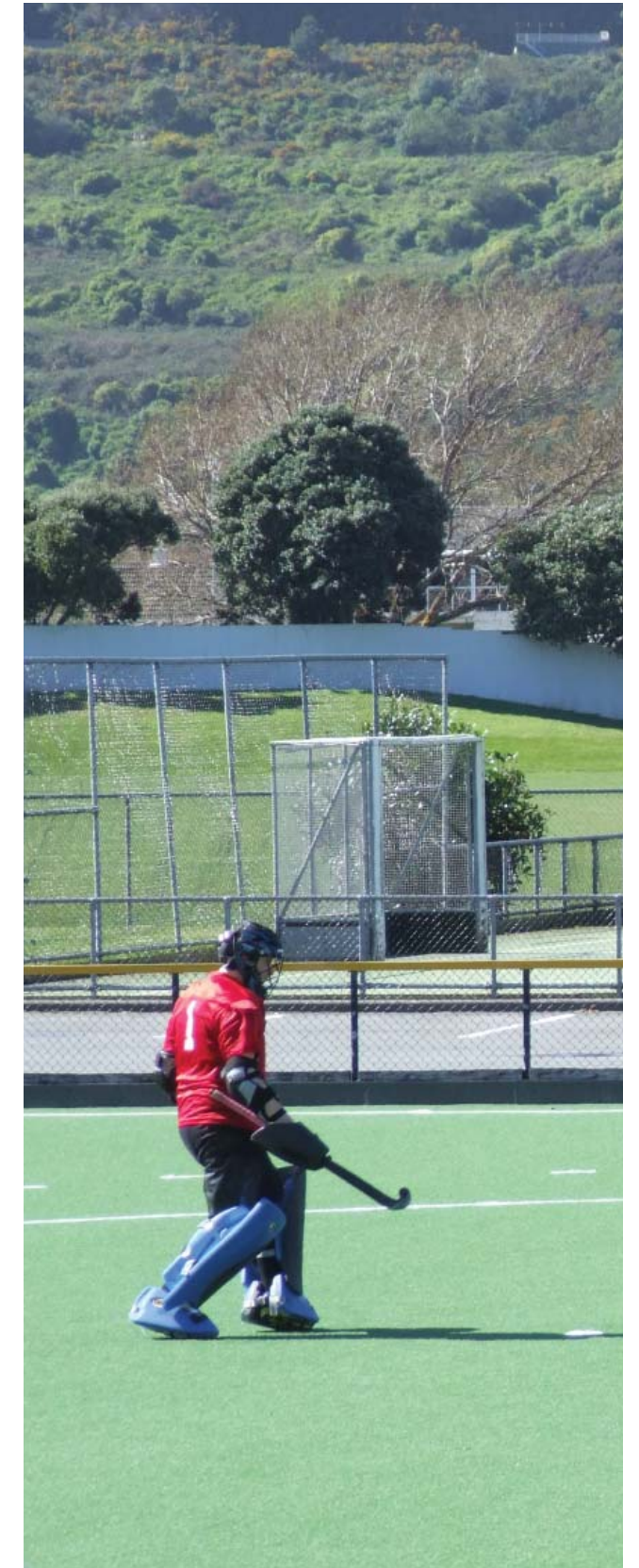




REVIEW OF VALLEY FLOOR RESERVES

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1.0 INTRODUCTION

This section introduces the review and summarises qualities and characteristics of effective public open space, review objectives, the study area and review methodology

Hutt City Council (HCC) owns, administers and manages over 5,300 hectares of public open space throughout the City as reserves. The vast majority is bush covered hills surrounding Wainuiomata, Stokes Valley and Lower Hutt. This open space is a key factor in establishing the “green” character of the City and central to its vision of being “a great place to live, work and play.”

Seventy-four percent of the population of Hutt City live on the valley floor. Others come from the hill suburbs and other parts of Hutt City as well as outside the City to schools, for work and for recreation. In particular, people come to the valley floor for sports, given the hilly landscape of much of Hutt City and the Wellington region.

Changes in demographics will have implications for the types of public open space that will be needed in the future. Societal and population changes also may mean that the purpose and use of individual spaces may change over time. The school age population is expected to decrease over the next 10 years, the elderly to increase and the population in general is expected to become more ethnically diverse.

Most of the areas with high deprivation are located on the valley floor. It is well documented that areas of high deprivation require a higher proportion of public open space because residents do not have the resources to travel outside their immediate area.

Housing density is increasing in areas of the valley floor. This results in smaller sites, greater site coverage, multi-unit housing, low-rise apartments and infill housing. The likely result is growing demand for reserves close to people’s homes.

Neighbourhood reserves are therefore likely to increase in importance. As the valley floor developed in the 1940s, 50s and 60s with large scale central government housing schemes in the northern and eastern parts of the City, land set aside for local public open space was often located at the rear of housing clusters with poor access and visibility from surrounding streets.

This review, therefore, aims to better understand the current Hutt City Council (HCC) public open spaces on the valley floor, along with those of the Greater Wellington Regional Council (GWRC) in the Hutt River corridor, and the likely future demands on these spaces. In this way, HCC can plan and make decisions on the future of individual properties.

The review considers a range of factors to do with public open space:

- Distribution of public open space areas
- Purpose of the open space, its values, use and whether the open space is fulfilling its purpose
- Demographics of the immediate and the wider population and their needs
- Current and predicted population trends
- The degree of existing and proposed residential intensification
- Contribution to the wider public open space network
- The degree of changes, development or other measures to increase reserve performance.

The review also considers the wide ranging role of public open space in the urban context. Public space:

- Contributes to the revitalisation of urban life
- Provides respite from the built environment and space for organised and casual active and passive recreation and sport
- Promotes physical activity critical for maintaining good health, reducing the risk of contracting certain diseases and reducing costs arising from physical inactivity. Less access to quality open space has been linked to inequalities in health overseas, although the direct link in New Zealand is not so clear
- Provides for development and conservation of the natural environment - space for large trees that are no longer viable on smaller house lots, plantings and gardens which provide intrinsic values such as habitat, shade and shelter for flora and fauna
- Provides attractive settings for human activities
- Provides recreational and ecological connections
- Plays a key role in connecting the main landscape features that give Hutt Valley its distinctive character
- Provides linear recreational and ecological opportunities: connections between the eastern and western hills, along the Hutt River and its tributaries on the valley floor and connections to the harbour
- Contributes to resilience of Hutt valley communities by providing open space in emergencies
- Provides space for vegetable and fruit gardens to reconnect people with food production.



1.1 Qualities and Characteristics of Effective Public Open space

Qualities and characteristics that make an open space effective vary from place to place, the users, the society within which the open space is set, its physical and environmental setting and linkages, and the quality and degree of management and maintenance.

Nevertheless it is useful to identify qualities and characteristics of effective public open space and to use them as a guideline when determining the degree of effectiveness of current provision. These qualities and characteristics are summarised below.

Key is accessibility, inclusion and equal distribution. A successful public open space applies not just to popular or dominant recreation groups and activities or to a selected demographic or use, but also to minorities and minority recreation groups and activities. Other qualities and characteristics are summarised below:

ACCESSIBILITY

- Close to residential, commercial and business areas and can be reached on foot if a local reserve, on foot or a short bike ride or drive if a suburban reserve, a bike ride, drive or ride on public transport if a city or district reserve, and clear and defined routes by car and public transport if a regional reserve
- Easy to access e.g. street frontages, multiple and clearly visible entrances, not severed by busy main roads or railway lines, accessible and well-graded paths.

INCLUSIVE

- Public participation in planning, design and in some cases management
- Welcoming and easily identified as a public reserve
- Inviting well maintained entrances
- Open and sheltered areas with shade options
- Spaces of different sizes
- Facilities and amenities to support a diverse public with a variety of seating for a range of social interactions and path surfaces suitable for a range of users
- Different users separated in some instances but within view of each other e.g. areas for skaters separate from paths for the elderly
- Clear wayfinding, signs and interpretation not text dependent.

CONNECTED

- Physically and visually well connected or a gateway to other areas of

- open space e.g. part of a green recreational and ecological corridor
- Physically and visually part of the neighbourhood/city open space network and not hidden away.

FUNCTIONAL

- Provides for a range of users e.g. ages, abilities, ethnicities for formal and informal recreation, activities and events
- A variety of different sized open spaces (from small neighbourhood parks to large sportsfields or regional parks)
- Has a clear and logical layout and orientation
- Is flexible and can adapt to different and changing needs, demands and participation patterns.

HIGH QUALITY

- Well maintained
- Attractive and aesthetically pleasing e.g. has quality materials and design - paths, plantings, turf, furniture, signage etc according to the purpose of the reserve.

SAFE

- Safe and perceived as safe and follows CPTED principles - clear sightlines in and out of the reserve, multiple entrance/exits, clear and logical layout, connected and looped pathways with no dead-ends.

ENVIRONMENTALLY SUSTAINABLE

- Emphasis on locally sourced vegetation
- Vegetation with multi-purpose functions e.g. for shelter, shade, amenity, nectar for birds, habitat for insects, pollen for bees etc
- Sustainable materials (paths, seats, buildings)
- Supports general ecological principles such as ecological connections
- Streams made visible and provide habitat for aquatic life
- Permeable surfaces to slow and reduce runoff and primary treatment of path and carpark run-off such as vegetated swales.

VALUED

- Community involvement and participation in planning, design, and management
- Lack of graffiti and vandalism with any graffiti quickly removed and vandalism quickly repaired
- Fosters a sense of kaitiakitanga and community pride
- Recognises culture e.g. Maori waka landing site, cultivation or garden sites.



1.2 Objectives

OBJECTIVES

The overall objective of the review is to establish the extent that reserve provision on the valley floor meets current and future public open space needs. The review has a particular objective of establishing the likely requirements for neighbourhood reserves. Other objectives are:

1. To quantify the number of sites and hectares of public open space on the Valley floor from Pomare in the north to the Petone Foreshore.
2. To break down these sites into the various categories according to the newly adopted categories promoted by NZRA.
3. To identify, review and assess the distribution and suitability of current provision, and in particular neighbourhood reserves.
4. To review reserve contribution to the wider public open space network and assess reserve provision against the key direction and principles of the Reserves Strategic Directions.
5. To identify and make recommendations on the likely requirements for future reserve provision, and in particular requirements for neighbourhood reserves.
6. To recommend measures of public open space availability.

STUDY AREA

The study area is the flat valley floor land from High St/Eastern Hutt Road roundabout (Pomare) in the north to the Petone foreshore in the south, from the Western Hutt Road to the foot of the eastern Hills.¹

¹ The study area excluded the part of Belmont on the valley floor between Hutt River and the State Highway

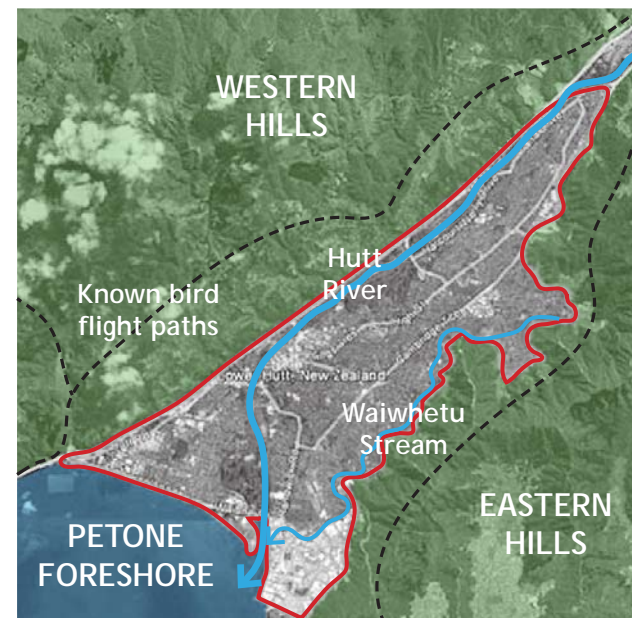


FIGURE 1 - WIDER HUTT VALLEY CONTEXT SHOWING STUDY AREA AND KEY LANDSCAPE FEATURES

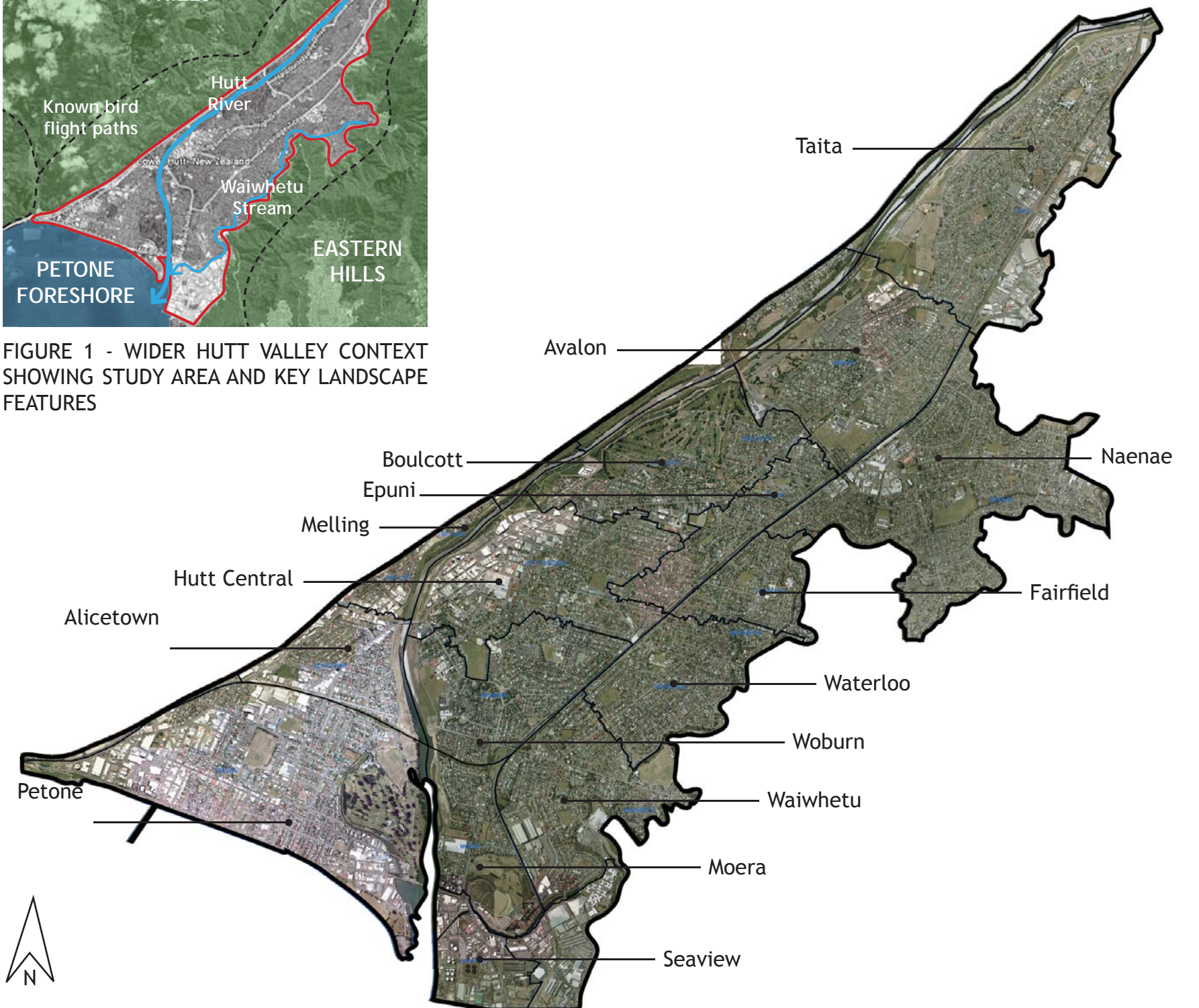


FIGURE 2 - SUBURBS OF THE HUTT VALLEY FLOOR

1.3 Methodology

The review used HCC land review information as a basis, updating information since the review using HCC GIS data, data from Statistics New Zealand and other information from a number of sources.

Public open space in the study area is owned by HCC, GWRC or DOC and is generally reserve land. For this reason, the term 'reserve' is used for the lands considered in this study. The review does not include private open space, golf courses (with the exception of the Hutt Park Golf Centre managed as a public facility in Hutt Park), schools and other educational institutes. This is because even though some schools may be currently accessible to the public after school hours, public access may change in the future.

The reserves considered in this review are made up of:

- Green space - parks for recreation, sportsgrounds, amenity, biodiversity, ecological and cultural heritage protection, developed and undeveloped linear vegetated areas along Te Awa Kairangi/Hutt River and streams, Waiwhetu stream and other streams
- Blue space - beaches and waterways (Te Awa Kairangi/Hutt River, Waiwhetu Stream and other smaller streams, wetlands and dunelands)
- Grey space - outdoor malls and squares (Naenae, Dowse Square) hard courts and artificial surfaces such as artificial turf.

1.3.1 QUANTIFYING THE NUMBER OF SITES AND HECTARES OF RESERVES

This was a desk-top mapping approach involving a number of steps and site visits:

1. Hutt City GIS data was used for identifying, mapping and recording reserves on a database.
2. Mapping recent District Plan changes that allow for residential intensification, identified in the Hutt City District Plan as Medium Density Housing.
3. Mapping GWRC designations.

From this information the number of sites and hectares of reserves were quantified and mapped digitally at a scale of 1:15,000.

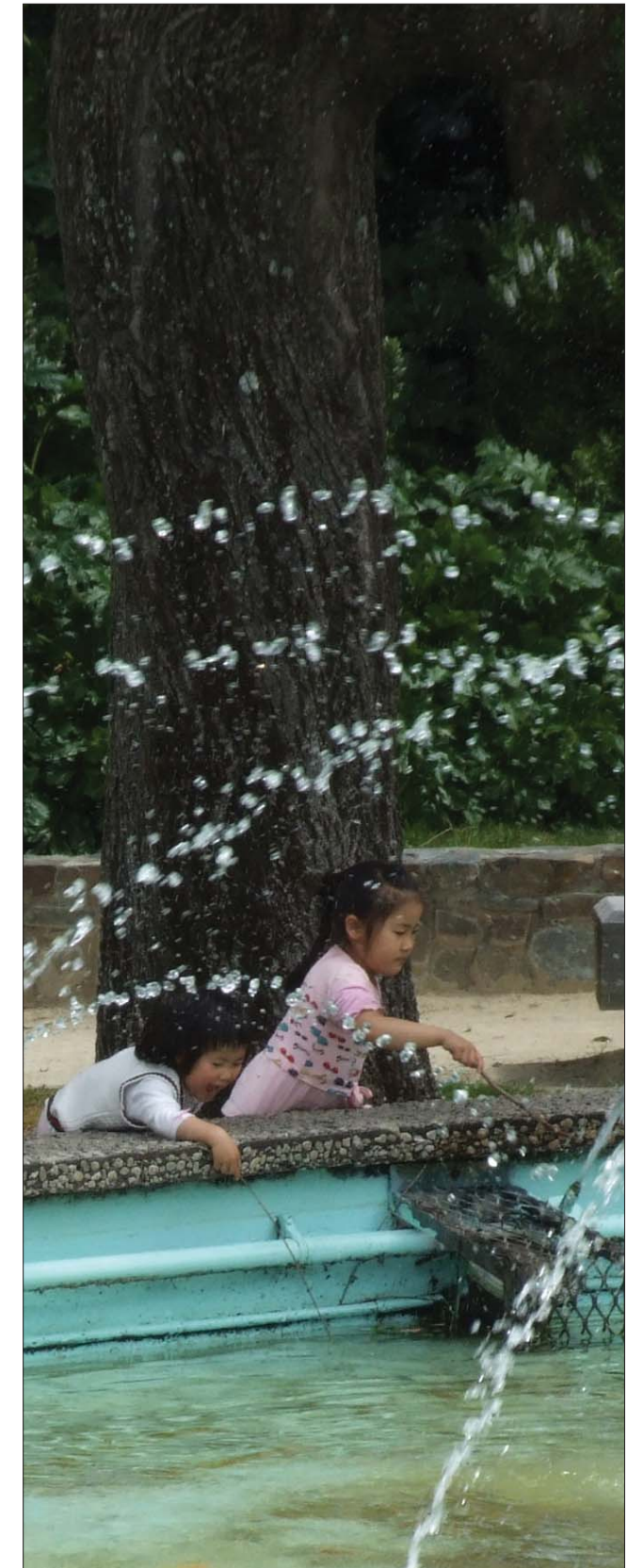
1.3.2 IDENTIFICATION OF THE RESOURCE AND CATEGORISATION

1. Categorise reserves by identifying the primary purpose of each reserve and its key values using Reserves Act classification and established through the earlier Reserve Review. Any changes since the review were established where necessary through site visits.
2. Categorise the reserves using the New Zealand Parks Categories.

1.3.3 IDENTIFICATION OF DISTRIBUTION AND SUITABILITY OF CURRENT RESERVES

A needs-based approach was used, involving a number of steps:

1. Assessing distribution and suitability of current sites. To do this, the following was established and mapped:
 - Medium density areas established potential housing density and likely reserve requirements
 - Housing ownership - social housing (Housing NZ and HCC properties)
 - Existing and projected population trends and demographics using data from Hutt City and Statistics NZ)
 - Demographics (age and ethnicity)
 - Deprivation index of different suburbs
 - Private retirement homes that impact on demographics and reserve requirements.
2. Establishing reserve needs of different demographics as far as possible using existing research. This assisted in assessing likely reserve requirements.
3. Recommend measures of public open space availability.
4. Recommend likely future reserve requirements.



2.0 VALLEY FLOOR RESERVES

This section identifies the reserves, their ownership, protection and contribution to the reserve network

1.3.4. LIMITATIONS OF DATA

Demographic information is from the 2006 census, the last census for which data is available, and projections made by Statistics New Zealand. More up to date information will not be available until data from the 2013 census held in March has been processed.

Demographic data from HCC GIS is organised under suburbs. This was useful as it has made it possible to show demographic differences between suburbs. However, projections sourced from Statistics New Zealand are only available by 'meshblocks', which is the smallest geographic unit for which statistical data is collected by Statistics New Zealand. In order to compare existing HCC data organised under suburbs with projections from Statistics NZ, meshblocks were combined to make up suburbs. For example the meshblocks that make up Naenae were combined.

Not all reserves were visited as part of this study. High resolution maps and data, aerial photographs, photographs and information from site visits during the earlier Land Review were used. Google Maps and Google Street View were also used in many instances to check reserve street frontages, entrances, facilities and natural features. This was followed up by site visits to a selection of reserves.

2.1 RESERVES CONSIDERED IN THIS REVIEW

The total number of public reserves on the valley floor is 148. Some reserves are made up of multiple land parcels and reserve lands and in these cases they have been defined as one site. Grouping the separate reserves/parcels together clarified their public open space purpose. An example is Walter Mildenhall Park which is made up of a number of reserves collectively called Walter Mildenhall Park. Another example is reserves along Waiwhetu Stream and Hutt River, which have been treated as two sites, even though they are made up of a number of reserves and land parcels. In these cases the rivers were identified as two very important linear recreation and ecological corridors that link suburbs to the harbour on the western and eastern sides of the valley floor.

A small number of reserves were excluded from this study because they were utilities, isolation strips or were very small and not usable as public open space.

The reserves were mapped and recorded in a database (see Appendix 2 for more detailed maps and Appendix 3 for details of each reserve, their name, location, area, characteristics, contribution to the wider network and values). Where reserves have been grouped, the individual reserves are identified in the database.

After grouping, the total number of reserves is 85, making up a total of 339 hectares.

2.2 OWNERSHIP

The majority of reserves on the valley floor are owned by Hutt City and Greater Wellington Regional Councils, with two small reserves owned by the Department of Conservation (see Figure 3). The first is at the far western end of the Petone foreshore, also the mouth of the Korokoro Stream. The second is Judd Crescent neighbourhood reserve located in Naenae.

All Greater Wellington Regional Council lands are along the Hutt River and are part of the Hutt River corridor. Most are held for soil conservation, river control and recreation. This land along the river is a key feature of the valley floor.

SAMPLE OF VALLEY FLOOR RESERVES



Walter Mildenhall Park



Hutt River



Civic Buildings and Civic and Riddiford Gardens



Waiwhetu Stream

2.3 RESERVES PROTECTED UNDER THE RESERVES ACT 1977

Reserves were categorised according to their primary purpose under the Reserves Act 1977. Sixty-five percent are protected, classified and managed under the Act. Of reserves that come under the Reserves Act, 61 have a Recreation classification which means recreation is their primary purpose and 19 are classified Local Purpose. Local purposes include community centres, cemeteries and a riverbank.

In some instances, different parts of some reserves have different classifications. For example Hikoikoi Reserve is a Recreation Reserve and one part of the reserve has a Local Purpose (Community Building).

The balance of reserves are not reserves under the Reserves Act. Most are Greater Wellington Regional Council owned along the Hutt River and their purpose is to do with conservation of soil and river control, as well as recreation. Recreation on these lands varies from walking or cycling along the Hutt River Trail to kayaking, swimming, fishing and other activities, as well as sports on formal sportsgrounds.

2.4 CONTRIBUTION OF RESERVES TO THE WIDER RESERVE NETWORK

The study area lies within the Hutt Valley and Harbour Landscape Identity Areas (LIA) as identified in Council's Reserves Strategic Directions. Their central location on the valley floor near major transportation routes means that the reserves have a role in protecting and strengthening valley and harbour LIAs.

Key strategies in these LIAs are to:

- Develop ecological and recreational linkages
- Naturalise the foreshore
- Improve natural qualities of streams, ecological health and linear recreation
- Improve horticultural displays and street planting
- Increase the carrying capacity of sportsfields.

The contribution of valley floor reserves to the wider reserve network is identified according to the extent they meet three Key Directions:

- Providing good quality facilities and services focusing on where there is greatest overall benefit and more efficient provision of services
- Improving linear recreational and ecological opportunities
- Linking natural features within and close to the urban environment.

