



# NATURAL LANDSCAPE PROFILE STATEMENT

## **Natural Character / Landscape Profile Statement Waipa District Growth Strategy**

### **1.0 Introduction**

Mary Buckland has been asked to prepare a profile statement on the landscape and natural character of the Waipa District using the landscape assessments already undertaken by LA4 Landscape Architects for Council over the past 15 years including *Waipa District Preliminary Landscape Assessment 1991*, *Landscape Objectives, Policies and Design Guidelines Waipa District 1992*, and *Guidelines for Activities in the Special Landscape Character Areas - Waipa District Council November 2004*.

The brief for this report is to identify areas within the District that are subject to Part 2 of the Resource Management Act, (particularly in relation to matters of national importance) and to identify the main landscape elements and features that are important to the character of the area.

### **2.0 Current Profile**

The preliminary landscape assessment carried out in 1991 and 1993 had two aims. Firstly to provide direction for longer term growth and development and secondly to evolve controls for the District Plan that would protect the landscape and aesthetic values of Waipa District.

In the second part of the study LA4 identified the degree to which different parts of the visual landscape were valued and perceived to have high quality. This was done in two ways. Firstly the landscape was assessed by LA4 to get the expert's opinion; and at the same time a survey of a random sample of the public of Waipa District was taken using interviews and questionnaires to assess how the public value and perceive their landscape.

Mary Buckland has recently reviewed the findings of these assessments as part of the work required for an assessment of the effects of Transpower's 400kV line upgrade through Waipa District.

The LA4 landscape assessment found that the landscape had seven distinct landscape character types. These were:

- volcanic cones
- steep hill country

- rolling farmland
- river valleys
- alluvial flats
- peat lakes and scenic corridor
- original domed peat swamps.

The distinctive ignimbrite bluffs, near Whitehall, Arapuni, and Castle Rock were identified as significant landscape features.

Amongst these there were some features that were of outstanding significance to the District. These were:

- Mt Pirongia;
- Mt Maungatautari
- Lake Karapiro
- Mt Kakepuku
- The Waikato River south of Karapiro and Lake Arapuni
- The peat lakes on both sides of SH3.

Most of these features also have high natural character values, particularly the bush covered cones of Pirongia and Maungatautari; the edges of the rivers and lakes, and the peat lakes.

Other features of regional or local significance were Mt. Kakepuku, Mt. Te Kawa, the SH3 scenic corridor and views out from it, and the distinctive ignimbrite bluffs. The domed peat swamps (Rukuhia and Moanatuatua) have very high ecological values.

At the time that the original studies were carried out the RMA was only just coming into effect and the emphasis on natural character was not as strong as it is now. As part of the original brief LA4 was asked to identify those landscapes that they saw as being of regional significance or outstanding.

The public preference survey that was carried out at the same time employed a sample size of 170 Waipa inhabitants. The sample reflected a cross section of rural, urban and rural residential residents. The selection of respondents was kept as random as possible.

The top eight scenic features selected most often by the public were the same as those identified by LA4 though in a different order. They were:

- Mount Pirongia;
- Lake Karapiro
- Rolling farmland
- Mount Maungatautari
- Mount Kakepuku
- Various historic sites
- Tree and bush stands
- Waikato River

## Main landscape character areas

### i. Volcanic Cones



*Photograph 1- Mt Pirongia from Waipa District*

The two most distinctive volcanic cones highly visible from many parts of the Waipa District are:

**Mount Pirongia**, which rises to a height of 962 metres above sea level, is sited on the extreme western boundary of Waipa District. The peak of it and the western flanks are outside the District in Waikato and Otorohanga Districts but this cone dominates, or is very visible from, much of Waipa District. It is clearly visible from State Highway 3 travelling between Hamilton and Te Awamutu, from parts of Te Awamutu itself as well as from Cambridge and the eastern parts of the District. From Pirongia township the mountain towers over the town and is the main feature of the views. The top of the mountain is frequently in cloud. The cone comprises a number of peaks, and indigenous forest clothes the upper slopes, and there are rock outcrops visible in places. Much of the top of the mountain is included in the Pirongia State Forest park and fingers of bush runs down the gullies on the lower slopes. On the mid slopes there are clumps of trees and pasture and on the lower slopes are farm buildings, houses, hedgerows and pasture. The aesthetic quality of this landscape feature is high.

