

Central Hawke's Bay District

OUTSTANDING NATURAL LANDSCAPE ASSESSMENT





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Prepared For

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PART A EXECUTIVE SUMMARY AND INTRODUCTION

Executive Summary

The landscape assessment of Central Hawke's Bay District has been undertaken as an expert based approach, with thirteen areas identified as having the appropriate qualities for them to be recognised as Outstanding Natural Features or Landscapes. Of these thirteen, twelve are identified as features and one (Ruahine Range) as a landscape. A further eleven areas have been assessed as Significant Amenity Features.

The assessment methodology is based on case law and NZILA Best Practice Guide 10.1. These suggest that the landscape can be considered under the three components of Natural Science, Perceptual/ Experiential, Associational. Within these three components there are 12 factors that should be considered in assessing a landscape:

Natural Science:

Geology/ geomorphology

Ecology

Hydrology

Perceptual/ Experiential:

Memorability

Legibility/Expressiveness

Transient

Aesthetic

Naturalness

Associational:

Shared and Recognised

Recreational

Historical

Tangata Whenua

Outstanding natural landscapes (and/or features) are generally of high value in terms of natural science and perceptual criteria, with less human modification and greater aesthetic appeal. They may also rank highly in terms of associational values, such as historic or cultural values from past uses or events.

There are a number of areas that rank highly in terms of the assessment factors, however may not qualify as Outstanding. This is typically due to the level of modification which provides clear evidence of human intervention such as ongoing grazing, or reduced values in terms of natural science or perceptual values. These areas may be identified as Significant Amenity Landscapes, being worthy of recognition but not reaching the level required to be assessed as Outstanding.

This assessment relates specifically to RMA s6(b) for identification of Outstanding Natural Features and Landscapes, while identification of Significant Amenity Features relates to s7(c).

While efforts have been made to obtain information relating to all 12 assessment factors, inevitably greater information will be held in relation to each area and each category than is known to the author. Landowner and public input through the consultation process is welcomed to fill information gaps.

The results of the assessment process have shown a consistency in terms of higher values occurring for specific areas over a range of factors for landscapes of significance i.e. high values may occur for geomorphology, ecology, hydrology, memorability, expressiveness, aesthetic and naturalness in the same area. This reinforces the assessment that this particular area has landscape significance. It is then a value judgment as to whether that area qualifies as an outstanding natural feature or landscape.

The twelve areas that have been identified as Outstanding Natural Features or Landscapes are listed on Figure 1, plus the eleven areas recommended for recognition as Significant Amenity Features.