FIGURE 3 - RESERVE OWNERSHIP

- Hutt City Council owned reserves
- Greater Wellington Regional Council owned reserves
- Department of Conservation owned reserves

339 hectares

197 hectares owned by HCC
 142 hectares outside of HCC ownership
 65% comes under the Reserves Act

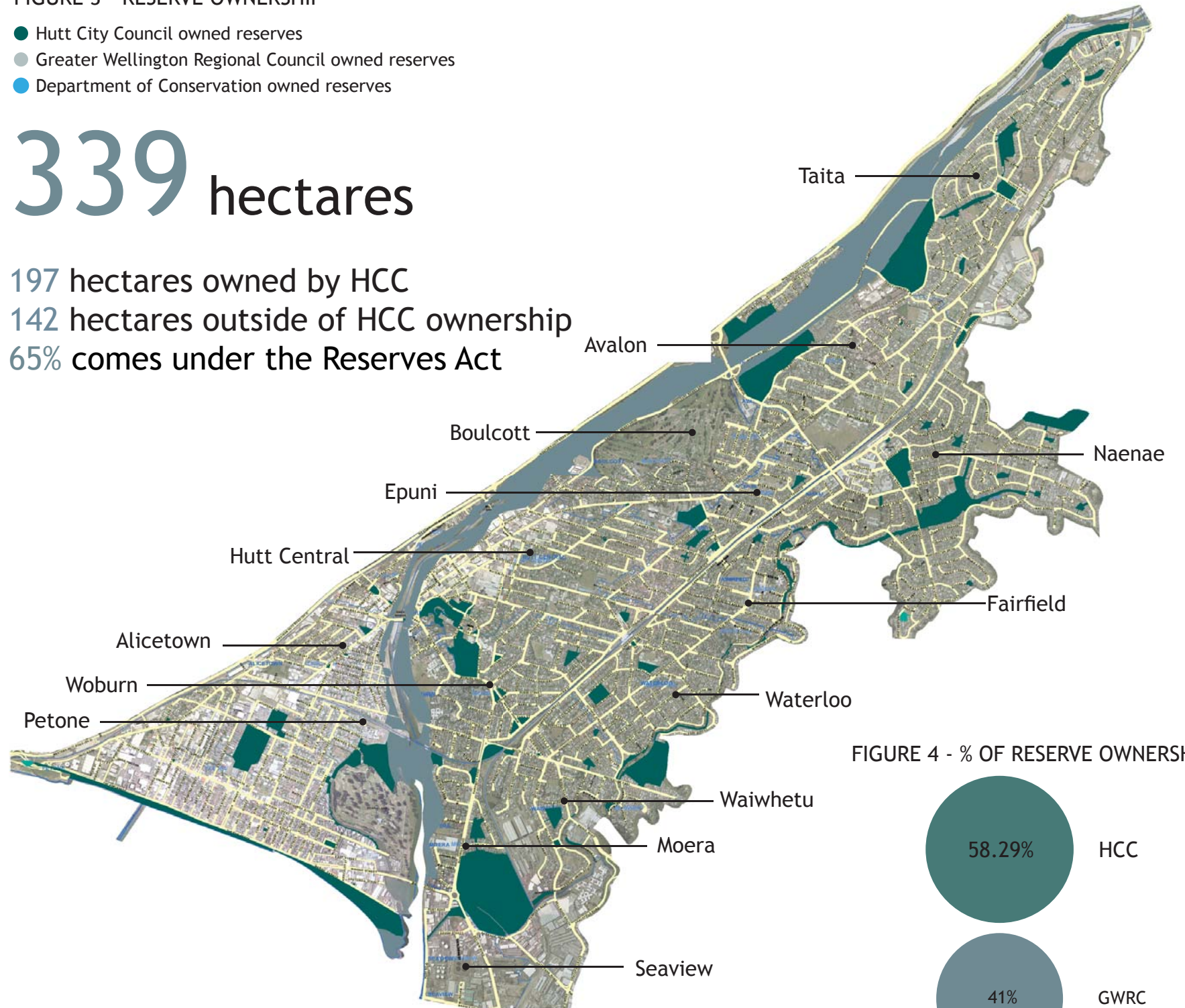
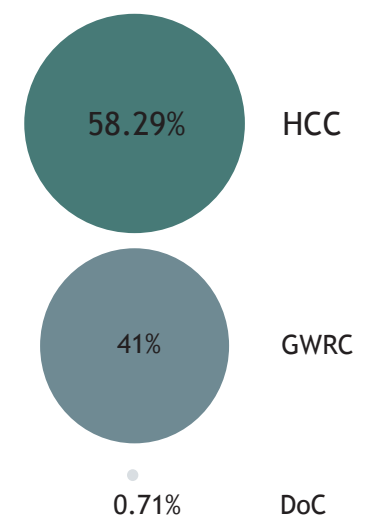


FIGURE 4 - % OF RESERVE OWNERSHIP



A small number of reserves meet all three Key Directions. These are reserves that are multi-purpose with quality services and facilities with recreational and/or ecological linkages or quality amenity planting. Nineteen percent meet two Key Directions and just under 50% of reserves meet one Key Direction. These are generally reserves that serve the immediate neighbourhood or suburb. Just over a quarter do not meet a Key Direction and generally have facilities for a specific use or are small grassed undeveloped areas.

The most common function of reserves is that they provide ecological and recreational linkages along Hutt River. Other reserves also provide ecological and recreational linkages, although many of these could be improved. An example is Naenae Park with access to Waiwhetu Stream, Riddiford and Civic Gardens with access to Opahu Stream and York Park with access to Awamutu Stream.

2.5 REGIONAL COUNCIL LANDS

One hundred and forty-two hectares of reserve land on the valley floor is owned by Greater Wellington Regional Council. This means that Hutt City is dependent on the regional council for 41% of valley floor reserve provision. Hutt River reserves are not generally multi-use and their development into multi-use reserves with a wide range of community benefits is limited by their key function of river control and soil conservation.

Most of the land that does not come under the Reserves Act is along the Hutt River. Hutt River reserves are on the western boundary of the valley floor and busy roads and private property are in some cases a barrier to access from many valley floor suburbs. The stopbank along the river on its eastern side is also a visual barrier between the river and suburbs on the valley floor.

FIGURE 5 - % OF RESERVES THAT MEET KEY DIRECTIONS

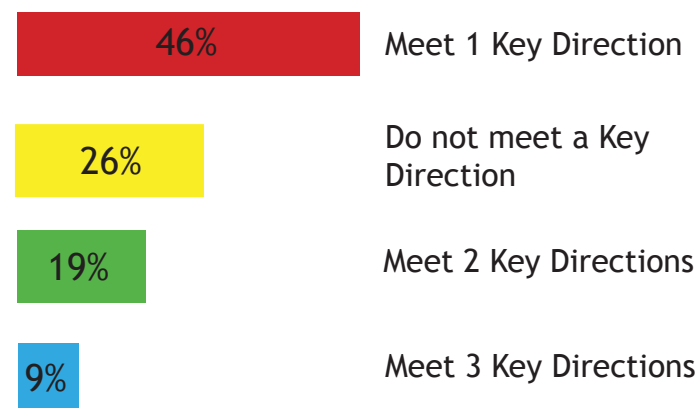
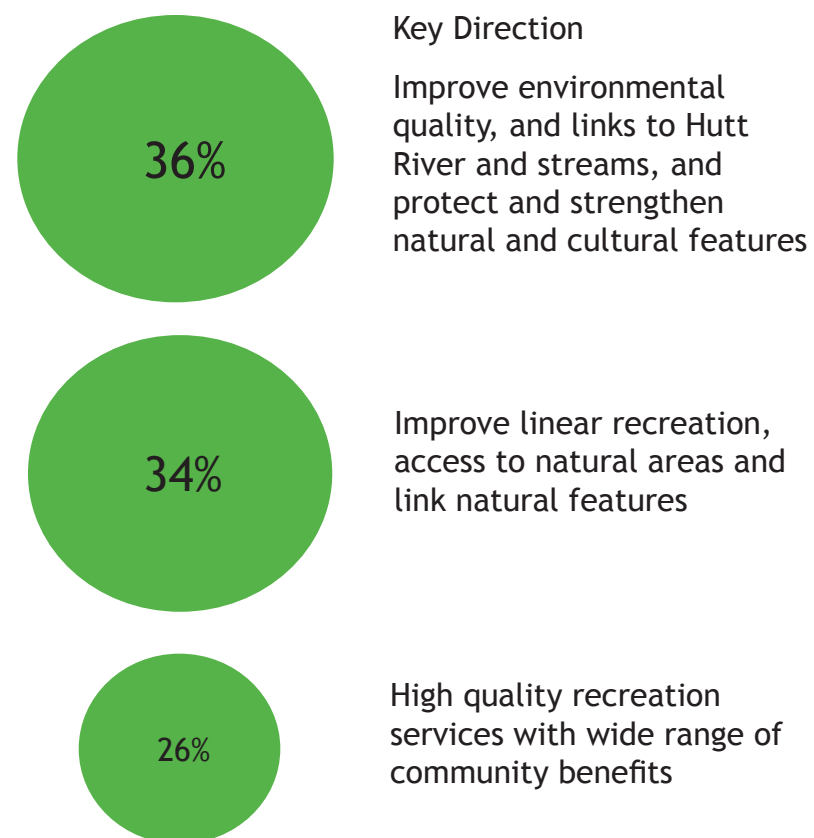


FIGURE 6 - % OF RESERVES PER KEY DIRECTION



Fraser Park - Sports and Recreation



Hutt River Trail - Recreation and Ecological Linkages



Godley Street Reserve - Neighbourhood



Riddiford Gardens - Public Gardens

3.0 CATEGORIES OF RESERVES

This section categorises reserves and identifies reserve communities of interest

3.1 NEW ZEALAND RECREATION ASSOCIATION CATEGORIES

Not all public open space on the valley floor is a reserve under the Reserves Act with a classification according to their primary purpose. For this reason, the reserves are categorised according to their primary purpose using New Zealand Recreation Association (NZRA) categories (see Figures 7 and 8). These categories were industry developed and are consistently applied throughout the country.

Some reserves have more than one primary purpose. For example, Mitchell Park has a primary purpose as a public garden and because it has bowling and tennis facilities a second primary purpose of recreation and sports. Some important secondary purposes were also identified. The primary purpose of Hutt Park is sports and recreation, but it also has a secondary purpose of providing recreation and ecological linkages along the streams and through the park.

3.1.1 SPORTS AND RECREATION RESERVES

The largest area of reserve land is used for Sports and Recreation at 48%. These reserves generally have facilities such as sportsfields, club rooms, hard courts, changing rooms, club facilities and facilities for informal recreation such as children’s playgrounds. They include large quality sportsfields such as Fraser Park, Hutt Recreation Ground and Hutt Park. Providing facilities for sports and recreation on the flat valley floor makes sense in that provision focuses on areas that are accessible for the majority of the population as well as for visitors who come to the City for sport and recreation.

3.1.2 RECREATION AND ECOLOGICAL LINKAGES

Linear reserve areas, usually with low levels of development, provide recreational and ecological linkages through the urban environment and make up 35% of the total reserve area. Hutt River is a primary ecological and walk and cycle corridor linking the top of the river catchment through to the harbour. Waiwhetu Stream links the eastern valley floor suburbs with the harbour. Some neighbourhood and sport and recreation reserves have a secondary role of linking streets (e.g. in Naenae and Epuni), and others provide ecological linkages. An example is Hutt Park with ecological linkages along Awamutu Stream and Waiwhetu Stream. Some reserves do not currently provide linkages but have potential to do so. An example is York Park along Awamutu Stream.

FIGURE 7 - NEW ZEALAND RECREATION ASSOCIATION (NZRA) RESERVE CATEGORIES

- Sports and Recreation
- Recreation and Ecological Linkages
- Natural
- Neighbourhood
- Cultural Heritage
- Public Gardens
- Civic Space
- Other

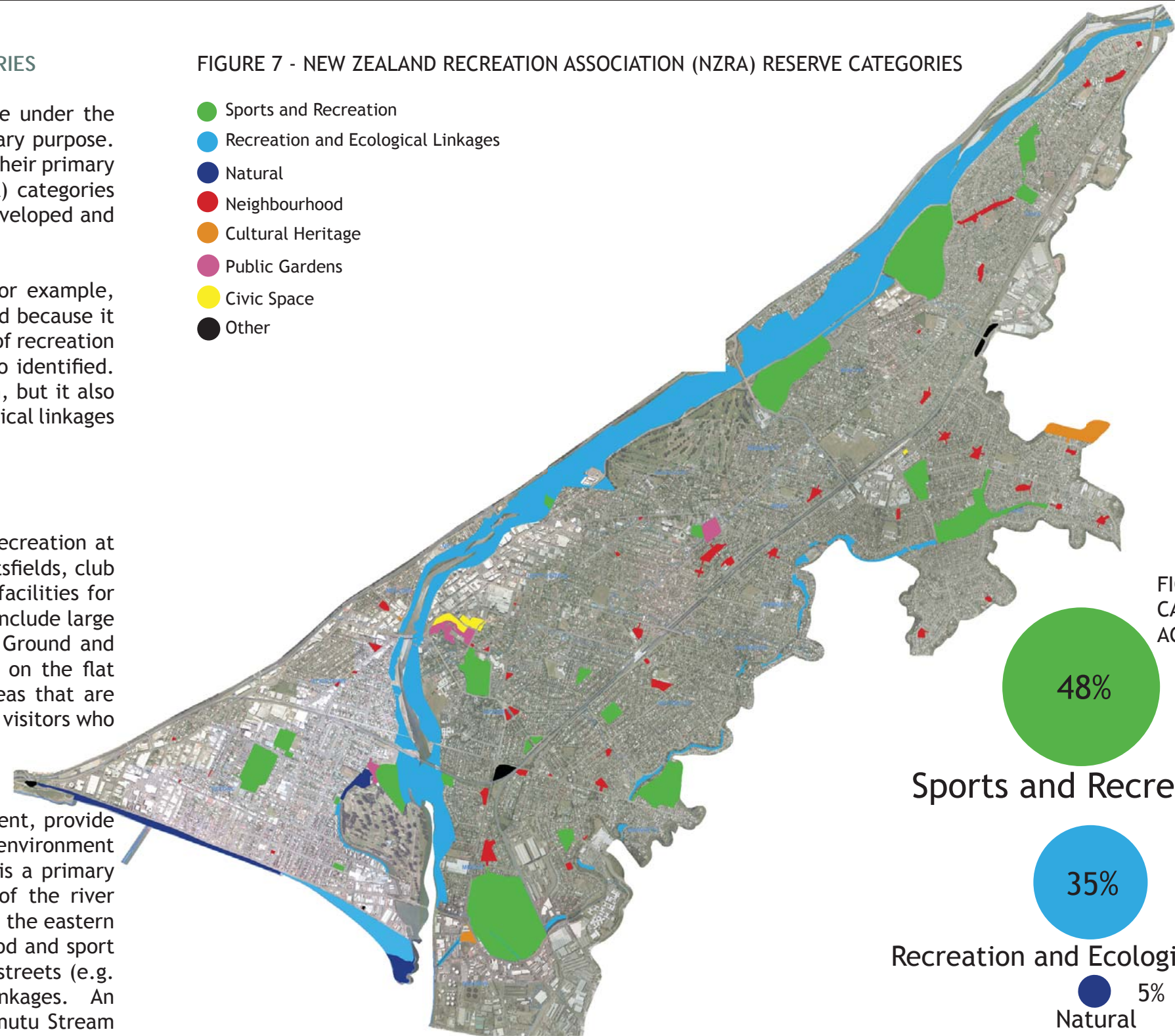
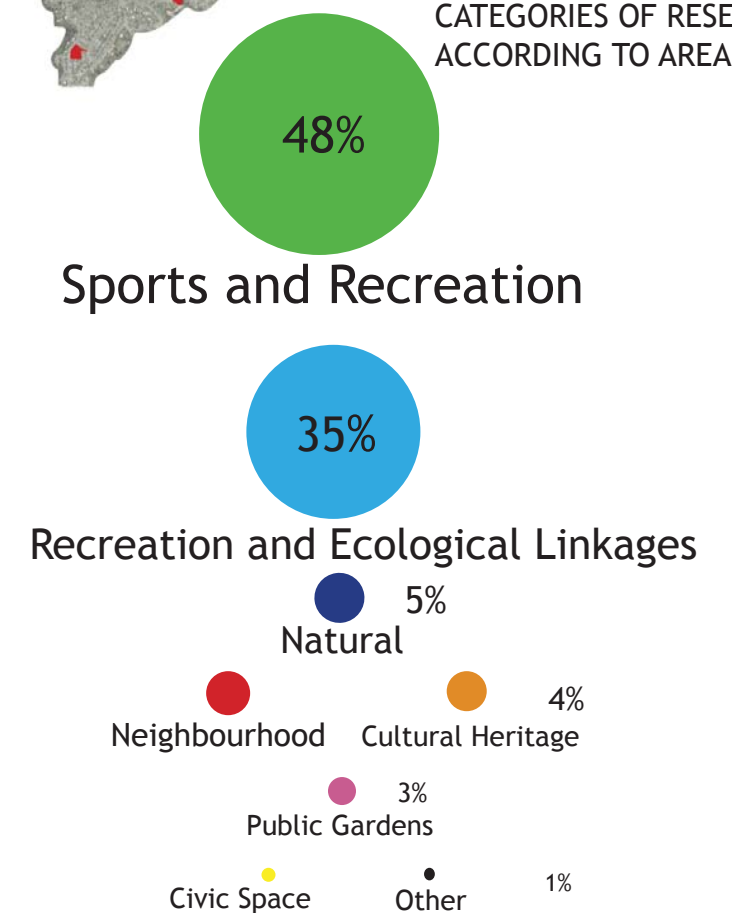


FIGURE 8 - COMPARING CATEGORIES OF RESERVES ACCORDING TO AREA



3.1.3 NATURAL RESERVES

Reserves on the valley floor where the primary purpose is to protect the natural environment or where people can experience it make up just over 5%. These are along the harbour edge. The Hutt River allows people to experience the natural environment, albeit a highly modified one. Because the primary purpose of this area is to do with river and soil conservation and linear recreation, the Hutt River is categorised as having NZRA 'Natural' category as its secondary purpose.

3.1.4 NEIGHBOURHOOD RESERVES

Neighbourhood Reserves make up 4% of the total area of reserves. These are usually small areas in residential areas. Some have facilities like playgrounds or open grassed areas for play and relaxation. Neighbourhood reserves are especially important in areas where there is urban intensification and where individual residential properties have small outdoor spaces, areas with young families and the elderly, and in areas with low socio-economic status where people may not have the resources to travel outside of their suburb. It is important that facilities on neighbourhood reserves serve their immediate community and are easily accessible and appealing.

3.1.5 CULTURAL HERITAGE RESERVES

Just over 4% of reserve areas have as their primary purpose 'Cultural Heritage'. Cemeteries and Hikoikoi Reserve which is a pa site come under this category. Reserves with memorial sites come under this category, but generally this is their secondary purpose. An example is Riddiford Gardens.

3.1.6 PUBLIC GARDENS

Three reserves are categorised as 'Public Gardens': Riddiford/Civic Gardens, Mitchell Park and the Garden of Remembrance in Memorial Park. Together they have an area of just over 13 hectares, or just over 3% of reserve area on the valley floor.

3.1.7 CIVIC SPACES

Civic spaces make up 1% of reserve areas on the valley floor and are defined as open space provided within retail/business areas for casual gatherings, meetings, relaxation, lunchtime, etc. They may also provide for large public gatherings, events and entertainment. Examples are Civic/Riddiford Gardens and Dowse Square.

3.1.8 OTHER SPACES

Three reserves do not meet the NZRA categories and are categorised as

'Other'. They are all associated with roading: the Windgate overbridge area and corner of White Line East and Randwick Road with the railway line on one side and fenced with no public access. The remaining reserve categorised as 'other' is an area at the western end of Petone foreshore at the overbridge to The Esplanade (Site 19).

3.2 RESERVE SIGNIFICANCE

All reserves are additionally categorised to identify how significant they are, calculated by assessing how far people are likely to travel in order to visit the reserve (see Figures 9, 10 and 11). They are categorised into local, suburban, city/district or regional reserves.

3.2.1 Local Reserves

Within the Hutt Valley floor, 47% of reserves are likely to be only visited by people in the immediate neighbourhood and reached on foot. These are local reserves and generally have a grassed area, some have trees and some have seats and play equipment. When the total area of these reserves is considered, they make up 5% of the total reserve area, although this is not surprising as local reserves are generally small.

3.2.2 Suburban Reserves

Thirty-one percent of reserves are likely to be used by residents in the wider suburban neighbourhood. They have facilities such as a community halls, bowling greens and other specialised facilities. When the area of suburban reserves is calculated they make up only a small percentage of the total reserve area at 4%. This is because, like local reserves, they are generally small.

3.2.2 City/District Reserves

Nineteen percent of reserves attract use from wider parts of Hutt City and the district. These reserves tend to have developed facilities such as sportsgrounds or are civic centres with events and attract users from further afield. They are generally larger than suburban or local reserves and make up 21% of the total reserve area.

3.2.2 Regional Reserves

Reserves that people from around the region are likely to travel to make up 3% of reserve provision, although they make up 69% of the total reserve area of the valley floor. This is because they are the large reserve areas along the Hutt River Trail and the Petone Foreshore and regionally significant sportsgrounds - Hutt Park, Fraser Park (the largest sportsfield in the region), Hutt Recreation Ground and Petone Recreation Ground.



FIGURE 9 - RESERVE SIGNIFICANCE (How far people are likely to travel in order to visit the reserve)

- Region
- City/District
- Community/Suburban
- Local/Neighbourhood

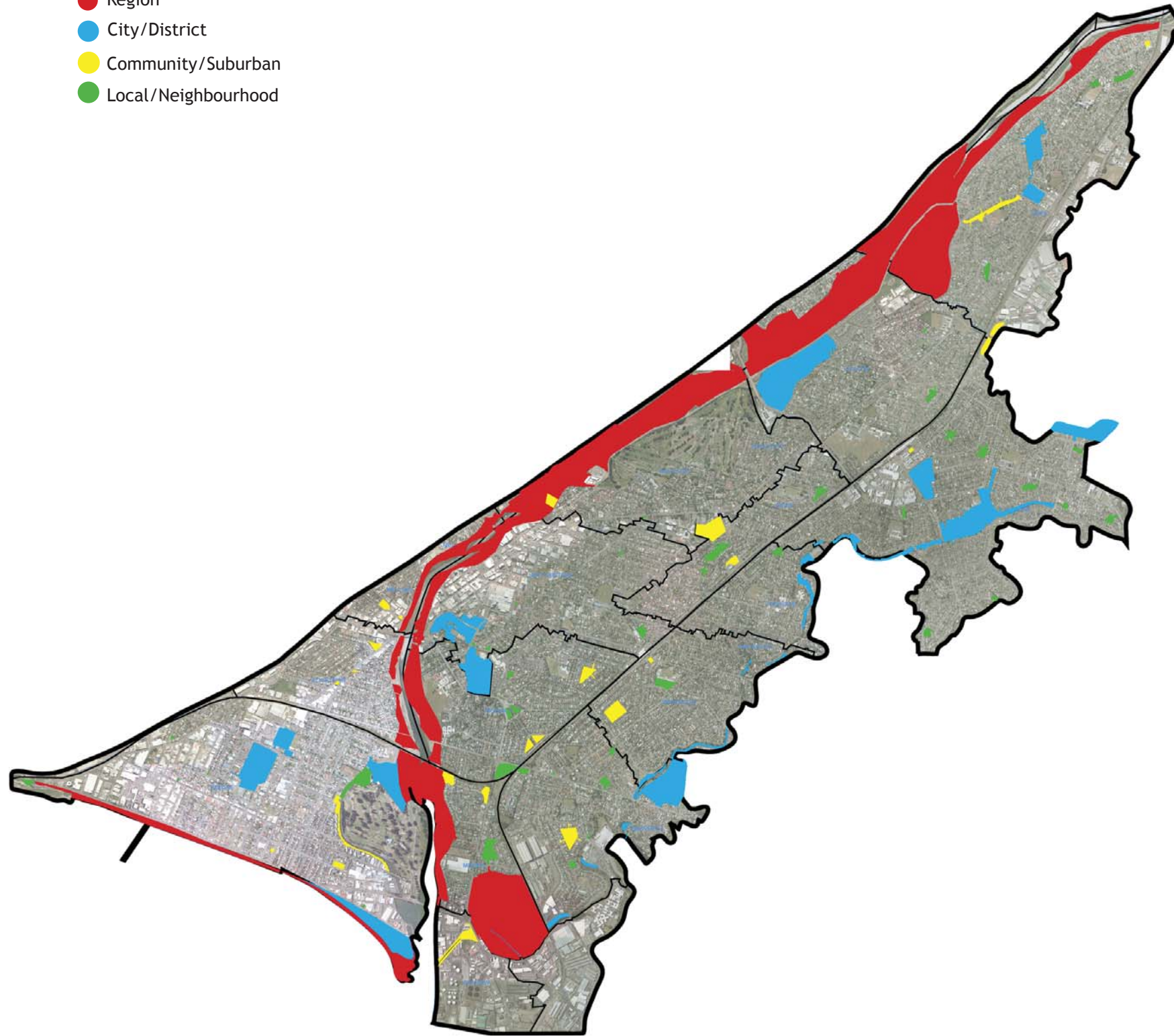


FIGURE 10 - RESERVE SIGNIFICANCE ACCORDING TO WHO IS LIKELY TO VISIT THEM

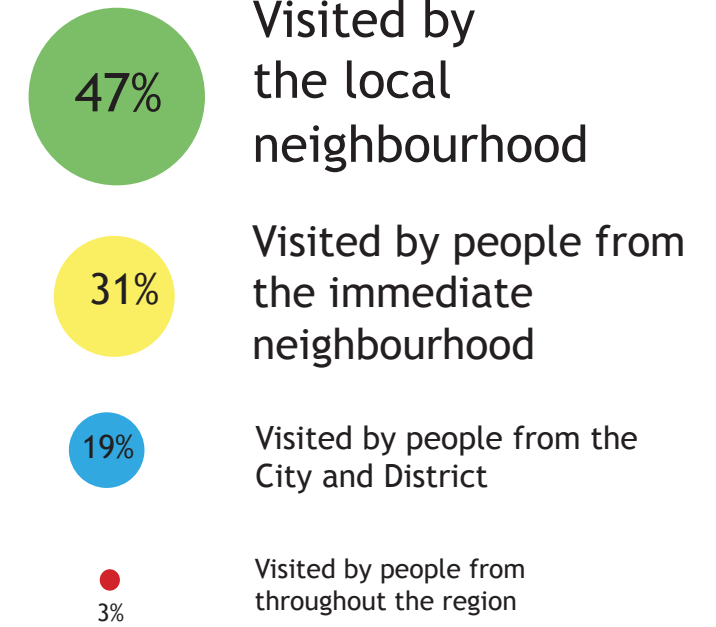
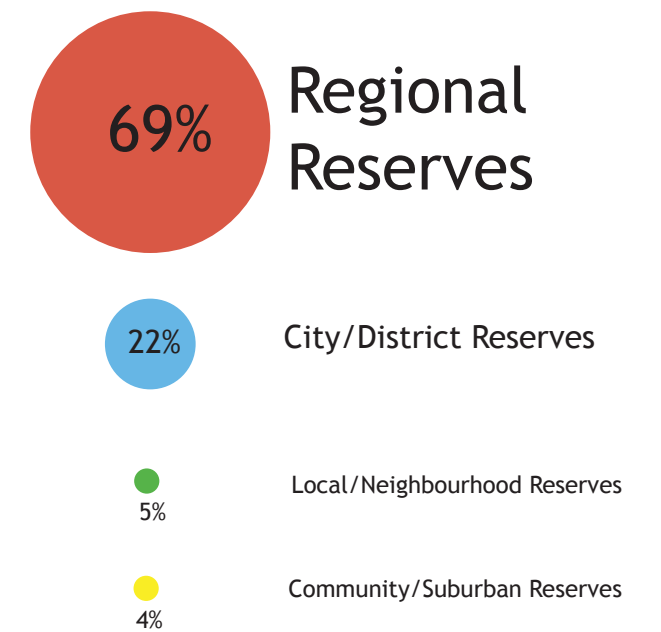


FIGURE 11 - RESERVE SIGNIFICANCE ACCORDING TO AREA OF RESERVE



4.0 REVIEW OF NEIGHBOURHOOD RESERVE PROVISION

This section identifies factors that guide decision making on reserve provision: demographic and population trends, housing density, socio-economic status, social housing, transport routes, retirement homes and reserves that need special attention - reserves at the rear of housing with limited street frontage, access and poor visibility

INTRODUCTION

Changes in demographics, population, numbers of households and their size, socio-economic levels, land use, commercial and industrial activities have implications for the number of reserves needed on the valley floor, their size, types and distribution.

