

## 12

## LANDSCAPE AND ECOLOGY

### 12.1

### Background

This Chapter presents Council's objectives, policies, methods and rules for the protection and management of significant landscapes and ecosystems.

The landscape and the ecology within Upper Hutt are very distinctive and provide a strong identity for the City. The City has three broad landscape character groupings which can be defined as Basins; Low lying hills; and Steeplands, as follows:

#### 12.1.1

#### Basins

There are six basins within the City, formed on alluvial plains, which contain the following land use types:

Urban - covers the Trentham Basin, which is the largest. Almost all indigenous vegetative cover has been removed. The isolated remnants are of great importance and individual trees contribute significantly to local amenity values.

Rural - covers the remaining basins which have predominantly pastoral land cover and very little original vegetation.

Mangaroa swamp - forms part of the rural basin area which has important ecological and geological characteristics.

#### 12.1.2

#### Low lying hills

Surrounding the basins are areas of rolling to moderately steep hills, which are covered in remnant and regenerating indigenous vegetation and some areas of commercial forestry. These scenic hillsides are virtually free of development, provide an important backdrop, and act as a town belt for the urban area.

These hill areas also provide an important role in the open space network and as an ecological corridor.

### 12.1.3 Steeplands

These cover the steeper hills of the headwaters of the rivers in the upper valley catchment and the more rugged areas of the Rimutaka, Tararua and Akatarawa Ranges. They are almost entirely free of structures and contain extensive areas of unmodified indigenous forest, which are significant locally and regionally. On the lower catchments there are areas of production forest.

The steeplands are dominant within the local and regional landscape. They provide an important resource for recreation, open space and identity for the City. Development or the removal of vegetation could have a significant impact on the landscape and ecosystem.

### 12.1.4 Southern Hills Overlay Area

Areas have been identified within the Southern Hills Overlay Area with high ecological, visual and/or landscape values. Development or the removal of vegetation has the potential to significantly impact on the identified values.

## 12.2 Resource Management Issues

### 12.2.1 *The destruction of indigenous ecosystems and the subsequent loss of biological diversity.*

A large proportion of the natural environment within Upper Hutt has been modified or destroyed as a result of human activities. This was mainly in the form of vegetation clearance of the valley floors for settlement and farming. Any remnants are now interspersed with urban and rural development while the hills surrounding the City contain larger areas of unmodified and regenerating indigenous vegetation. The protection of such areas also recognises that some modification may be necessary to ensure that essential services are able to operate safely and efficiently.

These remaining areas of indigenous vegetation are important in terms of their biological diversity, which refers to the variety among all species of plants, animals and micro-organisms and the ecological processes of which they are a part. Areas of regenerating indigenous vegetation are also potentially important. Without them, the number and diversity of indigenous ecosystems cannot be increased in the City.

Along with their vital life-supporting role, indigenous ecosystems contribute a variety of important functions to the City in terms of landscape, open space, recreation, heritage, water quality, education and community identity. In recognition of these valuable functions, there is a need to protect any remnants from loss of diversity and further modification of their natural environment.

**12.2.2                    *The sensitivity of the visual landscape of Upper Hutt and the impacts of development on it.***

Maintaining the quality of a landscape requires management of the effects of activities within an area. This quality is a function of the outstanding value, beauty, scenic and aesthetic qualities, which, in turn, is highly dependent on natural elements and natural state.

Upper Hutt has a high quality visual landscape with development mainly located in the valley floors. Regionally significant landscapes include the Tararua Range, the Rimutaka Range, the Wellington Fault Escarpment and the Hutt River. Many of the buildings within the landscape have been developed in harmony and unity with the surrounding natural landforms. One particular example is around Chatsworth Road in the Conservation Area of the Residential Zone. Here, residential activity has developed amongst the indigenous vegetation to provide a very distinctive character, preserving an important part of the City's natural heritage.

Areas of high visual and/or landscape value are identified within the Southern Hills Overlay Area. The key value of the Southern Hills Overlay Area landscape is to provide a largely undeveloped 'green' backdrop to the City with areas with high levels of naturalness (being high quality landcover, largely unmodified landform and the absence or unobtrusiveness of built elements).

Activities can degrade the quality of the landscape when not established appropriately, particularly when it involves a significant loss of natural character and natural vegetation as a result of activities such as land clearance and earthworks.

