

Silver Range

Identification: Outstanding Natural Feature

Location:

NZ Topo 50 – BL38

Description

Tilted uplifted mudstone ridgeline extending 10km from south of Elsthorpe up to the CHB district boundary.

Natural Science

Geological/Geomorphological

A late Miocene blue-grey sandy siltstone or alternating mudstone with concretionary sandstone. Following the line of a series of four faultlines running north-south, known as the Silver Range Fault Zone.

The NZ Geopreservation Inventory considers this to be a Regionally significant example of a hogback ridge which has been formed by a resistant limestone layer (unusual in the area)¹.

1 <http://www.geomarine.org.nz/NZGI/>

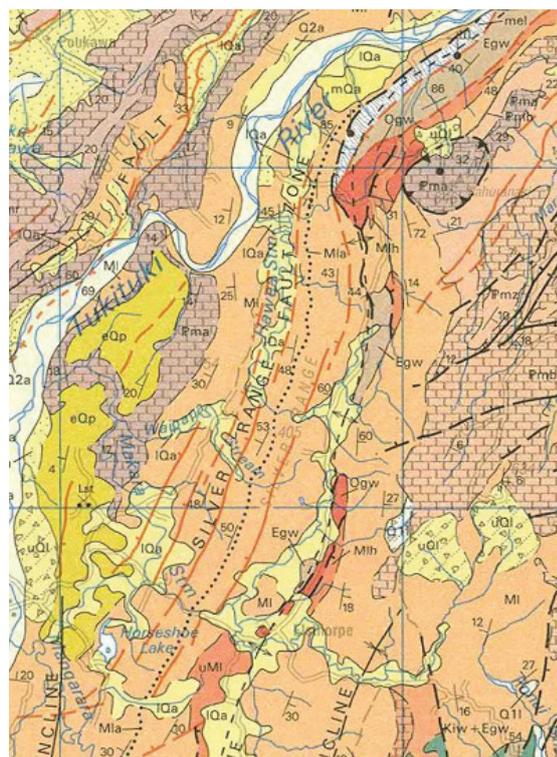


Figure 62: Geology Map showing Silver Range Fault Zone

Ecological

It appears that the land cover was grass and fern at the time of sale of the Waipukurau Block, which may include the Silver Range within its northern boundary. The original forest likely to have been destroyed by winds, floods and then fires over the preceding hundreds of years, although

pockets of bush are known to exist on the bank of the Tukituki River and a large wetland to the northwest of Silver Range at the time of the Waipukurau Block sale. Elsthorpe Bush still remains as a reserve of original native vegetation 2km to the east.

Hydrological

A sharp ridge with runoff to the east and west.

Perceptual Memorability

Highly memorable as an extensive linear tilted sharp ridge, with exposed mudstone on the backslope that is clearly seen as a sheer surface with little vegetation.

Legibility/Expressiveness

Highly expressive of uplift and tilting processes, with a number of parallel fault lines influencing activities and clear visibility of mudstone rock type.

Transient

Climatic changes of wind at a micro scale.

Aesthetic

Extensive linear ridgeline that is highly distinctive. Clearly expressive of faulting and uplift, with friction between parallel faultlines compressing the intervening land and uplifting the tilted plates. Aesthetic value related to its unusual form, linear extent and clear geological importance.

Naturalness

High naturalness in terms of geological process and unmodified form, but modified in terms of land cover in parts, particularly pines.

Associational Shared/Recognised

Site used by geology students from universities for field trips to study rock type and uplift processes. Area has active geological and tectonic past, so valuable example that is recognised by such groups.

A small northern part of the ridge is recognised in the Operative District Plan as an Area of Significant Conservation Value for the hogback landform.

Recreational

Specific recreation activities are not known.

Historical

Unknown



Silver Range
1:60,000

Tangata Whenua

Any particular importance of this specific area to Māori is unknown.

Key Characteristics

Aesthetic values of expressiveness and legibility of geological processes. High geological natural science values due to the expressiveness of its formative process of fault movement and tilted uplift.

