

### **3.** Description / Key Values



## Key values



Nature



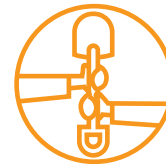
Landscape



Culture and heritage



Recreation and access



Community and identity



Resilience and city economy

## 3.1 Vital Statistics

### 3,029 ha

of reserves and Council-owned land managed as Outer Green Belt open space

- > **63%** of total reserves and Council-owned open space<sup>3</sup>

### 29 km

along the Outer Green Belt ridges from north to south

### 377 ha

native forest remnants on the Outer Green Belt

- > **38%** of all native forest remnants in Wellington City Council area

### 1,308 ha

in carbon storage forest under the Government's Permanent Forest Sink Initiative (PFSI)

- > **89%** of Wellington's PFSI areas are in the Outer Green Belt

### 162 km

public track network in the Outer Green Belt

- > **42%** of total Council track network
- > **14 km** connected Skyline Track

### 82,000

**Council-supplied plants** planted on Outer Green Belt over last 15 years (since last management plan in 2004)

- > **29,000** planted by community groups
- > **30%** planted in last four years, reflecting increasing trend

### 100,000+

**plants from the Forest & Bird nursery**

supplied to Zealandia and community groups over 20 years

**More than 35 community volunteer groups** helping manage the Outer Green Belt reserves

<sup>3</sup> These figures include Council-owned land that is classified or is intended to be classified as reserve under the Reserves Act; other Council-owned land that is managed as public open space but is not reserve land (e.g. Zealandia); and public reserve land that Council manages, or is soon to manage, on behalf of DoC e.g. part of Wrights Hill.



## 3.2 Nature

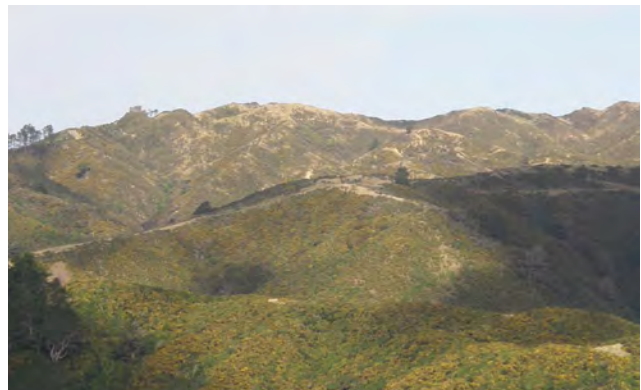
*Our Natural Capital*, the city-wide biodiversity strategy, aims to protect and restore our indigenous biodiversity. The Outer Green Belt plays a pivotal role in achieving that vision due to its concentration of ecological values and land area.

### 3.2.1 Past ecosystems and land use

In pre-settlement times the ridges of the Outer Green Belt would have been almost continuously covered in forest. Most of it would have been diverse rimu/tawa forest, typical of Wellington's inland hill country, which is more frost-prone than coastal areas but less exposed to salt-laden winds. On the highest peaks (Mt Kaukau, Mākara Peak, Hawkins Hill and Te Kopahou), the harsh climatic conditions and poor soils would have seen the vegetation dominated by tough wind-sculpted grey-scrub species. At the southern and eastern margins, where strong salt-laden winds are influential, coastal or semi-coastal forest would have occurred, as well as areas of mānuka, coastal scrub and shrublands. All the vegetation and stream environments would have supported abundant fauna, including numerous species of birds, invertebrates, reptiles and fish. There would have been considerable diversity in habitats due to the variability of valley, hillside and hilltop site conditions, including different combinations of slope, altitude, soil and aspect and related microclimates with differing exposure to wind, salt, frost, sun and rain.

As a result of human settlement, nearly all the Wellington peninsula, including the Outer Green Belt, was cleared of the original forest and most was converted to pasture. Even the few forest remnants were modified by such factors as the removal of timber, exposure to weather, grazing, isolation and the effects of weeds and pest animals. In the latter part of the 20th century, with changing economic conditions and the end of government subsidies, farming on Wellington's hill country became increasingly marginal. On the Outer Green Belt, a few areas were converted to forestry plantations but, generally, pasture on the steep land began to revert to scrub and, in recent decades, large areas have been completely retired from farming. Gorse and native scrub started to take over. Despite frequent fires, the succession of pasture to gorse to regenerating native vegetation became the dominant trend, except for the ridgetops and areas of private farmland mainly north of Mt Kaukau.

Johnston Hill 1958<sup>4</sup> (left); Hawkins Hill ridge, west, 2018 (right). The last half-century has seen the landscape transformed by succession from largely pasture-covered to gorse to regenerating native vegetation. Similar, slower, succession seems to be starting to happen where Darwin's barberry has succeeded pasture, as observed at Wrights Hill, but is still to be verified (see action 4.2.2.5 (b)).



<sup>4</sup> Aerial view of Karori, Wellington, from Wrights Hill. Evening post (Newspaper. 1865-2002) :Photographic negatives and prints of the Evening Post newspaper. Ref: EP/1958/1705-F. Alexander Turnbull Library, Wellington, New Zealand. /records/23021588