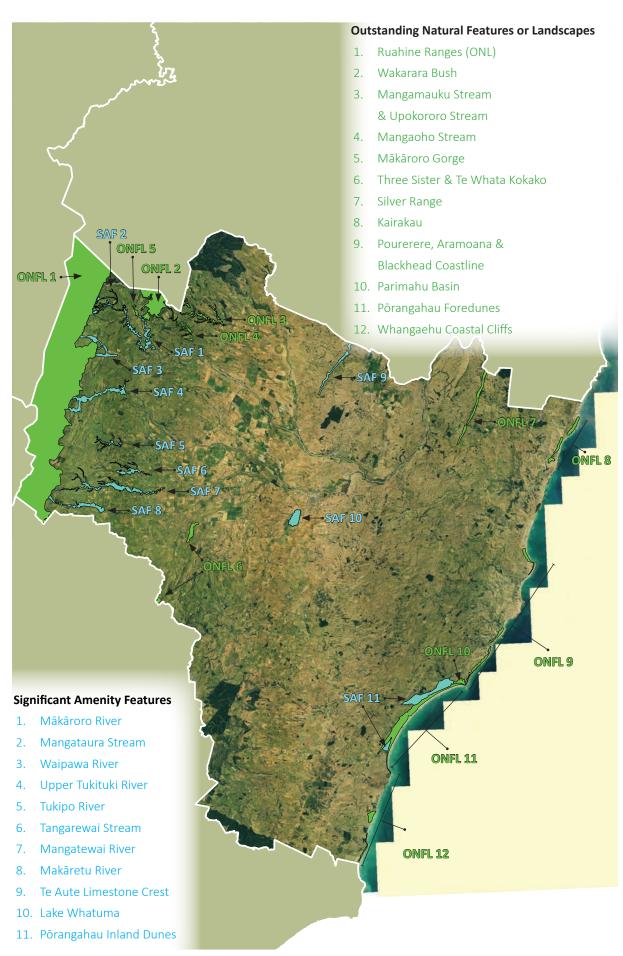


Figure 1: Outstanding Natural Features and Landscapes (green) and Significant Amenity Features (blue) identified in Central Hawke's Bay District

Introduction

Issue to be addressed

The issue to be addressed in the landscape assessment is the identification of Outstanding Natural Features and Landscapes so that these are known and can thus be protected in terms of the requirements of the Resource Management Act (RMA) s 6(b), and Significant Amenity Features so that these can be had regard to in terms of the requirements of RMA s 7(c).

The landscape report for Central Hawke's Bay District Council is required to identify the outstanding and amenity areas spatially and descriptively. To achieve this, the assessment has gone about mapping their extent, describing them in terms of case law (with the assessment process referred to as the Pigeon Bay factors), and determining the landscape characteristics that relate to each area. This is intended to contribute to the preparation of objectives, policies and rules that relate to the identified areas and for assessment criteria that may apply to activities within these areas.

Legislative Setting

The key provisions of the RMA that need to be considered when addressing the issue of landscape significance are s6(b) and s7(c):

s6(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development.

s7(c) The maintenance and enhancement of amenity values

However, landscape is an holistic subject that also draws on information gathered under other sections such as s6(c), s6(e), s6(f):

- s 6(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
- s 6(e) The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga.
- s 6(f) the protection of historic heritage from inappropriate subdivision, use, and development

Because the values of the landscape are contributed to by matters covered in these other sections, s 6(b) draws on information that is also identified under them. This does not over-ride or double up on the primary relevance of such information to these other sections, but simply draws on it to help inform a holistic view of the landscape.

Policy and Regulatory Setting

The Central Hawke's Bay Operative District Plan identified areas of outstanding landscape view. This will now be replaced by outstanding natural features and landscapes and significant amenity features, assessed with reference to the Pigeon Bay factors as referred to in case law.

The Hawke's Bay Regional Resource Management Plan makes no reference to outstanding natural features and landscapes and gives no direction on how these should be assessed or where they are located. The only reference to such matters within the regional planning framework is within the Regional Coastal Environment Plan (RCEP). Amongst other references, this has a specific objective and policies related to outstanding natural features and landscapes, outlines the Pigeon Bay factors and suggests Territorial Local Authorities can consider these when defining such features and landscapes within the coastal environment.1 Central Hawke's Bay District Council has undertaken the assessment for outstanding natural features and landscapes within the coastal environment in line with the RCEP provisions and has applied the same assessment process to cover the entire district.

Background

Before European settlement, the terraces on the eastern side of the Ruahine Ranges in Central Hawke's Bay (CHB) were covered in dense Podocarp forest, with a mixture of forest types that appear to have established 350-450 years ago. These were devastated by milling followed by fires to clear the land for agricultural purposes. Remnants remain in the valley floors, which were sheltered, damp, or perhaps too difficult to clear. Selected areas of original bush also remain in such places as Monckton Scenic Reserve, A'Deanes Bush, Inglis Bush Scenic Reserve, Evertree Bush and others.

Many of these specific areas have not been mapped in the landscape assessment unless they are located within a topography that has a landscape context. Places such as Monckton Scenic Reserve and north of Evertree are included as they are located within a more extensive stream valley system that meets this landscape requirement.