The ridge has significance as a geological feature, for educational purposes and aesthetic interest. Maintaining the feature with unmodified landform and free from pine trees is important to help maintain the integrity of these characteristics.

Potential Issues

Coverage by trees, particularly pine plantation or rogues pines, earthworks such as tracking, buildings.

Maintain clear of pines, avoid earthworks and buildings.

Potential Response

- Discourage earthworks
- Discourage establishment or spread of exotic trees
- Discourage built development
- Discourage development which would destroy cultural features/values and Restrict development which could compromise cultural features/values.



Figure 63: Earthworks for tracks for pine plantation harvesting



Figure 64: Pine plantation across Silver Range landform (photo north of the CHB district boundary) screens the distinctive tilted landform .



Figure 65: Distinctive tilted uplift of Silver Range landform

Kairakau Coastline

Identification: Outstanding Natural Feature

Location:

NZ Topo 50 – BL39

Description

Coastal escarpment, hills and the Manawarakau Gorge.

Natural Science

Geological/Geomorphological

An early Pliocene geology (Kairakau Limestone), described as a yellow-grey barnacle rich cross-bedded sandy limestone, forms the coastal escarpment and limestone stacks of the Manawarakau Gorge. This is an isolated section of limestone along the coast, which is predominantly mudstone.

The limestone cliffs within this area are botanically significant. The cliffs to the north (Taupata) support large stands of karaka trees and the Kairakau cliffs contain the only known population of the rengarenga lilly (*Anthropodium candidum*) between Cook Strait and East Cape. *Melicope ternate*, *Pittosporum ralphii*, *Hebe veronica squalida* and *Asplenium lyallii* are also regionally rare plants found within the remnant native vegetation of these cliffs.¹

The Hinemahanga Rocks are located approximately 800m off the Kairakau Beach coastline and form part of the area's context. These interesting geological features are basaltic pillow lavas with inter-bedded limestone and mudstone which are listed as Nationally Significant in the NZ Geopreservation Inventory (One of only two known significant occurrences of Red Island Volcanics).

1 Hawke's Bay Conservancy CMS 1994-2004. Appendix 4 'Areas with important natural and historical values in the Hawke's Bay Conservancy's coastal environment'. Pg 6.

The rocks are fault bounded and are a good example of tectonic processes, appearing to have been transported a considerable distance from the original site of eruption.²

Ecological

The land cover is primarily pasture, but there is regrowth of native vegetation on the steep slopes below the limestone Ridge, particularly behind the Kairakau settlement.

Part of this ONF is identified as a Department of Conservation Recommended Area for Protection (RAP), which was initiated as part of the Protected Natural Areas Programme. Kairakau Beach – Taupata (RAP11) includes two coastal sites with vegetation consisting primarily of flax shrubland and karaka treeland. Species within the RAP include; *Phormium cookianum*, *Pittosporum ralphii*, *cordyline australis*, *Myrsine australis*, *Urtica ferox*, *Hebe stricta*, *Austroderia toetoe*, *Corynocarpus laevigatus*, *Cordyline australis*, *Coprosma repens*, *Alectryon excelsus*, *Myoporum laetum* and *Pittosporum ralphii*.

Overall the area has 16 plant species present of botanical significance, with *Anthropodium cirratum* (Rengarenga Lily) being the most significant, as it is the only known occurrence in the Eastern Hawke's Bay Ecological District³.

One source has indicated that the steep slopes in front of the rock formations at Kairakau have stopped being grazed. Exclusion of stock would slowly see these slopes return to native vegetation.

2 Hawke's Bay Conservancy CMS 1994-2004. Appendix 4 'Areas with important natural and historical values in the Hawke's Bay Conservancy's coastal environment'. Pg 6.

