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Cover photograph: [Karori Sanctuary, © Rob Suisted]



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# 1. INTRODUCTION

The Wellington City Landscape Evaluation was commissioned by Wellington City Council (WCC) to inform the development of measures for the long term management of the City's landscapes. The evaluation identifies and maps landscapes as required by the Regional Policy Statement for the Wellington Region (RPS). Landscapes and features are categorised as either outstanding natural landscapes (ONLs) outstanding natural features (ONFs) or special amenity landscapes (SALs).

Building on the 2014 Landscape Character Description (Boffa Miskell Ltd, 2014) that describes the non-urban parts of Wellington City landscapes, the evaluation assesses the attributes that make them valued in terms of the RPS and Resource Management Act 1991 (RMA). The evaluation considers landscapes and features that are highly valued for ecological, sensory, and aesthetic characteristics and contribution to community identity.

WCC commissioned Boffa Miskell Ltd to undertake the evaluation and prepare this draft technical report, which will subsequently be submitted to the community for consultation





# 2. PURPOSE/STATUTORY REQUIREMENTS

All landscapes are dynamic and in a constant state of evolution as a result of the combination of natural and human induced processes. Landscape change is often associated with spatial and temporal changes to land use due to ongoing pressure to utilise and develop resources. Sometimes, changes in land use patterns alter landscapes in a way that conflict with the attributes that are necessary to maintain healthy ecosystem function and/or are valued by the community. Consequently, there is a need to sustainably manage landscapes. This is often achieved through policies that protect and enhance recognised values. Prior to developing such policies, it is important to describe, evaluate, and map the intrinsic value of landscapes. The RPS provides direction in regards to evaluation criteria for landscape assessment.

# RESOURCE MANAGEMENT ACT 1991 (RMA)

Sections 6 and 7 of the RMA outline principles for managing the use, development and protection of natural resources in order achieve the purpose of the Act. Section 6 outlines matters of National Importance. Under the Act, Section 6 (b) requires that all persons exercising function and powers shall recognise and provide for the protection of outstanding natural features and landscapes from inappropriate subdivision use and development. Section 7(c) requires that all persons exercising functions and powers shall give particular regard to the maintenance and enhancement of amenity values.

# REGIONAL POLICY STATEMENT FOR THE WELLINGTON REGION (RPS)

The RMA requires Regional Councils to prepare a regional policy statement that includes policies and methods to achieve the purpose of the RMA through integrated management of each region's natural and physical resources. A district plan, in the hierarchy of the RMA, is required to give effect to an RPS.

The RPS, adopted in 2013, addresses the requirements of the RMA by:

- Requiring a District Plan to identify outstanding natural landscapes and features (ONLs or ONFs) through a landscape evaluation process that uses 12 specific criteria to ensure regional consistency (Policy 25);
- Requiring a District Plan to include policies, rules and/or methods to protect outstanding natural landscapes and features from inappropriate subdivision, use or development (Policy 26);
- Providing the option for a District Plan to identify special amenity landscapes (SALs) using the same criteria outlined in Policy 25 (Policy 27) and including policies, rules and/or methods for managing these landscapes in order to maintain or enhance their special amenity landscape values (Policy 28).

Policies 25 and 27 of the RPS that refer to the identification of ONLs, ONFs and SALs are described below:

# POLICY 25: IDENTIFYING OUTSTANDING NATURAL FEATURES AND LANDSCAPES:

District and regional plans shall identify outstanding natural landscapes and features having determined that the natural landscape or features is:

- a. exceptional or out of the ordinary; and
- b. that its natural components dominate over the influence of human activity, after undertaking a landscape evaluation process, taking into account the factors listed below

### 1. Natural science factors

- a. Natural science values: these values relate to the geological, ecological, topographical and natural process components of the natural landscape or feature:
  - i. Representativeness: the combination of natural components that form the feature or landscape strongly typifies the character of an area.
  - ii. Research and education: all or parts of the feature or landscape are important for natural science research and education.
  - iii. Rarity: the feature or landscape is unique or rare within the district or region, and few comparable examples exist.
  - iv. Ecosystem functioning: the presence of healthy ecosystems is clearly evident in the feature or landscape.

### 2. Sensory factors

- b. Aesthetic values: these values relate to scenic perceptions of the landscape or feature:
  - i. Coherence: the patterns of land cover and land use are in harmony with the underlying natural pattern of landform and there are no significant discordant elements of land cover or land use.
  - ii. Vividness: the feature or landscape is visually striking and is widely recognized within the local and wider community for its memorable and sometimes iconic qualities.
  - iii. Naturalness: the feature or landscape appears largely unmodified by human activity and the patterns of landform and land cover appear to be largely the result of intact and healthy natural systems.
- c. Expressiveness (legibility): the feature or landscape clearly shows the formative processes that led to its existing character. The legibility is not compromised by human activity.
- d. Transient values: the consistent and noticeable occurrence of transient natural events, such as seasonal change in vegetation or in wildlife movement, contributes to the character of the feature or landscape.

### 3. Shared and recognized factors

- a. Shared and recognized values: the landscape or feature is widely known and is highly valued for its contribution to local identity within the immediate and wider community.
- b. Tangata whenua values: Māori values inherent in the feature or landscape add to the feature or landscape being recognized as a special place.
- c. Historical associations: knowledge of historic events that occurred in and around the feature or landscape is widely held and substantially influences and adds to the value the community attaches to the natural feature or landscape.

### POLICY 27: IDENTIFYING SPECIAL AMENITY LANDSCAPES:

District and regional plans may identify special amenity landscapes which are distinctive, widely recognised and highly valued by the community for their contribution to the amenity and quality of the environment of the district, city or region. Any special amenity landscape evaluation process carried out to inform the identification of any such special amenity landscapes shall take into account the factors listed in policy 25.

The Policy explanations goes on to clarify that the landscape does not need to be predominantly natural; ... special amenity landscapes when compared to outstanding natural landscapes will be:

- a. highly valued, but not clearly exceptional landscape values, in an area where the natural components of landscape character dominate; or
- b. highly valued, including exceptional landscape values, in an area where the modification of landscape by human activity is a dominant influence on landscape character.

### **ALL OTHER LANDSCAPES:**

A third category of landscape referred to, but not covered by policy in the RPS, is 'all other landscapes'. These landscapes are described by the RPS as landscapes that *contribute to the amenity and character* of the region and are managed through the general amenity provisions in local authority plans. Impacts on these landscapes are not considered to be regionally significant. While 'all other landscapes' are not required to be identified under the RPS, the definition helps to differentiate these landscapes from SALs. Landscapes like these may be further protected by targeted provisions in The Wellington City District Plan.







### LANDSCAPE EVALUATION

The landscape evaluation process seeks to identify, map and describe those landscapes and features in a district or region that are highly valued. An integral part of the description of these landscapes and features is identifying what particular aspects make them highly valued. Policy 25 sets out the criteria to be used for the evaluation of 'candidate sites' to asses if they should be further investigated to determine whether they are an ONL, ONF or SAL.

The landscape evaluation process follows the landscape character description phase that identifies, maps, and describes landscape character areas. These character areas distinguish landscapes from one another based on descriptions of biophysical, aesthetic, and cultural attributes that make a particular contribution to landscape character.

The detailed knowledge of the landscapes obtained from the character description, together with additional research, consultation with council officers and field investigation is then used to make judgements (based on the criteria in the RPS) on the relative value or importance of features and landscapes during the evaluation process.

The evaluation of landscape in turn informs what features or landscapes shall be protected from inappropriate subdivision, use, and development (ONL and ONF) or shall be managed to maintain and enhance amenity values (SAL).

ORUAITI AT THE ENTRANCE OF TE WHANGANUI-A-TARA WELLINGTON HARBOUR

# LANDSCAPE EVALUATION PROCESS

Collate relevant data & overlay in GIS to identify potential ONLs, ONFs and SALs



Use information gathered from local knowledge, previous field work, and expert opinion to complete a first cut list of candidate sites



Collate information for evaluation of candidate sites based on evaluation criteria, prepare summary of values for each site, and outline potential boundaries of landscapes & features.



Evaluate candidate sites, assess against criteria and ONL, ONF and SAL thresholds, confirm and calibrate evaluation scores and 'boundary' extent. Elimination of sites that do not score high enough to receive the ONL, ONF or SAL distinction



Field investigation to refine boundaries of ONLs, ONFs and SALs



Finalise ONL, ONF and SAL descriptions & mapping



Issue draft report to client for review



**Finalise document** 

Client
meeting
to confirm
potential
sites

Client meeting to confirm ONL, ONF and SAL sites

FIGURE 1: LANDSCAPE EVALUATION PROCESS

### **EVALUATION PROCESS**

Figure 1 summarises the key steps taken in the evaluation process. Additional detail about the evaluation process is located in Appendix A.

The initial step of the evaluation process identifies 'candidate sites' or the features and landscapes that are considered to have values that may deem them to be assigned ONL, ONF, or SAL status. These were selected based on information contained within the landscape character study, additional literature research, fieldwork, interrogation of GIS data and consultation with WCC officers.

Policy 25 sets out three groupings of evaluation factors for consideration; natural science, sensory, and shared and recognised, with each factor including several sub criteria (refer section 2). The candidate sites were assessed against evaluation factors using a seven point scale from very low to very high to come up with an evaluation for the natural science, sensory, and shared and recognised factors for each candidate site. These 'rankings' for each candidate site were then assessed against defined ONL, ONF and SAL thresholds to determine which designation (if any) should be assigned. Not all candidate sites reached established thresholds.

Typically, community input is sought through consultation to inform the evaluation process, in particular the 'shared and recognised' aspects. In this case, the study team worked closely with Council officers who provided input regarding community values. Consultation on this technical report will occur as the next stage of the process, when the community will have the opportunity to provide input and consequently some adjustments may need to be made. Community values that are revealed during the engagement process may result in adjustments to landscape and feature boundaries and/or classification.

Subsequent to the issue of the initial Draft WCC council have undertaken consultation with Port Nicholson Block Settlement Trust and Ngati Toa. Port Nicholson Block Settlement Trust have provided a report detailing the maori sites, and acknowledgment areas and maori features within the identified landscapes. Ngati Toa are currently being consulted with.

### ONL / ONF / SAL THRESHOLDS

While evaluation criteria are outlined in the RPS, the document does not identify thresholds for what constitutes an ONL, ONF or SAL. Thresholds for the evaluation were established by the study team based on interpretation of Policies 25 and 27 in relation to the list of sub criteria (section 2).

# INTERPRETATION OF POLICY 25 TO ESTABLISH A THRESHOLD FOR AN ONF OR ONL

According to Policy 25, an ONL or ONF, the natural landscape or feature must be:

- exceptional and out of the ordinary, and importantly
- the natural components must dominate over the influence of human activity.

These descriptions suggest that aesthetic values within 'sensory factors' such as vividness and naturalness, and rarity within 'natural science factors' are deemed to be distinctive and necessary characteristics of an ONL or ONF. In addition, since healthy ecosystem function is an essential element for maintaining natural components and processes, especially in areas of human activity, ecosystem function within the 'natural science' factor is also a necessary characteristic of an ONL or ONF. Since both natural factors and sensory factors are key components of the definition of an ONL or ONF, they are weighted higher than shared and recognised values.

The thresholds for classification of an ONL and ONF are therefore set as follows:

- must score at least **High** in both 'natural science' or 'sensory' factors and,
- must score Very High in one of these factors.

### LANDSCAPE AND FEATURE CLASSIFICATION

Section 6(b) of the RMA and Policy 25 of the RPS require the identification and protection of outstanding natural features and landscapes. However, neither document indicates what constitutes a landscape as opposed to a feature.

Policy 27 of the RPS specifically relates to identifying Special Amenity Landscapes and does not include features. Therefore, when evaluating areas relating to this designation, it is important to define what constitutes a landscape.

For the purpose of this evaluation, scale was used to determine whether an area qualified as a landscape. While there are many definitions for landscape scale, it is a term commonly used to refer to processes that cover a spatial scale addressing a range of ecosystem functions, land uses and land cover. In contrast, a feature is something that can be observed and often refers to a landform. The scale of a feature is such that features may be contained within a landscape.

# INTERPRETATION OF POLICY 27 TO ESTABLISH A THRESHOLD FOR AN SAL

In contrast to Policy 25, modification of landscape by human activity can be a dominant influence on landscape character when identifying SALs.

According to Policy 27, to be an SAL, the landscape must be:

'distinctive and widely recognised by the community for the contribution to the amenity and quality of the environment'

This description is interpreted as the contribution that landscape amenity values make to the pleasantness, aesthetic coherence, cultural and recreational attributes. Although visual and physical attributes are important elements for distinguishing an SAL, community and cultural values and people's relationship with the landscape have a greater significance. Therefore, shared and recognised factors must be a highly valued element when identifying SALs.

The thresholds for classification of a SAL are therefore set as follows:

- must be of a certain scale to be considered a landscape and,
- must score at least High in 'shared and recognised' and High in at least one other factor 'sensory' or 'natural science' or score Very High in 'shared and recognised' with no threshold regarding 'sensory' or 'natural science'.