In terms of its natural character the shape of the cone makes it highly distinctive and the bush on the upper slopes contributes to its high natural character. Though there are a number of volcanic cones in the region, because of its height and visibility Mt Pirongia is a very distinctive feature.



**Mt Maungatautari.** This volcanic landform is situated on the east side of the District and the hill range of which it is part runs from Karapiro south parallel to the Waikato River. This cone rises to a height of 797m, and is comprised of the three main peaks - Maungatautari, Pukeatua and Te Akatarere, and whilst none of the peaks are as high as Mt Pirongia, it stands out very distinctly in the south eastern portion of the District. It dominates both the flat lands to the west and Lake Karapiro, the Waikato River, Lake Arapuni and State Highway 1 to the east. Mt Maungatautari has a range of lower foothills surrounding it. It has less heavily indented side slopes than Mt Pirongia and there is very little development visible on its lower slopes. The boundary line between the native vegetation and the pasture slopes below is more geometric than on Mt Pirongia.

The landscape feature has high aesthetic values, and similar to Mt Pirongia it has high natural character values owing to its volcanic landform and extensive areas of bush cover. Mt Maungatautari is more sensitive to change than Mt Pirongia because of the lack of development on its flanks and less tree cover particularly when viewed from the east. It is slightly less visually exposed than Mt Pirongia because it is not as high.

In the past few years Mt Maungatautari has been established as an Ecological Island by the Maungatautari Ecological Trust. The top of the volcanic cone (the native forest area) is now protected as the Maungatautari Scenic Reserve and is surrounded by a 47 km long pest proof fence.

Mt Maungatautari has been identified as an outstanding natural feature and landscape.

The slopes of both these mountains can be divided into the following zones:

Zone A - The upper slopes are characterised by steep slopes, high rainfall, podocarp hardwood forest vegetation and uneven surfaces prone to erosion if cleared. These upper slopes are highly visible from most of Waipa District.

Zone B - The mid slopes in places are ridged with steep sided gullies, the ridges are usually in pasture with fingers of bush reaching down into the stream gullies.

The mid and upper slopes are highly visible from the surrounding plains and are sensitive to development.

Zone C - The lower slopes comprise pasture with less vegetation and some slope erosion. On Mount Pirongia there are farm houses, farm buildings, and some rural residential development and groups of trees, shelter belts and small forest lots. On Mt Maungatautari these features are only evident on the northern slopes towards Karapiro village.

## ii. Rolling farmland



*Photograph 4 - Rolling farmland*

Much of the landscape of Waipa is comprised of this landscape type. It is the typical Waikato lush rural landscape. The landform does not rise much above 77m above sea level and there are clumps of mostly exotic trees and hedgerows with some distinctive groups of remnant kahikatea in places. The extent and type of vegetation varies as one moves through the landscape. The land uses comprise pasture, maize growing, horse racing, breeding and cattle studs, fruit growing and forestry. Hedgerows follow the rolling landform in places emphasising it, and dividing the pasture into a checker board pattern.

This is a highly modified landscape and though its aesthetic values are only moderate compared to say Mt Maungatautari, its rural character qualities are high because of its level of management and maintenance and its lush greenness. The visual absorption capability of this landscape varies. If it forms the foreground to distinctive landscape features – for example Mt Pirongia or Mt Maungatautari, care needs to be taken with siting and size of development. But in other areas because of its rolling nature, clumps of trees and existing development this landscape can absorb change. The landscape character type generally has low natural character values.

This landscape character area has low natural character values.



*Photograph 5 - State Highway 3 scenic corridor and peat lakes*

**The SH3 Scenic Corridor between Hamilton and Te Awamutu** is included in this landscape character area. The corridor runs mainly along a ridge with views down into the peat lakes on either side of the ridge and out to Mt Pirongia to the west as well as the lush Waikato rural landscape on both sides. There are 14 peat lakes closely associated with the SH3 scenic corridor. These lakes are highly valued ecologically, and have high natural character values in places. They also have high landscape values because they are the focus of views from the State Highway 3.