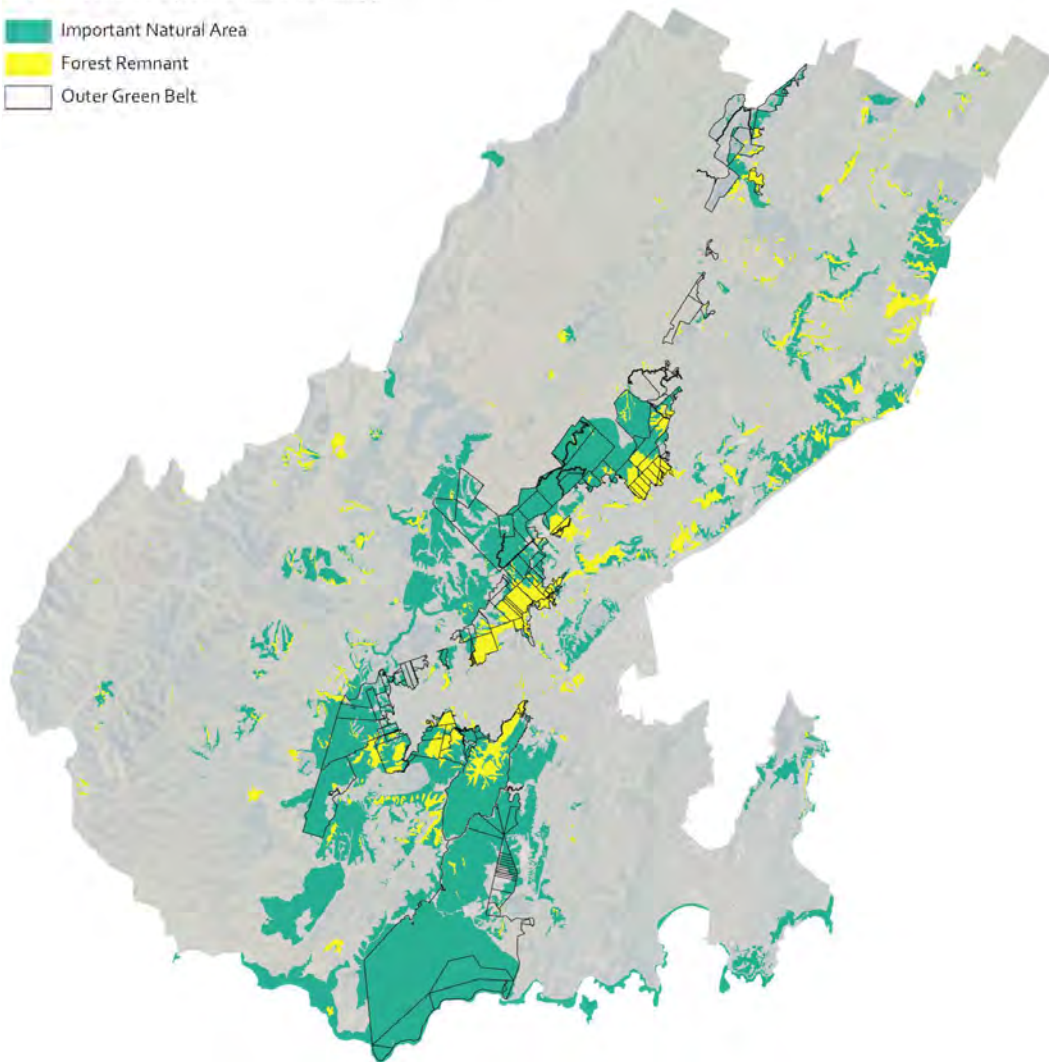
In 1999, the primary forest remnants remaining on the Wellington peninsula were identified and mapped. The map underleaf shows how relatively small and isolated they were, but notable is the comparative number and greater size of remnants within the Outer Green Belt. In particular, Otari-Wilton's Bush was an

unusually large area and its protection, dating back to the early 20th century, preserved a rare vestige of original forest. Protecting the remnants, with their seed sources, was the crucial starting point to begin restoring Wellington's ecosystems.

### Areas of High Natural Value

**Forest remnant:** Any site containing a stand of forest that appears, from the canopy species present, and/or from its ecological character, to constitute a remnant trace of pre-settlement indigenous forest, or a site where species characteristic of the pre-settlement forest are present within the canopy.

- Important Natural Area
- Forest Remnant
- Outer Green Belt



The comparatively large area and connectivity of important natural areas in the Outer Green Belt, as well as the number of larger forest remnants, is notable.

Note: forest remnants are based on Geoff Park (1999), *An inventory of the surviving traces of primary forest of Wellington City*.

### 3.2.2 Nature today

Implementing the Council's *Biodiversity Action Plan 2007 and then Our Natural Capital, Wellington's Biodiversity Strategy and Action Plan 2015* has influenced the Outer Green Belt's management in recent years - deliberately resetting our relationship with, and behaviour towards, nature. These plans brought together various earlier initiatives aimed at enhancing natural succession, better connecting natural areas, protecting threatened species and protecting and enhancing streams. Large-scale programmes of integrated pest management, restoration planting and reintroduction of locally extinct species have benefited the Outer Green Belt's biodiversity.

The Outer Green Belt's natural values and its role as a continuous northwest-southeast ecological corridor are key to the aims and objectives of *Our Natural Capital*. Many of the programmes and work undertaken or referred to under this plan align with the objectives and actions of that strategy - some are part of city-wide programmes while others might be restricted to a management sector or particular area of the Outer Green Belt.

As the map of areas of high natural value shows, the forest remnants in the Outer Green Belt are becoming increasingly connected into a continuous corridor of native vegetation, as was proposed in the OGBMP 2004. The preliminary results of an ecological review carried out in 2016 indicates that most of the land south of Johnsonville Park is potentially now a series of connected areas of high natural value. The concentration of sites in the Outer Green Belt compared to the rest of the Wellington city area is striking.

In broad terms, areas of high natural value rank highly in one or more of the following criteria:

- Are representative of ecosystems or habitats under-protected or no longer commonplace
- Contain rare and/or threatened species
- Are highly diverse ecologically or contain a rare or nationally uncommon ecosystem or biological community
- Connect, or are rare or diverse ecosystems and habitats, or provide habitat for protected or threatened indigenous species.

