ELIZABETH FARROW
SOLICITOR
DUNEDIN

Signed by **Paul Pope** in the presence of:


Paul Pope

Signature of witness

Name of witness

Occupation

Address

VALERIE ELIZABETH FARROW
SOLICITOR
DUNEDIN

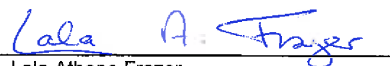
EJB-0256269-154-20-V9:jmr

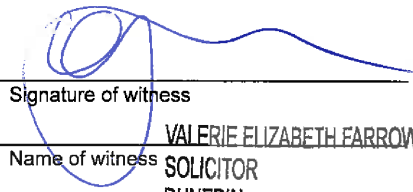


Memorandum of Understanding

9

Signed by **Lala Athene Frazer** in the
presence of:


Lala Athene Frazer


Signature of witness

Name of witness **VALERIE ELIZABETH FARROW**

SOLICITOR

DUNEDIN

Occupation

Address

Signed by **Kevin Joseph Neill** in the
presence of:

Kevin Joseph Neill

Signature of witness

Name of witness

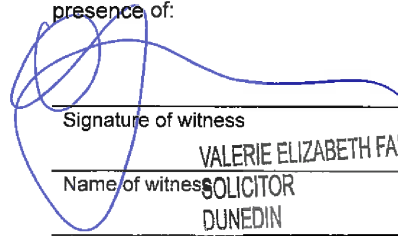
Occupation

Address

Signed by **Helen Irene Davidson** in the
presence of:



Helen Irene Davidson


Signature of witness

Name of witness **VALERIE ELIZABETH FARROW**

SOLICITOR

DUNEDIN

Occupation

Address

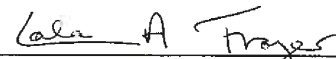
EJB-0256269-154-20-V9:jmr

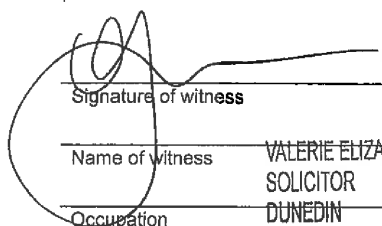


Memorandum of Understanding

9

Signed by **Lala Athene Frazer** in the
presence of:


Lala Athene Frazer


Signature of witness

Name of witness **VALERIE ELIZABETH FARROW**

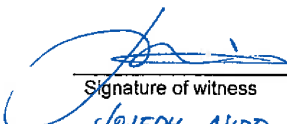
SOLICITOR

Occupation **DUNEDIN**

Address

Signed by **Kevin Joseph Neill** in the
presence of:


Kevin Joseph Neill


Signature of witness

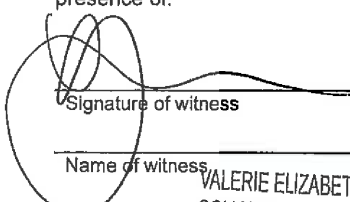
JOSEPH NIDD
Name of witness

BUSINESS OWNER
Occupation

211 HIGH ST, DUNEDIN
Address

Signed by **Helen Irene Davidson** in the
presence of:


Helen Irene Davidson


Signature of witness

Name of witness **VALERIE ELIZABETH FARROW**

SOLICITOR

Occupation **DUNEDIN**

Address

EJB-0256269-154-20-V9:jmr

Schedule 1
Certificates of Title

EJB-0256269-154-20-V9:jmr



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**
Limited as to Parcels

Search Copy



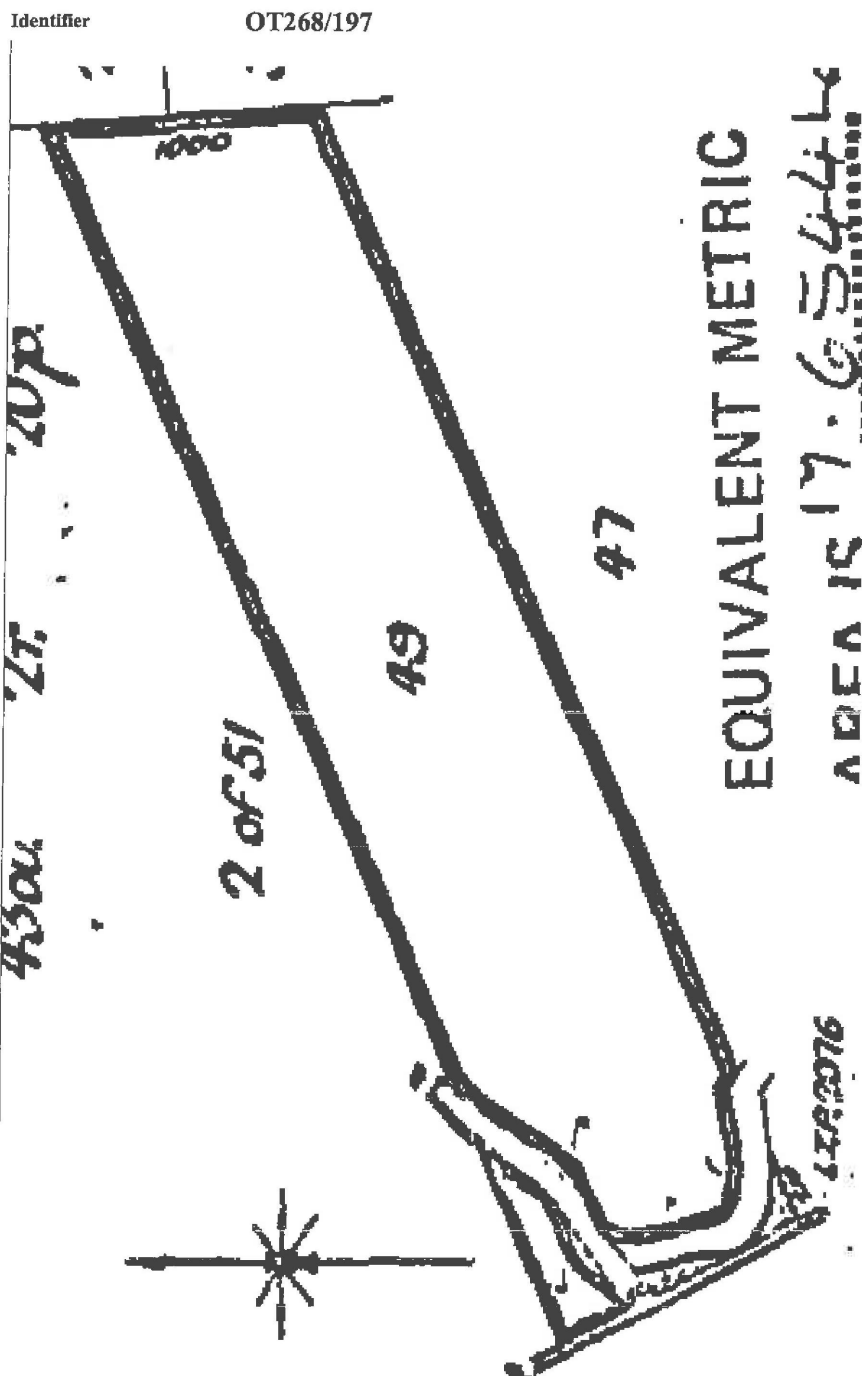
Identifier OT268/197
Land Registration District Otago
Date Issued 27 April 1935

Prior References
OTDI J795

Estate	Fee Simple
Area	17.6544 hectares more or less
Legal Description	Part Section 49 Block II Otago Peninsula Survey District

Proprietors
Dunedin City Council

Interests



Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 2 of 2
Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**

Search Copy



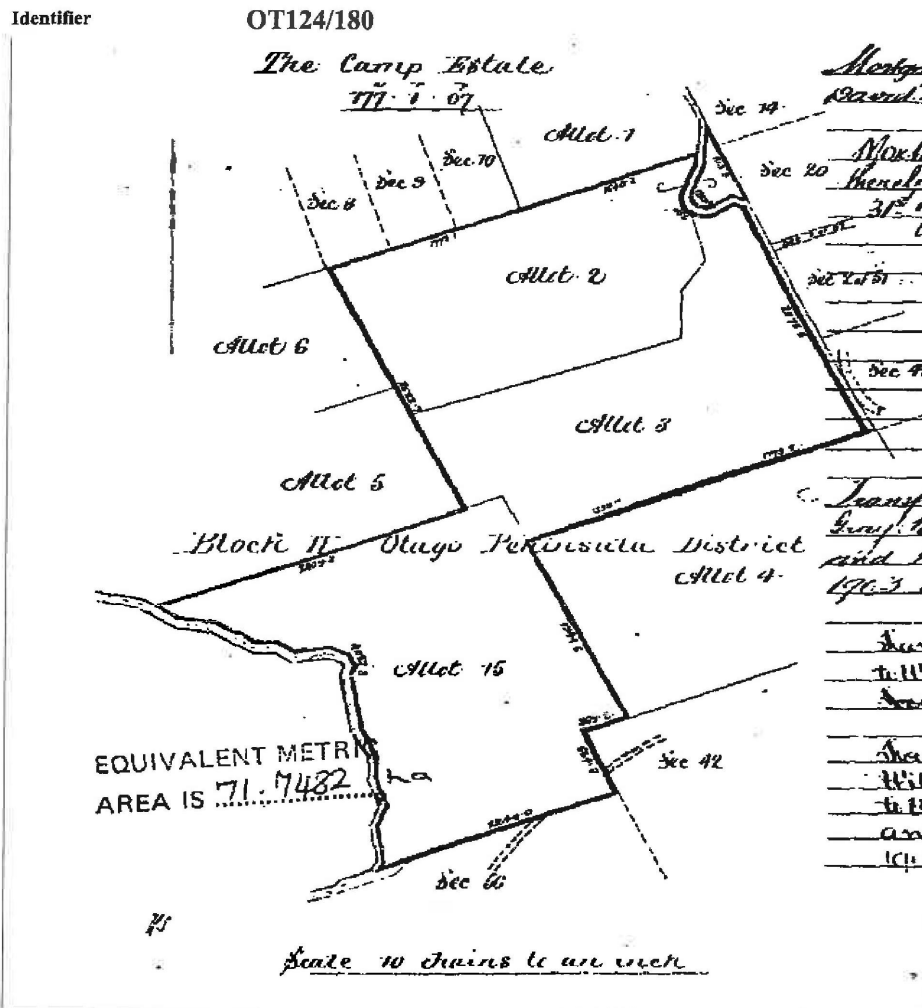
Identifier OT124/180
Land Registration District Otago
Date Issued 21 November 1900

Prior References
OT124/48

Estate	Fee Simple
Area	71.7482 hectares more or less
Legal Description	Allotment 2-3 and Allotment 15 Deposited Plan 1453

Proprietors
Dunedin City Council

Interests





**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**

Search Copy



Identifier OT124/181
Land Registration District Otago
Date Issued 21 November 1900

Prior References
OT124/48

Estate Fee Simple
Area 25.0779 hectares more or less
Legal Description Allotment 4 Deposited Plan 1453

Proprietors
Dunedin City Council

Interests

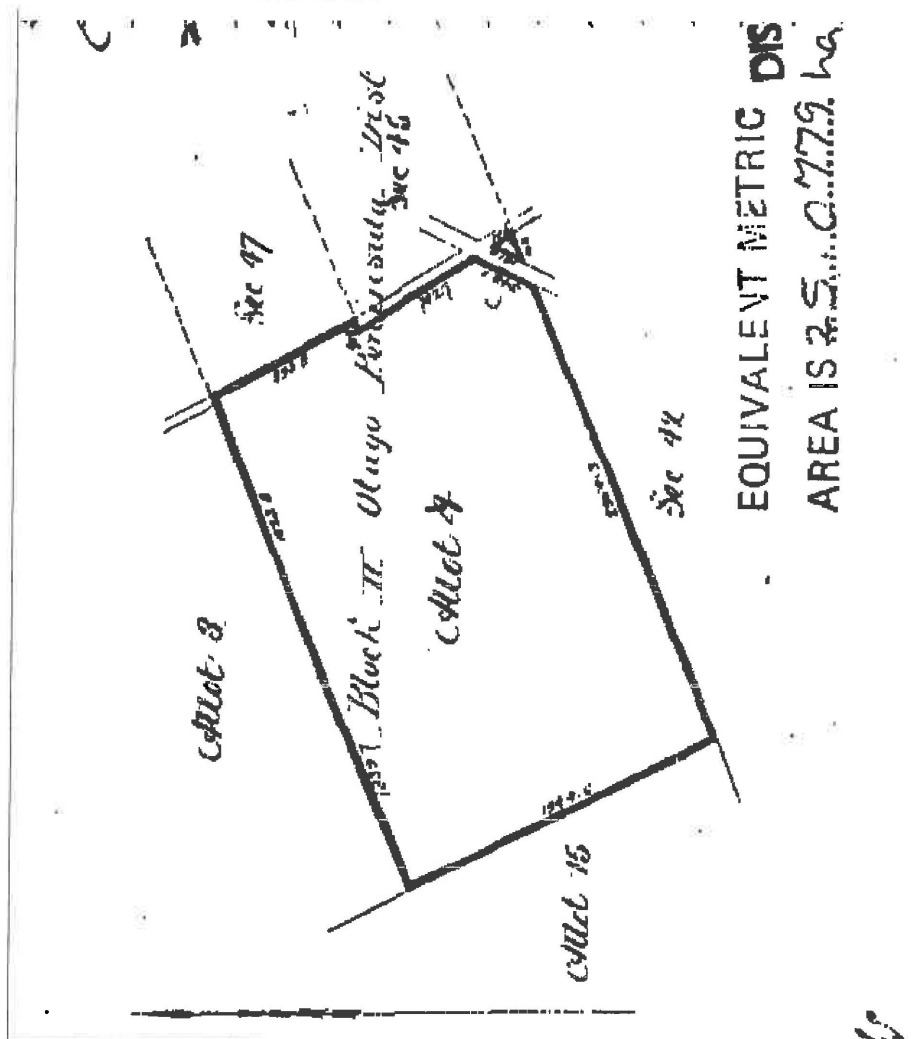
Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 1 of 2
Register Only



Identifier

OT124/181



Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 2 of 2
Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**

Search Copy



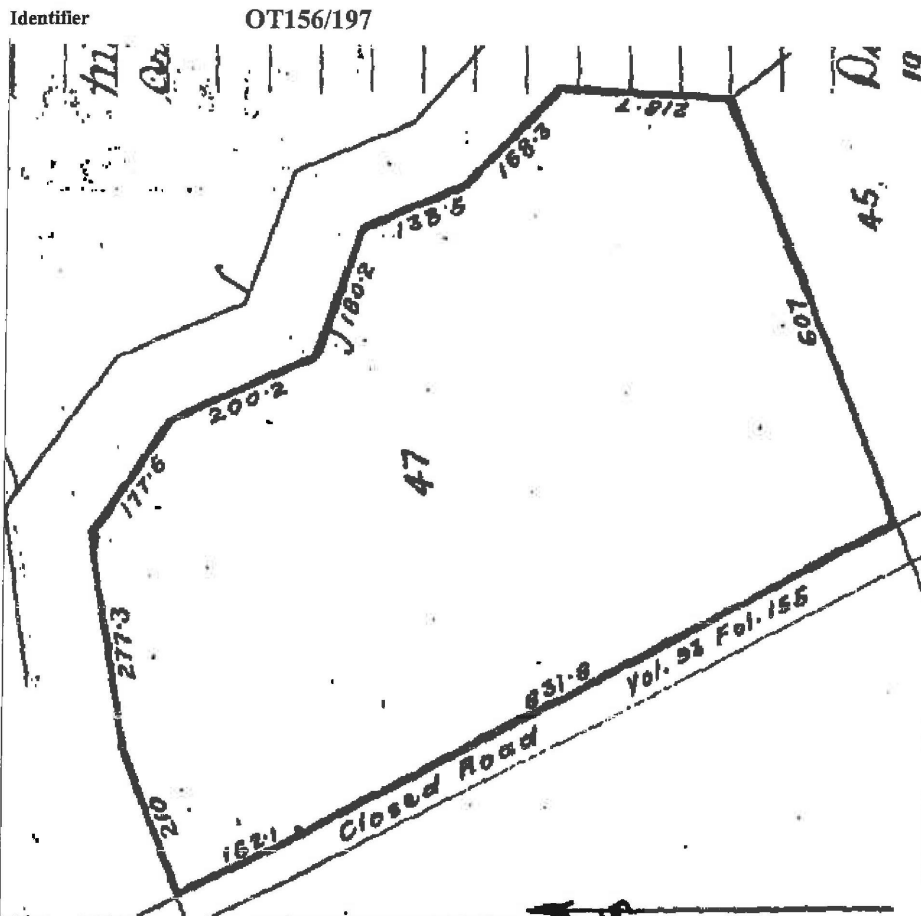
Identifier OT156/197
Land Registration District Otago
Date Issued 04 April 1910

Prior References
OT4/248

Estate	Fee Simple
Area	2.4086 hectares more or less
Legal Description	Part Section 47 Block II Otago Peninsula Survey District

Proprietors
Dunedin City Council

Interests





**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**

Limited as to Parcels

Search Copy



Identifier **OT268/188**
Land Registration District **Otago**
Date Issued 11 May 1935

Prior References

DI G158 DI R220

Estate Fee Simple
Area 22.4929 hectares more or less
Legal Description Part Section 3 of 36, Part Section 41 and
Part Section 43 Block II Otago Peninsula
Survey District

Proprietors
Dunedin City Council

Interests

55877 (79/839) Deed of Easement

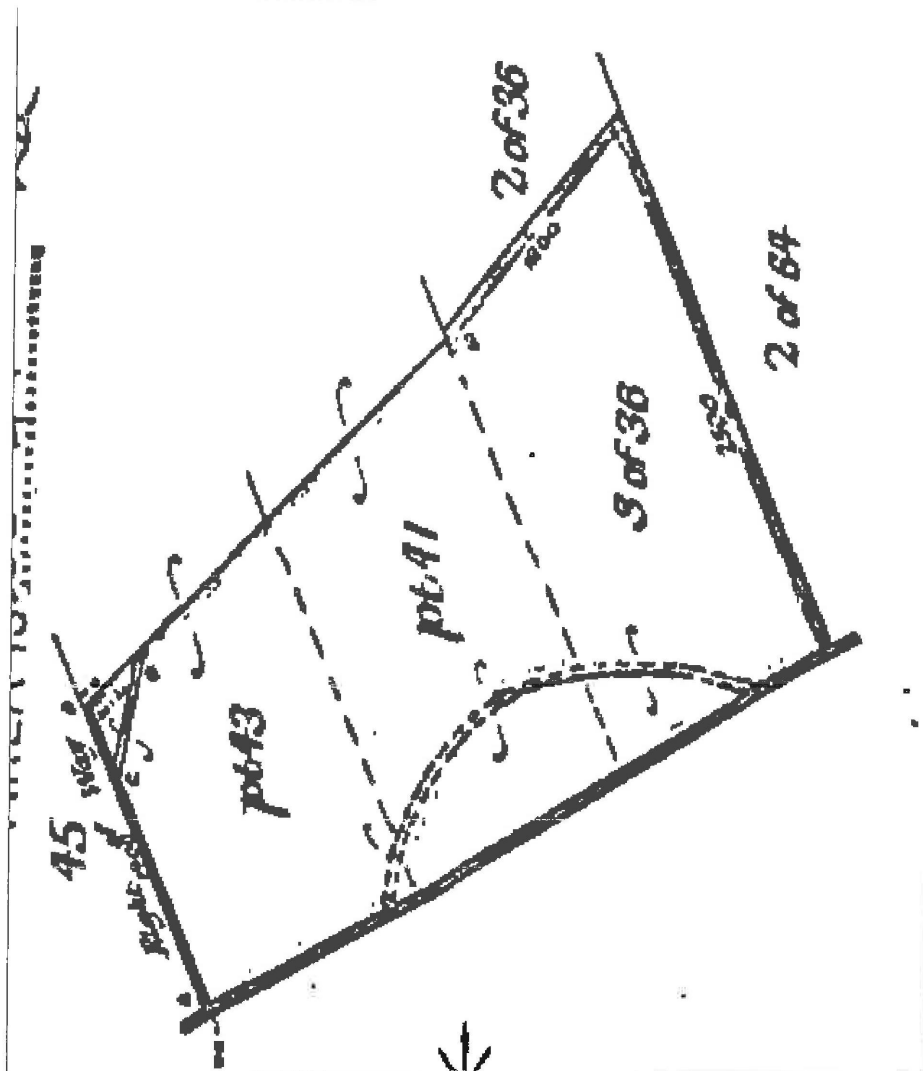
Type	Servient Tenement	Easement Area	Dominant Tenement
Right of way	Part Section 43 Block II Otago Peninsula Survey District - herein	Yellow Grant 55877 (79/839)	Section 35 Block II Otago Peninsula Survey District - CT OT268/189
Right of way	Part Section 43 Block II Otago Peninsula Survey District - herein	Yellow Grant 55877 (79/839)	Section 33-34 and Part Section 43 Block II Otago Peninsula Survey District - CT OT268/190

Subject to a right of way over part Section 43 coloured red on Grant 55878 (81/588) created by Deed of Easement 55878 (81/588) - 5.10.1881



Identifier

OT268/188



Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 2 of 2
Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952
Limited as to Parcels**

Search Copy



Identifier OT268/194
Land Registration District Otago
Date Issued 04 May 1935

Prior References

DI K713 DI N699

Estate	Fee Simple
Area	44.0829 hectares more or less
Legal Description	Section 37-38 and Part Section 39 Block II Otago Peninsula Survey District

Proprietors
Dunedin City Council

Interests

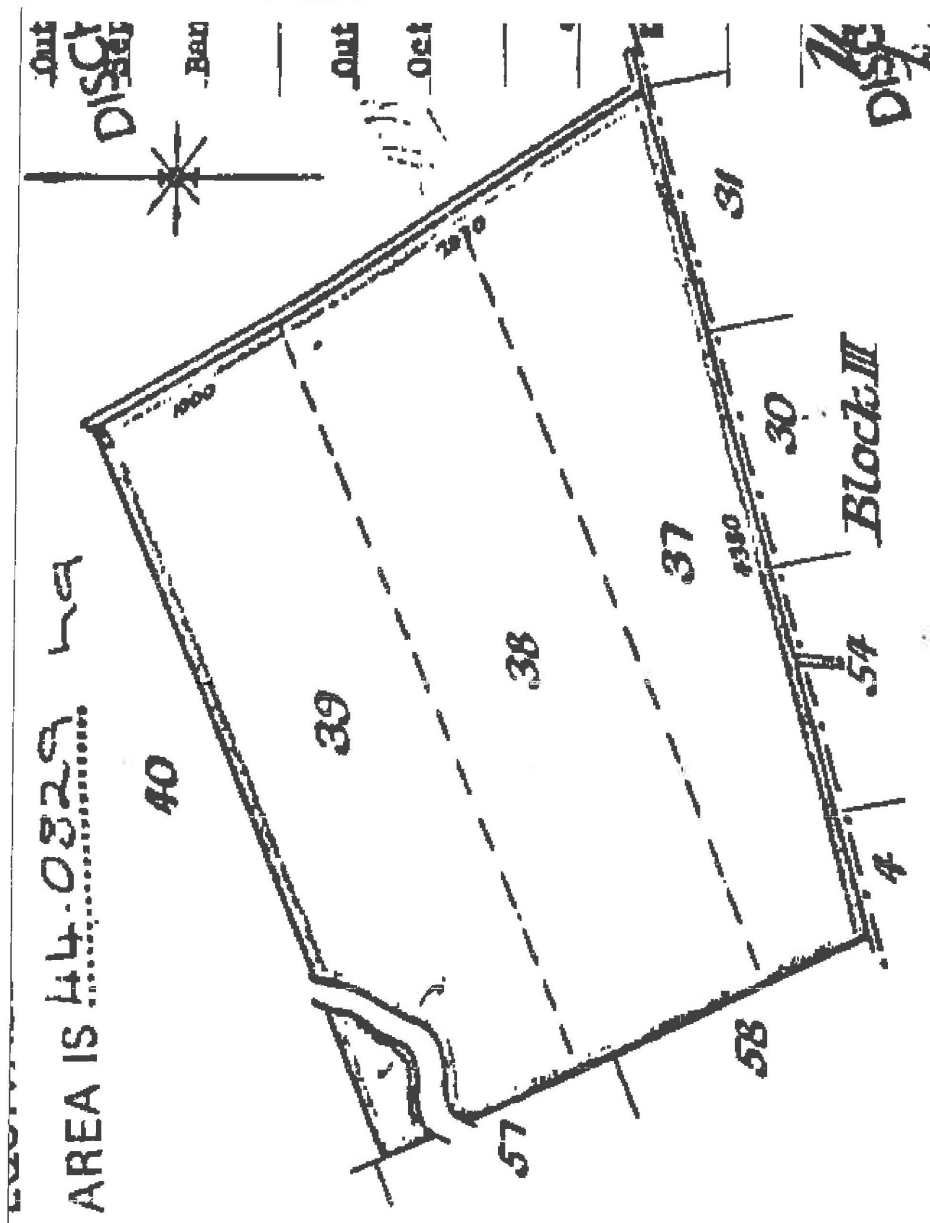
Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 1 of 2
Register Only



Identifier

OT268/194



Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 2 of 2
Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**
Limited as to Parcels

Search Copy



Identifier **OT268/195**
Land Registration District **Otago**
Date Issued 11 May 1935

Prior References
DI K733 DI L901 DI M567
DI M89

Estate Fee Simple
Area 27.0937 hectares more or less
Legal Description Part Section 40 and Part Section 42 Block
II Otago Peninsula Survey District

Proprietors
Dunedin City Council

Interests

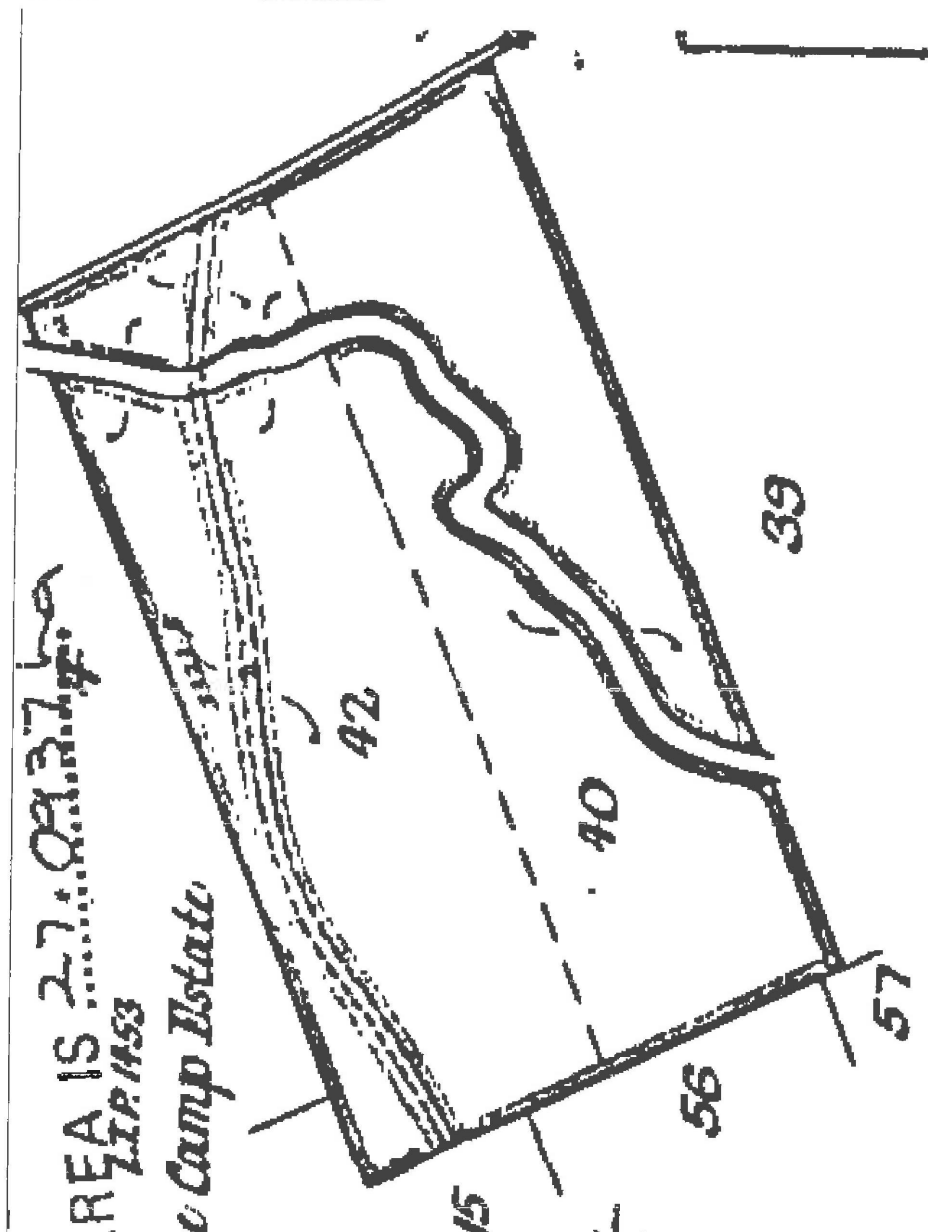
Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 1 of 2
Register Only