3 According to the Eastern Hawke's Bay Ecological District 'Survey Report for the Protected Natural Areas Programme'.



Figure 66: Dramatic limestone cliffs at Kairakau



Kairakau
1:40,000

Hydrological

The Mangakuri Stream flows through the Gorge and the Ponui Stream joins it after the Gorge several hundred meters inland from the River mouth. This final section of merged water is known as the Manawarakau River. There are steep coastal escarpments with rainfall flowing into the sea and run off causing channelling and erosion, and there are some streams flow through this feature towards the sea. This includes a small waterfall located approximately 2km north of the Kairakau settlement.



Figure 67: Aerial view into the Manawarakau Gorge

Perceptual Memorability

This area is highly memorable as an extensive linear coastal limestone geological formation, with classic cuesta of tilted backslope and steep colluvium front slope. The Manawarakau Gorge framed by the dramatic limestone stacks defining the Mangakuri River is visually striking. The high concentration of past cultural activities and sites that makes the area even more memorable for the understanding observer.

Legibility/Expressiveness

The limestone formations are clearly expressive of uplift and titling, resulting in a classic cuesta landform. The large limestone hills bounding the Mangakuri River and ongoing coastal processes also elevate the expressiveness of this area.

Transient

Coastal winds, with a likely funnelling effects through the gorge, play a role in the experience of this location. The lighting conditions, sunrise/sunset and shadows cast throughout the day, also effect the impression of the limestone faces backdropping the settlement.

Aesthetic

This highly attractive landform, that is a clearly legible example of uplift and tilting (cuesta formation), holds high aesthetic values.

The visibility of the landform is accentuated by the simple pastoral landcover while the native regeneration occurring along the escarpments increases perceived naturalness. Given the option between pastoral landcover or restored native landcover, there is no comparison (native overwhelmingly preferred), however it is still important to acknowledge the aesthetic qualities that are promoted by a simple monoculture landcover.

There is also the very attractive gorge feature, with the bend midway through preventing visibility from one end to the other and heightening the sense of the unknown when looking into it. This gorge in association with the prominent and distinctive limestone hill vertical faces, reinforce the sense of place experienced at Kairakau.

Naturalness

The areas is highly natural in terms of landform and transient qualities of the coast, but there are modification in the form of pastoral land cover which reduce the overall level of perceived naturalness.

Associational Shared/Recognised

The area is enjoyed today as a picturesque coastal settlement, with recognition of the strong cultural values associates with the area. The limestone formations backdropping the settlement are sometimes referred to by locals as the Twelve Apostles.



Figure 68: The Hinemahanga Rocks (Left half of Photo)

Recreational

This coastal settlement is a popular recreation destination which offers swimming, fishing, kai moana, kayaking and general enjoyment of the beach. At low tide it is a pleasant walk north along the beach to Waterfall Bay or beyond.

Historical

The Māori historical information described below is a key influence in the overall associational value of Kairakau. The unstable slopes below the limestone escarpment were known as Pakarakau and Te Apiti whaling station located at the foot of the slopes. William Colenso had observed about 50 people living at Kairakau in 1843. The portion of this ONF south of Mangakuri River would have been within the original Waipukurau Block (Hapūku's Block) purchased by Donald McLean, the Government Lands Purchase Commissioner, on 4 November 1851. The remaining three portions of this ONF which are positioned north of the Mangakuri River, are primarily within the Kairakau Block (which passed through Māori Land court in December 1869) with only the northern most portion being within the Te Apiti Block (Also December 1869).

Tangata Whenua

Kairakau Beach area is highly valued by tangata whenua with at least 8 recorded pā sites and has one of the most extensive concentrations of pits along the CHB coastline. This area is part of the transpeninsular route stretching from Cape Kidnappers to Cape Turnagain which is plentiful in Māori archaeological sites (pa, settlements, cultivation, urupa, meeting houses etc). The coast has always been significant as a traditional food gathering area, as a source of cultural materials and as a place of cultural significance (historical and legendary).

There were two pā sites⁴ located on the north-western banks of the Manawarakau Gorge. The pā closer to the southern gorge entrance was the fortified Manawarakau Pā, which was over 330m long and defended by three ditches (now considered an urupa).