Demographics have implications for the types of reserves. Where there is a younger active population, sportsfields and other active recreational facilities are important. Neighbourhood reserves are important where there are young families with young children and elderly people. They will be better used when they are close to people's homes, within walking distance and accessed without crossing busy roads. They also need to be appealing and fit for purpose, and be places where local people can enjoy the outdoors and watch others enjoying themselves.

Where there are adults with little time for recreation, it is important to have reserves near homes and workplaces to encourage physical activity and improvement in health and well being as people go about their everyday lives. Reserves on routes to and from work can play a part in the active transport network (walking and biking to and from work and school).

Housing density has implications for reserve provision. The greater the density the smaller the opportunities for private open space and the greater the need for reserves. Smaller private open spaces mean fewer opportunities for large trees which impacts on bird life. Providing reserves in higher housing density areas is therefore important.

However, levels of reserve provision is not just about the quantity of reserve land. Providing large areas of reserve land on the valley floor or a large number of reserves does not guarantee that the reserves meet the needs of their community. It is also important to consider:

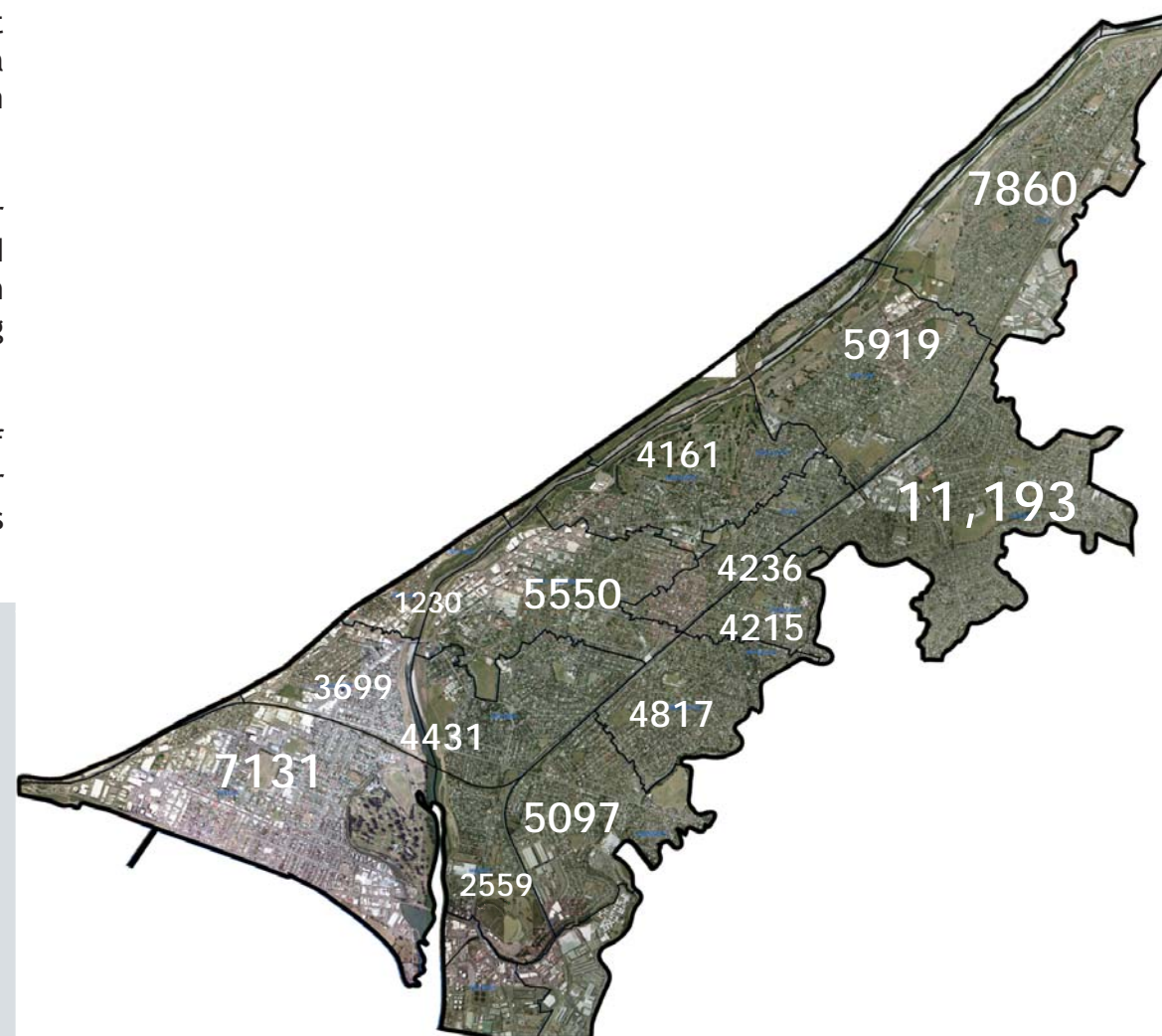
- Reserve quality
- Reserve accessibility and visibility
- Equity of reserve provision
- What communities want from their reserves
- Identification and appreciation of different values
- Positive outdoor nature-based recreational experience
- Opportunities for social interaction
- A variety of experiences
- Free or low cost recreation opportunities and experiences, particularly in low socio-economic areas
- Opportunities for casual and spontaneous play and recreation.

OVERVIEW OF PROJECTED POPULATION CHANGES

Naenae, Taita and Petone are valley floor suburbs with the highest population, followed by Avalon, Hutt Central and Waiwhetu. Other suburbs have fewer than 5000 residents (see Figure 12).

The valley floor is projected to have limited population growth and demographics are projected to change. The proportion of young people is projected to reduce and older people to increase, and the ethnic makeup is projected to diversify. Numbers of households on the valley floor are projected to increase with more housing achieved through infill housing with reduced lot sizes. Areas with the highest levels of socio-economic deprivation are projected to continue to have the highest levels of population growth, highest numbers of households and more people per household than in other areas.

FIGURE 12 - POPULATION PER SUBURB (BASED ON THE 2006 CENSUS)



4.1 Housing Density

Housing density is increasing in areas of the valley floor zoned Medium Density Residential. This zoning allows smaller sites, greater site coverage, multi-unit housing, low-rise apartments and infill housing.

On the valley floor, Medium Density Residential zoned areas are located around shopping centres and on key transport routes - along the Foreshore and Cuba Street in Petone, in Boulcott, Central Hutt, Avalon East and Taita and on land on both sides of the Hutt Valley railway line in Moera, Waiwhetu, Waterloo, Fairfield, Epuni and Naenae (see Figure 13). West Petone is also proposed for intensification pending a plan change.



Image of possible low rise apartments along the Esplanade, Petone
(Sourced from HCC Draft Urban Growth Strategy)

FIGURE 13 - MEDIUM DENSITY HOUSING AREAS



Although infill housing and new subdivision means that more dwellings are being built, this may not necessarily translate into more people living in an area. This is because there are likely to be fewer people per household, largely due to the general aging of the population when people are more likely to live as a couple without children or in one-person households. As a result, even areas with a projected decrease in population may have an increase in the number of households.

When housing density, numbers of households and site coverage increase, lot size decreases and households are smaller. In areas with multi-unit housing and apartments, the result is less private outdoor space and significant impacts on a sense of open space in the neighbourhood. Existing large specimen trees may also be felled to make way for housing, reducing the leafy character of some areas.

The likely result of higher density housing is growing demand for reserves close to people's homes because of limited space for private gardens, edible or ornamental plants and for quality, large specimen trees. This reduces the benefits and ecosystem services vegetation brings to the urban environment - climate regulation, reduction in stormwater runoff, pollination, air quality, habitat and niches for species, growing of food and aesthetic, amenity and cultural values.

An increase in the number of households and smaller households is also likely to result in demand for opportunities to interact socially. Smaller private open space also means demand for areas for children to run about in and for ball games is likely to grow.

Access to quality local public open and green space to compensate for smaller private open space also makes higher density living more widely acceptable in New Zealand.



Example of intensification with housing on smaller sites and smaller outdoor space (Cressy St, Waterloo)

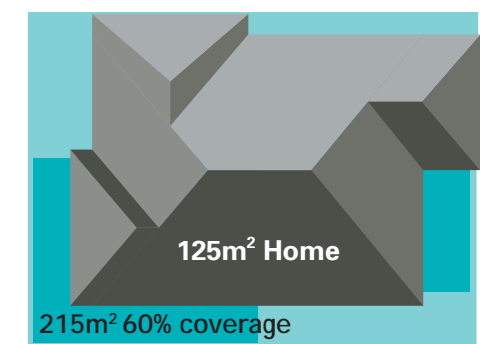
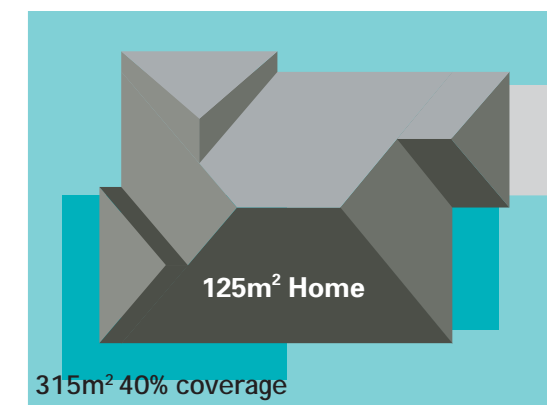
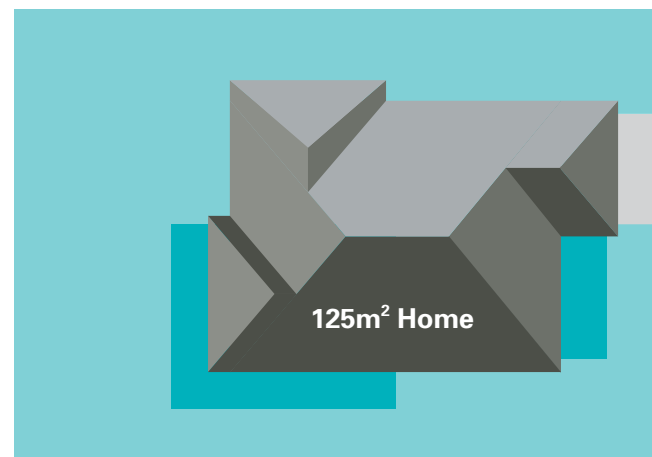


Infill housing at the rear of established housing (Copeland St, Epuni)



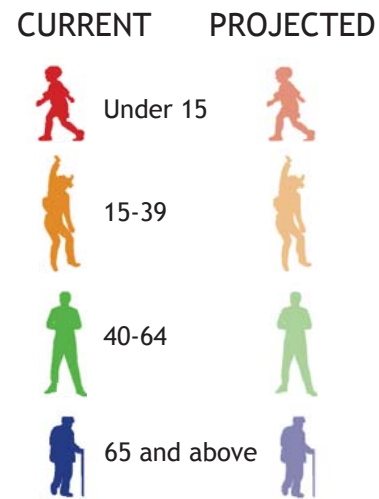
New Infill housing (Copeland St, Epuni)

Examples of allowing smaller Lot sizes and greater site coverage (from Hutt City Council Draft Urban Growth Strategy)

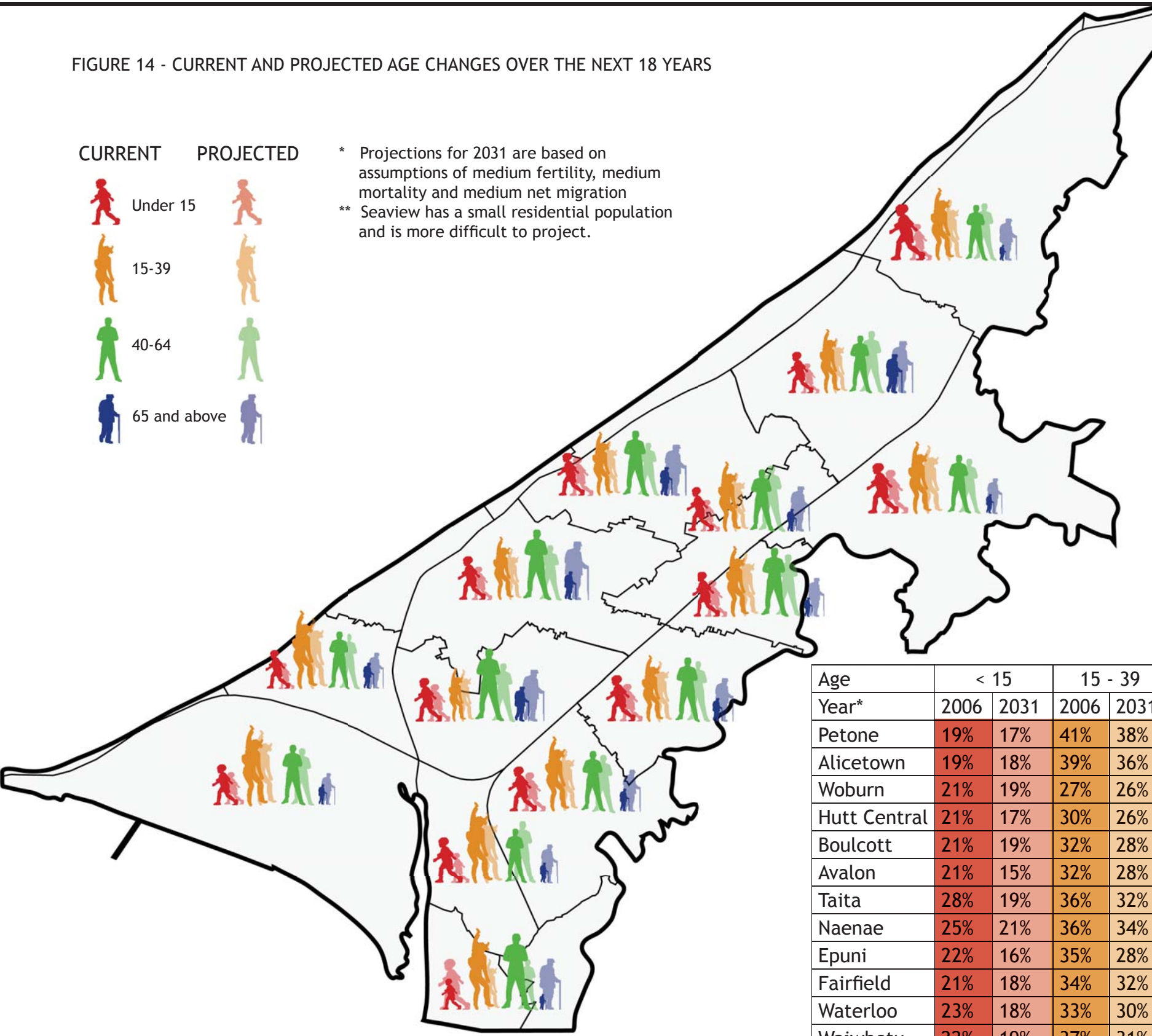


4.2 Current and Projected Ages

FIGURE 14 - CURRENT AND PROJECTED AGE CHANGES OVER THE NEXT 18 YEARS



* Projections for 2031 are based on assumptions of medium fertility, medium mortality and medium net migration
 ** Seaview has a small residential population and is more difficult to project.



Age	< 15		15 - 39		40 - 64		> 65	
	2006	2031	2006	2031	2006	2031	2006	2031
Petone	19%	17%	41%	38%	30%	29%	10%	16%
Alicetown	19%	18%	39%	36%	29%	28%	13%	18%
Woburn	21%	19%	27%	26%	35%	29%	17%	26%
Hutt Central	21%	17%	30%	26%	35%	28%	14%	29%
Boulcott	21%	19%	32%	28%	33%	27%	14%	26%
Avalon	21%	15%	32%	28%	28%	31%	19%	26%
Taita	28%	19%	36%	32%	28%	29%	8%	20%
Naenae	25%	21%	36%	34%	29%	28%	10%	17%
Epuni	22%	16%	35%	28%	31%	33%	12%	23%
Fairfield	21%	18%	34%	32%	34%	31%	10%	19%
Waterloo	23%	18%	33%	30%	32%	30%	12%	22%
Waiwhetu	22%	19%	37%	31%	30%	29%	11%	21%
Moera	22%	15%	40%	35%	28%	31%	10%	19%
Seaview**	14%	25%	40%	25%	38%	25%	8%	25%



4.2.1 INTRODUCTION

Over the next 18 years, population on the valley floor is projected to change. The percentage of both children and youth/adults is likely to decline slightly by an average of 4% per suburb. Similarly, the percentage of middle aged adults is also likely to change with a slight increase in some suburbs (3%) and a slight decrease in others (2%) by 2031 (See Figure 14).

In contrast, the percentage change of the elderly is much larger. Following the national trend towards an aging population, the elderly population is projected to increase by an average of 9% across all suburbs by 2031.

By 2031, children living in valley floor suburbs are projected to be 15-21% of the total population, youth and adults under 40 years of age 26-38%, middle aged adults 27-33% and the elderly 16-29%.

4.2.2 SUMMARY OF PROJECTED POPULATION CHANGES

Children (under 15 years)

- All suburbs will face an projected average decline of 4% by 2031
- By 2031, children will make up 15-21% of the population
- Currently, Taita has the largest percentage of children, however this is projected to reduce by 9% over the next 18 years
- Avalon, Epuni and Moera are projected to have the smallest percentage of children (15%, 16% and 15% respectively). In contrast, children in Naenae are projected to make up 21% of the population.

Youth and Adults (15-39 years)

- All suburbs will face a projected average decline of 4% of this age group by 2031
- Youth and adults are projected to make up 26-38% of the population in 2031
- Currently, Petone has the largest percentage of youth and adults (41%) and will continue to do so with a projected 38%. This is followed by projections for Alicetown (36%) and Moera (35%)
- Woburn and Hutt Central are projected to have the smallest percentage of youth and adults (26% respectively).

Middle Aged Adults (40-64 years)

- The majority of suburbs will face an average 3% decline in the number of middle aged adults by 2031. The exception to this is Avalon, Taita, Epuni and Moera, which have a projected average 2% increase in this age group

- Middle aged adults will make up 27-33% of the population
- Currently, Woburn and Hutt Central have the largest percentage of middle aged adults (35%)
- Boulcott is projected to have the smallest percentage of middle aged adults (27%). In contrast, Epuni is projected to have the largest percentage of middle aged adults (33%).

Elderly (over 65 years)

- All suburbs will have a projected average increase of 9% by 2031
- Elderly are projected to make up 16-29% of the population by 2031
- Currently, Avalon has the largest percentage of elderly (19%)
- Petone and Naenae are projected to have the smallest percentage of elderly (16% and 17% respectively). In contrast, Hutt Central is projected to have the highest percentage of elderly (29%) followed by Woburn, Boulcott and Avalon at 26%.

4.2.3 RESERVE NEEDS OF DIFFERENT AGES

In order to ensure that reserves accommodate and encourage wide use of public open space by the community, it is helpful to identify the open space needs of different age groups. These are summarised below:

CHILDREN

- Be within sight and earshot of home (especially younger children)
- Be easily accessible (avoid having to cross major roads)
- Cater for multiple ages and stages of development
- Provide areas for groups and individuals, undirected and directed play, play that requires cooperation between children and opportunities for individual play
- Include areas for imaginative and natural play rather than relying on standard play equipment
- Be interactive for learning and interpretation
- Places to go to be independent (safe without constant supervision).

YOUTH

- Accessible and places to hang out with things to do near malls, schools, shops, food and other youth focused activity areas (Hutt City Youth Study identified a lack of things to do and places to go, free things to do, safe areas, sport and recreation activities and facilities where young people can hang out - 60% identified that major improvements are needed in places to hang out)
- Play a fundamental role in negating boredom and allow for physical activity and escapism
- Invite youth to participate in the community

- Allow youth to see and be seen (such as viewing skateboarders doing tricks at a skate park)
- Provide free activities
- Be part of the commuting journey to and from school
- Provide opportunities for sport.

ADULTS

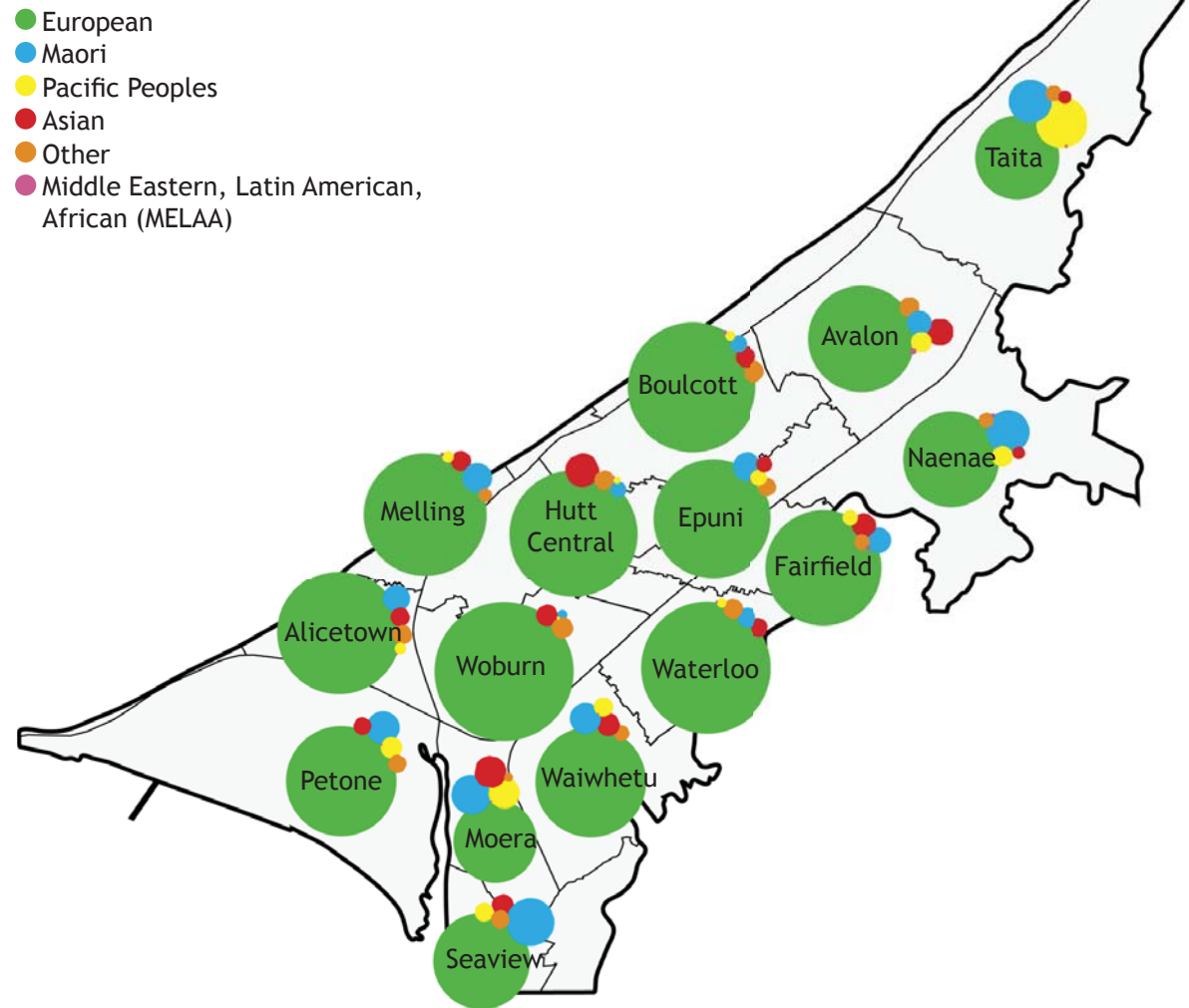
- Opportunities to participate in casual sports and recreation as well as organised sport
- Be multi-functional and flexible for a range of passive and active recreation activities - read, meditate, gather, eat, interact, watch, sit, talk, exercise, catch the sun, enjoy the outdoors
- Be part of the commuting journey.