The mature vegetation is dominated by podocarp forest, with species varying from location to location. One area may include matai, rimu and miro as the dominants, while another area will have red beech, matai, rimu, kahikatea while elsewhere matai and totara are the main species. Lower growing species include kotukutuku, titoki, maire, pokaka, rangiora, hangehange and mahoe.

¹ Hawke's Bay Regional Coastal Environment Plan 2014 Section 3 page 13



Figure 2: A'Deanes Bush Totara 600 years old, 33m high, 2.65m diameter. Growing in sheltered valley that escaped fire and wind in the Matawhero Period. Remnant of the podocarp forest that once covered the terraces east of the Ruahine Range.

While most of the podocarp forest has been cleared from the terraces, some remains in the valleys, with each of the named river systems containing varying amounts of remnant or regenerating forest. Being incised to varying degrees, the extent of clearance appears to be influenced by the accessibility of the valleys, their steepness and their width. Most of the rivers assessed as Significant Amenity Landscapes are wider, flatter and more accessible than those assessed as Outstanding Natural Features due to the less pronounced topography and more modified vegetation. As a consequence of the easier terrain and remaining shelter, grazing appears to be continuing throughout these valleys and farming activities occur. The shape and shelter of the old meanders in the wider valleys lend themselves to such activities, but remnant vegetation still remains in many such areas and contributes to the amenity values that this assessment is recognising.

Hawke's Bay Landscapes

Landscapes have meaning. Different landscapes have different meaning to different people, depending on their background, understanding, knowledge, values and attitudes. All of these have validity, as the landscape people identify with is like a mind map of their relationship with the land and the spaces they know. For some, the landscape will be a productive element, for others it will have deep associational values based on historic activities and relationships. For many, it will be appreciated for its beauty, sense of identity or place of belonging.

In assessing the landscape for use towards the preparation of the District Plan, the character of the landscape is analysed to determine areas that are outstanding natural features and landscapes or significant amenity landscapes. This is to provide a basis for determining which areas are in fact outstanding and then for determining appropriate activities that can be undertaken while still retaining the outstanding character.

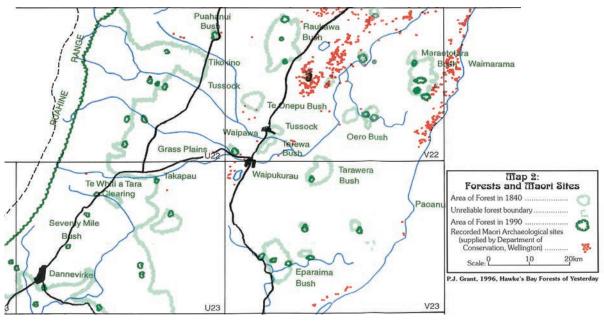


Figure 3: Forest Patterns pre 1840

The landscape can be considered in four dimensions: physical components, perceptual aspects, associational values and time. The fundamental physical component is the geology. This changes slowly and creates the physical form of the landscape that we all know. The greywacke backbone of the country is evident in CHB as the Ruahine Range, while the flats of the Ruataniwha Plains are the outwash from these hills. Land cover is another physical element but can change more quickly due to natural and human induced changes. Bush clearance, wetland drainage and agriculture have all created marked changes to the CHB landscape. Water is another physical element that affects the landscape, with its presence or absence affecting land cover and ecology.

Perception of the landscape is affected by the physical characteristics but also by their arrangement. Limestone or mudstone cliffs may be formed so as to create dramatic views that are clearly expressive of the geological processes that have formed them, vegetation may be present that is highly memorable for its grandeur, or lakes and rivers may have a high degree of naturalness.

Associational values relate to experiences and memories that people associate with places. These may be Māori cultural associations through ancestral occupation of an area or past events that have taken place in an area. Historic events may be associated with an area. Even though there may be no physical evidence still remaining, the place has importance through these associations.