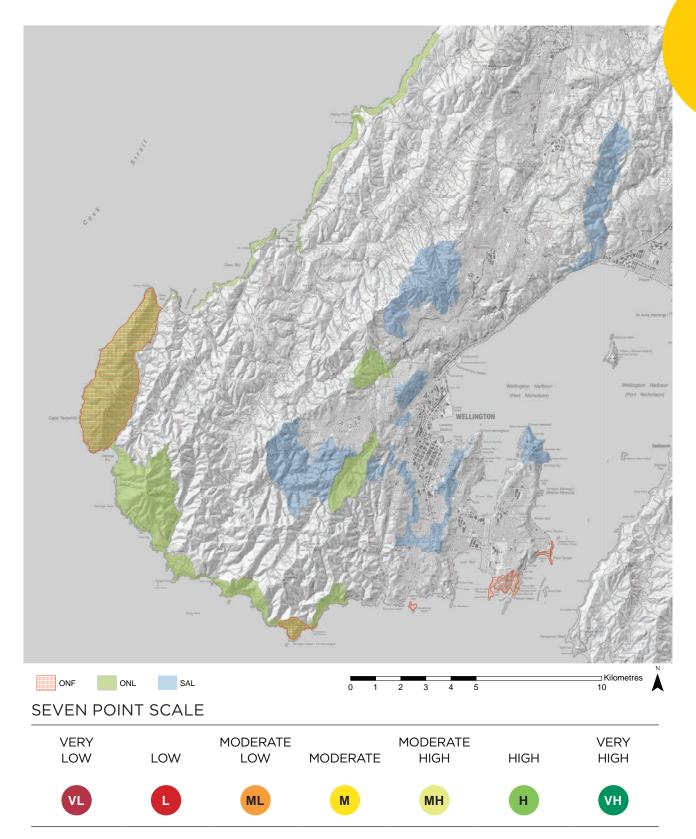
# 4. SUMMARY OF FINDINGS

Three ONLs, six ONFs and seven SALs were identified in Wellington City. A summary of the ONFs, ONLs, and SALs and rankings for each of the three factors - natural science, sensory, and shared and recognised - are contained within **Table 1** below.

LANDSCAPE OR FEATURE	NATURAL SCIENCE	SENSORY FACTOR	SHARED AND RECOGNISED	DESIGNATION
Karori Wildlife Sanctuary	VH	Н	VH	ONL
Otari-Wilton's Bush	VH	Н	Н	ONL
Raukawa Coast Cook Strait	Н	VH	Н	ONL
Terawhiti*	Н	VH	Н	ONF
Te Rimurapa Sinclair Head/ Pariwhero Red Rocks*	Н	VH	VH	ONF
Tapu Te Ranga Island	Н	VH	VH	ONF
Hue tē Taka Peninsula/ Rangitatau Palmer Head	Н	VH	VH	ONF
Oruaiti	Н	VH	VH	ONF
Watts Peninsula	M	Н	VH	SAL
Town Belt**	M	МН	VH	SAL
Te Ahumairangi Hill	М	Н	Н	SAL
Wellington Botanic Garden	MH	Н	VH	SAL
Wrights Hill/Makara Peak	MH	Н	VH	SAL
Mount Kaukau	М	Н	Н	SAL
Korokoro Stream Valley	MH	Н	Н	SAL

<sup>\*</sup>IDENTIFIED AS A FEATURE WITHIN THE RAUKAWA COAST COOK STRAIT ONL.

<sup>\*\*</sup> DOES NOT INCLUDE THE FULL EXTENT OF THE TOWN BELT OUTLINED IN THE WELLINGTON DISTRICT PLAN. ALTHOUGH TE AHUMAIRANGI HILL AND THE WELLINGTON BOTANIC GARDEN ARE PART OF THE TOWN BELT, THEY ARE RECOGNISED AS INDEPENDENT SALS



# Maps and Mapping Scales

The maps included in this document are for reference. They illustrate the detailed mapping provided in the corresponding GIS data sets. Detailed interrogation of the boundaries shown on the maps should be carried out using the GIS data sets.

The mapping scale provided in the GIS data is 1:10,000 i.e. at a 'landscape scale'. At this scale, boundaries should be considered to be a 'zone of transition' rather than a definitive line in a landscape. Interrogation of the GIS lines at scales finer than 1:10,000 will reveal that they are not aligned to fine scale features such as vegetation or property boundaries. Further details about the GIS mapping are provided in Appendix A.



5. OUTSTANDING
NATURAL
LANDSCAPES
AND
OUTSTANDING
NATURAL
FEATURES



# KARORI WILDLIFE SANCTUARY ONL

### DESCRIPTION

The Karori Wildlife Sanctuary is a protected conservation area located south of the Karori suburb. The 225 hectare area is surrounded by a pest-proof fence, forming an ecological island for native bush regeneration and bird habitat establishment. Although cleared of most of the original indigenous vegetation for farming, native bush has been regenerating since the early 20th century, when the area served as the city's water catchment and water storage area. The lakes behind the two dams are significant features of the sanctuary.

### **NATURAL SCIENCE VALUES**

VERY HIGH



### **Research and Education**

- Several educational offerings are available within the sanctuary. These include guided walks, custom tours, educational signage, and interactive learning opportunities.
- The sanctuary has a research partnership with Victoria University and Massey University, serving as a living laboratory for staff and students.
- The success of conservation programs regarding pest control, weed management, native species revegetation, and citizen science have served as a model for wider park management throughout Wellington.

### Rarity

The landscape is home to several rare and threatened birds, arthropods, frogs, reptiles, and tree species.

### **Ecosystem Function**

- Although the landscape is managed and includes modified features, stream function, successional vegetation patterns, and growth and diversity of bird populations are responding similarly to a natural system. Thus resulting in the presence of a healthy ecosystem.
- The landscape is one of the most biodiversity rich areas in Wellington in terms of flora and fauna. Although the efforts of restoration are contained within a fenced enclosure, the diversity of species extends beyond the boundary.
- The secondary forest is in the early to middle stages of successional development. The propagation of original indigenous species missing from the seedbank and other rare species have contributed to a highly diverse plant community within the landscape.
- The native bush establishment has helped restore rare and threatened bird populations, such as the kākāriki (at risk), hihi (threatened), stitchbird (threatened), kiwi (threatened), and takahē (threatened) (Zealandia, 2016).
- The sanctuary holds the headwaters of the Kaiwharawhara Stream, the only source to sea stream in Wellington with a 'natural' harbour outlet. The restoration and management of the sanctuary significantly contributes to the ecological health of the wider catchment.

### **SENSORY VALUES**

HIGH



### **Aesthetic**

- The landscape appears largely unmodified as evidenced by a limited presence of roads, structures and communities of exotic vegetation. Modification to the landscape is generally associated with hydrologic modification related to the dam, walking paths, perimeter fence, and small buildings associated with tourism and maintenance of the landscape.
- The lush native bush re-establishment contributes to the landscape's high aesthetic value.
- The two dams, while artificial, are important features contributing to the experience within the sanctuary.

### **Expressive**

The expressive Wellington fault and splinter faults are highly recognisable within the sanctuary.

There is a rich association with wildlife transient movement, most notably through bird flight and auditory elements such as bird song and calls.

### SHARED AND RECOGNISED VALUES

VERY HIGH



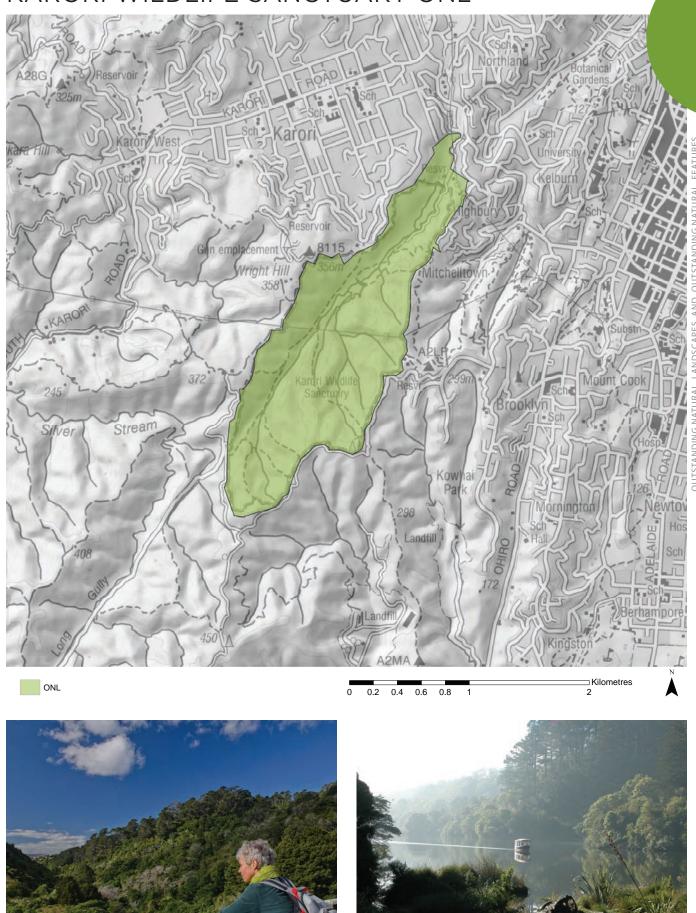
### **Shared & Recognised**

- The landscape is highly valued for recreational and wildlife viewing opportunities.
- The volunteer programme highly contributes to the success of the sanctuary. Volunteers are involved with research, education, and maintenance programs.

### **Historical Association**

The dams and associated structures that were once part of the city's original water catchment remain features of historic interest.

# KARORI WILDLIFE SANCTUARY ONL



VIEW FROM THE UPPER DAM

© Shaun Matthews

LOWER LAKE SURROUNDED BY NATIVE BUSH

© Chris Moore

### OTARI-WILTON'S BUSH ONL

### DESCRIPTION

Otari-Wilton's Bush is Wellington's best example of a primary podocarp broadleaf native forest. Primary and secondary forest span over 100 hectares from the suburb of Wilton to the Otari hilltop. The landscape includes both a botanic garden and bush reserve. The area was valued by Māori as a place for hunting and it also has historical significance because of its preservation despite traditional colonisation land clearing practices. The highly diverse plant species within the landscape have high habitat, conservation, education, and research value.

### **NATURAL SCIENCE VALUES**

**VERY HIGH** 



### **Research and Education**

- The area was gazetted as a scenic reserve in 1906 under the Preservation Act of 1903.
- Leonard Cockayne established the Otari Open Air Native Plant Museum, a public botanic garden for the display of native plants. The labelled plant collections and forested bush walks provide educational opportunities for visitors.
- The landscape is used for research about economic uses of native plants as well as plant structure and form (Wellington City Council, 2016a).

### Rarity

- The plant collection contains many rare and threatened indigenous species.
- The landscape contains one of the few remaining dense primary podocarp forests in the Wellington urban/suburban setting.

### **Ecosystem Function**

- Over 1200 native plant species are present (Wellington City Council, 2016a).
- The dense native bush provides habitat for many regionally significant bird species.
- The landscape is part of the Kaiwharawhara catchment, the only source to sea stream in Wellington with a 'natural' harbour outlet.

### **SENSORY VALUES**





### Aesthetic

- The landscape is highly unmodified with no roads and few structures. The primary forest was fenced off and preserved since the early European settlement of Wellington, contributing to the landscape's naturalness
- The lush native bush restablishment contributes to the landscape's high aesthetic value.

### **Transient**

There is a rich association with wildlife transient movement, most notable through bird flight and auditory elements such as bird song and calls.

### SHARED AND RECOGNISED VALUES



### **Shared & Recognised**

- An extensive series of tracks within the bush provide opportunities for forested walks and wildlife viewing.
- The landscape is a popular destination for picnics, botanising and 'wilderness' experience.
- The landscape recently won a Green Flag Award, recognising it as a well-managed park and green space that sets the benchmark standard for management of recreational outdoor spaces.
- The volunteer programme highly contributes to the conservation of the bush. Volunteers are involved with research, education, and maintenance programs.