Identifier

OT268/195



Transaction Id

Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 2 of 2

Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952
Limited as to Parcels**

Search Copy



Identifier OT268/196
Land Registration District Otago
Date Issued 27 April 1935

Prior References
DI L291

Estate	Fee Simple
Area	14.7053 hectares more or less
Legal Description	Part Section 45 Block II Otago Peninsula Survey District

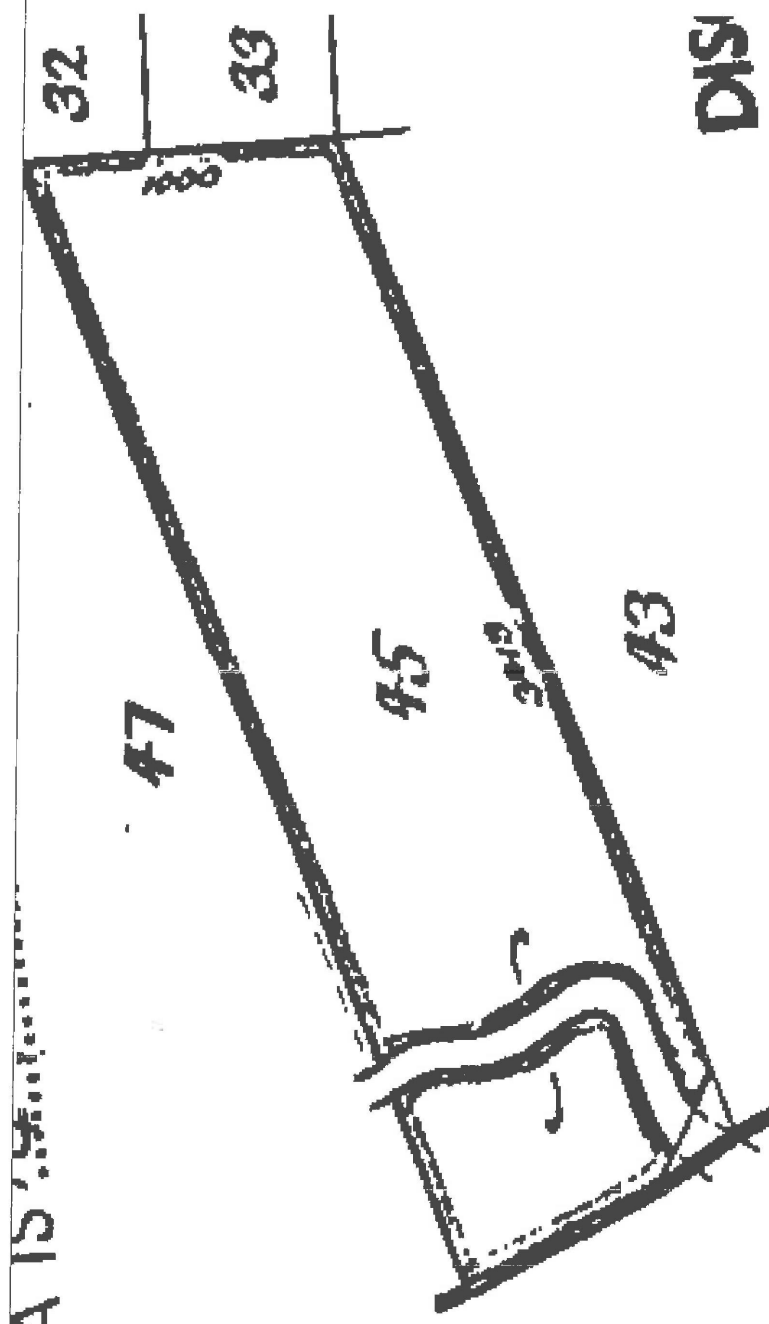
Proprietors
Dunedin City Council

Interests



Identifier

OT268/196



Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 2 of 2
Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**

Search Copy



Identifier OT44/78
Land Registration District Otago
Date Issued 10 March 1879

Prior References
OT2/253

Estate	Fee Simple
Area	6,6065 hectares more or less
Legal Description	Section 32 and Part Section 31 Block II Otago Peninsula Survey District

Proprietors
Dunedin City Council

Interests



Identifier

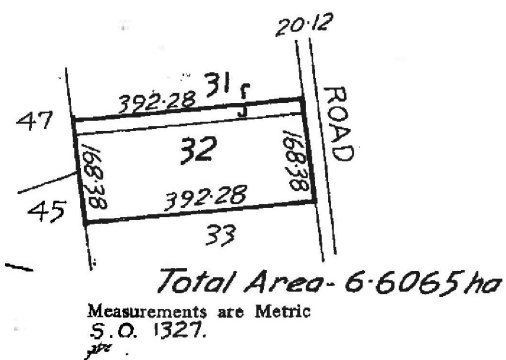
OT44/78

Title Diagram Title diagram

Cpy - 01/01.Pgs - 001.07/10/05.10:05



Dwg-n 110074955



Transaction Id

Client Reference 0256269-154

Search Copy Dated 27/05/15 10:07 am, Page 2 of 2

Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**

Search Copy



Identifier **OT170/39**
Land Registration District **Otago**
Date Issued 26 June 1913

Prior References
OT4/248 OT44/64

Estate Fee Simple
Area 18.3297 hectares more or less
Legal Description Part Section 31 and Part Section 47 Block
II Otago Peninsula Survey District

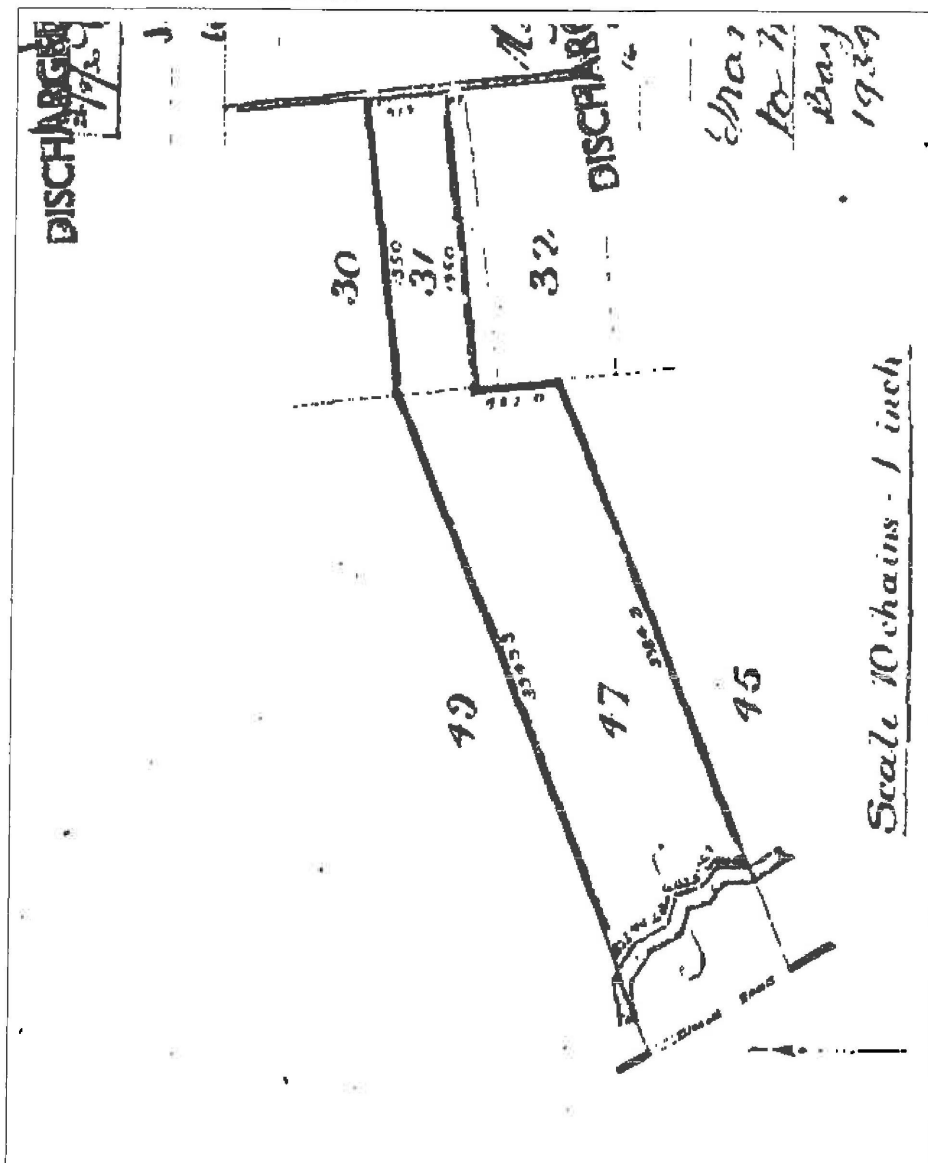
Proprietors
Dunedin City Council

Interests



Identifier

OT170/39



Transaction Id
Client Reference 0256269-154

Search Copy Dated 27/05/15 10:22 am, Page 2 of 2
Register Only



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**

Limited as to Parcels

Search Copy



Identifier OT14B/1180
Land Registration District Otago
Date Issued 28 April 1992

Prior References

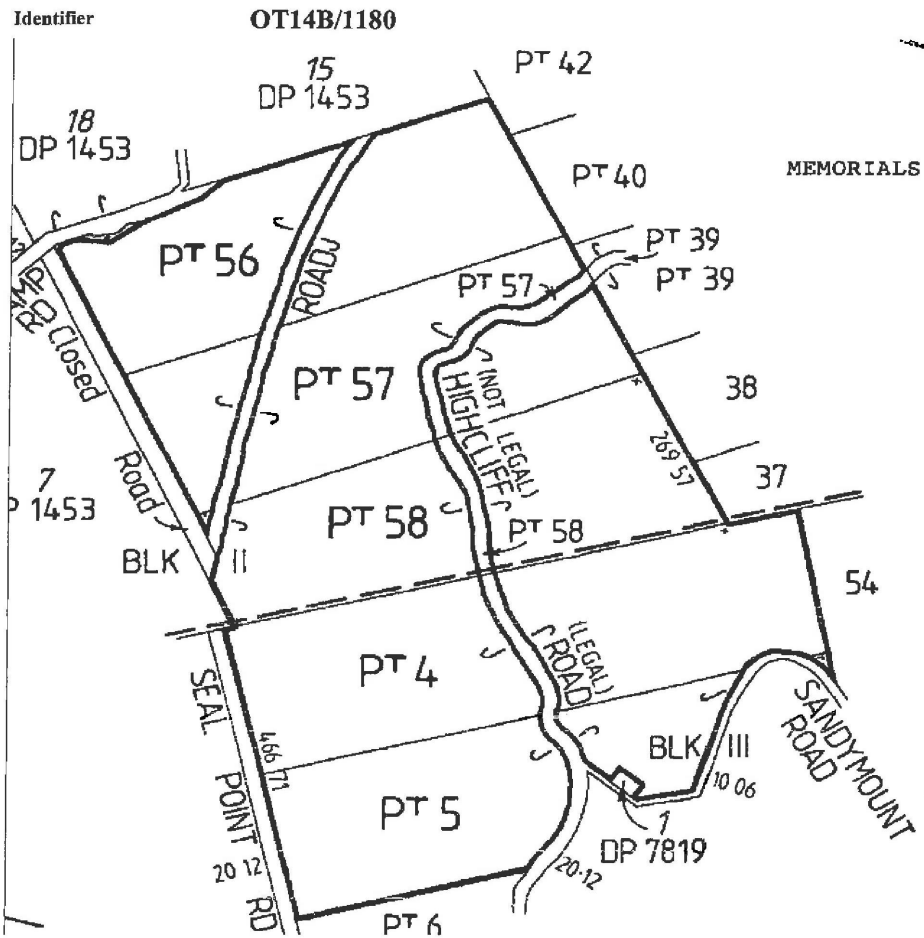
OT268/199 OT366/235

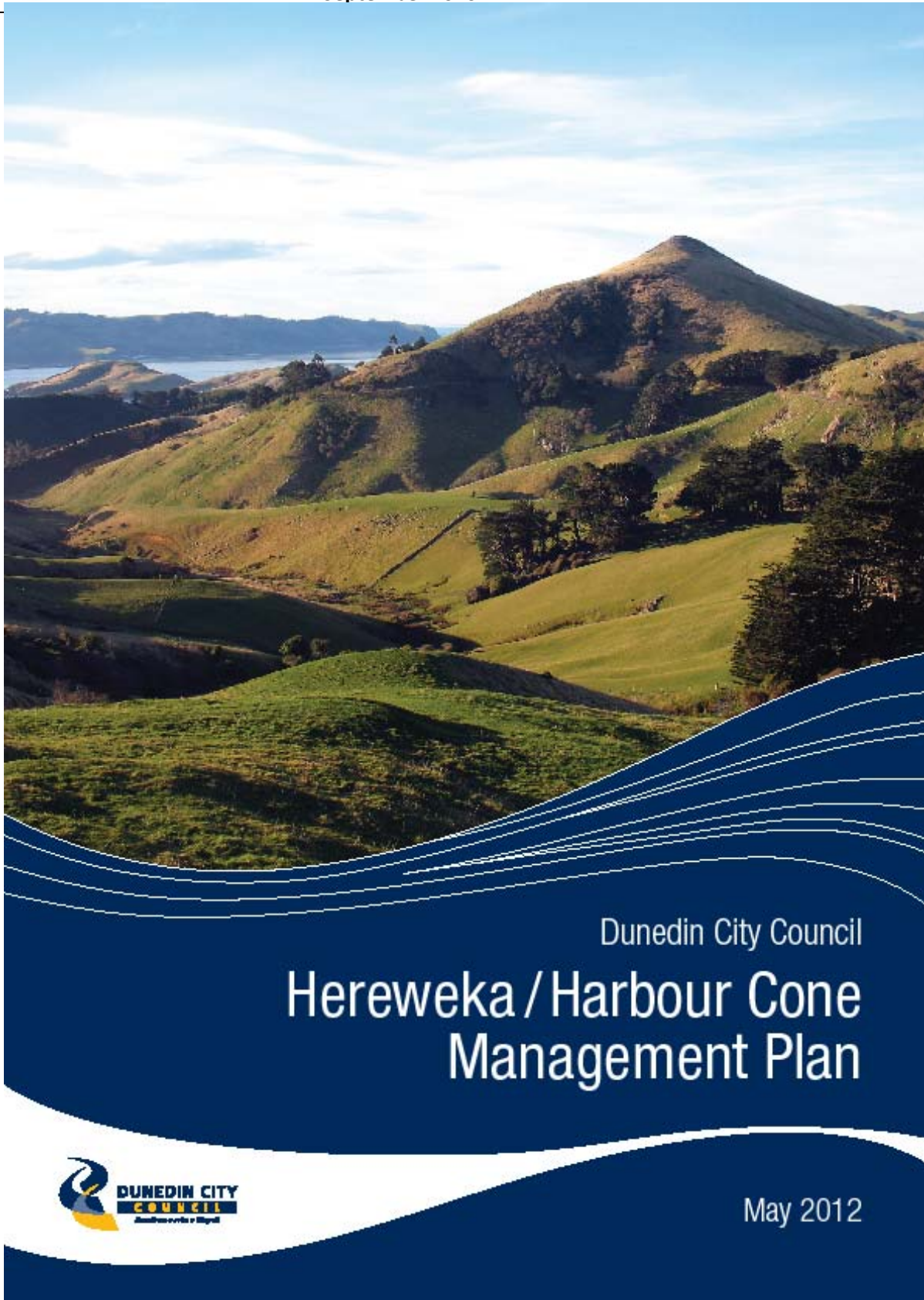
Estate Fee Simple
Area 77.1311 hectares more or less
Legal Description Part Section 56-58 Block II Otago
Peninsula Survey District and Part Section
4-5 Block III Otago Peninsula Survey
District

Proprietors
Dunedin City Council

Interests

350244 Compensation Certificate (affects Part Sections 56, 57, 58 Block II) pursuant to Section 17 Public Works
Amendment Act 1948 - 23.12.1969 at 11.19 am





Contents

Acknowledgements	2
1. Introduction	3
1.1 Preamble	3
1.2 Vision	5
1.3 Legal Description.....	5
1.4 Management Zones	7
1.5 Management Zone Descriptions.....	7
2. Purpose of the Management Plan.....	12
2.1 Development and Management Options.....	12
2.2 Process for Developing the Management Plan	14
2.3 Consideration of Other Documents.....	15
3. Hereweka/Harbour Cone Property Values.....	17
3.1 Landscape and Land Use Values	17
3.2 Ecological Values.....	17
3.3 Cultural Values	18
3.4 Historic Values.....	19
3.5 Recreation and Public Appreciation Values.....	20
4. Management of the Hereweka/Harbour Cone Property	22
4.1 Aims, Objectives and Policies	22
5. Governance, Administration and Legal Protection	23
6. Landscape and Land Use	26
6.1 Visual Landscape and Land Use	26
6.2 Land Use and Catchment Functions.....	27
6.3 Sustainable Farm Management.....	29
6.4 Local Food Economies	31
6.5 Forest Woodlot Management.....	32
7. Ecology.....	35
7.1 Ecology Management Zones and Priorities.....	35
7.2 Existing Indigenous Vegetation and Habitats	36
7.3 Habitat Restoration.....	37
7.4 Management of Rare and Threatened Species.....	39
7.5 Weed Control.....	40
7.6 Pest Animal Control	41
8. Heritage and Cultural Landscape	43
8.1 Recognition of the Cultural Values	43
8.2 Historic Sites, Structures and Cultural Landscape.....	44
9. Visitor and Commercial Use	48
9.1 Recreation Use.....	48
9.2 Visitor Use	49
9.3 Visitor Infrastructure	52
9.4 Signage and Interpretation	54
9.5 Commercial and Exclusive Use, Special Events and Occupation Agreements	55
Appendices	
Appendix 1 Land Use Actions and Management Map.	56
2	

Appendix 2	Existing Vegetation (2011) Map.....	57
Appendix 3	Heritage Sites Map.	58
Appendix 4	Proposed Recreation Routes and Access Map.	59
Appendix 5	Development Option 4b Map.	60
Appendix 6	Discussion: The Potential for Reintroduction of Buff Weka.	61
Appendix 7	Statutory Acknowledgement.	62
Appendix 8	Bibliography.	65
Appendix 9	Implementation Plan.....	66

Acknowledgements

This Management Plan was prepared by Rhys Millar (Forest Environments Limited), with significant input and assistance from Jackie Fanning (L&R New Zealand Limited). Kelvin Lloyd, of Wildland Consultants Limited, provided the ecological content of this Management Plan. Mike Moore, Landscape Architect, provided input into the Landscape section of this Management Plan.

Review and Council input was provided by Debbie Hogan, Lisa Wheeler, Martin Thompson and other Council staff.

We would like to thank all of those people who actively participated in the Working Group process that provided such a strong foundation upon which this Management Plan was developed.

Photographs: Rhys Millar



1. Introduction

1.1 Preamble

The 328 hectare Hereweka/Harbour Cone property is located in a central position on the Otago Peninsula and straddles the main peninsula ridgeline behind Broad Bay and Portobello. It includes the summit of Peggys Hill, the second highest point on the Peninsula, and Harbour Cone, the most distinctive hill form in the area. The majority of the property falls within two catchments, Smiths Creek on the harbour side and Stewarts Creek on the Hoopers Inlet side.

The primary access and public viewing corridor through the site is Highcliff Road but the property also abuts Camp Road, Sandymount Road and Bacon Street. The property wraps around three sides of Larnach Castle and is adjacent to the Otago Peninsula Trust property on Sandymount Road containing the historic lime kilns.

In common with the rest of the Otago Peninsula, the property is mainly composed of volcanic rocks of the Dunedin volcanic group and the high points of Peggys Hill and Harbour Cone consist of hard basaltic lava flows. Much of the property is underlain by volcanic ash and rubble which weathers readily to clay rich materials. This clayey rubble, together with the loess (wind-blown silt), which also mantles the Peninsula, is responsible for widespread landsliding. There is a small area of sedimentary rock, including limestone, exposed at the southern end of the site near the historic lime kilns. A fault scarp is visible as the eastern face of Peggys Hill. This geology has given rise to steep, rugged topography with plenty of evidence of unstable slopes, slips and slumps.

The property would once have been clothed in native forest but has been cleared for farming. There is now little native forest left and what remains is almost entirely regrowth. Significant patches of bush, however, are present, including six areas identified as having

the potential to be included as Areas of Significant Conservation Value in the Dunedin City District Plan (Wildland Consultants, 2008).

Grazed pasture is now the dominant vegetation cover, reflecting a history of first dairy farming but now largely sheep farming. There is some exotic scrub but in general the property has been well managed and is relatively free of noxious weed species such as gorse and broom.

One of the most striking features of the site is the evidence of more densely settled historic European occupation. This is in the form of derelict houses, drystone walls, tracks and shelter plantings (mainly macrocarpa). The Archaeological Assessment scoping report (Middleton 2008) describes the property as 'a pristine archaeological landscape of historic occupation' that 'has the potential to offer both Dunedin's citizens, as well as tourists, a glimpse of an intact historic landscape typical of nineteenth and early twentieth century settlement on the Otago Peninsula'. The report notes that this relates both to small ten acre dairy farms and also to the larger estate of William Larnach.

The public are drawn to this property as it provides a unique opportunity where access is supported to explore and appreciate the Otago Peninsula interior. Being able to access and enjoy this property and piece together its heritage is a stimulating experience.

The property can provide a range of recreational opportunities, encouraged by the multi-use nature of the tracks (in accordance with the Dunedin City Council Track Policy and Strategy) and the provision of some infrastructure to facilitate access. The property's proximity to the city means it is relatively accessible for many Dunedin residents and for the residents of Broad Bay and Portobello, this property is on their 'back door step' and is a community asset.

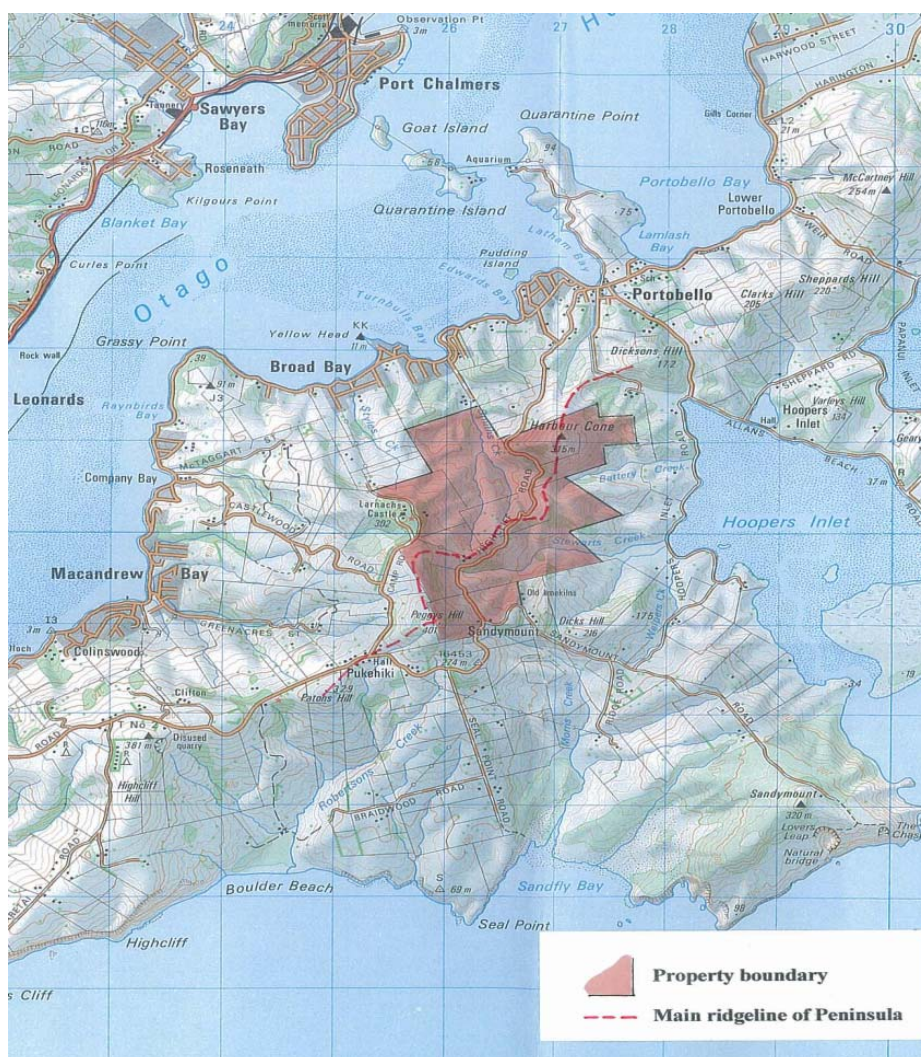


Figure 1: Location

The Hereweka/Harbour Cone property provides an important setting for heightening people's enjoyment, awareness and understanding of environmental, conservation, sustainability and heritage issues and provides tremendous opportunities to explore the role of community-based land use in defining the social and cultural wellbeing of citizens.

The importance of Hereweka/Harbour Cone is due to the following values:

- The history, cultural significance and connection for manawhenua.
- The intactness of the archaeological landscape.
- The outstanding landscape and the significant landforms.
- The areas of significant conservation value.
- The recreational opportunities and the ease of access to open space for Dunedin residents.
- The potential of the property as a place for community learning and as an exemplar of sustainable land management practice.

With so many important and diverse values, it is essential that the management of the Hereweka/Harbour Cone property provides the necessary protection of the natural and cultural values while accommodating appropriate human use.

1.2 Vision

The vision for the Hereweka/Harbour Cone property is:

To maintain the working landscape and enhance landscape, ecological, recreation, cultural and heritage values of the Hereweka/Harbour Cone property.

The vision statement recognises the significant values of the property and provides a direction and framework for the management of the Hereweka/

Harbour Cone property Management Plan, informing the development of the aims, objectives and policies.

1.3 Legal Description

The Hereweka/Harbour Cone property, at 1299 Highcliff Road, has the following legal description:

Certificate of Titles 268/197, 124/180, 124/181, 156/197, 268/188, 268/194, 268/194, 268/195, 268/196, 44/78, 170/139, 14B/1180.

A map showing the parcels and legal Certificates of Title is shown over page.

1.4 Management Zones

The Hereweka/Harbour Cone property is large in size and the protection and enhancement of its values requires considerable resources. Future operational management of the property will be assisted by dividing the property into management zones. These zones will not be managed in isolation from each other, but by breaking down tasks into the various zones, objectives can be achieved more easily as management can prioritise tasks and implement these on a smaller scale.

