Castlecliff Coastal Reserve Management Plan 2018

He Mahere Whakahaere Mō Te Taiāpure o Te Kaihau o Kupe





Whanganui District Council Reserve Management Plan



Contact Department for enquiries:

Planning Department

Date approved:

13 December 2018

Date by which a review should be carried out:

Plan should be kept up-to-date and a full review carried out by 2028.





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Part 1: Introduction

Purpose of the Reserve Management Plan

Preparation of a Management Plan is required for the Castlecliff Domain Recreation Reserve under Section 41 of the Reserves Act 1977

The principal purpose of the Domain Recreation Reserve area is for recreation. The Reserve Management Plan (Plan) acknowledges that the natural environment of the coastal margin requires careful management to ensure it is protected and sustained, to ensure it can be enjoyed by future generations.

The Plan provides a strategic framework for the management by Council. It contains short term actions and longer term objectives to achieve the gazetted purpose for the recreation reserve to:

"Provide for and ensure the use, enjoyment, maintenance, protection and preservation, as the case may require, and, the development, as appropriate, of the reserve for the purposes for which it is classified".

The framework created by this Plan will enable future decisions to be made in a transparent, efficient and coordinated manner.

Castlecliff Coastal Reserve

While a Reserve Management Plan is only required to be created for reserves under the Reserves Act 1977, for the purposes of this Plan other adjacent pieces of land will be included. This entire area is referred to as the Castlecliff Coastal Reserve. Refer to the map on page 7 for the exact areas covered by the Plan.

The beach below MHWM (Mean High Water Mark) does not form part of the Reserve as it is not within Council's jurisdiction. Council has no control over activities that take place in this area of the coast. It does however form an important part of the wider coastal environment and it interrelates directly with the Reserve.

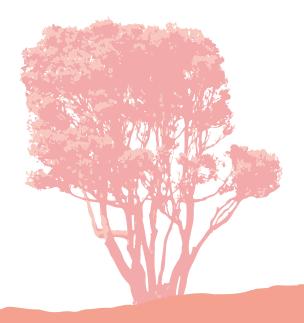
The beach area is perceived by the community as being inseparable from the dune area and therefore the objectives, policies and management proposals in this Plan will cover the foreshore areas of the coastal environment where appropriate.

Location and Description of Reserve

The Castlecliff Coastal Reserve is located at the western-most edge of the Whanganui Urban Area, at the Tasman Sea. The areas extends 3.1 kilometres northwards from the mouth of the Whanganui River and comprises a total area of approximately 38 hectares. The area consists mostly of dune land and wetland area located between Mean High Water Mark (MHWM) and Road Reserve.

The Castlecliff Coastal Reserve is primarily land which has been formed over the past 100 years as coastal processes adjusted to port developments. Mole structures were constructed on the North and South heads in 1877 to aid navigation at the river entrance by improving river depth and channel stability. The moles were later extended in 1911. The structures have resulted in accretion of sand as it becomes trapped by a dominant net north to south littoral drift. The greatest change occurred adjacent to the North Mole where the coastline moved approximately 600 metres seaward between 1880 and 1993. The rate of progradation (the growth of the land seaward) decreases in a northerly direction.

The Castlecliff Domain Recreation Reserve (red hatched area on map on page 7) was classified as a Reserve in 1918 when an area of 12 acres (4.9 hectares) of beach and dune land was reserved for the purposes of a "Public Recreation Ground". A further 50 acres (20.2 hectares) of accreted land was added to the Reserve in 1957.



Natural Environment

While the landforms of the Castlecliff Coastal Reserve have been formed over the last 100 years, the sedimentary rocks into which the sea cliff has been cut are hundreds of thousands of years old. At a height of 30 to 45 metres, the cliffs, situated between Castlecliff Settlement and Nukumaru form a very dominant feature of the coastline. The cliffs are south facing, therefore remaining damp in some places for much of the year and are exposed to weathering by salt spray. The rock is relatively young and easily eroded by wave and wind action.

Since the erection of the North and South moles, the beach has been prograding seaward.

Sand is the most significant deposition material in the Reserve, sourced mainly from the erosion of the cliffs to the north-west of the Reserve. It is transported by wave action to reach the foreshore, and via this wave action silt and driftwood also reach the coast.

The natural dune character of the area has also been altered by the erection of structures and other activities. In the Rangiora Street vicinity the buildings and carparks have altered the rolling dune character and annual beach grooming has prevented fore dune development in this location.

Format of the Plan

Part 1 of the Plan provides an introduction to the Castlecliff Coastal Reserve.

Part 2 is divided into five sections. Each section contains Objectives and Policies relevant to that topic. The five main sections are:

- Historical and Cultural Values
- Reserve Use
- Buildings, Structures and Facilities
- Natural Values
- · Operational Management

Part 3 provides an Action Plan for the Reserve. It lists actions, identifies who is responsible and gives an anticipated timeframe for completion.

Part 4 includes the appendices and references.

The planning and legislative context is provided in the Appendix 1.

Appendix 2 contains the Castlecliff Reserve Management Plan Map which indicates current facilities within the Reserve

Castlecliff Rejuvenation Project

The Castlecliff Rejuvenation Project is a collaborative project between Council and the Progress Castlecliff community group. It began in 2013 with the aim of partnering with the community to develop and implement a plan to rejuvenate the suburb of Castlecliff and environs.

Castlecliff has a long history as a proactive community. Progress Castlecliff has been a driving force for the Castlecliff Rejuvenation Project. Council will continue to foster this relationship through open engagement and providing support to Progress Castlecliff for projects that benefit the wider community.

While the Castlecliff Coastal Reserve is only one component of the Castlecliff Rejuvenation project, it is a destination Reserve that is important to Whanganui as a whole. Because of this, its rejuvenation is considered a Whanganui wide project.

Consultation

A public notice expressing Council's intent to review the management plan was published in the Midweek newspaper on 7 September 2016.

Council staff attended multiple public meetings held at Castlecliff School by Progress Castlecliff as a part of the wider Castlecliff Rejuvenation project. The Castlecliff community is well engaged and their feedback has informed the preparation of this Plan.

In addition to public meetings consultation flyers were delivered to the Castlecliff community requesting feedback and comments. Specifically what they liked about the Reserve, any issues or concerns they had and any ideas, wants or needs for the Reserve going forward.

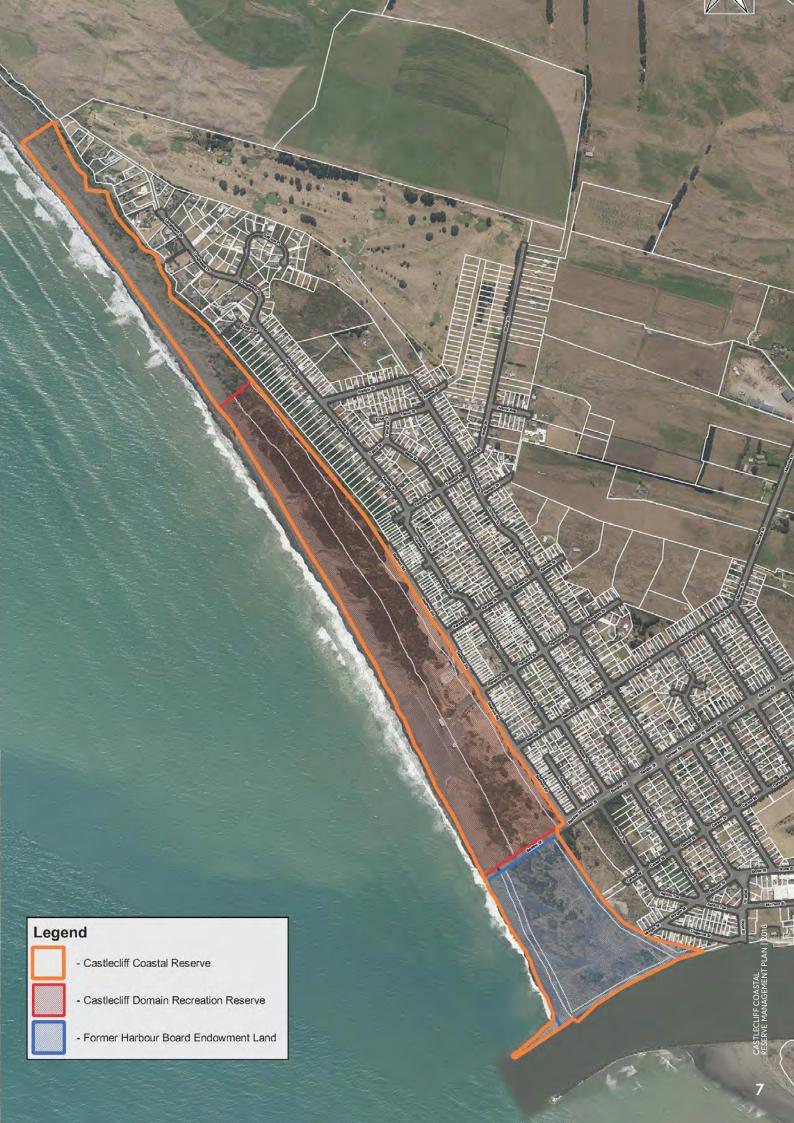
An online survey was also promoted through the Council's webpage and social media platforms between 4 November 2016 and 31 January 2017. Council received 91 responses, many of which echoed the Castlecliff community's feedback.