Māori identify with the land through their whakapapa, which is about the recitation of genealogy. It places people in a wider context, linking them to a common ancestor, their ancestral land and waterways and tribal groupings. A pepeha (introductory speech based on whakapapa recited during a mihimihi) tells people where the speaker is from. This is not simply a place, but a holistic description that may contain the following:

- The mountain that I affiliate with is ..
- The river that i affiliate with is ..
- The waka that i affiliate with is ..
- My founding ancestor is ..
- My tribe is ..
- My marae is ..
- I am from ..
- My parents are ..
- My name is ..

A pepeha is about relationships, with the persons identity inextricably linked to relationships with the land, water, ancestry, place and people. Such practices are an example of the holistic nature of the landscape and the associational values that relate to it.

Time is the fourth dimension affecting the landscape. While all factors are affected by time, such as changes through geological time and changes through history, perhaps the most obvious change that has affected CHB is to land cover and land use over recent history.

The research of Patrick Grant, in his book Hawke's Bay Forests of Yesteryear, concludes that the Hawke's Bay land cover has undergone massive changes over the last 1,000 years. Originally mainly covered in podocarp forest, it was devastated by natural processes of high winds, floods and fires in two epochs. The first was in the Waihirere Period approximately 1,280 - 1,400 AD when 94% of the forest was destroyed by gales and burning. The second was in the Matawhero Period approximately 1510-1620 AD when 85% was destoyed by similar events. Both occurred through natural forces of nature.

Another hundred years later (c1700) 42% was destroyed by natural causes and intentional or unintentional Māori burning, leaving 43% standing forest at 1840. Following European arrival, milling and burning impacted this, reducing it to 17% standing forest cover by 1990, with much of this in the Ruahine Range, and only 1% of the region retaining standing lowland forest.²

Evidence of the effect of regrowth from a fairly uniform starting point, as occurred after the devastation of the Matawhero Period, can be seen in the clustering of similar age trees that would normally have been single specimens that emerged through a mature canopy. The collection of mature podocarps at A'Deane's Bush is such an example, where a cluster of large trees all of similar age are growing in very close proximity rather than being a single specimen that had emerged over time.

2 Hawke's Bay Forests of Yesteryear, Patrick J Grant, 1996. P 210



Figure 4: A'Deanes Bush. Dense spacing indicated trees seeded at a similar time, immediately after the destruction that occurred through the Matawhero Period.

Method

The landscapes have been assessed generally considering the Pigeon Bay factors, which is a list of landscape assessment factors established by the Environment Court in its decision on an appeal for a series of mussel farms in Pigeon Bay, Banks Peninsula³. These factors, which were refined in the subsequent Wakatipu Environmental Society Inc (WESI) v Queenstown Lakes District Council appeal and other appeals, are known from that case as the WESI criteria⁴. However, the Pigeon Bay case has taken on a greater prominence in rhetoric, and is the commonly named method for assessing the significance of landscapes. The NZILA (NZ Institute of Landscape Architects) Best Practice Guide 10.1 also refers to a similar method and this has been adopted in the assessment.

The assessment process identifies three categories for assessment: Natural Science, Perceptual and Associational. These three broad categories encapsulate a more detailed list of factors listed in RCEP Section 3. The three categories used in the CHB assessment are subdivided into a further 12 categories, generally aligning with the 7 criteria listed in the RCEP:

Natural Science	Geological/Geomorphological
	Biological/Ecological
	Hydrological
Perceptual	Memorability
	Legibility/Expressiveness
	Transient
	Aesthetic
	Naturalness
Associational	Historical
	Recreational
	Tangata Whenua
	Shared/Recognised

The assessment process gathered information from available sources, including GNS Geological maps, Department of Conservation (DOC) databases, Council databases for cultural sites and ecological information, reference books on the history of CHB, many discussions with noted author and historian Patrick Parsons, site visits, aerial photography and initial consultation with iwi representatives. Further information is welcomed through the draft plan consultation process. Until that time, this is an expert assessment that does not have the input from the wider community, particularly in relation to Associational factors where local knowledge is essential.