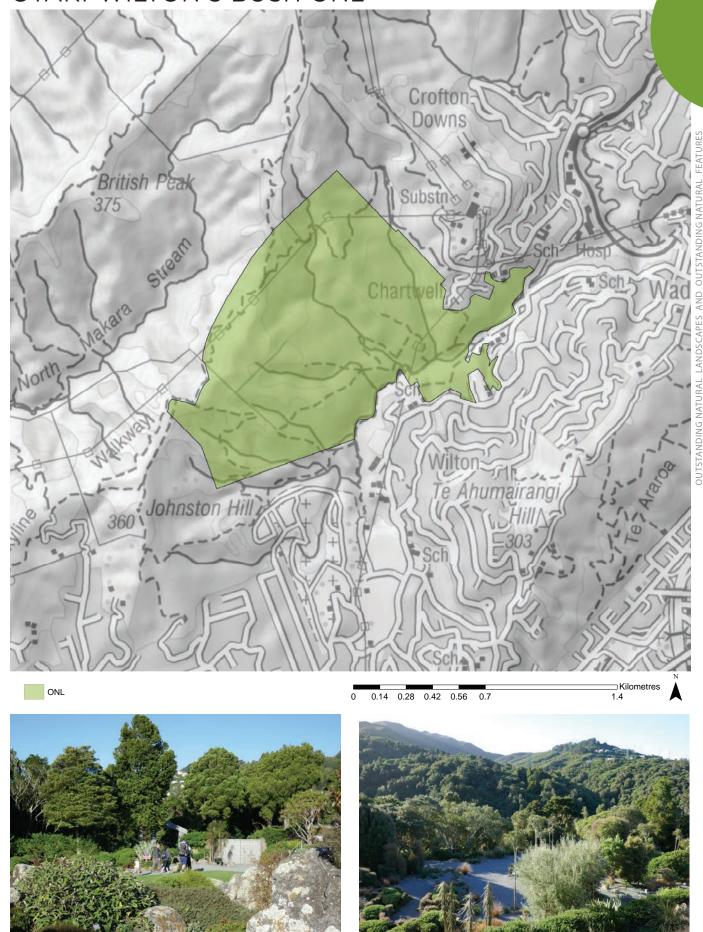
### Tangata Whenua

Mana whenua comments to be provided at a later date.

### **Historical Association**

- The landscape is historically significant because of its size, scale and native vegetation despite the effects of colonisation land clearing practices, for timber and farming, as well as for its role in the preservation and display of native species.
- The botanic gardens were established in 1927 by Leonard Cockayne, considered to be New Zealand's greatest botanist and a founder of modern science in New Zealand.

# OTARI-WILTON'S BUSH ONL



NATIVE BOTANIC GARDEN

VIEW NORTH - REGENERATING FOREST



# RAUKAWA COOK STRAIT COAST ONL

### **DESCRIPTION**

Known as Wellington's 'Wild Coast', the Raukawa Cook Strait Coast is a rugged, remote, and expressive coastline characterised by steep escarpments above narrow gravel beaches along several notable headlands, bays and rock formations. The landscape extends along the coast from the former quarry at Owhiro Bay around Cape Terawhiti north to the WCC boundary including Ohariu Bay, Makara Estuary, Boom Rock and Pipinui Point. Outstanding Natural Features (ONFs), Te Rimurapa Sinclair Head/ Pariwhero Red Rocks and Terawhiti are contained within the Raukawa Cook Strait Coast landscape. The largely unmodified coastline has high natural character and is home to seal colonies and important lizard and bird species. Regenerating native vegetation can be found along coastal escarpments and within protected gullies. While there are some scattered primary forest remnants, the slopes and ridgetops are dominated by pasture. There are several important cultural and historic sites contained within this landscape, including Pipinui Point which has been identified as a place of Māori settlement.

### **NATURAL SCIENCE VALUES**

HIGH



### Rarity

 Regionally rare and threatened plant, insect, lizard, and bird species are found throughout the landscape (Boffa Miskell Ltd, 2005).

### **Ecosystem function**

- Indigenous vegetation is prominent within several sheltered gullies and along coastal escarpments and primary forest remnants with sub-alpine vegetation can be found along ridgetops of the Terawhiti hill country (Boffa Miskell Ltd, 2001b).
- The prominent headlands, Tongue Point and Te Rimurapa Sinclair Head, are seal haul outs and home to important lizard and bird species (Boffa Miskell Ltd, 2016).
- Several locations along the coastline are recognised for their natural character, Terawhiti (very high),
   Oteranaga Head/Outlook Hill (high), Karori Coastal Cliffs (high), and Te Rimurapa Sinclair Head (high)
   (Boffa Miskell Ltd, 2016).
- Native vegetation is present throughout the area between Pipinui Point and Boom Rock with grey scrubland along the scarps and a high plant diversity that includes uncommon plants such as native broom on Pipinui Point (Boffa Miskell Ltd, 2016).
- The Makara Estuary has diverse native wetland vegetation with salt marsh providing habitat for feeding and nesting birds, several indigenous fish, native lizard species and katipo spider.
- Pipinui Point is a breeding and nesting area for the sooty shearwater and white fronted tern (Boffa Miskell Ltd, 2014) (Boffa Miskell Ltd, 2016).
- The area of Pipinui Point/Boom Rock is recognised as having high coastal natural character (Boffa Miskell Ltd, 2016).

SENSORY VALUES VERY HIGH

### Aesthetic

- The coastline is recognised both locally and regionally as an iconic, memorable and visually striking landscape. There is notable aesthetic value where strong currents break at the Karori Lighthouse and the wave worn cobbles line Opau Bay. Although access to many areas of the coastline is limited, the landscape can be viewed from the sea.
- The coastline and escarpments are highly unmodified as evidenced by a limited presence of road, structures, and areas of introduced vegetation. Disturbance is generally limited to grazing within the hill country and small settlements of baches and infrastructure associated with the Raukawa Cook Strait transmission cable at Oteranga Bay. Isolation has contributed to the landscape's wild and scenic character.
- Makara Stream estuary is a significant feature on the coast contrasting with the steep coastal scarps and rocky shoreline. It is unusual for a west coast estuary in having a higher proportion of mud to sand.

### **Expressive**

- The raised beach platform and sheer coastal escarpment are highly expressive of the forces of uplift and
  erosion which led to the existing character. Marine terraces and raised beaches are most pronounced at
  Tongue Point.
- The gently undulating surfaces of Terawhiti and Outlook Hills are remnants of an ancient peneplain and gold-veined quartz rock (ridgetops and hilltops).
- The red, basaltic pillow lava formed by lava erupting on the sea floor are exposed at Pariwhero Red Rocks.
- The Makara Estuary has high experiential values due to low levels of modification.

### **Transient**

• There is a rich association with transient coastal experiences due to shifting tides, wave patterns, light conditions, aromatic, and auditory elements, sunset views, and the presence of marine mammals.

### **SHARED AND RECOGNISED VALUES**

HIGH



### Shared & Recognised

- Public access to most of the coastal landscape is restricted by private ownership. However, areas such
  as the Makara walkway and Te Rimurapapa Sinclair Head/Pariwhero Red Rocks are valued for their
  recreational and wildlife viewing opportunities, otherwise access is limited to fishing and diving.
- Oteranga Bay is the location of the electrical transmission cable connection to the South Island.
- Te Kopahou Reserve extends along the coast from Owhiro Bay to Rimurapa Sinclair Head, providing access to a wilderness area in close proximity to Wellington city.
- The Makara Estuary is valued by the community for its mahinga kai values.

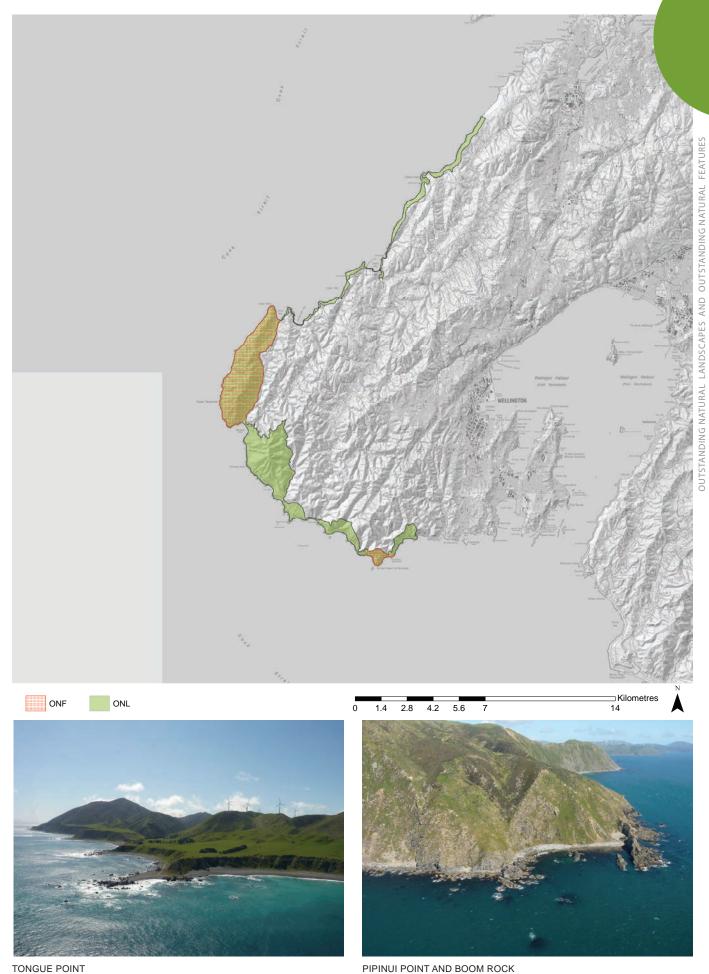
### **Tangata Whenua**

Mana whenua comments to be provided at a later date.

### **Historical Association**

- Several structures associated with early gold mining, such as tunnels, machinery, processing plants and settlements remain near Terawhiti Hill and Outlook Hill (Greater Wellington Regional Council, 2015).
- The Woollahra Shipwreck site (1907, Tongue Point) and the light at Ohau Point and Karori Rock lighthouse to aid in navigation are significant to Wellington's maritime history (Greater Wellington Regional Council, 2015).
- Several baches along the coast are registered by the New Zealand Historic Place Trust (Wellington City Council, 2016b)

# RAUKAWA COOK STRAIT COAST ONL



WELLINGTON CITY LANDSCAPE EVALUATION: TECHNICAL ASSESSMENT

### TERAWHITI ONF

### DESCRIPTION

Terawhiti is a large promontory along the west edge of Wellington's 'Wild Coast'. It is characterised by a narrow gravel beach platform and steep slopes that rise to a folded and faulted ridgeline. The promontory is a clearly defined feature. separated from the adjacent hill country by Black Gully. The feature begins at the coastal edge of the promontory at Ohau Bay, following the ridgetop to Terawhiti Hill, and then down to the coast at Oteranga Bay. It is recognised more for the expressive landform and scenic and cultural value, rather than its habitat value. Vegetation and habitat are impacted by the harsh coastal conditions, historic mining activities, and current grazing practices. However, there are native grasses and shrubs establishing in sheltered areas and sub-alpine vegetation at the top of Terawhiti Hill.

### **NATURAL SCIENCE VALUES**





### **Ecosystem Function**

- The harsh coastal conditions and current grazing practices impact ecosystem function throughout the feature.
- The summit of Terawhiti Hill is recognized as an ecological site of significance due to the presence of sub alpine native grasses and shrubs within pasture (Boffa Miskell Ltd, 2003).
- The feature is recognized as having very high natural character (Boffa Miskell Ltd, 2016).

### **SENSORY VALUES**

VERY HIGH



### **Aesthetic**

- The coastline is recognised both locally and regionally as an iconic, memorable and visually striking landscape. While access to many areas of the coastline is limited, it can be viewed from the sea.
- The landform is generally unmodified apart from farm tracks and remains of former gold mining workings. The land cover is reflective of the harsh coastal environment and grazing practices, which have diminished the ecological value.

### **Expressive**

- The raised beach platform and sheer coastal escarpment are highly expressive of the forces of uplift and erosion which led to the existing character.
- Terawhiti Hill is a remnant of an ancient peneplain and gold-veined quartz rock (Boffa Miskell Ltd, 2001b).
- Black Gully, a branch of the Pukerua Fault, forms the eastern edge of the feature (Boffa Miskell Ltd, 2014).

### **Transient**

There is a rich association with transient coastal experiences due to shifting tides, wave patterns, light conditions, aromatic, and auditory elements, and sunset views.

### SHARED AND RECOGNISED VALUES

HIGH



### Shared & Recognised

Land access is restricted by private ownership, therefore recreational opportunities are limited to fishing and diving along the coastal edge.