A basis for dividing the property into five management zones is illustrated in Figure 3.0 overleaf. A description of the Management Zones is provided below in Section 1.5.

Short term management actions and priorities are described and illustrated in more detail in the Hereweka/Harbour Cone Implementation Plan provided in Appendix 9.

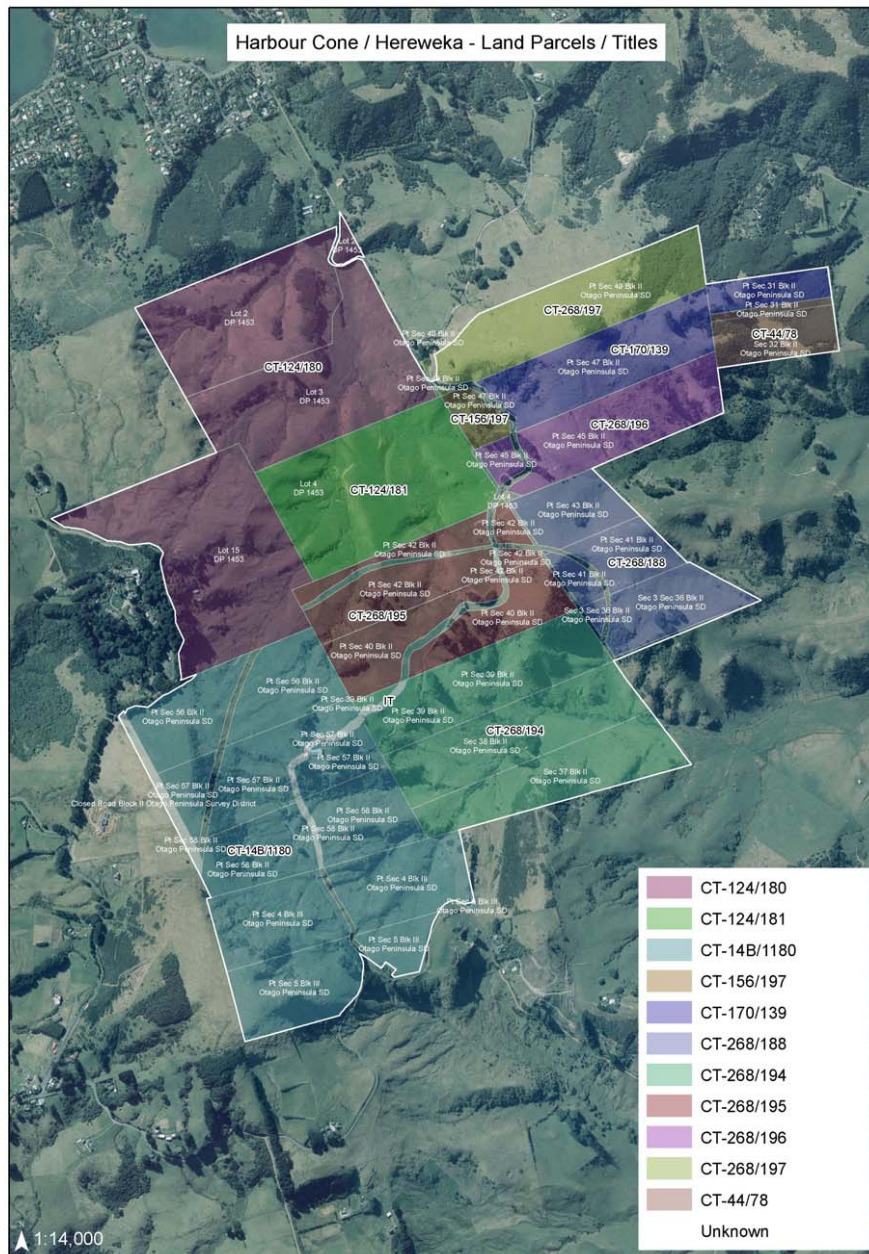


Figure 2: Hereweka/Harbour Cone Land Parcels/Titles

1.5 Management Zone Descriptions

The character of the management zones is described below, with an overview of values and management priorities. A more comprehensive list of management priorities is provided in the Hereweka/Harbour Cone Property Implementation Plan.

Bacon Street

This zone takes in the lowest part of Smiths Creek within the property and the adjacent gullies and hill slopes to the west. It contains lowland alluvial flats, gullies and dry hill slope landforms. A strip of kanuka forest occurs along part of the riparian margin of Smiths Creek, with larger patches of kanuka tree-land on hill slopes. These tree-land patches are heavily used by stock. There has been natural regeneration of kanuka on dry hill slopes below the largest tree-land patch. Gorse is scattered through the zone on the hill slopes and forms a scrub with regenerating indigenous forest in places on the northern boundary of the zone. The alluvial flats are covered in pasture and patches of rush-land in wet areas. Wet gully floors are mostly vegetated in rush-land and sedge-land.

The proximity of the community at Broad Bay currently makes the Bacon Street zone a popular place for recreation and enjoying the open space of the rural environment. It has always been popular with local residents, having historically been used by the local community as a site for picnics, or as a destination for Dunedin day trippers.

One marked track currently begins here, leading to Highcliff Road and beyond. In the future, the marking of short circular walking routes within this zone will provide an accessible place for recreational opportunities. A multi-use track that provides for horses and mountain bikes could also begin here.

Its accessibility and sheltered aspect makes this zone an ideal place for community initiatives such as community orchards or ecological restoration projects. Restoration

planting to restore podocarp-dominant forest and indigenous riparian vegetation and trialling best practice to foster kanuka regeneration are two examples of relevant ecological projects that could be instigated in this Management Zone.

Smiths Creek

The Smiths Creek zone occupies the catchment of Smiths Creek below Highcliff Road. It mostly comprises dry hill slope landforms with intervening gullies. Very little indigenous vegetation remains within this zone, which is mostly covered by pasture. There are small patches of dry broadleaved forest in places on steep slopes and in gullies and it is a matter of priority that these are fenced. Stands of exotic trees are common on the margins of the zone, including sycamore, which is spreading into adjacent areas. Hawthorn is scattered throughout the zone, but gorse is at low abundance. The exotic climber Chilean flame creeper is present in some locations. Controlling these weeds is of high ecological priority in this zone.

The land use history of small scale dairy farming is highly legible in the upper slopes of this catchment, due to the uniformity of the pasture cover. This allows the relic shelter plantings, stone walls and building ruins to be highly coherent. The importance of this cultural landscape is also demonstrated by the historic site of Larnach's model dairy farm, which is an important feature in this zone.

The previous clearance of indigenous forest vegetation from these slopes and subsequent farming practice has resulted in the occurrence of widespread erosion. Re-establishing woody vegetation on these slopes is a priority, assisting to slow further erosion and to protect the waterways of this catchment. Linking with potential community initiatives to enhance the waterway in the Bacon Street zone, the gradual revegetation of riparian vegetation up the Smiths Creek catchment could occur over time, providing habitat for indigenous fish species that are present, and as such, for indigenous fauna.

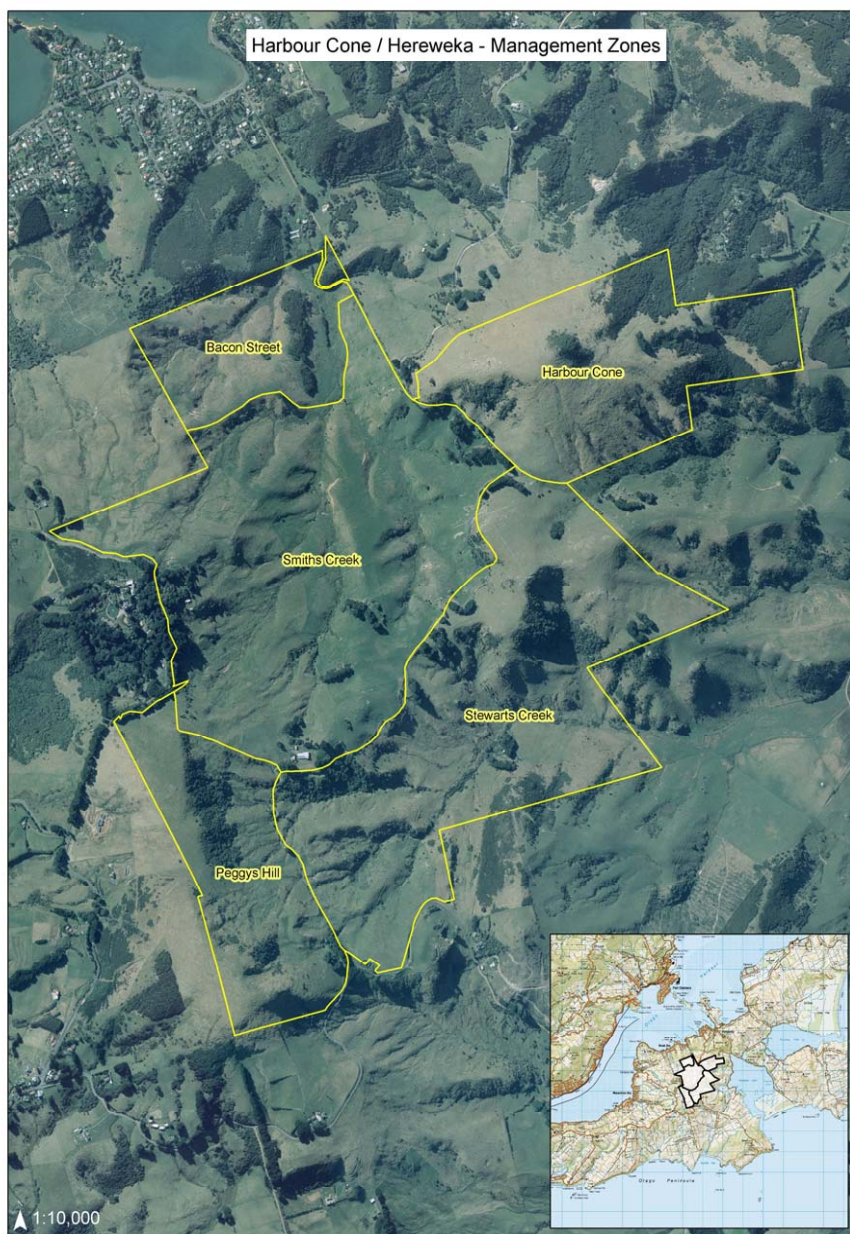


Figure 3: Hereweka/Harbour Cone Management Zones

Establishing small areas of highly sensitive forest management will assist in enhancing biodiversity, protecting waterways and slowing erosion and will provide a framework of woody vegetation that provides context in the pastoral landscape.

The proximity to neighbouring Peninsula settlements makes enhancement of recreational opportunities a priority in this zone. The large open spaces that are devoid of sensitive site-specific biodiversity or historic values means other recreational users, such as horse riders and mountain bikers, have more opportunities here.

The woolshed that sits upon the ridge of this catchment is at the core of the farming operation, strategically placed to both Smiths' catchment and Stewarts' catchment. This strategic area is also a potential site for a future visitor hub that would serve as a place for environmental and outdoor education and provide for some visitor amenities.

Hereweka/Harbour Cone

This zone comprises the summit and moderately steep flanks of Hereweka/Harbour Cone and associated ridges and gully heads to the east, with a predominantly dry hill slope character. The distinctive conical form of Hereweka/Harbour Cone is a major cultural landmark and landform feature with high levels of significance that demand protection from any adverse activities.

Kāi Tahu have a long association with Muaupoko (Otago Peninsula) and the mauka (mountain) of the peninsula Hereweka (Harbour Cone). Hereweka also features in Kāi Tahu oral history as one of the places where Tarewai, a Kāi Tahu warrior chief hid from Kati Māmoe warriors (Kāi Tahu Ki Otago, 2009).

The zone includes two patches of significant indigenous broadleaved forest and the most extensive areas of kanuka forest on the property. The broadleaved forest stands are being adversely affected by stock browse, but kanuka is naturally regenerating in rough pasture on the southern and eastern aspects and

this will ultimately extend the coverage of kanuka forest toward the Harbour Cone summit. Patches (and individual plants) of gorse are commonly found in grassland on the flanks of Harbour Cone, and it is actively invading uphill from the southern margin of the zone. Excluding stock from the broadleaf forests is an ecological priority, combined with restoration planting in the fenced-off gaps.

Hereweka/Harbour Cone already attracts significant numbers of people enjoying the long views across wide valleys, the peninsula and open sea and the physical presence of a rich cultural landscape. Further opportunities have been identified that will allow for existing tracks to connect with neighbouring tracks in Hoopers Inlet and Portobello, providing walking track circuits between the settlements of Broad Bay and Portobello.

Peggys Hill

The Peggys Hill zone takes in steep eastern slopes, terraces and the relatively flat summit of Peggys Hill above Highcliff Road, which have a moist character unlike most of the Hereweka/Harbour Cone property. The eastern slopes are the source of several springs and there are several areas of landsliding instability in this part of the zone. A litter of sub-fossil tree trunks on the summit of Peggys Hill probably represent a former cover of Hall's totara. The zone includes a relatively large and significant stand of moist indigenous broadleaved forest on the eastern slopes and a smaller patch of similar forest further south. Gorse has extensively invaded non-forest habitats on slopes and terraces within this zone and has been subject to an aerial spraying operation that has affected regenerating indigenous trees among the gorse. Pasture covers the remaining areas, apart from isolated exotic trees of macrocarpa and radiata pine.

The largest area of indigenous forest, and a considerable area of grassland on its margins, was recently fenced to exclude stock. An ecological restoration programme has commenced within the fenced area, with the aim of restoring



indigenous forest cover to areas currently covered with pasture. The first plantings were undertaken in 2009/2010 and further plantings are envisaged in 2011. The protection of this site from livestock and the ability for community to participate in the ecological restoration has created a sense of local ownership of both the project and site.

Insulated from the farming operation, this fenced-off area also provides a site for community initiatives such as trialling alternative ecological restoration techniques and building soil organic matter and carbon.

The recently sprayed gorse higher on the slopes of Peggys Hill provides other opportunities to trial ecological restoration techniques such as direct seeding, with subsequent manipulation of grazing practice to encourage biodiversity and protection of this catchment's headwaters.

Marked tracks will provide opportunities for people to access the ridgeline of Peggys Hill and to appreciate the 360-degree views over the Peninsula and surrounding sea. A steep track will also lead down into the Stewart's Creek Management Zone, incorporating an edge of the large broadleaved forest and the active ecological restoration project that is underway, providing further public exposure of the property's values and the community initiatives that are underway.

Stewarts Creek

The Stewarts Creek zone is centred on the catchment of Stewarts Creek below Highcliff Road. At a lower elevation, Stewarts Creek passes between narrow alluvial flats, but in general the zone is occupied by steep slopes, apart from gentle topography in the head of Battery Creek. The upper tributary of Stewarts Creek below Peggys Hill has a moist forest character, but most of this zone is covered by dry hillslopes. The predominant cover of the zone is pasture but it also includes significant stands of moist and dry indigenous broadleaved forest and scattered smaller stands of indigenous forest and shrub-land. Moist forest occurs only in the upper

catchment below Peggys Hill. Elsewhere, hill slopes support forest that is dry in character, with frequent kowhai in the canopy. Gorse is widespread and has been subject to aerial spraying operations in places. Almost continuous linear strips of gorse scrub occupy the low elevation riparian margins of Stewarts Creek. Small rock outcrops are present in places and there are scattered groves of tall macrocarpa and radiata pine. The moist indigenous forest remnant has been fenced to exclude stock and its margins are subject to the same indigenous restoration programme as described above for the Peggys Hill zone.

Further removed from the settlements of Broad Bay and Portobello, the Stewarts Creek zone exudes a sense of rural remoteness. The presence of archaeological sites, including the lime kilns on a neighbouring property, the ruinous standing house of the Stewart family and the ruins of the enclosed Rutherford's farmstead, strengthen the significance of this area. Rutherford's road, consisting of a complex of stone features, is still formed and useable, providing an auspicious beginning to recreational journeys for people wanting to explore the Peninsula's past. Combined with the strong physical landforms and natural vegetation of this zone, it is a place for encouraging human interaction and reflection.

The ecological restoration project that began in this zone in 2010 is the basis of further restoration activities that centre on the waterways of this catchment. Stock exclusion from the riparian margins of Stewarts Creek, accompanied by restoration planting, will create a strong vegetative framework in this catchment that enhances freshwater values and habitat for fauna. The accessible and relatively flat valley floor of the Stewarts Creek catchment makes it a suitable site for consideration of native tree woodlots that serve to provide timber products, protect waterways and enhance biodiversity. These highly sensitive forest management operations form a part of the ecological restoration.



2. Purpose of the Management Plan

The whole-of-property management plan for the Hereweka/Harbour Cone property provides a policy framework that serves to strategically integrate the multiple objectives that the Dunedin community has for this property. It is a document for all stakeholders involved in the use of the property, including those charged with managing the property and other local stakeholders implementing conservation, heritage or cultural projects.

Future decision-making will be guided by this Management Plan, ensuring that the management and enhancement of the property is based on sound principles. This Hereweka/Harbour Cone Management Plan will also ensure that all activities and enhancements align with the values of the property and the stated aims/objectives and policies within this Plan.

The Management Plan provides guidance and direction on the following key issues:

- Minimising potential conflict between the property's values and various uses of the property.
- Facilitating public access to and through the property for a range of users and uses.
- Facilitating appropriate community use of the property.
- Minimising the provision of infrastructure but ensure that it is adequate to protect and enhance values.
- Ensuring existing infrastructure is compatible with the property's values and, if not, implement ways to mitigate or remedy negative effects.
- Ensuring new infrastructure is compatible with the protection of the property's values.

- Considering the use of existing buildings to enhance the property's values.
- Ensuring long-term visitor accessibility and enjoyment of the property's values.

The Management Plan will help to inform the future legal status of the property, as well as the ownership and governance structure. This Management Plan has been prepared to be consistent with the Reserves Act 1977, but as no decision has yet been made whether to gazette the property, it remains unbound by the restrictions of this Act.

2.1 Development and Management Options

In January 2008, the Dunedin City Council approved purchase of the 328 hectare property on the Otago Peninsula that has become known as Hereweka, or Harbour Cone. The Council purchased the land to protect its significant landscape, ecological, heritage and cultural values and in recognition of its potential recreational and tourist values.

In June 2009, in seeking to understand the potential options for recouping some of the purchase price of the property, the Dunedin City Council commissioned consultants to prepare a report to explore how a range of development options would impact upon the values of the property.

Millar and Moore (2009) developed and explored six options for consideration. Each option was considered to conform to the Council's vision and guiding principles for management of the property to varying extents, while attempting to provide for some recouping of the costs associated with purchase and ownership.

The options were as follows:

- Option 1: Protect the values, subdivide as provided for in the District Plan and sell.
- Option 2: Protect the values, subdivide as provided for in the District Plan and sell part of the site, retaining the remainder in public ownership.
- Options 3, 4, 4a and 4b: Retain most of the site in public ownership, but suggest subdividing and selling various discrete parcels.

Each of the options listed above were assessed for their performance against the vision and guiding principles, as well as the requirements to recoup or minimise financial costs where possible. The criteria used were as follows:

- Does the proposal maintain or enhance the natural environment values?
- Does the proposal maintain or enhance the visual landscape values?
- Does the proposal maintain or enhance the cultural/historic heritage values?
- Does the proposal maintain or enhance the recreational values?
- Does the proposal maintain or enhance the economic values?
- Does the proposal maintain or enhance the social values?
- Does the proposal contribute positively to management of the Otago Peninsula environment generally?
- What are the financial implications for Council?

In summary, Options 1 and 2 proposed subdividing the property into small holdings and relied on management of the effects of private ownership and compliance by the new owners to sustain the identified values of the

property. Subdividing and selling the lots would recoup a significant proportion of the purchase costs and minimise ongoing management costs to Council, but would also involve considerable impact of new buildings and associated infrastructure in the landscape. The report concluded that the fragmentation and the associated private ownership of the property did not fit with vision for the property and did not provide sufficiently for sustaining the identified values.

Options 3, 4, 4a and 4b proposed retaining the bulk of the property under a single ownership structure, emphasising flexibility and responsiveness to site character and placing emphasis on the regeneration and enhancement of the values of the property. In retaining a significant asset, Options 3 – 4b protected potential future recreational, economic and social opportunities. It was also considered that ownership by and for the public would enhance opportunities for community involvement and benefit.

The report concluded that Option 4b was the best of these options on the basis that it provided the best balance between environmental protection and enhancement and recouping of costs. Option 4b proposed retaining most of the property in public ownership to continue to be managed as a working farm and to protect and enhance its values. To assist with recouping of Council's purchase and ongoing management costs, housing was identified as being appropriate in areas where it was considered that they would have a low impact on the values of the property. Proposed areas for subdivision to provide for residential use were kept as small as practicable to minimise impacts on the farming operation.

Option 4b proposed three areas that could potentially be subdivided and sold.

- (i) A cluster of five dwellings at the northern edge of the property accessed from Bacon Street, with a sixth lot included that encompasses a large wetland area. This sixth lot of the 'Bacon Street cluster' would be jointly owned and managed by

the owners of Lots 1-5, and restoration of its natural values would be prescribed.

- (ii) Two sites at the end of the formed section of Camp Road.
- (iii) Two sites at the southern edge of the property off Sandymount Road. These sites were considered acceptable in the rural landscape, with strict design and appearance controls imposed on the basis that they are in relatively recessive locations or would be seen in the context of existing loose clusters of dwellings.

Option 4b also included provision for a heritage tourism venture based on Larnach's model farm. This expanded lot provided for a building site for the purpose of facilitating a small scale dairy farming operation as part of a heritage tourism venture. The management option is shown on the map in Appendix 5.

In reviewing the development and management options, the Council agreed that Option 4b was the preferred option; however it considered that the Larnach's model farm should stay in public ownership and should therefore be removed from any development option.

At its meeting on 15 June 2011, the Community Development Committee resolved that the Bacon Street Cluster was inconsistent with the management aims of the Plan and that Option 4b without the Bacon Street Cluster be approved for public notification.

At the Hearing, the Committee agreed with a significant number of submissions that the proposed subdivision on Sandymount Road could not be done in such a way that it was in line with the vision of the Management Plan, as it was a visually prominent site. It was therefore decided that the Sandymount Road subdivision proposed in Option 4b be removed from the final management option. It was considered that one small lot on Camp Road Lot could possibly be subdivided and sold at some future point.

The development option that has been adopted for Hereweka/Harbour Cone retains most of the property in public ownership with only one small area being potentially available for subdivision and disposal at some time in the future. This development would need to be assessed against the rest of the policies in the Management Plan at the time of implementation.

2.2 Process for Developing the Management Plan

The process of developing the management plan has identified priorities, assisting to resolve any uncertainty and potential conflict over various uses and expectations. The needs of the key stakeholders and the public have been clearly identified through their involvement in the process of developing the plan.

The process for developing this management plan involved extensive community participation. A public workshop started the planning process, providing an opportunity for all members of the community to contribute their ideas and aspirations for the property. Attracting 60 people, this full-day event generated a diverse range of objectives for the Hereweka/Harbour Cone property.

The second stage of the planning process involved the establishment of four working groups based upon four themes – heritage/cultural values, recreation and visitor use, land use and food production and ecology. Each working group met on two or three occasions to discuss the objectives for each theme. The membership of each working group consisted of community representatives and expert representatives of statutory authorities, local government, independent consultants and non-government authorities. Facilitated by the consultants employed to develop this Management Plan, these meetings provided a venue for filtering the ideas that had come out of the community workshop and subsequent debate about important issues. Complementing the

work completed by the working groups was the extensive advice provided by the contracted consultants, Forest Environments Limited, L&R New Zealand Limited and Wildlands Ecological Consultants.

Dunedin City Council staff then reviewed the management plan, providing constructive feedback from the perspective of Council as land owner and current manager. The consultants employed to develop this management plan then presented the draft plan to the Hereweka/Harbour Cone Steering Group and then to an open public meeting. These two events provided opportunity for further community input prior to the final draft being submitted to the Council.

To complete the process, the Dunedin City Council embarked upon formal consultation under the Local Government Act 2002. The process involved a submission period of a minimum 20 working days, followed by a hearing, decision on submissions and then adoption of the final Management Plan.

2.3 Consideration of Other Documents

Reserve management planning does not occur in isolation, as there are other broader documents that guide it. In developing this Hereweka/Harbour Cone Property Management Plan, the statutory Dunedin City District Plan is relevant. The Hereweka/Harbour Cone property is within the Rural Zone of the Dunedin City District Plan and is also covered by two Landscape Management Areas, the 'North West Peninsula Landscape Conservation Area' to the north of the main peninsula ridge and the 'Peninsula Coast Outstanding Landscape Area' to the south. Landscape management rules apply to these areas which seek to control 'principal threats' and 'other threats' as identified in the District Plan. All activities not specifically referred to in the Landscape Management Areas are classified according to the rural zoning of the land. Five potential areas of

significant conservation value have been identified, but not yet formally recognised, within the District Plan (Wildlands, 2008 a-e).

The Reserves Management Plan – General Policies was also used to inform the development of this management plan and is the default document for any scenario not covered in this Hereweka/Harbour Cone Property Management Plan. The General Policies cover all basic issues of the day-to-day administration of parks and reserves in Dunedin.

The Resource Management Act 1991 (RMA) in particular is relevant and provides overall direction in terms of sustainable management. The Management Plan must be consistent with the RMA, including documents prepared under the legislation such as the Dunedin City District Plan (2006) and the Kāi Tahu ki Otago Natural Resource Management Plan (2005).

Other legislation also has implications for the management of this property. These include the Reserves Act 1977, Historic Places Act 1993, the Conservation Act 1987, the Wildlife Act 1953 and the Ngāi Tahu Claims Settlement Act 1998.

The Ngāi Tahu Claims Settlement Act includes a number of mechanisms to recognise and give practical effect to Ngāi Tahu mana over taonga resources and areas of land and water. These mechanisms include statutory acknowledgements. A Statutory Acknowledgement is an acknowledgement by the crown of Ngāi Tahu cultural, spiritual, historical and traditional association with identified areas (Appendix 7).

All archaeological sites in New Zealand are protected under the Historic Places Act (1993). An archaeological site is any place where pre-1900 human activity has occurred and which can be investigated through archaeological methods. Forty-two historical sites and structures within the Hereweka/Harbour Cone area are known and recorded on the NZ Archaeological Association Site Recording Scheme (Walton 1999;

Middleton 2008) but, as yet, not within the Dunedin City District Plan.

Other non-statutory sources of information have been referenced in the bibliography of this document.



3. Hereweka/ Harbour Cone Property Values

3.1 Landscape and Land Use Values

The high elevation of the Hereweka/Harbour Cone property, and its position as a backdrop to many surrounding areas, contributes significantly to the quality and sense of place that it provides to the wider Otago Peninsula landscape. The distinctive conical form of Hereweka/Harbour Cone is a major landmark and landform feature with high levels of significance. It appears in numerous artworks and has been described as an iconic part of Dunedin's landscape.

The uniform pasture cover, characteristic of the property, allows the character of the natural landform to show through clearly and allows rocky outcrops and remnant stumps from the previous forest cover to be seen. The natural landform is highly expressive of its history of volcanism and erosion. The remnant bush areas coinciding with the steepest or wettest areas, unsuitable for grazing, reflect the landform patterns and enhance the naturalness of the landscape.

Likewise, the land use history of small scale dairy farming is also highly legible, again, largely due to the uniformity of the pasture cover. This allows the relic shelter plantings, stone walls and building ruins to be highly coherent.

The pastoral farming management regime is the process that maintains the current landscape pattern and character. It is important that appropriate pastoral use continues to maintain the large scale openness and character of the landform, whilst assisting with the delivery of a wider range of ecosystem benefits.