ELDERLY

- Accessible on foot or a short ride on public transport from their place of residence (elderly people are often unable to drive and may not be able to walk long distances)
- Easy to navigate with accessible paths (avoid loose gravel, uneven or slippery surfaces and provide paths wide enough for wheelchairs and mobility scooters, provide paths separate from skaters)
- Provide for comfort (seating with backs and arms in clusters and individually placed, shelter from sun and wind etc)
- Multi-functional and flexible (to allow people to meet with friends, be a part of the community, exercise, relax, appreciate and connect with nature, observe activities/views etc).
- A local 'trip' with a friend or grandchild.

4.3 Ethnicity

FIGURE 15 - ETHNIC BREAKDOWN PER SUBURB



4.3.1 INTRODUCTION

As our cities diversify and grow there is opportunity to strengthen relationships between people, place and nature. Research shows that these relationships are culturally based - for some the natural world is a provider of food for harvesting and resources to gather, for others it is place for play and exercise or for social and family gatherings.

Quality open space that aims to entice communities into the outdoor world contributes to developing positive associations with the outdoors and its recreational activities, the natural environment and communities with each other. To achieve this, identification and appreciation of the different values and what constitute a positive outdoor nature-based recreational experience is desirable.

Europeans are the dominant ethnic group living on the valley floor, but like New Zealand as a whole Hutt City is increasingly a multi-cultural society. Valley floor population is made up of European, Maori, Pacific, Asian, MELAA (Middle Eastern, Latin American and African) and other ethnicities and cultures. Some areas within the valley floor are more multi-cultural than others.

4.3.2 SUMMARY OF ETHNIC BREAKDOWN PER SUBURB

- Both Taita and Moera in particular are culturally diverse. Taita in particular has a higher proportion of Maori and Pacific peoples that other suburbs (21% Maori, 25% Pacific Peoples, 41% European, 6% Asian, 1% MELAA and 7% Other). In Moera, Asian peoples make up 16% of the population which along with 20% Maori, 16% Pacific peoples, 42% European, 1% MELAA and 5% Other, makes Moera the most ethnically diverse suburb
- Waterloo is not as culturally diverse with 65% European, 10% Maori, 4% Pacific Peoples, 9% Asian, 1% MELAA and 10% Other
- The largest percentage of Asians live in Hutt Central (17%)
- The largest percentage of Pacific peoples live in Taita (25%)
- Maori in Naenae, Taita and Moera make up almost one quarter of the population (Naenae and Taita 21%, Moera 20%)
- A large proportion of residents in Boulcott, Hutt Central, Woburn and Waterloo are Europeans (Boulcott 64%, Hutt Central (63%), Woburn (69%) and Waterloo (65%). Europeans make up two thirds of the population of these areas.

4.3.3 RESERVE NEEDS OF MULTI-CULTURAL COMMUNITIES/NEW IMMIGRANTS

- Clearly defined and easily interpreted as public open space (defined entrances and pathways, clear way-finding, use of images and welcoming and inviting gestures that do not rely on language and/or use multiple languages)
- Activities to do with food production and food gathering
- A variety of spaces including space for large groups
- Areas for picnicking and food preparation with picnic tables and water
- Comfort - in particular seating, shelter and shade
- Colour(materials and vegetation)
- Quality materials, are well maintained and have signs of stewardship and care
- Opportunity for community participation in planning and design.



Fresh food markets



Community gardens - this one is in Moera



Places to picnic for family/whanau



Places for performances and cultural events

4.4 Socio-economic status, social housing and health

FIGURE 16 - DEPRIVATION INDEX

- 1 - Least Deprived
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 - Most Deprived

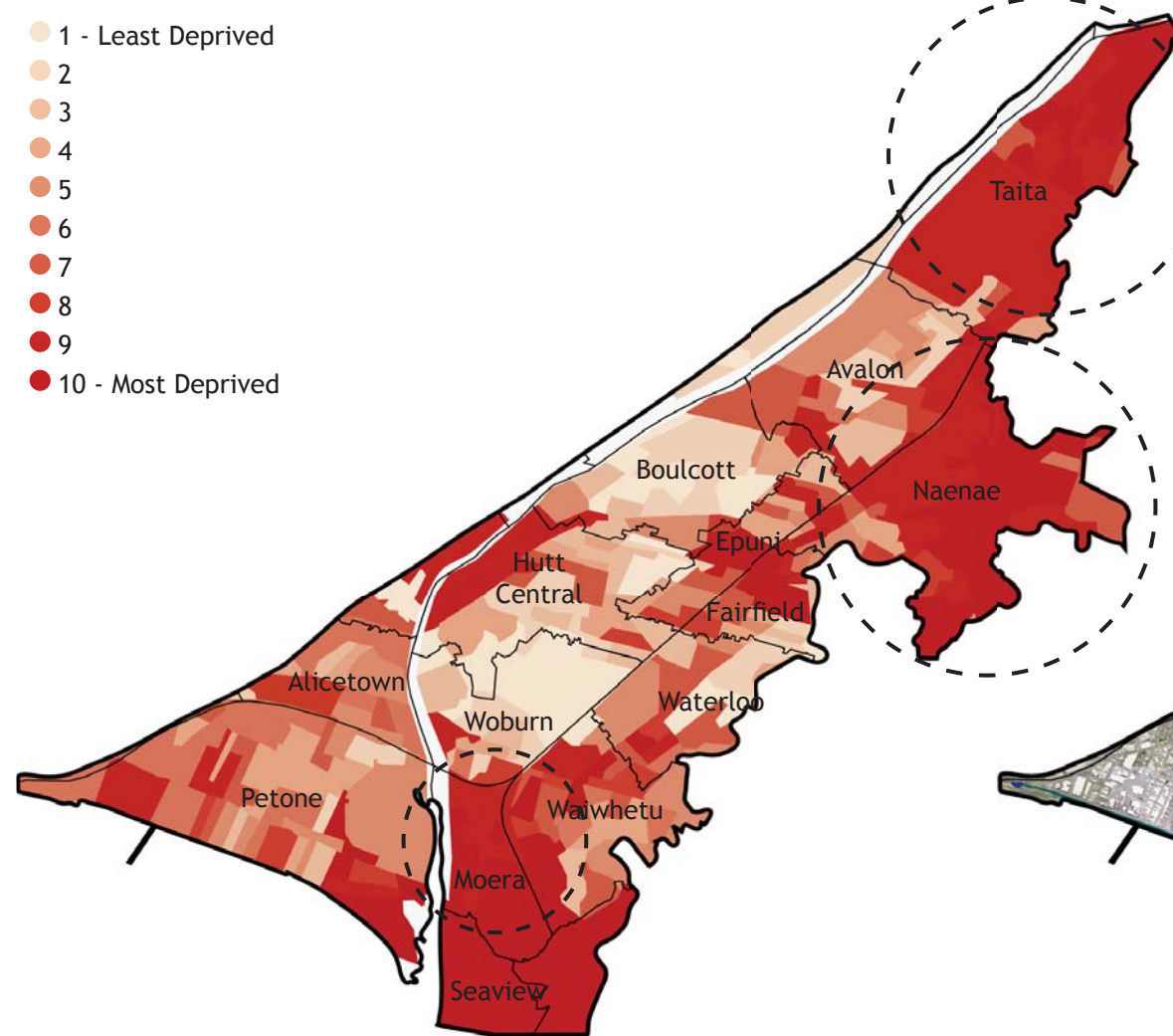
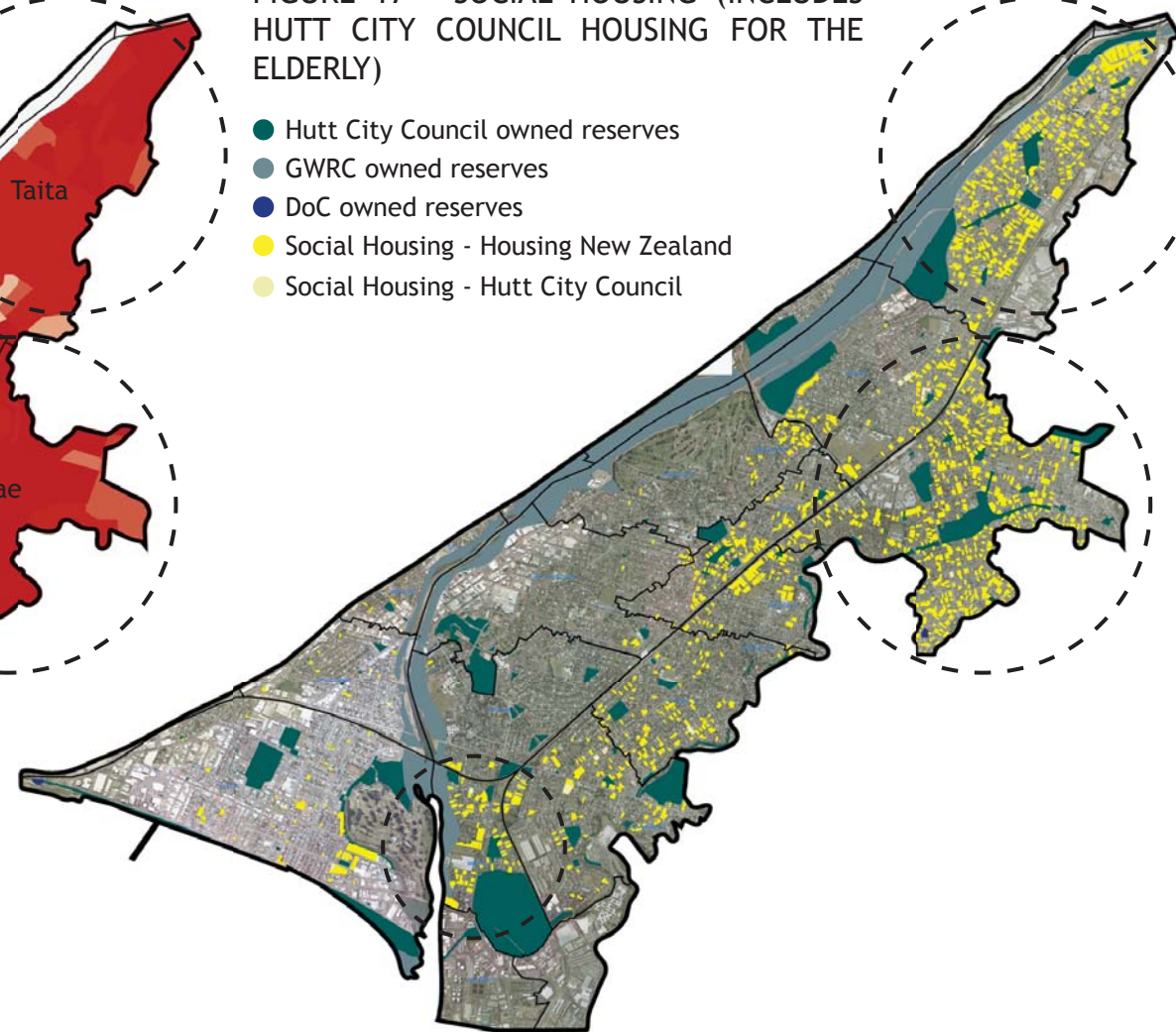


FIGURE 17 - SOCIAL HOUSING (INCLUDES HUTT CITY COUNCIL HOUSING FOR THE ELDERLY)

- Hutt City Council owned reserves
- GWRC owned reserves
- DoC owned reserves
- Social Housing - Housing New Zealand
- Social Housing - Hutt City Council



4.4.1 INTRODUCTION

Socio-economic status is calculated using the social deprivation index. This index is a visual representation of nine variables of social deprivation taken from the 2006 census: income (benefit eligibility), employment, income (income threshold per household), communication, transport, support (single parent families), qualifications, living spaces (bedroom occupancy threshold per household) and house ownership (see Figure 16).

Social deprivation and social housing are linked. Where there is social housing there are higher levels of deprivation than in areas where there is a higher proportion of owner occupied or privately rented housing.

4.4.2 SUMMARY OF SOCIO-ECONOMIC STATUS PER SUBURB

- Generally the most deprived areas are on the eastern side of the valley floor and near the Hutt Valley railway line
- Taita, Naenae and Moera have the most wide spread social deprivation
- Waiwhetu, Waterloo, Fairfield and Epuni have pockets of most deprived areas
- Petone, Hutt Central and Avalon have mixed levels of deprivation
- The link between deprivation and social housing is particularly evident in Taita and Naenae. These suburbs are the most deprived and have the largest numbers of social housing and the greatest population per suburb. A quarter of the population (26.3%) of the suburbs on the Hutt Valley floor live in these two suburbs alone
- Suburbs with the least deprivation are Woburn and Boulcott. Both of these suburbs have little social housing.



4.4.3 HEALTH, SOCIAL FRAGMENTATION AND RESERVES

Neighbourhoods have an influence on residents' health and well being. Low levels of health is linked to social deprivation, social housing and neighbourhoods with low levels of social interaction, fragmentation and attachment to a neighbourhood.

Reserves can provide opportunities for locals to engage with each other in a social context e.g. at a fundamental level a summer evening ball game on a neighbourhood reserve. In this way, reserves and neighbourhood reserves in particular may be common ground where diverse groups can interact and this assists in developing social cohesion.

Neighbourhoods identified as deprived generally have higher levels of poor health. Avoidable hospitalisations across the Hutt Valley floor shows that they increase in more deprived areas and the rate is higher for people living on the valley floor than in other areas of Hutt City (Elizabeth Lucie-Smith, Measuring the Difference - Avoidable Hospitalisations, Hutt Valley DHB, July 2012). Suburbs with the highest rates are in Taita, Naenae and Boulcott/Avalon followed by Waiwhetu (see Figures 16 and 17).

Avoidable hospitalisations are influenced by such things as housing quality, access to services and opportunities for daily physical activity. Where people live affects the amount of physical activity. Daily physical activity can be improved through a walkable street pattern, public transport access and access to local parks and reserves. Evidence also suggests that individual physical activity increases as the number and density of accessible places to exercise increases.

The quality and safety of accessible places and the quality of their settings are important to encourage physical activity. Where there are safe and attractive community facilities that are easy to access, local residents can increase their physical activity levels and reduce their chances of developing adverse health effects associated with inactivity.

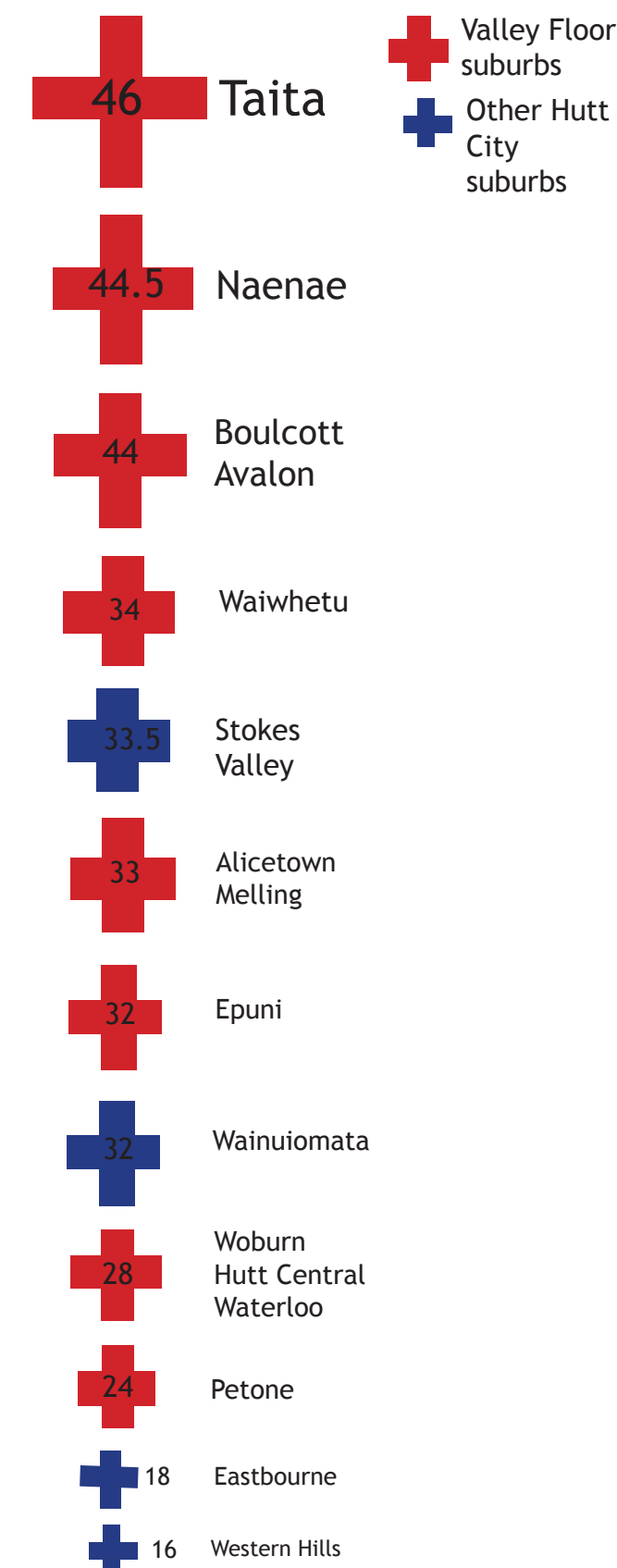
4.4.4 REASONS WHY RESERVES (AND NEIGHBOURHOOD RESERVES IN PARTICULAR) ARE PARTICULARLY IMPORTANT IN LOW SOCIO-ECONOMIC AREAS

- Many social housing areas are made up of adjoining units or multi-storied units with communal shared outdoor spaces
- Others have back and front yards but because of changing tenancy, and limited resources, quality may be low
- Areas of high deprivation generally have less access to private and public transport to access areas outside their suburb for physical activity and their health and wellbeing
- Deprived areas generally have larger households and fewer square metres per person per property.

4.4.5 THE ROLE OF RESERVES IN LOW SOCIO-ECONOMIC AREAS

- Aid social, physical and mental well-being
- Opportunities for play and physical activity
- Reserves linked by streets provide direct and leisurely paths to destinations
- Opportunities for locals to engage with each other
- Provide relief from the built environment - there is generally a greater number of people per property so the need for open space is greater
- Opportunities to reflect the various cultures of local residents through design.

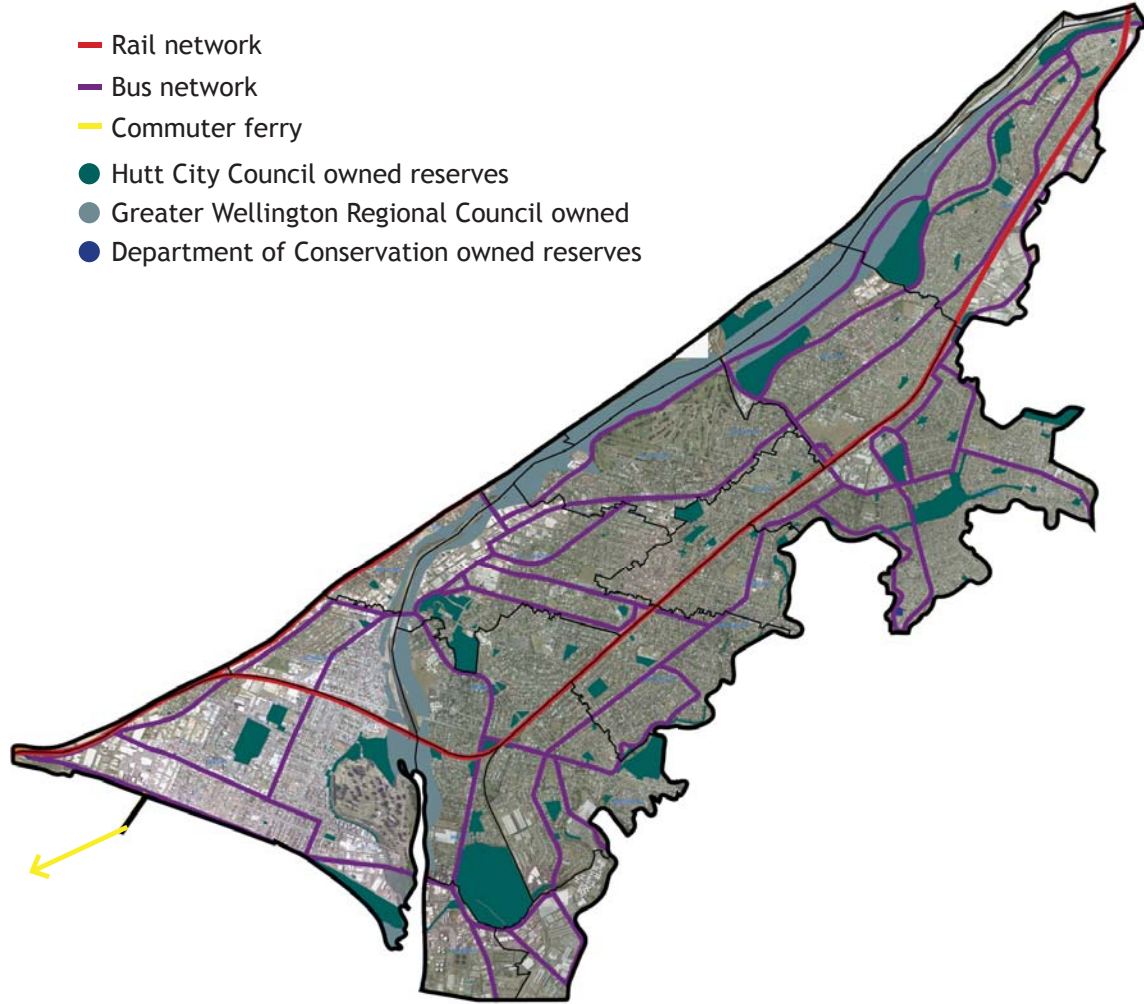
FIGURE 18 RATE OF AVOIDABLE HOSPITAL ADMISSIONS PER 1,000 POPULATION BY SUBURB



4.5 Main Transport Corridors

FIGURE 19 - MAIN TRANSPORT CORRIDORS

- Rail network
- Bus network
- Commuter ferry
- Hutt City Council owned reserves
- Greater Wellington Regional Council owned
- Department of Conservation owned reserves



- Bus - Generally follows main arterial or linking roads
- Ferry - The East by West ferries docks at Petone Wharf.

Main road access spines of the valley floor:

- Up the valley (south/north): Western Hutt Road, High Street, Cuba Street, Randwick Road, Cambridge Terrace, Waiwhetu Road, Kings Crescent, Naenae Road, Harcourt Werry Drive, Taita Drive and Eastern Hutt Road
- Across the valley (east/west): The Esplanade/Waione Street, Railway Ave/Woburn Road, Whites Line East, Waterloo Road and Fairway Drive/Daysh Street.

Road access to regional and district reserves from State Highway 2 is generally good e.g. Fraser Park, Hutt River, Petone Foreshore, Hutt and Hutt Park are connected to the wider region via the state highway and The Esplanade/Waione Road along the Petone Foreshore.

Multi modal transport (cycle and pedestrian) on the valley floor giving access to reserves has great potential given the flat terrain and wide roads but is generally not well catered for. Reserves could play a role in providing safe and attractive off-road routes for cyclists and pedestrians for recreation as well as for commuters.

4.5.2 ACCESS TO RESERVES USING MAIN TRANSPORT CORRIDORS

Regional reserves need to:

- Be easily accessible from State Highway 2
- On or very near public transport routes
- Provide large areas of car parking
- Have multiple entrances from different roads and streets, be easy to locate and access.

District/City reserves need to:

- Be easy to travel to across the valley floor and from suburbs in the western hills
- Be on or near public transport routes
- Be centrally located.

Community/Suburban and Neighbourhood Reserves need to:

- Be within walking distances of residential areas
- Provide for other forms of transport: mobility scooter, children’s bikes etc
- Have a street frontage and be easy to access
- Be reached without having to cross busy roads. Children can then visit spontaneously without supervision.

4.5.1 INTRODUCTION

Proximity of transportation routes to reserves plays a key role in their accessibility. Accessibility in turn contributes to their success. It makes sense that regional and district or city reserves are near major roads and public transport routes.

On the valley floor, the regional and district transport spine generally runs up the valley with key routes across the valley floor. Access to some of the open spaces within the valley floor is restricted by river crossings, major arterial roads, the railway line, private property and reserve entrance locations.