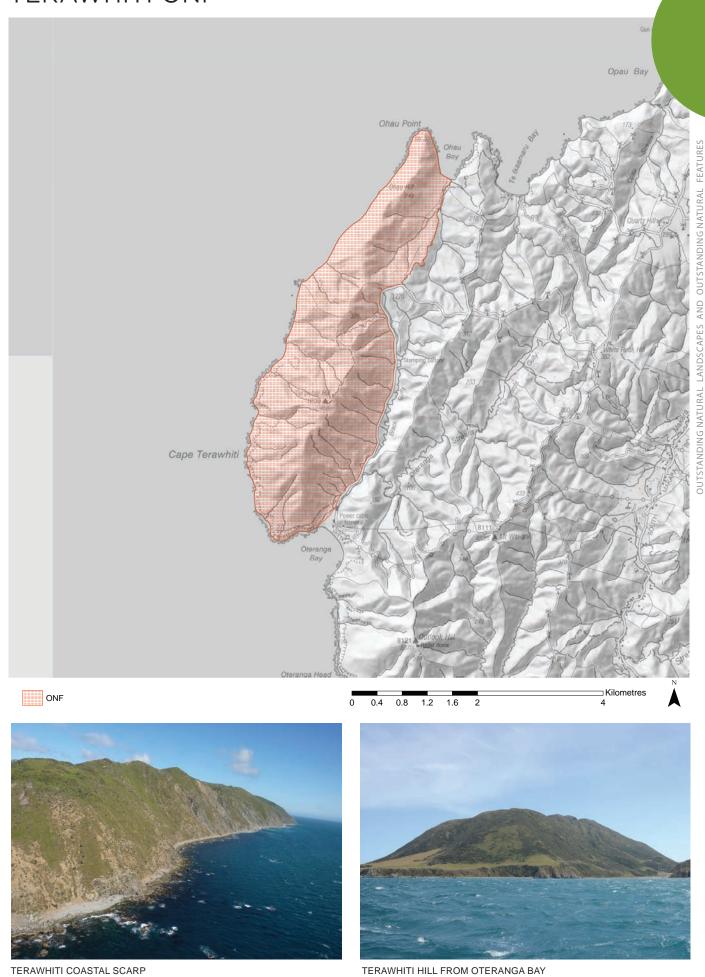
### **Tangata Whenua**

Mana whenua comments to be provided at a later date

### **Historical Associations**

- Several structures associated with early gold mining, such as tunnels, machinery, processing plants and settlements remain near Terawhiti Hill (Greater Wellington Regional Council, 2015).
- The Grassmere shipwreck (1896) at Cape Terawhiti is significant to Wellington's maritime history (Greater Wellington Regional Council, 2015).

# TERAWHITI ONF



WELLINGTON CITY LANDSCAPE EVALUATION: TECHNICAL ASSESSMENT

# TE RIMURAPA SINCLAIR HEAD/ PARIWHERO RED ROCKS ONF

### **DESCRIPTION**

Te Rimurapapa Sinclair Head/Pariwhero Red Rocks is a prominent headland and rock sequence along the Raukawa Cook Strait Coast The metamorphic facies of the feature are framed by pillow lava and notable red and green rock formations. These features are noted as geopreservation landforms of national significance. The headland is home to seal colonies and threatened and rare lizard and bird species. Both wildlife and the scenic character of the coastline attract many visitors to the headland. Several notable cultural sites and Māori legends are associated with the feature.

### **NATURAL SCIENCE VALUES**





### **Research and Education**

The Red Rocks Scientific Reserve was established in 1972 (Wellington City Council, 2016b).

### Rarity

- Five threatened at risk bird species, black shag, variable oystercatcher, re-billed gull, white fronted tern, and NZ pipit frequent the headland.
- Shrubby tororaro (Muehlenbeckia astonii), identified as a nationally vulnerable and regionally critical plant, is growing along the headland escarpment (Boffa Miskell Ltd, 2014).

### **Ecosystem function**

- The headland is an important seal haul-out area.
- The feature is recognised as having high coastal natural character (Boffa Miskell Ltd, 2016).

VERY HIGH **SENSORY VALUES** 

### **Aesthetic**

- Te Rimurapapa Sinclair Head/Pariwhero Red Rocks is recognised both locally and regionally as an iconic and memorable feature with high scenic value.
- The headland and rock formations are highly unmodified with no structures, introduced vegetation, or designated road (though restricted four-wheel drive vehicle access is permitted).

### **Expressiveness**

- The oceanic metabasalt pillow lava and coloured argillites within the Torlesse Complex greywacke of Pariwhero Red Rocks are evidence of submarine volcanic eruptions formed 200 million years ago (Greater Wellington Regional Council, 2015).
- The steep escarpment and rocky shore platform are expressive of the forces of uplift and erosion which led to the existing character of the headland.

### **Transient**

There is a rich association with transient coastal experiences due to shifting tides, wave patterns, light conditions, aromatic and auditory elements, bird migration patterns and the presence of marine mammals.

### **SHARED AND RECOGNISED VALUES**

VERY HIGH



### Shared & Recognised

The feature is highly valued for both terrestrial and aquatic recreation opportunities, most notably for seal wildlife viewing.

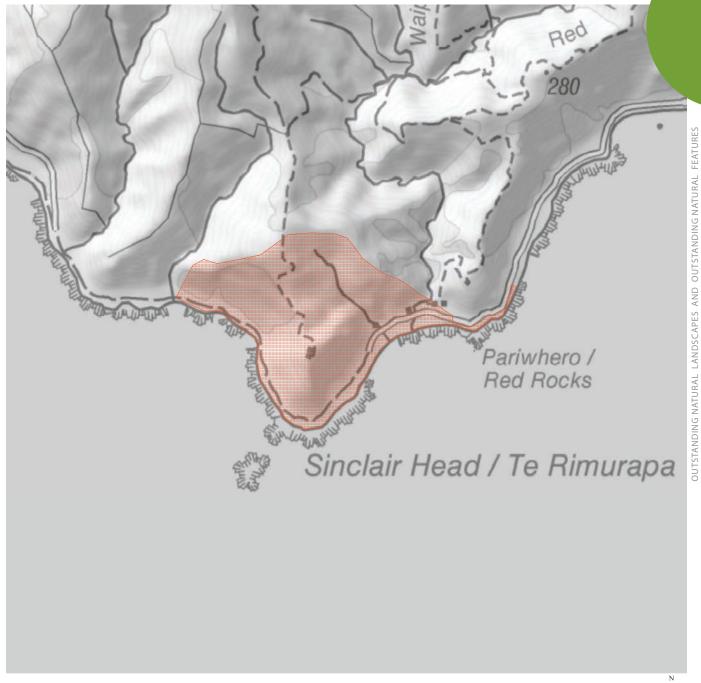
### **Tangata Whenua**

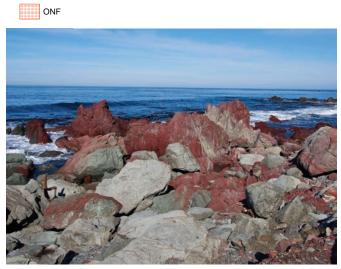
Mana whenua comments to be provided at a later date

### **Historical Association**

- Concrete remnants from a WWII observation post remain at the top of the headland.
- The Tyne Shipwreck (1845) at Pariwhero Red Rocks has high historical significance for its association with prominent early immigrants to the colony (Greater Wellington Regional Council, 2015).

# TE RIMURAPA SINCLAIR HEAD/ PARIWHERO RED ROCKS ONF









TE RIMURAPA SINCLAIR HEAD

### TAPU TE RANGA ISI AND ONE

### **DESCRIPTION**

Tapu Te Ranga Island is an iconic feature off the south coast within the Island Bay Marine Reserve. Known as the 'Isle of Hallowed Ways', the island is the subject of many Māori legends and traditions. Although the feature is dominated by weed species, its location along the coastal edge attracts a wide range of regionally significant bird species.

### **NATURAL SCIENCE VALUES**

HIGH



### Rarity

The island provides habitat for a variety of threatened and at risk bird and lizard species. It is one of only two breeding sites for the reef heron and home to the rare common skink and minimac gecko (Boffa Miskell Ltd, 2014)(Greater Wellington Regional Council, 2015).

### **Ecological Function**

- Although the land cover mainly consists of weed species, there are some regionally significant flora that attract a diverse range of regionally significant wildlife including birds, geckos, and skinks (Boffa Miskell Ltd,
- The island is a nesting area for blue penguins.
- The feature is recognised as having very high coastal natural character (Greater Wellington Regional Council, 2015).

### **SENSORY VALUES**

VERY HIGH



### **Aesthetic**

- The form of the island is highly unmodified. Disturbances are limited to indigenous vegetation which has been slow to regenerate due to harsh coastal conditions.
- The island is an iconic feature within the Island Bay community and is the subject of paintings by many different artists (e.g. Rita Angus). It is highly valued for its dramatic and scenic character.

### **Expressive**

The exposed coastal greywacke rock feature is expressive of the forces of uplift and erosion that led to its existing character.

### **Transient**

There is a rich association with transient coastal experiences due to shifting tides, wave patterns, light conditions, aromatic and auditory elements, and bird migration patterns.

### SHARED AND RECOGNISED VALUES

**VERY HIGH** 



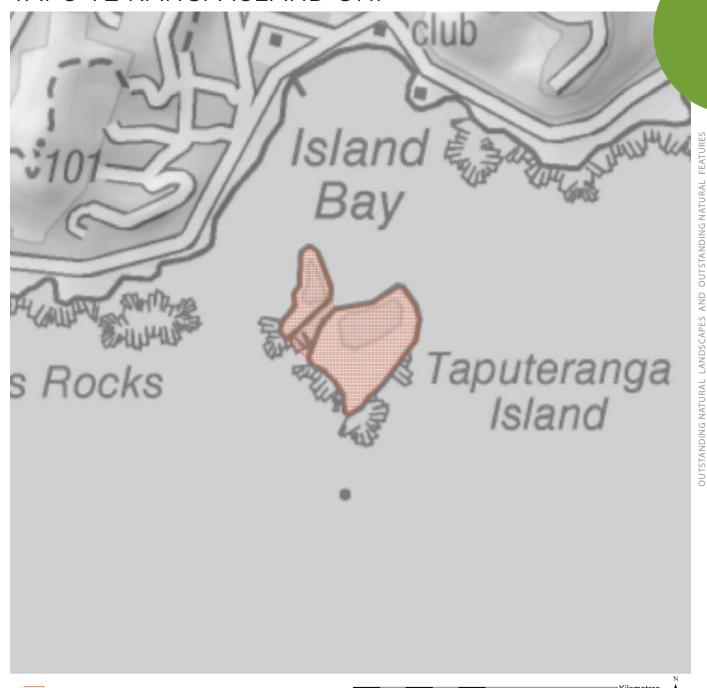
### **Shared & Recognised**

- The feature is highly valued for its aquatic recreational opportunities within the marine reserve.
- The sheltering effect that the island provides to the bay has allowed the bay to be used as a harbour for fishing boats. The long association with fishing is an important characteristic of Island Bay identity (e.g. Boats, Island Bay by Rita Angus.

### **Tangata Whenua**

Mana whenua comments to be provided at a later date

### TAPU TE RANGA ISLAND ONF





TAPU TE RANGA ISLAND WITHIN ISLAND BAY

# HUE TĒ TAKA PENINSULA / RANGITATAU PALMER HEAD ONF

### **DESCRIPTION**

Hue tē Taka Peninsula/Rangitatau Palmer Head refers to the southern headland, escarpment and rock stacks at the southern end of Motu Kairangi Miramar Peninsula. The feature is characterised by a steep vegetated above a narrow beach platform that extends to form the Hue tē Taka Peninsula. The headland extends from the top of the southern ridge of Rangitatu Palmer Head to include the escarpment and edge of the shore and rock stacks along Tarakena Bay. The peninsula and part of the headland are designated as conservation areas. The feature is known for its scenic, habitat, cultural, and historic value. The rock formations and regenerating coastal vegetation attract a diverse range of indigenous coastal birds and lizards. Two pā are located above the escarpment. The headland was a strategic defence location for Māori and later for military during WWII.

### **NATURAL SCIENCE VALUES**

HIGH



### Rarity

• The Hue te Taka Peninsula has one of the largest lizard populations in the Wellington region (Greater Wellington Regional Council, 2015).

### **Ecosystem Function**

- Successional patterns of regenerating indigenous coastal vegetation occupy the south-facing flanks of Tarakena Bay and the Hue te Taka Peninsula.
- The headland and peninsula provide habitat for a diverse range of indigenous coastal birds including the blue penguin.
- The feature is recognised as having high coastal natural character (Boffa Miskell Ltd, 2016).

### **SENSORY VALUES**

**VERY HIGH** 



### Aesthetic

- The Hue te Taka Peninsula is fairly undisturbed amongst a generally unmodified headland and coastal edge. Modifications are limited to the coastal road, parking areas, and sewage outfall.
- The landmark landform and rock stacks are valued by the community for their scenic and aesthetic character.

### **Expressive**

• Steep coastal escarpments, beach platforms, and rock stacks are expressive of the forces of uplift and erosion that led to the existing character.

### **Transient**

• There is a rich association with a transient coastal experiences due to shifting tides, wave patterns, light conditions, aromatic and auditory elements, and bird migration patterns.

### **SHARED AND RECOGNISED VALUES**

**VERY HIGH** 



### **Shared & Recognised**

The feature is highly valued for terrestrial and aquatic recreation and wildlife viewing opportunities. The
peninsula is a notable diving, fishing, and shellfish collection area, and is also valued as a place to enjoy
and observe the coastal experience.