Council also attended the Whanganui Home Show on the 20 and 21 August 2016 to discuss the Castlecliff Coastal Reserve area.

Legal Description Table

Land	Castlecliff Domain Recreation Reserve	Harbour Board Endowment Land	Land Northwest of Gazetted Reserve	North Mole
Gazette Status	Reserves Act Gazetted for Recreation Purpose GN 1981 pg 1520	n/a	n/a	n/a
Legal Description	Section 315 Right Bank Wanganui river Section 316 Right Bank Wanganui River	Section 324 Right Bank Wanganui River	No legal description available	No legal description available
Owner	Whanganui District Council	Whanganui District Council	n/a	The land is owned by the Crown. Activity functions are owned by WDC.
Total Area (hectares)	25.0905	13.0046	n/a	n/a





Part Two: Objectives and Policies

Historical, Social, and Cultural Values

Kaitiakitanga

The Reserve has been identified by hapū with mana whenua, and claimant groups, as having cultural and spiritual significance. The exercise of kaitiakitanga responsibilities include the protection of wāhi tapu, mahinga kai, fauna and flora related to rongoa Māori and fibre resources – in particular the taonga pīngao. There is evidence that pīngao resources have declined significantly since 1994[1].

OBJECTIVE

 Acknowledge the mana whenua of hapū whanui related to the Reserve and support the access to resources to exercise kaitiakitanga.

Policies

- 1.1 Facilitate a collaborative approach to the management and development of the Reserve.
- 1.2 Ensure parks officers and hapū are supported to share knowledge and expertise relating to native plantings, harvesting and maintenance.
- 1.3 Work with mana whenua to ensure discoveries of koiwi are managed in a culturally appropriate way.

Culture and Heritage

Castlecliff Coastal Reserve is rich in culture and heritage. Few physical remnants of previous occupation remain as historic heritage features in the Reserve. Examples include the Karaka Street Beacon, the WWII Pill Boxes, SS Te Anau, Chequer Board and Pilot House. It is important these few remaining features are celebrated and maintained so they are available to inform future generations about the local history.

OBJECTIVE

2. Ensure that sites of historic or cultural significance within the Reserve are recorded and protected.

Policies

- 2.1 Promote greater community awareness about the historic, cultural and scenic significance of the Reserve.
- 2.2 Ensure an archaeological survey is carried out before any major earthworks are undertaken and that any archaeological sites uncovered in future are identified and protected.

Community Groups and Partnerships

The beach and reserve area is a part of the local community's identity. It is essential the management of the reserve is done in partnership with the community. This creates a sense of ownership and pride with flow on effects that benefit both the Reserve, the wider Castlecliff and Whanganui community.

The Castlecliff community is highly proactive and engaged with issues and opportunities in the Reserve. Whanganui District Council and Progress Castlecliff have been working alongside each other on the Castlecliff Rejuvenation project. This project has already seen great outcomes, it is important Council continues to foster this relationship.

OBJECTIVE

3. To continue to support and enhance an ongoing collaborative relationship with the Castlecliff community, in relation to the development and implementation of this Reserve Management Plan.

- 3.1 Engage with the Castlecliff community, including Progress Castlecliff and Castlecliff Coast Care, before making fundamental decisions that will affect the use, enjoyment or management of the Reserve.
- 3.2 Continue to engage with local community groups on the future development of the Reserve.

^[1] Castlecliff Coastal Reserve Management Plan 2005 p.22

Reserve Use

A wide range of passive recreation activities occur within the Reserve. Other activities include use of motor vehicles, fishing, barbeque facilities, horse riding and cycling.

The Surf Life Saving Club, the Duncan Pavilion, and the Rangiora Street toilet block are the only buildings on the Reserve. They all enhance the safety and enjoyment for users of the Reserve and the wider community.

The Council focus for the future is to ensure existing facilities are maintained at a high standard to meet the needs of recreation users within the Reserve.

OBJECTIVE

4. Promote a range of recreational opportunities within the Reserve, whilst protecting cultural, landscape, and ecological values.

Policy

4.1 Maintain the amenity values of the Reserve and its facilities and where practical enhance facilities and amenity values to encourage greater recreational use of the Reserve by the wider community.

Pedestrian and Vehicle Access

Many formal and informal walking tracks are established over the sand dunes and throughout the wider Reserve. Walking tracks provide access to the beach and recreation opportunities in the Reserve. Formal walking tracks should be actively encouraged and use of informal tracks discouraged to prevent further damage to the dunes.

Conflicts also arise between pedestrian and vehicle activities in the Reserve. Vehicles such as motor bikes cause damage to the natural environment, especially the dune system, and cause safety concerns for pedestrians and other informal reserve users.

OBJECTIVE

 Minimise adverse effects on the natural environment and potential conflicts between Reserve users.

Policies

- 5.1 Promote awareness of and compliance with any Council Bylaw concerning speed limits and vehicle access.
- 5.2 Prevent vehicle access to and through the dunes by the use of physical barriers and enforceable regulatory controls e.g. bylaws.
- 5.3 Enhance pedestrian access to the Reserve and walkways through the Reserve in a manner that avoids potential conflicts with other Reserve users and activities.
- 5.4 Define formal access points to the beach for vehicle users.
- 5.5 Define formal walkways within the Reserve.

Dogs

Dogs can pose a direct threat to people, animals and birds. Dogs should be under direct and continuous control at all times in the Reserve, and are prohibited from the beach area in front of the Rangiora Street carpark from the 1st of November to the 1st of April. Dogs are also prohibited in the children's playground all year round.

OBJECTIVE

 Ensure dogs are kept under control at all times to avoid conflict with other Reserve users.

Policy

6.1 Promote awareness of and compliance with the Dog Control Bylaw 2015 in the Reserve.



Buildings, Structures and Facilities



Buildings and Facilities

There are minimal buildings in the Reserve, the two notable being the Duncan Pavilion and the Whanganui Surf Life Saving Club. The Duncan Pavilion is owned by Whanganui District Council and leased to Progress Castlecliff. The Whanganui Surf Lifesaving Club is owned by the Surf Lifesaving Club Trust.

Other facilities in the Reserve include a toilet block, children's play area with BBQ facilities and a drinking fountain, skate park and basketball courts located at the Rangiora Street entrance of the Reserve. These facilities provide informal recreational attractions which encourage wider community use and enjoyment of the Reserve. It is important they are maintained and upgraded where appropriate.

OBJECTIVE

7. Ensure that Reserve facilities are maintained and upgraded where necessary, to enable the community to continue to use and enjoy such facilities.

Policies

- 7.1 Ensure buildings and facilities are maintained to an acceptable standard.
- 7.2 Allow further development and restoration of the children's playground based on further demand and need.
- 7.3 Investigate the potential use of locally made products for facilities such as signs and fences in the Reserve.
- 7.4 Ensure future buildings are sited so as to blend in with the natural environment and ensure building style, colour, form, and materials integrate with the environment.

North Mole

The City to North Mole Shared Pathway is currently under development. This 2.5-3m wide sealed path/boardwalk connects the Whanganui City Bridge to the North Mole.

It celebrates our river culture and heritage, creating a magnificent riverside trail that connects the town centre to the Tasman Sea and an iconic end point for the Mountain to Sea national cycle trail.

Shared pathways enable people to get around on foot, by bicycle, scooter, skateboard, and with mobility aids.

Other facilities located at the North Mole are the fishing platform and the toilet block.

Both the North and South Moles will be upgraded as part of the repair of the lower river infrastructure and revitalisation of the port area in Whanganui.

OBJECTIVE

 Enhance the amenity and landscape of the North Mole area as an iconic destination to end the Mountains to Sea cycle trail and attract users to the City to the North Mole Shared Pathway.

- 8.1 Promote the North Mole landscape area as an iconic destination to end the Mountain to Sea national cycle trail and attract users to the shared pathway.
- 8.2 Investigate options to design and erect a significant art piece to mark the end of the Mountain to Sea cycle way and reference the cultural and historical significance of the river mouth area.

Parking

The Reserve and beach area currently has sufficient car parking. The majority of car parking area is located where the fore dune system would naturally develop. While provision of car parking is important, this should be balanced against the benefits of enabling the natural sand dune system to re-establish. The proposal currently being investigated to re-establish a fore dune seaward of the Duncan Pavilion and Surf Lifesaving club would mean the loss of the lower carparks.

OBJECTIVE

 Ensure adequate parking for visitors to the Reserve in locations appropriate to enhancing the natural environment while safeguarding the natural beach system.

Policies

- 9.1 Maintain and enhance parking areas provided that this avoids adverse effects on the natural beach system, and the amenity of the surrounding area.
- 9.2 Consider other options for overflow parking areas, ensuring the natural beach system is safeguarded as a priority.

Signage

The Reserve lacks clear signage and this effects how visitors experience and find their way around the Reserve.