Potential Issues

There are a number of potential issues facing the areas identified within this assessment and these have been outlined below. These primarily relate to loss of indigenous vegetation, earthworks, buildings, drainage and the effect of pine plantations. These are discussed below. Several positive activities are also recognised for the identified landscapes.

The potential issues identified for each area have been listed in the assessment for each ONF or SAF. Following this, Potential Responses have been identified. These relate to the items listed below and have each been preceded with one of the following words, which are in a hierarchy from the more limiting to the less limiting:

- Discourage
- Restrict
- Limit

This hierarchy and the issues they relate to might be used in a planning response through policy provisions, activity status and activity standards in the Draft District Plan such as discourage = non-complying, restrict = discretionary and limit = restricted discretionary.

Loss of Indigenous Vegetation

Many of the areas identified as outstanding natural features or landscapes with significant indigenous vegetation are within locations that already have some form of protection, such as DOC land, QEII Trust covenants, Areas of Significant Nature Conservation Value (ASNCV.) Loss of indigenous vegetation within such areas is unlikely, but if it did occur, it would adversely affect one of the key characteristics contributing to the outstanding values.

A number of smaller river values are recognised as outstanding natural features and contain significant indigenous vegetation values which fall outside such protection mechanisms. This reduced level of protection may increase the threat of vegetation loss unless otherwise protected through the Plan.



Figure 5: Limestone cuesta's form part of CHB landscape character but perception of this is threatened by pine plantations.

³ Pigeon Bay Aquaculture Ltd and others v Canterbury Regional Council [1999] C32/99

⁴ Wakatipu Environmental Society v Queenstown Lakes District Council [2001] C075/2001.

Many areas identified as Significant Amenity Features contain areas of indigenous vegetation but this is frequently interspersed with pasture and appears to be grazed. These areas generally fall outside any form of protection, such as DOC, QEII or ASNCV, and the threat for further degradation of the indigenous vegetation through grazing remains high. The District Plan process will consider options for protection of such vegetation and whether any protection will be provided. From a landscape perspective, protection of indigenous vegetation in outstanding natural features and significant amenity features is very important where it makes a contribution to the landscape values of these areas.

Damming for Water Storage

Four river channels have been identified as outstanding natural features. This is generally due to a combination of incised topography and indigenous vegetation. One of these areas has the protection of a QEII covenant. Water storage was a distinct possibility for one of the other three areas, being the gorge related to the Ruataniwha Water Storage Scheme (RWSS). The gorge, including and upstream of the dam, is identified as part of an outstanding natural feature. The key characteristics of incised geomorphology, vividness, naturalness etc. would be adversely affected for the gorge if the dam proceeded, thereby preventing its qualification as an ONF.

A consent has been granted for construction of the dam in the Mākāroro Gorge, but an appeal to the Supreme Court held that an area of DOC reserve affected by the filling of the dam could not be exchanged for another area of land. This effectively prevents the dam being filled under the current legal framework. If the dam is unlikely to be built, the existing environment is to be assessed as though the dam is not present. If the dam is likely to be built, the existing environment would assume the dam is present by virtue of it forming part of the consented baseline. If that was the case, the gorge would not be assessed as an outstanding natural feature.

Based on a legal opinion, the assessment has been undertaken on the assumption that the consent for the dam does not form part of the consented baseline as it cannot be implemented in its existing form and therefore the dam does not form part of the existing environment.

Pastoral Farming

There are a number of examples within the areas identified as Outstanding Natural Features where pastoral farming activities are already occurring. The results of the landscape assessment conclude that these can continue to be accommodated in the identified ONF areas without adversely affecting the key characteristics of these areas. Pastoral land cover is recognised as increasing the potential for perception of these landscapes as it reveals the form of the underlying landform. A case in point is the Three Sisters, where the unique geomorphology is plain to see under the thin pastoral land cover.