4 Archaeological Survey of the Southern Hawke's Bay Coast from the air, Department of Conservation- Science for Conservation 202, Kevin L. Jones and Vanessa Tanner.

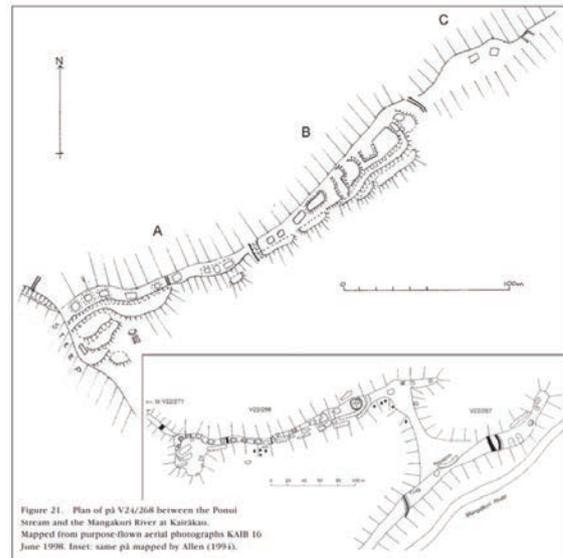


Figure 69: Layout of Archaeological Sites at Kairakau

Archaeological Survey of the Southern Hawke's Bay Coast from the air, Department of Conservation- Science for Conservation 202

The pā closer to the northern gorge entrance is unnamed and consists of a number of house platforms running southeast along the ridge above the river. This has two defensive ditches at the southern end of the pā site.

Another two fighting pā are located further inland within the immediate area, with one on the high and one on the lower land west of Mangakuri Stream (outside of the area defined as ONF).

A palisaded kainga (rather than a fortified site) was located on the north bank of the Manawarakau River not far from the beach. Approximately 50m up Te Apiti Road, from the Kairakau Rd intersection, stood two meeting houses on a marae associated with the Native Reserve. A fortified site was located on the ridge overlooking the sea and Hinemahanga's Rocks.

The three rocks off the coast of Kairakau Beach are known collectively as the Hinemahanga Rocks (or floats), named after the floats off Hinemahanga's fishing net.



Figure 70: The Hinemahanga Rocks (Right half of Photo)

The oral tradition of Hinemahanga⁵ recalls a disastrous fishing season, during which the men decided to head inland to hunt for birds (out of season) while the woman stayed on the coast. During this time the women continued fishing at Kairakau and were surprised by a good catch, which was mostly eaten in the men's absence. When the men returned, they were taunted for being outdone by the women. Chief Patea, Hinemahanga's husband, resented this and it is inferred that he pushed Hinemahanga to her death from the Kairakau clifftops before fleeing inland over the Ruahine Ranges to Taihape. Hinemahanga's fishing net floats are said to have been petrified into these rocks up on her death. Looking out to sea from the beach, the left rock bears the name Hinemahanga, the centre rock is Waimatai and the right one is Tokaroa.

Hinemahanga's tale represents the earliest known occupants of the Kairakau area, and is likely to be closely linked to when the first Rangitāne tribe settled in the area⁶, prior to the Ngāti Kahungunu invasion of 1550.

In one version of a story involving the reputable Chief Morena Hawea, he joined a group of both European and Māori who set off from Purerere on a whaling boat. When the wind and currents took the boat a great distance out to sea, the Europeans prayed to their God for a change in conditions to assist them. When this failed, Morena Hawea recited an incantation which summoned the guardian whale Paikea, which nudged the boat back to the Pakaraka Whaling Station, just below Ohinewhango Pa.⁷

There is a burial ground (Urupa) located in the Kairakau township at 1225 Kairakau Road (surrounded by houses), and there is said to be a burial site located within a cave in the Manawarakau Gorge.

The fortified Ohinewhango Pā was located on the ridgeline to the north-east of the Kairakau ONF's northern extent, above Pakaraka.

The karaka groves and rengarenga lily may have been planted in the area by Māori for food, while it is assumed that the waterfall (2km north of the settlement) would have significant to tangata whenua.