The introduction of narrative and graphic signage at key locations would also provide opportunities to educate and inform visitors of the Reserve's historical, archaeological and cultural significance.

Consideration needs to be given to how new signage might impact on the open space nature of the Reserve, and the need to minimise ground disturbance of this archaeological site. The opportunity also exists to consider new technology when designing signage, for example, the use of QR codes for people to scan from their mobile devices and access further information about a building or feature.



OBJECTIVE

 Clear signage is established and maintained throughout the Reserve that assists in user orientation wayfinding, reduces conflict between Reserve users, and enhances educational opportunities.

- 10.1 Prioritise provision of way-finding signage in the Reserve to assist informal recreation users to identify access routes and restrictions on activities within the Reserve.
- 10.2 Collaborate with mana whenua and community groups to develop informative signage about the natural landscape, culture and history of the Reserve.
- 10.3 Provide clear signage to identify the formal pedestrian routes to the beach and through the dunes.
- 10.4 Provide clear signage to identify the formal vehicle access points and routes onto the beach to minimise potential damage to the dune system and reduces the potential for vehicles conflicting with other reserve users.

Natural Values

Dune Management

Castlecliff beach is known for its vast sand dunes and as a rugged west coast beach. In 1877, in an attempt to improve river depths and stability at the entrance to the Whanganui River for shipping, North and South Moles were constructed. The training walls (jetties) were filled with shell rock and concrete to trap and deflect littoral drift of sand, minimising the formation of a sand bar at the mouth. The result was a rapid build-up of the foreshore area north of the river mouth.

The Reserve's dune field comprises of rear, mid and fore dunes, all of which have distinctive flora and fauna. The foredunes, which are naturally advancing seaward, have extensive spinifex plantings which help trap sand with their running roots. There are very few areas of mid dunes, and they are susceptible to blow outs because of their close proximity to the sea and vehicle damage. The rear dunes have varied vegetation, including marram grass and wattle.

Exposure to strong coastal winds and the fineness of vegetation cover means the foredunes are constantly shifting. Where the ridge of a fore dune is broken, wind will begin to funnel through to the hind dune. This eventually forms a blowout and large quantities of sand are shifted inland. Dune instability continues to be of concern. It creates a sand nuisance for the local residential neighbourhood, particularly on adjacent roads. Over time the dunes are becoming steeper and less stable.

Unrestricted access for vehicles and walkers has disrupted and diminished vegetation growth throughout the dune system. Well established vegetation cover is a vital component to stabilise and manage the sand dunes. This needs to be done in conjunction with identification of appropriate access routes to manage the effects of the wide range of recreational activities that occur within the Reserve.

Sand is annually cleared from the lower car parks in front of the Surf Life Saving Club and Duncan Pavilion. Drift wood is also cleared from the upper parts of the beach directly adjacent to the lower carpark. This prevents the foredune from establishing in this area and improves accessibility and views to the sea. The impact this is having on the dune system as a whole and the appropriateness of this approach for the future is under review. Consideration is being given to ceasing this annual beach clearance process, to allow a fore-dune to re-establish seaward of the Duncan Pavilion and Surf Lifesaving Club Building. This could help prevent sand from encroaching landward, and assist to reinstate the natural dune system.

OBJECTIVE

11. To undertake sand stabilisation to help prevent further erosion, whilst providing for compatible recreational activities in the Reserve.

- 11.1 Manage and restrict pedestrian and vehicle access through the dunes in order to protect sand binding vegetation and dune stability.
- 11.2 Develop and implement an education strategy to raise awareness of the function and importance of the natural dune system.
- 11.3 Protect and re-establish the current foredunes where it has been affected by erosion (including blowouts).
- 11.4 Use native species such as spinifex when planting on the dunes to encourage stabilisation and replace introduced species with native ones when appropriate.

Karaka Wetlands

The Karaka Wetland is a large permanent wetland at Castlecliff Beach boarded by an access track and a drainage channel. It is composed of numerous residential sections and Crown land administered by both the Department of Conservation (DOC) and Whanganui District Council. The boundary of the Castlecliff Coastal Reserve coincides with the boundary of the Karaka Wetland.

The Karaka Wetland is an important asset in the Castlecliff Coastal area. While this area is largely managed through the Karaka Wetlands Enhancement Plan it is essential to be recognised within this Reserve Management Plan.

The Enhancement Plan sets out future management of the wetland including pest plant control, native plantings, ecological management and fish habitat enhancement

OBJECTIVE

12. Protect and enhance the ecological, recreational and cultural values of the Karaka Wetland.

Policies

- 12.1 Ensure that activities in the Reserve do not negatively impact management of the Karaka wetland.
- 12.2 Have regard to the Karaka Wetland Enhancement Plan when undertaking maintenance, development or other activities within the wetlands area.

Landscaping and Planting

The natural landscape of the Reserve is an attraction in itself. Araucaria heterophylla (Norfolk Pines) is a dominant features in the Domain area and along Seafront Road. A number of the Norfolk Pine trees have stunted, with thin needle growth and look to be struggling overall.

Broadly speaking, most trees are in reasonably good health and contribute significantly to the amenity of the area.

The community has signalled through consultation for this Plan, that use of native plant species throughout the Reserve is widely supported as a high priority.

OBJECTIVE

13. Protect and where practical, enhance the natural environment and interface between the beach front, sand dunes, Reserve area and urban development.

Policies

- 13.1 Recognise and protect ecological values of the Reserve by maintaining or planting appropriate vegetation.
- 13.2 Promote the use of local native coastal species in any re-vegetation and landscaping development work carried out within the Reserve.
- 13.3 To continue the programme of landscaping in the Reserve using appropriate coastal tolerant species.

Biodiversity

Biodiversity refers to the diversity of living things in a habitat or ecosystem - plants, animals, insects, fungi, and microorganisms. Increased biodiversity reflects a healthy and ecologically richer environment. Providing options for wildlife to travel and find new food sources and mates is important for biodiversity. Generally planting natives is often the best way to support a habitats natural wildlife. However, choosing location appropriate plants that suit the growing conditions (such as climate, soil type, sun exposure, water availability) is an important factor and just planting natives alone will not necessarily increase biodiversity.

OBJECTIVE

14. To encourage greater biodiversity in the Reserve.

- 14.1 To identify appropriate areas in the Reserve which could be the focus for increased biodiversity.
- 14.2 Encourage planting in these defined areas, and where possible source consider plants/trees from local seed.

Plant and Animal Pests

Pest plant management within the Castlecliff Reserve area is currently shared between Horizons Regional Council and Whanganui District Council. Whilst local authorities are responsible for the identification, monitoring and control of plant pest species highlighted in the Horizions Regional Council Regional Pest Management Plan 2017-2037, certain species will be kept under review by Horizons due to the practicality of treatment and identification of areas affected.

OBJECTIVE

15. To manage and control animal pests and plants identified in the Horizons Regional Council's Regional Pest Management Plan 2017-2037.

Policy

15.1 Monitor for pest plant species in the Reserve such as Boneseed and Evergreen buckthorn and notify Horizons Regional Council if found.



Administration and Management Leases, licences, permits and maintenance

Any person, organisation or company wishing to occupy any part of the Reserves requires a concession agreement between themselves and the Council. In undertaking its role in providing recreational opportunities to the community, Council provides leases, licences and permits of land and/or buildings to a wide range of groups undertaking a variety of activities on the Reserve.

Leases will be issued where a person or organisation requires the exclusive long-term use of a building or land on the Reserves, while a licence will be issued for the non-exclusive use of a building or land on the Reserves.

OBJECTIVE

16. To allow for the occupation of the Reserve for approved uses and facilities by the granting of a lease, licence or permit.

- 16.1 Manage the lease agreements to ensure the most effective use of the Reserve for the enjoyment of the whole community.
- 16.2 To allow use of the Reserve for special activities where compatible with its primary purpose.
- 16.3 The Reserve will be maintained to the levels of service identified in the Parks and Open Spaces Strategy 2007, or any subsequent strategy.