**12.2.3                    *Loss of significant trees within the Upper Hutt urban landscape.***

Trees are a prominent and important feature of the Upper Hutt urban landscape. Individually and collectively they are important for ecological, visual, environmental and cultural reasons. The most significant trees are recognised and specifically protected through inclusion in the Schedule of Notable Trees (Chapter 27).

**12.2.4                    *Loss of indigenous vegetation and habitats on private land.***

Many regionally and nationally significant ecological areas are retained in public ownership to ensure their protection. There are many significant sites located on private land. Such sites can be retained in private ownership and formally protected by way of covenants, management agreements or District Plan rules.

<b>12.3</b>	<b>Objectives</b>
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**12.3.1**                    ***The protection and enhancement of significant indigenous ecosystems and biological diversity.***

Indigenous vegetation and fauna are important to ecological processes, as they are the habitat and breeding ground for plants, animals and micro-organisms. In addition, these areas are important in terms of Upper Hutt's landscape character and identity providing functions of open space, amenity, and water quality protection. The Council recognises their importance and will promote the protection of areas containing significant indigenous vegetation or fauna habitats from destruction and modification on both public and private land.

**12.3.2**                    ***The protection, maintenance or enhancement of essential natural landscape elements that determine Upper Hutt's landscape and geological structure and identity and contribute to the amenity values of the City.***

Upper Hutt's landscape is distinctive and is important for the identity of the City. In recognising this, there are land use activities which can alter the landscape significantly, reducing its visual quality and changing the identity of the City. Such activities require controls to manage the changes that may occur to the landscape.

**12.3.3**                    ***To manage development within the Southern Hills Overlay Area to protect areas of significant indigenous vegetation, and maintain and enhance high value landscape and/or visual areas.***

The identified Southern Hills Overlay Area has locally significant environmental values in relation to natural ecological systems, landscape and/or visual features. In particular:

- In ecological terms, the Southern Hills area is considered overall to be somewhat unusual in that it contains a relatively high proportion of indigenous vegetation in close proximity to an urban area. The pattern of existing vegetation forms important ecological corridors (protected natural areas and reserves), meaning that the overall Southern Hills area has relatively significant ecological values.
- Landscape values of the Southern Hills include the highly visible land either side of the ridgeline, including prominent and distinctive vegetated spurs, particularly where the hills form a backdrop to the suburbs and CBD of Upper Hutt. The key value of the Southern Hills landscape is to provide a largely undeveloped, 'green' backdrop to the city, with areas with high levels of naturalness (high quality landcover, largely unmodified landform and the absence or unobtrusiveness of built elements).

**12.3.4                    *Control development and vegetation removal within identified Urban Tree Groups to ensure their respective high amenity, landscape and/or ecological values are protected.***

The Urban Tree Groups have been specifically identified due to their contribution to the amenity, landscape and/or ecological values of the Upper Hutt townscape. It is important the development and vegetation removal/trimming within these Urban Tree Groups is controlled. This is to ensure that development and vegetation removal/trimming does not damage Urban Tree Groups to an extent that their high values for which they have been identified are significantly degraded or lost.

<b>12.4                    Policies</b>
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**12.4.1                    *To protect and enhance significant natural areas of indigenous vegetation and fauna habitats from the adverse effects of activities that would reduce indigenous biological diversity and/or the life supporting capacity of ecosystems.***

The protection of areas of significant indigenous vegetation and fauna habitats is identified as a matter of national importance under the Act. Council remains committed to the preservation and enhancement of significant indigenous vegetation and fauna habitats to reduce species loss and modification to these important ecological areas.

**12.4.2                    *To preserve and enhance the indigenous vegetated southeast ridge from Pinehaven to Te Marua and the northwestern ridge from Keith George Memorial Park to the Akatarawa River to maintain their function as ecological corridors.***

The ridges provide important ecological corridors for bird and wildlife movement within the Hutt Valley. Many of the indigenous forest species found on these ridge areas have seeds which can only be spread by birds.

**12.4.3                    *To protect wetland areas within the City from activities which would have adverse effects on their life supporting capacity, natural character or habitat values.***

The preservation of the natural character of wetlands and their protection from inappropriate subdivision, use and development is identified as a matter of national importance under the Act. Wetlands are important ecological areas which provide habitats for wildlife and endangered species, help to reduce flood damage and abate water pollution. Historically many have been drained and converted to pasture, and consequently wetlands have become increasingly rare.