5 Documented by Patrick Parsons, 1999 – Māori Interests on the Te Apiti – Ouepoto Coast. Pg 2-3.

6 Patrick Parsons, 1999 – Māori Interests on the Te Apiti – Ouepoto Coast. Pg 3.

7 Based on the research of Patrick Parsons. Detailed in The Purerere Road pg 7, and Waimarama- Waves of Occupation, by David Mackintosh

Key Characteristics

Very high landscape values derived from the memorable geological formations which exhibit a visually striking landform. This results in very high expressiveness and aesthetic values, which is coupled with very high cultural values and the ecological significance of parts of these cliffs. The cultural significance of the Manawarakau Gorge and nearby pā sites cannot be understated.

Potential Issues

Any proposed activity within the ONF should be keenly aware of the historic cultural features/activities and not have adverse effects on these values. This is likely to occur through built development and earthworks.

Sheep and wild goats have grazed the understory of the karaka grove and thinned the shrubland in the northern area (RAP11 – Area 1), and browsing in general (domestic or wild) is considered a threat which compromises regeneration and can lead to a loss of indigenous vegetation.

The establishment of production forestry within the ONF areas is also considered an issue as this would compromise the identified values, particularly due to the adverse effects of earthworks of the harvesting process that could devastate the natural landform and cause sedimentation..

Potential Response

- Maintain and enhance indigenous vegetation throughout the ONF.
- Discourage establishment or spread of exotic plants
- Restrict earthworks
- Limit built development
- Discourage development which would destroy cultural features/values and Restrict development which could compromise cultural features/values.



Figure 71: Aerial photo of Manawarakau Gorge



Figure 72: Aerial photo of Kairakau, overlooking the Hinemahanga Rocks

Pouererere, Aramoana and Blackhead Coastline

Identification:

Outstanding Natural Feature

Location:

NZ Topo 50 – BL39, BM 39 & BM 38

Description

Coastal Cliffs from approximately Paoanui Point down to Blackhead Point.

Natural Science

Geological/Geomorphological

The coastline of this area has a sequence of intertidal siltstone and mudstone platforms that have resulted in steeply eroding coastal escarpments, with the platforms at the northern end of Pouererere Beach having fossil deposits of national importance¹.

The cliffs at Paoanui Point about a shore platform that is recognised as regionally important by the NZ Geopreservation Inventory. This consists of an accessible and extensive intertidal mudstone wave-cut platform which is representative of this stretch of coastline². The Aramoana Slump is recognised as Regionally important by the NZ Geopreservation Inventory as it is the biggest coastal slump in Hawke's Bay. This has been caused by natural erosion as a result of the Pleistocene-Holocene sea level changes³. The Pouererere fossils are also recognised by the NZ Geopreservation Inventory as Nationally Significant.

Ecological

There is varied vegetation cover with areas of bare exposed base, pasture and areas of regenerating native vegetation. This stretch of coastline has high wildlife values, in particular, this habitat provides a feeding ground for at least 15 species of native birds.

1 Hawke's Bay Conservancy CMS 1994-2004. Appendix 4 'Areas with important natural and historical values in the Hawke's Bay Conservancy's coastal environment'. Pg 6.

2 <http://www.geomarine.org.nz/NZGI/>

3 <http://www.geomarine.org.nz/NZGI/>

Some of species for which this is important include; White-faced heron (*Ardea novaehollandiae*), Variable oystercatcher (*Haematopus unicolor*), Red-billed gull (*Larus scopulinus*), Bar-tailed godwit (*Limosa lapponica*), Black shag (*Phalacrocorax carbo*) and White-fronted tern (*Sterna striata*).⁴

In 1997 the Te Angiangi Marine Reserve (446 ha) was established within the coastal waters between Aramoana and Blackhead. This reserve is special as it contains a mix of habitat types including a boulder bank, rocky intertidal platforms and a sheltered bay.