Part 3: Action Plan

		Obj.			
No	Action	Link to Objective	Year/s	Cost	Responsibility
Prior	rity Actions				
1	Pedestrian and vehicle Access Set a speed limit on the beach via a Bylaw.	5	2018/19	Staff Resources.	Policy and Governance Department and Infrastructure Department.
2	Pedestrian and Vehicle Access Install physical barriers in and around the dunes to prevent vehicle access and allow for pedestrian access only.	5	2018/19	Staff Resources.	Parks and Property Department.
3	Culture and Heritage Investigate the opportunity to install an informative interpretive panel to enhance the public's appreciation of the heritage sites within the Reserve.	2	Short- medium term.	Staff Resource. Consultation costs.	Parks and Property Department in liaison with the Local Community.
4	Community Groups and Partnerships Investigate options for Coastcare and community education by liaising with Horizions Regional Council to explore avenues of funding.	3	Medium term.	To be confirmed.	Horizons Regional Council in liaison with Whanganui District Council.
5	North Mole Investigate the opportunity to design and construct artwork to symbolise the mountains to the sea cycleway. Commission and install the artwork.	8	Short- medium term.	To be confirmed.	Infrastructure and Parks and Property Department in Liaison with Community Services Department.
6	Buildings and Facilities Erect double swings by the public toilets located near the playground.	7	2019	\$7,000.00	Parks and Property Department.
7	Buildings and Facilities Undertake a shade audit within the Reserve and ensure compliance with the Councils' Solar Protection Policy.	7	Short- medium term.	Staff Resources	Parks and Property Department.
8	Signage Progressively design and install of signage to record culture, heritage, and natural values, and stories of the Reserve at appropriately nominated points. Programme budget and required works.	10	Short- medium term.	Staff Resources Costs to be confirmed	Parks and Property Department.
9	Signage Progressively design and install Way-finding and informative signage at the entrances and key locations throughout the Reserve. Programme budget and required works.	10	Short- medium term.	Staff Resources Costs to be confirmed	Parks and Property Department.
10	Parking Reseal the middle carpark to ensure it continues to be suitable for use. Reseal the upper carpark to ensure it continues to be suitable for use.	9	2020 -2023	\$15,500 \$25,000	Parks and Property Department.
11	Buildings and Facilities Upgrade of the playground equipment. Programme budget and required works.	7	2022	Staff Resources \$150,000	Parks and Property Department.
12	Buildings and Facilities Upgrade the Rangiora Street toilet block to ensure it is fit for purpose.	7	2025	\$160,000.00	Parks and Property Department.

No	Action	Link to Objective	Year/s	Cost	Responsibility
13	Buildings and Facilities Replace the retaining wall alongside the Rangiora Street public toilets.	7	2025	\$10,000.00	Parks and Property Department.
14	Buildings and Facilities Refurbish the skate bowl located near the playground.	7	2025	\$50,000.00	Parks and Property Department.
15	Dune Stability Investigate options for dune restoration and management, including educational material.	11	Long term.	No budget allocated.	Parks and Property Department in Liaison with, Strategy, and Horizions Regional Council, Various Council Staff.
16	Parking Review supply and demand of car parking, and develop a plan for future provision – based on projected future demand patterns.	9	Long term.	To be confirmed.	Parks and Property Department.
Ong	oing				
17	Buildings and Facilities The provision of water fountains at regular intervals throughout the Reserve will be investigated as part of current and future upgrade projects.	7	Ongoing	To be confirmed.	Parks and Property Department.
18	Kaitiakitanga Engage with mana whenua on future plans for development within the Reserve.	1	Ongoing	Staff Resource	Parks and Property Department and Infrastructure in liaison with the Planning Department.
19	Plant and Animal Pests Regularly inspect the Reserve to eliminate significant pests such as Boneseed and Evergreen Buckthorn by appropriate methods.	15	Ongoing/ As pests are identified.	External and staff resources.	Horizions Regional Council in liaison with Whanganui District Council
20	Parking Continue maintenance and sand clearing of the car parking areas.	9	Ongoing	\$40,000.00	Parks and Property Department.
21	Cultural and Heritage Maintain the WW2 pillboxes regularly to ensure that they are safe. This involves ensuring they are structurally sound and safe for the public to be around.	2	Annual inspection	Staff resource + project specific costs	Parks and Property Department
22	Buildings and Facilities Continue to lease beacon land in Karaka Street. Note: While this facility is not within the Reserve, the continued leasing is deemed important in respect of this area.	7	Ongoing	\$15,000.00	This is an annual lease agreement between the Harbour Board and Whanganui District Council.
23	Reserve Use Monitor Reserve assets to ensure they are safe and well maintained.	4	Annually	Staff Resources	Parks and Property Department
24	Leases, licences and permits Review licences and leases	16	Annually	Staff resources	Parks and Property Department
25	Review and Monitoring Review this RMP's actions annually.	16	Annually	Staff Resources	Strategy and Policy in liaison with Parks and Property Department.

Part 4: Appendices Appendix 1

Strategic Context for this Reserve

National Context

New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement sets national guidance for the whole coast and parameters for development and use of the coastal environment. It guides Regional Policy Statements and Regional Plans (the One Plan) prepared by the Regional Councils throughout the country. The difference between these two is that the Policy Statement sets policy (excluding rules) and general principles for the whole region, and the Regional Plans implement the policy through rules and other methods.

Reserves Act 1977

The Management Plan regime under the Reserves Act deals with specific land and the development, use and protection of that land in a general way and on a day-to-day basis. The Management Plan aims to provide the framework for decisions and guide everyday development.

Regional Context

Manawatu-Whanganui One Plan

The Manawatu-Whanganui One Plan, the One Plan, combines the Regional Policy Statement, Regional Plan, Regional Coastal Plan, and the Land and Water Regional Plan.

Chapter 8 of the One Plan addresses the Coastal Marine Area, (CMA), and the wider coastal environment. The One Plan considers the coastal environment as wider than the CMA and comprises the CMA together with an area landward of MHWS, where coastal qualities or influences predominate.

The One Plan highlights the need for better integration between activities happening on land and those happening in the CMA, to ensure consistent and compatible management. Subdivision, land use intensification and the management of dunes are addressed through district plans and Chapter 4 of the One Plan.

Local Context

Reserves and Open Spaces Strategy

The Goal of the Reserves and Open Spaces Strategy (The Strategy) is:

"A well utilised, well positioned, safe and attractive parks and open space network that is best able to meet today's and expected community need."

Castlecliff Coastal Reserve is categorised as a Premier park within the Whanganui Reserves and Open Spaces Strategy. Premier parks are termed destination parks and are of special value and significance. They have high recognition and use within the community and are an attraction for out of town visitors. The Reserve is an especially popular attraction for surfers, swimmers and fishermen alike.

The Strategy encourages active promotion of premier parks, in particular, to both extend and capitalise on their iconic status. A desired outcome of The Strategy is; Council develops and maintains a city-wide network of open space routes linked to passive, active and premier parks, cycle ways, the Whanganui River and additional green space as appropriate.

Leading Edge Strategy

On 28 October 2014 the Council adopted a "leading edge" vision and purpose statement for the Whanganui District Council and its community.

Key elements identified in the Strategy relevant to Castlecliff Coastal Reserve is:

Community:

 Strengthen partnerships and ways of working collaboratively to weave our aspirations together - while respectfully acknowledging differences

Connectivity:

 Making our district more walk and cycle friendly – enhance urban cycle and pathway connections, provide more bicycle parking, and improve open space linkages

Creativity:

- Retain our historic and cultural heritage as a key point of difference.
- Facilitate the use of digital technologies and smart approaches to drive innovation and productivity.

Environment:

- Ensure our built environment reflects 21st century needs while protecting our distinctive heritage – manage our assets, facilities and infrastructure responsibly and sustainable on behalf of the community.
- Pursue integrated and rejuvenated urban design, place making and landscape approaches – Rejuvenate Castlecliff and our coastal environment. Develop and implement a coastal plan.
- Safeguard the health of the Awa and let its richness shape us as a place
- Generate a buzz through events.

Economy:

- Ensure our services and facilities reflect the diverse and changing needs of our community.
- Deliver sport and recreation facilities to meet the needs of our community in line with our Sport and Recreation Strategy

Whanganui District Plan

All land in the Reserve is zoned Reserves and Open Space in the District Plan. Objectives, Policies and Rules relating to reserves can found in Chapter 8 – Reserves and Open Spaces.

The Reserve and Open Spaces chapter aims to ensure quality reserve and open spaces are safe, accessible and pleasant to use. The chapter outlines policies that need to be taken into account when development is proposed. Including, but not limited to, implementation of Crime Prevention through Environmental Design Principles (CPTED) principles and retention of natural landscape and historic heritage features.

Other Council Strategy and Bylaws:

- Public Places, Parks and Reserves Bylaw 2016
- Parks and Open Spaces Strategy 2007 (and any subsequent strategy)
- Smoke free Bylaw 2017
- Alcohol Control Bylaw 2017
- Dog Control Bylaw 2015
- Traffic and Speed Limit Bylaw 2017

Historical Context

Māori History

Kupe, the renowned chieftain of Hawaiki is credited with discovering Aotearoa. To the early Māori the coast to the north of the mouth of the Whanganui River was known as Kai Hau O Kupe.

This section will be updated further when information is provided by mana whenua.

Early Māori Occupation

The importance of Castlecliff Reserve for access to traditional Māori fishing grounds and other resources continues today, as it has since long before European occupation of New Zealand.

A limited number of artefacts of archaeological significance have been discovered at Castlecliff. One, an adze found near Thatcher Street, has been dated between 500 and 1000 years old, and is of the early 'Moa Hunter' type. The significance of this in terms of very early settlements has yet to be established. This section will be updated further when information is provided by mana whenua.

European Settlement of the Area

Kirk (1989, p.33), in his book "Streets of Whanganui", states:

"The European name of Castlecliff first appeared in 1853. In that year a notice appeared in the Wellington newspaper advising mariners that the entrance to the Whanganui River could be picked up from the open sea by observing the castle like cliff to the north of the entrance to the river. Indeed a high cliff did exist there at one time, but over the years it has been eroded by the sea".