One of the greatest values of the property is its potential to implement and demonstrate a new model of land use that demonstrates multi-functionality. Multi-functionality aims to deliver a wide range of benefits. For this Hereweka/Harbour Cone

property, these benefits include food, landscape character, clean water, flood protection and water management, wildlife habitat, protection of cultural features and strengthened relationships with local communities.

As a community asset, the Hereweka/Harbour Cone property provides a tremendous opportunity to explore the role of community-based land use in defining the social and cultural wellbeing of citizens. In a carbon-constrained world, health, closeness to nature, open space and consuming and recreating locally have greater significance for land use management than previous priorities such as global commodity production and maintenance of vistas. In the multi-functionality model, these opportunities are not exclusive of one another but are a part of a functional and interactive landscape.

This property provides an important setting for heightening people's enjoyment, awareness and understanding of environmental, conservation, sustainability and heritage issues. Community members should be encouraged to explore initiatives that will assist with the enhancement of the property's values and that deliver benefit to local communities.

3.2 Ecological Values

The Hereweka/Harbour Cone property contains five patches of indigenous forest that have been assessed as being ecologically significant (Wildland Consultants 2008 a-e). Two of these patches occur on Harbour Cone, two in the upper part of Stewarts Creek, and one on the northeast face of Peggys Hill. Additional stands of kanuka treeland and forest occur in the northern part of the property, and are adjacent to more extensive areas of indigenous forest on adjoining properties (Appendix 1). Smaller patches of broadleaved forest and shrub-land are scattered across the property.

A number of locally important and nationally 'At Risk'¹ indigenous species are present on the Hereweka/Harbour Cone property and the property provides important moist forest habitat that is atypical of the Otago Peninsula. This habitat also supports a high diversity of indigenous fern species.

Indigenous forest on the property provides important food sources for indigenous avifauna and the forest remnants are important components of the network of small indigenous forest remnants in this part of the Otago Peninsula. Proximity to relatively large areas of indigenous forest centred on adjacent land at Dicksons Hill and the lower northern and eastern flanks of Hereweka/Harbour Cone will allow for flows of indigenous flora and fauna between these habitats and the areas of forest habitat on Hereweka/Harbour Cone.

The lower part of Smiths Creek supports five indigenous fish species and, as such, is a significant habitat for indigenous fauna. Streams on the property are in relatively good condition; however, there is potential for further improvement in terms of riparian management and removal of barriers to fish passage.

The main threats to features of ecological values of the property are stock browsing and weed invasion. Two of the significant forest patches have recently been fenced to exclude stock, but the remaining forest patches remain open to stock and are declining in condition as a result. Woody weeds are present in most indigenous forest patches and require control. There is considerable scope for restoration of indigenous vegetation on the Hereweka/Harbour Cone property and this has commenced within the recently-fenced areas. Additional indigenous restoration works should be prioritised to areas where the ecological benefits of restoration are high.

¹ de Lange P.J., Norton D.A., Courtney S.P., Heenan P.B., Barkla J.W., Cameron E.K., Hitchmough R., and Townsend A.J. 2008: Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47: 61-96.

3.3 Cultural Values

Kāi Tahu have a long association with Muaupoko (Otago Peninsula) and the mauka (mountain) of the peninsula Hereweka (Harbour Cone). Permanent settlements occurred around the coast due to reliance on the sea as a means of transport and for the availability of kai moana and fish. Places for mahika kai, where food resources could be produced or procured, around Muaupoko were numerous. The tidal bays of the peninsula provided excellent tuaki (cockle), pātiki (flounder) and pāteke (duck). Other species caught by netting included red cod (hoka) and leather jacket (kōkiri/puamorua). The kake (female sealion) was sought from December to May, as was the whakahao (male sealion).

The practice of mahika kai, moving seasonally to gather food and tool-making resources from throughout the rohe (area), was a distinct feature of the lifestyle of Kāi Tahu tupuna (ancestors). The name Hereweka, a literal translation of which would be 'catch weka', refers to the place on the peninsula where the food resource of weka was found. Another suggested possible meaning of Hereweka is 'swift weka', also a reference to the birds that were once a plentiful food source.

Hereweka also features in the 'Tarewai tradition', captured in the oral histories of Te Rūnanga o Otākou and in published works. The story is told that, following an incident near the pyramids in the late 1700's, Tarewai, a Kāi Tahu warrior chief and several of his men were taken prisoner by Kāti Māmoe. The warriors were killed, while the wounded Tarewai made his escape into the surrounding dense bush. Hereweka has been identified in one account as the mauka site where Tarewai hid in a cave tending his wounds, recovering to remain a threat to Kāti Māmoe for many years.

There are numerous other Māori archaeological sites recorded on the Otago Peninsula around Hereweka including Little Papanui, a large village as evidenced by the abundance of moa and seal remains and richness of

artefact collections, Hoopers Inlet, Papanui Inlet and Papanui Beach, Pipikeratu, Taiaroa Head (Pukekura) and Tarewai Point. Material from several sites has been reported, including seal, moa, small birds and fish.

Kāi Tahu sites are continually appearing around the peninsula coastline as erosion takes place. For example, a recent excavation at an eroding site at Sandfly Bay uncovered a small wrapped bundle of bird spears.

Much of the landscape of Muaupoko is dotted with sites of significance for Kāi Tahu. Although there may not be any identified sites within the Hereweka/Harbour Cone property to date, particular sites or places did not function in isolation from one another. All places were part of a wider cultural setting that included not only site as defined by the presence of archaeological remains, but all manner of highly valued places that were named by the earliest inhabitants of the area.

3.4 Historic Values²

The post colonial/pakeha historic value of the Hereweka/Harbour Cone property is the intact archaeological landscape, typical of nineteenth and early twentieth century settlement on the Otago Peninsula. This early colonial settlement relates to small ten acre dairy farms and also the larger estate of William Larnach.

The 1844 Otago purchase from Ngāi Tahu included most of the Peninsula to Taiaroa Head (Pukekura). The Hereweka/Harbour Cone property was then subdivided into land titles in 1863 and many of the stone wall features on the property are boundary walls constructed along these first survey lines.

At the time of the 1863 subdivision, heavy bush covered the landscape. The first European settlers cleared the land to establish farming pasture. The

community consisted principally of small family dairy holdings. During the days of early colonial settlement, the family economy was dependant on producing butter from the daily milk. Farmsteads often consisted of a dairy as well as a cow byre for over-wintering cows. It was a subsistence economy, with perhaps twelve cows, a flock of hens and a few pigs, some of which would be sold to the butcher when large enough and with gardens producing other food for the family.

At the beginning of 1892, the Sandymount creamery opened and farmers took milk to this factory, which in turn was taken into a central factory in Dunedin where the milk company produced butter. The daily visit to the Sandymount creamery must have been a focal point for interaction in the community, as well as taking a large amount of time out of the day, as for many of the farmers, transporting the milk was often slow and sometimes difficult.

In the late nineteenth century, four dairy factories were working on the Peninsula. When the Sandymount creamery was operating at its peak, there were 30 dairy farms in the area, but by the close of this period, only six remained as sheep farming gradually replaced the dairy herds.

The Hereweka/Harbour Cone property boundary encases the upper reaches of Sandymount Road, where much of the Harbour Cone community's infrastructure and industrial activity was found. Further west, towards Dunedin at Pukehiki, other important community structures were located, such as the drill-shed and the Pukehiki Presbyterian Church.

Two of the limestone kilns, the site of the Sandymount School and the Sandymount creamery lie outside the property's boundaries but played an important role in the community. Two other sites within the property's boundaries are the Sandymount post office and a lime crushing plant.

William Larnach began buying land on the Peninsula in 1870 and by about the

² (Extracts from the 'Harbour Cone Project – Archaeological Assessment for the Dunedin City Council; Angela Middleton, November 2008)

mid 1880s had developed the "Camp Estate". This estate covered not only Larnach's original purchases in the area, but also the smaller sections of land originally granted by the Crown to earlier settlers and then amalgamated by Larnach. The Camp Estate included the castle and associated buildings and the farm buildings.

Within the Hereweka/Harbour Cone property boundary is Larnach's "Model Farm" (replacing an original steading) which was accessed through a grand arched entranceway and consisted of a byre, stable, barn and dairy and the farm manager's house. Constructed as a model of the ideal dairy farm, this must once have formed the heart of Larnach's self-sufficient farming operations.

Larnach is also likely to have constructed, or to have employed stone masons to build, some of the stone boundary walls. He also pioneered the use of wire fencing. Following William Larnach's death in 1898, his son Douglas and a solicitor sold off parts of the estate to other local landowners.

3.5 Recreation and Public Appreciation Values

The Hereweka/Harbour Cone property is considered special by many local Otago Peninsula residents and the wider Dunedin community. Its open landscape, elevated position and location on the Otago Peninsula are all key aspects of its public appeal.

Dunedin residents are proud of the Otago Peninsula landscape. The public are drawn to this property as it provides a unique opportunity where access is supported to explore and appreciate this area. This large property, with big open spaces of rural character, grazing stock and with few modern developments, also adds to its value. From the higher areas on the property, the views over large parts of the peninsula interior, inlets, coastline and open sea are undeniably spectacular.

The uniqueness of this property is also in its crumbling stone constructions and walling and big macrocarpa trees. On closer inspection historic roads, homes, property boundaries, hedge rows, orchard trees and a past settlement emerge from the landscape. This property and surrounds tell a story of early colonial settler life on the Otago Peninsula and the links with early colonial Dunedin. Being able to access this property and piece together its heritage is a stimulating experience.

The proximity of this property to the city means it is relatively accessible for many Dunedin residents. For the residents of Broad Bay and Portobello, this property is on their 'back door step' and is therefore a community asset.

The property can provide a range of recreational opportunities. Such use is and will be encouraged by the multi-use nature of the tracks and the provision of some infrastructure to facilitate access. Public access through the property is focussed on protecting the property's values while enabling a wide range of users an enjoyable experience.

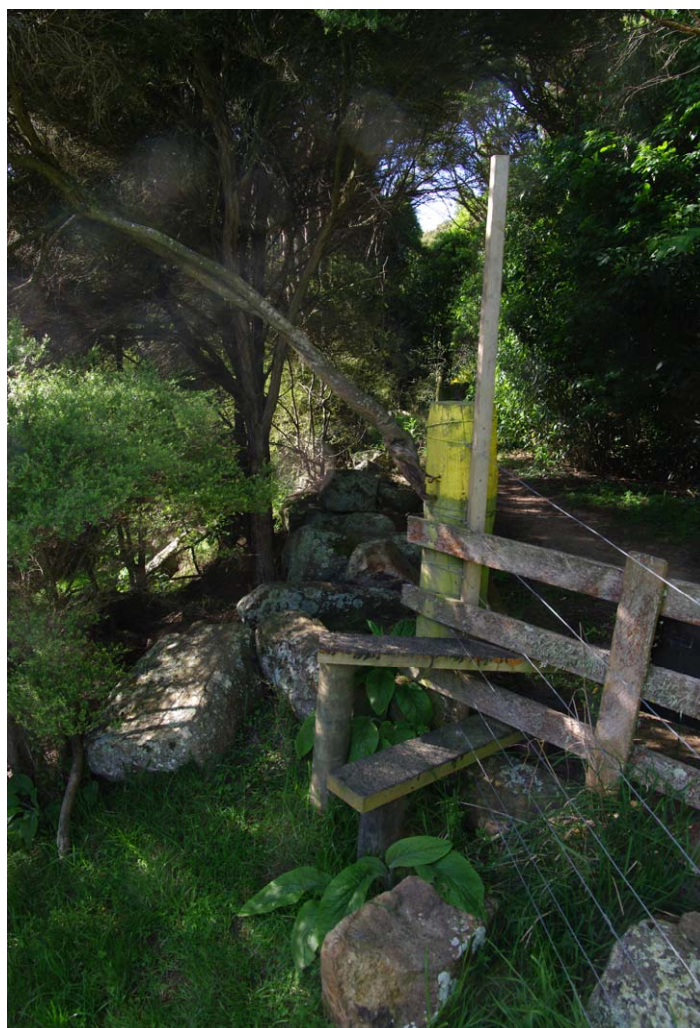
The large, open, flatter spaces on this property are suitable for passive activities. The proximity of these areas to the property's entrances, views and sites of interest, means that this property can easily satisfy people with reduced mobility or those with limited time to explore. In contrast, the steep hillsides and the network of tracks provide for users seeking a more physical challenge and an extended experience.

Supporting access and use of this property by the local and wider Dunedin community is important. Access provides an opportunity to learn about and appreciate the significant landscape, heritage, cultural and ecological values of the property.

The size of the property and quality of landscape where people can recreate, and participate in community initiatives and the enhancement of values, can contribute to the quality of life of visitors. The public use of the property and an understanding of the property's

values can create a community focal point and, in recognising the importance of publicly accessible land and shared community resources, will help to develop a collective sense of stewardship.

The presence of Hereweka/Harbour Cone, the open rural countryside, a rich cultural landscape and long views cross wide valleys, the peninsula and open sea, not only gives the visitor a sense of solitude, but a sense of exhilaration in being somewhere of significance.



4. Management of the Hereweka/Harbour Cone Property

4.1 Aims, Objectives and Policies

The aims, objectives and policies within this Management Plan have been prepared in terms of the Hereweka/Harbour Cone values and vision statement and other relevant guiding documents listed in the bibliography.

Success in managing the Hereweka/Harbour Cone property will be in being able to balance the protection of cultural and natural values of the property, while encouraging land use activities and the active participation of the community in its use.

When development and enhancement projects are being considered for specific issues and areas of the property, it is important that the policies within this management plan are interpreted in a holistic manner considering the property as a whole. Individual objectives and policies should not be read in isolation and must be implemented and applied consistently with reference to all of the plan's objectives and policies.

Management Aims

The aims of this Management Plan represent the long-term vision for the Hereweka/Harbour Cone property. Management aims complement the vision statement for the Hereweka/Harbour Cone property, providing a framework within which any future proposals for enhancement, or any other form of action which may impact on the property, can be considered.

The aims of this Management Plan reflect the expectations for the management of the Hereweka/Harbour Cone property. Aims are written as statements of outcome to allow the property to be assessed/measured/monitored against the achievements in future.

Management Objectives

The objectives of this Management Plan specify the means necessary to achieve the aims. 'Objectives' explain what the management intends to do. They are oriented towards action and provide the basis for developing specific policies on matters that the Council or the authorised governing body will likely need to address.

The objectives are used to assess the suitability of all activities and to identify the conditions/mechanisms required to maximise benefits and to minimise adverse impacts.

Management Policies

The policies are the means by which objectives are achieved – ie how to implement the objectives. Over time, as certain specific objectives are attained or require change, relevant policies will also be amended. The policies guide all future aspects of the property and provide the framework for continuity of management.



5. Governance, Administration and Legal Protection

The Hereweka/Harbour Cone property was purchased by the Dunedin City Council to protect its significant landscape, its ecological, heritage and cultural values and in recognition of its potential recreational values.

This Management Plan has been prepared as if it were a reserve managed by the Dunedin City Council and hence as if it were a reserve under the Reserves Act 1977 (eg authorities for leases). However, as no decision has yet been made whether to gazette the property, it remains unbound by the restrictions of this Act. As a consequence, the property is currently not protected as a community asset in perpetuity.

There are options for the governance of this property that protect the whole-of-property or specific sites for future generations. The whole property (or parts thereof) could be gazetted as a reserve under the Reserves Act 1977, which allows the administering body [Dunedin City Council], a voluntary organisation or a Board to control and manage a reserve. Activities such as recreation, heritage conservation, biodiversity enhancement and community initiatives would be permitted activities depending on the type of reserve classification and the purposes of the reserve listed in the gazette notice.

The Reserves Act 1977 also permits the control and management of land that is not a reserve by an administering body that is not the controlling authority. Other forms of site-specific protection could include QEII National Trust covenant protection of sites of significant conservation value.

If the property is to remain fee simple in the long-term, it will be necessary to legalise the access (in the form of easements) throughout the property to ensure the ongoing protection of community access.

Protection mechanisms such as covenants and public access easements should be considered in more depth if the Council should ever consider sale of the property, ensuring protection in perpetuity.

Any disposal of part of the property, including boundary adjustments, can be considered if they are consistent with the objectives of this Management Plan and the land's legal status. Section 2.1 of this Management Plan discusses the development options that have been considered by the Council as being appropriate for this property. Any disposal of the previously identified site at Camp Road needs to be assessed against the objectives of this Management Plan prior to initiating any disposal process, ensuring that the values of the property are not significantly affected. Public consultation will form a necessary part of any disposal process.

Given the popularity of the site and the ethos of stewardship for this property already evident in the local and wider Dunedin community it is considered preferable that, irrespective of ownership status, a Management Board is established that works with the Dunedin City Council to manage the property and administer this Management Plan. A Memorandum of Understanding developed between the Dunedin City Council and the Management Board would establish how this property is to be administered, giving due consideration to this Management Plan. The structure of the Management Board would need to be considered, but is likely to consist of community representatives who have governance experience and appropriate technical experience.

The Management Board would strive to continuously steer towards achieving the vision and aims of this Management Plan, making sure the day-to-day activities and management are always

aligned with the objectives and policies of this Management Plan. The Board members will articulate and promote the values of the property.

Management will meet on a regular basis to consider proposals for activities or enhancements, to be updated on issues (eg enhancement progress/wildlife monitoring/research/etc.), review financial management, to monitor the implementation of this plan, to authorise applications for funding and to determine future planning priorities.

Some aspects of the implementation of this Management Plan will likely require financial resources and input and expertise from relevant Dunedin City Council staff. The Management Board will actively source funding to implement this plan, though it is recognised that funding options will remain limited if the property remains under Council ownership.

Alternatively, the property could be vested with an independent charitable trust, removing the Dunedin City Council as administering body of the property but with a likely Council representative appointed to the Trust's Board. The charitable trust, whether already existing or created specifically to manage the Hereweka/Harbour Cone property, would both own and manage the property. This Management Plan would need to be updated to reflect this new ownership status.

A charitable trust is at an advantage in its ability to more easily secure contestable public funds to assist with the enhancement of the property. This needs to be weighed up against the ability of the Council to contribute consistent levels of expenditure to the property, albeit at maintenance management levels rather than at levels which will allow significant capital works to occur. Alternatively, if vested in a trust, the Council could commit to a long-term Memorandum of Understanding (MOU) that ensures a commitment to contributing annual funds to enable the delivery of core services, such as track maintenance. The Trust is then able to focus fundraising efforts towards obtaining

funds for biodiversity restoration, heritage restoration and other high-cost operations.

Regardless of the management and ownership structure adopted, management of the property will be in accordance with this Management Plan. This Management Plan will be under continuous review so that it can be adapted to changing circumstances or in accordance with increased knowledge.

This administration section primarily involves the establishment of a Management Board and the implementation of this Management Plan. There are, however, administration issues (eg commercial use) detailed in other sections of this plan that are not repeated in this section.

Throughout this Management Plan the term 'appropriate approvals' is used when stating issues that require consultation and approval. The relevant 'appropriate approvals' differ depending on each scenario. 'Appropriate approvals' can include Hereweka/Harbour Cone management, the statutory role of organisations, administering bodies and any other relevant parties as identified by Hereweka/Harbour Cone management. Protocols of how management decisions will be processed (including the relevant 'appropriate approvals') will need to be developed.

5.1 Aims:

1. The Hereweka/Harbour Cone property is administered in accordance with this Management Plan.
2. The Hereweka/Harbour Cone property is legally protected using mechanisms which protect the values of the property, in perpetuity.

5.2 Objectives:

1. To achieve efficient, effective and lawful delivery of the aims, objectives and policies of this plan and ensure the administration of

the Management Plan is consistent with the property's values.

2. To ensure the management structure and governance model protects the property's values in perpetuity.
3. To secure the legal protection of the Hereweka/Harbour Cone property, to protect values and ensure appropriate public use in perpetuity.
4. To ensure the Management Plan remains current, reflecting changing circumstances and increased knowledge.

5.3 Policies:

1. To secure the most appropriate form of legal protection of the property (or parts thereof) as a community asset (incorporating the property's values) in perpetuity.
2. All authorities granted will be issued by the Dunedin City Council, or authorised governing body, unless otherwise agreed.
3. Consideration of the disposal of part of the property is to be

assessed against the objectives of this Management Plan.

4. Public notification for boundary adjustments or disposal of property is required.
5. To establish a Management Board with a Memorandum of Understanding with the Dunedin City Council (including form of the Board) – unless formally replaced with an alternative governance option and approach.
6. Protocols between the Management Board and the Dunedin City Council will be developed to process management decisions.
7. Management will meet regularly to provide governance, ensuring accurate implementation of this Plan.
8. Management will actively source funding for the implementation of the Plan.
9. This Management Plan should be kept under continuous review, with a general review at the end of ten years.





6. Landscape and Land Use

6.1 Visual Landscape and Land Use

The Hereweka/Harbour Cone property contributes significantly to the distinctive landscape character of the Otago Peninsula. It is a landscape that provides evidence of its formative processes, in terms of both its natural qualities and cultural features. Pasture cover over the majority of the property, and the absence of disjointed vegetation patterns, allows the natural landform of rocky outcrops and remnant stumps from the previous forest cover to be clearly seen. This natural landform clearly illustrates its history of volcanism and erosion. The remnant bush areas enhance the naturalness of this landscape.

The visual values of this property are important internally but also highly valued more widely as much of the property is elevated and therefore forms the backdrop for many surrounding areas. Its natural/rural character contributes significantly to the quality and sense of place of the wider Otago Peninsula landscape. The distinctive conical form of Hereweka/Harbour Cone is a major iconic landmark and landform feature with high levels of significance for the Dunedin community.

The land use history of small scale dairy farming is also highly legible, again largely due to the expansive areas of pasture cover. This allows the relic shelter plantings, stone walls and building ruins to be highly visible. Importantly, the property is remarkably free of modern developments.

The high significance of Hereweka/Harbour Cone and the Otago Peninsula for manawhenua and the 'pristine archaeological landscape of historic occupation' (Middleton 2008) of early European settlement in Dunedin makes this property and the surrounding areas an important cultural landscape.

The landscape significance of the area is recognised in the Dunedin City District Plan by its inclusion within Landscape Management Areas. The values identified in the Plan can be summarised as natural/rural character (the subservience of built to natural elements), the presence of indigenous vegetation, wildlife and historic heritage elements and the significant views.

Minimising the impact of structures, plantings and other developments that negatively impact on the rural/natural character and significant landscape values of the property is crucial. It is therefore important that enhancement projects for this property, such as new woodlots or expanded areas' native vegetation, consider future impacts on this highly valued landscape.

There are specific areas of the Hereweka/Harbour Cone property that require further detailed spatial planning to ensure that all activities and enhancements are undertaken in a sympathetic manner and considered within the context of the greater values of the property. The need for detailed planning to minimise potential conflict between the property's values and various uses of the property is of particular importance on sites where public use may be high. In particular, these areas include the Bacon Street Management Zone, the main entrance in the Stewarts Creek Management Zone, the historic site of Larnach's model dairy farm in the Smiths Creek Management Zone and the site of the current woolshed in the Smiths Creek Management Zone, which is a potential site for a Visitor Hub.

The Bacon Street Management Zone, for example, is an area that has value as a place for ecological restoration, open space for local residents, potential as a site for community initiatives such as orchards and as part of recreational routes. Rather than considering each value and enhancement individually, it is appropriate that they be considered together, for this Management Zone as

well as in the context of the whole property. This will enable consideration of the potential effects of one activity on another, along with cumulative effects of different activities to achieve the aims.

6.1.1 Aim:

1. The Hereweka/Harbour Cone visual amenity, natural character and heritage landscape values are protected and enhanced in accordance with the long-term vision of this Management Plan.

6.1.2 Objectives:

1. To protect and enhance the visual amenity values of the property and in particular the visual coherence of the natural landform.
2. To protect and enhance the natural landscape character values of the property.
3. To protect and enhance the heritage/cultural landscape character values of the property.
4. To reduce potential conflict between the property's values and uses.
5. To enhance land use and landscape values on the Hereweka/Harbour Cone property considering all the potential developments, activities and initiatives in specific sites.

6.1.3 Policies:

1. Avoid significant earthworks that detract from natural landform character and if they are necessary, ensure they are designed to integrate with the natural landforms.
2. Protect existing areas of indigenous vegetation and enhance their natural character.
3. Provide for new plantings or other revegetation to be established in a manner that integrates with or highlights, the natural landforms, and is responsive to the natural

processes and conditions of the site.

4. Locate and design any buildings and other structures/built elements to minimise their visual impact on the natural character.
5. Ensure that all enhancement activities and developments are compatible with sustaining the cultural and heritage landscape values of the property including minimising the potential adverse effects of modern/new structures, and maintaining appropriate pastoral land use character.
6. Protect the structures and plantings that contribute to the heritage landscape character and manage to appropriately sustain their values.
7. Ensure property enhancement is designed to be sensitive to all of the property's values and is in accordance within this management plan and other relevant secondary plans.
8. Ensure detailed planning is undertaken for specific sites where public use activities may conflict, where concentrated public use may occur, and where such use may impact on the property's values.

6.2 Land Use and Catchment Functions

One of the greatest values of the Hereweka/Harbour Cone property is its potential to implement and demonstrate a new model of land use that demonstrates multi-functionality. Multi functionality aims to deliver a wide range of benefits. For this property these benefits include food, landscape character, clean water, flood protection and water management, wildlife habitat, protection of cultural features and strengthened relationships with local communities.

Underpinning such a model is a resilient landscape that can self-regenerate. The historic replacement of complex natural

ecosystems with simplified farming practices has led to the landscape unable to either self-regenerate or provide the full range of environmental services that it used to naturally (eg stream ecology).

Effective management of water encompasses both soil and water management, including the maintenance of soils to facilitate rainfall infiltration, vegetation barriers to slow movement of water down slopes, year-round soil vegetative cover and maintenance of natural vegetation in riparian areas, wetlands and other strategic areas of the catchment. Such a well-managed rural landscape can provide protection against extreme natural weather events such as flooding.

Waterways form an integral link in the Hereweka/Harbour Cone and Otago Peninsula landscape. They are "the lungs of the land", connecting the hills to the sea. Targeting the permanent and seasonal wetlands and waterways as corridors in the landscape is the first element of a sustainable land management strategy for Hereweka/Harbour Cone. This involves encouraging and re-establishing some local indigenous flora and fauna, patterns, processes and connections. Restoring the waterways will also provide a strong natural context and permanent framework for the pastoral farm.

The removal of tall woody vegetation from steep slopes to create pasture within the Hereweka/Harbour Cone property has accelerated soil erosion. The landscape has to a large extent been shaped by land sliding on all scales over thousands of years, and deforestation has contributed to accelerated land sliding. More common and superficial shallow soil erosion is a very visible negative impact of pastoral land use, affecting downstream communities and the natural environment by removing fertile topsoil, and causing damage through silt deposition in valley floors.

Climate change is likely to increase the frequency and intensity of extreme weather events such as windstorms and

flooding (NIWA, 2008), therefore increasing the risk of soil erosion. Erodible hill country is present across approximately 50 percent of the Hereweka/Harbour Cone property, and this will be subject to increasing risk.

The establishment of trees and scrub on the most erosion prone areas is also a priority on this property. Steep-sided gullies and open faces that are vulnerable to erosion will be planted with either indigenous or exotic species over time, coinciding with the manipulation of grazing intensity and in some instances, complete removal of livestock. In high-risk areas of erosion, rapidly establishing a tree cover with deep root systems is a priority to ensure that the probability of further erosion is minimised (refer Appendix 1). However, land sliding and erosion are naturally occurring processes, and it is accepted that re-establishment of woody vegetation cover will only slow down, not halt, these processes.

6.2.1 Aim:

1. Critical catchment functions and ecosystem services, including flood control and climate stabilisation, soil formation and water purification, are enhanced.

6.2.2 Objectives:

1. To protect and enhance the values of the property by minimising the risk of flooding, land instability and erosion.
2. To reduce the rate of sedimentation of waterways within the catchments of the Hereweka/Harbour Cone property and adjoining properties within those catchments.
3. To protect and improve the natural character of waterways.