Hydrological

There are steep coastal escarpments with rainfall flowing into the sea and run off causing channelling and erosion. There are some areas where streams flow through the feature towards the sea with the biggest being Pouererere Stream and Ouepoto Stream (at Aramoana).

Perceptual Memorability

This stretch of coastline is memorable because of its characteristic light grey steeply eroded escarpments. Vertical in places, such as Blackhead Point where the mudstone is harder, and less steep in other areas where softer baserock prevails. Dynamic patterns have emerged through the erosion process, which contributes to the memorability of this area.

Legibility/Expressiveness

Clearly expressive of underlying rock type, with vertical faces showing the presence and composition of the sedimentary mudstone.

Transient

The transient influences along the coast include onshore/offshore winds, sea spray and coastal birds.

4 Hawke's Bay Conservancy CMS 1994-2004. Appendix 4 'Areas with important natural and historical values in the Hawke's Bay Conservancy's coastal environment'. Pg 6.

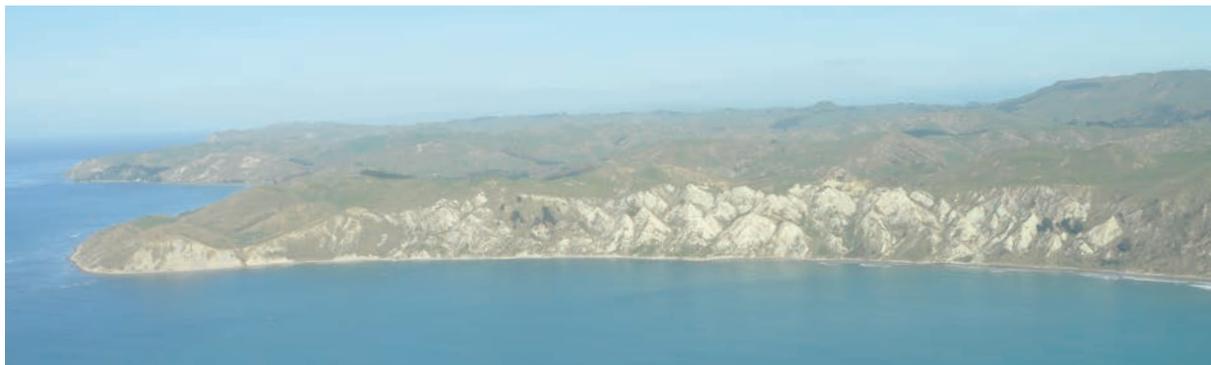


Figure 73: Aerial photo of Paoanui Point and coastal cliffs to the north



Pourerere, Aramoana & Blackhead Coastline
1:100,000

Aesthetic

The active coastal edge is a prominent illustration of the power of the sea and of nature, with tall cliffs up to one hundred meters or more high climbing steeply from the beach. The light grey colour of the mudstone is reflective and bright in the sunlight, adding to the aesthetic appeal.

Naturalness

There is a high degree of perceived naturalness in terms of geological visibility and coastal processes. The varied vegetation, with pasture and pine plantations can reduce naturalness, but there is value where native regeneration is occurring or there are naturally exposed surfaces.

Associational Shared/Recognised

The coastline is heavily used at the river outlets where small settlements have developed.

Recreational

Coastal areas recognised for recreational purposes and kai moana. Activities include; swimming, surfing, fishing, water sports, diving, and as traditional source of kai moana.

Historical

During Captain Cook's second voyage to New Zealand, he anchored off Pouterere Beach on 22 October 1773. Here two canoes with local Māori came out to trade, including two chiefs. One of these chiefs was later identified by William Colenso as Chief Taunui. Captain Cook traded with Taunui and this included pigs and chickens, with the instruction to not eat them so that they might stock the island⁵. The introduction of the pig (known as the Captain Cooker) was the first change to the traditional diet of Māori for centuries⁶.

5 The Pouterere Road- Section written by Patrick Parsons, Pg 6, And, Heretaunga Tamatea Deed Of Settlement - 9 July 2015 pg17.

