

## **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 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.

## 12.2 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.

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>
-------------	-------------------

**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 maintenance and 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.

<b>12.4</b>	<b>Policies</b>
-------------	-----------------

**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 23.11) 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. The STEM Tree Evaluation criteria have been used to determine the notable trees in the City. The Schedule of these notable trees includes trees on both public and private land.

<b>12.5</b>	<b>Methods</b>
-------------	----------------

- 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).
4. The identification of protected ridgelines 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.

## 12.6 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.

Anticipated environmental results	Monitoring indicators	Data source
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
The retention of notable trees within the Upper Hutt landscape	Additions and deletions to tree register  Resource consents	Council records

## 12.7 Criteria for items to be included on the future Schedule of Significant Natural Areas

<b>Representativeness</b>
<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Rarity</b>
<ul style="list-style-type: none"> <li>Contains threatened communities of plants or animals.</li> <li>Contains individuals or populations of threatened species.</li> <li>Contains species that are endemic to the ecological district.</li> </ul>
<b>Diversity</b>
<ul style="list-style-type: none"> <li>Supports a diversity of communities/species /vegetation.</li> </ul>

<b>Distinctiveness</b>
<ul style="list-style-type: none"> <li>• Contains large/dense viable population of species.</li> <li>• Is largely in its natural state or restorable.</li> <li>• Is an uninterrupted ecological sequence.</li> <li>• Contains significant landforms.</li> <li>• Supports large numbers of indigenous species.</li> </ul>
<b>Continuity and linkage within landscape</b>
<ul style="list-style-type: none"> <li>• Provides, or has potential to provide, corridor/buffer zone to an existing protected area that supports indigenous species.</li> </ul>
<b>Cultural values</b>
<ul style="list-style-type: none"> <li>• Traditionally important for Maori.</li> <li>• Recreational values.</li> <li>• Significant landscape values.</li> <li>• Protection of soil values.</li> <li>• Water quality protection.</li> <li>• Recreation or tourism importance.</li> <li>• Aesthetic coherence.</li> </ul>
<b>Ecological restoration</b>
<ul style="list-style-type: none"> <li>• Ability to be restored.</li> <li>• Difficulty of restoration.</li> <li>• Cost/time.</li> </ul>
<b>Landscape integrity</b>
<ul style="list-style-type: none"> <li>• Significance to the original character of the landscape.</li> <li>• Isolated feature, does it stand out or blend in?</li> <li>• Does it have a role in landscape protection?</li> </ul>
<b>Sustainability</b>
<ul style="list-style-type: none"> <li>• Size and shape of area.</li> <li>• Activities occurring on the boundaries which may affect its sustainability.</li> <li>• Adjoins another protected area.</li> <li>• Links with other areas.</li> <li>• Ease of management.</li> </ul>