"In 1881 a meeting of residents of Whanganui was held to discuss a proposal that a railway should be constructed to Castlecliff. After discussion it was agreed to form a railway company. After the formation of the company in 1882 the township of Castlecliff was laid out. In January 1883 the lease of 98 sections was offered by auction. With the sale of these sections Castlecliff was established although it was 1885 before the first passenger trains ran between Whanganui and Castlecliff."

The Castlecliff Town Board was established in 1909. In 1911 it received a considerable boost when the following decision was made. In the 1911 Whanganui Harbour Board election the party favouring an overseas port at Castlecliff was elected over the opposition of several influential merchants who wanted the Town wharf developed. This decision resulted in the original wharf at Castlecliff being rebuilt along with further extensions of the moles and the construction of a wall to form a floating basin.

The Harbour Board, and the development of the Port at Castlecliff was very important in the development of the young township. By 1991 it had a population of 4044 people and 1391 occupied dwellings.

Development in the Reserve

The early 1900s was a time when many townspeople were either camping or building baches at Castlecliff, with many travelling to and from work throughout the summer months.

Interest in the beach environs grew during this period and in 1911 the Castlecliff Surf Bathers and Life Saving Club was formed. The club reformed as the Castlecliff Ladies Surf Life Saving Club, then became the Castlecliff Surf and Life Saving Club, and is now known as the Whanganui Surf Life Saving Club.

Historically a number of community initiated development proposals have been implemented with support of Council. Including the construction of the Duncan Pavilion, public toilets, car parking areas and the children's playground.

During the Second World War at least five emplacements (pill boxes) were built near the coast. Of these, two are located adjacent to the Whanganui Surf Life Saving Club building (now sand covered), two in the dune land of the Reserve, and some were located at the end of Morgan Street, however, it was destroyed by the Army in 1973. Initially these boxes were placed so a view of the sea and beach area was available, but natural processes at the coast have resulted in dune sand building up around them.

A planting programme involving the public was held during Conservation Week in 1988. Over 1000 trees were planted along the Reserve fronting Seafront Road.

Structures in the Reserve

The majority of buildings and facilities in the Reserve are owned and maintained by the District Council. The exception to this is the Whanganui Life Saving Club building.

Duncan Pavilion

The William McAlpine Duncan Pavilion, known as the Duncan Pavilion, is a distinctive two-storeyed 12 sided building at the southern end of the beachfront carpark off Rangiora Street.

The Pavilion was built in 1966. The building is owned by the Council however is leased to Progress Castlecliff (a community group).

Whanganui Surf Lifesaving Club Building:

The Whanganui Surf Lifesaving Club Building was completed in 1956, and is located in the lower Rangiora Street carpark. The building is described as modernistic, using the lean to or barn style for its overall form.

The building is owned by the Surf Lifesaving Club, who are also responsible for its maintenance and repair.

Children's Playground

The children's playground is situated between the back dunes, Seafront Road and Rangiora Street.



Public Toilets

The public toilets adjoin the children's playground in Rangiora Street and are owned and maintained by the Whanganui District Council. Under the Councils LTP, the toilets will be restored in 2025.



World War II Pill Boxes:

Three pillboxes dating from the Second World War are visible in the Reserve boundary today, and are important heritage features within the dune landscape. The pill boxes are solid concrete structures that were placed in a network along the beach to house machine guns in case of an attack from Japanese raiding ships. 23 pill boxes were completed by March 1943. In 1994, the home guard forces were wound down and the pill boxes, along with other beach defences, were abandoned.

The pill boxes at Castlecliff beach are either arrowhead shaped or round.

One round pill box is located in the dune adjacent to Morgan Street, while the other two are in the dunes close to the Whanganui Surf Lifesaving Building.

Karaka Street Beacon

This beacon is high on a cliff face and forms part of the navigational roadstead for the Port of Whanganui as an unlit beacon. The beacon is on land owned by the Harbour Endowment Trust, and is leased to the Whanganui District Council.

North Mole

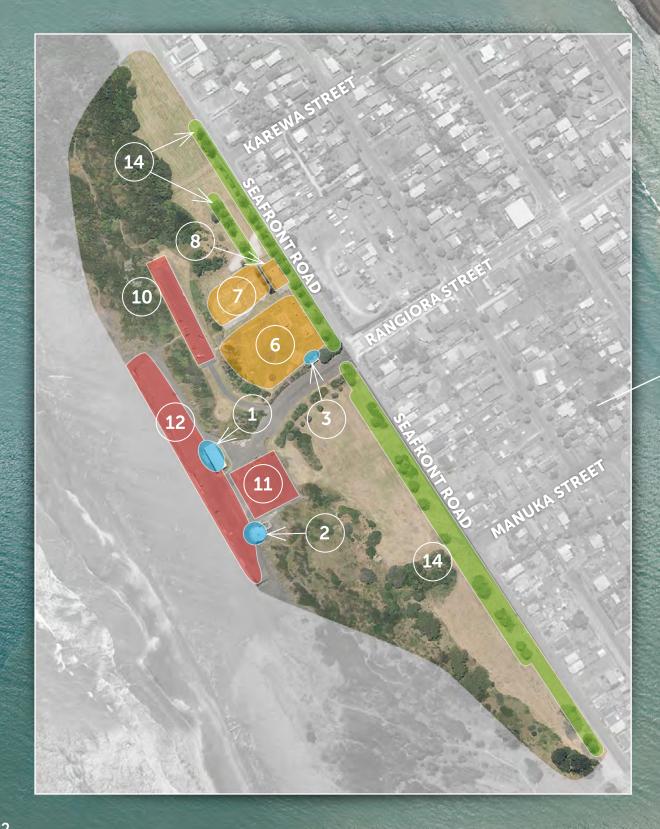
The North Mole adjoins the Reserve boundary near Morgan Street. Both the North and South Moles (adjacent the North on the opposite side of the river), were established in 1877 in an attempt to improve river depths and stability at the entrance to the Whanganui River. The training walls were filled with shell rock and concrete to trap and deflect littoral drift of sand. The result was a rapid build-up of the foreshore area north of the river mouth. Before the construction of the Moles, the coast had a sediment deficit which resulted in continual erosion of the cliffs and negative dune development.

The mole is used for a variety of activities from fishing to sightseeing and walking. The mole is a considerable recreational asset to the Whanganui community.

Appendix 2

Castlecliff Reserve Management Plan







Appendix 3

Whanganui Plant List 4

Vascular Plants of Castlecliff Beach Reserve, Whanganui.

Based on surveys by Whanganui Museum Botanical Group and associates, between 1981 and 2018. Compiled by Colin Ogle, ex-Department of Conservation, Whanganui.

The list excludes species present as planted specimens which are not naturalising, eg: Pohutukawa, Tasmanian ngaio, Norfolk pine, Cupressus macrocarpa, she-oak (Casuarina cunninghamiana), coastal tea-tree (Leptospermum laevigatum). Numerous "garden escapes" in WD (dunes west of the urban area) probably started as plantings in the 1980s or earlier by some person(s) with a particular passion for South African plants. Some have barely naturalised (e.g., Gladiolus carneus) but others have spread widely (e.g., Gazania rigens, Lampranthus glaucus, Freesia refracta).

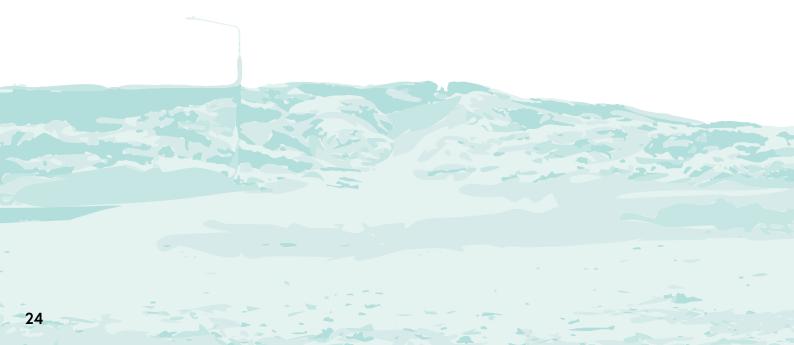
One patch extending becoming extensive, by layering from 2 planted bushes.

Habitats:

For the dune area in front of urban area (Castlecliff Recreation Reserve etc.)
FD = foredune; RD = rear dune; WW = WW2 pillbox waste area;
WS = western swamp; ES = eastern swamp (Bamber St).

For the dunes and cliffs west of urban area i.e. from west of walkway down from Longbeach Drive, WD = western dunes; CF = cliff-face; CR = cliff rubble (talus); SW = swamp & stream between base of cliffs and hind dune.