There are a greater range of land uses along this corridor with some farms, stud farms, rural residential development, market gardening and commercial development in small settlements. There are a number of groups of houses and settlements along the road which block views in places. The sense of enclosure and then openness is one of the features of this scenic corridor.

The visual absorption capability of these lakes is low. The scenic corridor is identified as a landscape of district wide significance.

### iii. Steep Hill Country



*Photograph 6 - Steep Hill Country*

These are the areas that surround Mt Maungatautari, and Mt Maungakawa.

The characteristics of this landscape types are steep indented landforms in places, rising to over 382m, with deep gullies and acute ridges. In other parts there are medium to steep slopes with pockets of vegetation. One of the distinctive features of this landscape type is the significant areas of bush in the valleys or on the hillsides. In places there are exposed limestone rock outcrops which are a significant landscape feature of the district.

This steep hill country rises quite abruptly out of the alluvial plains.

The aesthetic value of these landscapes is moderate overall, with pockets of forest which have high natural character values. The main characteristic is a patchwork of pasture, trees and bush. These landscapes form the backdrop to many areas in Waipa.

Because of the steep undulating landform and groups of trees these landscape can absorb change, though some of the flanks of the hills are visually exposed. Overall this landscape has a limited sensitivity.



#### iv. River valleys and hydro lakes



*Photograph 7 - Waikato River*

There are two main rivers that flow through Waipa District – the Waikato and the Waipa. The Waikato River originates from Lake Taupo and enters the Waikato Basin through the Maungatautari Gorge. The Waipa River rises in the Rangitoto Ranges and flows 160 kms before it joins the Waikato River at Nguawahia.

There is evidence that the Waikato River was formerly a braided stream and it appears that both rivers were once wandering waterways. Both rivers entrenched themselves in the easily eroded alluvium soils leaving their banks fringed with long narrow terraces.<sup>1</sup>

These two rivers and their associated hydro lakes are a very distinctive and valuable feature in the landscape. Both river valleys have very steep sides and this makes it very difficult to get views down into them. Parts of these rivers are the hidden landscapes of the Waipa District.

The existing land uses surrounding the river corridors are pastoral farming, rural residential development, and some quite large developments such as Mystery Creek and the Karapiro Domain Rowing Centre. There are also hydro electric power stations, mostly hidden in the river corridor, and towns such as Cambridge and Leamington which sit astride the river.

The aesthetic value of the rivers varies. In the northern parts the river hard to see, it is quite narrow and clothed in willow and hazel trees, though still an attractive and sort after feature. The landform comprises steep banks with, in places, flat river terraces. There is both native and exotic vegetation in places. The visual absorption capability varies considerably along the river corridor. In some places there is dense vegetation cover and the meanders in the river mean that some development can be easily screened.

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<sup>1</sup> *The Waipa County Landscape. No.1 Introduction* . Queen Elizabeth II Trust 1982.

In other places – for example Lake Karapiro – there is a lack of landform screening. At Lake Karapiro, the Waikato River below the lake, and Lake Arapuni the water surface widens out and the water is at a higher level, and the banks of the lake and river are covered in exotic and native trees creating a high quality landscape.



*Photograph 8 - Lake Karapiro*

In the stretch of Lake Karapiro running from the Maungatautari Road bridge south to Arapuni the council boundary between Waipa District and South Waikato District runs down the middle of the lake.

LA4's conclusions about the overall landscape value and sensitivity of the two rivers are as follows:

- Waikato River from Mystery Creek to Karapiro and the Waipa River – Landscape of district wide significance
- Waikato River south of Karapiro including Lake Karapiro, and Lake Arapuni – Outstanding landscape.

**v. Alluvial flats**



*Photograph 9 - Alluvial Flats*

The alluvial flats basically follow the meandering course that the rivers used to follow - the Waipa River and along the western side of the Waikato River. These flats include the Rukuhia and Moanantuatua peat swamps. The alluvial flats have been built up by pumice and sand deposited by the Waikato and Waipa Rivers and the soil is rich and fertile.