Key public transport:

- Train - Melling and Hutt Valley lines. The Hutt Valley line runs the full length of the valley floor. Train routes are generally not near regional and district or key city reserves. The Hutt Valley line also limits east to west access



Two train lines - Hutt Valley and Melling lines



School pedestrian crossing



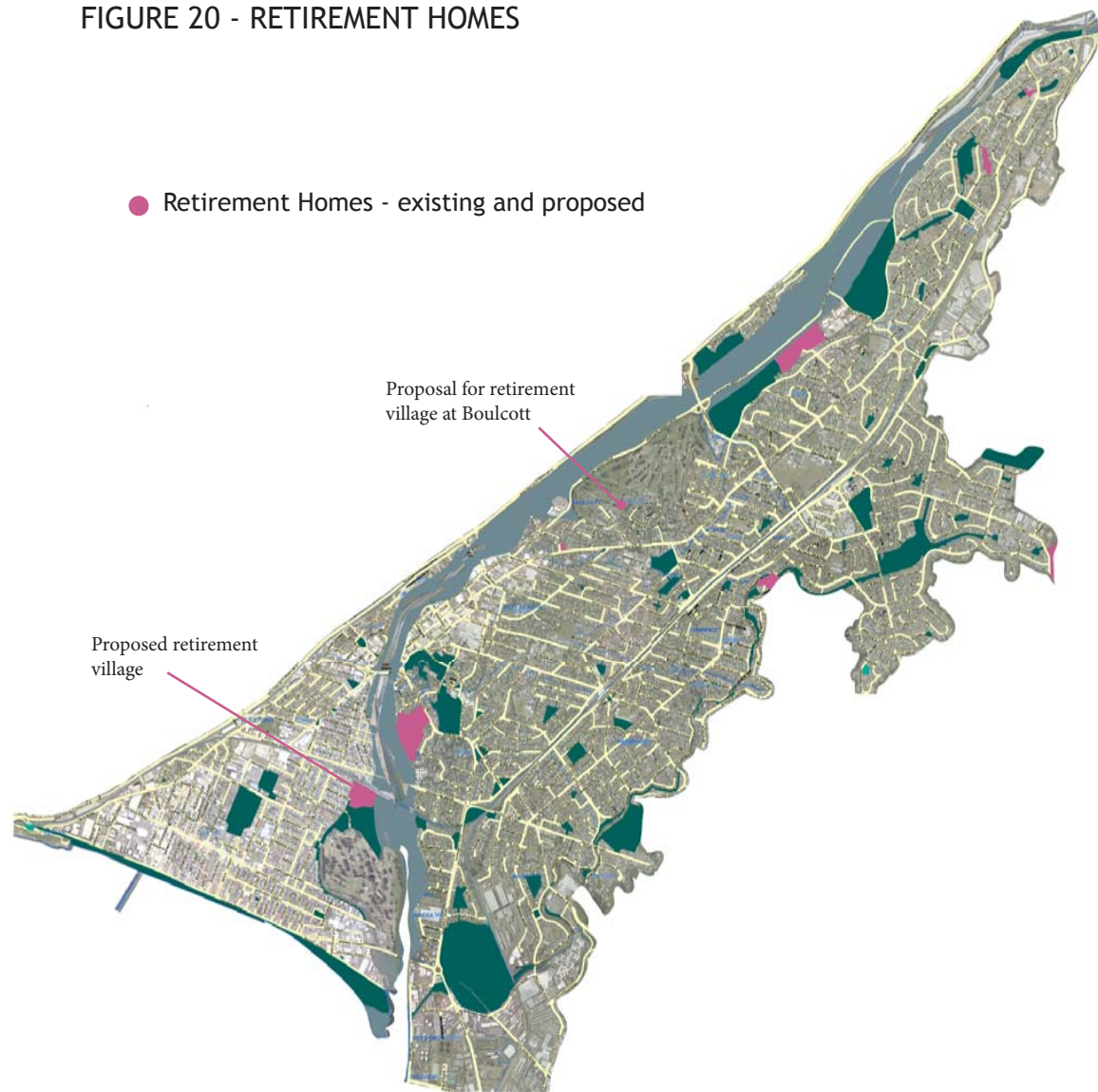
Biking along the Hutt River Trail



Hutt Valley bus services

4.6 Retirement Homes

FIGURE 20 - RETIREMENT HOMES



where elderly people can observe, interact with and take part in the wider community and in community activities.

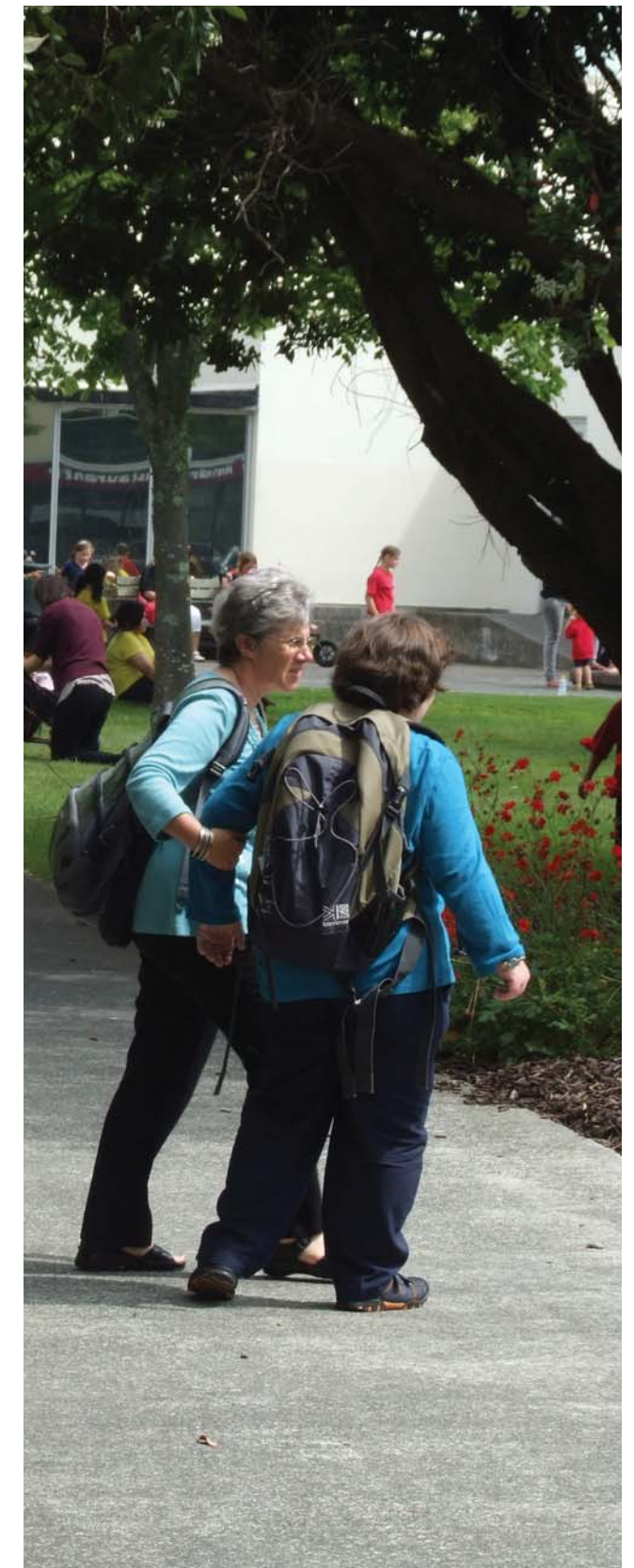
4.6.2 RESERVE NEEDS FOR THE ELDERLY

- Be accessible on foot or a short ride on public transport
- A variety of easily accessible entrances
- Be easy to navigate, accessible paths with even, non-slippery surfaces and materials, ramps, wide enough for wheelchairs and mobility scooters, and with some paths separate from activities such as skaters
- Seating with backs and arms in clusters and individually placed
- Shelter from sun and wind
- Be multi-functional and flexible to allow people to meet with friends, socially interactive and part of the community, exercise, relax, appreciate and connect with nature, observe activities/views etc)
- Opportunities for physical activity
- Opportunities to experience the natural environment
- Visual, texture of surfaces, auditory and olfactory clues.

4.6.1 INTRODUCTION

The valley floor has a number of existing and proposed retirement homes, generally centrally located close to services and transport routes (see Figure 20). Hutt City Council also has housing for the elderly and these complexes are mapped as a part of social housing in section 4.4.

Large existing and proposed retirement villages are all located near the Hutt River and the Hutt River trail and many provide open space for gardens, trees and recreation within their complex. An example is Shona Mcfarlane Retirement Village which has gardens, lawns and a bowling green. In these settings public reserves still have a role to play. In contrast to private open space, reserves provide settings



4.7 Enclosed neighbourhood Reserves

4.7.1 INTRODUCTION

Reserves which this review defines as ‘enclosed’ reserves were developed during the mid twentieth century as part of large scale central government housing schemes.

The schemes aimed to achieve a higher density of population in suburban areas and to use the land saved as open space for safe play areas. A feature was that the houses turned away from through-traffic roads and surrounded a central reserve (see Figure 21). The objective was for pleasant, restful, safe play areas easily supervised from the houses and reached without having to cross roads. These central, communal areas were also to be used as the location for well grown specimen trees which were too large for suburban gardens (E.A. Plischke, Design and Living, Wellington Department of Internal Affairs, 1947, page 78)

These housing schemes were partly implemented in the Hutt Valley, and variations of them are located in the northern and eastern parts of the valley floor in Naenae, Taita, Waiwhetu and Moera, as well as along the central spine on both sides of the railway line in Epuni, Fairfield and Avalon (see Figure 22). All these areas have central common reserve areas.

Over time, use of these communal areas has developed in different ways. While the earlier intention for reserves within residential blocks may have been to develop neighbourhood reserves overlooked by the surrounding community, today this has not eventuated in many cases.

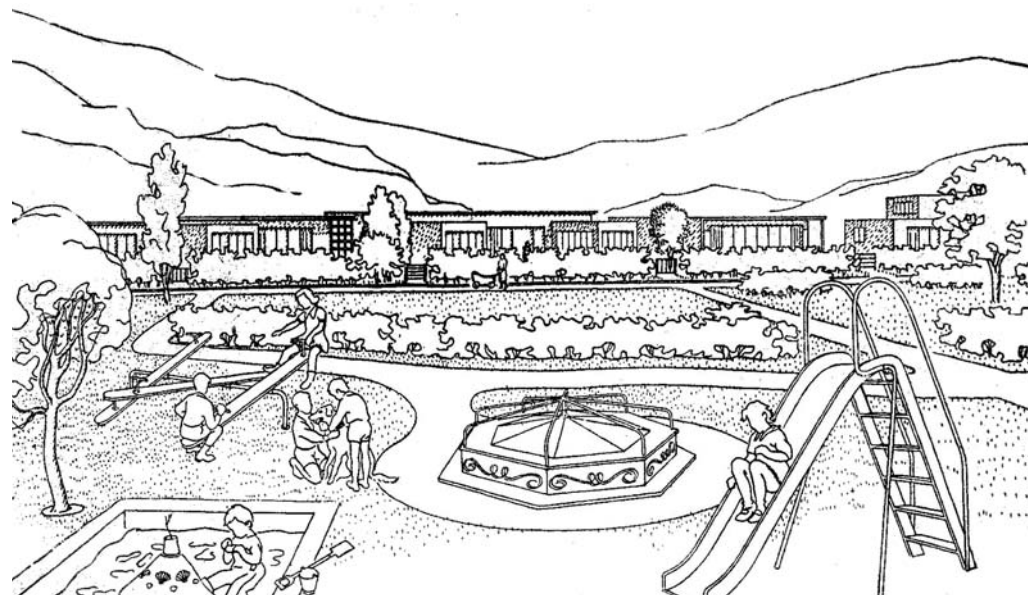


FIGURE 21 - from Design and Living, showing concept of houses facing onto a common open space (page 85)

Surrounding houses often turn their backs on these communal spaces. They often have high solid boundary fences limiting visual surveillance and fewer properties have access onto these communal spaces. Society has also changed and fewer people are at home during the day compared to when these suburban areas were first developed.

2.7.2 CHALLENGES TO MANAGING ‘ENCLOSED’ RESERVES

- Houses generally face away from the central reserve areas toward the street often with high solid boundary fences limiting visual surveillance of the reserves
- Few neighbouring properties have direct access onto the public spaces via gates in boundary fences
- Some reserves have little or no street frontage, limited access and are not seen from surrounding streets. This reduces perceptions of safety. For example Glenbrook Grove Reserve in Naenae (site 66) has only one entrance/exit. Having more than one entrance is recommended for safety
- Some entrances are narrow alleyways reducing access, visibility into the reserve and perceptions of safety
- On some reserves the value of multiple street entrances has been lost because sections of the reserve have been fenced off preventing access through the site. An example is Copeland Street Reserve (Site 55)
- Built facilities dominate some reserves or are used for purposes that require membership. This reduces or prevents their use as neighbourhood reserves
- Some reserves have poor drainage or are associated with stormwater infrastructure and are unusable in wet weather e.g. Reynolds Street Reserve, Taita.



Reynolds Street Reserve, Taita - high solid fences face away from the reserve; poor drainage limits use

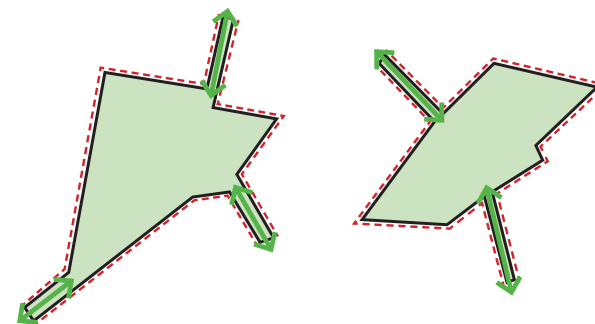


Godley Street Reserve, Waiwhetu - a wide street frontage with easy, safe access



Hall Crescent Reserve - high boundary fences, limiting access and and surveillance

FIGURE 22: EXAMPLES OF LAYOUT OF ENCLOSED RESERVES



Examples of enclosed reserve layout with no street frontage and access from neighbouring streets

4.7.3 ROLE OF ENCLOSED RESERVES

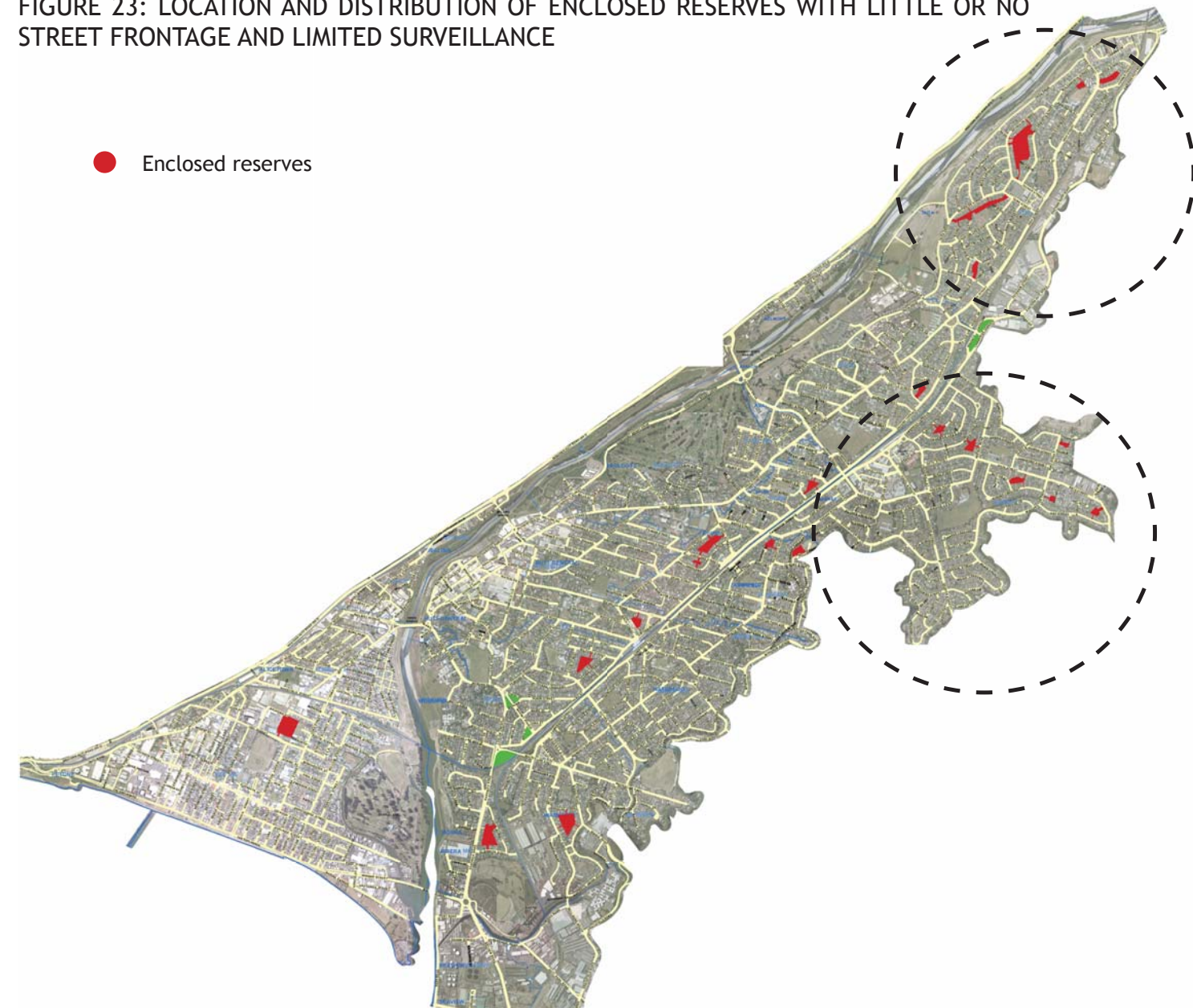
- Can be reached from the neighbourhood without having to cross roads. Children can access the reserves for unsupervised play and are used by the neighbourhood for informal and spontaneous activities e.g. summer evening family cricket e.g. Godley St Reserve Waiwhetu (Site 32)
- Link neighbourhoods with multiple entrances and exits e.g. Barton Grove in Naenae (Site 71)
- Provide off road thoroughways for pedestrians and cyclists
- Have open space for neighbourhood 'kick-a-ball' type activities e.g. Rata Street in Naenae (Site 65)
- Undeveloped open space for adventure and natural play
- Settings for formal playgrounds with play equipment
- Space for large attractive specimen trees e.g. Robert Street Reserve in Epuni North
- Settings for streams and the stormwater network e.g. York Park in Moera (Site 25)
- Settings for specific purposes e.g. Lower Hutt Tennis Club in Woburn (Site 50)
- Facilities e.g. IHC, scout hall and clubrooms in Copeland Street Reserve in Epuni (Site 55), Hutt Theatre School on Phil Evans Reserve in Hutt Central (Site 51).

2.7.4 RECOMMENDATIONS FOR ENCLOSED RESERVES

In order to increase use of enclosed reserves and improve access and safety, the following strategies are recommended:

- No new reserves developed without wide street frontages
- Review fencing on reserve boundaries and redesign and replace solid fencing with a combination of solid and visually permeable fencing. Working with property owners and tenants, identify location of solid fencing for privacy (e.g. from living areas) and visually permeable fencing where visual privacy is less critical
- Review existing reserve vegetation and manage to allow views into and out of the reserve e.g. limb up trees to retain views and locate shrubs where they do not block views
- Orientating new infill housing behind existing housing so that they face toward the reserve
- Purchase properties on street frontages as they become available to extend reserve street boundaries and widen entrances/exits.

FIGURE 23: LOCATION AND DISTRIBUTION OF ENCLOSED RESERVES WITH LITTLE OR NO STREET FRONTAGE AND LIMITED SURVEILLANCE



Copeland Street Reserve fencing preventing access through the site



Hutt Tennis Club with controlled access

5.0 SUMMARY OF CURRENT RESERVE SUPPLY

This section summarises the current reserve supply in each suburb according to a reserve's community of interest and identifies the positives and negatives of reserves

SUBURB	RESERVE SIGNIFICANCE (area in hectares)				SUMMARY CURRENT RESERVE SUPPLY	
	Local	Suburban	City/ District	Regional	+	-
Petone	4.5078	1.3919	28.9955	7.291	<ul style="list-style-type: none"> Petone has access to extensive reserve areas on the Petone Foreshore and Hutt River on the edges of the suburb Petone Recreation Ground and North Park in the centre of the suburb is used for organised sport, with local use outside of booked use Petone Recreation Ground has a children's playground for neighbourhood use Shandon Golf Course is public land with Hutt River Trail passing through it South eastern corner of the suburb well supplied with local reserves with Hikoikoi and Schoefield Reserves and Hutt River Access to the coastline. 	<ul style="list-style-type: none"> North Park partly enclosed - with limited views into the park from streets Petone Foreshore and Hutt River cannot be reached on foot in 8.5 minutes from many parts of the suburb Shandon Golf Course is open for public use nevertheless is a barrier to accessing the river Petone lacks local reserves throughout the suburb Petone has a number of very small reserves which provide a location for vegetation but are too small for use.
Alicetown	.4625				<ul style="list-style-type: none"> Reserves are along Hutt River on the suburb's eastern edge and local reserves along the suburb's central spine. 	<ul style="list-style-type: none"> The western edge of the suburb between SH2 and Victoria Street is outside the 8.5 walking threshold to central local reserves and Hutt River Neighbourhood reserves are less than the minimum recommended size of 2500²m.
Melling		.4975			<ul style="list-style-type: none"> Most residences and workplaces in Melling have access to the Hutt River reserve, and/or The Greenway can be reached within 8.5 minutes walking. 	
Hutt Central	1.8731	1.6148	12.5289		<ul style="list-style-type: none"> Key high profile reserves are Riddiford/Civic Gardens, the Dowse Plaza, Hutt Recreation Ground and Hutt River 	<ul style="list-style-type: none"> Lack of local neighbourhood reserves close to people's homes and workplaces Local reserves are very small at road intersections or surrounded by busy roads which limit use and access, especially by children and the elderly.
Woburn	1.8731	1.6148			<ul style="list-style-type: none"> Hutt River on the western edge of the suburb Local reserves with pleasant open space and mature specimen trees Reserves with recreation - bowling and tennis clubs. 	<ul style="list-style-type: none"> Local reserves are surrounded by busy roads which limit use and access Two local reserves dominated by recreation clubs with membership requirements Corner of Randwick Rd/Whites Line East is fenced with no access.
Boulcott	.0361	.5303			<ul style="list-style-type: none"> Mitchell Park on the edge of the suburb has extensive recreation facilities with green open space and gardens for local use. 	<ul style="list-style-type: none"> Private open space of the golf course separates the suburb from Hutt River and reduces access Mitchell Park on the edge of the suburb is well outside the 8.5 minute walk threshold from much of the suburb Very small grassed area has limited use at corner of two busy roads.
Epuni	1.9454	3.3803			<ul style="list-style-type: none"> Epuni has local reserves with undeveloped potential Most residents are likely to be able to access a local reserve within 8.5 minutes walking Mitchell Park on the edge of the suburb has extensive recreation facilities with green open space and gardens for local use. 	<ul style="list-style-type: none"> Except for Mitchell park, reserves are undeveloped and do not invite use Four reserves are enclosed with minimal street frontage and access and safety issues A grassed open area around the Epuni Community Centre does not invite use.
Avalon	.055		15.2676		<ul style="list-style-type: none"> Avalon Park and Hutt River are two key reserves on the western edge of the suburb. 	<ul style="list-style-type: none"> Reserves are located on the edges of the suburb which means residents in the centre of the suburb have a walk of more than 8.5 minutes to a local reserve The railway line on the eastern edge of the suburb is a barrier for residents of eastern Avalon to access reserves in Naenae to the east Harcourt Werry Drive and the stopbank are barriers to accessing the river, especially for children and the elderly - Vehicles travel up to 70kph with no crossing points for pedestrians or cyclists Of the two local reserves one is enclosed on the eastern edge of the suburb with a grassed open area and specimen trees. The other is a small area on the corner of two streets on the suburb's northern edge.

SUBURB	COMMUNITY OF INTEREST - RESERVES IN HECTARES				SUMMARY CURRENT RESERVE SUPPLY	
	Local	Suburban	City/ District	Regional	+	-
Taita	2.0946	1.6687	7.2166	28.6712	<ul style="list-style-type: none"> Reserves are evenly distributed throughout the suburb. Most residents would reach a reserve within the 8.5 minutes threshold for access to local reserves Fraser Park and Hutt River are major reserves on the western edge of the suburb but the river is difficult to access across Harcourt Werry Drive Changes to social housing is driving positive changes to reserves and street tree planting Good neighbourhood ownership of Walter Nash Park as a result of the Great Start initiative Fraser Park sportsfields are available for local use when not booked for formal sports Grassed linear reserves link streets Reynold Street Reserve is a linear reserve in the centre of the suburb connecting key recreation facilities, schools and streets. 	<ul style="list-style-type: none"> Hutt River is difficult to access across Harcourt Werry Drive Most local reserves are enclosed with limited street frontage, access and surveillance for safety Two local/suburban reserves are used for specific activities (outdoor and indoor netball courts and bowling club) with exclusive use and unavailable to the general public Linear reserve in the centre of the suburb (Reynold Street Reserve) unrealised potential 12.5 % of neighbourhood reserves are less than the minimum recommended size of 2500²m.
Naenae	3.0712	.2731	18.2007		<ul style="list-style-type: none"> Central and northern Naenae have several local reserves within 8.5 minutes walk from most residences Linear reserves along Waiwhetu Stream through Naenae Park link with suburbs to the south Walter Mildenhall Park and Naenae Park have extensive recreation facilities with potential to improve open space for free community use Naenae Park sportsfield available for community use outside of booked hours. 	<ul style="list-style-type: none"> Most local reserves are enclosed with minimal facilities and road frontage Linear reserves along Waiwhetu Stream under used as a linear connection along the eastern edge of the valley floor Much of Walter Mildenhall Park facilities require membership or payment for entry and the balance requires improvement to maximise the reserve's potential The area south of Naenae Road has fewer options to access local reserves Wingate Reserve on the western edge of the suburb is dominated by roading with safe access on its northern side only 36% of neighbourhood reserves are less than the minimum recommended size of 2500²m.
Fairfield	.3445				<ul style="list-style-type: none"> Te Whiti Park is a major reserve on the eastern side of Waterloo at the foot of the Eastern Hills available for local use and a popular entrance to the Eastern Hills for fitness walkers and runners, although tracks are generally too steep for cyclists Amenity and ecological values of Waiwhetu Stream are improving. 	<ul style="list-style-type: none"> Fairfield and Waterloo are separated from reserves to the west by the railway line Areas earmarked for higher density in southern and eastern Fairfield and northern and eastern Waterloo lack local neighbourhood reserves and residents will need to walk further than the desirable 8.5 minutes walk to a local reserve Only Trafalger Square is less than the minimum recommended size of 2500²m Waiwhetu Stream as a linear trail limited by lack of an all weather pathway.
Waterloo	.9129	1.818				
Waiwhetu Moera	1.3447 1.1645	1.5477 1.5987	12.1007		<ul style="list-style-type: none"> Waiwhetu and Moera in particular have a good supply of local reserves generally within the 8.5 minutes walk threshold, including Hutt River and Hutt Park Good supply of sportsgrounds and facilities for organised sports. 	<ul style="list-style-type: none"> The non residential area east of Hutt Park is a barrier to the park from the Waiwhetu residential area Busy Randwick Road is a barrier for Moera residents to access Hutt Park with very few pedestrian crossings York Park is an enclosed reserve, large grassed area with few trees, shade and shelter and highly modified Awamutu Stream with no stream bank shade for stream life Neighbourhood reserves in Moera are a good size, four in Waiwhetu are less than the minimum recommended 2500²m.
Seaview		.1808				<ul style="list-style-type: none"> Industrial area with no relief from the industrial form for those working/living in the area Little opportunity for active worker recreation near their workplaces Port Road is part of the cycle connection between the Hutt River Trail and the Eastern bays and the Great Harbour Way Currently a low number of resident population and likely to remain low.