Last updated 30 Sep 2018, C C Ogle



		Dune area in front of urban area (Castlecliff Recreation Reserve etc.)												
Species	FD	RD	ww	ws	ES	WD	CF	CR	sw					
Trees and shrubs														
* Acacia longifolia (Sydney golden wattle)		✓												
* Acacia sophorae (sand wattle)		✓		✓		✓								
* Aloe ciliaris (climbing aloe)		✓												
** Anredera cordifolia (Madeira vine)		✓												
* Artemisia arborescens (hedge artemisia)		✓		✓										
* Artemisia verlotiorum (mugwort)				✓										
** Atriplex halimus (salt-bush)		✓												
Calystegia sepium subsp. roseata (pink bindweed)				✓										
* Calystegia silvatica (white bindweed)						✓								
Calystegia soldanella (sand convolvulus)	✓	✓				✓								
* Casuarina cunninghamiana (she-oak)		р												
* Chamaecytisus palmensis (tree lucerne)		р	р											
* Clematis vitalba (old man's beard)			✓											
* Coleonema pulchellum (breath of heaven)			✓											
Coprosma acerosa (sand coprosma)	✓	✓				✓								
Coprosma repens (taupata)		✓	✓	✓	✓	✓	✓							
Coprosma acerosa x C. repens [= C. kirkii]						✓		✓						
Cordyline australis (cabbage tree, ti kouka)		✓	р	✓	✓		✓							
* Cotoneaster coriaceus (C. lacteus)						✓								
* Correa alba		✓												
* Cupressus macrocarpa		р												
* Cytisus scoparius (broom)					✓	✓								
* Delairea odorata (Senecio mikanioides) (German ivy)		✓	✓	✓	✓	✓	✓							
* Dimorphotheca (Osteospermum) fruticosa (dimorphotheca)						✓								
* Dimorphotheca (Osteospermum) jucunda		✓												
* Euonymus japonicus (Japanese spindleberry)		✓		✓	✓									
* Hedera helix (ivy)					✓									
* Hydrangea macrophylla (hydrangea)				✓										
* Ipomoea indica (morning glory)			✓		✓									

 $FD = foredune; RD = reardune; WW = WW2 \ pillbox \ waste \ area; WS = western \ swamp; ES = eastern \ swamp \ (Bamber \ St) \ WD = western \ dunes; CF = cliff-face; CR = cliff rubble (talus); SW = swamp \ & stream \ between \ base of cliffs \ and \ hind \ dune \ dunes; CF = cliff-face; CR = cliff rubble (talus); SW = swamp \ & stream \ between \ base of cliffs \ and \ hind \ dune \ dunes; CF = cliff-face; CR = cliff rubble (talus); SW = swamp \ & stream \ between \ base of cliffs \ and \ hind \ dune \ dunes; CF = cliff-face; CR = cliff rubble (talus); SW = swamp \ & stream \ between \ base of cliffs \ and \ hind \ dune \ dunes; CF = cliff-face; CR = cliff rubble (talus); SW = swamp \ & stream \ between \ base of cliffs \ and \ hind \ dune \ dunes; CF = cliff-face; CR = cliff-$

Dunes/cliffs west of urban

^{*} adventive species (including native species naturalised from planted specimens)

** significant adventive species not recorded in 1994 or earlier but present Oct. 1997.

p = planted or possibly planted

✓ = recorded first in 2017-18

			in front o ecreation									
Species	FD	RD	ww	ws	ES	WD	CF	CR	sw			
Trees and shrubs												
Leptospermum scoparium (manuka)				✓	✓	✓						
* Lonicera japonica (Japanese honeysuckle)		✓		✓								
* Lupinus arboreus (shrub lupin)	✓	✓	✓			✓						
* Lycium ferocissimum (boxthorn)		✓	✓		✓	✓	✓		✓			
* Malus X domestica (apple)						✓						
* Malva arborea (tree mallow)		✓	✓			✓						
Muehlenbeckia australis X M. complexa									✓			
Muehlenbeckia complexa (small-leaved pohuehue)		✓		✓	✓	✓		✓	✓			
* Myoporum aff. insulare (Tasmanian ngaio, boobialla)		р										
Myoporum laetum (ngaio)		✓										
Olearia solandri		✓					✓					
Ozothamnus leptophyllus (tauhinu)		✓				✓	✓					
* Paraserianthes lophantha (brush wattle)		✓										
Pimelea actea							√ [1]					
Pimelea villosa "Southern" (sand daphne)	✓	✓				✓						
* Pittosporum crassifolium (karo)		✓		✓		✓			✓			
* Populus alba (silver poplar)		✓		✓								
* Populus yunnanensis?				✓								
* Prunus Xdomestica (plum)						✓						
* Pseudopanax crassifolius x P. lessonii				✓								
* Quercus robur (oak)						✓						
** Rhamnus alaternus (evergreen buckthorn)		✓			✓							
* Pseudopanax crassifolius x P. lessonii					✓							
* Rubus fruticosus agg. (blackberry)					✓							
** Rumex sagittatus (climbing dock)		✓			✓	✓			✓			
* Salix cinerea (grey willow)				✓	✓							
* Salix fragilis (crack willow)				✓	✓				✓			
* Salpichroa origanifolia (lily of the valley vine)		✓				✓						
* Senecio angulatus (Cape ivy)		✓	✓	✓	✓	✓		✓				
* Tamarix chinensis (Chinese tamarisk)									✓			
* Ulex europaeus (gorse)		✓	✓	✓	✓	✓	✓	✓				
* Ulmus x hollandica (suckering elm)		✓			✓							
* Vinca major (periwinkle)		✓	✓	✓	✓	✓						

			n front of ecreation								
Species	FD	RD	ww	ws	ES	WD	CF	CR	sw		
Grasses											
* Agrostis stolonifera (creeping bent)					✓	✓					
* Ammophila arenaria (marram)	✓	✓	✓			✓					
* Arundo donax		✓	✓		✓						
Austroderia fulvida (cliff toetoe)							✓	✓	✓		
Austroderia toetoe (swamp toetoe)		✓			✓		✓	✓	✓		
* Briza major (quaking grass) `		✓				✓					
* Bromus diandrus (rip-gut brome)	✓	✓			✓	✓					
* Bromus hordeaceus		✓									
* Bromus willdenowii (prairie grass)		✓		✓	✓	✓					
* Cenchrus clandestinus (Pennisetum clandestinum) (kikuyu grass)		✓	✓	✓	✓	✓			✓		
* Cortaderia selloana (pampas)	✓	✓		✓	✓	✓	✓		✓		
* Cynodon dactylon (Indian doab)		✓	✓		✓	✓					
* Dactylis glomerata (cocksfoot)		✓	✓	✓	✓	✓		✓			
* Echinochloa crus-gallii (barnyard grass)									✓		
* Ehrharta erecta		✓	✓		✓	✓	✓	✓	✓		
* Eleusine indica (crow's foot)			✓								
* Elytrigia repens (couch)		✓									
* Echinochloa crus-gallii (barnyard grass)									✓		
* Festuca rubra ssp. commutata (Chewing's fescue)		✓	✓								
* Glyceria declinata (floating sweetgrass)				✓					✓		
* Holcus lanatus (Yorkshire fog)		✓	✓	✓	✓	✓	✓	✓	✓		
Lachnagrostis billardierei ssp. billardierei (sand bent)	✓	✓				✓					
* Lagurus ovatus (hare's tail)	✓	✓	✓			✓					
* Lolium multiflorum (Italian ryegrass)					✓						
* Lolium perenne (perennial ryegrass)		✓									
* Paspalum dilatatum (paspalum)						✓					
* Paspalum distichum (Mercer grass)						✓			✓		
* Poa annua (annual poa)		✓			✓						
* Lolium arundinaceum (Festuca arundinacea) (tall fescue)		✓	✓	✓	✓	✓	✓	✓	✓		
Spinifex sericeus (spinifex)		✓	✓			✓					
* Sporobolus africanus (rat's tail)			✓								
* Stenotaphrum secundatum (buffalo grass)	✓	✓			✓	✓					
* Vulpia bromoides (vulpia hair-grass)	✓					✓					

 $FD = foredune; RD = reardune; WW = WW2 \ pillbox \ waste \ area; WS = western \ swamp; ES = eastern \ swamp \ (Bamber \ St) \\ WD = western \ dunes; CF = cliff-face; CR = cliff rubble (talus); SW = swamp \ \& \ stream \ between \ base \ of cliffs \ and \ hind \ dune$

^{*} adventive species (including native species naturalised from planted specimens)

** significant adventive species not recorded in 1994 or earlier but present Oct. 1997.

p = planted or possibly planted ✓ = recorded first in 2017-18

			in front o ecreation			area,	west of st of wa ngbeach	lkway	
Species	FD	RD	ww	ws	ES	WD	CF	CR	sw
Sedges									
Bolboschoenus caldwellii (CHR									✓
Carex flagellifera? (CHR 526023)							✓		
Carex sp. (C. geminata agg. 'large sp')								✓	✓
Carex lessoniana			?	✓					
Carex maorica					✓				
Carex. pumila (sand carex)	✓					✓	✓		
Carex secta				✓	?				
Carex virgata									✓
* Cyperus eragrostis									✓
Cyperus ustulatus (mariscus)				✓	✓	✓	✓	✓	✓
Eleocharis acuta (sharp spike-sedge)								✓	✓
Eleocharis gracilis (slender spike-sedge)								✓	
Isolepis cernua							✓		✓
Ficinia nodosa (club rush)		✓			✓	✓	✓	✓	
Ficinia spiralis (pingao)	✓	✓				✓			
Machaerina sinclairii (tuhara) (CHR							✓		
Schoenoplectus pungens (three-square)					✓				✓
Schoenoplectus tabernaemontani (kapungawha)					✓				
Schoenus maschalinus							✓		
Schoenus nitens (CHR							✓	✓	