Some areas of the Outer Green Belt are particularly known for their biodiversity value and are at the heart of efforts to gradually expand and restore ecosystems into a connected network. From north to south these areas are:

- Westhaven Bush/Redwood Bush (refer management sector 1)
- Johnsonville Park/Khandallah Park (refer management sector 3)
- Otari-Wilton's Bush/Johnston Hill (refer management sector 4)
- Wrights Hill/Zealandia (refer management sector 6)
- Waipapa Stream and valley (refer management sector 7)
- Spooky/Hape Gully (refer management sector 7).

Around these areas are many small pockets of high value ecosystems and large tracts of regenerating vegetation. These areas are developing in diversity of plant species, are connecting forest remnants and providing more habitat for indigenous wildlife, serving as wildlife corridors and providing conditions suitable for a wider range of species to gradually establish. While gorse and Darwin's barberry are still prevalent in many areas, and there are occasional pine plantations and other scattered exotic plant species, secondary native vegetation is gradually emerging as the dominant cover. Some invasive weed species that threaten regeneration require management. The range of environmental conditions and history of land use has produced a mosaic of plant communities at different stages of transition from open grass through to tall forest. The successional process is slower on the more exposed tops and drier north-facing slopes but scrub is visibly advancing up to these areas in many places.

Native birdlife, too, has been increasing, as it has throughout much of the city. Tui, for instance, are much more prolific and kākā, which were reintroduced into Zealandia in 2002, are living in the suburbs and other open spaces, including the Outer Green Belt. Of great importance ecologically is the increase in the number and distribution of kereru, a key species in the dispersal of native canopy tree seeds. They are now a common sight in and around Otari-Wilton's Bush, the main location of mature native canopy in Wellington, and in Zealandia, and continue to spread.

Our knowledge of the biodiversity in the Outer Green Belt continues to expand. We are now starting to learn more about the lizards of the area, for instance, and we are also learning more about freshwater fish through partnerships with Greater Wellington Regional Council (GWRC). Nevertheless, there is still a lot to learn, particularly in regard to the invertebrates that inhabit the area. Research, which is a strand in *Our Natural Capital*, is important to help understand how best to care for nature in the Outer Green Belt.

The main exception to the pattern of reverting farmland is north of Johnsonville Park, on Totara Ridge, Ohariu Ridge<sup>5</sup> and on the western flanks facing Ohariu Valley, where private farmland remains predominantly in pasture. Nevertheless, several small areas of high ecological value occur within this farmland and there are larger areas at the north end of the Outer Green Belt, notably in and around Westhaven Bush, Spicer Forest and Redwood Bush/ Larsen Crescent Bush.



The majority of survey respondents in 2017-2018 supported the following ecological restoration activities in all areas of the Outer Green Belt; on average as follows:

	Support	Neutral	Oppose
Native planting	95%	3%	2%
Pest animal management	92%+	5%	3%
Weed control	91%+	5%	4%

## 3.3 Landscape

### 3.3.1 Today's landscape

The Outer Green Belt ridges are one of a series of broadly parallel northwest-southeast ridges and valleys in Wellington formed by tectonic uplift along major fault lines. The higher ridgetops and summits, with their characteristic rocky outcrops, are remnants of an ancient eroded plateau (peneplain). In the case of the Outer Green Belt, the remnant surface provides an almost continuous undulating landform broken only where the Karori Stream flows between Mākara Peak and Wrights Hill and with only two low saddles, where Ohariu and Mākara roads cross. The higher peaks are remarkably consistent in height along the entire 29-kilometre length, though overall, the ridgetops are lower and more rounded in the north and higher and more rugged from Mt Kaukau south. Hawkins Hill, at 495m, is the highest point in the Outer Green Belt. The skylines of the Outer Green Belt include many of the city's highest and most popular viewpoints.

Today's landscape reflects the progress that has been made towards the vision in the 2004 OGBMP of restoring 'a broad and continuous band of indigenous vegetation. . . mainly along the eastern slopes'. The east (city) side is now mainly covered in native forest, regenerating vegetation and a few areas of plantation forest, except between Old Coach Road and Redwood Bush. The hilltops and the western (rural) flanks of the ridges are more open and pastoral in character though pasture is increasingly reverting to scrub on the steeper land, especially south of Mākara Road, where there has been no grazing on the Outer Green Belt reserves for some decades. Viewed from the city and suburbs, the Outer Green Belt is seen as a forested 'natural' backdrop, viewed from the countryside areas of Ohariu and Mākara, it is still a largely rural landscape.

<sup>5</sup> For the purposes of this plan, Ohariu Ridge runs from the Ohariu Valley Road saddle to the saddle at the head of Ohariu Stream. The northern part of this ridge has formerly been called 'Spicer's Ridge' and the southern part, 'Best's Ridge'.

The relative absence of built development on the Outer Green Belt is important to its character and urban containment role though there are built features involving earthworks or structures, including roads and tracks, utilities for telecommunication, electricity