There is a mixture of land uses including market gardening, fruit growing, cattle and dairy farms, stud farms and racing stables. The area is dotted with groups of native and exotic trees particularly around farm houses and buildings, and hedges are a feature. There are distinctive clumps of kahikatea in places. There are occasional small knolls where farm houses are located surrounded by exotic and deciduous trees.

The peat lakes are also a feature of the alluvial flats. There are 23 altogether. They lie on the flat land at the base of the SH3 ridge. They are highly valued ecologically and are surrounded by raupa, flax and willows in places. There are also groups of kahikatea in the pasture surrounding them. The combination of lake and wetland fringe gives these lakes very high natural character values, and the surroundings to these lakes are highly sensitive to change.

Rukuhia and Moanatuatua domed peat swamps are also features of this landscape character type. The Moanatuatua Swamp is raised several metres above the surrounding alluvial flats. Rukuhia Swamp once stretched from Frankton to Ohaupo. These swamps once supported distinctive bog flora including mosses and sedges, though these have been lost because the swamps have been modified by drainage and converted to productive maize, forestry and blueberry areas. Very little of the former vegetation remains today. Native vegetation of manuka, ferns and rushes is limited to scattered pockets where they are protected from stock. Even more limited are the clumps of kahikatea, tawa, titoki, and pukatea<sup>2</sup>.



Photograph 10 – Moanatuatua Peat Swamp

### 3 Trends and Growth

Since carrying out the original landscape assessments, the most noticeable change to the landscape is the additional housing and development on the river terraces of Lake Karapiro and the Waikato River. These are outstanding natural landscapes. Rural residential development has occurred on the river terrace surrounding Lake Karapiro to the detriment of the landscape. Further rural residential development along the banks and river terraces of the lake and Waikato River should be avoided.

More recently Transpower New Zealand Ltd has proposed to upgrade an existing 100kV line to 400kV where it passes across the slopes of Mount Maungatautari and crosses Lake Karapiro and the southern portion of Lake Karapiro near Lake Arapuni. If given consent this will significantly adversely affect the landscape of this part of Waipa District.

### 4. Management Considerations

Part 2 of the Resource Management Act, which sets out the Purposes and Principles of the Act, includes several references of relevance to landscape. Section 5 states the purpose of the Act is to promote “.....the sustainable management of natural and physical resources” and defines sustainable management to include “avoiding, remedying or mitigating any adverse effects of activities on the environment”. This provision when linked with the definition of “environment” (which includes amenity values aesthetic and cultural conditions) extends the meaning of sustainable management to encompass protection of aesthetic and landscape

<sup>2</sup> *The Waipa County Landscape An Introduction No 1*. Queen Elizabeth II National Trust.

values. Section 5 appears to require a balance between allowing people and communities to carry on their desired activities and protecting aesthetic and amenity values within the environment.

Section 6 specifies “matters of National Importance”, and requires all persons exercising functions and powers under the Act to provide (amongst other things) for the “protection of outstanding natural features and landscapes from inappropriate subdivision, use and development”.

In defining “other matters” to which persons exercising functions and powers under the Act shall have particular regard to, Section 7 includes:

- c. The maintenance and enhancement of amenity values:
- f. Maintenance and enhancement of the quality of the environment:

This clearly includes protection of the aesthetic values of landscapes on a wider basis than simply the protection of outstanding landscapes.

Local authorities (Regional and district councils) are therefore required by the Act to identify and protect outstanding landscapes, and also to have particular regard to the protection of landscapes that may not be outstanding but are of significant landscape value.

District Plans are expected to contain provisions that fulfill these requirements. In *Terrace Tower (NZ) Pty Ltd v. Queenstown Lakes District Council*, C111/2000, the Court observed that the RMA is at least partly about reasonable and justified regulation. The Act clearly authorises regulatory control where there are environmental concerns in terms of Section 6 and 7 and where such methods, on balance and in terms of section 32, would better achieve sustainable management than would other methods. Because of the overarching status of Section 5, the methods adopted must allow people and communities to provide for their social, economic and cultural well being.