Pine Plantations

The results of the landscape assessment conclude that pine plantations can threaten some of the key characteristics of some of the outstanding and amenity features. This is because the dark colour and uniform planting of such species can hide the landform and can also reduce the perceived naturalness values, often contrasting in colour and form with adjacent land use. An example would be pine plantations on the Three Sisters, which would contrast with the colour, height and texture of the surrounding pasture and hide the detail of the landform and adversely affect the old Te Horehore Pā site and associational values.

The appropriateness of pine planting on the soft eroding coastal escarpments is also questioned as they hide the characteristic colour and material of the coast and could pose erosion problems at harvest. Revegetation with native or permanent vegetation could be more appropriate for long term sustainability in this coastal environment if it is to be vegetated.



Figure 6: Pine Plantation screen characteristic Mudstone cliffs

Pine plantations have also been observed on some of the limestone cuesta's that characterise the central spine of the district. Perhaps regarded as difficult topography for farming, pine planting on these exposed limestone cliffs hides them and adversely affects perception of these features that contribute to the landscape character of the district.

A number of titled limestone ridges and their associated steep drop off cliffs (cuesta's) have been recognised as outstanding natural features or significant amenity features, but many other limestone cuesta's have not. This is because they are not sufficiently exceptional to qualify as outstanding, yet they form an important part of the CHB character.

The National Environmental Standards for Plantation Forestry permit plantation planting in any rural area except those recognised as outstanding natural features and landscapes.

There is potential for such plantations to adversely affect one of the important landscape characteristics of CHB by forestry being planted on these prominent limestone cliffs which are located through pastoral rural land on a band of limestone that runs north-south through CHB.

Earthworks

The geology of CHB has a fundamental influence on its landscape character. Three main landforms contribute to the district: the greywacke spine of the Ruahine Range, the mudstone/sandstone conglomerate of the coast and the alluvial gravels of the Ruataniwha Plains. Formed over geological time, the Ruahine Range formed the western edge of what was an inland sea, with uplift forming the hills to the east. This uplift was sedimentary deposits, comprising mudstone, sandstone, areas of limestone and conglomerates of them all. The mudstone can be seen along the coastal cliffs, soft and easily eroded, it forms the characteristic light grey escarpments that stretch along the district's and region's eastern coastal edge.

Volcanic ash has overlaid areas in more recent time as well, adding to the diversity, The limestone, which is sedimentary seabed that has been mixed with other sedimentary materials in places and uplifted, runs north-south through the district in a band of varying width. A thin strip runs down the coast and is evident at Kairakau, while a wide band runs through the district and is evident at places like west of Te Aute, west of Otane, west of Lake Whatuma and east of Takapau.

A narrative exists regarding the large lake that was located in what is now the Ruataniwha Plains. Two taniwha lived in this lake. On one occasion a boy fell into the lake and the two taniwha fought over their prey. The resulting destruction on the landscape created breaks in the hills through which the lake drained away. One of the channels through which the lake drained was the Waipawa River. The Waipawa River and adjacent lands were associated with the tipuna Te Whatuiapiti.

Earthworks undertaken within outstanding landscape features or significant amenity features have potential to adversely affect the landscape character of these areas, with some being more sensitive to such affects than others. For example, earthworks for drainage of Parimahu wetland or flattening of the Pōrangahau dunes would have a significant adverse effect, while those undertaken on the eroded escarpment north of Paoanui Point would be less sensitive due to the already diverse nature of the coastal face.



Figure 8: Parimahu Wetland System



Figure 7: Mudstone cliffs north of Paoanui Point form part of CHB landscape character

Earthworks within any of the features characterised by indigenous vegetation would involve removal of such vegetation, which is likely to have an effect on landscape character along with the earthworks themselves.

The Potential Response section of each area discussed in the landscape assessment includes comments on the sensitivity of earthworks (along with comments on indigenous vegetation, exotic plants etc) with a recommendation on the planning response (discourage, restrict, limit) that may be included with the District Plan.