**12.4.4** *To introduce a Plan Change or Variation as soon as practicable to identify significant natural areas within the City.*

Council has already done some work on identifying significant natural areas, so that they can be given formal protection. More detailed identification of the areas needs to be undertaken, in consultation with affected landowners and interested parties, prior to their inclusion in the Plan. The criteria to be used in assessing areas for inclusion are set out in 12.7.

Until the Change or Variation takes effect, an interim rule and standards (Rule 23.2 and Standard 23.15) on the clearance of indigenous vegetation apply.

**12.4.5** *To discourage activities which have adverse effects on the high visual quality of the north-western and south-eastern hillsides adjacent to the urban environment.*

Urban development within Upper Hutt is contained, physically and aesthetically, by the adjacent hills to the northwest and southeast. These hillsides and ridges are well covered in vegetation, mainly indigenous, and generally remain free from development to provide the urban area with an identity and orientation points. These areas are recognised as an essential landscape element. Visually these areas act as a 'town belt' providing a natural visual backdrop to the City which defines the corridor of the Hutt River.

These landscape elements are sensitive to development due to their prominent location, and could significantly alter the character of Upper Hutt if they were developed with buildings, roads and other physical structures. Some parts of these areas are used for exotic forestry and it is not the intention of this policy to inhibit harvesting and replanting of them.

**12.4.6** *To ensure the ridgelines are identified as essential elements in Upper Hutt's landscape and are protected from visually obtrusive development which would detract from the natural skyline appearance.*

The skylines within Upper Hutt are relatively unblemished by structures, except for a number of telecommunication sites and lines, and are valued as an important feature of the City's landscape. The development of physical structures on ridgelines could have a significant adverse effect on this visual amenity and may detract from the overall City landscape.

- 12.4.7** ***To protect trees of ecological, biophysical, historic, cultural or botanic value, or significant visual amenity value in both public and private ownership from activities which may result in adverse effects on these trees.***

Trees within the community are significant for ecological, biophysical, cultural, historic and aesthetic reasons. Trees are protected through a variety of methods, including rules and standards that apply to the Residential Conservation and Residential Hill Sub-zones.

- 12.4.8** ***To manage development and activities with the potential to adversely affect the ecological, visual and/or landscape values within the Southern Hills Overlay Area.***

The Southern Hills Overlay Area contains high value and significant natural areas. For activities that may have an adverse effect on the values, controls are required to ensure that the proposal can be adequately assessed for its impact on the value. Through the resource consent process, the intensity, scale and location features of a proposed activity or development will be assessed to determine the potential effects. The effectiveness of measures to avoid, remedy or mitigate the adverse effects on the environmental values within the Southern Hills Overlay Area will differ on a case-by-case basis. Contouring land, re-vegetating earthworked areas, screen planting, locating buildings amongst existing vegetation or below the skyline for the ridgeline, or modifying the colour or reflectivity of structures and buildings are examples of measures that may avoid, remedy or mitigate the adverse effects.

- 12.4.9** ***To protect notable trees in both public and private ownership that score 100 points or more against the STEM tree evaluation criteria from activities which may adversely affect these trees.***

Large specimen trees provide a significant contribution to the identity and amenity values of the urban environment. Trees scoring 100 points or more against the STEM assessment criteria will be considered for inclusion in the Schedule of Notable Trees detailed in Chapter 27.

- 12.4.10** ***Identify Urban Tree Groups that contribute to the amenity values, landscape values and ecological values of the Upper Hutt townscape.***

The Urban Tree Groups have been specifically identified due to their respective contribution to the amenity, landscape, and/or ecological values of the Upper Hutt townscape. The protection of these Urban Tree Groups, and any further Urban Tree Groups in the future, is important to ensure that they continue to positively contribute to the townscape values of Upper Hutt.

- 12.4.11** ***New development, buildings and works within the dripline of a tree(s) identified as being within an Urban Tree Group shall be undertaken in a manner that ensures their respective high amenity values, landscape values, and/or ecological values identified for the Urban Tree Group are protected.***

Development within the dripline of trees in the identified Urban Tree Groups has the potential to reduce or destroy the high values they contribute to the local environment. It is therefore important that development within the driplines, is appropriately managed to ensure that the integrity of the Urban Tree Group is protected and the Urban Tree Group continues to positively contribute to the local townscape.