In its District Plan Waipa District Council has given effect to the provisions of the Act by identifying Special Landscape Character Areas (SLCA's) some of which are outstanding natural features and landscapes.

Since the original landscape assessments were carried out for Waipa District in 1991 and 1993, Mary Buckland has carried out a further study to check that the Special Landscape Character Areas (SLCA's), which would be affected by the proposed Transpower 400 kV line, would be considered outstanding natural landscapes and features in the current RMA climate.

There is no universally accepted definition of Outstanding Natural Features and Landscapes, but case law does give some outline criteria for assessing landscapes. These criteria include natural science factors such as geology, topographic variability, ecological and dynamic components of the landscape; aesthetic factors; legibility; transient values; whether the values are shared and recognised, value to tangata whenua and historical associations. A landscape does not have to be pristine to be considered outstanding. (Nor can it necessarily be assumed that because it is outstanding that all change must be avoided – some outstanding landscapes can absorb change provided it is appropriate to the context, carefully managed, and does not adversely affect aesthetic values).

In my recent re-assessment of the Waipa landscape, the Wakatipu Environment Society Inc vs. Queenstown Lakes District Council (para 80) criteria were used. This led to confirmation that Mount Maungatautari and Lake Karapiro are outstanding natural landscapes. Evidence to this effect was presented to the Board of Enquiry for the Transpower 400kV line in June 2008.

A range of specific provisions applying to the Special Landscape Character Areas were incorporated in the 1997 Waipa District Plan, with the purpose of retaining and enhancing landscape quality. These provisions have now been in operation for 13 years. Specific policies relating to the protection of the existing landscape character of Mt Kakepuku, Mount Pirongia and Mt Maungatautari and the steep hillsides associated with them have been

included in the Plan, as well as specific provisions for Lakes Karapiro and Arapuni. In brief these provisions protect the existing landscape character of Mt Kakepuku, Mt Pirongia and Mt Maungatautari. The steep hill country around them is also protected. Management guidelines for development which recognise and enhance the landscape character of these areas were put in place.

In addition there are specific policies in relation to the protection of the landscape quality of the SH1 corridor alongside Lake Karapiro (Policy RU9 paragraph 2.3.2.6), and Policy RU10 seeks to discourage development that could have an adverse effect on the landscape qualities of this corridor including restrictions on the erection of further buildings, structures, power lines, drives and access ways.

The Plan also includes specific policies in relation to Mount Pirongia and Mount Maungatautari to protect:

- the bush covered upper slopes,
- the pastoral character of the mid slopes,
- the rural character of the lower slopes.

The SLCA's were applied to a range of landscapes, including "outstanding", "regionally significant" and "amenity" landscapes. In the situation that exists now these controls may no longer provide a level of protection that is in step with the requirement of S.6, particularly where the landscapes are "outstanding" in terms of current practice. At the 400kV Board of Enquiry legal Counsel for Transpower indicated that if Waipa District had been genuinely concerned about their landscapes, activities such as high voltage transmission lines within the outstanding landscapes should have been made non complying rather than discretionary.

## **5. Strategic Opportunities & Constraints**

The implications of the findings of the landscape assessments in terms of landscape management in the future are as follows.

- Some of the landscape features which have been identified either as outstanding landscapes, as landscapes of District wide importance, or as visual amenity landscapes are located across district boundaries. The boundary between Waipa District and South Waikato District for example runs down the middle of the southern portion of Lake Karapiro (Waikato River). Mount Pirongia is split between 3 districts. It is recommended that Waipa District Council, Matamata Piako District, Otorohanga District, South Waikato District and Waikato District Councils take a combined approach to landscape management along the boundaries in respect of lakes, Waikato River, Mount Pirongia, Mangakawa and Te Tapui.
- Volcanic cones have a very high landscape quality, low visual absorption capability and in some cases high natural character values. Any change in these landscapes will be highly visible and must be very carefully considered. Any building, utility, bush clearance or introduction of a forestry regime could have adverse effects. This would be difficult to mitigate because the slopes are so visually exposed. Mounts Pirongia and Mt Maungatautari are outstanding landscapes.
- Lake Karapiro and parts of the Waikato River including the river terraces are outstanding landscape features. Rural residential development has occurred on the river terrace surrounding Lake Karapiro, to the detriment of the landscape. Further rural residential development along the banks and river terraces of the lake and Waikato River should be avoided.
- The domed peat swamps are the most sensitive landscapes of all because of their ecological values and in places their natural character values. These are quite



rare landscape features, and no building development should be permitted on them.