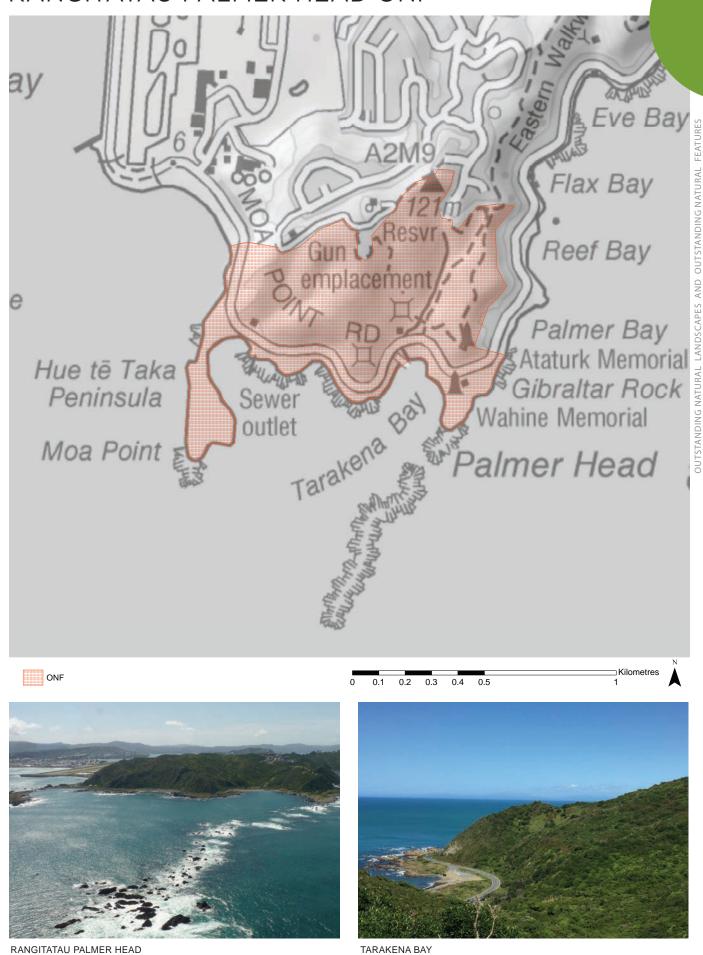
### **Tangata Whenua**

Mana whenua comments to be provided at a later date

### **Historical Association**

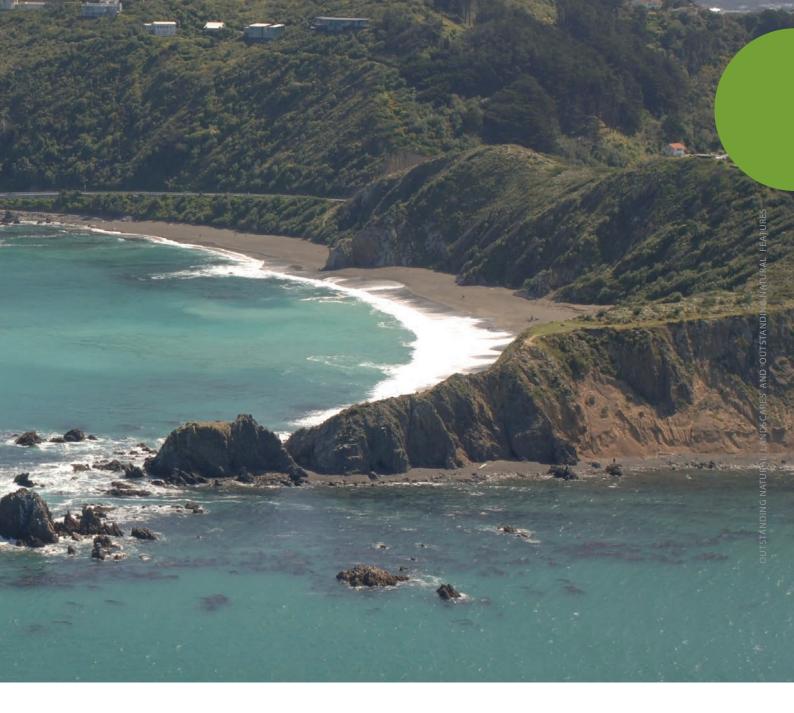
- The feature was a strategic site during WWII. Fortification and search light emplacement remnants remain on the headland ridge.
- Tarakena Bay is the site of an old Pilot Station that served as home to Captain Lancelot Holmes, the pilot in command during the 1870s and 1880s (Raukura Consultants, 2014).

# HUE TĒ TAKA PENINSULA / RANGITATAU PALMER HEAD ONF





BREAKER BAY
BEYOND POINT DORSET



# **ORUAITI ONF**

#### **DESCRIPTION**

Oruaiti is a feature comprised of steep coastal cliffs, sand dunes, beaches, and rock sequences along the east coast of the Motu Kairangi Miramar Peninsula. The feature extends south from the escarpment at Te Aroaro-o-Kupe Steeple Rock to include Point Dorset and west along Breaker Bay. Located at the entrance to Te Whanganui a Tara Wellington Harbour, Oruaiti is the site of a strategic pā and was later used as a defensive position during both world wars. Prominent rock formations and steep vegetated coastal cliffs are recognised for their scenic and recreational value. The beaches below the escarpment are a breeding ground for blue penguins and the rock formations are habitat for coastal bird species.

#### **NATURAL SCIENCE VALUES**

HIGH 🖳



#### Rarity

- The sand dunes below the eastern escarpment are one of the few remaining along Wellington's south coast (Wellington City Council, 2011).
- The escarpment contains *Desmoschoenus spiralis*, a rare sedge.

#### **Ecosystem Function**

- Through restoration efforts, indigenous coastal vegetation is regenerating along the escarpment (Boffa Miskell Ltd, 2001a).
- The eastern shore is a breeding area for blue penguins.
- The headland is an important nesting area for penguins. The rocks at Point Dorset are a roosting area for shags and gulls.
- The feature is recognised as having high coastal natural character (Boffa Miskell Ltd, 2016).

#### **SENSORY VALUES**

VERY HIGH



#### **Aesthetic**

- The relatively unmodified headland is the only part of the eastern shoreline of Motu Kairangi Miramar Peninsula without immediate road access. Disturbance is generally limited to the nearby former military structures, interpretive signage, and pedestrian stair access on the headland.
- The landmark feature signals the Te Whanganui a Tara Wellington Harbour gateway for sea vessels (Boffa Miskell Ltd, 2001a).
- The headland is important to the community and recognized for its scenic and aesthetic value.

- Steep coastal escarpments and beach platforms are expressive of the forces of uplift and erosion that led to the existing character of the feature.
- Te Aroaro a Kupe (Steeple Rock) and Point Dorset are expressive rock formations extending along the headland.

#### **Transient**

There is a rich association with transient coastal experiences due to shifting tides, wave patterns, light conditions, aromatic and auditory elements, and bird migration patterns.

#### SHARED AND RECOGNISED VALUES

VERY HIGH



#### Shared & Recognised

- The feature is highly valued for recreation and wildlife viewing opportunities. The connection to the Eastern Walkway, isolated character from the road, and the panoramic views of the harbour from the top of the escarpment contribute to the feature's attraction. The sheltered, sandy beach along Breaker Bay is a popular area for surfing, swimming, and surfcasting.
- The feature is the official tsunami evacuation location for the nearby school and surrounding neighbourhood.

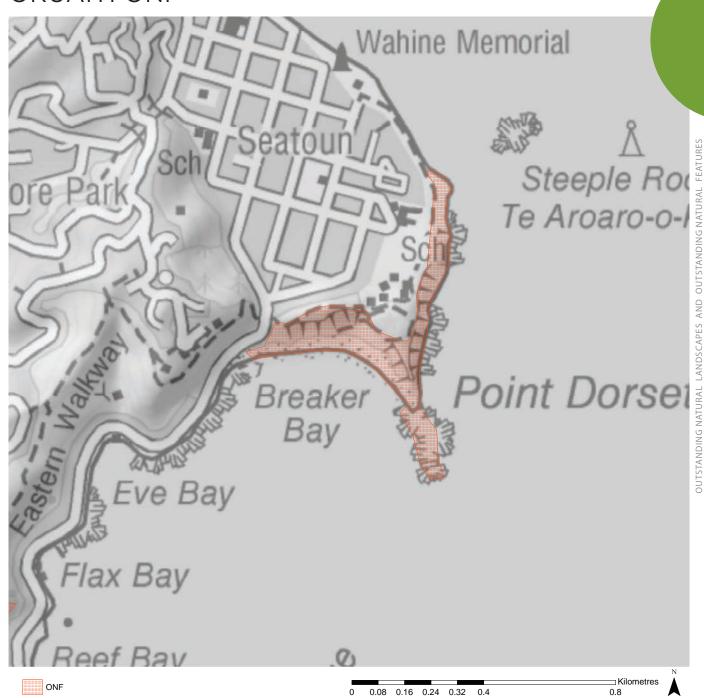
#### **Tangata Whenua**

Mana whenua comments to be provided at a later date

#### **Historical Association**

- Point Dorset was a strategic defence location during both world wars (Wellington City Council, 2011). Remnants of the former gun emplacements and observation bunkers remain on the site.
- Several shipwrecks, notable in Wellington's maritime history, occurred near the features, Subraon (1848), Tui (1886), Willie McLaren (1889), and the Wahine (1968) (Wellington City Council, 2011).

# **ORUAITI ONF**





POINT DORSET AT THE ENTRANCE OF TE WHANGANUI-A-TARA WELLINGTON HARBOUR



POUWHENUA AT ORUAITI



## WATTS PENINSULA SAL

#### DESCRIPTION

Watts Peninsula is the northern headland of the Motu Kairangi Miramar Peninsula. The landscape extends from Mt Crawford to include the steep escarpments and narrow beach platform from Shelly Bay around Point Halswell to Scorching Bay. Watts Peninsula contains sites from different periods in Wellington's history, including Māori settlement and early European defence. The headland is an important landscape feature to Māori as it is the site of the Mataki-kai-poinga Pā and there are a large number of Māori sites that are noted for their intactness. Historic military buildings, strategic posts, and a war memorial contribute to the landscape's strong military character. The landscape is highly valued by the community for its recreational opportunities, particularly along the fairly undeveloped coastal roadway. The land cover can generally be described as exotic with some regenerating native species regenerating in the understory.

#### **NATURAL SCIENCE VALUES**





#### **Ecosystem Function**

- Vegetation along the ridgetop is comprised of mainly exotic conifers and exotic shrubs that have limited ecological value.
- Native species are emerging along the coastal escarpment, with tree species in sheltered gullies and flax communities on more exposed faces.

#### **SENSORY VALUES**





#### Aesthetic

- The headland is an iconic landscape, recognized as one of the few remaining undeveloped areas along the Wellington city section of the harbour.
- Although the coastal edge, roadways, and military buildings suggest that the landscape is highly modified
  by human activity, the landform and dense vegetation amongst a highly developed surrounding area
  contribute to the landscape's naturalness.

#### **Expressive**

• The steep escarpments and narrow beach platform are expressive of the forces of uplift and erosion that led to the landscape's existing character.

#### **Transient**

• There is a rich association with transient coastal experiences due to shifting tides, wave patterns, light conditions, aromatic and auditory elements, and bird migration patterns.

#### **SHARED AND RECOGNISED VALUES**

**VERY HIGH** 



#### Shared & Recognised

- The area is a prominent landmark and can be seen from many points around Wellington, including from the sea, land and air.
- The coastal roadway and adjacent rock formations are highly valued for their recreational opportunities that include running, walking, biking, fishing and diving.

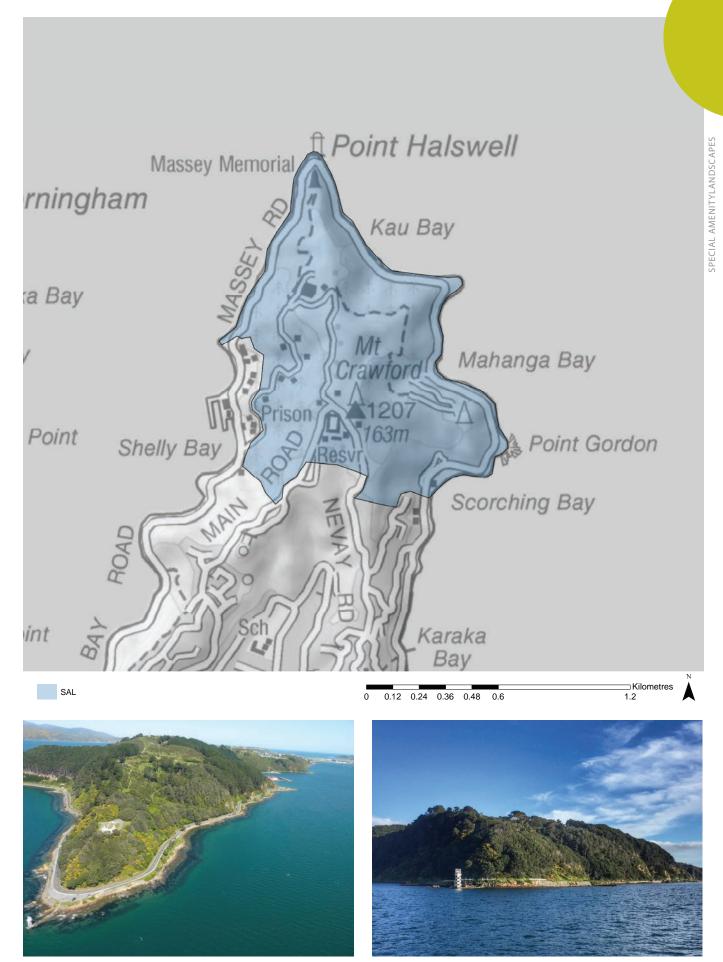
#### **Tangata Whenua**

Mana whenua comments to be provided at a later date

#### **Historical Associations**

- The headland contains several historic military structures. These include buildings associated with the air force and naval base at Shelly Bay, gun emplacements on Mount Crawford, Fort Balance at Point Gordon and Massey Memorial commemorating New Zealand's past war efforts.
- The former prison that remains on Mount Crawford was built in 1915. The prison had several uses including a reform school and men's prison before closing in 2012 (Blaschke & Rutherford Environmental Consultants, PAOS Ltd, & TRC Tourism Ltd, 2012).