- 12.4.12** ***Tree trimming and removal shall be undertaken in a manner that ensures their respective high amenity values, landscape values and/or ecological values identified for the Urban Tree Group are protected.***

The removal and/or the trimming of trees from within these Urban Tree Groups, has the potential to reduce or destroy the values they contribute to the local environment. It is therefore important that tree removal/trimming, is appropriately managed to ensure that the integrity of the Urban Tree Group is protected and the Urban Tree Group continues to positively contribute to the local townscape.

- 12.4.13** ***To support the trimming, maintenance and enhancement of Urban Tree Groups for their ongoing viability and contribution to their respective amenity values, landscape values, and/or ecological values and quality of the local townscape.***

The District Plan allows for some trimming of the scheduled trees within the Urban Tree Groups as a permitted activity. The level of trimming allowed is considered to strike an appropriate balance between allowing for property owners to undertake general maintenance, without affecting the form and health of the trees and their associated respective high visual amenity, landscape and/or ecological values.

- 12.4.14** ***To support the trimming and removal of trees where they present an imminent threat to people, property and network utilities.***

There will be instances where a tree within an Urban Tree Group will present an immediate and imminent threat to people, property, or the safe operation of a network utility. Such instances are likely to arise as a result of a natural hazard event such as a storm, which may affect the structural integrity of an individual tree or group of trees. A tree may also lose its structural integrity over a prolonged period of time as a result of a disease to such an extent it becomes an immediate and imminent threat to people, property, or safe operation of a network utility. In such instances, it is appropriate that the tree is immediately removed to ensure that this threat is safely removed.

**12.4.15**                    ***To support the trimming of trees (including root pruning) and their removal to maintain the safe operation of network utilities.***

A number of the Urban Tree Groups are located close to the front boundary of their respective properties. The Legal Road contains network utilities that service a number of properties. These utilities may be covered by their own regulations that require vegetation to have a minimum separation distance (for example the Electricity (Hazards from Trees) Regulations 2003 outlines the minimum separation distance for trees from overhead powerlines). It is appropriate to include provisions within the District Plan to allow network utility operators, and private property owners, to comply with the requirements of other regulations, and to enable the safe operation of network utilities on an ongoing basis without the need for resource consent approval.

**12.4.16**                    ***To support the removal of pest and wilding tree species that could compromise the high amenity values, landscape values and/or ecological values of Urban Tree Groups.***

The Urban Tree Groups are located on private property and pest and wilding species have the potential to detract from the respective high amenity, landscape, and/or ecological values of these groups. It is therefore important that private property owners have a degree of flexibility in how they manage these groups through allowing them to remove pest or wilding species that may, overtime, detract or adversely affect the Urban Tree Groups.

<b>12.5</b>	<b>Methods</b>
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**12.5.1**                    District Plan provisions consisting of the following:

1. Rules to promote the retention of bush-covered hillsides with the provisions of the Conservation Area within the Residential Zone, and standards to implement the landscape and ecology protection policies.
2. Open Space and Rural Zone rules which assist in the retention of open character and natural landscape values.
3. Individual specimens or groups of trees included in the Schedule of Notable Trees (Chapter 27 and 27A).
4. The identification of protected ridgelines and the Southern Hills Overlay Area on the Planning Maps.
5. The requirement to provide esplanade reserves and strips upon subdivision where it adjoins specified water bodies.
6. Rules on earthworks and the clearance of indigenous vegetation.

- 12.5.2** Reserve Management Plans, which the Council is required to produce for reserves gazetted under the Reserves Act 1977, manage natural areas located on public land. These plans include provisions relating to protection and preservation of areas for their intrinsic worth, indigenous flora and fauna, scenic, scientific or historic value. These provisions may include fencing of the area to avoid, remedy or mitigate the impact of outside influences, or facilitation of natural rehabilitation or restoration.
- 12.5.3** Implementation of an on-going education programme to increase public knowledge of the existence and importance of ecologically significant sites within Upper Hutt. This can be done through pamphlets, displays, school programmes and talks. Where appropriate, the Council will work with other authorities, including the Wellington Regional Council, the Department of Conservation and community groups, to ensure that public education is co-ordinated within Upper Hutt.
- 12.5.4** The Council will consult with potentially affected landowners and occupiers, the tangata whenua, Orongomai Marae Committee, Department of Conservation, Wellington Regional Council, volunteer groups and other interested parties as appropriate.
- 12.5.5** To encourage protection of significant natural areas on private land, the Council will recognise the positive effects of resource consent applications which incorporate measures to protect natural resources.
- 12.5.6** In dealing with incomplete information on sites with high natural values the Council will take a precautionary approach and will attempt to compile a better understanding of resources it is managing over time through appropriate monitoring and research/survey work.
- 12.5.7** To enhance and augment biological diversity in the City, the Council may provide advice and support to other groups and organisations engaged in the protection and enhancement of biological diversity.
- 12.5.8** To introduce a Plan Change or Variation, involving a process of research, consultation and formulation of practical statutory and non-statutory methods, to facilitate the preservation and enhancement of significant indigenous vegetation and fauna habitats.
- 12.5.9** To implement a scheme aimed to assist landowners when work is required to maintain or enhance the health of notable trees or Urban Tree Groups.