6.2.3 Policies:

1. Develop and implement a revegetation plan for the establishment of appropriate tree species on slopes and gully systems that are eroding or show



indication of high potential for sheet erosion or gully erosion.

2. Develop and progressively implement a plan to protect and restore waterways, streams and wetlands by fencing off and planting the buffer zones (in conjunction with Section 7).
3. Progressively remove/modify engineered stormwater systems and reinstate natural waterways wherever practicable and where infrastructure would not be at risk from this action.
4. Avoid building permanent facilities and structures in areas that are prone to flooding and land instability.

6.3 Sustainable Farm Management

Grazed pasture is now the dominant vegetation cover on the Hereweka/Harbour Cone property, reflecting the history of firstly, dairy farming, and now, largely sheep farming. Farming operations are essential to the maintenance of the rural character of the property and the open space that results. Sheep farming also provides a cost effective means of retaining these open space settings without compromising other property values.

Looking ahead, the Management Body has the opportunity to implement an exemplary farming system. Rather than operating to maximise farm production and revenue, the management of the property will emphasise multi-functional land use management, including maintenance of landscape values, facilitating safe recreational use and the progressive protection of riparian areas, wetlands, steep gully systems, natural ecosystems and cultural heritage sites from the impacts of grazing. This will include appropriate fencing of revegetation and riparian zones and significant sites of biodiversity value.

The farmed property is also important in that it provides a rural experience for

urban people, particularly children, with access to operational farms. To protect the heritage values of the property, to minimise soil compaction and erosion, and to ensure visitors feel safe in the presence of farm animals, sheep farming is considered the only appropriate grazing stock for this property.

At the time of writing, the property is leased for the purpose of grazing stock. The lease recognises that there are public walking tracks on the property and ensures that public access is available, except when during lambing. Once the Management Plan is adopted, the Council or the Management Body are required to liaise with the Lessee to discuss any effects the plan may have on the management of the land during the remaining term of the lease.

Due to the nature of the property, it is important that the farm lessee has an understanding of the property's many values and knowledge of how farming has the potential to impact (both negative and positive) on these values. Provision of infrastructure such as gates and stiles and location of fence lines will not only assist in ensuring that the farming operation does not detract from landscape values, recreational access, and enhancement of biodiversity or heritage values but that all non-farming activity does not impact or impede on the farming of the property. Ongoing communication between the Management Board and the Lessee will be essential to the success of this management model. Once the current lease expires in 2016, the Management Body will be able to assess whether a lease is the appropriate management tool or if other options are available to provide protection for the values of the property while maintaining the farming operations.

Many of the existing modern structures that are part of the Hereweka/Harbour Cone property are part of the farm's management and should not be compromised. The woolshed and yards at 1299 Highcliff Road are the operational hub of the farming operation.

Overtime some farming structures may become redundant as needs change or as their function is superseded. Before the decision is made to dispose of buildings or infrastructure, it is important that their future value to the property is carefully evaluated.

Animal welfare considerations are becoming increasingly important for the management of farming animals both in New Zealand and internationally. High standards of animal welfare are not only a legal obligation, but a moral obligation. Providing animals with shelter from adverse weather conditions and from the extremes of heat and cold is essential. This can be provided by shelter belt plantings, existing historic shelterbelts or new plantings established for erosion control.

As part of the New Zealand Government's policies for tackling climate change, in the future the agricultural sector will need to start taking the cost of carbon emissions into account in their business and production decisions. Therefore, to be a leader in sustainable land use management, the Management Body should assist the farm lessee to understand the level of emissions arising from farm operations, seek to reduce their levels of emissions in the future and ensure that all legal obligations of the Emissions Trading Scheme are met. Demonstrating an awareness and understanding of the implications of livestock farming on greenhouse gas levels is also a fundamental component of demonstrable environmental stewardship. These greenhouse gas emissions need to be considered alongside any carbon sequestration that will occur as a result of biodiversity restoration and woodlot development.

6.3.1 Aims:

1. Farm operations assist to enhance the multiple values of the Hereweka/Harbour Cone property.
2. Farming practices are implemented in accordance with best practice sustainable land management principles, animal welfare

considerations and implementation of environmental best practice.

3. Farming systems will build social capital, encouraging community participation in food production systems.

6.3.2 Objectives:

1. To implement a farming operation on the Hereweka/Harbour Cone property that assists in the enhancement of the property's values, demonstrating a multifunctional management emphasis.
2. To implement sustainable farming practices that demonstrates the multi functional emphasis of managing the property.
3. To implement a farming operation that will meet best practice standards in animal husbandry and welfare and environmental care.
4. To recognise the importance of acknowledging and reducing carbon emissions in managing the property.
5. To encourage farming systems that allow for community participation and benefit.

6.3.3 Policies:

1. Retain pastoral sheep farming across the property, except in areas subject to conditions imposed by heritage conservation plans, sites of significance to manawhenua, approved revegetation or other environmental programmes and relevant community initiatives.
2. Regularly review the extent of sheep farming across the property. Stock may be permanently restricted from parts of the property when approved ecological, heritage and/or community initiatives commence on site.

3. The Management Body will continue to liaise with the current lessee to ensure that the farm management plan:
 - a. Demonstrates sustainable farming management practices that will assist in the enhancement of the property's value.
 - b. Demonstrates best practice in animal welfare and husbandry.
 - c. Recognises the public good element and primary focus/land use of areas of the property
 - d. Maintains appropriate stocking rates of sheep so as to minimise soil compaction and erosion so as not to negatively impact on the other values of the property, namely the recreation and cultural heritage values.
 - e. Ensures farm management of stock does not negatively impact on sites of value priorities, including fenced areas of significant conservation value and areas of planted tree crops.
 - f. Ensures that the emissions that arise from livestock farming are monitored and mitigated where possible.
 4. The Management Body will consult with the lessee when revegetation or development is proposed on the property that may impact on the farming operations.
 5. The Management Body will liaise with the lessee regarding public access during the lambing season (September to November).
 6. When the current lease expires in 2016, review the best options for retaining a farming operation which complements and enhances the aims of the Hereweka Harbour Cone Management Plan.
 7. To provide infrastructure to facilitate compatibility between farming and the property's other values in accordance with policies within other sections of this management plan.
 8. To ensure the property infrastructure is maintained wherever practicable and desirable. Any removal or disposal of infrastructure will be considered where it:
 - a. Adversely affects the natural and heritage values of the property.
 - b. Is not of historic or cultural importance.
 - c. Is not of importance to tangata whenua.
 - d. Ceases to be necessary for any approved or foreseeable potential use in the property.
 - e. Is demonstrably uneconomic to continue to upgrade or operate.
 9. Consider favourably proposals for farming systems that have positive benefits for the local community.
- #### 6.4 Local Food Economies
- Though the current pastoral farming on the Hereweka/Harbour Cone property is based upon the traditional global commodity production model, there is potential for this to become more localised in its focus. There is growing interest in localism, with consumers increasingly seeking produce from smaller scale economic activity using environmental best practice and from a local source. The Hereweka/Harbour Cone property, as an iconic community asset, has potential to meet the expectations of local consumers in their desire to purchase locally and from a landscape to which they are connected.
- Small scale community initiatives (whether commercial or purely for the community good), that are compatible



with the main farming operation, can increase the community use and stewardship of the Hereweka/Harbour Cone property. Bee keeping is one example of a land-based commercial initiative that is compatible with the current sheep farming operation. An 'open community orchard' is another example of a community initiative.

Sustainable land use is best achieved by encouraging neighbouring communities to develop an empathy with their local landscape. The development of local food economies will develop identity-driven relationships which will assist to shift consumption behaviour to favour the purchase of goods and services that nurture the land and its dependent communities.

Community members should be encouraged to explore initiatives that will assist with the enhancement of the property's values and that deliver benefit to local communities. Such a system deserves encouragement, investigation and facilitation.

6.4.1 Aims:

1. Farm production systems facilitating production for local consumption are encouraged.
2. Local communities benefit from the property through appropriate small-scale land use initiatives.

6.4.2 Objectives:

1. To support small-scale cottage industry where compatible with the main farming operation and where it does not negatively impact on the property's values.
2. To support initiatives that promotes localism and/or strengthens the local economy.

6.4.3 Policies:

1. Proposals for cottage industries will be considered and applications must demonstrate a knowledge of the property's many values and the compatibility and potential effects of the proposed activity on these

values and actions taken to avoid, remedy or mitigate any adverse effects.

2. All cottage industry and local community initiatives on the property require the appropriate approvals.
3. Support research into the potential of the property for local food production systems that link directly to local consumers.
4. The sections 'Commercial Use' and 'Occupation Agreements' and other relevant sections of the Dunedin City Council Reserves Management Plan – General Policies should be read in conjunction with this plan.

6.5 Forest Woodlot Management

The Hereweka/Harbour Cone property is largely devoid of planted woodlots in either of its catchments, with just one small *Pinus radiata* / *Cupressus macrocarpa* woodlot at the historic site of Larnach's model dairy farm. New forest woodlots will be considered where they have ecosystem or public benefit and are compatible with the visual landscape values and other values of the property.

New woodlot areas, whether of exotic or native species composition, will be managed for environmental benefit and for timber and non-timber forest products. The design and layout of woodlots will promote the protection, restoration and conservation of waterways, erosion-prone slopes and visual coherence (refer Appendix 2). Woodlots play an important role in enhancing indigenous biodiversity and can provide a more cost-effective method of creating functioning ecological corridors throughout the pastoral landscape.

When planning for new woodlots, timber tree species will be chosen that are suited to the local growing conditions and produce products that are of high-value to local markets. There is

potential for some woodlot stands to be managed as a renewable resource of community firewood supply. In areas of difficult access and steep topography and to reduce the dependency on fossil fuels, development of woodlots should be tree types that are able to be managed without machinery.

Given the high values of the property and the potential future conflicts that will arise from poorly planned harvesting operations, a model of sensitive forest management should be implemented. Continuous cover forest management is advocated, using age and species diversity to ensure continual maintenance of the forest canopy and a largely self-regenerative forest.

The public stewardship of this property creates a unique opportunity for long-term research into the potential of growing native trees for timber, as well as restoring biodiversity. The lack of existing knowledge and data sees the Hereweka/Harbour Cone property ideally positioned as a place where such forest management can be studied to inform similar forest management elsewhere of best practice and techniques.

Poplar, willow and eucalyptus woodlots established for erosion control and catchment protection also provide opportunities for the long-term improvement in indigenous biodiversity. By fencing off these woodlots from livestock and through careful silvicultural practice, a vigorous native understorey could be established through natural seed dispersal.

The establishment of new forest woodlots, whether of indigenous or exotic species, creates opportunities to sell carbon credits under the Emissions Trading Scheme (ETS). The Permanent Forest Sink Initiative (PFSI) is a mechanism that has particular merit for forest management that is primarily aimed at environmental restoration. The PFSI is complementary to the ETS, but limits any harvesting of the forest until a minimum of 50 years, at which point in time harvesting must be of the continuous cover model rather than clearfell. Areas that will definitely not be harvested, such as areas being restored

for indigenous biodiversity, are also eligible for the PFSI. A covenant with the Crown needs to be registered on the title, binding all future landowners. At that 50 year milestone, there is the potential for forest owners to remove the covenant and disengage from the PFSI scheme. The possibility of securing ongoing income from the establishment of new forests on this property should be considered by the Management Body, providing a potential method for the funding of some capital projects.

Aging trees that pose a risk to property visitors from falling trees or limbs will be removed. Likewise, wilding exotic trees that are not appropriate from an ecological or landscape perspective should be removed over time. The management and potential removal of trees at heritage sites (including trees considered as weeds) is an archaeological process and therefore requires the appropriate approvals.

On an open currently largely grazed property with an intricate landform such as this, inappropriate woodlot establishment poses considerable risks to visual landscape values. For this reason, any proposals for woodlot development will be subject to rigorous assessment of their effects on landscape if and when proposed.

6.5.1 Aim:

1. Appropriately located and designed woodlots provide timber and non-timber forest products and environmental and social functions.

6.5.2 Objectives:

1. To plan and manage forest woodlots for research, timber products, biodiversity, energy production, land stability management, waterway protection, livestock shade, recreational and other purposes where this does not negatively impact on the property's values.
2. To ensure the design and layout of woodlots contributes to the enhancement and functioning of indigenous biodiversity.

6.5.3 Policies:

1. Plan and implement the establishment of multi-functional woodlots for erosion control purposes, timber production, biodiversity and energy production where consistent with the property's values.
2. The location of native and/or exotic tree species woodlots will enhance ecological connectivity through the property.
3. Age and species diversity in the composition of woodlots is preferred, so as to enhance ecological and spatial stability.
4. Continuous cover forest management is advocated, ensuring maintenance of the forest canopy and minimisation of environmental effects.
5. Retain existing woodlots/shelterbelts where they are necessary for land stabilisation or if they have amenity or historic significance.
6. Manage for indigenous understory within exotic woodlots where appropriate.
7. Analyse the costs and benefits of selling carbon from newly established woodlots and sites of indigenous restoration and consider entering the Permanent Forest Sink Initiative (PFSI).
8. Ensure removal of tree species identified as weeds aims to achieve full utilisation of timber values and if on or near heritage sites, ensure that appropriate approvals are obtained.
9. Landscape assessments of any specific new woodlot proposals will be undertaken, ensuring the acceptable integration of woodlots within the landscape.





7. Ecology

7.1 Ecology Management Zones and Priorities

The Hereweka/Harbour Cone property is a large site and protection and enhancement of its ecological values requires considerable resources. It is unlikely that sufficient resources will be available to undertake all the necessary and desirable activities at once. 'Necessary' and 'desirable' provide a useful framework for prioritising ecological activities.

The immediate priorities should involve protecting existing indigenous vegetation and controlling major ecological weeds. This is a priority as existing indigenous forest vegetation is suffering from attrition and controlling ecological weeds when they are less abundant is a more practical and cost-effective approach.

Indigenous restoration activities should initially focus on infilling gaps in existing indigenous forest stands and then on restoring indigenous vegetation to new sites.

Once indigenous habitats have been protected and enhanced, it may be appropriate to focus on species reintroductions.

Division of the Hereweka/Harbour Cone property into management zones will assist with operational management by breaking down tasks into areas where objectives can be achieved more easily. A basis for dividing the property into five management zones is described in Section 1.5.

Short term management actions and priorities are described and illustrated in more detail in the Hereweka/Harbour Cone property Implementation Plan (a secondary plan to this Management Plan).

7.1.1 Aim:

1. Management of ecological values occurs in a coordinated and systematic manner, according to assessed priorities.

7.1.2 Objectives:

1. To manage ecological values on the Hereweka/Harbour Cone property within the context of management zones.
2. To continue to update priorities for ecological management within Hereweka/Harbour Cone.

7.1.3 Policies:

The following policies are in order of priority:

1. Protect and enhance small indigenous forest remnants and control sycamore and Chilean flame creeper in the Smiths Creek Management Zone.
2. Control Chilean flame creeper in the Stewarts Creek and Peggys Hill Management Zones.
3. Protect and enhance dry forest remnants in the Harbour Cone and Stewarts Creek Management Zones.
4. Promote indigenous forest regeneration within stands of sprayed gorse in the Peggys Hill Management Zone by seeding with fast-growing fleshy-fruited species such as poroporo (*Solanum laciniatum*).
5. Facilitate natural indigenous forest regeneration in the Harbour Cone and Bacon Street Management Zones. This facilitation will include control of gorse, but aerial spraying of herbicide will not be used.
6. Restore podocarp-dominant forest and indigenous riparian vegetation on low elevation alluvial landforms in the Bacon Street and Stewarts Creek Management Zones.



7.2 Existing Indigenous Vegetation and Habitats

Only approximately 5% of the Otago Peninsula retains an indigenous forest or shrub cover (Johnson 2004). The Hereweka/Harbour Cone property however, has fared slightly better, with just over 14% cover. This indigenous woody vegetation is mostly restricted to steep and/or rocky sites, with the largest stands on the north-eastern faces of Peggys Hill, the upper slopes of Harbour Cone and on steep slopes in the upper part of the Stewarts Creek catchment (Appendix 1). The Smiths Creek catchment has relatively little indigenous forest and shrub-land remaining and an effort should be made to preserve and enhance all of the existing remnants in this catchment.

Most of the indigenous forest and shrub-land vegetation on the Hereweka/Harbour Cone property has been strongly modified by stock damage, resulting in regeneration failure and depletion of understorey and ground cover vegetation. Forest fragments that have been 'opened up' in this way are vulnerable to wind damage and these are experiencing dieback on their margins due to this. If not addressed, this process will over time convert forest to tree-land and then to grassland.

The principal areas of moist forest on Peggys Hill and in the upper part of Stewarts Creek have recently been fenced to exclude stock. These stands of moist forest have an intact canopy but the fenced areas contain a considerable amount of pasture, which has been partially planted with native trees. In contrast, none of the dry forest stands have been fenced to exclude stock and they are generally internally fragmented, with canopy openings and grassy patches present.

Mature indigenous forest has much higher habitat value than forest in the early stages of restoration and it is much easier to retain existing indigenous vegetation than to restore it. Therefore, it is important that the property's remaining areas of indigenous woody vegetation be protected and enhanced.

Management of the existing forest remnants should be integrated with restoration projects so as to enhance the existing forest values and also to buffer existing forest remnants from edge influences such as exposure to wind, weed invasion and stock browse.

Appendix 2 provides detail of existing vegetation across the Hereweka/Harbour Cone property.

7.2.1 Aim:

1. Existing areas of indigenous vegetation and habitat are protected and enhanced to improve ecological functions and viability.

7.2.2 Objective:

1. To maintain and enhance the condition of existing areas of indigenous vegetation to ensure that high quality habitats exist for indigenous flora and fauna.

7.2.3 Policies:

1. Protect existing areas of indigenous vegetation from the potentially adverse effects of farming, public use and other potentially adverse activities.
2. Develop an indigenous vegetation and habitat management plan within each management zone.
3. Monitor the ecological condition of existing areas of indigenous vegetation and habitat at five to ten year intervals.
4. Ensure enhancement of existing areas of indigenous vegetation will not negatively impact on the property's cultural, landscape and heritage values.
5. Ensure enhancement of existing areas of indigenous vegetation will not negatively impact on the property's indigenous fauna.

7.3 Habitat Restoration

The existing pattern of forest vegetation on the Hereweka/Harbour Cone property provides some evidence of the likely historic pattern. On Peggys Hill (at 401m above sea level, the second highest hill on Otago Peninsula) and in the upper part of Stewarts Creek, the influence of fog and drizzle from the prevailing north-east and south-east weather events has created relatively moist conditions. Indigenous forest in these areas supports plant species that are not present in dry conditions. These include the ferns crown fern (*Blechnum discolor*), *B. colensoi*, soft tree fern (*Cyathea smithii*), *Rumohra adiantiformis*, filmy ferns (*Hymenophyllum* spp.), and *Trichomanes venosum*. Peggys Hill and the upper part of Stewarts Creek are two of the most important sites for indigenous ferns requiring damp habitats on Otago Peninsula. The emergent podocarp miro (*Prumnopitys ferruginea*), which also favours moist forest, is also present on Peggys Hill and in Stewarts Creek, which are its sole locations on Otago Peninsula. The moist forest canopy is characterised by fuchsia (*Fuchsia excorticata*) and mahoe (*Melicytus ramiflorus*), with *Coprosma rotundifolia* and soft tree fern in the understorey.

Elsewhere on the steep mid-slopes and rocky areas, the dry forest vegetation is present that is more typical of the Otago Peninsula. This dry forest is characterised by narrow-leaved lacebark (*Hoheria angustifolia*) and/or kowhai (*Sophora microphylla*) in the canopy, and *Coprosma crassifolia* in the understorey above 'dry forest' ferns such as *Asplenium hookerianum* and *A. flabellifolium*.

Low elevation alluvial forest is no longer present on the Hereweka/Harbour Cone property, but would likely have supported forest in which tall podocarps such as kahikatea (*Dacrycarpus dacrydioides*), matai (*Prumnopitys taxifolia*), and totara (*Podocarpus totara*) would have thrived, together with lowland ribbonwood (*Plagianthus regius*), and kowhai and narrow-leaved lacebark in streamside habitats. The

lower parts of Smiths Creek and Stewarts Creek (below 60m elevation) have suitable habitat for this kind of forest and these sites are a priority for its re-establishment.

Active restoration will be required to restore indigenous forest on other parts of the property. Strategically, the priority for restoration should be the riparian zones of important waterways, which will benefit in-stream habitats as well as coinciding with the low elevation landforms where alluvial forest requires restoration. This would also enhance connections to areas of indigenous forest adjacent to Hereweka.

Habitat restoration can also help to link indigenous vegetation and habitats on the property to adjacent patches of indigenous habitat on other properties. This can help to increase the size of habitat patches and, therefore, the size of fauna populations that these habitats can support. In addition, connectivity between different parts of the landscape can be enhanced and fragmentation of habitat patches reduced. There are good opportunities to increase connectivity with indigenous habitats on neighbouring land in the Bacon Street, Harbour Cone and Stewarts Creek management zones.

Other priorities for active restoration are the internal and external gaps within and between patches of dry forest on steep slopes in Stewarts Creek. Active restoration will also be a priority when areas of indigenous forest that contain canopy gaps are fenced to exclude stock.

Peggys Hill has considerable importance for ecological restoration due to its existing indigenous forest, moist forest habitat and the potential for forest vegetation to reduce landsliding instability on the lower slopes. Recently-sprayed gorse on the steep slopes of Peggys Hill could help to protect regenerating indigenous tree species. Indigenous regeneration could be facilitated by seeding these dead gorse stands with fast-growing fleshy-fruited indigenous tree species that will attract frugivorous indigenous birds that are likely to disperse



additional indigenous tree species to these sites.

Natural regeneration of indigenous forest in pasture vegetation is occurring on some locations on the property, but is not prevalent. On the eastern and northern slopes of Harbour Cone, kanuka (*Kunzea ericoides*) is invading rough grassland, while mingimingi (*Coprosma propinqua*) is present on dry forest margins in Stewarts Creek and probably represents establishment in pasture. These two species are examples of browse-resistant indigenous trees and shrubs that could be used to improve canopy cover in the presence of stock. Encouraging natural regeneration in the presence of livestock will require a manipulation of grazing pressure over time and, in some cases, the removal of grazing.

Where natural regeneration of indigenous forest is occurring close to, or at sites of significant heritage value, the management of this vegetation regeneration will be informed by a whole-property archaeological assessment and subsequent prioritised archaeological conservation management plans.

The Hereweka/Harbour Cone Property Implementation Plan contains more detail on a process for encouraging natural regeneration of kanuka, the immediate priorities for restoration planting, and it describes a process for selection of appropriate species for different landforms and habitats on the property.

7.3.1 Aim:

1. Indigenous vegetation and habitats are progressively restored, improving the extent of indigenous vegetation cover.

7.3.2 Objectives:

1. To progressively restore indigenous vegetation on the Hereweka/Harbour Cone property, integrated with protection of indigenous forest.

2. To re-establish lowland podocarp forest on suitable sites within the property.
3. To restore the indigenous forest cover and in-stream ecological values of the riparian zones of important waterways.
4. To protect and connect stands of indigenous forest vegetation within the Hereweka/Harbour Cone property and in adjacent properties, so as to facilitate the movement of indigenous fauna.
5. To facilitate natural indigenous forest regeneration where this is occurring.

7.3.3 Policies:

1. Develop a Habitat Restoration Plan that is based upon Management Zones, to identify and prioritise sites for restoration of indigenous vegetation and ecological values, integrating with the enhancement of areas of existing indigenous vegetation.
2. Implement the Habitat Restoration Plan over time, regularly reviewing priorities for the implementation of restoration activities based on the ecological requirements of indigenous vegetation, habitats and species.
3. Maintain and protect the habitat restoration projects that have been established in advance of the adoption of the Hereweka/Harbour Cone Management Plan.
4. Protect areas of habitat restoration from any adverse effects of farming, public use and other potentially adverse activities.
5. Undertake experimental trials of different restoration techniques, so as to determine the best and most cost-effective indigenous restoration techniques for particular landforms on the property.

6. Monitor restoration projects on the property, using the information to inform future restoration projects.
7. Facilitate natural indigenous forest regeneration in appropriate sites.
8. Manipulate stock grazing levels to aid the regeneration of natural indigenous forest in appropriate sites. Remove stock grazing on those sites where it is considered beneficial for the regeneration of natural indigenous forest.
9. Advocate for the restoration, protection and enhancement of indigenous vegetation on adjacent properties.
10. Retain the cultural value of historic farmsteads by maintaining appropriate curtilage of pasture around them. Management of natural regeneration processes occurring at, or close to, sites of significant archaeological and heritage value will be informed by archaeological assessments and archaeological conservation management plans.

7.4 Management of Rare and Threatened Species

The Hereweka/Harbour Cone property currently provides habitat for several locally important species and some nationally important species. These include the locally important trees miro, narrow-leaved lacebark, kowhai, lowland ribbonwood, Hall's totara, *Melicope simplex*, *Streblus heterophyllus*, and the mistletoe *Ileostylis micranthus*, and the nationally At Risk – Declining climber *Brachyglottis sciadophila*.

The Hereweka/Harbour Cone property is also the location of a historical record of the Threatened – Nationally Vulnerable tree *Olearia fimbriata*, which has not been recently seen at the site, but which could be reintroduced. Another species that could be considered for introduction to the property is *Helichrysum selago* var. *tumidum*, which is currently known from rock outcrops at Cape Saunders

and Lovers Leap, but which could potentially grow on marble outcrops at the Hereweka site.

Hereweka means 'catch weka' and refers to the area being a place where the food resource of weka was found. Buff weka (*Gallirallus australis hectori*) were historically indigenous to the eastern South Island and Southland but became locally extinct from the South Island. Buff weka is a taoka species to Ngāi Tahu. Papatipu rūnaka, including Otākou rūnaka, have supported its reintroduction to islands in Lakes Wakatipu and Wanaka, and to the adjacent Stevenson's Peninsula. Otākou rūnaka are strong advocates for reintroduction of buff weka to the Hereweka/Harbour Cone property. A discussion on the factors requiring assessment when considering the reintroduction of locally and nationally important species is attached in Appendix 6.

South Island rifleman (At Risk – Declining) are known to be present in forest adjacent to Hereweka/Harbour Cone, and are likely to utilise kanuka forest on the property from time to time. As forest cover in this part of the property increases in extent, rifleman are likely to become more common.

Both Smiths Creek and Stewarts Creek are known to support populations of the threatened freshwater invertebrate koura (*Paranephrops zelandicus*; Chronically Threatened – Gradual Decline) which suggests that current habitat quality in these streams is reasonably good. Stewarts Creek has not been fully surveyed for fish and this represents an information gap. At least one barrier to fish passage exists in Smiths Creek and other barriers may be present. Improvement of stream habitats through removal of barriers to fish passage and planting of appropriate riparian vegetation may result in other locally or nationally important fish species colonising these streams, including giant kokopu (*Galaxias argenteus*) and long-finned eel (*Anguilla dieffenbachii*).

Translocations of threatened species, either to the site or away from it, need

to be undertaken according to Department of Conservation processes and in consultation with iwi.

improved habitat for South Island rifleman.

7.4.1 Aims:

1. Existing populations of locally and nationally important flora and fauna are stable or improving.
2. New populations of locally and nationally important species are established if appropriate.

7.4.2 Objectives:

1. To maintain or improve existing populations of any locally or nationally significant species within the property.
2. To provide for the recovery or re-establishment of populations of appropriate indigenous species in suitable habitats within the property.
3. To improve the quality of habitats so that locally and nationally important species with populations on adjacent land can naturally colonise the site.