# WATTS PENINSULA SAL



MASSEY MEMORIAL ON POINT HALSWELL

WEST SIDE OF POINT HALSWELL

### TOWN BELT SAL

#### DESCRIPTION

The Town Belt is a network of areas of open space providing a scenic backdrop to the inner city. The portion of the Town Belt contained within this SAL forms a horseshoe shape from Point Jerningham near Matairangi Mount Victoria in the northeast, to Mount Albert at its southern end, then northwest to the boundary of the Karori Wildlife Sanctuary. Known as the 'lungs' of the city, the network of reserves has deep historical roots and was formed in the mid-19th century to establish public parks and gardens at the edge of urban development. In order to establish vegetation quickly, species that were hardy and fast-growing, primarily radiata pine, were selected in lieu of native species. While these non-native species continue to dominate the landscape today, there are increasingly large areas of regenerating and planted native vegetation. The landscape is highly valued for its open space network and recreational opportunities within an urban context. Matairangi Mount Victoria, one of the city's most iconic landmarks, is located within the SAL.

#### **NATURAL SCIENCE VALUES**

**MODERATE** 



#### **Ecosystem Function**

- Vegetation throughout the landscape is dominated by non-native species such as radiata pine, macrocarpa and eucalyptus that have limited ecological value.
- Many of the streams within the town belt are ephemeral or have been piped underground in response to surrounding urbanisation. While there are some locations with open flow perennial streams that are healthy enough to support fish populations, the streams are channelised with a mix of hard and soft edges.

#### **SENSORY VALUES**

HIGH 🖽



#### Aesthetic

- The Town Belt is an iconic backdrop to the central city. Matairangi Mount Victoria is a prominent landmark that offers panoramic views of the city and harbour.
- The densely vegetated reserve is protected by its own Act of Parliament enacted in 2016 and is highly valued for its aesthetic quality and contrast to the surrounding urban landscape.
- The landscape is modified by human activity with roads, sports facilities, and various other structures, earthworks, and extensive plantings of exotic tree species. However, the network of pathways through dense vegetated cover contrasts with the surrounding developed urban and residential areas, contributing to the Town Belt's sense of landscape naturalness.

#### **Expressive**

The fault formed ridges and valleys through the landscape are highly expressive of the forces that led to the existing character.

#### **SHARED AND RECOGNISED VALUES**

**VERY HIGH** 



#### Shared & Recognised

- The network of open space areas within an urban context contributes to the health and well-being of the community.
- The landscape is highly valued for the many recreational opportunities it provides. A series of trails provide linkages to various parks and sports facilities.
- There are several active volunteer groups that are critical to the success of the Town Belt. Volunteers are involved with re-vegetation and restoration projects, pest management, and trail maintenance.

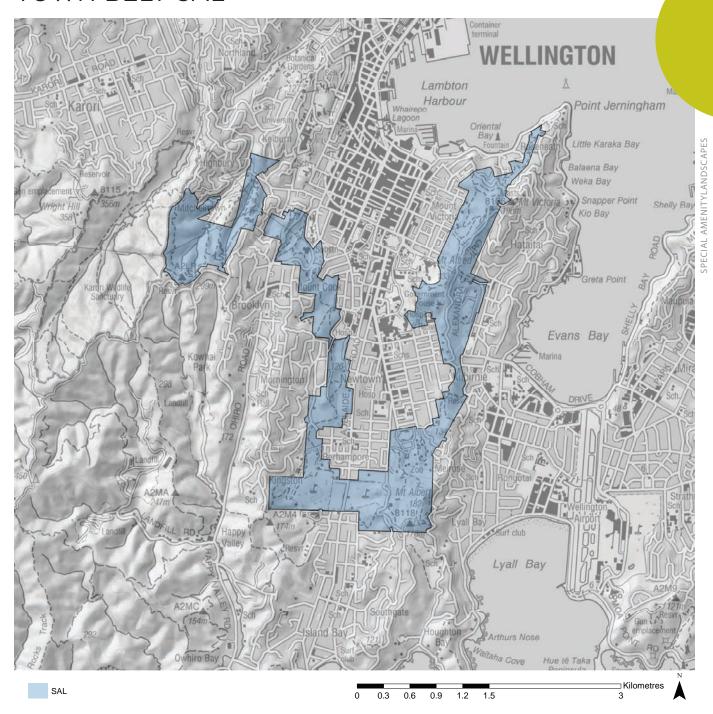
#### **Tangata Whenua**

Mana whenua comments to be provided at a later date

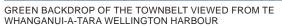
#### **Historical Associations**

The origins of the Town Belt date back to the 1830s and are rooted in colonisation, social hierarchy, and the promotion of health and well-being of citizens. The green network was known as the 'lungs' of the city as well as a socio-economic barrier to keep highly valued property closer to the central city (Wellington City Council, 2013).

# TOWN BELT SAL









PANORAMIC VIEWS FROM MATAIRANGI MOUNT VICTORIA

## TE AHUMAIRANGI HILL SAL

#### **DESCRIPTION**

Te Ahumairangi is a steeply rising hill forming the northern backdrop to the central city. The landscape is a Wellington landmark and part of the Town Belt. Located along the Wellington faultline, Te Ahumairangi Hill is bound by the suburbs of Wadestown to the north, Wilton to the west, and Northland to the south. The vegetation is mostly exotic, but native forest is regenerating throughout. Te Ahumairangi Hill is the only undeveloped landform near the city's central business district and provides an important green backdrop. The landscape has both important recreational and cultural values.

#### **NATURAL SCIENCE VALUES**

**MODERATE** 



#### **Ecosystem Function**

- Although much of the vegetation is exotic, native forest is regenerating in the understorey and within sheltered gullies.
- Native vegetation is regenerating on the western slopes where a combination of tree felling and storms have removed large areas of pine trees.
- The large area of tree cover provides habitat for birds.
- The headwaters of five streams originate from this area, the Pipitea, Tiakiwai, Tutanenui, Waipiro, and Kumutoto Streams (Rachel Buchanan, 2012).

**SENSORY VALUES** 

HIGH



#### **Aesthetic**

- The landform appears largely unmodified by human activity, with modifications mainly limited to a single access road, telecommunication mast, radio transmitter tower and reservoir along the ridgeline.
   Although, the land cover consists mainly of introduced tree species, the dense backdrop of vegetation contributes to the high natural character.
- The backdrop is an iconic landmark and is highly valued for its contribution to the urban landscape and panoramic views of the harbour, city, Hutt Valley and western hills from the summit.

#### **Expressive**

 Located along the Wellington faultline, the landscape is highly expressive of the forces of uplift that led to its existing character.

#### **SHARED AND RECOGNISED VALUES**

HIGH



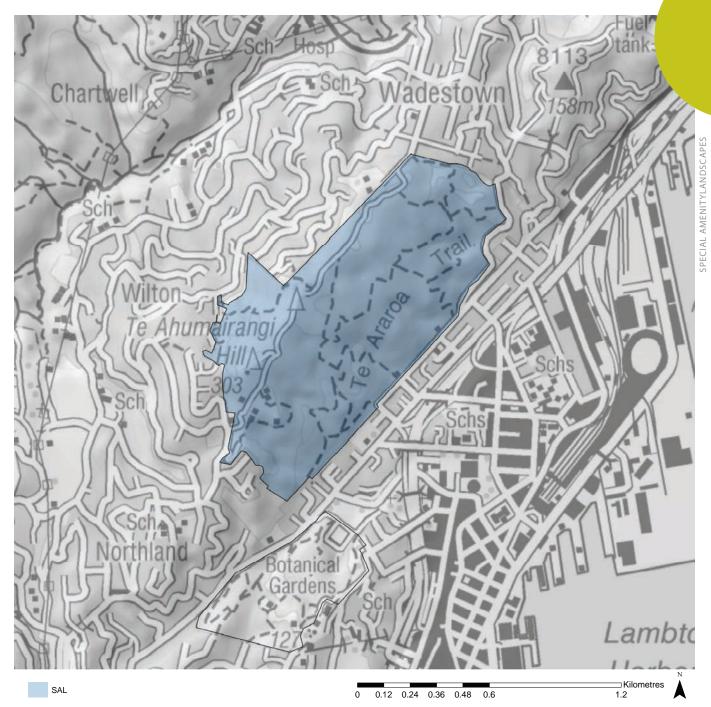
#### Shared & Recognised

- A network of walking and mountain biking tracks provide recreational opportunities valued by the community.
- The green backdrop that the hill provides to the western part of the city, especially the CBD, is highly valued by the community.
- The landscape is highly used due to its proximity and ease of access city centre and surrounding suburbs.

#### **Tangata Whenua**

Mana whenua comments to be provided at a later date

# TE AHUMAIRANGI HILL SAL





TE AHUMAIRANGI HILL FROMING THE BACKDROP OF THE CENTRAL CITY



RECREATION TRAILS OF THE EASTERN WALKWAY PROVIDE ACCESS THROUGHOUT TE AHUMAIRANGE HILL

## WELLINGTON BOTANIC GARDEN SAL

#### **DESCRIPTION**

The Wellington Botanic Garden consists of 26 hectares of native bush, exotic forest, specialty gardens, and floral displays near the Wellington city centre between the suburbs of Kelburn and Thorndon. The landscape was originally an important food gathering area for Māori, forming part of the Kumutoto Pā. Later, it became an important place for European settlers to import plant species to assess their economic potential, making it one of New Zealand's oldest botanic gardens. While the stream systems are modified and there is a significant amount of exotic vegetation, the dense vegetative cover and remnant indigenous bush improve the ecological value of the garden. A network of trails connecting open space with several notable attractions, contribute to the garden's popularity as a shared and recognised space.

SEASONAL FLORAL DISPLAYS ATTRACT MANY PEOPLE TO THE BOTANIC GARDENS



#### A VIEW FROM ABOVE THE TREE CANOPY



#### **NATURAL SCIENCE VALUES**

MODERATE HIGH



#### Research and Education

- The documented collections of plants are used for scientific research and education. It is the only public garden in New Zealand to have a scientific mandate from the government (Wellington City Council, 2002).
- In addition to educational facilities such as the Treehouse Visitor Centre, Cable Car Museum, and Carter Observatory, informational signage and guided and self-guided walking tours contribute to the educational opportunities within the gardens.

#### Rarity

- Native bush areas along the western slope of Fern Glen Stream and Stable Gully are the only examples of original gully native forest within the city (Myers, 1987).
- The microclimate created by the vegetation and Pukatea Stream are habitat for glow worms.

#### **Ecosystem Function**

- Although a significant amount of vegetation is exotic, the garden contains several remnants of indigenous bush and areas of regenerating native vegetation. The larger areas of bush are generally healthy and self-sufficient with high ecological value.
- The large area of tree cover has helped expand the native bird habitat for restored populations in Karori Wildlife Sanctuary.

HIGH \ **SENSORY VALUES** 



#### Aesthetic

- The landscape is somewhat modified with building structures associated with the gardens and other quasi-public organisations, altered streams and exotic vegetation. However, the dense vegetated cover and limited presence of roads amongst developed urban and residential areas, contribute to the garden's sense of landscape naturalness.
- A network of walking tracks through lush vegetation and floral displays contribute to the landscape's high aesthetic value.

#### **Transient**

There is a rich association with wildlife transient movement, most notable through bird flight and auditory elements such as bird song and calls.

#### **SHARED AND RECOGNISED VALUES**



#### Shared & Recognised

- The garden is highly valued by the community as a place for recreation, education, public art, and seasonal events. A network of pathways, open space for picnicking and play and events such as summer concerts, light festivals, and seasonal floral displays attract many residents and tourists to the gardens.
- Several notable attractions are within or adjacent to the garden. These include, the Wellington Cable Car and Museum, Begonia House, Lady Norwood Rose Garden, Treehouse Visitor Centre, and Carter Observatory.
- The volunteer programme highly contributes to the success of the Botanic Garden. The Friends of the Wellington Botanic Garden was formed in 1990 to promote and support the development of the garden, raise funds and support, and foster public interest.