6.0 RECOMMENDED MEASURES OF RESERVE AVAILABILITY

This section outlines factors to consider when assessing reserve availability and recommends a measurement of reserve availability

6.1 INTRODUCTION

Levels of provision in urban areas is not just about quantity of reserve land. Providing large areas of reserve land on the valley floor or a large number of reserves does not guarantee that the reserves meet the needs of their community.

Provision is to do with:

- Accessibility and visibility
- Equity of provision (reserve provision regardless of where residents live and their circumstances)
- What the community wants from their reserves
- Quality
- Variety of reserves for different uses and experiences.

The connection between quality and type of open space and improved physical, mental, social, economic, environmental and cultural health and wellbeing is increasingly recognised. It is also important to recognise that different parts of the valley floor have different needs, requirements and types of open space.

Therefore, when making decisions on whether levels of reserve provision on the valley floor are sufficient and on measures of reserve availability, a range of factors need to be considered.

6.2 FACTORS TO CONSIDER WHEN ASSESSING RESERVE AVAILABILITY

- The degree of urban intensification and size of private outdoor areas and space for trees
- The quality of both private and public open space and facilities
- Accessibility and visibility of reserves. For example the time it takes to walk to a neighbourhood reserve from a residence. Christchurch City Council 'Public Open Space Strategy 2010 - 2014' identified reserves with more than an 8.5 minute walking time as being deficient, based on the time it would take for a child or elderly person to walk 400 metres. Other factors are barriers to access e.g. busy roads that need to be crossed, and how visible and inviting a reserve is (length of street frontage, inviting and well-defined entrances and cared for facilities)
- Degree of pedestrian/cyclist connections and linkages between reserves
- Socio-economic issues and people per household. As a general rule of thumb, provision of high quality open spaces becomes more important as socio-economic deprivation and people per household

increases. Evidence suggests that reducing the amount of open space in lower socio-economic areas has a greater impact on the overall wellbeing of the community

- Growing diversity of population is a signal that it is important to provide diverse types of reserves and multi-functional spaces
- Demographics and projected changes - the proportion of young people and the elderly in particular. A number of suburbs on the valley floor have a high proportion of young people and the elderly population is projected to increase over the next 18 years. The valley floor population is also projected to be increasing in ethnic diversity
- Needs of people - for example Hutt City Youth Study identified that generally there is a lack of things to do and places to go, free things to do, safe areas, sport and recreation activities and facilities where young people can hang out. Sixty per cent identified that major improvements are needed in places to hang out. Evidence shows that open space provides more benefits for children and teenagers, as well as low socio-economic groups, low income ethnic minorities, those who have little free time for exercise and the elderly
- The values placed on reserves by the community and established through surveys and interviews
- Environmental values of reserves, environmental connections/linkages between reserves and the environmental services they provide e.g. the degree reserves reduce hard surfaces, provide habitat for fauna, have space for trees, reduce carbon, reduce air and water pollution.

6.3 MEASURES OF RESERVE AVAILABILITY

Measures of reserve availability vary according to the significance of the reserve i.e. whether it is a neighbourhood, suburban, city/district or regional reserve. For example a neighbourhood reserve should be within a comfortable walking distance, while a city, district or regional reserve may require a car journey or reached by public transport.

Other measures are to do with the size of the reserve and the activities that can take place on it. A regional reserve is generally large and has a wide range of activities or special facilities that attract wide use. A neighbourhood reserve on the other hand is small with space for a limited range of activities.

This review proposes measures for reserve availability based on the following:

- Reserve size
- The range of activities that can take place on the reserve
- Whether it can be accessed from a number of directions i.e. the number of entrances it has
- The degree it conforms to CPTED principles which influences how safe people feel accessing and using the reserve
- The quality of the reserve and its facilities
- Its linkages to neighbouring streets, pedestrian/cyclist routes, key transport routes and public transport.

The key measure for neighbourhood reserves is whether a reserve can be reached on foot from most residences in the immediate area in 8.5 minutes. This is the time it generally takes for a young child or elderly person to walk 400 metres. A neighbourhood reserve should also be reached without having to cross busy roads, railway lines or rivers and streams.

This measure was used to test availability of neighbourhood reserves on the valley floor. Some parts of the valley floor have access to more than one neighbourhood reserve within the 8.5 minute walk threshold. In other areas, people are outside the 8.50 minute walk or 400 metre threshold (see Figure 24).

(See the following page for a table of recommended measures.)

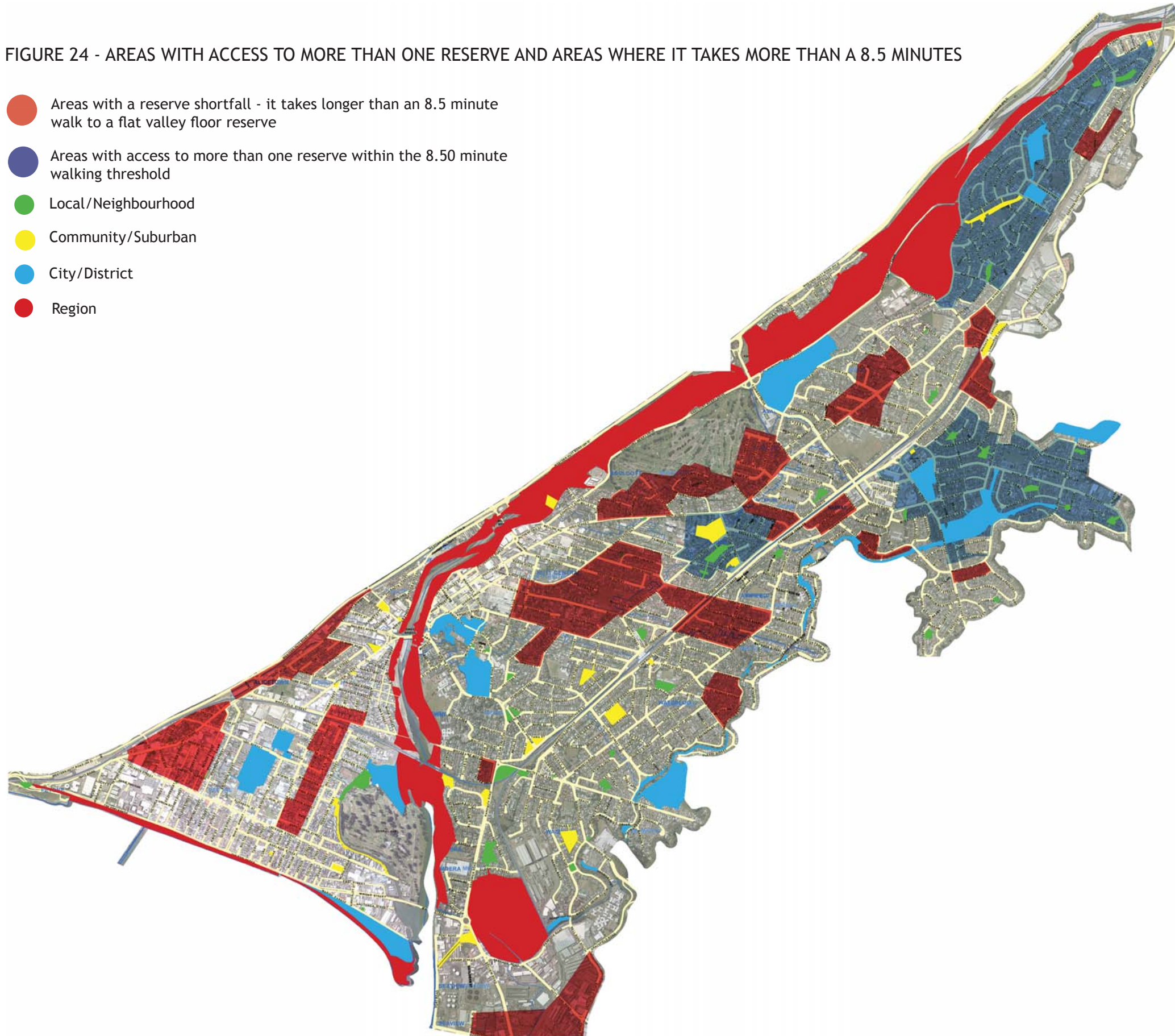
TABLE OF RECOMMENDED MEASURES OF RESERVE AVAILABILITY

RESERVE SIGNIFICANCE	MEASURES
<p>Local Neighbourhood Reserves - 47% of valley floor reserves</p>	<ol style="list-style-type: none"> 1. Can be reached on foot from most residences in the immediate area in 8.5 minutes (approximately 400 metres along streets, not as a straight line) without crossing high traffic count roads, railway lines or water courses 2. Has an area of more than 0.25 hectare (or 2500m²). 3. Has a minimum of two entrances and preferably three. 4. Has a wide street frontage of a minimum of 30% of their perimeter. 5. Has a minimum of 50% visually permeable perimeter fencing (this can be combination fencing with solid fencing blocking views into private areas of housing on a reserve boundary). 6. Conforms to CPTED principles - surveillance, access management, territorial reinforcement, quality environments. 7. Has linkages to street pedestrian/cyclist routes and other reserves.
<p>Suburban Reserves - 31% of valley floor reserves</p>	<ol style="list-style-type: none"> 1. Can be reached on foot within 30 minutes from most residences in the surrounding area (may involve crossing high traffic count roads, railway lines or water courses). 2. Can be reached from a suburban transport route and public transport. 3. Has a minimum of two entrances and preferably three. 4. Has a wide street frontage of a minimum of 30% of their perimeter. 5. Has a minimum of 50% visually permeable perimeter fencing (this can be combination fencing with solid fencing blocking views into private areas of housing on a reserve boundary). 6. Conforms to CPTED principles - surveillance, access management, territorial reinforcement, quality environments. 7. Has linkages to road/street pedestrian and cyclist routes and to other reserves 8. Is interesting and varied enough to hold interest for longer than 30 minutes.
<p>City/District Reserves - 19% of valley floor reserves</p>	<ol style="list-style-type: none"> 1. Can be reached from a main transport route and public transport. 2. Has linkages to city/district pedestrian/cyclist routes and other reserves. 3. Has car parking facilities. 4. Conforms to CPTED principles - surveillance, access management, territorial reinforcement, quality environments.
<p>Regional Reserves - 3% of valley floor reserves</p>	<ol style="list-style-type: none"> 1. Can be reached from a main transport route and public transport. 2. Has linkages to city/district/regional pedestrian/cyclist routes. 3. Has car parking facilities. 4. Has an outstanding quality or experience. 5. Conforms to CPTED principles - surveillance, access management, territorial reinforcement, quality environments.



FIGURE 24 - AREAS WITH ACCESS TO MORE THAN ONE RESERVE AND AREAS WHERE IT TAKES MORE THAN A 8.5 MINUTES

- Areas with a reserve shortfall - it takes longer than an 8.5 minute walk to a flat valley floor reserve
- Areas with access to more than one reserve within the 8.50 minute walking threshold
- Local/Neighbourhood
- Community/Suburban
- City/District
- Region



Some parts of the valley floor have access to more than one neighbourhood reserve within the 8.5 minute walk threshold. In other words, people in these areas live within 400 metres of more than one reserve.

Areas with access to more than one reserve within the 8.5 minute walking threshold are in Taita, Naenae and central Epuni. These areas have social housing and high levels of social deprivation. In New Zealand it is not unusual for such areas to have high levels of reserve provision, in contrast to the United Kingdom, Australia, Canada and the United States (Stevenson, Anna et al, NZ Geographer (2009), 'Neighbourhoods and health: a review of the New Zealand literature', pge 219). The parts of Naenae, Taita and Epuni where people live within 400 metres of more than one reserve have high levels of social housing and social deprivation and were planned developments at a time when the value of public open spaces for recreation and health was recognised.

The map also shows areas on the valley where people are outside the 400 metre threshold (more than 8.50 minutes walk) of a reserve with suitable space for a ball game or a playground. This indicates a shortfall in neighbourhood reserve provision.

Jackson Street and the block immediately to its south are just within 400 metres of the Petone foreshore which means it can be reached in 8.50 minutes from most properties. This area is earmarked for intensification including apartments, and given the relatively exposed foreshore, more sheltered neighbourhood reserves may be warranted.

7.0 PROPOSED FUTURE RESERVE REQUIREMENTS

This section gives reserve requirements and recommends measures for reserves that do not perform. Reserves are organised according to suburbs or groups of suburbs.

SUBURB	SUBURB PROFILE	REQUIREMENTS AND RECOMMENDATIONS
<p>Petone Alicetown</p>	<ul style="list-style-type: none"> • Third largest population and one of the largest in area • Projected higher housing density area between the foreshore and Jackson Street • Largest current and projected demographic young to middle-aged adults with a projected percentage of 67% of the total population of Petone and 64% in Alicetown • Petone projected to have the smallest percentage of elderly of all valley floor suburbs (16% Of the projected population and Alicetown 18%) • Petone is culturally diverse with Maori second to European; Alicetown is slightly less culturally diverse • High socio-economic deprivation near Hutt River mouth, small patches throughout Petone and in the southern area of Alicetown • Key transport links along the foreshore and western edge • Proposed retirement village on the eastern edge of Petone • Petone Foreshore, Hikoikoi Reserve and sportsground in the centre of the Petone and Hutt River are key reserves • North Park is partly enclosed • Petone Recreation Ground is open to street views and access from Udy Street. 	<p>Requirements:</p> <ol style="list-style-type: none"> 1. Multi-functional and flexible reserves with a range of facilities and activities. 2. Additional local reserves. <p>Measures to improve performance:</p> <ul style="list-style-type: none"> • Improve connections for pedestrians and cyclists from the suburb to Hutt River and along the river from the harbour • Provide new neighbourhood reserves in central and western Petone, areas earmarked for higher density to offset higher density • Widen North Park perimeter street frontage on Udy Street • Investigate developing a local reserve in west Alicetown.
<p>Central Suburbs: Hutt Central Woburn Boulcott</p>	<ul style="list-style-type: none"> • Higher density housing projected in Hutt Central and Boulcott (except for eastern Hutt Central from Waterloo Road north to the hospital) • The population of central suburbs are projected to have a reduction in numbers of children, the smallest percentage of youth and adults of valley floor reserves • Woburn and Hutt Central are projected to have the largest percentage of middle aged adults and Hutt Central the highest percentage of elderly followed by Woburn and Boulcott • Central suburbs are less culturally diverse although the largest percentage of Asians live in Hutt Central • Central suburbs have low levels of socio-economic deprivation and very low levels of social housing • Hutt Central has a number of retirement villages with proposals for more homes for the elderly. Boulcott also has a proposal for a retirement village • Key reserves are the civic precinct in Hutt Central, Hutt River and Hutt Recreation ground • Two enclosed reserves are on the eastern sides of the central suburbs • Lacking are easily accessed local neighbourhood reserves. 	<p>Requirements:</p> <ol style="list-style-type: none"> 1. Improve access to local neighbourhood reserves across busy roads, Hutt River and civic gardens will become increasingly important as the elderly population grows. <p>Measures to improve performance:</p> <ul style="list-style-type: none"> • Develop local neighbourhood reserves close to people's homes and workplaces in higher density areas and near retirement villages • Improve pedestrian and cycle connections from central suburbs to the civic gardens and Hutt River • Improve access to local reserves across busy roads in Woburn, paths, seating and amenity in these reserves • Develop the large reserve area at the corner of Randwick Rd/Whites Line East was an urban island nature or wilderness area with trees.
<p>Epuni</p>	<ul style="list-style-type: none"> • Population has proportionally more children than many areas of the valley floor although projected to decline along with youth and adults to 40 years of age • Middle aged and the elderly to increase and make up 56% of the population • Culturally diverse with Maori following Europeans as the dominant ethnicity followed by Pacific, other ethnicities with Asian people the smallest ethnic group • Higher housing density projected in Central and north Epuni and the eastern edge along the railway line with reduction in private outdoor space and less space for trees • Central Epuni is a high socio-economic deprivation area with pockets of medium socio-economic deprivation elsewhere in the suburb • High proportion of social housing in central Epuni and on the eastern side of the suburb • Main transport corridors run along the suburb's eastern and western boundaries (railway to the east, road to the west) • Three of the five reserves are enclosed with limited street frontage and surveillance for safety. 	<p>Requirements:</p> <ol style="list-style-type: none"> 1. Local neighbourhood reserves. <p>Measures to improve performance:</p> <ul style="list-style-type: none"> • Work with local communities to improve/develop neighbourhood reserves providing free facilities • Improve quality of reserves and safety of users (enclosed reserves and Epuni Community Centre) • Work with Housing NZ to purchase property and create street frontage on enclosed reserves • Work with owners and tenants of neighbouring properties to review solid fencing on reserve boundaries, redesign and replace with a combination of solid and visually permeable fencing (identify location of solid fencing for privacy) • New infill houses at rear of existing properties face onto reserves • Develop linkages for pedestrian and cyclists through reserves to connect neighbouring streets and reserves, and encourage pedestrians and cyclist to use reserves as off road commuter routes • Consider acquiring properties to create wider open reserve frontages.

SUBURB	SUBURB PROFILE	RECOMMENDATIONS
Avalon	<ul style="list-style-type: none"> Population the fourth largest after Naenae, Taita and Petone Housing density projected to increase in the southern and eastern areas of the suburb and along the central spine (High Street), away from the suburb's key reserve areas with reduction in private outdoor space and less space for trees Projected to have the smallest percentage of children of all valley floor suburbs (15%), youth to decline slightly and the middle aged population to increase slightly A major retirement village in the suburb means it has the largest percentage of elderly of all valley floor suburbs. This demographic is projected to increase to 26% Ethnically diverse with Asian peoples second to Europeans followed by Maori, Pacific and other ethnicities Most socio-economically deprived areas and social housing in the eastern and southern areas of the suburb Public transport and main transport routes run north to south along the suburb's eastern and western boundaries and through the suburb linking major reserves Contains Avalon Park identified as the site of the City's premier playground. 	<p>Requirements:</p> <ol style="list-style-type: none"> Reserve facilities close to homes for easy access and year round appeal. <p>Measures to improve performance:</p> <ul style="list-style-type: none"> Improve pedestrian and cycle access to Avalon Park from the northern and eastern areas of the suburb, access to Hutt River across the stop bank and Harcourt Werry Drive and between Naenae and Avalon reserves Investigate opportunities to purchase property suitable for development into a neighbourhood reserve in the centre of the suburb (near High Street) and work with local communities to develop a reserve that meets their needs Develop Colson Street Reserve as a local neighbourhood park, working with the local community to improve quality and safety of users in this enclosed reserve - attractive and welcoming entrances, gestures and signage, quality paths and facilities; widen perimeter street frontage; work with owners and tenants of neighbouring properties to review solid fencing on reserve boundaries, redesigning with a combination of solid and visually permeable fencing Improve Avalon Park for family and all weather use.
Taita	<ul style="list-style-type: none"> Population second largest of valley floor suburbs Housing density to increase in centre of the suburb, eastern parts of the suburb and along the central spine of High Street with reduction in private outdoor space and less space for trees The most culturally diverse and a high proportion of Maori and Pacific peoples The largest percentage of children of any suburb although projected to reduce over time Elderly population to increase Medium density along the central spine of the suburb with reduction in private outdoor space and less space for trees High socio-economic deprivation area with high levels of old social housing Public transport and key road north/south linking the suburb with key large reserves High proportion of reserves are enclosed with limited street frontage and surveillance for safety. 	<p>Requirements:</p> <ol style="list-style-type: none"> Focus on improving access and free facilities on current reserves to meet the needs of the local culturally diverse communities. Work with Housing NZ and property developers when redeveloping housing on improving public open space and trees. <p>Measures to improve performance:</p> <ul style="list-style-type: none"> Work closely with local communities to improve/develop reserves and their facilities Improve pedestrian connections between reserves developing linked walkways throughout the suburb Develop enclosed reserves - attractive and welcoming entrances and signage, quality paths and facilities; widen perimeter street frontage; work with owners and tenants of neighbouring properties to review solid fencing on reserve boundaries, redesigning with a combination of solid and visually permeable fencing. Alternatively, dispose of and replace with superior reserves Develop the linear reserve in the centre of the suburb and higher housing density zone (Reynold Street Reserve) as a key pedestrian/cyclist route connecting key recreation facilities, schools and streets; investigate making stormwater infrastructure visible by reintroducing stream and developing as an ecological corridor and feature of the suburb.
Seaview	<ul style="list-style-type: none"> A large industrial area on the harbour edge A small resident population and the suburb with the largest proportion of Maori is Seaview at 24%, although the actual population is small Port Road is part of the cycle connection between Hutt River Trail and the Eastern Bays and the Great Harbour Way Hutt Park and Waiwhetu Stream are located on the northern side of Park Road with recreational opportunities in an attractive setting, although access is separated from Seaview by a busy road and the stream. 	<p>Requirements:</p> <ol style="list-style-type: none"> The area has few residents but an increase in population during the day may merit investigating opportunities for open space within the industrial area. <p>Measures to improve performance:</p> <ul style="list-style-type: none"> Focus on improving amenity along the harbour edge and the Great Harbour Way Improve access to the beach on Park Road on the western side of the marina and integrate into the harbour cycle trail Investigate opportunity for open space for worker recreation.

SUBURB	SUBURB PROFILE	RECOMMENDATIONS
Eastern suburbs: Fairfield Waterloo Waiwhetu Moera	<ul style="list-style-type: none"> The middle-aged and the elderly in particular are projected to increase and make up 49% of the population in 18 years The percentage of children and adults under 40 is projected to decrease Housing density is projected to increase on the western side of the suburbs and in central Waiwhetu Moera is the most ethnically diverse suburb of all valley floor suburbs and along with Hutt Central has the highest percentage of Asian peoples Maori make up nearly a quarter of the population in Moera and slightly less in Waiwhetu Waterloo is not as culturally diverse Moera has a high level of socio-economic deprivation and social housing as has north Fairfield and western Waiwhetu with patches in Waterloo Waterloo has low levels of socio-economic deprivation and social housing Western Fairfield, Waterloo and north Waiwhetu in particular have access to the rail network Moera and Waiwhetu have one enclosed reserve each and Fairfield two The railway line separates the suburbs from reserves on its western side, Moera is well supplied with reserves although a busy road separates much of the suburb from Hutt Park and residents in southern Fairfield and northern Waterloo have less access to local reserves than other parts of the suburbs. 	Requirements: <ol style="list-style-type: none"> Given the projected increase in the middle aged and elderly demographic, focus on: <ul style="list-style-type: none"> Improving access to reserves for people on foot or cycling Widen use of existing sportsgrounds such as Te Whiti Park to include wider demographics Develop walk/cycle way and ecological, corridor along Waiwhetu Stream. Measures to improve performance: <ul style="list-style-type: none"> Develop linear cycle/pedestrian route and ecological corridor along Waiwhetu Stream connecting the eastern suburbs along the edge of the valley floor Develop local neighbourhood reserve in projected higher density area so residents in southern and eastern Fairfield and northern and eastern Waterloo can reach a local reserve within the 8.5 minute threshold Develop enclosed reserves - attractive and welcoming entrances and signage, quality paths and facilities; purchase properties to widen perimeter street frontage (some Housing NZ properties bordering York Park); work with owners and tenants of neighbouring properties to review solid fencing on reserve boundaries, redesign and replace with a combination of solid and visually permeable fencing (identify location of solid fencing for privacy e.g. from living areas, with visually permeable fencing where visual privacy is less critical).
Naenae	<ul style="list-style-type: none"> Population largest of valley floor suburbs Housing density to increase around civic/shopping centre and Walter Mildenhall Park with reduction in private outdoor space and less space for trees Culturally diverse with Maori making up 21% after Europeans Projected to have the highest percentage of children of valley floor suburbs with 55% of the population to be 39 years and younger Elderly increase but along with Petone projected to have the lowest percentage of elderly of valley floor reserves High socio-economic deprivation and social housing across the suburb Access to key transport routes (rail, road and bus) A string of enclosed reserves across the suburb Waiwhetu Stream a key connecting element. 	Requirements: <ol style="list-style-type: none"> Prioritise community facilities for children, youth and young adults and improving linear pedestrian/cycle and ecological connections. Improve the quality of existing reserves. Work with Housing NZ and property developers when redeveloping housing on improving public open space and trees. Measures to improve performance: <ul style="list-style-type: none"> Work closely with local communities to improve/develop reserves and their facilities Link the string of reserves across the suburb as a pedestrian/cyclist route Develop enclosed reserves (see item above re Taita enclosed reserves) Develop linear cycle/pedestrian route and ecological corridor along Waiwhetu Stream connecting the suburb with the harbour along the eastern edge of the valley floor Develop open space of Walter Mildenhall Park for free community use with a focus on activities for youth and young adults and children Develop vegetation on Wingate Reserve (trees as part of the eastern hills/valley crossing bird corridor) with pedestrian and cyclist access connecting to Taita.