Rushes						
Apodasmia (Leptocarpus) similis (oioi, jointed rush)				✓	✓	
* Juncus articulatus (jointed-leaved rush)	✓		✓	✓		✓
* Juncus bufonius (toad rush)		✓		✓		✓
Juncus caespiticius				✓	✓	✓
* Juncus dregianus? AK specimen was an odd form of J. caespiticius						✓
Juncus edgariae			✓		✓	✓
Juncus pallidus			✓			✓
* Juncus tenuis var. tenuis						✓

Monocot herbs other than grasses, sedges, rushes						
* Alstroemeria pulchella		✓				
* Alstroemeria sp. (A. ligtu?) (garden alstroemeria)		✓				
* Amaryllis belladonna (belladonna lily)				✓		
* Arum italicum (Italian arum)			✓			

 $FD = foredune; RD = reardune; WW = WW2 \ pillbox \ waste \ area; WS = western \ swamp; ES = eastern \ swamp \ (Bamber \ St) \\ WD = western \ dunes; CF = cliff-face; CR = cliff \ rubble \ (talus); SW = swamp \ \& \ stream \ between \ base \ of cliffs \ and \ hind \ dune \ of the swamp \ wastern \ wastern \ swamp \ wastern \ swamp \ wastern \ swamp \ wastern \ swamp \ wastern \$



^{*} adventive species (including native species naturalised from planted specimens)

** significant adventive species not recorded in 1994 or earlier but present Oct. 1997.

p = planted or possibly planted

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			n front o								
Species	FD	RD	ww	ws	ES	WD	CF	CR	sw		
Dicot herbs											
Acaena anserinifolia (bidibidi)									✓		
* Acaena novae-zelandiae (bidibidi)								✓			
* Acanthus mollis (bear's breeches)		✓		✓							
* Aeonium haworthii		✓									
* Aenonium haworthii cv 'Major'						✓					
* Anagallis arvensis (scarlet pimpernel)		✓				✓			✓		
* Angelica pachycarpa (false angelica)							✓				
Apium prostratum subsp. australe (sea celery)					✓				✓		
* Arctotheca calendulacea (Cape daisy)		✓	✓								
* Arctotis stoechadifolia (arctotis)						✓					
* Aster subulatus (sea aster)					✓	✓			✓		
* Atriplex prostrata (orache)		✓									
* Bellis perennis (lawn daisy)				✓							
* Brassica sp. (wild turnip)		✓	✓								
* Calendula officinalis (marigold)		✓									
* Callitriche stagnalis (starwort)				✓					✓		
* Carpobrotus chilensis (iceplant)		✓									
* Carpobrotus edulis (iceplant)		✓	✓		✓						
* Centaurium erythraea (centaury)							✓				
* Cerastium glomeratum		✓									
Centipeda aotearoana									✓		
* Chenopodium album agg. (fathen)						✓			✓		
* Cirsium arvense (Californian thistle)								✓	✓		
* Cirsium vulgare (Scotch thistle)					✓			✓			
* Conium maculatum (hemlock)									✓		
* Conyza sumatrensis (fleabane)		✓	✓	✓	✓	✓		✓			
Cotula australis									✓		
Cotula coronopifolia (batchelor's button)							✓		✓		
* Cotyledon orbiculata		✓	✓		✓						
Crassula sieberiana		√ ?				✓					
* Crepis capillaris (hawkbit)		✓			✓				✓		
* Datura stramonium (thorn apple)						✓					

	(1	Dune area in front of urban area (Castlecliff Recreation Reserve etc.)											
Species	F	-D	RD	ww	ws	ES	WD	CF	CR	sw			
Dicot herbs													
Disphyma australe (NZ iceplant)								✓					
* Dysphania (Chenopodium) pumilio (clammy goosefoot)										✓			
* Echium plantagineum (Paterson's curse)			✓										
Epilobium billardierianum (willowherb)										✓			
* Epilobium ciliatum (willowherb)										✓			
Epilobium komarovianum (willowherb)								✓					
Epilobium nerteroides (willowherb)								✓		?			
* Epilobium parviflorum (willowherb)						✓			✓				
* Euphorbia lathyris (caper spurge)									✓				
* Euphorbia maculata (spotted spurge)													
* Euphorbia peplus (milkweed)			✓	✓		✓							
* Ficaria verna ssp. ficariiformis (lesser celandine)			✓										
* Foeniculum vulgare (fennel)			✓	✓		✓	✓	✓					
* Fumaria capreolata (white fumitory)													
* Fumaria muralis (fumitory)			✓	✓		✓	✓						
* Galium aparine (cleavers)			✓			✓	✓		✓	✓			
* Gazania linearis (gazania)							✓						
* Gazania rigens (gazania)			✓				✓						
* Geranium molle (soft dove's foot)			✓										
Gunnera arenaria (sand gunnera)								✓					
* Helianthus tuberosus (Jerusalem artichoke)					✓								
* Helminthotheca (Picris) echioides (ox-tongue)						✓	✓	✓	✓				
Hydrocotyle heteromeria (waxweed)					✓	✓							
* Hypochoeris radicata (cat's ear)	,	✓	✓	✓			✓						
* Jacobaea vulgaris (Senecio jacobaea) (ragwort)						✓							
* ? Kalanchoe sp.			✓										
* Lactuca virosa (wild lettuce)			✓						✓				
Lagenophora pumila								✓					
* Lamium galeobdolon (aluminium plant)					✓								
* Lamium purpureum (red deadnettle)			✓										
* Lampranthus glaucus (a shrubby ice plant)							✓						
* Lathyrus latifolius (everlasting pea)			✓	✓									

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^{*} adventive species (including native species naturalised from planted specimens)
** significant adventive species not recorded in 1994 or earlier but present Oct. 1997.
p = planted or possibly planted ✓ = recorded first in 2017-18

			n front of		Dunes/cliffs west of urba area, from west of walkw down from Longbeach Dri					
Species	FD	RD	ww	ws	ES	WD	CF	CR	sw	
Dicot herbs										
* Leontodon saxatilis (hawkbit)		✓				✓	✓	✓		
* Lepidium (Coronopus) didymus (twin cress)		✓	✓							
Leptinella dispersa ssp. rupestris (button daisy) [2]							✓			
Limosella lineata									✓	
Lobelia anceps					✓		✓	✓	✓	
* Lobularia maritima (alyssum)	✓	✓	✓		✓	✓	✓	✓		
* Lotus pedunculatus (lotus major)	✓				✓	✓				
* Medicago arabica (spotted burr medick)		✓	✓		✓					
* Medicago lupulina (black medick)					✓	✓	✓		✓	
* Medicago nigra (bur medick)		✓	✓			✓				
* Melilotus indica (King Island melilot)		✓	✓			✓				
* Mentha x piperita (eau de Cologne mint)				✓						
* Mimulus guttatus (monkey musk)		✓		✓	✓					
* Modiola caroliniana (creeping mallow)		✓								
* Moenchia erecta (erect chickweed)		✓								
* Myosotis laxa (water forget-me-not)					✓					
* Myosotis sylvatica (garden forget-me-not)				✓	✓					
* Opuntia monacantha (prickly pear)		✓			✓					
* Orobanche minor (broomrape)	✓	✓	✓			✓		✓		
* Oxalis articulata (sourgrass)		✓			✓	✓				
* Oxalis incarnata (lilac oxalis)		✓			✓	✓				
* Oxalis pes-caprae (Bermuda buttercup)		✓			✓	✓	✓			
Oxalis rubens	✓	✓				✓				
* Persicaria (Polygonum) hydropiper (water pepper)				✓						
Persicaria salicifolium (NZ willow-weed)					✓				✓	
* Phytolacca octandra (inkweed)		✓			✓	✓		✓		
* Plantago coronopus (buck's horn plantain)							✓	✓		
* Plantago lanceolata (narrow-leaved plantain)			✓						✓	
* Plantago major (broad-leaved plantain)										
* Polycarpon tetraphyllum (all-seed)						✓				
* Polygonum aviculare (wireweed)					✓					
Pseudognaphalium sp. (P. luteoalbum agg.; juvenile with broad spathulate leaves; adult stems decumbent - on cliffs)							✓			
P. sp. (P. luteoalbum agg.; erect with narrow-oblong leaves - in dune hollows)						✓				
Ranunculus acaulis (sand buttercup)							✓		✓	