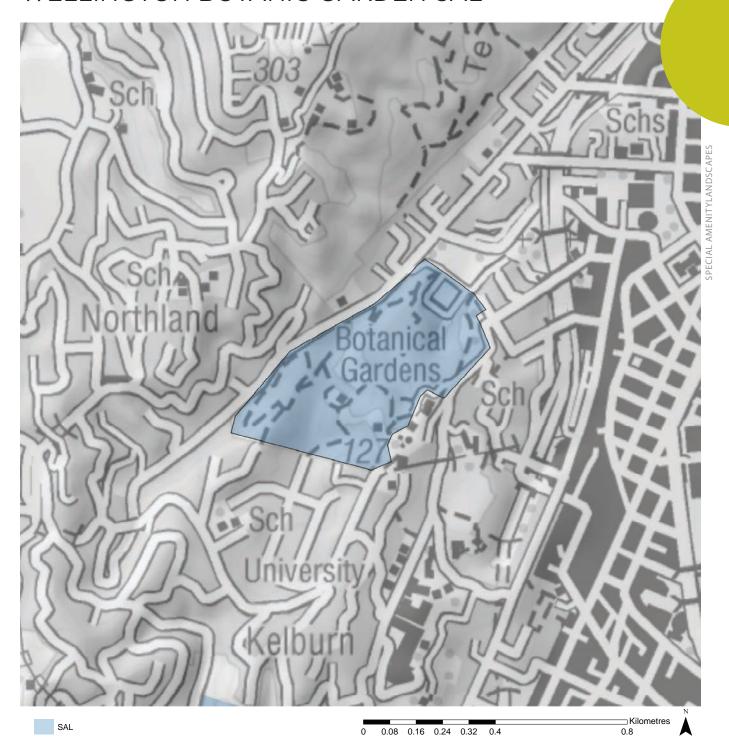
#### **Tangata Whenua**

Mana whenua comments to be provided at a later date

#### **Historical Association**

- The garden is classified as a Garden of National Significance by the Royal New Zealand Institute of Horticulture and is an Historic Places Trust Heritage Area (Wellington City Council, 2014).
- The landscape was used by European settlers as a place to import plant species to assess their economic potential (Wellington City Council, 2014).

# WELLINGTON BOTANIC GARDEN SAL



# WRIGHTS HILL/MAKARA PEAK SAL

#### **DESCRIPTION**

Wrights Hill/Makara Peak are a series of hilltops forming a ridgeline that rises from the Wellington faultline escarpment, creating a distinct rural/urban edge. The landscape is characterised by distinctive flat-topped blocks with steep slopes that form gently undulating, relatively wide valleys. Located south and west of the suburb of Karori, the landscape is bound by the Karori Wildlife Sanctuary to the east, Silver Stream to the south, South Makara Road to the west, and Makara Road to the north. The Karori Stream Valley bisects the two hilltop blocks. The landscape is best known for its recreational and historical value, and scenic views from the top of the hills. There are walking and mountain biking tracks throughout, with designated mountain biking park on Makara Peak. An extensive WWII fortification and tunnel system is located on Wright's Hill. The land cover can generally be described as regenerating native vegetation with native shrubland present along the ridgeline of Wright's Hill.

#### **NATURAL SCIENCE VALUES MODERATE**

Н

HIGH

#### Rarity

 Wrights Hill is one of few native shrubland hilltops remaining in Wellington. When combined with the Karori Wildlife Sanctuary landscape they form the largest contiguous areas of indigenous vegetation in Wellington's Outer Green Belt (Boffa Miskell Ltd, 2014).

#### **Ecosystem Function**

- Land cover is mainly regenerating native shrubland and secondary forest mixed with exotic species.
- The stream valleys contain important indigenous remnant trees.

#### **SENSORY VALUES**

**MODERATE HIGH** 



#### Aesthetic

- The hill blocks are part of the central ridge forming the undeveloped skyline backdrop to the city and western residential suburbs. Both hilltops are iconic landmarks within the community.
- Although the landscape is modified by military structures on Wright's Hill and an extensive network
  of mountain biking paths on Makara Peak, the relatively intact natural landform and dense vegetation
  contribute to the landscape's naturalness.

#### **Expressive**

• The steep valley walls and escarpment edges are expressive of the forces of uplift and fluvial erosion processes that led to the character of the landscape. The gently undulating, relatively flat-topped summit of Wright's Hill is expressive of an ancient peneplain surface.

#### **SHARED AND RECOGNISED VALUES**

VERY HIGH



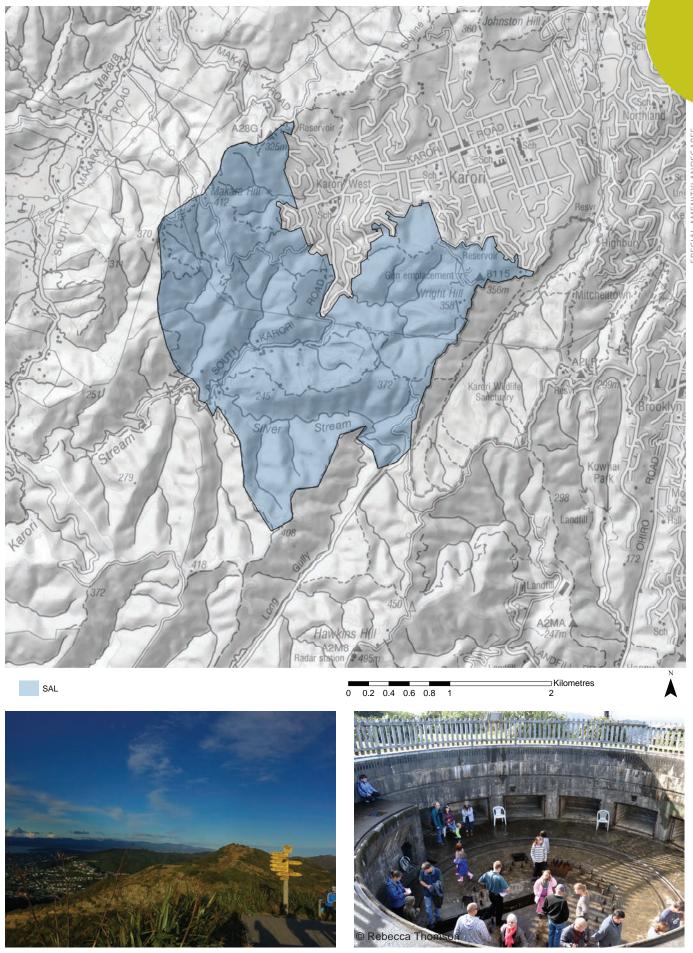
#### Shared & Recognised

- The landscape is highly valued for recreational opportunities. Riding the 'Makara Circuit' is a popular route for road cyclists and Makara Peak Mountain Bike Park is an award-winning dual use (biking and walking) park.
- The landscape is highly used due to its proximity and ease of access from the city's outer suburbs.

#### Historical association

 An extensive network of WWII structures along the top of Wrights Hill. Remnants of observation posts, fortifications, gun pits, reservoirs, building platforms and tunnel networks are present (Boffa Miskell Ltd, 2014).

# WRIGHTS HILL/MAKARA PEAK SAL



TRACK SIGNAGE AT THE TOP OF MAKARA PEAK

GUN PIT AT WRIGHTS HILL

## MOUNT KAUKAU SAL

#### **DESCRIPTION**

Mount Kaukau is located northwest of the suburb of Khandallah along the Te Wharangi Ridge separating the rural and urban sections of the city. Accentuated by the transmitter tower at the summit, Mount Kaukau is the most visible high point within the Wellington landscape. The landscape comprises the hilltop forming Mount Kaukau, extending south to include the Crows Nest above Ngaio. The landscape consists of mainly pasture, with rocky outcrops that are expressive of the peneplain surface. There are also areas of regenerating native vegetation on the southern slopes near Khandallah. The summit of Mount Kaukau is a destination along the popular Skyline Track, offering panoramic views of Wellington and to the South Island.

#### **NATURAL SCIENCE VALUES**

**MODERATE HIGH** 



#### **Ecosystem Function**

Most of the hilltop and crest flanks are covered in pasture. Native vegetation is generally limited to gullies, but patches of regenerating scrub are becoming more widespread.

**SENSORY VALUES** 



#### **Aesthetic**

- Mount Kaukau is an iconic high point along the network of ridgelines and hilltops that form the backdrop to Wellington.
- The landscape and vegetation are modified by the pastoral land use and presence of the transmitter tower and accessory buildings at the summit. However, the patterns of landform remain largely intact due to the absence of roads and other structures throughout most of the landscape.

The rocky outcrops on the ridgetop and upper slopes are highly expressive of the peneplain surface that was uplifted. Mount Kaukau is considered one of the best preserved peneplain surfaces in the Wellington Region.

#### **SHARED AND RECOGNISED VALUES**

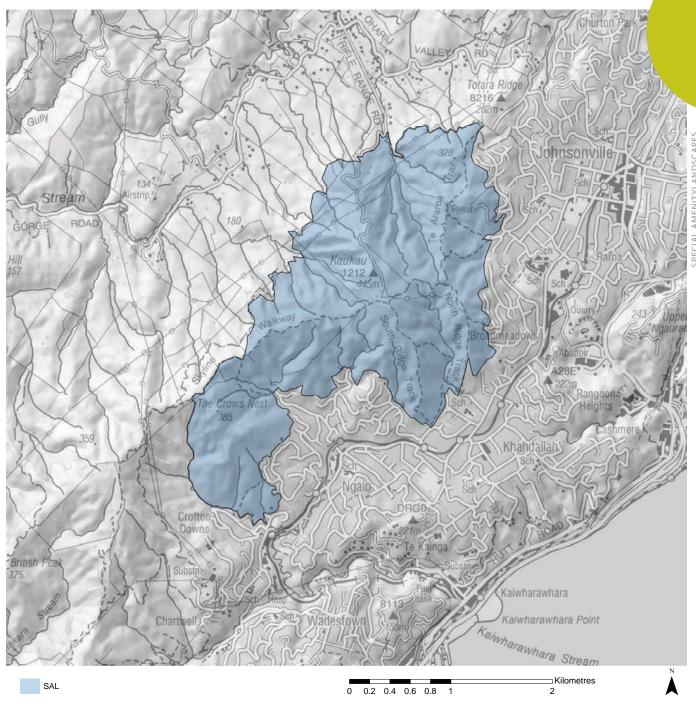




#### **Shared & Recognised**

- The summit is highly valued as a destination for panoramic views of the city and harbour, Hutt Valley, the Tararua Range, Porirua and the South Island.
- The landscape is highly used by walkers, runners, and mountain bikers due to its proximity and ease of access from the city's outer suburbs. Tracks through the landscape are the most well used within Wellington.

# MOUNT KAUKAU SAL





TRANMITTER TOWER AT THE SUMMIT OF MOUNT KAUKAU IS SEEN THROUGHOUT THE CITY



VIEW OF TE WHANGANUI-A-TARA ATOP MOUNT KAUKAU

# KOROKORO STREAM VALLEY SAL

#### **DESCRIPTION**

The Korokoro Stream Valley landscape comprises the portion of the stream valley between the Horokiwi Ridge and the eastern boundary of Wellington City, extending from Belmont Regional Park to the stream mouth into Te Whanganui a Tara Wellington Harbour. The landscape is a north/south complex system with steep spurs and gullies interweaving down to a narrow stream valley floor. The land cover is largely regenerating native vegetation with remnant native forest remaining in many of the gullies. The landscape is known for its recreational, cultural, and historic value. A portion of the landscape lies within Belmont Regional Park and is highly valued for its recreational opportunities. The stream valley has high spiritual value. A heritage concrete gravity dam is located just upstream of Korokoro Stream outlet into the harbour.

#### **NATURAL SCIENCE VALUES**

MODERATE HIGH



#### **Ecosystem Function**

- Although largely covered with regenerating vegetation, remnant native forest remains in several sheltered gullies.
- The Korokoro Stream is recognised as having migratory indigenous fish value.

#### **SENSORY VALUES**

HIGH



#### **Aesthetic**

• The Horokiwi ridge is a notable green backdrop to both the city edge and rural communities to the north.

#### **Expressive**

 The complex valley system is highly expressive of fluvial erosion processes. The rocky outcrops along the Horokiwi ridge are indicative of the eroded peneplain surface.

#### **SHARED AND RECOGNISED VALUES**

HIGH



#### **Shared & Recognised**

• The landscape, forming part of Belmont Regional Park, is highly valued for its recreational opportunities such as walking and biking.