8.0 CONCLUSIONS

INTRODUCTION

Seventy-four percent of the population of Hutt City live on the valley floor and others come to valley floor reserves for recreation from the hill suburbs and from elsewhere. The one hundred and seventy-eight valley floor reserves are grouped in this review into 85 reserves, making up a total of 339 hectares.

Levels of reserve provision in urban areas are not just about the area of reserves. Reserves need to meet the needs of their community and be accessible and visible regardless of where residents live and their circumstances. Different parts of the valley floor also have different reserve needs and requirements for types of reserves.

OWNERSHIP

One hundred and ninety-seven hectares of reserve land or just over 58% of total reserve area on the valley floor are owned by Hutt City Council. Forty-two percent is owned by Greater Wellington Regional Council. This means that nearly half of valley floor reserves are not owned by Hutt City Council. Regional Council reserves are located along the Hutt River. These reserves are not generally multi-use and their development into multi-use reserves with a wide range of community benefits is limited by their key function of river control and soil conservation.

Reserves along the Hutt River are also on the western boundary of the valley floor and separated from valley floor suburbs by busy roads, some with higher speeds than 50kph and private properties. This makes access to the reserves difficult. The stopbank along the river is also a visual barrier between the river and valley floor suburbs.

SUMMARY OF FACTORS THAT GUIDE DECISION MAKING ON RESERVE PROVISION

DEMOGRAPHICS AND HOUSING DENSITY

Housing density is likely to result in higher population or more households around shopping centres and on key transport routes in Hutt Central, Moera, Boulcott, Avalon, Naenae, along the Petone Foreshore and Cuba Street in Petone and on both sides of the Hutt Valley railway line. Increased site coverage will reduce the size of private open space in these areas and result in growing demand for reserves close to people's homes. Access to quality local reserves to compensate for smaller private open space makes higher density living more widely acceptable in New Zealand.

Increased site coverage on private open space decreases opportunity for trees. Reserves become important as locations for large trees creating habitat for birds, insects and invertebrates. Some reserves also have potential to become settings for streams with improved habitats for aquatic flora and fauna and opportunities for engagement with natural systems. Along with reserves with trees, they become areas for natural play. Research shows that contact with the natural world is important for general health and wellbeing, as well as making an area attractive and liveable.

Along with higher density living, increased numbers of households and smaller households, projected increases in numbers of the elderly and increasing ethnic diversity will result in people seeking opportunities for social interaction, and reserves have a role to play in providing these. Neighbourhood reserves in particular are likely to grow in importance. Taita and Moera are particularly culturally diverse. The largest percentage of Pacifica people live in Taita (25%), the largest percentage of Asians live in Hutt Central (17%). The largest percentage of Maori live in Naenae and Taita, and the largest percentage of European live in Woburn (69%).

Although all suburbs on the valley floor are projected on average to have lower numbers of children, neighbourhood reserves will continue to be important to meet the needs of this demographic. Naenae is projected to have higher numbers of children than other suburbs, followed by Taita, Woburn, Boulcott, and Waiwhetu.

In Petone, young to middle-aged adults are projected to make up 67% of the population with the smallest percentage of elderly of all valley floor suburbs. The adult demographic requires reserves that are multi-functional and flexible with a range of facilities and functions and opportunities to integrate recreation into their commuting journey to and from work or study and for both informal and formal sport. Petone is also earmarked for housing intensification, yet 31% of its local reserves are very small and unsuitable for active types of recreation.

In contrast, Woburn and Hutt central are projected to have the largest percentage of middle-aged and the elderly at 55%. The elderly in particular need accessible, quality reserves close to home. Yet local reserves in these areas are often accessed across busy roads with limited provision to meet the needs of this demographic.



AREAS WITH LOW SOCIO-ECONOMIC STATUS

Provision of reserves for people in areas with lower levels of socio-economic status is important as these areas generally have higher levels of poor health. Reserves aid social, physical and mental well-being.

Households are generally larger in these areas with a greater number of people per property and fewer square metres per person. Housing is often more dense with adjoining or multi-storied units. The quality of back and front yards is typically low because of changing tenancy and limited resources. Areas of higher deprivation generally have less access to private and public transport, therefore reserves within walking distance are important.

Generally areas with higher social and economic deprivation are on the eastern side of the valley floor and near the Hutt Valley railway line. Taita, Naenae and Moera have the greatest and most wide spread social and economic deprivation. Waiwhetu, Waterloo, Fairfield and Eponi have pockets of deprived areas. Petone, Hutt Central and Avalon have mixed levels of deprivation.

The link between deprivation and social housing is particularly evident in Taita and Naenae. These suburbs have not only the highest levels of deprivation but also the largest numbers of social housing and the largest population. A quarter of the population (26.3%) of the suburbs on the Hutt Valley floor live in these two suburbs alone. Reserves, and in particular neighbourhood reserves, are therefore important in these suburbs. Suburbs with the least deprivation are Woburn and Boulcott. Both of these suburbs have little social housing.

QUALITY OF RESERVES

Areas earmarked for higher density, areas with ethnic diversity, higher numbers of young families and the elderly, socially deprived areas with higher levels of social housing and areas with retirement villages especially need quality reserves. Opportunity for input into reserve design and types of facilities and activities in them is important in these areas, as are signs of stewardship and care.

ACTIVE TRANSPORT

Reserves on the valley floor play a role in providing safe and attractive off-road routes for cyclists and pedestrians for recreation and for commuters. They can be part of commuting routes to and from work and schools. Integrating active recreation as people move about their everyday lives particularly benefits adults and youth.

ENCLOSED RESERVES

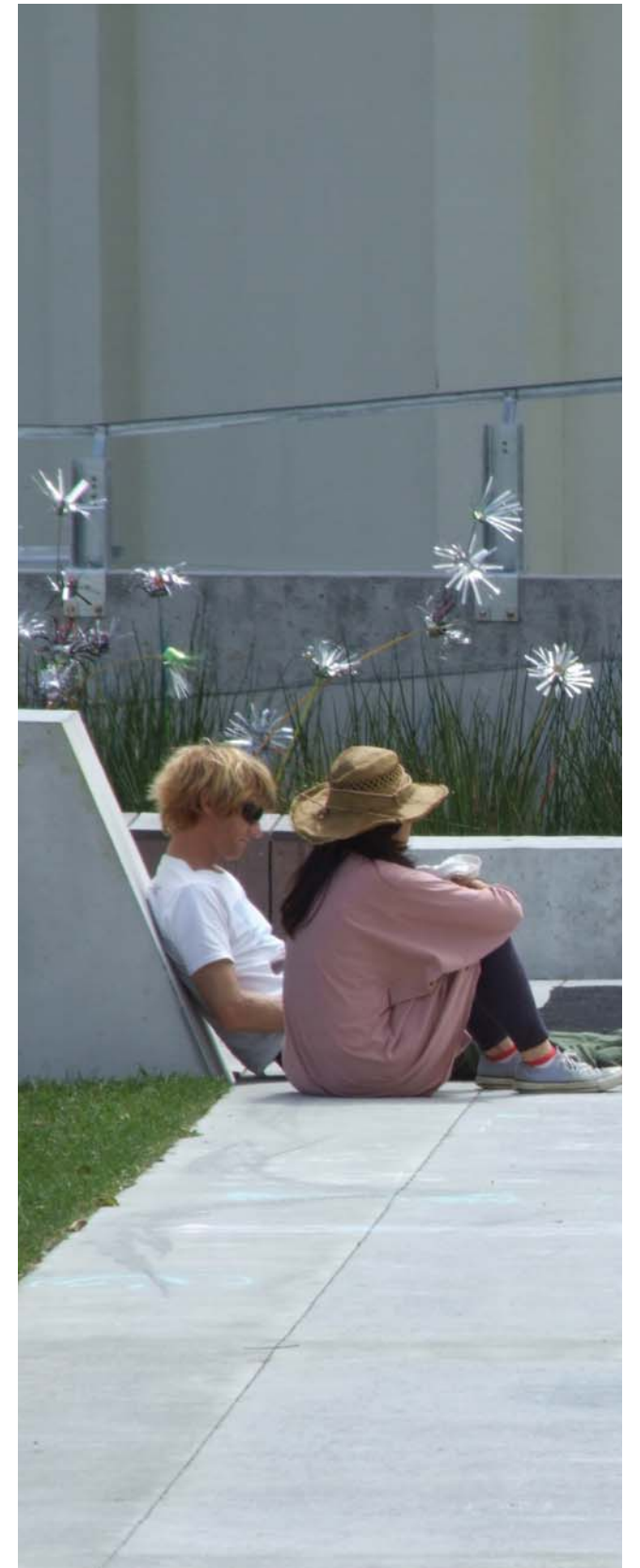
Naenae, Taita, areas along the west side of the main railway line, north Fairfield and Waiwhetu have reserves that have not reached their potential as public open space because they are located at the rear of housing clusters, have little or no street frontage and have poor visibility and access. They are a special type of reserve that requires particular treatment.

AREAS WITH A SHORTFALL IN RESERVES

In some parts of the valley floor a reserve cannot be reached within the measure of an 8.5 minute walk from a person's home to a flat valley floor reserve. This is the time it takes for an elderly person or child to walk 400 metres. Petone and central suburbs have residential areas where it takes more than a 8.5 minute walk to a reserve. Residents in parts of Waterloo and Fairfield, central Avalon, smaller areas within Naenae, Taita, Eponi and Woburn and in western parts of Alicetown also cannot reach a reserve within the 8.5 minute threshold. Reserve land in Seaview is limited to the coastal walk and cycleway at the harbour edge with little relief from the industrial form and few opportunities for worker recreation near their workplaces.

AREAS WITH ACCESS TO MORE THAN ONE RESERVE WITHIN THE 8.5 MINUTE WALKING THRESHOLD

In parts of Taita, Naenae and central Eponi, people live within 400 metres of more than one reserve. These are the areas with more social housing, higher levels of social deprivation and poorer health than in other parts of the valley floor. The value of public open spaces for recreation and health is well recognised, and reserve supply in these areas is justifiable. Moreover, it is important in these areas to have a variety of reserve facilities for different experiences. It is also important that reserves are high quality and well-maintained, and that people in the neighbourhood have opportunities for input into the design and development of reserves.



SUMMARY OF CATEGORIES OF RESERVES AND SIGNIFICANCE OF COMMUNITY OF INTEREST

Valley floor reserve provision for sport is important as Hutt City hillside suburbs have limited access to large flat areas. The flat land of the valley floor also means that provision for sportsfields is important regionally given the hilly terrain of much of the region. It is therefore fitting that the largest areas of reserve land on the valley floor (48%) have as their primary purpose sports and recreation.

Recreation on these reserves is formal, such as organised sport, or informal when not used by sports groups. Some visitors travel to the larger sportsfields from around the region. Other sportsfields are used by more local Hutt Valley people.

The second largest areas of reserves are along Hutt River and provide ecological linkages and a walking and cycling corridor. These reserves make up 35% of reserve area and are of regional significance i.e. people are likely to travel some distance to get to the reserve. In the case of Hutt River, this is largely due to the Hutt River Trail. Ecological and recreational linkages along Waiwhetu and Awamutu Streams could become more significant with further development, linking the eastern suburbs.

Together with regional sportsfields and the Petone foreshore, reserves along the river corridor with regional significance make up 69% of the total area of valley floor reserve land.

Forty-seven percent of reserves on the valley floor are likely to be only visited by people in the immediate neighbourhood and are generally small in area. Twenty-five percent of these reserves are small and their size means they are less flexible and their use is constrained. Some of these reserves are too small for any development other than a seat or perhaps a specimen tree or other amenity planting. Some are on street corners or located between roads and their function is more to do with breaks along a pedestrian journey, yet these reserves have a role to play in the urban setting. Most of the 'enclosed' reserves located at the rear of housing clusters are neighbourhood reserves and have little or no street frontage and poor visibility and access.

Public gardens and civic spaces together make up 4% of reserve area. These spaces are important, are generally centrally located and close to key transport routes. They also bring visitors to Hutt City.

RECOMMENDED MEASURES OF RESERVE AVAILABILITY

Measuring levels of reserve provision in urban areas is to do with accessibility, visibility, equity of provision (reserve provision regardless of where residents live and their circumstances), what the communities value and want from their reserves. It is also to do with the needs of the community. Of importance are quality and accessible reserves as well as a variety of reserves according to needs.

This review recommends measures of reserve availability according to reserve significance (the estimated time a person would be prepared to travel to a reserve). For neighbourhood reserves, important measures of availability are ease of access from local areas, safety and perceptions of safety and linkages. Safety is also an important measure for suburban reserves, along with access on foot but also by public transport.

Measures of the availability of city/district and regional reserves include access from main transport routes and public transport, parking facilities and city/district/regional pedestrian and cycle linkages, as well as conforming to CPTED principles (Crime Prevention through Environmental Design).



9.0 RECOMMENDATIONS

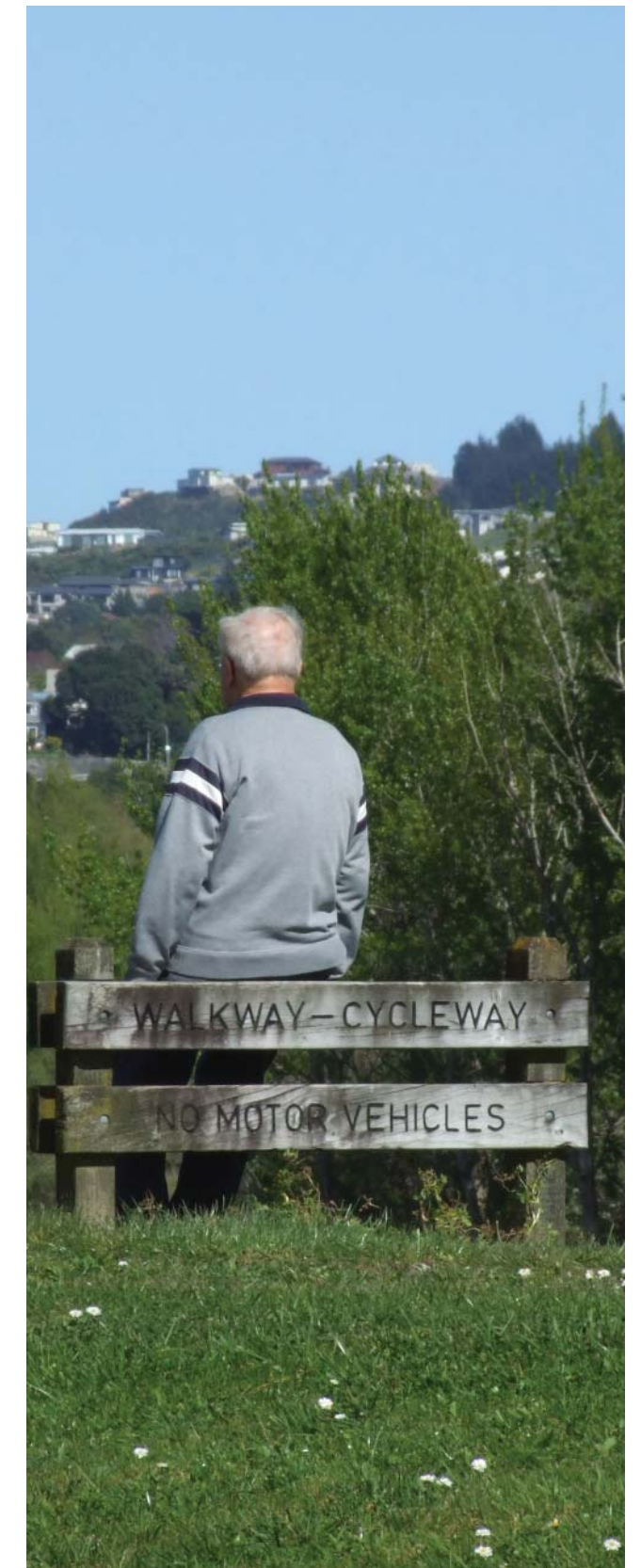
1. Increase provision of local reserve facilities for neighbourhoods by:
 - Improving access
 - Improving drainage on reserves where access in wet weather limits use
 - Developing sports and recreation reserves so that they are multi-use and cater for local informal neighbourhood use as well as wider city/district and regional recreation. A successful park with these features is Karori Park in Wellington
 - Setting aside parts of sports grounds for neighbourhood use. This also increases the value of sportsgrounds for families who can enjoy facilities while family members participate in organised
2. Increase use of reserves with little or no street frontage, limited access, poor visibility from surrounding streets and houses and located at the rear of housing clusters by:
 - Improving visibility by a different approach to fencing
 - Managing vegetation
 - Widen reserve street boundaries and entrances
 - Develop policy, guidelines and District Plan measures to encourage housing to face onto reserves.
3. Work with communities to improve and develop reserves with local significance (suburban and neighbourhood reserves). In this way, the reserves will reflect the needs of the local community, local identity, increase reserve use and benefits to community along with environmental health and well-being.
4. Improve connections between reserves developing linked walkways and cycling routes throughout suburbs.
5. Waiwhetu Stream connects the eastern suburbs from Naenae to Hutt Park and Seaview. A pathway along Waiwhetu Stream connecting reserves along the stream has unrealised potential as a key cycle/ pedestrian recreational and commuting route.
6. Awamutu Stream is another stream with opportunity to improve, protect and strengthen linear recreational and ecological linkages and increase ecological health and biodiversity, for example where it passes through York Park. This would build on and extend natural and cultural identity.

7. Seek to improve reserve availability in areas identified as having a shortfall in reserve provision:
 - In the first instance this may be by improving connections and access to reserves. An example is better access to Hutt River from residential areas of Boulcott
 - Developing reserves for access and recreation and increasing the size of some very small reserves would make them more flexible and usable. Examples are along Waiwhetu Stream and in Petone
 - In some areas the solution may be to purchase land for neighbourhood reserves of a size that can be developed for uses that meet the needs of the particular local population, such as in areas earmarked for intensification Petone.
8. A major implication of dependence on reserves along the Hutt River to meet the needs of valley floor reserve provision is that regional and city councils work closely together on reserve planning and development, integrating the primary purposes of reserves along the river with recreation.
9. Improve access to Hutt River for local as well as city/district and regional use. For example access to the river is difficult from Avalon and Taita because of the barrier of Harcourt Werry Drive with a 70 km/h speed and lack of crossing points, and from Boulcott due to the large area of private land between the suburb and the river.



GLOSSARY

Asset	Something of value that the Council owns on behalf of the people of Hutt City, such as roads, drains, parks and buildings	Facilities	conditions which affect the conditions stated in paragraphs (a) to (c) (Resource Management Act). Buildings, structures, equipment or resources that enable recreational use and enjoyment of a reserve (Hutt City Council Reserves Strategic Directions 2003)
Asset Management	Strategy which helps with the physical and financial management of Council assets	Informal Recreation	Unorganised or casual recreational use of a space for sports, socializing, exercise or other activities
Active Reserve	An area where more energetic recreational activity takes place, where physical skills are required, often involving organised sporting activities (Hutt City Council Reserves Strategic Directions 2003)	Iwi	Tribe, people (Waitangi Tribunal Report [Wai27] 1991)
Amenity Values	Natural or physical qualities and characteristics of an area that contributes to peoples appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes (Resource Management Act)	Kaitiakitanga	The exercise of guardianship. In relation to a resource, kaitiakitanga includes the ethic of stewardship based on the nature of the resource itself
Biodiversity	The variety of all biological life - plants, animals, fungi and micro organisms (Hutt City Council Reserves Strategic Directions 2003)	Linear Open Space	A long tract of land generally following a natural feature such as a river or coastline and generally containing vegetation and used for recreational purposes such as walking and biking (Hutt City Council Reserves Strategic Directions 2003)
City District Reserve	Serves the whole city or district. Access by driving or public transport	Medium Density Housing Neighbourhood Reserve	Residential housing development with higher section coverage to allow for smaller sites Serves immediate local area. Generally can be accessed by walking
Community/ Suburban Reserve	Serves local community or town. Accessed by walking, bike or car	Mana Whenua	The exercise of traditional authority over an area of land (whenua). It is the area over which particular iwi and hapū claim historical and contemporary interests
CPTED	Crime Prevention through Environmental Design	Natural Features	Includes features on a reserve that is part of nature and may include individual plant or tree specimens and ecosystems that by their nature require special care and attention for their preservation
Cultural Heritage	Includes archaeological, traditional, and historic sites, buildings, objects and areas, and/or historic or commemorative trees	Natural Resources	Includes plants and animals and their habitats, landscape and landforms, geological features, systems of interacting living organisms, and their environment (Conservation Act).
Cultural Resources	Includes cultural heritage sites, traditional sites, Wahi Tapu sites	Open Space	Any area of land or water with recreational, ecological, landscape, cultural and/or historic value which provides public access (Wellington Regional Open Space Strategy (WRS), 2009)
Ecological Corridor	A strip or patch of habitat between otherwise isolated 'islands' of habitat (such as reserves, forests, parks etc) that enable the species living in those islands to pass from one island to another (Hutt City Council Reserves Strategic Directions (2003)	Park Elements	Includes picnic tables, seating, rubbish bins, lights and tree protector guards, fences, bollards and wheel stops in car parks (Hutt City Council District Plan, Chapter 3)
Ecosystem services	The term given to the benefits that human populations derive directly or indirectly from functioning ecosystems		
Environment	Includes: a) Ecosystems and their constituent parts, including people and communities; and b) All natural and physical resources; and c) Amenity values; and d) The social, economic, aesthetic, and cultural		



Recreation Activity	Any activity whose primary aim is the passive or active enjoyment of leisure, whether competitive or non-competitive, casual or organised
Regional Reserve	Serves the entire region comprising several cities or districts. Access by driving or public transport
Reserve	Any open space, plantation, park, garden or ground set apart for public recreation or enjoyment which is under the management or control of the Council and includes all land administered by the Council under the Reserves Act (Hutt City Council Bylaw: Part 12 - Parks and Reserves)
Reserve Network	All land within the Hutt City Council boundaries that has been set aside for a range of recreational sporting and leisure activities or for cultural, heritage, environmental, landscape or other special purpose (Hutt City Council Reserves Strategic Directions 2003)
Tangata Whenua	In relation to a particular area, tangata whenua means the iwi, or hapū, that holds mana whenua over that area

Hutt City Council, 2012. Go Outside and Play.

Hutt City Council, 2003. Reserves Strategic Directions.

Hutt City Council, 2010. Urban Forest Plan.

Hutt City Council. Draft Urban Growth Strategy.

Hutt City Council. Physical Activity Strategy.

Hutt City Council, Hutt Valley Youth Survey.

Hutt City Council, North East Magic initiative.

NZ Recreation Association, June 2011. Parks Categories and Levels of Service.

Nielson Quality of Life Survey, February 2013.

Stevenson, Anna et al, 2009. Neighbourhoods and health: A review of the New Zealand literature. *New Zealand Geographer* 65,211-221.

Plischke E.A.,1947. Design for Living, Wellington Dept of Internal Affairs.

Regional Public Health, 2010. Healthy Open Spaces: A summary of the impact of open spaces on health and wellbeing. *Regional Public Health Information Paper* March 2010, Lower Hutt.

South Australian Active Living Coalition, 2010. Creating Active Communities. Prepared by Associate Professor Jon Kellett and Dr Matthew W. Rofe Institute for Sustainable Systems and Technologies, University of South Australia.

Witten, Karen et al, 2008. Neighbourhood access to open spaces and the physical activity of residents: A national study. *Preventative Medicine* 47, 299-303

REFERENCES

CABE SPACE, 2010. Urban Green nation: building the evidence base. Commission for Architecture and the Built Environment, London. Available from www.cabe.org.uk/files/urban-green-nation.pdf.

Canterbury District Health Board, Health Promotion and Sustainability through Environmental Design: A Guide for Planning.

Christchurch City Council, 2010. Public Open Space Strategy 2010-2040.

Hutt City Council, District Plan.

Hutt City Council, 2012. An Integrated Vision for Hutt City

Hutt City Council, 2010. Hutt Valley Youth Study.