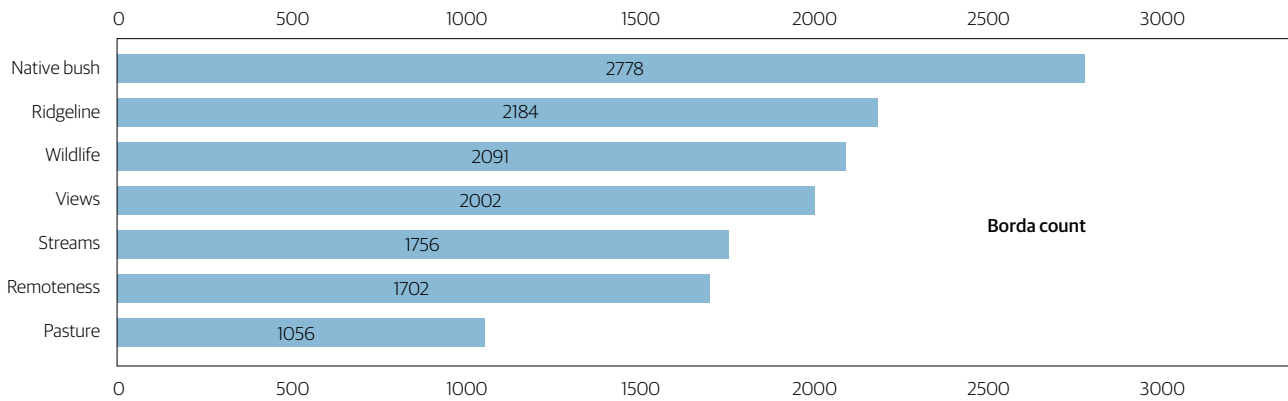
supply, water supply, landfill and former defence purposes, and features associated with farming, recreation and conservation activities, including fences, stockyards, signs, shelters and buildings. Some features are of historical significance (see section 3.4).

**3.3.2 Landscape experience**

Contact with nature, the often boisterous weather, the sense of separation from the urban environment and the panoramic vistas add up to a landscape experience that feels surprisingly remote though close to the city.

The ridgetops provide a memorable threshold for visitors - urban one way and rural the other way -with spectacular views over farmland, city, harbour and beyond to distant mountains, Cook Strait and even the South Island. The forested eastern flanks and stream valleys add to the variety of environments people can experience and are important in the way that the Outer Green Belt is perceived as a landscape feature, as revealed in the 2017/2018 survey, in which respondents ranked native bush as the most important of seven listed natural features (see chart below).

**Survey respondents' ranking of seven natural features of the Outer Green Belt, 2017/2018.**



**3.3.3 Continuity and urban edge**

The increasing spatial continuity of the Council's Outer Green Belt reserves is a key element. It is increasingly a green corridor connecting nature and offering extensive inter-linked recreational opportunities from north to south. The sheer size of this combined open space provides for values that smaller, separated open spaces cannot.

Outer Green Belt is identified as a key action in the *Wellington Urban Growth Plan 2014-2043*. By kerbing urban development, the Outer Green Belt helps to keep the city compact, with benefits for transport efficiency, reduced infrastructure and liveability. Further additions to the Outer Green Belt are considerations in the current structure planning in the northern suburbs.

The almost continuous line of steep ridges and hills has provided a natural edge to the city that has historically influenced the city's form by limiting westward urban expansion. The completion of the

The increasing continuity of the Outer Green Belt reserves also means the people who live here see its open spaces as part of their environment from many

---

different places around the city, in both distant and local views. Locally, it can be a highly visible part of each suburb's distinctive character and, at the city

scale, it reinforces the city's identity as a place of hills, skylines and wild nature.



---

Wellingtonians live within the hills,  
look at the hills and play in the hills –  
often all three!





## 3.4 Culture and heritage

The Outer Green Belt landscape holds stories of settlement, changing land use and events that reflect historic change and development of the entire city as well as local communities. A number of (often interwoven) broad themes are evident. Even this plan and its predecessors are a record of the changes that have happened on the ground as well as a record of our changing perceptions, values, expectations and hopes for our extraordinary Outer Green Belt.

### 3.4.1 Settlement, land & resource use

#### Māori settlement

The history and traditions related to the area that is now known as the Outer Green Belt go back to the earliest arrival of Māori in Wellington. That time was arguably 850 AD but perhaps nearer 1200 AD. Ngāi Tara were probably the first Māori to settle in the Wellington area, constructing pā, developing gardens and using the wider area to gather food. Before Ngāi Tara were others, more of the hunter-gatherer groups known by some as the Kāhui Mouna, who moved around taking advantage of the natural resources of the region.

Settlement was mainly around the Wellington coastline, including the coastal area at the south end of the Outer Green Belt, recognised in the Wellington City District Plan as the Rimurapa Māori Precinct. Identified sites of significance to mana whenua within the Outer Green Belt include karaka groves associated with settlements, the sites of Makure Rua Pā, Taumata Pātiti Pā and Whare Rairekau kāinga/settlement, and the Pari Whero cliff (also known as Red Rocks). Inland, Māori used the Outer Green Belt as a rich hinterland of resources. The plants and animals of the forest and stream environments provided plentiful food as well as materials. Māori also crossed the central ridges when travelling from the harbour to the west coast via the Ohariu - Thorndon Track, which is also recognised as a site of significance in the district plan.

After 1840, when the first New Zealand Company ships began to arrive at Port Nicholson (Wellington), mana whenua were gradually displaced from the Wellington area. However, Māori names for places in the Outer Green Belt reflect mana whenua's connection to the

land and are also often descriptive of features that we still recognise, or that once were. For instance, mana whenua called the central ridge from Mākara Peak to Mt Kaukau 'Te Wharangi', meaning 'broad open space' and also called Mt Kaukau by the alternative name of 'Tarikākā', meaning 'where the parrots rested'.<sup>6</sup> The Pari Whero cliff on the south coast is also associated with various Māori legends relating to Māui and Kupe.

In 2003, the Waitangi Tribunal found that at 1840 the iwi groups that had take raupatu<sup>7</sup>, or rights of conquest over all the lands within the Port Nicholson block, which includes the Outer Green Belt, were Te Ātiawa, Ngāti Ruanui, Taranaki, Ngāti Tama and Ngāti Toa Rangatira. Historical claims under the Treaty of Waitangi were settled under the Port Nicholson Block (Taranaki Whānui ki te Upoko o te Ika) Claims Settlement Act 2009 and the Ngāti Toa Rangatira Settlement Act 2014. The Council now works with its mandated iwi mana whenua entities and the wider Māori community to build on, and maintain, good relationships.