7.4.3 Policies:

1. Document the status of existing populations of locally and nationally important species.
2. Work with expert stakeholders regarding the reintroduction and management of locally or nationally important species that are appropriate for the property.
3. Survey aquatic values in Stewarts Creek, including assessment of any potential barriers to fish passage.
4. Reassess at five to ten year intervals the status of existing and new populations of locally and nationally important species within the property.
5. Facilitate the natural regeneration of kanuka forest in the Harbour Cone Management Zone, to provide

7.5 Weed Control

Several ecological weeds are present at Hereweka and include sycamore (*Acer pseudoplatanus*), hawthorn (*Crataegus monogyna*), gorse (*Ulex europaeus*), elder (*Sambucus nigra*), radiata pine (*Pinus radiata*), macrocarpa (*Cupressus macrocarpa*), gooseberry (*Ribes uva-crispa*), Scotch broom (*Cytisus scoparius*), Darwin's barberry (*Berberis darwinii*) and blackberry (*Rubus fruticosus*). Of these species, gorse and hawthorn are widespread and relatively abundant, while elder is widespread at low density. Sycamore is present at only a few sites but is actively spreading. The remaining species are at relatively low abundance in indigenous vegetation. Weeds also include the non-local indigenous species rangiora (*Brachyglottis repanda*), which is present in the upper part of Stewarts Creek.

Climbing weeds such as Chilean flame creeper (*Tropaeolum speciosum*) are also present. Other climbing weeds such as old man's beard (*Clematis vitalba*), banana passion fruit (*Passiflora tripartita*), and bomarea (*Bomarea caldasii*) appear to be absent or at very low abundance at Hereweka. These and other ecological weeds with the potential to invade the site should be subject to surveillance, so that any new weed incursions can be swiftly detected.

Many weeds are entering the Hereweka/Harbour Cone property from sources on neighbouring properties. To effectively manage weeds in a sustainable and cost-effective manner, it is important that cross-boundary management of weeds is implemented. Instigating discussions with landowners that adjoin the Hereweka/Harbour Cone property is an important first step in a coordinated weed control programme.

Initial priorities for weed control are described and illustrated in the Hereweka/Harbour Cone Implementation Plan.

7.5.1 Aims:

1. Ecological weeds are controlled to levels that do not threaten indigenous biodiversity or indigenous ecological processes.
2. Ongoing monitoring ensures that any invasions of new weeds are controlled.

7.5.2 Objectives:

1. To ensure that the indigenous species, habitats, and ecological processes on the Hereweka/Harbour Cone property are protected and enhanced through appropriate management of ecological weeds.

7.5.3 Policies:

1. Develop and implement a weed-control programme that aims to eradicate sycamore, rangiora, Himalayan honeysuckle, Darwin's barberry and Chilean flame creeper and substantially reduce hawthorn and elder, during the period of this management plan.
2. Gorse and broom are to be controlled to low levels on the property unless they are facilitating the development of indigenous vegetation. Include management of these weeds within the weed control programme.
3. Document weed control activities by recording GPS coordinates of the locations of significant ecological weeds and reporting on weed control methodology and outcomes.
4. Undertake annual surveillance to detect any new weeds or additional occurrences of existing weeds.
5. Ensure the weed management responsibilities of the farm lessee meet the objectives of the Management Plan and coordinates with other weed management on the property.

6. Coordinate weed control in conjunction with adjoining landowners when appropriate.

7.6 Pest Animal Control

There has been no formal assessment of pest animals on the Hereweka/Harbour Cone property, but pests likely to be present include possum (*Trichosurus vulpecula*), ferret (*Mustela furo*), stoat (*M. erminea*), weasel (*M. nivalis*), rabbit (*Oryctolagus cuniculus*), European hare (*Lepus europaeus*), hedgehog (*Erinaceus europaeus*), ship rat (*Rattus rattus*), Norway rat (*Rattus norvegicus*) and house mouse (*Mus musculus*). These pest animals are likely to be having widespread detrimental effects on indigenous vegetation and species within Hereweka. Control of larger bodied pest animals such as possums and mustelids is generally more feasible than for smaller bodied species such as rats and mice.

The Otago Peninsula Biodiversity Trust is working with the Otago Peninsula community towards a 'pest free Otago Peninsula'. Possums have been identified as the initial priority for pest control. A coordinated approach to pest control is highly beneficial because pests on the margins of a control area can usually rapidly reoccupy sites where control has been undertaken. Coordinated control across a large area can significantly increase the size of the protected 'core' area. It is important that management of the Hereweka/Harbour Cone property works with the Trust and local community so as to integrate pest control on the property with pest control in the wider area.

Control of specific pests also needs to consider interactive effects between different pest species. For example, control of mustelids may cause increases in rodents, which are a major mustelid prey item. Where pest interactions such as this are likely to occur, it is important to control each of the interacting pest species simultaneously.

Pest animal control of small mammals generally requires a network of traps and/or bait stations that need to be

checked and reset periodically. The time required to undertake this work represents a significant commitment. Use of volunteers from stakeholder groups and local communities can significantly decrease the costs.

Pest control should not be undertaken for its own sake, but to achieve specific ecological outcomes such as improving the population status of indigenous fauna. To assess the effectiveness of pest control, the predicted ecological outcomes should be monitored.

7.6.1 Aims:

1. Pest animals are controlled to levels that do not threaten indigenous biodiversity or indigenous ecological processes.
2. Ongoing monitoring ensures that any invasions of new pest animals are controlled.

7.6.2 Objective:

1. To ensure that indigenous species, habitats, and ecological processes

at the Hereweka/Harbour Cone property are protected and enhanced through appropriate management of pest animals.

7.6.3 Policies:

1. Develop and implement a pest animal control programme specifying the pests to be controlled, and appropriate pest control targets and pest density indices that have been shown to be relevant to biodiversity outcomes.
2. Ensure that pest interactions such as predator release are considered when planning pest control activities.
3. Integrate pest control on the Hereweka/Harbour Cone property with wider scale pest control work wherever possible.
4. Encourage volunteers to assist with pest control and/or monitoring.
5. Monitor the ecological outcomes of any pest control that is undertaken.



8. Heritage and Cultural Landscape

8.1 Recognition of the Cultural Values

Kāi Tahu have a long association with Muaupoko (Otago Peninsula) and the mauka (mountain) of the peninsula Hereweka (Harbour Cone). The practice of mahika kai, moving seasonally to gather food and tool-making resources throughout the rohe (area), was a distinct feature of the lifestyle of Kāi Tahu tupuna (ancestors). Hereweka was a part of the mahika kai network of trails, and was likely used for hunting and food gathering.

Hereweka means 'catch weka' and refers to the area being a place where the food resource of weka was found. Hereweka also features in Kāi Tahu oral history as one of the places where Tarewai, a Kāi Tahu warrior chief hid from Kati Māmoe warriors (Kāi Tahu Ki Otago, 2009).

It is necessary to recognise the significance of cultural landscapes not only in terms of the integrity of the sites of significance they contain but also on a wider scale. The Hereweka/Harbour Cone area is one part of the wider cultural landscape of the Otago Peninsula and needs to be considered in this context. Interpreting the significance of the wider cultural landscape, and the place of the Hereweka/Harbour Cone property within this landscape, is an important objective for Kāi Tahu.

It is important that the naming of Harbour Cone as Hereweka and the descriptive significance of the name in the traditions of Kāi Tahu should be recognised and not be lost. As the significant mauka of Te Rūnanga o Otākou, Hereweka and the surrounding landscapes should remain free from any inappropriate development/activity such as houses, roading or telecommunications. Enhancing this cultural landscape includes the restoration and enhancement of native bush with fruiting native trees and the potential to reintroduce weka.

A partial assessment of Māori archaeological sites on the property has been undertaken, however more work is required. A cultural opportunities mapping exercise with Te Rūnaka o Otākou will identify the opportunities Te Rūnaka o Otākou would like provided for in and around the Hereweka/Harbour Cone property. Such activities could include a joint manawhenua/community initiative to establish and promote use of traditional medicinal plants and various harakeke (flax) species for their weaving properties.

The statutory acknowledgement for Te Tai O Arai Te Uru (Otago Coastal Marine Area) is relevant to the Hereweka/Harbour Cone. Under section 313 of the Ngāi Tahu Claims Settlement Act Schedule 103, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic and traditional association to Te Tai o Arai Te Uru (refer to Appendix 7). The tangible evidence of this is protected under the Historic Places Act 1993.

8.1.1 Aim:

1. The Hereweka/Harbour Cone property is managed in a way that recognises the cultural significance of the area for manawhenua.

8.1.2 Objectives:

1. To identify and protect or conserve archaeological and cultural sites.
2. To ensure traditional access through Hereweka/Harbour Cone and support the harvest of cultural material or harvest of material for cultural purposes by manawhenua where appropriate.
3. To ensure any enhancement of Hereweka (mauka) and the Hereweka/Harbour Cone property is consistent with the cultural position of manawhenua and recognises this area as part of a wider cultural landscape.

8.1.3 Policies:

1. To support the protection and conservation of wāhi tapu and wāhi toaka and other significant Māori sites in a culturally appropriate manner.
2. Ensure an archaeological assessment of the Hereweka/Harbour Cone property includes the development of a resource inventory of sites and landscapes of significance to manawhenua.
3. Undertake a cultural opportunities mapping exercise with Te Rūnaka o Otākou.
4. Encourage the acknowledgement and use of the traditional names of the Hereweka/Harbour Cone property and the surrounding landscape.
5. Provide for traditional trail routes for manawhenua.
6. Policies within the 'Harvest of cultural material or harvest of material for cultural purposes' section of the *Reserves Management Plan – General Policies* apply.
7. To ensure that Hereweka/Harbour Cone remains free from any development and all developments and activities on the remainder of the Hereweka property are consistent with the property's cultural value.
8. To consult with Te Rūnaka o Otākou on all matters that may impact on the cultural landscape for manawhenua, including restoration of flora and fauna.
9. That all archaeological finds of Māori objects are notified to manawhenua.
10. That kaitiakitanga of manawhenua over cultural materials is observed.
11. Acknowledge the Te Tai O Arai Te Uru (Otago Coastal Marine Area)

relevant to Hereweka/Harbour Cone.

8.2 Historic Sites, Structures and Cultural Landscape

Forty-two historical sites and structures within the Hereweka/Harbour Cone area are known and recorded on the New Zealand Archaeological Association Site Recording Scheme (Walton 1999; Middleton 2008) (refer Appendix 3). None of these are registered with the New Zealand Historic Places Trust but all are protected under the legislation and archaeological provisions of the Historic Places Act 1993. Due to the extensive historic occupation of this area there are likely to be sites and items that to date remain unidentified (Walton 1999; Middleton 2008).

The cultural landscape of early colonial settlement extends beyond this property's boundaries. To retain the integrity of this wider landscape, it is important that historic sites and structures outside the property's boundaries and the surrounding areas are also recognised under the Historic Places Act 1993 legislation.

Public access to cultural and historic sites and structures on the Hereweka/Harbour Cone property is an important opportunity for residents and visitors to Dunedin to understand the area's Māori and early European settlement history. Some sites are, however, more sensitive and vulnerable to visitors than others. Wāhi tapu and wāhi toaka are very significant cultural areas and public access to such sites must be guided by manawhenua.

An initial scoping assessment was commissioned by the Dunedin City Council to identify the historic sites within the property (Harbour Cone Project, Archaeological Assessment for the Dunedin City Council; Middleton 2008). This report recommended that there are a number of archaeological sites made up of a complex of features that require more intensive research and/or investigation. Due to the

historical importance of the property and the potential vulnerability of sites with increased public access it is important that this further research and investigation occurs.

A more intensive archaeological assessment of known sites and the whole-of-property will identify the full extent of historic remnants and enable management to protect and enhance the historic value of the property.

It is important that an archaeological assessment for this property identifies which sites require conservation and management plans and prioritise the development of these plans. This prioritisation should be, among other considerations, influenced by issues regarding public access/use and visitor impact.

Archaeological assessments of individual sites and the whole-of-property must include the following considerations:

- Assessment in terms of significant sites for manawhenua and European.
- Early colonial settler sites and structures including stone walls, roads, early wire fences and drilled posts.
- Consider what era and time period of history sites and structures refer to.
- Historic orchards and plantings.
- Sections of current public roads through and around site – including culverts, etc.
- Heritage structures post 1900.

The development of Conservation and management plans will inform management as to which sites require monitoring, conservation or restoration and how this should be undertaken. These plans should also identify sites suitable for public access and use, hazards and actions required to protect the site from visitors and promote visitor safety. It is likely that some conservation and management plans will

be relatively simple, for example, monitoring of the site. In addition, it may be considered appropriate that several sites that require similar management be grouped in one plan.

Conservation and management plans must also include:

- Need for heritage planting, eg replacement of macrocarpa hedging showing historical alignments.
- Vegetation management.
- Identify non-historic items, ie rubbish, which should be removed.
- Impacts of livestock.

It is considered that sheep are the only appropriate livestock for grazing on this property as they have little impact on heritage sites.

It is a requirement that anyone who intends to carry out work that may damage, modify or destroy an archaeological site or heritage structure must have an authority from the Historic Places Trust (NZHPT). Because of the historical significance of the Hereweka/Harbour Cone property, it is important that management work with the NZHPT to develop the appropriate archaeological authorities for this property and, as part of these authorities, an 'approved works' schedule. Consultation with manawhenua is part of the authority process.

The participation of the public (under the supervision of experts) to assist with implementing conservation and management plans of heritage sites will be encouraged and supported. Anyone carrying out work on archaeological sites or heritage structures should not only have the appropriate approvals but must undertake the work in accordance with best practice (described in the 'International Council on Monuments and Sites' charter).

Due to the intense human history of the property in the past, there are likely to be objects that remain undiscovered.

These are protected under the Protected Objects Act 1975 and the Historic Places Act 1993. It is important that sites undergo a controlled surface collection, with an accompanying analysis and record of the site. This exercise must be undertaken with an archaeological authority, prior to encouraging visitor access. This will reduce the likelihood of people accessing the property to fossick.

Under the Historic Places Act 1993 all items found that are not taoka tūturu belong to the property's owner. To allow for future opportunities to enhance visitors' appreciation of the property, it is important that such items are only loaned to other organisations and can therefore be available for future onsite interpretation.

The high significance of Hereweka/ Harbour Cone and the Otago Peninsula for manawhenua and the 'pristine archaeological landscape of historic occupation' (Middleton, 2008) of early European settlement in Dunedin makes this property and the surrounding areas an important cultural landscape.

8.2.1 Aim:

1. Protect and develop an understanding of the cultural heritage of the Hereweka/Harbour Cone property.

8.2.2 Objectives:

1. To prevent further deterioration of archaeological sites and structures.
2. To manage archaeological sites and heritage structures according to best practice.
3. To ensure archaeological items, sites and heritage structures are not removed or destroyed nor adversely affected by public use and farming practices.
4. To promote safe public access to archaeological sites and heritage structures.
5. To recognise opportunities for on-site interpretation that will

make use of appropriately collected protected objects.

6. To recognise the property as part of a cultural landscape.
7. To support the input of volunteers to protect and enhance heritage sites.

8.2.3 Policies:

1. Undertake an intensive archaeological assessment of the whole-of-property that includes establishing priorities to develop conservation and management plans.
2. Implement priorities to prepare conservation and management plans (identified in Policy 1).
3. Develop the necessary archaeological authorities, including an approved New Zealand Historic Places Trust works schedule.
4. Manawhenua are recognised as the guardians of all taoka tūturu as required under the Protected Objects Act 1975.
5. Manage archaeological sites and heritage structures according to their conservation and management plan and best practice.
6. Encourage supervised community participation in restoration works that is informed by the conservation and management plans.
7. Monitor public impact at sites and if deemed necessary restrict or exclude people from the site (or parts thereof).
8. Advocate that this property and archaeological sites, heritage structures outside its boundaries and the surrounding landscape are protected as a cultural landscape.
9. Consider the use of historic buildings for visitor purposes where such use does not compromise the

- historic value of the building or surrounding area.
10. Recognise that tree removal and vegetation management on archaeological sites and heritage structures is an archaeological process and requires the appropriate approvals.
 11. Ensure that farming livestock does not damage historic sites.
 12. Actively source funding to implement archaeological, historic and cultural conservation and restoration.
 13. The search for or removal of objects from the property is not permitted unless the appropriate approvals are obtained.
 14. All historic items found on the property (excluding taoka tūturu) belong to the property owner and will only be 'on loan' to other organisations as they may be required for future onsite interpretation.





9 Visitor and Commercial Use

9.1 Recreation Use

Public access has been a feature of the Hereweka/Harbour Cone property for many years. The property is used by local residents and its proximity to Dunedin means it is also enjoyed by the wider Dunedin community.

Its purchase by the Dunedin City Council and increased publicity and interpretation of the property's values will likely increase its popularity with Dunedin residents and tourists. For tourists, this will be influenced by the level of promotion it receives within the context of the Otago Peninsula.

Due to the size, topography and various values, the property provides a range of recreation opportunities from the very active to more passive activities. Public access is multi-use and therefore biking, walking and horse riding are permitted, although horse riding is an appropriate use in certain areas only. Mountain biking is also more suited to specific tracks.

The Hereweka/Harbour Cone property is a working farm and recreational use of the property must continue to be compatible with this use.

Due to the sensitivity of some of the historic sites and areas of significant biodiversity, the public will be encouraged to use designated tracks (marked routes) and areas. Motorised recreation (including 4WD vehicles and motor bikes) is not permitted as it is incompatible with some of the property's values and other users.

The steep terrain of most of the property means that many of the tracks are only for people with at least an average level of fitness and mobility and are classified as 'Hard'. However, flatter sites close to the main entry points provide easier access (described as 'Easier Access Areas'). Refer to Section 9.4 for further detail regarding these access descriptions.

The promoting of specific tracks for mountain biking and horse riding is new for this property and due to the sensitivity of the historic and (some) biodiversity sites, and to promote the safety and enjoyment of other users, these activities will be monitored. If necessary, tracks will be temporarily or permanently closed for these activities.

Because this property is a working farm, dogs are not permitted on the property (except for farm management purposes) and the property will be closed for public access during lambing season.

Uncontrolled camping is considered an inappropriate use of this property. The lack of toilet facilities, water supply and the property's proximity to the city and relative remoteness from neighbouring houses and possible conflict with farming are all reasons for concern. The acceptance of campervans or 'freedom camping' will be guided by Council policy. It may be that some roadside parking areas are suitable for camper vehicles to stay overnight. Toilet provision on the property and self-contained vehicles are key factors when considering such use.

9.1.1 Aim:

1. The Hereweka/Harbour Cone property is available for recreational use by the public.

9.1.2 Objective:

1. To support the use of the Hereweka/Harbour Cone property by a range of recreation users that is compatible with the property's values.

9.1.3 Policies:

1. Tracks are multi-use unless otherwise specified.
2. Motorised vehicles for recreational use are not permitted (this excludes vehicles for management and farming purposes).

3. Public access across the property is classified as 'Hard' (a classification of the Dunedin City Council Track Policy and Strategy for biking, walking and horse riding) except in identified 'Easier Access Areas'.
4. The public are encouraged to keep to marked tracks, 'Easier Access Areas' and specified sites of interest.
5. The impact of public access and use will be monitored and tracks and/or areas may be temporarily or permanently closed to all or some forms of public access if deemed necessary.
6. Public access is may be restricted during lambing season (September through to November). Dates will be clearly shown on signage and appropriately advertised.
7. Camping is only permitted when authorised.
8. Tolerance of overnight parking of camper vehicles/freedom camping is in accordance with Council policy.
9. Horses are permitted on specified tracks only.
10. Dogs are not permitted except for farm management purposes.

9.2 Visitor Use

The Hereweka/Harbour Cone property embodies features that are representative of the natural, historic and manawhenua values of the Otago Peninsula. As the majority of the Otago Peninsula is in private ownership with restricted public access, this property offers an accessible place where people are able to experience and learn about these values. As such, this property provides an important setting for heightening people's enjoyment, awareness and understanding of environmental, conservation, sustainability and heritage issues.

A positive aspect of community participation in protecting and enhancing the property's values is that it can promote an ethic of stewardship. Stewardship is an important long-term objective, which requires a genuine feeling of local ownership and control. To realise these benefits active community participation must be encouraged and facilitated, which can include design, ongoing management and maintenance of projects and spaces.

There are many opportunities for the local and wider community to work together on activities that support the objectives and policies in this plan. Such public involvement is encouraged, but all works must be under the close supervision of groups or organisations with relevant expertise and the appropriate approvals.

If necessary, partnerships between the Management Body of the property, individuals and organisations (eg manawhenua, businesses and community groups) could be developed. Furthermore, the property's Management Body may wish to develop formal agreements with community organisations or groups who have a strong and long-term relationship with the Hereweka/Harbour Cone property, in order to outline the activities or works they will undertake in partnership with the Management Body.

Examples of activities that can involve community participation include the following:

- a) Protection and enhancement of natural heritage and cultural heritage values (eg pest eradication and species recovery programmes and restoring stone walling).
- b) Property maintenance (eg building and track maintenance, mowing, pest control, litter control).
- c) Cottage industry and community food production (eg orcharding, bee keeping etc).
- e) Research on property issues and values.

f) Developing and delivering education and interpretation programmes.

g) Event management.

h) Developing and delivery of recreation opportunities.

Programmes such as public talks, guided walks and experiential activities will be encouraged. Expert volunteers will, where appropriate, be encouraged to take a lead role in these programmes.

The Hereweka/Harbour Cone property provides a valuable opportunity to provide 'hands-on' learning opportunities in a variety of 'outdoor classrooms'. This would support parts of the national curriculum, linking with the enviroschools programme. Environmental education provides a vehicle for raised awareness of sustainable land management, ecological restoration, food production and an understanding of 'the rural'. This property also provides excellent opportunities for education on the local heritage, especially early European settlement history.

The Hereweka/Harbour Cone property also has potential to fill a gap in Dunedin's lack of specialist facility for an environmental education centre. Facility provision on the property could be used as a hub for environmental education, demonstration of multi functional land use, small-scale renewable technology, and social enterprise. Such a facility could also have a function as a base for outdoor education and recreation skills programmes or other community or group activities requiring indoor space. As discussed in Section 9.3, the provision of visitor infrastructure (eg interpretation and amenities such as vehicle parking and toilets) could also be a function of such a facility.

On-site research projects that further the understanding of the property's values and inform management will be encouraged. There is an opportunity to work with tertiary institutions to promote research of archaeological, cultural or historical sites, public and commercial use management cultural heritage

management, or how these aspects interrelate.

The property also provides potential for community members to experiment with pilot projects and experimental schemes that try out ways of change of how people connect with each other and their local environment. Research and trials may target themes such as sustainable food security, soil care, carbon sequestration, building organic matter and maximising the benefits for the water.

It is essential that all proposals for research or projects involving enhancement works (including earthworks, modifying existing structures or new developments) obtain the appropriate approvals. Approvals include the formal Management Body of the property and could also include authorities from the Minister of Conservation (responsible for granting permission regarding research relating to native flora and fauna refer to Section 7) and the New Zealand Historic Places Trust (NZHPT) (for all works in and around archaeological sites and heritage structures). In addition, any discovery of historic objects on the property will be dealt with in accordance with the NZHPT Accidental Discovery Policy. Refer to Section 8 for detail and specific policies.

Proposals to undertake specific research or development works must be in accordance with this management plan and any relevant secondary plans.

All organisations/groups working on or visiting the property are responsible for the safety of people in their charge (eg staff, volunteers, students).

9.2.1 Aims:

1. Community research, community initiatives and participation are supported and underpinned by an ethos of stewardship.
2. Research increases the understanding of the property's values, sustainable land use, functioning ecosystems and enhanced understanding of how communities can interact with the

environment in a sustainable manner.

3. Organisations, groups and volunteers are able to participate in the protection and enhancement of the property's values.
4. The property is used by educational institutions and groups.
5. The local communities benefit from the property through appropriate community initiatives.

9.2.2 Objectives:

1. To encourage appropriate research that increases the understanding of the property and informs management of the property.
2. To encourage organisations and groups with relevant expertise and authority to assist with the protection and enhancement of the property's values.
3. To encourage and support the use of the property for educational purposes that aims to enhance the public's awareness, knowledge and understanding of the property values and the wider environment.
4. To support and provide areas for community initiatives that help develop social cohesion, sustainable land use practices and an ethic of stewardship.
5. To consider provision of a facility for specialised education aimed at increasing knowledge of the environment, sustainability and heritage which could also provide an indoor base for other community or group activities and provide visitor infrastructure.

9.2.3 Policies:

1. To support the use of the property for education purposes.
2. To support the development of 'on-site' and 'off-site' information, interpretation, programmes and initiatives that can be used to

educate people on the property's values.

3. Encourage education programmes where they:
 - a. Do not negatively impact on the property values and other property users.
 - b. Contribute to people's understanding and appreciation of the property's values.
 - c. Raise awareness of environmental, sustainability issues and sustainable land management practices.
 - d. Increase people's outdoor recreation skills.
4. Applications/proposals for community initiatives, research or enhancement works require the appropriate approvals and must include potential effects of the proposed activity on the property's values and actions to take to avoid, remedy or mitigate any adverse effects.
5. Where appropriate, organisations, groups or people with relevant expertise will be encouraged and supported to carry out specific research and enhancement works.
6. All organisation, groups or persons are required to independently gain all relevant statutory authorities necessary to undertake their activities.
7. All organisations and groups are responsible for supervising people in their charge.
8. When relevant, policies within the 'Volunteers Working on Reserves' section of the Reserves Management Plan – General Policies apply.
9. Community initiatives are supported where compatible with the property's values and where

sufficient evidence of project planning and resourcing exists.

10. To support partnerships with the property's Management Body, manawhenua, individuals, businesses and community groups to work together on activities that support the objectives and policies in this plan.
11. To encourage links with tertiary and educational institutions to promote education and research.
12. To support research and trials that contribute to an understanding of environmental regeneration, sustainable land use and ecosystem functioning.
13. To work with interested stakeholders in considering the feasibility of an environmental education centre/visitor hub and base for community activities related to this property.

9.3 Visitor Infrastructure

The Hereweka/Harbour Cone property is highly valued for its landscape vistas, open space and rural character. The property is a great public amenity for both local residents and the wider Dunedin community.

To facilitate public use enjoyment of the property, some visitor infrastructure is necessary. However, such provision must not negatively impact on the property's character and values. To achieve this, visitor infrastructure will be kept to a minimum and sensitive to the property's values.

Public access will be encouraged in areas that are of interest to the visitor, for example, where there are good examples of the property's landscape, cultural, historic values and biodiversity. Encouraging access to specific sites is also determined by the vulnerability of the site, how accessible the site is and the risk to public safety.

The steep terrain of most of the property and the desire of the community to

maintain its rural character means that track provision is classified as 'Hard' (a classification of the Dunedin City Council Track Policy and Strategy for biking, walking and horse riding) and therefore minimal track construction is required. The development of new tracks will focus on marked pole routes that facilitate creating circuits of varying length, access areas of interest (cultural, heritage and biodiversity) and scenic points. Local access (eg to/from Portobello) and 'long distance' tracks linking with other areas on the Otago Peninsula will also increase the property's recreational value. Appendix 4 outlines the proposed track routes and visitor access points.

'Easier Access Areas' are identified in more moderate terrain where public access is less physically demanding. This definition also defines areas of concentrated public use (eg community initiatives and shorter circuits near main entrance points such as the Bacon Street entrance). Public use of these areas includes access across open farmland. To facilitate public access and enjoyment, visitor infrastructure in these areas may be at a higher level than on the remainder of the property. For example, easy access through fence lines and, if necessary, drainage or board walks and seating. Visitor amenities such as barbeque areas and picnic tables are not considered appropriate for this property.

The multi-use aspect of this property also requires some visitor infrastructure to accommodate all users and reduce potential conflict. For example, 'sprung' gates (rather than stiles) will enable access by horse riders, people with reduced mobility and mountain buggies and will also reduce potential conflict between public use and farming (ie gates not being left open).