APPENDIX 1

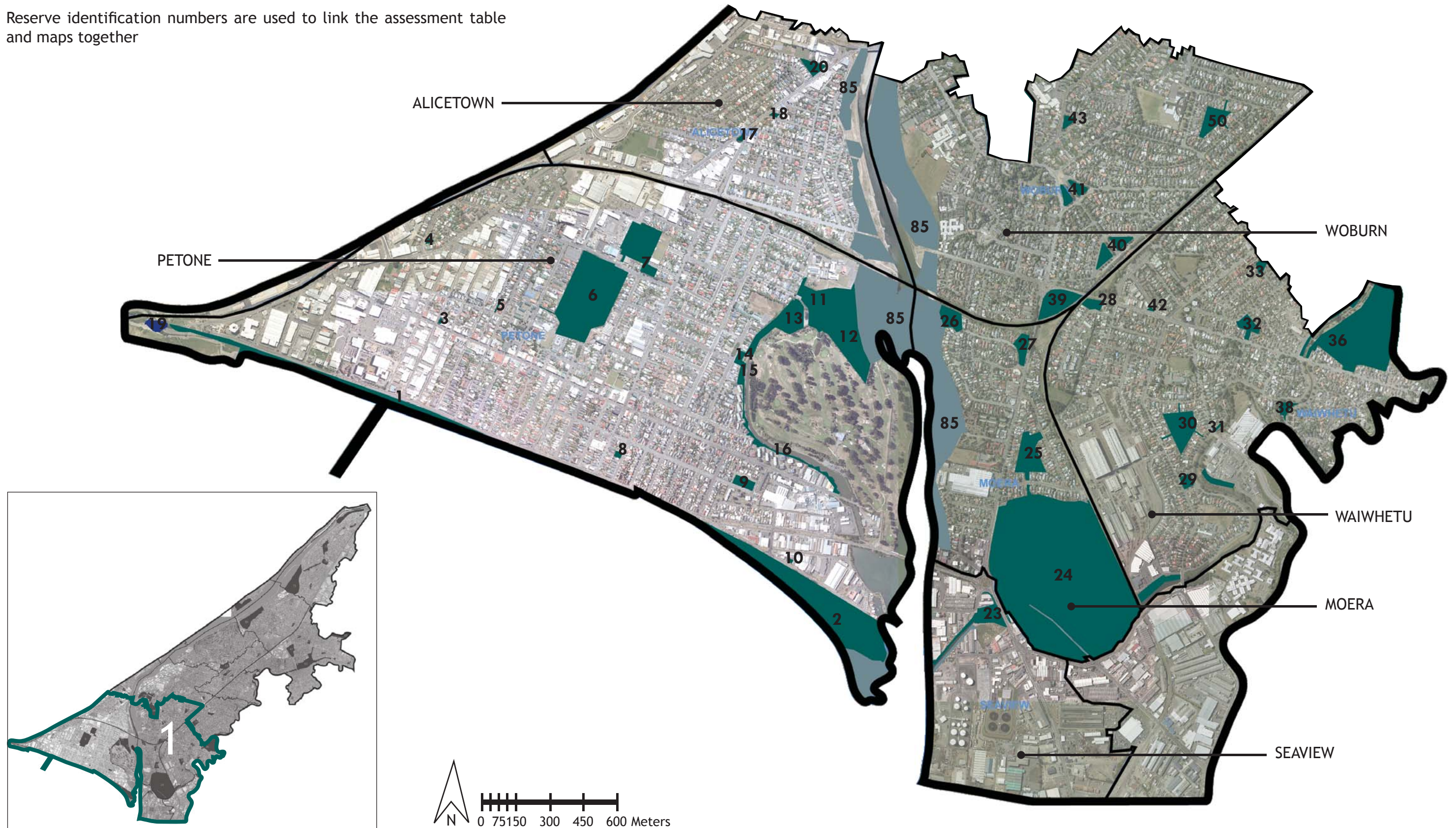
Criteria for assessment of reserve availability for neighbourhood reserves

MEASURE OF RESERVE AVAILABILITY	ASSESSMENT OF RESERVE AGAINST MEASURES	CHANGES IN ORDER TO REACH THE STANDARD
<p>Can be reached on foot from most residences in the immediate area in 8.5 minutes (approximately 400 metres along streets, not as a straight line).</p>		
<p>Have a minimum of two entrances and preferably three.</p> <ul style="list-style-type: none"> • Entrances to be inviting and attractive e.g. width ideally a minimum of 5 metres, no visual obstructions along its length with views from the entrance into the reserve and exit route • Paved paths • Planting (specimen trees allowing views under tree crown or low planting along path edge) • Signage. 		
<p>Have a street frontage of a minimum of 30% of their perimeter.</p>		
<p>Have a minimum of 50% visually permeable perimeter fencing (this can be combination fencing with solid fencing blocking views into private areas of housing on a reserve boundary).</p>		
<p>Conform to CPTED principles:</p> <ol style="list-style-type: none"> 1. Surveillance 2. Access management 3. Territorial reinforcement 4. Quality environments 		
<p>Linkages to street pedestrian and cyclist routes and other reserves.</p>		

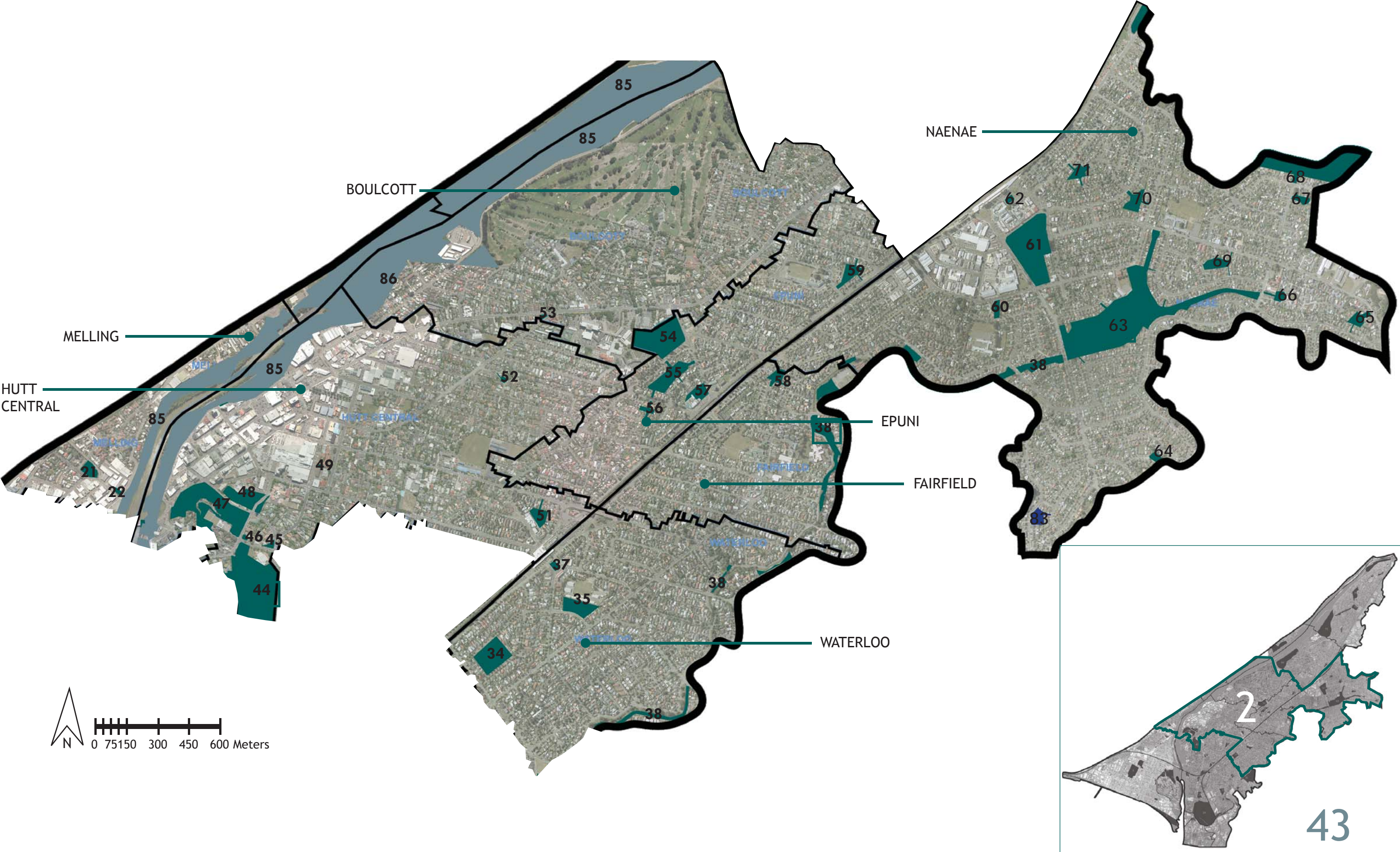
APPENDIX 2

Location of Reserves - Map 1

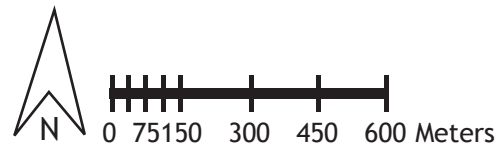
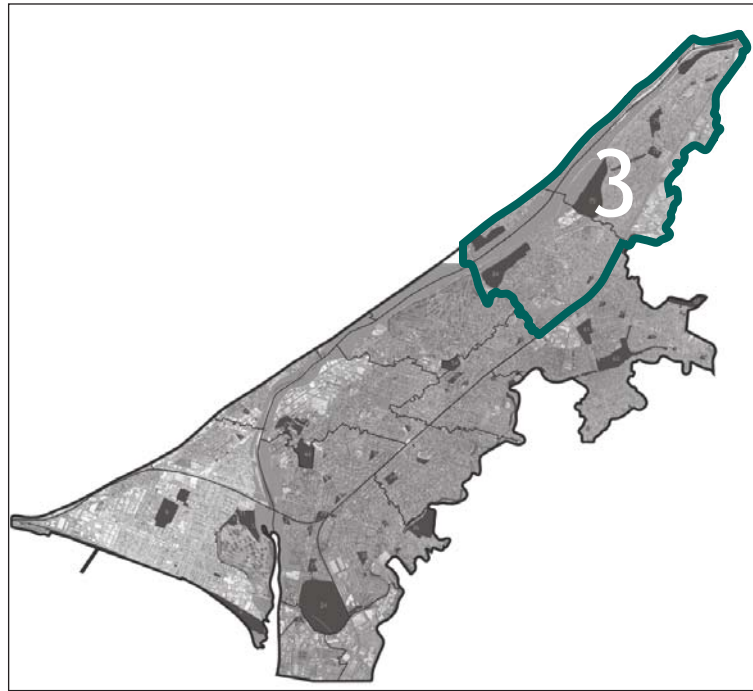
Reserve identification numbers are used to link the assessment table and maps together



Location of Reserves - Map 2



Location of Reserves - Map 3



APPENDIX 3

Table of Reserves

Reserve ID	Reserve Name	Area (Ha)	Map	Suburb	Reserves Act Classification	Primary Purpose - NZRA Park Category											Significance & Community of interest			Contribution to Wider Network of Reserves - Reserves Strategic Directions			Enclosed Reserves	Summary Key values				
						Sport & Recreation	Neighbourhood	Public Gardens	Nature	Cultural Heritage	Outdoor Adventure	Civic Space	Recreation or Ecological Linkages	Other	Local	Community Suburban	City District	Region	Meets Key Direction 3	Meets Key Direction 4	Meets Key Direction 5							
					n/a = not classified as a reserve under the Reserves Act																							
9	Scholefield Street Reserve	0.3535	1	Petone	Recreation Reserve	P	S											√					√					Includes sportsfield, playground, picnic area with BBQ facilities, basketball hoop, pou (poles) at entrances and amenity planting. Street frontages on all four sides, overlooked by housing.
10	Marine Parade	0.285	1	Petone	Riverbank Reserve, Local Purpose Reserve (Riverbank)										P	√												Building behind low fence within industrial/commercial area. Street frontage.
11	Garden of Remembrance	6.2553	1	Petone	Recreation Reserve			P										√				√	√	√	√		Structured public garden which has paving, walkway, planting beds, pergola, statue and footbridge. Te Mome stream runs through the site. Provides high demand access between street end and the Hutt River Trail.	
12	Memorial Park	0.7886	1	Petone	Soil Conservation and River Control and Recreation	P												√				√	√	√			Large grassed multi-purpose sportsfield with stadium and servicing building. Hutt River Trail runs along the east boundary of the park.	
13	Bracken Street Depot	2.057	1	Petone	Conservation Purposes				P				S		√								√	√			Te Mome stream flows through the site, riparian area, grassed open areas next to the stream. Links to neighbouring reserves, access between streets and with the croquet club.	
14	Petone Central Croquet Club	0.3102	1	Petone	N/a	P											√										Croquet field.	
15	Tennyson Street	0.3382	1	Petone	Recreation Reserve					S			P				√					√		√			Provides a link with adjacent reserves. The site is identified as an early settlement place in 1840 (known as Britannia).	
16	Heretaunga Street Reserve	0.3618	1	Petone	Heretaunga Street (Local Purpose Reserve Walkway) Heretaunga Street Reserve (Recreation Reserve)								P				√						√	√			Runs along the Hutt River tributary area, grassed with amenity planting, provides access between streets.	

Reserve ID	Reserve Name	Area (Ha)	Map	Suburb	Reserves Act Classification	Primary Purpose - NZRA Park Category										Significance & Community of interest			Contribution to Wider Network of Reserves - Reserves Strategic Directions			Enclosed Reserves	Summary Key values				
						Sport & Recreation	Neighbourhood	Public Gardens	Nature	Cultural Heritage	Outdoor Adventure	Civic Space	Recreation or Ecological Linkages	Other	Local	Community Suburban	City District	Region	Meets Key Direction 3	Meets Key Direction 4	Meets Key Direction 5						
					n/a = not classified as a reserve under the Reserves Act																						
17	Alicetown Reserve and Alicetown Toilets	0.0476	1	Alicetown	Local Purpose Reserve (Community Facilities)	P										√											Small reserve with four street frontages, large established Pohutukawa trees, public toilets and car parking.
18	Alicetown Community Centre	0.0492	1	Alicetown	N/a	P										√											Alicetown Community Centre on street corner, single large mature tree on site.
19	1 The Esplanade	2.045	1	Petone	N/a									P	√												Reclaimed land at the far western end of the Petone foreshore. Mouth of the Korokoro Stream.
20	Victoria Street Park	0.3657	1	Alicetown	Recreation Reserve	P										√			√								Triangular shaped area including children's playground, carpark, amenity planting, picnic tables. Street frontage.
21	The Greenaway	0.438	2	Melling	Recreation Reserve	P	S									√			√								Open grassed area for recreation. Amenity planting, formal pathways and seating. Three street frontages.
22	Bridge Street Cemetery	0.0595	2	Melling	Local Purpose Reserve (Cemetery)					P						√											Cemetery on street corner, surrounded by a low fence, dense vegetation.
23	Port Road	0.1808	1	Seaview	N/a					P		S				√				√							Part of the site is an Urupa (burial ground), a significant cultural resource. Waiwhitu Stream runs through the site with riparian planting. Provides off street parking from the main road.
24	Hutt Park and Parkside Road	35.0821	1	Moera	Recreation Reserve	P			S			S							√	√	√						Large open multi-purpose sportsfield area with sportville, commercial gym, car parking, regenerating vegetation along riparian stream edge, Hutt Valley Golf Course and holiday park. Awamutu and Waiwhetu streams.
25	York Park	1.5987	1	Moera	Recreation Reserve	P									√						√		√				Enclosed grass kick-a-ball area surrounded by residential housing and accessed from three streets. Awamutu Stream flows through the centre of the site towards Hutt Park.

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26	Riley Kindergarten	0.7069	1	Moera	Recreation Reserve	P											√										Assumed to now be called Moera Kindergarten. Site has a number of buildings, kick-a-ball space, car parking and links to the river promenade beyond. Small street frontage.
27	Moera Reserve Community Centre	0.4576	1	Moera	Local Purpose Reserve (Community Building)	S	P										√				√						Community Centre, library, playground, car parking, mature Pohutukawa, amenity planting and kick-a-ball space located on street corner.
28	Awamutu Grove Reserve	0.3134	1	Waiwhetu	Recreation Reserve		P										√				√						Grassed kick-a-ball type space with amenity planting. Awamutu Stream runs along the east boundary. Street frontage.
29	Bell Square	0.2218	1	Waiwhetu	Recreation Reserve		P										√				√						Kick-a-ball type space with amenity planting around edges. Square with street frontages on all four sides in residential area.
30	Bell Park	1.5477	1	Waiwhetu	Recreation Reserve	P											√				√			√			Sportsfields with entrances from three streets. Includes stands, clubroom facilities and amenity planting. Street frontage.
31	Hinemoa Street/Wainui Road connection	0.0969	1	Waiwhetu	N/a		P										√				√	√					Grassed area linking two streets by a concrete footpath which follows the Waiwhetu Stream.
32	Godley Street Reserve	0.5028	1	Waiwhetu	Recreation Reserve		P										√				√						Neighbourhood park with playground, seating, amenity planting and kick-a-ball space. Links two streets. Street frontage.
33	Atiawa Crescent Reserve	0.1795	1	Waiwhetu	Recreation Reserve		P										√										Small kick-a-ball area with street frontage.
34	Trafalgar Park	1.7034	2	Waterloo	Recreation Reserve	P											√				√						Large kick-a-ball area with two street frontages on opposite sides. Provides for informal and formal organised sports.
35	Waterloo Reserve	0.9129	2	Waterloo	Local Purpose Reserve (Community Use)		P										√										Kick-a-ball space adjoining Waterloo School, Kindergarten and Playcentre. Street frontage.

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36	Te Whiti Park	12.1067	1	Waiwhetu	Recreation Reserve	P																						Large grassed area with sports fields for informal and formal organised sports. Also includes clubrooms, playground and parking. Enclosed with no street frontages.
37	Trafalgar Square Reserve	0.1146	2	Waterloo	Recreation Reserve		P																					Includes Plunket rooms, small playground, seating, amenity planting and subway access to the train station. Street frontage.
38	Waiwhetu Stream - Bell Road, Rishworth Street, Hayward Terrace, Between Cleary Street and Riverside Drive, Wyndrum Avenue, Parnell Street, Tilbury Street, Off Tilbury Street, Waddington Drive Reserve, Off Rossiter Avenue, Between Hamerton Street and Waddington Drive, Guthrie Street, Summit Road Nursery, Hamerton Street to Riverside Drive North	5.3436	1,2	Waiwhetu, Waterloo, Fairfield, Naenae	Recreation Reserves: Bell Road, Rishworth Street, Hayward Terrace, Between Cleary Street and Riverside Drive, Wyndrum Avenue, Parnell Street, Tilbury Street, Off Tilbury Street, Waddington Drive Reserve. Local Purpose Reserve (Esplanade): Off Rossiter Avenue. Recreation Reserve and Local Purpose Reserve (Esplanade): Between Hamerton Street and Waddington Drive. Unclassified reserves: Guthrie Street, Summit Road Nursery, Hamerton Street to Riverside Drive North										P													Grassed areas some with specimen trees and other vegetation and some pathways following the Waiwhetu Stream.

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39	Corner of Whites Line East and Randwick Road	1.1495	1	Woburn	N/A									P	√												Grassed open site with trees and no public access. Bounded by busy roads and railway.
40	Woburn Bowling Club and Woburn Grass Reserve	0.7338	1	Woburn	Recreation Reserve	P										√											Two triangular areas bounded by streets. Mature trees and Woburn Bowling Club.
41	Ludlam Park	0.4863	1	Woburn	Recreation Reserve		P								√												Two triangular Pohutukawa groves surrounded by roads.
42	Hawkins Street	0.0303	1	Waiwhetu	Recreation Reserve		P								√												Small grassed area where two streets converge.
43	Hautana Square	0.1918	1	Woburn	Recreation Reserve		P								√												Triangular centre-piece surrounded by roads, open green space with specimen trees.
44	Hutt Recreation Ground and Odlin Gallery	6.5821	2	Hutt Central	Hutt Recreation Ground (Recreation Reserve) Odlin Gallery (Local Purpose Reserve)	P													√		√	√					Sportsfields and pool complex. Includes various clubrooms, amenity planting, the Opahu Stream, areas for informal and formal recreation. Opens out to multiple street frontages. Includes adjacent Odlin Gallery.
45	Huia Street	0.1256	2	Hutt Central	Recreation Reserve		P								√												Corner pocket park containing paved pedestrian cut through between streets, mown grass and seating.
46	Huia Quadrants, Myrtle Street and Laings Road	0.0013	2	Hutt Central	N/a		P								√												Corner pocket park containing paved pedestrian cut through between streets, mown grass and seating.
47	Civic Buildings, Civic Gardens and Riddiford Gardens	3.918	2	Hutt Central	To be classified			P		S		P	S						√		√	√					Gardens as a setting for Council and civic buildings. Opahu Stream runs through the site. Features include amenity planting, seating and gathering areas, fountains, playground, bird aviary, library, theatre, gallery and fern house.
48	Court House Lawn, Dowse Art Museum and Dowse Lawn	1.0144	2	Hutt Central	N/a							P							√		√	√					Includes Dowse Art Museum, Dowse Square, carpark, amenity planting, water feature, information centre and courthouse. Has recently been redeveloped.

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49	Memorial Place	0.0235	2	Hutt Central	N/a		P									√										Short tree-lined pedestrian link between two streets.
50	Lower Hutt Tennis Club	0.881	1	Woburn	Recreation Reserve	P											√				√			√	Lower Hutt Tennis Club predominantly covered with tennis courts and a car park area. Accessible from two streets.	
51	Phil Evans Reserve	0.4631	2	Hutt Central	Local Purpose Reserve		P									√						√		√	Enclosed area amongst a residential and commercial area providing kick-a-ball space with amenity vegetation. Also home to the Hutt Theatre School.	
52	Orr Crescent Reserve	0.0585	2	Hutt Central	Proper Development and use as a Reserve		P									√									Small playground area with walkway access between two streets.	
53	Kings Crescent Reserve	0.0361	2	Boulcott	N/a		P									√									Small grassed area with amenity planting where two streets converge.	
54	Mitchell Park	2.9508	2	Epuni	Recreation Reserve	P		P									√				√	√	√		A formally laid out park for informal passive recreation with rose gardens, specimen trees and pathways. Also home to the Naenae Bowling Club and Tennis Club. Corner site with two street frontages.	
55	Copeland Street Reserve	1.2256	2	Epuni	Recreation Reserve		P									√							√	√	Enclosed area divided into three parts including IHC facilities, redundant bowling club and scouts hall. Access is from the each of the four surrounding residential streets.	
56	Hall Crescent Reserve	0.1864	2	Epuni	Recreation Reserve		P									√						√	√	√	Kick-a-ball area situated in the middle of a residential block providing access between streets.	
57	Epuni Community Centre	0.4295	2	Epuni	Local Purpose Reserve (Community Centre)		P										√								Epuni Community Centre and predominantly mown grass, with a few specimen trees. Located on the street corner with two street frontages.	

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66	Glenbrook Grove Reserve	0.1733	2	Naenae	Local Purpose Reserve (Neighbourhood)	P									√									√			Open grass area with rehabilitated stream providing kick-a-ball space and links between two streets. Street frontage.	
67	Rimu Street Reserve	0.2347	2	Naenae	Recreation Reserve	P									√									√	√	Kick-a-ball type area with street frontage link to eastern hills. Sparse vegetation.		
68	Taita Cemetery	2.613	2	Naenae	Recreation Reserve					P								√					√	√		Includes Taita Cemetery, Native and exotic vegetation and access to the eastern hills.		
69	Butler Street Reserve	0.5181	2	Naenae	Recreation Reserve	P									√									√	√	Enclosed kick-a-ball type space with no vegetation. Links three streets. Street frontage.		
70	Hewer Crescent Reserve	0.6	2	Naenae	Recreation Reserve	P									√									√	√	Large kick-a-ball space partly enclosed in a residential block providing access between two streets. Partial street frontage.		
71	Barton Grove Reserve	0.4318	2	Naenae	Recreation Reserve	P									√									√	√	Large kick-a-ball space enclosed within residential block, two points of access.		
72	Colson Street Reserve	0.4324	3	Avalon	Recreation Reserve	P									√									√	√	Enclosed kick-a-ball type space with large specimen trees, access between streets.		
73	De Menech Grove Reserve	0.0588	3	Avalon	Recreation Reserve	P									√									√		Kick-a-ball type space with amenity planting on street corner.		
74	Wingate Overbridge	0.1826	3	Naenae	Local Purpose Reserve (Road)									P		√											Separated from adjacent areas by roading. Grassed, specimen trees, amenity planting.	
75	Fraser Park	28.6712	3	Taita	Recreation Reserve, Soil Conservation and River Control and Recreation	P							S					√	√					√		Wellington Regions largest sportsfield catering for multiple sporting codes, supported by a number of facilities, artificial turf, amenity planting and off-street parking.		
76	Hughes Crescent Reserve	0.4614	3	Taita	Recreation Reserve	P									√									√	√	Large grassed accessway between streets, kick-a-ball type space.		

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77	Reynolds Street Reserve	1.5319	3	Taita	Recreation Reserve		P										√						√	√	Open grassed area with swale, access between streets, connecting Walter Nash Stadium, Fraser Park, Taita Central School and St Michael's Catholic School.	
78	Taine and Tocker Street Reserve	1.7411	3	Taita	Local Purpose Reserve (Community Centre)	P											√		√						Netball Courts and clubrooms.	
79	Walter Nash Park and Taita Bowling Club	3.7344	3	Taita	Recreation Reserve	P											√			√	√	√	√	Open grassed area with trees, access between streets and bowling green.		
80	Molesworth Street Reserve and Pomare Resource Centre	0.2682	3	Taita	Local Purpose Reserve (Community Centre)		P								√								√	Open kick-a-ball type space next to school.		
81	Farmer Crescent Reserve	0.6825	3	Taita	Recreation Reserve		P								√					√			√	Enclosed within residential block, one street frontage. Kick-a-ball type space, some trees.		
82	Pomare Community House	0.1368	3	Taita	N/a		P								√									Community House, grassed open area.		
83	Judds Crescent Reserve	0.3783	2	Naenae	Recreation Reserve		P								√							√		Kick-a-ball space, children's play equipment, seating, planter boxes, street frontage.		
84	Avalon Park	15.2676	3	Avalon	Recreation Reserve, Soil Conservation and River Control and Recreation	P											√			√	√			High profile park with green open space, two playgrounds, a lake, model railway, mini golf, pavilion and amenity planting.		

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85	Hutt River Corridor and Floodplain: Hutt River Area, Belmont Domain and Memorial Hall, Riverside Oval, Belmont River Area, Ewen Park, Ewen-Melling River Area, River Bank Car Park Area, Daly Street, Western Ewen - Melling River Area, Govind Bhula Park, Govind Bhula River Bank Area, Ewen Bridge Riverside, Strand Park, Ava Park, Ava Park - Ewen River Area, Sladden Park, Seaview Rd	141.8886	1,2,3	Belmont, Avalon, Boulcott, Hutt Central, Melling, Woburn, Alicetown, Petone, Seaview	Recreation Reserves: Belmont Domain, Local Purpose Reserves - Community Use: Belmont Memorial Hall. Soil Conservation and River Control and Recreation: Hutt River Area, Riverside Oval, Belmont River Area, Ewen Park, Ewen-Melling River Area, Govind Bhula Park, Govind Bhula River Bank Area, Ewen Bridge Riverside, Strand Park, Ava Park, Ava Park - Ewen River Area. Unclassified reserves: Daly Street, Sladden Park, Seaview Rd	P				S					P												Part of the Hutt River floodplain with grassed open space, Hutt River trail and amenity vegetation.
86	Waimarie Croquet Club	0.5303	2	Boulcott	Boulcott	P																				Two croquet lawns and clubrooms for members only.	