#### Farming

Forest cover on the Outer Green Belt ridges had largely disappeared by the late 19th century, cleared by European settlers to make way for farming, which played an important part in the local economy for many years. Though suburban Wellington expanded inland from the original settlement, most of the steep difficult-to-develop Outer Green Belt remained in pastoral sheep and cattle farming until the latter part of the 20th century when the withdrawal of farming subsidies made farming on much of the land uneconomic. As described in the nature section, large areas have since reverted to scrub and forest cover. The present-day landscape holds traces of the former

<sup>6</sup> <https://teara.govt.nz/en/wellington-places/page-5>

<sup>7</sup> Take raupatu refers to rights associated with conquest and is described as interests in: "...a wider area in which a group had more general rights by virtue of having participated in the conquest of that area, provided the group had sufficient strength to sustain those rights."

farming activities in such features as old fence lines and fence posts, rural tracks, stock yards and shelter planting. The remaining open hilltop areas are a reminder of the former farming landscape.



Totara gate post near Bell's track

### Timber resources

Timber from the original native forests of the Outer Green Belt was an invaluable resource for both Māori and European settlers. The forests provided much-needed firewood for heating and cooking. Māori used timber to build structures and used entire large trees for making waka<sup>8</sup>. Large trees were also useful to European colonists for ship masts. Though much of the forest was cleared in the 19th century by burning, timber was also logged and processed for a wide range of purposes, such as buildings, furniture, ships and carts. Traces of the former logging activities can be seen in features like former pit sawing sites, old tree stumps and logs, and old farm structures made from native timber such as totara.

In the later 20th century timber production re-emerged as a land use when farming became less viable. Exotic conifer plantations appeared in places,

bringing a new element into the productive landscape. A number of the plantations in the Outer Green Belt have since reached maturity but have not been harvested due to several factors, including changes in ownership, unviable economics, and new attitudes favouring management to allow native forest to regenerate under the exotic plantations instead of harvesting.

### Mining and quarrying

A minor gold rush followed the discovery of alluvial gold in the upper Kaiwharawhara Stream in 1869. Gold mining operations were set up in the upper Kaiwharawhara valley and also at Tawa Flats, mainly during the 1870s, to excavate and crush what was hoped to be gold-bearing quartz. Though nothing of significance was ever found, a number of former gold prospecting shafts and other related remains still exist in the Outer Green Belt<sup>9</sup>.

It is likely that minor quarrying would also have occurred in places on the Outer Green Belt to produce rock for metalling local roads, though little is known about this.

### Nature conservation

Changing attitudes to nature and conservation evident in the Outer Green Belt's history parallel a wider story in New Zealand. The historic changes on the Outer Green Belt exemplify changing attitudes from colonial times, when the natural environment was exploited for its resources and often perceived as a barrier to settlement (as in the case of forest cover). With time, greater understanding and appreciation of New Zealand's unique biodiversity saw a gradual change in attitudes and an increasing realisation of the need to protect nature and ecosystem services. This theme is evident in the broad changes in land management on the Outer Green Belt and even more so at specific places associated with the conservation movement, where local individuals or communities have sought (and fought) to protect natural values. The widely known Otari-Wilton's Bush and Zealandia Eco-Sanctuary are two nationally significant examples of visionary leadership in nature conservation.

A further thread in the conservation story is the increasing recognition in the last several decades of the role that nature conservation and ecosystem

<sup>8</sup> Boffa Miskell, Thematic Heritage Study of Wellington, p. 30

<sup>9</sup> Including New Zealand Archaeological Association sites R27/190, R27/276 & R27/276 in management sector 6.

services play in providing resilience to the city in the face of climate change or natural disasters. This recognition has seen some historic stories come full-circle, such as the return of forest cover to the hills of the Outer Green Belt with benefits including flood risk management, improving water quality and water supply. The Outer Green Belt itself is a part of the nature conservation story, having been conceived, at least in part, for protection of landscapes and natural values.

### 3.4.2 Public utilities/infrastructure

The Outer Green Belt, so conveniently close to the growing city, has attracted a variety of public utility uses that exemplify aspects of Wellington's historic development. Some of these uses continue, others have been decommissioned or adapted to new use. An interesting thread within this theme is the changing attitudes to use of the land for infrastructure. Historically, such use was largely driven by need, cost benefit and convenience but, with time, attitudes changed as citizens sought to protect the land as open space with undeveloped skylines, questioning further utility development and seeking the creation of the Outer Green Belt as a protected area.

#### Transport

The steep ridges of the Outer Green Belt have always presented a barrier between east and west in the district<sup>10</sup>. The historic crossing places are a reminder of the arduous journey that early inhabitants faced. These places include the well-known and heritage-classified Old Coach Road, the historic Māori Ohariu-Thorndon track and the nearby Bell's track, which both cross Te Wharangi ridge near The Crows Nest, and the former bridle trail at the Mākara saddle. Today, there are still only two public roads that connect the rural communities with the city - Ohariu Valley Road and Mākara Road.

There are still only two public roads that connect the rural communities with the city across the Outer Green Belt - Ohariu Valley Road and Mākara Road.

Other routes of historic interest in the Outer Green Belt include old farm and other access tracks that are associated with early settlers or historic uses. More latterly, the development of the recreation track network is, at the very least, history in the making, with the trend in recent decades towards community volunteers building special-purpose tracks and the integration of the local track network with regional and national tourism routes such as the Skyline Track and Te Araroa Walkway.