Existing areas to park vehicles are currently on the shoulders of public roads. However, depending on the level of public use of the property, increased vehicle parking provision may be required. Such provision should consider increasing these 'shoulder' areas and the use of areas within the property such as at the designated 'main

entrance' and within the context of a 'Visitor Hub'.

Providing public toilets on the property is a possibility if deemed necessary. There is an existing toilet near the farm woolshed that, if improved, could possibly be considered for public use (this could be considered alongside the development of a Visitor Hub). Both settlements of Portobello and Broad Bay have public toilet facilities approximately five to six minutes drive from the designated main entrance to the property. Providing public toilets is also a consideration with regard to overnight vehicle parking.

Visitor infrastructure on the property is also required to provide visitors with information on the values of the property and to aid visitor management. Signs and interpretation information will increase visitors' understanding and appreciation of the property and its context in the wider landscape. Signage on this property is also required to direct visitors around their chosen routes. Details and policy regarding signage and interpretation is provided in Section 9.4.

The development of a 'Visitor Hub' for educational purposes and to provide additional facilities for visitors would be a positive development of this property. However, the location of such facilities must be sensitive to the character and values of the property. The benefit of a 'Visitor Hub' for visitors includes provision of toilets, a main site for interpretation and additional car parking. The use of an existing building is considered preferable to constructing a new one for a visitor hub.

The Roger's Farm House is the only remaining inhabitable dwelling on the property from the early European settler era. This house is in the area identified as a potential 'Visitor Hub' and its use for visitor purposes should be explored (eg onsite interpretation). This needs to be considered as part of an evaluation of the viability of restoring this building.

9.3.1 Aims:

1. Visitor infrastructure facilitates public enjoyment of the property

and takes practical steps to promote public safety.

2. Visitor infrastructure does not negatively impact on the values of the property.
3. Tracks enable local access to the property and facilitate the ability to access other areas on the Otago Peninsula.

9.3.2 Objectives:

1. To encourage public access onto and through the property where appropriate.
2. To facilitate public access to the property from neighbouring areas and links to the Otago Peninsula.
3. To recognise the topography of the property and provide 'Easier Access Areas' in suitable areas only while recreational access to the remainder of the property is classified as 'Hard'.
4. To provide minimal visitor infrastructure to facilitate multi-use access, protect the property's values and to promote public enjoyment and safety.

9.3.3 Policies:

1. Ensure that all visitor infrastructure is sensitive to the rural character and values of the property and will be adequate for the visitor.
2. Except for 'Easier Access Areas', all other tracks through the property are classified as 'Hard' and managed accordingly.
3. Pole markers will be used to identify tracks.
4. Visitor infrastructure can be greater in areas identified as 'Easier Access Areas' in order to facilitate use and enjoyment for those with reduced mobility but will still be sensitive to the character and values of the property.

5. The future use of historic structures for visitor purposes must be acknowledged and managed accordingly.
6. Access points will be provided and promoted for public use, including provision of adequate car parking spaces.
7. To undertake, where feasible, the necessary improvements to enable multi-use access throughout the property (or on specified tracks or areas) and to mitigate any potential conflict between users and farming.
8. Where appropriate, tracks will be developed to create circuits within the property, access suitable sites of public interest and provide linkages with adjacent areas and tracks.
9. To work with adjoining landowners to retain or develop and where necessary legalise public access through their property to specific sites of interest (having a historical link with the Hereweka/Harbour Cone property), to create circuits and to access surrounding areas on the Otago Peninsula.
10. Rubbish bins and litter control will not be provided.
11. The provision of public toilet facilities will be considered if necessary.

9.4 Signage and Interpretation

Signage and interpretation will increase users' enjoyment, understanding and appreciation of the property by detailing visitor access, explaining the significant values of the property and encouraging community stewardship. Well-planned signage will also aid in visitor management.

Signs will be used to discourage public access to areas that are vulnerable to visitor impact and also to inform the

public of appropriate use and specific unusual or significant hazards. Signage at entrances needs to contain information from the NZHPT on the legal protection of cultural sites.

Providing a system of track pole markers (to define the various routes) and direction signs at track junctions (where potentially confusing) will aid public use and enjoyment. Signage will also indicate entrance points and property boundaries and reduce the likelihood of accidental trespass onto private property.

Given the multi-use nature of tracks and the steep terrain, it is necessary to use track signage to inform the public of suitable track use (eg for mountain biking) and where relevant, the type of use not permitted (eg horse riding on some specific tracks).

The Hereweka/Harbour Cone property and surrounding area have many values that are of interest to the public. It is considered that on-site signage interpretation will have a crucial role in increasing visitors' understanding and appreciation of these values and to help promote an ethic of stewardship. Due to the complexity of the site and surrounding area (ie many values and layers of history), input from an expert in interpretation planning will be required. The style of interpretation signage must be sympathetic to the physical and historical landscape.

A 'Visitor Hub' (discussed in Section 9.3), brochures, the internet and collaboration and links with the Otago Peninsula community groups are all interpretation opportunities that could be explored.

9.4.1 Aim:

1. Signage and interpretation increases public enjoyment and appreciation of the property.

9.4.2 Objectives:

1. Interpretive material is provided to increase understanding of the property's values and promote an ethic of community stewardship.

2. Signs will be used to facilitate public access, appropriate public use and warn of significant hazards.

9.4.3 Policies:

1. To develop and implement a Signage and Interpretation Plan that promotes and protects the property's values.
2. To ensure the style of interpretation signage is appropriate to the physical and cultural landscape and has low visual impact.
3. To provide adequate signage to facilitate appropriate use of sites, areas and tracks.
4. To use signage to warn visitors of unusual or significant hazards, property boundaries and legal protection of cultural sites.
5. To support adjoining landowners to manage visitor access through signage.
6. To support the development of 'off-site' interpretation and secure future 'on-site' possibilities to promote the property's values.

9.5 Commercial and Exclusive Use, Special Events and Occupation Agreements

Use of areas within the Hereweka/Harbour Cone property for organised use (commercial or exclusive use or special events) is supported only if such use does not negatively impact on the property's values, including casual public use and enjoyment of the property. Applications to use the Hereweka/Harbour Cone property for these purposes on a permanent or temporary basis will be considered.

It is Council practice to work in accordance with the provisions contained in the Reserves Act 1977, even when the land is not subject to this Act. Therefore

authorities granted will be in the form of written approvals, leases, licences or concessions issued by the relevant Dunedin City Council department, or the property's Management Body. Proposals will be assessed against the aims, objectives and policies within this management plan and the relevant sections of the *Dunedin City Council Reserves Management Plan – General Policies*. The cumulative effect of having a number of organised uses on the property and the effect of this on the property's values (including casual public use and enjoyment) will also be a consideration when assessing proposals.

An occupation agreement may also be an appropriate means to legitimise a person, organisation or company to occupy part of the property. The agreement to farm the property is a relevant example for this property. Other occupation agreements include rights-of-way, water rights, storm-water discharge, drainage rights and underground facilities. Requests to access land or water will be considered where they are consistent with the objectives of this Management Plan, subject to the *Dunedin City Council Reserves Management Plan – General Policies* and any relevant legislation.

An authority to undertake commercial activities will be granted for a period of no more than 14 years (or, in the case of a licence, up to five years) with an annual review. It is considered necessary to review commercial use on an annual basis to ensure the activity continues to be compatible with the property's values.

To ensure that management will not be burdened with responsibilities and expenses that are directly related to such use, authorities granted are likely to include payment of an appropriate fee and to cover all costs related to their authority, including any other costs associated with their use (eg contribution to general visitor provision). The *Dunedin City Council Reserves Management Plan – General Policies* and the *Dunedin City Council Fees and Charges Policy* will be used to guide the level of rent payable.

Compliance with the relevant conditions of the Resource Management Act 1991, the Health and Safety in Employment and other relevant Acts and statutory authorities (eg Food and Hygiene regulations) and the Dunedin City District Plan, is the responsibility of the authority holder.

9.5.1 Aim:

1. Organised use is encouraged where it is compatible with, and does not negatively impact on, the values of property.

9.5.2 Objectives:

1. To allow organised use of the property where compatible with other users and where it does not negatively impact on the property's values.
2. To ensure that all commercial use and occupation of the property is authorised.

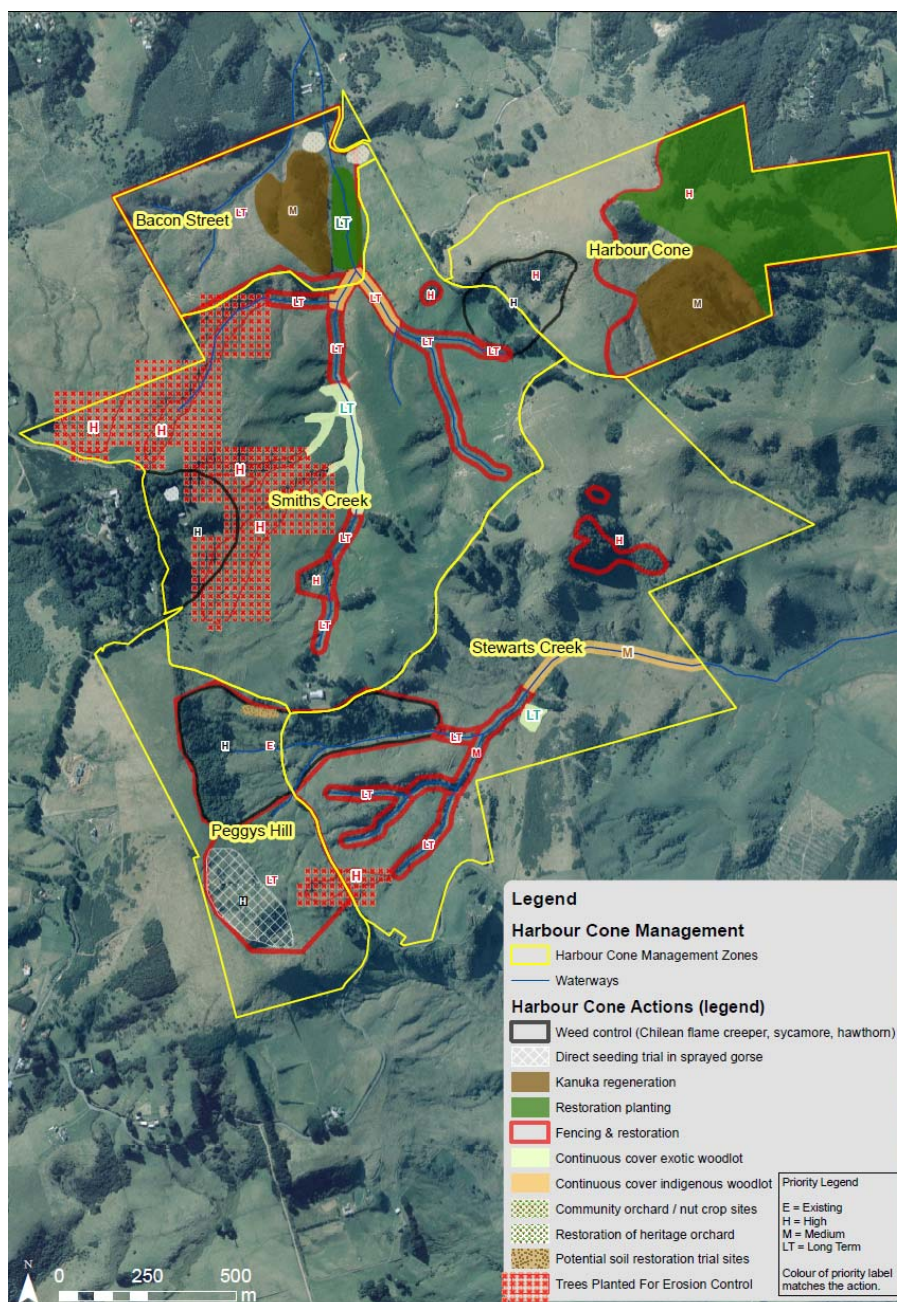
9.5.3 Policies:

1. The sections 'Commercial Use', 'Exclusive Use', 'Use of Reserves', 'Special Events' and 'Occupation Agreements' of the Reserves Management Plan – General Policies should be read in conjunction with this plan.
2. Proposals for organised use will be assessed against impacts on the property's values and benefits to the local community.
3. All costs associated with any organised use, including

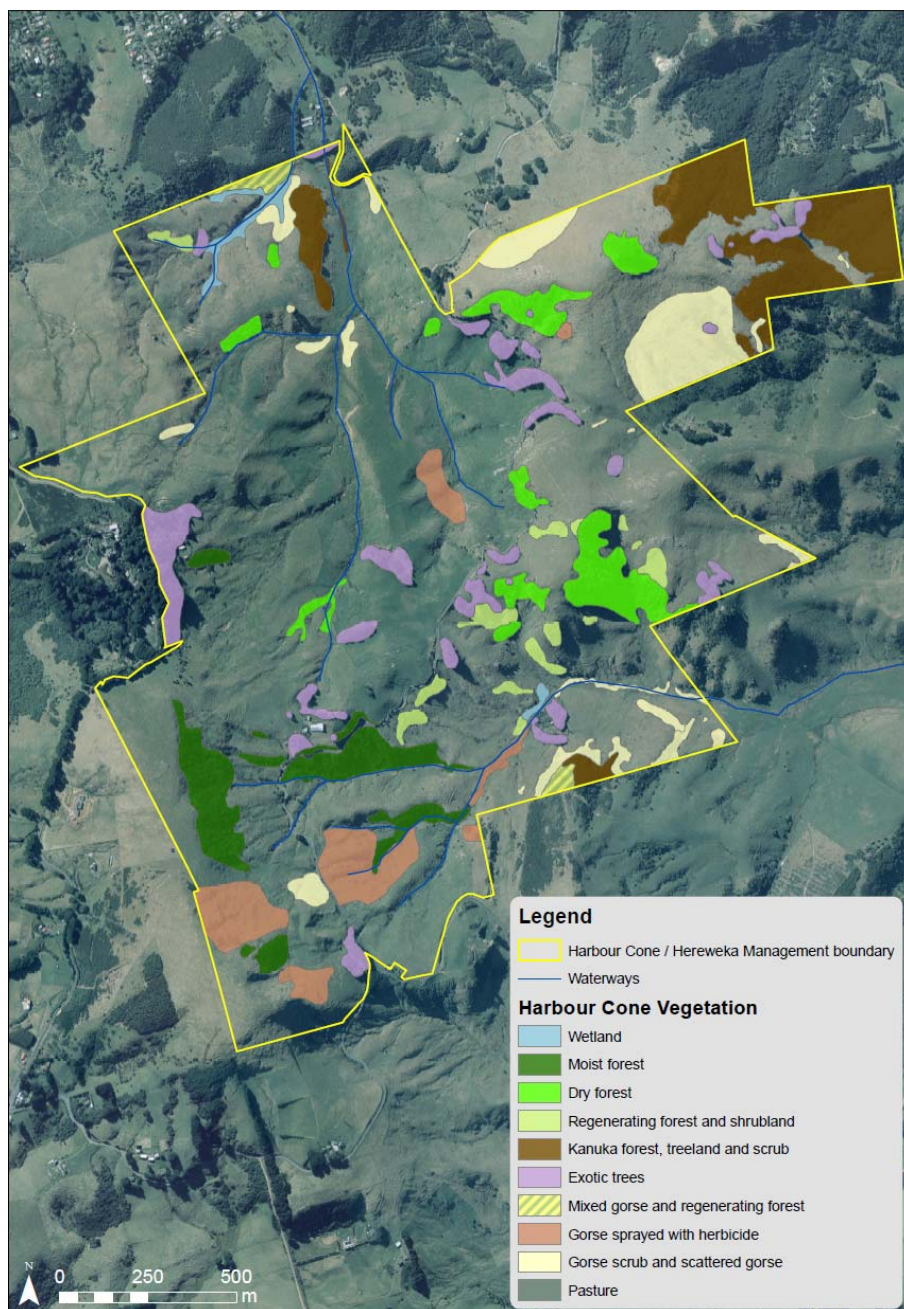
maintenance and monitoring potential impacts, will be met by the user unless specifically waived by the Council.

4. Commercial users may be required to pay an appropriate fee.
5. All organised use of the property will be reviewed on an annual basis and if use is deemed to have an adverse impact on the property and/or other property users, the authority holder must remedy these impacts or the authority granted may be withdrawn.
6. Public notification for leases and licences and occupation agreements is required.
7. The cumulative effect of organised use will be considered when assessing proposals.
8. Any groups using the property are required to independently gain all relevant statutory authorities necessary to undertake their activities.
9. Proposed changes to Commercial Use Agreements, informed by the objectives of the Management Plan, will be resolved through discussions between the Management Body and holders of Commercial Use Agreements.
10. The Management Body will appoint a representative to liaise with holders of Commercial Use Agreements and to resolve property use conflicts as they arise.

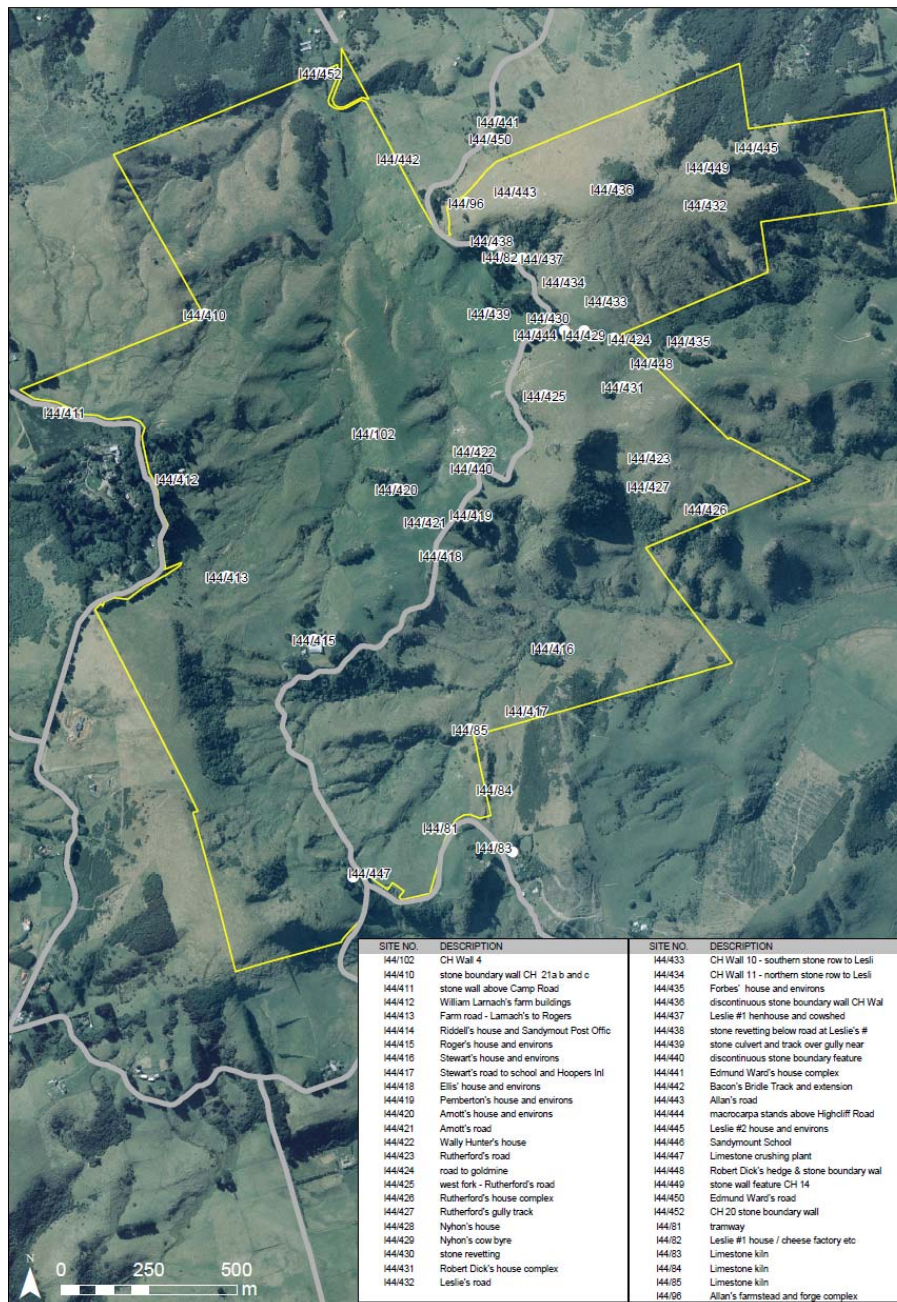
Appendix 1: Land Use Actions and Management Map



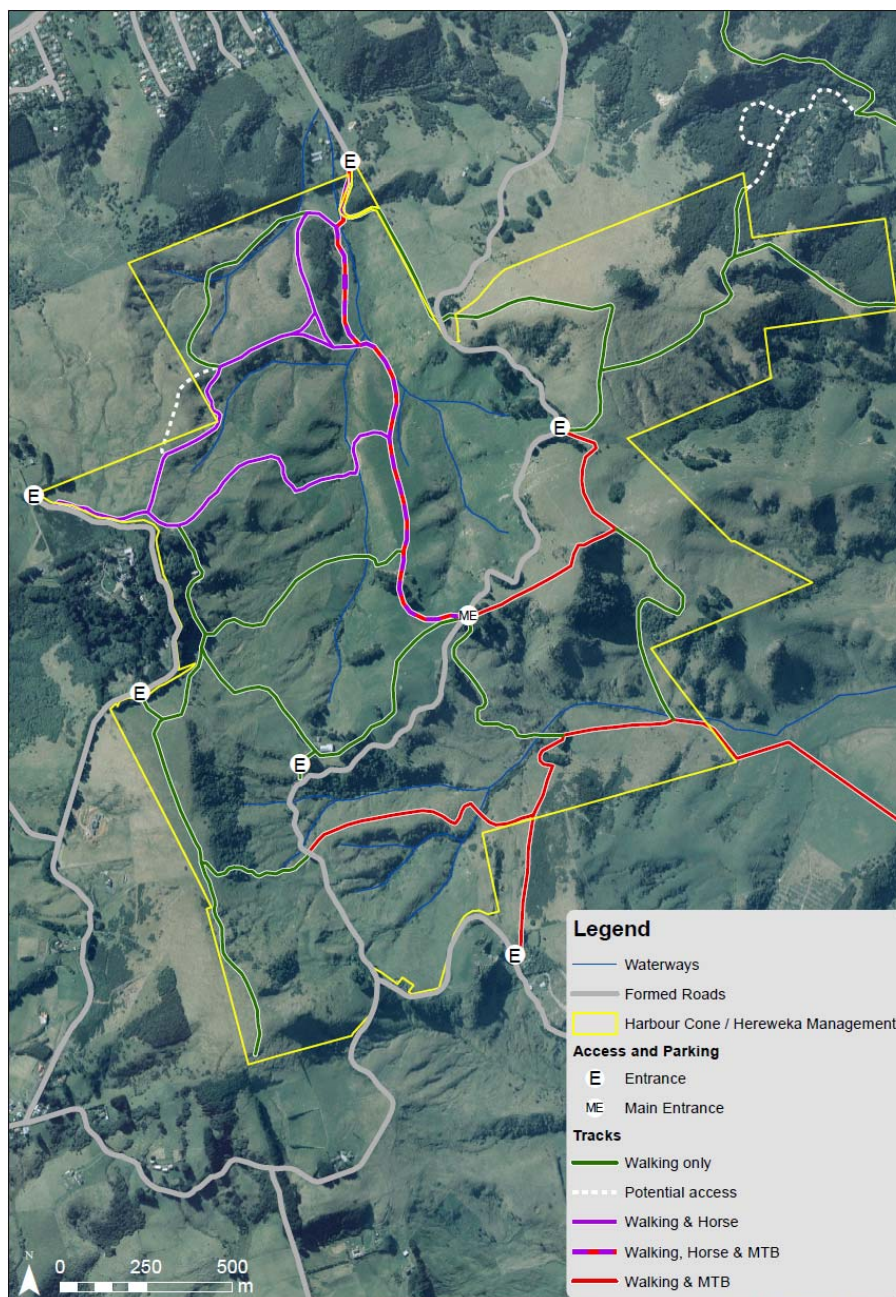
Appendix 2: Existing Vegetation (2011) Map



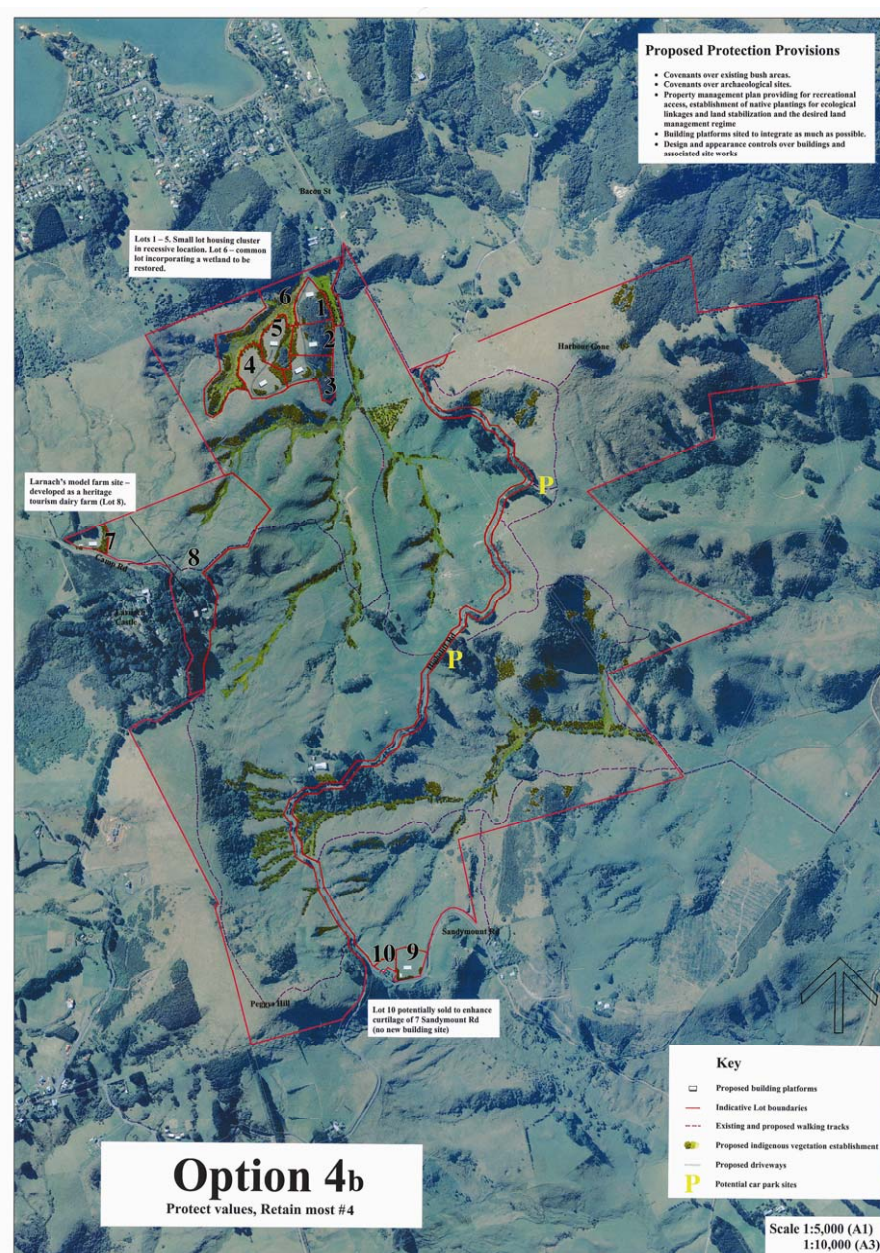
Appendix 3: Heritage Sites Map



Appendix 4: Potential Recreation Routes and Access map



Appendix 5: Development Option 4b Map
(refer to Section 2.1)



Appendix 6: Discussion: The Potential for Reintroduction of Buff Weka (*Gallirallus australis*)

This discussion exists as an example of the complex factors requiring assessment when considering the reintroduction of locally and nationally important species.