**12.5.10**

Implementation of an on-going education programme regarding how to maintain and enhance Urban Tree Groups to ensure that their respective high amenity values, landscape values, and/or ecological values are maintained. This can be achieved through pamphlets, displays, talks, and information on the website. Where appropriate, the Council will work with other authorities, including the Greater Wellington Regional Council, the Department of Conservation and community groups, to ensure that public education is co-ordinated within Upper Hutt.

## 12.6 Anticipated environmental results and monitoring

The following results are expected to be achieved by the objectives, policies, and methods of this Chapter. The means of monitoring whether this Plan achieves the anticipated environmental results are also set out below.

<b>Anticipated environmental results</b>	<b>Monitoring indicators</b>	<b>Data source</b>
The protection of ecologically important sites within the City with a consequent protection or enhancement of the level of indigenous biological diversity	Type of resource consents and compliance with conditions  Additions and deletions to lists of important sites  State of the resources	Council records  Consultation with land owners and other interested parties
Protection of important ecological sites on private land	Additions and deletions to lists of important sites	Council records  Consultation
Maintenance of high visual quality of significant landscape elements and protection of these elements from inappropriate subdivision and activities	Effectiveness of conditions of consent and methods used in controlling adverse effects	Council resource consent records and complaints register
Maintenance of high value visual and/or landscape values within the Southern Hills Overlay Area	Effectiveness of conditions of consent and methods used in controlling adverse effects	Council resource consent records and complaints register
Protection of significant ecological values within the Southern Hills Overlay Area	Effectiveness of conditions of consent and methods used in controlling adverse effects	Council resource consent records and complaints register
The retention of notable trees within the Upper Hutt landscape	Additions and deletions to tree register  Resource consents	Council records
The protection and retention of identified Urban Tree Groups in a manner that maintains their respective amenity, landscape, and ecological values	Type and number of resource consents and compliance with conditions  Feedback from the community	Council records  Community feedback

<b>12.7</b>	<b>Criteria for items to be included on the future Schedule of Significant Natural Areas</b>
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<b>Representativeness</b>
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- Contains an ecological unit or indigenous plant or animal community or species that is unrepresented in the existing protected natural areas or is unique to the ecological districts within the City.

<b>Rarity</b>
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- Contains threatened communities of plants or animals.
- Contains individuals or populations of threatened species.
- Contains species that are endemic to the ecological district.

<b>Diversity</b>
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- Supports a diversity of communities/species /vegetation.

<b>Distinctiveness</b>
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- Contains large/dense viable population of species.
- Is largely in its natural state or restorable.
- Is an uninterrupted ecological sequence.
- Contains significant landforms.
- Supports large numbers of indigenous species.

<b>Continuity and linkage within landscape</b>
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- Provides, or has potential to provide, corridor/buffer zone to an existing protected area that supports indigenous species.

<b>Cultural values</b>
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- Traditionally important for Maori.
- Recreational values.
- Significant landscape values.
- Protection of soil values.
- Water quality protection.
- Recreation or tourism importance.
- Aesthetic coherence.

<b>Ecological restoration</b>
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- Ability to be restored.
- Difficulty of restoration.
- Cost/time.

<b>Landscape integrity</b>
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- Significance to the original character of the landscape.
- Isolated feature, does it stand out or blend in?
- Does it have a role in landscape protection?

**Sustainability**

- Size and shape of area.
- Activities occurring on the boundaries which may affect its sustainability.
- Adjoins another protected area.
- Links with other areas.
- Ease of management.