#### Water, electricity and telecommunications services

Not unexpectedly, the elevated landforms of the Outer Green Belt have attracted certain types of utility development. Water reservoirs were developed on elevated sites to provide high pressure water to outer suburbs. An early example was the now-decommissioned reservoir in Johnsonville Park. A number of more recent tank reservoirs still exist. The development of telecommunications during the 20th century also saw installations developed that required high points for clear transmission. The radio masts on Wrights Hill, television and radio transmitter on Mt Kaukau (1965) and the airport radar dome at Hawkins Hill are all examples. Growing demand for electricity supply saw the development in the 1960s of the HDVC transmission lines on Te Wharangi ridge to carry hydro-power to the North Island from the new Cook Strait undersea cable, and the first wind turbine in New Zealand was built on the necessarily windy high ground near Polhill in 1993.

Valleys in the Outer Green Belt have not been exempt from utility uses. The dams and related infrastructure in Zealandia date from the 19th century, when the upper Kaiwharawhara Stream was used for city water supply purposes. The lower dam, completed in 1878, is a Heritage New Zealand category 1 historic place<sup>11</sup> and the upper dam, completed in 1908, is a category 2 historic place<sup>12</sup>. Both are listed in Engineering New Zealand's register of engineering heritage. Typical of many water supply areas in the country, both the upper Kaiwharawhara catchment and the Johnsonville Park catchment were long managed to protect forest cover and are now recognised for their natural values. Storm water management and emergency water

<sup>10</sup> *Wellington's Ridgetops and Hilltops - The Natural and Amenity Values*, Boffa Miskell Ltd, 2001, p. 95

<sup>11</sup> See Reserves Act Guide, chapter 6.

<sup>12</sup> Mana whenua means customary authority exercised by an iwi or hapu in an identified area.

supply from streams and springs is another aspect of the valley environments that has become increasingly important with urban expansion. In some cases, infrastructure has once again been developed, such as the water retention dam at Stebbings Stream and the emergency water supply stations at Khandallah Park, Silverstream Road in Crofton Downs and Fitzgerald Place in Karori.

### Defence

During World War II, defence fortifications were built at Sinclair Head/Te Rimurapa, Polhill and Wrights Hill where the elevated sites enabled the harbour and harbour entrance to be kept under observation in case of attack. The Wrights Hill Fortress Restoration Society has been active since the late 1980s in restoring the complex on Wrights Hill<sup>13</sup>, the most extensive in Wellington, and running public open days. Other defence-related features on the Outer Green Belt include former military roads above Tawa and recently rediscovered military bunkers at the foot of Mt Kaukau.

### 3.4.3 People and communities

There is also much local history associated with the people who lived on, or near, the ridges of the Outer Green Belt. There are stories about families and individuals, and collective stories associated with local communities and the interest groups associated with the Outer Green Belt.

#### Early settlers and farming families

Farming families and personalities farmed the hills of today's Outer Green Belt from well back in the 19th century. Some were influential in the development of local communities and in civic affairs in Wellington. They are remembered in place names and local histories. They include Charles and Catherine Duncan, who had a farm extending over the ridge above Lindenvale and are remembered in several local place names, the Stebbings, after whom Stebbings Stream is named, who farmed in what is now the Glenside area, and John and Henry Kilmister, who farmed most of Te Wharangi ridge between Mt Kaukau and Mākara Saddle, after whom the 'Kilmister Tops' are named.

The suburb of Lindenvale is named after Charles Duncan's farm 'Linden Vale' and the suburb of Wilton for the Wilton family who farmed in the mid-Kaiwharawhara Valley. Johnston Hill was named after Sir Charles John Johnston, an early settler who arrived in Wellington in 1843 and later bought the land from pakeha owner Judge Chapman. Wrights<sup>14</sup> Hill is thought to be named after John Wright, a landowner and Wellington provincial councillor in the 1860s. Hawkins Hill was named after a local farmer. Many descendants of these early settlers still live in Wellington.

### Communities

The communities that developed in the valleys east and west of the central ridgelines also have ties to 'their' part of the Outer Green Belt. Originally, the small outlying settlements would have had strong farming connections to the land which would have continued even as the settlements grew into suburbs. Some place names appear to have originated in local descriptive usage, such as The Crows Nest viewpoint above Ngaio, referencing the lookout on sailing ship masts. The farmland provided places to walk and a rural visual setting that contributed to each area's sense of identity. At times, local communities actively defended 'their' part of the Outer Green Belt, as with the controversies over proposed residential developments near the Old Coach Road above Johnsonville and below The Crows Nest in Ngaio. As the Outer Green Belt reserves have grown, and appreciation of their values, local interest groups have also sprung up and become involved in voluntary restoration and awareness projects in numerous places.

### Public recreation

The growth of outdoor recreation on the Outer Green Belt is another historic thread that parallels a wider trend in society. Over time, recreational activities and the public provision for recreation has diversified from a focus on organised sport in sports grounds to a wider variety of outdoor recreation in many types of location. An early example in the Outer Green Belt is the popularity of Wilton Bush as a picnic spot in the 19th century and the St Johns pools in Birdwood

<sup>13</sup> The Wrights Hill Fortress is a Category 1 historic place, List number 7543, New Zealand Heritage List/Rārangi Kōrero

<sup>14</sup> Wrights Hill has become the common usage, though it was gazetted officially as 'Wright Hill', and the official name for the road is 'Wright Hill Road'.

Reserve. For many years recreation on the Outer Green Belt was constrained by private land ownership though some hill walking did happen. In the latter part of the 20th century, as more of the land came into public ownership, outdoor recreation opportunities

opened up. Track and public facilities have been gradually developed, including areas for specific use, such as the Mākara Peak Mountain Bike Park, developed since 1998. Public recreation is now a major land use within the Outer Green Belt.