Buildings

Buildings can have an adverse effect on landscape character by introducing a constructed element into an area that is recognised for its naturalness. Different areas have different tolerances for the effect of buildings, with buildings on some e.g. The Three Sisters, likely to be more significant than others e.g. Makāretu River channel. The size, scale, colour and form of the building all contribute to the effect (or lack of it) and the sensitivity of each area is noted in the recommended planning response.



Figure 9: Horehore Pā (Left), Puketotara (Right)

Māori Cultural Values

"Mauri is the life essence of nature itself on this planet" Hodges (1992). When mauri is extinguished within a species, the result is extinction because the natural restorative and regenerative powers are lost. Of absolute importance to Ngāti Kahungunu is the preservation and protection of mauri. Ensuring the preservation and protection of mauri is to provide for conservation of biodiversity. The outcome will ensure the restoration and regeneration of ecosystems. Mana whenua as kaitiaki seek to sustainably manage all taonga species within the Tukituki River catchment. This is expressed through the cultural value of mauri that seeks to enhance the life force principle included in people, fish, animals, birds, forests, land, seas, rivers, biodiversity and ecosystems.

The Tukituki river flows ki uta ki tai – from the mountains to the sea – from its headwaters in the Ruahine Ranges, downstream through the Ruataniwha plains and lowland mouth and coastline at Haumoana. From the headwaters of the upper Tukituki tributaries which cross the Ruataniwha Plains are: the Mākāroro, Waipawa, Mangaroa stream, Kahahakuri stream, Mangataura stream, Mangaonuku stream, Tukipo, Maharakeke, Ngahape stream, Pōrangahau Stream, Mangatewai River, Mangapohio stream, and Makāretu River.

All the Tukituki tributaries, rivers and streams will have an influence on the overall ecological health of the catchment. Therefore, these tributaries are considered in terms of their relationship to cultural values, their mauri and the cumulative effects on the whole ecosystems and ecological health state of the Tukituki River catchment.⁵

⁵ Tukituki River Catchment Cultural Values and Uses HBRC report June 2012

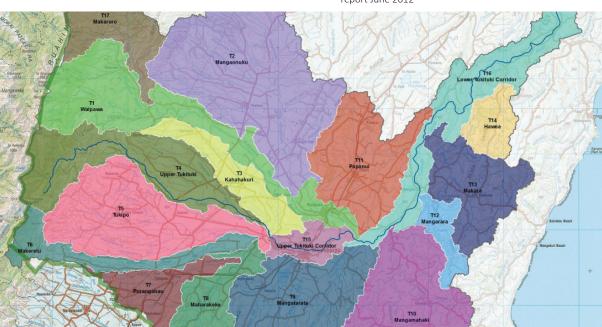


Figure 10: Tributaries to the Tukituki River (Source HBRC - Schedule 14c: Sub Catchments)

Nearly all of Central Hawke's Bay District is linked to the Tukituki River through the catchments of the tributaries. The exception is the coastal edge, where individual rivers feed directly into the sea. However, the same principles apply to this area.

Sites of Māori cultural significance, such as pā and wāhi tapu areas are located throughout the district, particularly along the coast and rivers. Many are recorded in the Council database and some are noted in the landscape assessment. Recognition and preservation of the areas contributes to maintaining the mauri, as does maintaining the health of the rivers and tributaries.

For the mauri to be maintained, the life forces of all the elements listed above should be maintained. These life forces may be more pronounced in areas identified in the landscape assessment, so preserving them will help preserve the mauri. In all areas considered in the assessment, this importance is recognised and reference is made to the Deed of Settlement for associated responsibilities and cultural significance.

Additional Information Required

To complete this assessment, additional information is needed from consultation to inform decision-makers on the views of land owners, the public, and cultural representatives. This information will be obtained during consultation with key stakeholders and through submissions after publication of the Draft District Plan.

Without this information the assessment remains an expert based assessment and will be enhanced, particularly regarding Associational Factors, from information that comes from community input.