Hereweka means 'catch weka' and refers to the area being a place where the food resource of weka was found.

Buff weka (*Gallirallus australis hectori*) were historically indigenous to the eastern South Island and Southland but became locally extinct from the South Island due to the effects of habitat loss compounded by predation from exotic pest animals. Fortunately, populations of buff weka had been established on Chatham Island and Pitt Island prior to their extinction from the mainland. This Chatham Islands population has been used as the source of buff weka for re-establishment of weka populations in Canterbury and Otago, although these have not always been successful.

Buff weka is a taoka species to Ngāi Tahu. Papatipu rūnaka, including Otākou rūnaka, have supported its reintroduction to islands in Lakes Wakatipu and Wanaka, and to the adjacent Stevenson's Peninsula. Otākou rūnaka are strong advocates for reintroduction of buff weka to the Hereweka/Harbour Cone property and would envisage a successful weka reintroduction as one that resulted in colonisation by buff weka of wider Otago Peninsula habitats in sufficient abundance as to sustain a managed harvest, as occurs on the Chatham Islands.

Weka favour landscapes with thickets of ground cover vegetation such as fernland, shrubland, and vineland, including those comprised of weedy species such as gorse and blackberry. However, areas that support abundant fleshy-fruited indigenous trees and shrubs are ideal. They predominantly eat fruits and invertebrates, but are also predators of lizards and chicks of other birds, including penguins. Weka form permanent territories but sub-adult birds disperse so as to establish new territories or replace the territories of other weka that have been killed.

Adult weka are vulnerable to predation by domestic dogs and cats, ferrets and stoats, while eggs and nestlings are vulnerable to

predation by hedgehogs and rats. Drought and periods of low rainfall are also factors that periodically reduce weka survival. Many weka are killed in collisions with road traffic. They are also vulnerable to pest control activities such as use of poison baits and leghold traps.

Buff weka would be vulnerable to all of the above influences at the Hereweka/Harbour Cone property. Dense ground cover vegetation is absent from most of the site, with the exception of gorse thickets and locally dense vegetation around buildings. Stock browsing in the indigenous forest remnants has resulted in major depletion of ground cover and understorey vegetation. The full range of weka predators is likely to be present on this property. Otago Peninsula experiences periods of low rainfall and drought and the Hereweka/Harbour Cone property is bisected by a well-used public road. Pest control activities would need to be designed to avoid weka bykill. On the other hand, weka are opportunistic and adaptable and, where they occur in good conditions with abundant food sources, can breed frequently and rapidly increase in numbers.

A major constraint involving weka is their potential for adverse effects through predation of other threatened indigenous fauna. For example, if buff weka were successfully established on the Hereweka/Harbour Cone property and dispersed into the wider area, they could potentially affect valued nesting shorebirds such as penguins.

The issues described above need to be given more consideration. If a feasibility study for buff weka introduction is undertaken, it should address all of the factors and indicators relevant to mainland sites, as specified in Appendix 8 of the Weka Recovery Plan (DOC 1999).

Appendix 7: Statutory Acknowledgement

Ngāi Tahu Claims Settlement Act Schedule 103

Statutory Acknowledgement for Te Tai O Arai Te Uru (Otago Coastal Marine Area)

The statutory area to which this statutory acknowledgement applies is Te Tai o Arai Te Uru (the Otago Coastal Marine Area), the Coastal Marine Area of the Moeraki, Dunedin Coastal and Molyneux constituencies of the Otago region, as shown on SO Plans 24250, 24249, and 24252, Otago Land District and as shown on Allocation Plan NT 505 (SO 19901).

Preamble

Under section 313, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Te Tai o Arai Te Uru as set out below.

Ngāi Tahu Association with Te Tai o Arai Te Uru

The formation of the coastline of Te Wai Pounamu relates to the tradition of Te Waka o Aoraki, which foundered on a submerged reef, leaving its occupants, Aoraki and his brothers, to turn to stone. They are manifested now in the highest peaks in the Ka Tiritiri o Te Moana (the Southern Alps). The bays, inlets, estuaries and fiords which stud the coast are all the creations of Tu Te Rakiwhanoa, who took on the job of making the island suitable for human habitation.

The naming of various features along the coastline reflects the succession of explorers and iwi (tribes) who travelled around the coastline at various times. The first of these was Maui, who fished up the North Island and is said to have circumnavigated Te Wai Pounamu. In some accounts the island is called Te Waka a Maui in recognition of his discovery of the new lands, with Rakiura (Stewart Island) being Te Puka a Maui (Maui's anchor stone). A number of

coastal place names are attributed to Maui, particularly on the southern coast. The great explorer Rakaihautu travelled overland along the coast, identifying the key places and resources. He also left many place names on prominent coastal features. Another explorer, Tamatea, sailed along the Otago coast in the waka Tākitimu. After the waka eventually broke its back off the coast of Murihiku, Tamatea and the survivors made their way overland back to the North Island, arriving at the coast by the place Tamatea named O-amaru (Ōamaru).

Place names along the coast record Ngāi Tahu history and point to the landscape features which were significant to people for a range of reasons. For example, some of the most significant rivers which enter the coastal waters of Otago include: Waitaki, Kakaunui, Waihemo (Shag), Waikouaiti, Kāikrae (Kāikorai), Tokomairiro, Mata-au (Clutha), Pounawea (Catlins). Estuaries include: Waitete (Waitati), Otākou (Otago), Makahoe (Papanui Inlet), Murikauhaka (Mate-au and Koau estuaries), Tahaukupu (Tahakopa estuary), Waipātiki (Wapiti Estuary). Islands in the coastal area include Okaihe (St Michaels Island), Moturata (Taieri Island), Paparoa, Matoketoke, Hakinikini, and Aonui (Cooks Head).

Particular stretches of the coastline also have their own traditions. The tradition of the waka (canoe) Arai Te Uru and its sinking at the mouth of the Waihemo (Shag River) has led to the coastal area of Otago being known as Te Tai o Araiteuru (the coast of Arai Te Uru). Accounts of the foundering, the wreckage and the survivors of this waka are marked by numerous landmarks almost for the length of the Otago coast.

The boulders on Moeraki coast (Kai Hinaki) and the Moeraki pebbles are all

associated with the cargo of gourds, kumara and taro seed which were spilled when the Arai Te Uru foundered.

For Ngāi Tahu, traditions such as these represent the links between the cosmological world of the gods and present generations. These histories reinforce tribal identity and solidarity, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Because of its attractiveness as a place to establish permanent settlements, including pā (fortified settlements), the coastal area was visited and occupied by Waitaha, Ngati Māmoë and Ngāi Tahu in succession, who, through conflict and alliance, have merged in the whakapapa (genealogy) of Ngāi Tahu whānui. Battle sites, urupā and landscape features bearing the names of tūpuna (ancestors) record this history. Prominent headlands, in particular, were favoured for their defensive qualities and became the headquarters for a succession of rangatira and their followers. Notable pā on the Otago coast include: Makotukutuku (Ōamaru), Te Raka-a-hineatea (Moeraki), Te Pā Katata, Pā a Te Wera, (Huriawa Peninsula), Mapoutahi (Purakaunui), Pukekura (Taiaoroa Head), Moturata (Taieri Island). The estuaries from the Waitaki River to the Chaslands also supported various hapu.

Tūpuna such as Waitai, Tukiauau, Whaka-taka-newha, Rakiiamoë, Tarewai, Maru, Te Aparangi, Taoka, Moki II, Kapo, Te Wera, Tu Wiri Roa, Taikawa, Te Hautapanuiotu among the many illustrious ancestors of Ngati Māmoë and Ngāi Tahu lineage whose feats and memories are enshrined in the landscape, bays, tides and whakapapa of Otago.

The results of the struggles, alliances and marriages arising out of these migrations were the eventual emergence of a stable, organised and united series of hapu located at permanent or semi-permanent settlements along the coast, with an intricate network of mahika kai (food gathering) rights and networks that relied to a large extent on

coastal resources. Chiefs such as Korako (several), Tahatu, Honekai, Ihutakuru, Karetai, Taiaoroa, Potiki, Tuhawaiki, and Pokene being some among a number who had their own villages and fishing grounds. Otago Peninsula (Muaupoko) had many kaunga nohoanga with a multitude of hapu occupying them. At one time up to 12 kainga existed in the lower Otago harbour, some larger and more important than others.

The whole of the coastal area offered a bounty of mahika Kāi, including a range of kaimoana (sea food); sea fishing; eeling and harvest of other freshwater fish in lagoons and rivers; marine mammals providing whale meat and seal pups; waterfowl, sea bird egg gathering and forest birds; and a variety of plant resources including harakeke (flax), fern and ti root. In many areas the reliance on these resources increased after the land sales of the 1840s and 1850s, and the associated loss of access to much traditional landbased mahika kai.

Many reefs along the coast are known by name and are customary fishing grounds, many sand banks, channels, currents and depths are also known for their kaimoana. One example is Poatiri (Mt Charles — Cape Saunders) the name of which refers to a fish hook. Poatiri juts out into the Pacific, close to the continental shelf, and is a very rich fishing ground. Another example is Blueskin Bay which was once a kohanga (breeding ground) for the right whale, although it is well over 150 years since it has seen this activity.

Other resources were also important in the coastal area. Paru (black mud used for dying) was obtained from some areas. Some of the permanent coastal settlements, such as those at the mouth of the Mataau (Clutha River), and at Ōtākou and Purakaunui, were important pounamu manufacturing sites. Trading between these villages to the south and north via sea routes was an important part of the economy.

The Otago coast was also a major highway and trade route, particularly in areas where travel by land was difficult. Pounamu and titi were traded north with



kumara, taro, waka, stone resources and carvings coming south. Travel by sea between settlements and hapu was common, with a variety of different forms of waka, including the southern waka hunua (double-hulled canoe) and, post-contact, whale boats plying the waters continuously. Hence tauranga waka (landing places) occur up and down the coast in their hundreds and wherever a tauranga waka is located there is also likely to be a nohoanga (settlement), fishing ground, kaimoana resource, rimurapa (bull kelp — used to make the poha, in which titi were and still are preserved) with the sea trail linked to a land trail or mahika kai resource. The tūpuna had a huge knowledge of the coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whānau and hapu and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast. Numerous urupā are being exposed or eroded at various times along much of coast. Water burial sites on the coast, known as waiwhakaheketupapaku, are also spiritually important and linked with important sites on the land. Places where kaitangata (the eating of those defeated in battle) occurred are also wāhi tapu.

Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna and are frequently protected in secret locations.

The mauri of the coastal area 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 coastal area.

Appendix 8: Bibliography

- Bishop, D.G and Turnbull, I.M. (1996). Geology of the Dunedin Area. IGNS, Lower Hutt.
- Boffa Miskell Limited (2007). Dunedin LMA Review. Unpublished.
- de Lange P.J., Norton D.A., Courtney S.P., Heenan P.B., Barkla J.W., Cameron E.K., Hitchmough R., and Townsend A.J. (2008). Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47: 61-96.
- Department of Conservation (2010). Jewelled Gecko/Moko-karariki Management Plan - A community-based plan for Otago Peninsula.
- Department of Conservation (2009). Weka (*Gallirallus australis*) recovery plan. 1999-2009. Threatened Species Recovery Plan 29. Department of Conservation, Wellington.
- Dunedin City Council (1998). Track Policy and Strategy. Dunedin City Council, Dunedin.
- Dunedin City Council (2005). Reserves Management Plan – General Policies. Dunedin City Council, Dunedin.
- Dunedin City Council (2006). Dunedin City District Plan. Operative 3 July 2006. Dunedin City Council, Dunedin.
- Johnson, P.N. 2004. Otago Peninsula plants. An annotated list of vascular plants growing in wild places. Save the Otago Peninsula Inc., Dunedin.
- Kāi Tahu Ki Otago Limited (2009). Dunedin City Council, Hereweka/Harbour Cone, Report – Stage 1. (Unpublished)
- Leslie, D.M. (1972). New Zealand Soil Bureau Scientific Report 12. DSIR, Wellington.
- Middleton, A. (2008). Harbour Cone Project: Archaeological Assessment for the Dunedin City Council. Unpublished.
- Millar, R (2004). The Next Crop – sustainable planning and management of commercial forestry in the Marlborough Sounds. Marlborough District Council.
- Millar, R and Moore, M (2009). Hereweka/Harbour Cone – Development and Management Options.
- Wildland Consultants 2008a: Site information- natural areas in Dunedin City. Site 25, Harbour Cone summit. Wildland Consultants Contract Report No. 2059c, prepared for the Dunedin City Council.
- Wildland Consultants 2008b: Site information- natural areas in Dunedin City. Site 26, Harbour Cone SW side. Wildland Consultants Contract Report No. 2059d, prepared for the Dunedin City Council.
- Wildland Consultants 2008c: Site information- natural areas in Dunedin City. Site 49, Peggys Hill N side. Wildland Consultants Contract Report No. 2059f, prepared for the Dunedin City Council.
- Wildland Consultants 2008d: Site information- natural areas in Dunedin City. Site 46, Head of Stewarts Creek. Wildland Consultants Contract Report No. 2059h, prepared for the Dunedin City Council.
- Wildland Consultants 2008e: Site information- natural areas in Dunedin City. Site 45, Stewarts Creek. Wildland Consultants Contract Report No. 2059j, prepared for the Dunedin City Council.

Appendix 9: Hereweka/Harbour Cone Property Management Plan Implementation Plan

The purpose of this Implementation Plan is to provide an order of priority to the implementation of management policies detailed in the Hereweka/Harbour Cone Management Plan. It is recommended that these priorities are implemented over a period of three years, from 2011-2014. At the end of this timeframe, priorities should be reviewed and a new Implementation Plan developed.

The whole-of-property Management Plan for the Hereweka/Harbour Cone property provides a policy framework that serves to strategically integrate the multiple objectives that the Dunedin community has for this property. It is a document for all stakeholders involved in the use of the property, including those charged with managing the property and other local stakeholders implementing conservation, heritage or cultural projects.

The Implementation Plan is informed by those objectives and policies of the Hereweka/Harbour Cone Management Plan that relate to each of the core values of the Hereweka/Harbour Cone property. These values are summarised as:

- The history, cultural significance and connection for manawhenua.
- The intactness of the archaeological landscape.
- The outstanding landscape and the significant landforms.
- The areas of significant conservation value.
- The recreational opportunities and the ease of access to open space for Dunedin residents.
- The potential of the property as a place for community learning and as an exemplar of sustainable land management practice.

Given the integrated nature of the Management Plan's objectives and policies, this Implementation Plan should not be considered in isolation but should be referenced back to the context of the Management Plan whenever possible. The Implementation Plan uses the objectives and policies of the Management Plan to focus the Management Body's time and resources on tasks that are considered to be high priority.

Given the relative short time frame that has passed since the Council purchased the Hereweka/Harbour Cone property and because this is the first Implementation Plan (and Management Plan) that have been produced for the Hereweka/Harbour Cone property, a number of the higher priority tasks that are described in this document are focussed on:

- Legal protection of the property.
- Establishing the most effective governance and management structure, thereby enabling sound management for the future.
- Further understanding the heritage and cultural values of the property and prioritising the protection of sites as a result of this increased understanding.
- Understanding ecological enhancement priorities and implementing works that protect existing values.
- Developing signage, interpretation and route markers to enable a safe and informative visitor experience.

Who Implements the Plan?

The priorities have been broken into a simplified order of key tasks that relate to achieving specific Management Plan policies and objectives. The Implementation Plan Table (Appendix 1) makes reference to task responsibilities and potential partnerships for

implementation of these specific tasks. However, as the management and governance structure has not been finalised, it is possible that these responsibilities may change over time and do not preclude involvement of other stakeholders. Reference has been made to the use of consultants when it is considered that this external expert input is needed.

Timing

The tasks listed in the Implementation Plan Table have been prioritised within timeframes. These timeframes are as follows:

- Priority 1: Implemented during July 2011 – end June 2012.
- Priority 2: Implemented during July 2012 – end June 2013.
- Priority 3: Implemented during July 2013 – end June 2014.

These timeframes are indicative only and are very dependent on other Council processes, such as the revision and subsequent adoption of the Annual Plan. As such, it is expected that there will be some fluidity as to when these tasks will be implemented. The ability for some tasks to be implemented by Council staff, rather than external contractors, may also increase the ability to implement some tasks more quickly than others.

Legally protecting the values of the property and ensuring public access in perpetuity is one of the highest priority tasks to be implemented. Sitting alongside this is the need to establish the most effective form of governance and management of the property.

Other tasks that have been prioritised centre around the protection of existing values. An archaeological assessment, which includes the development of a resource inventory of sites and landscapes of significance to manawhenua, has been highly prioritised. This assessment will determine priorities for the management of heritage sites and will also directly inform other management activities such

as visitor access, vegetation management and farm management on these heritage sites. A cultural opportunities mapping exercise will follow the completion of the archaeological assessment. The objectives for this project and the methodology for completing the work need to be planned in conjunction with Te Rūnanga o Otākou.

Slowing the erosion across parts of the property is a priority from the perspective of managing risk. Sensitive design and planning is essential to ensure that this is completed to a high standard. The actual revegetation project is considered to be a relatively low cost operation.

Other low-cost priorities include trialling alternative methods of facilitating the natural regeneration of indigenous vegetation. With guidance provided, such exercises can be easily implemented by knowledgeable members of the public and serve to inform other restoration projects that are proposed for the future.

Developing site-specific management plans for the restoration of existing areas of indigenous vegetation has also been prioritised. Most of these patches of indigenous vegetation are in a substandard state and need active management to ensure their ongoing maintenance of health and ecological functioning. Understanding the level of management that each patch of vegetation needs is important, directly informing the ability of the Management Body to plan and budget for the physical restoration works. Public funding is available for protection and enhancement of these biodiversity values and should be accessed immediately after the planning is completed.

To facilitate public use enjoyment of the property and to increase visitors' understanding of the property's values, some visitor infrastructure is necessary. Site-specific improvement of the marked tracks will need to occur in a number of places before enabling use by higher impact horses and mountain bikes. In addition, some new walking

tracks need to be marked to ensure ease of navigation.

A signage and interpretation plan will ensure the future location and design of interpretation panels and access signs are sensitive to the values of the property, whilst informing visitors of both the property's values and safe track routes that are available for recreation.

Hereweka/Harbour Cone Operational Implementation Plan Table

Priority 1: Implemented during July 2011 – end June 2012³

Priority 2: Implemented during July 2012 – end June 2013

Priority 3: Implemented during July 2013 – end June 2014

Objective	Relevant Policy	Key tasks Order of tasks	Task Priority Ranking	Stakeholders (and possible involvement)	Resources Required	Indicators of progress	Comments
Section 5.0 Objective 2 To ensure the management structure and governance model protects the property's values in perpetuity.	Section 5.0 Policy 3 To establish a Management Board with a Memorandum of Understanding with the Dunedin City Council, or an alternative governance option.	- Assess costs and benefits of various governance and management structures. - Decide on the most appropriate governance model for the property. - Implement structure.	Priority 1	- Harbour Cone Steering Group. - The Dunedin City Council.	Council Staff time.	- Agreement is reached about the most effective form of management structure and governance model, within eight months of the adoption of the Management Plan. - Official management and governance agreements are established and signed off within 15 months of adoption of the Management Plan.	
Section 5.0, Objective 3 To secure the legal protection of the Hereweka/Harbour Cone property, to protect values and ensure public use in perpetuity.	Section 5.0, Policy 1 To secure the most appropriate form of legal protection of the property (or parts thereof) as a community asset in perpetuity.	- Assess costs and benefits of the available legal protection mechanisms available. - Decide whether the property will be gazetted as a Reserve. - Develop policy to enable the legal protection of the property's values. - Implement the policy.	Priority 1	- Harbour Cone Steering Group. - Council Management Group.	Council Staff time.	- Production of Council resolution that directs uptake of the favoured legal protection mechanism(s) within 12 months of the adoption of this Management Plan. - Agreed legal protection mechanisms are adopted across the property within 24 months of the adoption of this Management Plan.	

³ Indicative timeframes only

Objective	Relevant Policy	Key tasks Order of tasks	Task Priority Ranking	Stakeholders (and possible involvement)	Resources Required	Indicators of progress	Comments
Section 6.3.2 Objective 1 To prevent further deterioration of archaeological sites and structures.	Section 6.3.2 Policy 1 Undertake an intensive archaeological assessment of the whole property that includes establishing priorities to develop Conservation and Management Plans.	- Assess options for funding the archaeological assessment. - Engage archaeological consultants and undertake the archaeological assessment. - Establish priorities to develop Conservation and Management plans.	Priority 1	- Historic Places Trust. - Council heritage planning staff. - Council parks staff.	Consultant archaeologist (indicative cost \$6,000).	- Funding is secured and the Management Body commits to undertaking the archaeological assessment within 12 months of adoption of the Management Plan. - Completion of archaeological assessment and provision of information within 18 months of adoption of Management Plan. - Understand priorities for the development of Conservation Management Plans within 18 months of adoption of Management Plan.	Refer to Heritage sites Map within the Hereweka/ Harbour Cone Management Plan.
Section 6.3.2 Objective 2 To manage archaeological sites and heritage structures according to best practice.	Section 6.3.2 Policy 2 Implement priorities to prepare Conservation and Management Plans.	- Allocate funding to this task, determining the number of Conservation and Management Plans that can be produced annually. - Begin development of Conservation and Management Plans on highest priority sites.	Priority 2	- Historic Places Trust. - Council heritage planning staff.	Consultant archaeologist (indicative average price \$3,000 per site).	- Funding is secured and the Management Body commits to developing Conservation Management Plans for the four highest priority sites within 12 months of the completion of the intensive archaeological assessment. - Conservation Management Plans are developed for the four highest priority sites within 18 months of the completion of the intensive	Refer to Heritage sites Map within the Hereweka/ Harbour Cone Management Plan.

Objective	Relevant Policy	Key tasks Order of tasks	Task Priority Ranking	Stakeholders (and possible involvement)	Resources Required	Indicators of progress	Comments
						archaeological assessment.	
Section 6.1.2 Objective 1 To protect and enhance the values of the property by minimising the risk of flooding, land instability and erosion.	Section 6.1.2 Policy 1 Develop and implement a revegetation plan for the establishment of appropriate tree species on slopes and gully systems that are eroding or show indication of high potential for erosion.	- Identify sites where planting is necessary. - Identify appropriate species and management regime. - Establish plantings. - Maintain plantings.	Priority 2 Priority 3	- Hereweka/Harbour Cone Management Body. - Farm Forestry Association or other interested community group.	- Revegetation plan (indicative \$2,000). - Tree stocks (indicative \$10,000). - Labour (voluntary).	- Development of a costed revegetation plan within 18 months of the adoption of this Management Plan. - Implementation of revegetation plan - successful establishment of tree-stocks across erosion prone slopes within 24 months of the adoption of this Management Plan. - Annual monitoring ensuring ongoing health of tree-stocks.	Refer to Land Use Actions and Management Map, within the Hereweka/Harbour Cone Management Plan, for indicative sites requiring prioritised revegetation for erosion control.
Section 6.2.3 Objective 5 To facilitate natural indigenous forest regeneration where this is occurring.	Section 6.2.3 Policy 4 Undertake experimental trials of different restoration techniques, so as to determine the best and most cost-effective indigenous restoration techniques for particular landforms on the property.	- Restoration planting of browse-resistant species among sprayed gorse. Include trialling of direct seeding. - Monitor success of alternative different restoration techniques.	Priority 1	- Save The Otago Peninsula Inc. - Otago Peninsula Biodiversity Group. - Landcare Research, University, Schools, other education institutions.	- Establish protocols and structure of trials (\$1,000). - Monitoring of trials. Photo sample points.	- Development of trial protocols and objectives within 12 months of the adoption of this Management Plan. - Begin trials within 18 months of the adoption of this Management Plan. - Ongoing monitoring and database management.	Refer to Land Use Actions and Management Map, within the Hereweka/Harbour Cone Management Plan, for indicative sites requiring prioritised management.
Section 6.2.3 Objective 1 To progressively restore indigenous vegetation on the Hereweka/Harbour Cone property, integrated with	Section 6.2.3 Policy 3 Maintain and protect the habitat restoration projects that have been established in advance of the	- Maintain the 2009-2011 Peggys Hill plantings for three years after planting. - Control any broom and	Priority 1	- Council parks staff. - Partnerships with voluntary groups.			

[illegible]

Objective	Relevant Policy	Key tasks Order of tasks	Task Priority Ranking	Stakeholders (and possible involvement)	Resources Required	Indicators of progress	Comments
	potentially adverse activities.				\$25,000 per site. Range \$7,000 - \$40,000 per site). • Ongoing maintenance of sites (indicative \$10,000/annum for first five years).	programme of fund-raising, remnant protection and restoration, protecting and restoring one site every second year. • Beginning within 24 months of adoption of this Management Plan.	
Section 6.3.1 Objective 3 To ensure any enhancement of Hereweka (mauka) and the Hereweka/Harbour Cone property is consistent with the cultural position of manawhanua and recognises this area as part of a wider cultural landscape.	Section 6.3.1 Policy 3 Undertake a cultural opportunities mapping exercise with Te Rūnanga o Otākou.	• Clarify objectives for completing the cultural opportunities mapping exercise. • Engage Kāi Tahu Ki Otago, Te Rūnanga o Otākou, or an agreed consultant, to implement the mapping exercise.		• Te Rūnanga o Otākou. • Kāi Tahu Ki Otago (KTKO). • Hereweka/Harbour Cone Management Body.	• KTKO or agreed consultant (indicative \$6,000).	• Agreement with Te Rūnanga o Otakou as to objectives, protocol and strategy for implementing the task, within 24 months of the adoption of this Management Plan. • Complete the Cultural Opportunities Mapping Exercise within 36 months of the adoption of this Management Plan.	
Section 6.4.5 Objective 1 Interpretative material is provided to increase understanding of the property's values and promote an ethic of community stewardship.	Section 6.4.5 Policy 1 To develop and implement a Signage and Interpretation Plan that promotes and protects the property's values.	• Develop a Signage and Implementation Plan. • Construct and install interpretation and signage in a prioritised method.		• Interpretation specialist. • Archaeological consultant. • Te Rūnanga o Otākou. • Council parks staff.	• Interpretation specialist – development of Plan and design for interpretation (estimated \$10,000). • Contractor – installation (estimated \$10,000). • Production of interpretation signs	• Contract a specialist expert in interpretation and signage to develop a Signage and Interpretation Plan, and to develop the interpretation design for the property, within 24 months of adopting this Management Plan. • Begin production and installation of the highest priority signs and interpretation panels within 36 months of adoption of	

Objective	Relevant Policy	Key tasks Order of tasks	Task Priority Ranking	Stakeholders (and possible involvement)	Resources Required	Indicators of progress	Comments
					(estimated \$60,000).	this Management Plan.	
Section 6.4.4 Objective 1	Section 6.4.4 Policy 8						
To encourage public access onto and through the property where appropriate.	Where appropriate, track links will be developed to create circuits within the property and provide access to neighbouring properties.	• Create track links and circuits onto and throughout property. • Confirm track locations. • Establish priority of track developments. • Secure legal agreements with relevant neighbours where access is desired. • Confirm contractors for implementation. • Implement developments over time.		• Local community (local and Dunedin) walking/ track groups. • Mountain Bike Otago. • Local pony club or other Dunedin equestrian groups. • Council parks staff.	• Council recreation operational staff – planning. • Contractor and/or local groups. • Equipment to undertake drainage and construct boardwalks (estimated \$10,000).	• Secure legal agreements with applicable neighbouring landowners, if access easements are required, within 24 months of the adoption of this Management Plan. • Tracks established and track markers and necessary signage in place within 24 months of the adoption of this Management Plan. • Any board walks completed within 48 months of the adoption of this Management Plan.	Refer to Recreation – Proposed Routes and Access Map for indicative routes.