## 3.5 Recreation and access

The Outer Green Belt offers a wide range of outdoor recreational opportunities that are relatively accessible to local communities and the city at large while offering a sense of escape from the urban environment. People enjoy a variety of often contrasting experiences, including contact with nature, physical activity, exhilarating weather, peace and quiet, and beautiful views. For many, sharing these experiences with others is part of the fun.

### 3.5.1 What do people do on the Outer Green Belt?

The type of recreation most associated with the Outer Green Belt is ‘active outdoor recreation’, often involving movement through the natural environment. The environment itself is the main attraction and the track network is the main way to facilitate people’s enjoyment of it. Instead of sports fields or club buildings, facilities are generally of a simple ‘comfort stop’ nature. A few places near main entrances offer more intensive facilities that cater for all ages and abilities, such as short gently graded walks, information and amenities at Khandallah Park or Otari-Wilton’s Bush.

Recreational activities on the Outer Green Belt include:

- Walking/tramping
- Running/jogging
- Mountain biking and e-biking
- Sightseeing and photography
- Picnicking
- Dog walking
- Orienteering
- Horse riding (in certain areas only)
- Nature conservation volunteering - planting, track maintenance, weed control and predator trapping

- Events such as mountain bike competitions, mountain running races and 4WD day trips
- Naturalist activities such as bird watching, botanising and guided nature walks
- Rock climbing
- Geo-caching and outdoor reality gaming
- Diving.

Some activities that were not contemplated in the 2004 management plan have emerged, such as drone flying, geo-caching and a proposed zip line above Carey’s Gully. Organised events, too, have become more varied and popular, including open days at the Wrights Hill fortress, the annual Mt Kaukau challenge for 5-15 year-olds, regular mountain biking events at Mākara Peak Mountain Bike Park, and the Xterra and WUU2K (Wellington Urban Ultra 2K) endurance mountain and trail running events. The idea of providing for overnight camping (possibly in a hut) in more remote areas has been suggested.

A wide range of interest groups represent the recreational users. There are groups specifically representing walkers, mountain bikers and cyclists, horse riders, harriers, buggy walkers, trail builders, cross country vehicle drivers, and orienteers. Residents and progressive associations can also represent, more broadly, local recreational interests. Volunteer groups, which have increased noticeably in the last decade, represent those who spend spare time on activities such as planting, pest animal and weed control, track work and visitor guiding. These activities are not ‘classic’ outdoor recreation. They can be hard work. They are also physical, sociable, in the outdoors and often depend on using infrastructure such as access tracks.

A survey in 2017/2018 indicated the following broad patterns in recreation use and preferences on the Outer Green Belt.



in simply by use, and less formed routes across open country. Some tracks are extremely steep, others of easier or undulating gradients. Most tracks are unpaved, the exceptions being relatively short distances of public road at Ohariu and Mākara Road saddles, Wrights Hill Road and the paved right-of-way to Brooklyn wind turbine and Hawkins Hill summit. Complex local networks at Khandallah Park, Otari-Wilton's Bush, Mākara Peak Mountain Bike Park and Zealandia provide for shorter and longer routes and loops within relatively self-contained areas. Collectively, the network provides tracks of varying lengths suitable for different abilities and levels of fitness though not everywhere. The numerous entrances to the Outer Green Belt along its length are generally low-key in the level of signage, information or other facilities provided and are not specifically signalled as being entrances to the Outer Green Belt.

The 2004 management plan emphasised securing public access and developing the track network to deliver a continuous route from north to south, with local connections. Since then, considerable progress has been made. A Skyline Track route is now accessible from the south coast to Old Coach Road and the purchase in 2018 of land at the Ohariu Valley Road saddle has filled another gap. There is potential for more reserves and recreational access linked to future housing in the Upper Stebbings Valley. Since 2004, the national Te Araroa Walkway has been routed through parts of the Outer Green Belt - at Spicer Forest and from Old Coach Road along the Skyline Track for a distance. More mountain biking tracks have also been developed at Mākara Mountain Bike Park, Wrights Hill and along the Hawkins Hill/Te Kopahou ridge, much of it constructed by volunteers.

Future management and development of recreational access on the Outer Green Belt will be guided by the Council's *Open Space Access Plan*, which aims to improve open space access opportunities to benefit local citizens and communities by providing equitable distribution and choice of opportunities while also providing for tourism. The *Wellington Regional Trails for the Future 2017* also outlines a framework for

developing the region's trail network as a world-class destination for trail-based recreation. It is still being developed and each territorial authority will decide the extent to which the framework aligns with its own management objectives. The framework identifies a number of outstanding 'Signature Trails' and significant 'Regional Trails' for development and promotion, including the following in the Outer Green Belt.

#### **Regional Trails (partly in Outer Green Belt)**

- > Polhill Reserve - Brooklyn wind turbine - Te Kopahou
- > Northern Walkway

#### **Signature Trails**

- > Mākara Peak Mountain Bike Park
- > Skyline Track

The Outer Green Belt is attracting increased use, which is likely to continue as proposed development and promotion is implemented. Increased use<sup>15</sup> inevitably raises questions about impacts and how to manage them. When we asked about reviewing this plan, common concerns were around how to manage increased use in itself, whether or not to develop and/or upgrade more tracks and, if so, to what standards, and compatibility between different users, most particularly between walkers, runners, mountain bikers, e-bikers and dog walkers. The compatibility of recreational use with grazing stock was also a concern. Other needs identified included better information, signage and way-finding, and more facilities such as toilets, drinking water, seats, rubbish disposal and, perhaps in exposed places, shelters.

The over-riding issue is how to balance providing for different user groups and experiential preferences with the need to ensure that development of the track network does not compromise the other open space values and reasons why people want to recreate in the Outer Green Belt. The issues and opportunities are addressed in more detail under the general policies in Part 4 and, where required, in the appropriate management sectors.