			n front of ecreation		Dunes/cliffs west of urban area, from west of walkway down from Longbeach Drive				
Species	FD	RD	ww	ws	ES	WD	CF	CR	sw
Dicot herbs									
* Ranunculus repens (creeping buttercup)		✓		✓	✓				✓
* Ranunculus sceleratus (celery-leaved buttercup)				✓					✓
* Raphanus raphanistrum (wild radish)		✓							
* Rorippa microphylla (one-rowed watercress)				✓	?				✓
* Rorippa nasturtium-aquaticum (two-row watercress)				✓					✓
* Rumex crispus (curled dock)		✓		✓	✓			✓	✓
* Rumex obtusifolius (broad-leaved dock)								✓	
* Sagina apetala (pearlwort)						✓			
* Sagina procumbens (procumbent pearlwort)		✓	✓	✓	✓	✓			✓
Samolus repens (sea primrose)							✓	✓	
Salicornia quinqueflora (glass wort)							✓		
* Sedum praealtum					✓	✓			
* Sedum spectabile			✓						
Selliera radicans (half-star)							✓	✓	✓
* Senecio elegans		✓	✓	✓		✓	✓	✓	
* Senecio glastifolius (pink ragwort) [3]		✓			✓	✓	✓	✓	✓
Senecio minimus (fireweed)					✓				
* Senecio skirrhodon (gravel groundsel)		✓							
* Silene gallica (catchfly)		✓			✓	✓			
* Silybum marianum (variegated thistle)		✓		✓		✓	✓		
* Sisymbrium officinale (hedge mustard)			✓						
* Solanum chenopodioides (velvety nightshade)		✓		✓	✓	✓		✓	
* Solanum nigrum (black nightshade)					✓	✓		✓	
* Solanum tuberosum (potato)		✓			✓				
Sonchus kirkii							✓	✓	
* Sonchus oleraceus (puwha)		✓	✓		✓		✓	✓	
* Stellaria media (chickweed)		✓			✓				✓
* Trifolium arvense (haresfoot trefoil)						✓			
* Trifolium glomeratum (clustered clover)						✓			
* Trifolium repens (white clover)		✓	✓	✓					✓
* Trifolium subterraneum (subterranean clover)		✓							
* Tropaeolum majus (nasturtium)		✓							
* Vicia disperma (small French tare)		✓				✓			✓
* Vicia hirsuta (hairy vetch)		✓							
* Vicia sativa (vetch)		✓	✓		✓	✓			
* Viola odorata (violet) [pink flowers]						✓			

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** significant adventive species not recorded in 1994 or earlier but present Oct. 1997.

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Species		Dune area in front of urban area (Castlecliff Recreation Reserve etc.)					Dunes/cliffs west of urban area, from west of walkway down from Longbeach Drive			
	FD	RD	ww	ws	ES	WD	CF	CR	sw	
Ferns										
Adiantum cunninghamii (maidenhair fern)							✓		✓	
Asplenium flaccidum (hanging spleenwort)					✓					
Asplenium oblongifolium									✓	
Asplenium polyodon						✓			✓	
Azolla filiculoides ssp. rubra				✓					✓	
Blechnum discolor (crown fern)				✓						
Blechnum minus [of NZ authors] (swamp kiokio)				✓					1	
Blechnum novae-zelandiae (kiokio)							✓	✓		
Blechnum triangularifolium (cliff kiokio)							✓	✓		
Blechnum novae-zelandiae X B. triangularifolium								✓		
Cyathea dealbata (ponga)								✓	✓	
Cyathea medullaris (mamaku)								✓	✓	
Dicksonia squarrosa (wheki)				✓				✓	✓	
Diplazium australe								✓		
Histiopteris incisa (water fern)				✓						
Hypolepis ambigua								✓		
Microsorum pustulatum (hound's tongue)				✓	✓					
Paesia scaberula (ringfern)								✓		
Polystichum (prob. P. neozelandicum) (hard shield fern)						✓				
Pteridium esculentum (bracken)		✓		✓	✓	✓		✓		
Pteris pendula [P. macilenta auct NZ]				✓			✓	✓		
Pteris tremula					✓	✓		✓		
Pyrrosia eleagnifolia (leatherleaf fern)					✓					
Rumohra adiantiformis [CHR]							✓			

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 $^{^{[1]}}$ One patch of 20 flowering + 20 non-flowering plants, 15.4.01; another patch of 14 flowering + 30 non-flowering plants found 1.12.01.

^[2] Castlecliff is the type locality (Lloyd 1972)

 $^{^{\}rm [3]}$ Seen at 'ES' in 1994 or earlier; not seen in dunes (RD) until 1997.



Appendix 4

Native Fauna

Waders; Shore or Seabirds

- Black-back or red billed gulls
- Variable oystercatchers
- White-fronted terns
- Banded dotterel
- Pied stilts
- Little black or pied shags
- · Little blue penguins

Terrestrial Birds

- Silvereyes
- Finches
- Grey warbler
- Skylarks
- Fantails
- And other small Passerines

Marine mammals

New Zealand fur seals
 They are quite commonly seen near the mole and sometimes come up onto the beach



Glossary

Council: means Whanganui District Council

Conservation: in relation to Chapter 9 – Cultural Heritage as defined under the ICOMOS New Zealand Charter for The Conservation of Places of Cultural Heritage Value, means the process of caring for a place so as to safeguard its cultural heritage value.

CPTED (Crime Prevention through

Environmental Design): the discouragement of antisocial behaviour through design of the built environment using principles based on access management, defining public and private space, and passive surveillance.

Cultural Heritage Significance or Value:

as defined under the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value means possessing historical, archaeological, architectural, technological, aesthetic, scientific, spiritual, social, and community esteem, traditional or other special cultural significance, associated with human activity.

Hapū: means a sub-tribe of lwi, and is made up of a group of families with a common ancestor.

Iwi: means an extended Māori kinship group, tribe, nation, people, nationality, and race - often refers to a collective of related hapū, descended from a common ancestor and associated with a distinct territory.

Kaitiakitanga: means the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship.

Tangata Whenua: means in relation to a particular place or area, the iwi or hapū that holds, or at any time has held, mana whenua in relation to that place or area. In relation to this plan, the relevant Tangata Whenua are Ngaa Rauru Kiitahi and Te Runanga o Tūpoho and their whānau and hapū.

Historic heritage: means those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities:

- I. Archaeological
- II. Architectural
- III. Cultural
- IV. Historic
- V. Scientific

VI. Technological; and includes

- · Historic sites, structures, places, and areas; and
- Archaeological sites; and
- Sites of significance to Māori, including wāhi tapu; and
- Surroundings associated with the natural and physical resources.

Maintenance: in relation to lawfully established network utility structures means works including repair performed to preserve the efficacy of function of a structure without altering the type or intensity of use for which the structure is utilised.

Natural and physical resources:

includes land, water, air, soil, minerals and energy, all forms of plants and animals (whether native to New Zealand or introduced) and all structures.

Network utilities: means those works undertaken by network utility operators as defined in Section 166 of the Resource Management Act 1991 and for the purpose of the district plan, also includes navigation and survey aids, beacons and meteorological activities and the soil conservation, erosion control, river control or flood protection works of regional councils.

Recreation facilities: means any land, building or other structure used for playgrounds, sports fields, swimming pools, games venues, club rooms, viewpoints, reserves and open space, parking and rest areas, vehicle parking, toilets.

Reserves and open spaces: means an area of land or body of water, set aside for landscape conservation or recreation, and may include open space, walkways, seating, water features, gardens, plantings and maintenance of trees and other vegetation, including removal of pest plant species on that land and include ancillary facilities such as parking, toilets, play equipment, information kiosks and accessory buildings.

Sign: means boards, flag signs, placards, hoardings, banners or other similar devices or advertising matter, whether consisting of a specially constructed free standing device, structure, erection or apparatus, or painted, printed, written, carved, inscribed, endorsed, projected on to, placed or otherwise fixed to or displayed upon any land, building, wall, fence, rock, tree or other structure or object (including parked vehicles or trailers where such a vehicle or trailer is parked specifically for the purpose of attracting attention), with or without illumination.

This does not include:

- a. Sponsored art installations where the sponsors take up 1m² or 25% or less of the total area of the installation, whichever is lesser; or
- b. Memorials and plaques on public land approved by the Public Arts Committee.
- c. Structure: means any building, equipment, device or other facility made by people and which is fixed to land and includes any raft. Excluding: (other than within the National Grid Yard).

- d. Any retaining wall less than 1.5m in height measured from the lowest adjoining ground level.
- e. Any fence or wall (other than a retaining wall) less than 1.8 meters in height measured from the lowest adjoining ground level within 1 metre of a property boundary.
- f. Any pool or tank which is less than 1.0m in height measured from the lowest adjoining ground level.
- g. Play equipment and letterboxes.

Vegetation clearance: means the destruction of vegetation by any means, including cutting, burning, clearing or spraying; and excludes clearance of agricultural or horticultural crops, pasture, forest thinnings or coppicing, or any plant defined as a plant pest; or clearance of tracks for the use of foot traffic only; or any clearance for the purposes of a recognised river control scheme or any clearance for the normal maintenance of roads, railway lines and public utility networks; and includes clear felling of forest; and line clearance by bulldozer or similar machine for fences or planting.

(Note: Maintenance of roads, railway lines and public utility networks includes the trimming of adjacent vegetation; but does not include vegetation clearance for new installation, roads, or access ways).