Consultation to Date

Consultation to date has included meetings with iwi representatives and Hawke's Bay historian and author of several publications, Mr Patrick Parsons, who has contributed generously with his time and expertise. Further consultation will take place through the Draft publication and submission process.

Conclusion

The results of the landscape assessment process have shown a consistency in terms of higher values occurring for specific areas over a range of factors for landscapes of significance i.e. high values may occur for geomorphology, ecology, hydrology, memorability, expressiveness, aesthetic, naturalness and tangatea whenua cultural values in the same area. In other areas, there may be higher values placed on a smaller number of factors, such as cultural values at The Three Sisters, with this being supported by high geomorphological values but ranking lower on ecological values.

A expert value judgment is then made as to whether that area is an outstanding natural feature or landscape, a significant amenity feature or neither, depending upon the cumulative outcome of the factors.



Figure 11: View across the Three Sisters to the Ruahine Range

Outstanding Natural Features or Landscapes

- 1. Ruahine Range (ONL)
- 2. Wakarara Range
- 3. Mangamauku Stream & Upokororo Stream
- 4. Mangaoho Stream
- 5. Mākāroro Gorge
- 6. Three Sisters & Te Whata Kokako
- 7. Silver Range
- 8. Kairakau
- 9. Pourerere, Aramoana & Blackhead Coastline
- 10. Parimahu Basin
- 11. Pōrangahau Foredunes
- 12. Whangaehu Coastal Cliffs

Significant Amenity Features

- 1. Mākāroro River
- 2. Mangataura Stream
- 3. Waipawa River
- 4. Upper Tukituki River
- 5. Tukipo River
- 6. Tangarewai Stream
- 7. Mangatewai River
- 8. Makāretu River
- 9. Te Aute Limestone Crest
- 10. Lake Whatuma
- 11. Porangahau Inland Dunes

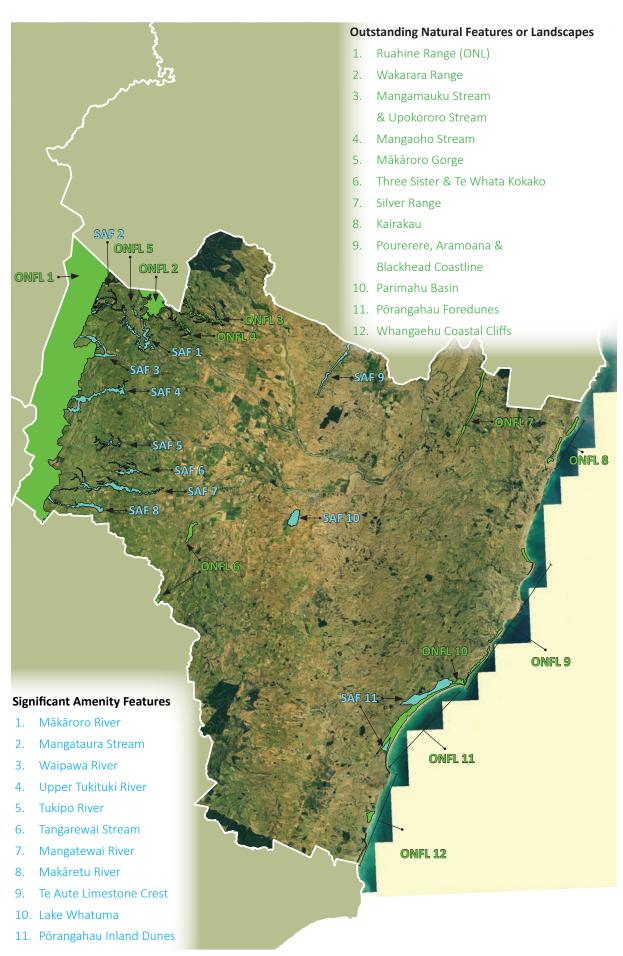


Figure 12: Outstanding Natural Features and Landscapes (green) and Significant Amenity Features (blue) identified in Central Hawke's Bay District