<sup>15</sup> Anecdotal observation from Parks, Sport and Recreation staff



## 3.6 Community and identity

### 3.6.1 Community participation

The Outer Green Belt concept was advocated by community groups from the 1960s and, since then, a wide range of groups, landowners, recreational users and members of the science community have become involved in hands-on projects in many parts of the Outer Green Belt. Without their efforts far less could be achieved.

The growth in outdoor recreation and volunteering of one sort or another has been a key change since the 2004 management plan. Through strategies dealing with biodiversity, open spaces, community wellbeing and recreation, including *Our Natural Capital*, *Capital*

*Spaces* and the *Open Space Access Plan*, individuals and community groups have been encouraged to become actively involved in helping to manage the city's open spaces. With Predator Free Wellington, for instance, predator control is being done by volunteer groups within the reserves and by neighbours trapping in their backyards. As well as helping to stretch the Council's resources further, participation brings multiple other benefits, including health and wellbeing through exercise, social interaction and contact with nature, a sense of empowerment through having greater influence and being able to 'make a difference' to the environment, learning more about 'our places', and strengthening people's sense of community, belonging and kaitiakitanga (guardianship).



### 3.6.2 How well recognised is the outer green belt?

Underpinning the OGBMP 2004 was the objective to 'unite (and manage) the area as one single, yet complex, entity' and promote it as 'one of the world's best urban green belts'. For the concept to be viable it

had to be consistently understood and supported by all stakeholder communities and be consistent with other Council strategies. So how well is it known now and how well does it fit, strategically?



Overall, the Outer Green Belt is recognised and supported in the Council’s strategic framework (see section 1.1.3.2 and Appendix II) and the Council has made progress on making the Outer Green Belt better known by extending the Skyline Track and working with the community on projects. However, resident surveys and feedback indicate that many people are still unaware of the Outer Green Belt as a distinct entity, though they might recognise and visit certain parts of it. The Outer Green Belt is still not as well-known as the Wellington Town Belt, even though it is almost six times the size.

From a strategic viewpoint, the Outer Green Belt’s open space value will grow as the city grows and that should be recognised. As already mentioned, it brings multiple benefits to the city at a large scale - urban containment and connected open space for people to recreate and live alongside nature. Promoting awareness of the Outer Green Belt could help reinforce its recognition, protection and use. An important aspect of that will be developing a consistent and appropriate identity in the design of information, signage and facilities.



## 3.7 Resilience & City economy

### 3.7.1 Resilience

The Outer Green Belt contributes to another focus in the Council’s strategic framework - city resilience. The Wellington Urban Growth Plan 2014-2043 emphasises the importance to resilience of keeping the city compact and protecting the natural environment. The *Wellington Resilience Strategy 2017* emphasises the need, in the face of natural disasters and climate change, for the environment to be healthy and robust and communities connected and empowered. In June 2019, the Council declared an ecological and climate change emergency and adopted *Te Atakura First to Zero, Wellington’s blueprint for a Zero Carbon Capital*. The Outer Green Belt contributes to the city’s resilience and climate change response in a number of ways.

Ecosystem services on the Outer Green Belt are already strengthening the city’s resilience by helping to maintain clean water and mitigate effects of extreme weather. The Outer Green Belt encompasses a large proportion of the city’s stream catchments, where vegetation cover is improving water quality by holding soil, retaining and filtering water in floods and drought periods, and storing carbon. More than 1,300 ha have been registered to sequester carbon under the Permanent Forest Sink Initiative (see the map underleaf). The potential and implications of Emissions Trading schemes is a rapidly changing area at the present time. Carbon farming and trading schemes will need to be monitored and carefully considered to obtain any potential value while

continuing to protect and enhance the Outer Green Belt values.

The Outer Green Belt’s skylines and backdrop of accessible open space contributes to Wellington’s unique identity, underpinning its growing reputation as a biophilic city - a place where living close to nature offers an improved quality of life, work and play, and as a place of beauty and adventure. The Outer Green Belt’s natural environment is also a substantial asset in the city’s economy by way of the ‘ecosystem services’ it delivers that help to keep Wellington a healthy, prosperous and sustainable place to live. Those services include breathable air, drinking water, soil, plant materials, carbon storage, storm water retention and soil conservation (see more in *Our Natural Capital*, p.9).

When people meet and form groups to undertake shared activities on the Outer Green Belt, they develop a sense of common identity, connection with and knowledge of the land in their local areas. That, in turn, strengthens community resilience in disasters because people know each other, are aware of who has useful skills and know their local area.

In civil defence emergencies, when built-up areas may be severely damaged and feel unsafe, the open spaces of the Outer Green Belt can provide comparatively safe gathering places, water supply and alternative movement routes via the track network if road and rail transport is disrupted. A tangible example is the community water station installed at Fitzgerald Place

in Karori, which will draw emergency water from the nearby stream. Ecosystem services in the forested catchment will improve the reliability and quality of the water and the open space at the water station will be a gathering place for people.

### 3.7.2 City economy

The Outer Green Belt contributes a number of tangible and intangible economic benefits.

Already, such popular destinations as Otari-Wilton's Bush, Zealandia, Mākara Peak Mountain Bike Park,

the Brooklyn wind turbine, Mt Kaukau summit, the Skyline Track and Wrights Hill fortress attract regional, national and international visitors as well as local citizens. The Te Araroa Trail brings visitors into the city via parts of the Outer Green Belt as well. The associated activity helps to support businesses and promote Wellington as a destination.

Access to the reserves so close to the city is a point of difference that attracts people to live and work in Wellington. The Outer Green Belt is an integral part of the way the city looks and its reputation as a city set in a natural environment.

#### Wellington's Carbon Forests