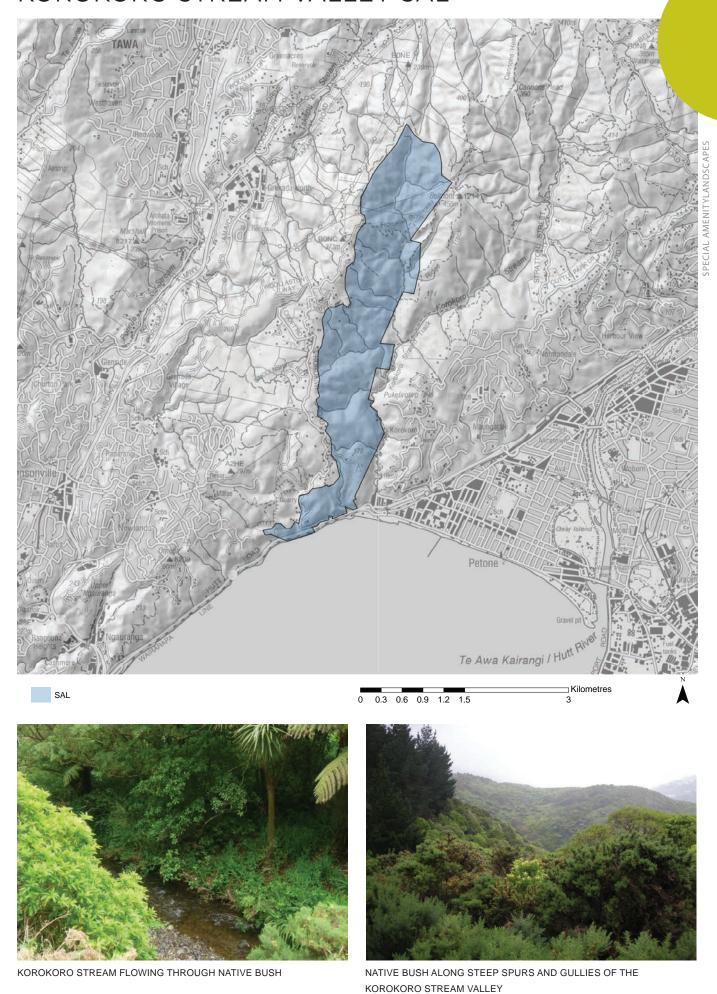
#### **Tangata Whenua**

Mana whenua comments to be provided at a later date

#### **Historical Association**

• The concrete gravity dam was used to supply water for mill operations for the Wellington Woollen Manufacturing Company. Constructed in 1904, the dam was one of the earliest mass concrete gravity dams in New Zealand and is recognised as a heritage site (Astwood & Baines, 2014).

# KOROKORO STREAM VALLEY SAL





# APPENDIX A: METHODOLOGY DETAIL

# **CANDIDATE SITES**

Drawing on feedback received from consultation with WCC officers, together with information contained within the 2014 *Wellington Landscape Character Description*, local knowledge, field investigation, and interrogation of GIS data sets, an initial list of 'candidate sites' was compiled for evaluation. To ensure overall consistency, sites contained within this list were assessed using a ranking system and qualifying thresholds described below.

# **RANKING SYSTEM**

Professional judgement was used to assess landscape value using the following seven point scale for each of the three evaluation factors, natural science, sensory, and shared and recognised factors:

VERY LOW	LOW	MODERATE LOW	MODERATE	MODERATE HIGH	HIGH	VERY HIGH
VL	L	ML	M	МН	H	VH

The following criteria were used to further assist with understanding the assessment scale used:

# NATURAL SCIENCE FACTORS

#### **JUDGEMENT**

	LOWER	HIGHER				
NATURAL SCIENCE VALUES	Values relate to the geological, ecological, topographical, and natural process components of the natural feature or landscape					
Representativeness	The combination of natural components that form the feature or landscape are discordant with the character of the area	The combination of natural components that form the feature or landscape strongly typifies the character of the area				
Research and Education	<ul> <li>No parts of the feature or landscape are important for natural science research and education, nor are there elements to be considered for research and education</li> <li>No DoC scientific reserves are established</li> <li>Natural processes and patterns are not recognised as a model for research and education</li> </ul>	<ul> <li>All parts of the feature or landscape are important for natural science research and education</li> <li>Established as a DoC scientific reserve</li> <li>Established education program for schools</li> <li>Recognised as a model for natural patterns and processes</li> </ul>				
Rarity	<ul> <li>Feature or landscape is commonly found throughout region or district</li> <li>No naturally uncommon or nationally threatened species, habitats, or environments are present</li> </ul>	<ul> <li>Unique or rare with few comparable examples within the region or district</li> <li>Naturally uncommon or nationally threatened species, habitats, or environments</li> </ul>				
Ecosystem functioning	<ul> <li>Indigenous vegetation is absent or fragmented in a way that disrupts connective landscape ecology patterns, reducing ecological value</li> <li>Exotic vegetation is the dominant vegetative land cover</li> <li>Extensively modified geological, geomorphological, hydrological elements, patterns and processes</li> <li>Ecosystem function is compromised as evidenced by habitat degradation</li> <li>Low level of biodiversity present and not a result of low nutrient environments</li> </ul>	<ul> <li>Primarily intact indigenous vegetation with important ecological value</li> <li>Exotic vegetation is absent or occurs in small areas of regeneration</li> <li>Relatively intact geological, geomorphological, hydrological elements, patterns and processes are present</li> <li>The presence of healthy ecosystems is realised through the establishment of high value habitats</li> <li>High level of biodiversity present</li> </ul>				

# SENSORY FACTORS

#### **JUDGEMENT**

	LOWER	HIGHER			
AESTHETIC	Values relate to scenic perceptions of landscape or feature				
Coherence	Land cover and land use are incongruent with natural patterns or processes with either random or significant discordant elements evidenced	Land cover and land use are in harmony with natural patterns and processes with no apparent random or significant discordant elements			
Vividness	<ul> <li>Unremarkable or ordinary landscape elements and patterns</li> <li>Unlikely to remain clear in the memory or recalled in a mental map of the district or region</li> </ul>	<ul> <li>Striking landscape elements or patterns</li> <li>Highly recognised within the local and wider community for its memorable and sometimes iconic qualities</li> </ul>			
Naturalness	<ul> <li>Human intervention and / or modification dominates the area resulting in undifferentiated modified systems</li> </ul>	<ul> <li>Area appears largely uncompromised by human modification and / or built elements resulting in intact and natural systems</li> </ul>			
Expressiveness	Landscape patterns, elements and processes have been heavily modified with little evidence of the formative process that led to its existing character	Formative landscape patterns, elements and process are clearly and legibly expressed			
Transient Values	<ul> <li>There is limited change relating to patterns and processes that is evident across the day, season, or year</li> <li>Encounters with wildlife are unlikely</li> </ul>	<ul> <li>Changing elements, patterns and processes remain clearly apparent throughout different times of the day, season or year</li> <li>Frequent opportunities to encounter wildlife</li> </ul>			

## SHARED AND RECOGNISED FACTORS

#### **JUDGEMENT**

	LOWER	HIGHER
Shared and recognized values	The landscape or feature is not widely recognised in the community	The feature or landscape is widely recognised in the community
Proc	<ul> <li>The feature or landscape is not considered to be an important</li> </ul>	<ul> <li>The feature or landscape is valued for its contribution to local identity</li> </ul>
	contribution to the local identity	<ul> <li>Commonly referred to in art,</li> </ul>
	<ul> <li>Not commonly referred to in art, literature, or tourist information and therefore not highly frequented by those outside of the community</li> </ul>	literature or tourist information and therefore, widely visited by people outside of the community
Tangata whenua	Of limited value or importance to local iwi	The area of landscape or natural feature contains cultural sites or values which are important to local iwi
Historical associations	<ul> <li>Limited historic and heritage associations</li> </ul>	Important historic / heritage sites and associations

## ANALYSIS AND BOUNDARY DESIGNATION

The ONF, ONL, and SAL boundaries were initially mapped at a scale of 1:10,000. Some boundaries were required to be mapped at a finer scale where they adjoined the smaller land parcels of residential areas. The notes below provide rationale of how the area boundaries were defined.

Because landscapes are inherently heterogenic and dynamic they do not neatly start and stop at a given point on the ground. Hence, defining the boundary extent of ONFs, ONLs, and SALs can be challenging. Landscape boundaries could more practically be considered as 'transition zones' between adjoining landscapes with differing values or attributes. While multiple landscape attributes and values were used to inform ONF, ONL, and SAL boundaries, landscapes are generally defined by topography. Subsequently, topography delineating catchment area and landform were used to define ONF, ONL, and SAL boundaries where possible. There were several instances for which land cover was used to extend or contract the ONF, ONL, and SAL boundary from catchment and landform edges.

Boundaries were extended to include large contiguous areas of mature indigenous and/or rare vegetation contributing to landscape value and were contracted to exclude areas of managed exotic forest and other non-indigenous vegetation. However, where managed exotic forest and other non-indigenous land cover are contained within ONF and ONL boundaries, these areas are of a relatively small scale and are contained within a larger landform or catchment area. Since SALs may include landscapes modified by human activity, non-indigenous land cover was often not considered in the determination of SAL boundaries.

In some instances where no clear boundary was present, it was necessary to use an arbitrary boundary. For mapping clarity, the coastline designation on the topographic map rather than the cadastral designation was used to specify the boundary along the coastal edge of Wellington.

It should be noted that the mapped boundaries have been defined using GIS mapping. Therefore, the boundaries will need to be ground-truthed in order to achieve a level of accuracy for legal purposes.

# REFERENCES

- Astwood, K., & Baines, P. (2014). Korokoro Stream dams, Lower Hutt (Heritage Register Report). IPENZ.
- Blaschke & Rutherford Environmental Consultants, PAOS Ltd, & TRC Tourism Ltd. (2012). Watts Peninsula: feasibility study identifying options for further development. Prepared for the Ministry of Culture and Heritage.
- Boffa Miskell Ltd. (2001a). Fort Dorset assessment of open space values (Report No. W01065). Prepared by Boffa Miskell Ltd for Wellington City Council.
- Boffa Miskell Ltd. (2001b). Wellington's ridgetops and hilltops: The natural and amenity values. Prepared by Boffa Miskell Ltd for Wellington City Council.
- Boffa Miskell Ltd. (2003). Restoration strategy: Part 1 (Report No. W03004). Prepared by Boffa Miskell Ltd for Wellington City Council.
- Boffa Miskell Ltd. (2005). Project West Wind Wellington: Ecological values and effects report. Prepared by Boffa Miskell Ltd for Meridian Energy Ltd.
- Boffa Miskell Ltd. (2011). Tapu Te Ranga Island: An ecological restoration plan: Final draft. Prepared by Boffa Miskell Ltd for Wellington City Council.

- Boffa Miskell Ltd. (2012). Hutt landscape study 2012: Landscape character description. Prepared by Boffa Miskell Ltd for Hutt City Council and Upper Hutt City Council.
- Boffa Miskell Ltd. (2014). Wellington landscape character description 2014 (Report No. W14006). Prepared by Boffa Miskell Ltd for Wellington City Council.
- Boffa Miskell Ltd. (2016). Wellington City and Hutt City coastal natural character assessment (No. W15016). Wellington: Prepared by Boffa Miskell Ltd for Wellington City Council and Hutt City Council.
- Greater Wellington Regional Council. (2015).
  Proposed Natural Resources Plan for the
  Wellington Region. Greater Wellington Regional
  Council.
- Greater Wellington Regional Council. (2016). Korokoro Valley. Wellington: Greater Wellington Regional Council. Retrieved from http://www. gw.govt.nz/where-the-wild-things-are/
- Myers, S. C. (1987). Native forest remnants in Wellington's Botanic Gardens. Wellington Botanical Society Bulletin, 43, 32–40.
- New Zealand Government. Resource Management Act (1991).

- Rachel Buchanan. (2012, September 15). The king of Wellington's hills. Dominion Post. Wellington Region.
- Raukura Consultants. (2014). Wellington Airport Limited south runway extension: Rongotai-Hue te Taka: Cultural values report. Prepared by Raukura Consultants for Wellington International Airport Ltd.
- Wellington City Council. (2002). Combined management plan: Wellington Botanic Garden, Anderson Park, Bolton Street Memorial Park. Wellington: Wellington City Council.
- Wellington City Council. (2011). Oruaiti Reserve management plan. Wellington: Wellington City Council.
- Wellington City Council. (2013). Wellington Town Belt Management Plan. Wellington City Council.
- Wellington City Council. (2014). Botanic gardens of Wellington management plan. Wellington: Wellington City Council. Retrieved from http://wellington.govt.nz/your-council/plans-policies-and-bylaws/policies/botanic-gardens-of-wellington-management-plan
- Wellington City Council. (2016a). Otari-Wilton's Bush native botanic garden and forest reserve. Wellington: Wellington City Council. Retrieved from http://wellington.govt.nz/recreation/enjoy-the-outdoors/gardens/otariwiltons-bush/visitor-information
- Wellington City Council. (2016b). Red Rocks Scientific Reserve. Retrieved January 11, 2017, from http://www.wellingtonnz.com/discover/things-to-do/sights-activities/red-rocks-scientific-reserve/
- Zealandia. (2016, December 12). Zealandia. Retrieved January 11, 2017, from https://www.visitzealandia.com/