- Views of the peat lakes from the State Highway 3 should be protected. Development alongside the state highway or close to the peat lakes should be avoided.
- The rolling farmland and alluvial flats are the parts of the district that can accommodate some development.
- Steep hillsides overlooking flat land have been identified as being highly sensitive to change. These are:
  - The lower slopes of the SH3 scenic corridor on the west side of Rukuhua Swamp adjacent to Temple View.
  - The eastern slopes of Mt Pirongia overlooking Pirongia township
  - The foothills of Mt Maungatautari which face out over the surrounding lower lying land in all directions;
  - The foothills of Mt Maungakawa to the north east of Cambridge particularly in the Te Miro/French Pass area.

The earlier landscape assessments identified a number of areas where additional rural residential development could be accommodated without adverse effects on the landscape. These included:

<b>Te Miro</b>	Provided development is on the flat land. Areas of bush to be protected.
<b>Kairangi</b>	a gently rolling valley enclosed by higher hills.
<b>Whitehall</b>	small enclosed valley east of Cambridge
<b>Karapiro</b>	an area west of the Karapiro Domain was identified as a possibility for rural residential. This has now been developed.

Part of the brief for the original assessment was to examine existing settlements and recommend how these could expand without adverse effects on the landscape. Maps were provided showing the areas where development could occur. These areas were included Pirongia; Ohaupo; Kihikihi; Ngahinapouri; Temple View, Cambridge, Orepunga Road bridge; Te Awamutu; Te Pahu.

## 6.0 Base Case Conclusions

- The original landscape assessment findings, carried out in 1991 and 1993, were incorporated into the Waipa District Plan 1997. Landscapes that were identified as either “outstanding”, of regional significance or “amenity” landscapes were identified as Special Landscape Character Areas in the Plan.
- The assessments found that there were seven landscape types in the District. These were:
  - volcanic cones
  - steep hill country
  - rolling farmland
  - river valleys
  - alluvial flats
  - peat lakes and scenic corridor
  - original domed peat swamps.
- A number of significant landscape features were identified in the studies as either outstanding or of regional significance. These were:
  - Mt Pirongia;
  - Mt Maungatautari

- Lake Karapiro
  - Mt Kakepuku
  - The Waikato River south of Karapiro and Lake Arapuni
  - The peat lakes on both sides of SH3.
- Other features of regional or local significance were Mt. Kakepuku, Mt. Te Kawa; the SH3 scenic corridor and views out from it, and the distinctive ignimbrite bluffs near Whitehall, Arapuni, and Castle Rock. The domed peat swamps (Rukuhia and Moanatuatua) have very high ecological values
  - Of these landscapes the volcanic cones, the lakes and rivers, the domed peat swamps and the steep hillsides overlooking flat land are the most sensitive to the adverse effects of new development.
  - There are a number of areas where additional development could be incorporated without adverse effects on landscape values including the flat areas of Te Miro, Kairangi, Whitehall. Small farming settlements could also expand without detriment to landscape values.

## **7.0 Recommendations for further work**

- The landscape assessments which LA4 carried out for Waipa District Council are now 15 years old and development and change has occurred in the district during that time. Also, the interpretation and application of the Resource Management Act has evolved over time.
- It is therefore appropriate to now reassess the landscape of the district, taking into account case-law that has developed over the last 15 years.
- It would also be opportune to re-assess the location and extent of areas that were earlier identified as having potential to accommodate additional development without adversely affecting landscape values.

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August 9<sup>th</sup> 2008