6 Central Hawke's Bay District Council - Aramoana Beach, Historical and Archaeological Report, Patrick Parsons (2001). Pg 4.

The Waipukurau Block (Hapūku's Block) was purchased by Donald McLean, the Government Lands Purchase Commissioner, on 4 November 1851. The extent of this block along the coast went from Manawarakau Gorge in the North, down to Parimahu in the south. The Blackhead Block (Pohatupapa Block) was later sold by Nairn Bros in 1873 to JH Coleman and AL McHardy.

The name 'Aramoana' (The pathway beside the sea) has only been associated with this area since the 1890's when the European Settler Alexander McHardy purchased land here. He also built homesteads at both Blackhead and Aramoana, with the Aramoana homestead still standing as a grand example (built in 1894). The Area is referred to as Ouepoto within Māori records, which is named after a species of harekeke/flax.



Figure 75: Aramoana Homestead

Tangata Whenua

The coastline of Central Hawke's Bay, including the intertidal platforms and the adjacent nearshore reef systems, has always been important to tangata whenua as source of kai moana for local communities, particularly paua, kina and crayfish. Strong connections remain for Ngāti Manuhiri and Ngāti Kere. There is a long history of occupation along this coast and significant pā sites associated with this stretch of coast include Puke o Heke Pā, Te Pouterere Pā, Ouepoto Pā (More recently the McHardy Monument) and Te Ikatiere Pā.

Te Ikatiere Pā was a fortified pā of historic significance overlooking Ouepoto/Aramoana (known now as Hikateru) with the earthworks of the pā still visible today.



Figure 74: Aerial photo Blackhead and Aramoana coastline

The Archaeological Survey⁷ undertaken in 2002 was able to map an extensive area of the Te Ikatiere Pā landform features (identified as V23/55) which run along the coastal ridge.

This early pā of Ngāti Tara and Rangitāne was occupied at the time Ngāti Kahungunu migrated south from Poverty Bay (around 1550) and defended an initial assault, however succumbed to the Ngāti Kahungunu attack the following day. Chief Tuteremoana offered his daughter Moeteao as a way to stop the fighting, which was accepted.

This battle at Te Ikatiere Pā was one of the last battles to take place between Rangitāne and Ngāti Kahungunu prior to Rangitāne retreating to Dannevirke. Following this battle, the mana of this coastline passed to Te Aomatarahi (General of Taria 1), and then onto his grandson Te Ikareroa. Te Ikareroa later divided his land between his two sons, with Tumapuhia being given the land north of Aramoana (Ouepoto), and Te Angiangi being given the land south of Ouepoto⁸.

While Tumapuhia and his descendants have retained the mana over the land gifted to him, it is recorded that the majority of Te Angiangi's land was lost following a series of feasts where Te Angiangi and Whatuiapiti sought to out perform each others hospitality. In an effort to repay one of the feast rounds, Te Angiangi and his father (Te Ikareroa) sought food from Marlborough but Te Ikareroa tragically died on the return journey when a storm overwhelmed their canoe. Without the ability to repay the food, Te Angiangi gifted the land south of Taurekaitai/ Pōrangahau River down to Akitio instead. Te Angiangi retained the coastal lands between Ouepoto (Aramoana) and Rangitoto (Parimahu) for himself, and also gifted the land between Ngapunawaitai and Tāurekaitai River (Pōrangahau River) to Manuhiri.

It is in recognition of this history that Ngāti Kere chose to honour Te Angiangi by naming the Marine reserve, established off the coast between Aramoana and Blackhead Beach, after him. This was established in 1997 and protects a 446ha area that contains habitats representative of the central Hawke's Bay coastal and marine environment⁹.

7 Archaeological Survey of the Southern Hawke's Bay Coast from the air, Department of Conservation- Science for Conservation 202, Kevin L. Jones and Vanessa Tanner.

8 The Pourerere Road- Section written by Patrick Parsons, Pg 5.

9 Te Angiangi Marine Reserve Brochure – Department of Conservation.

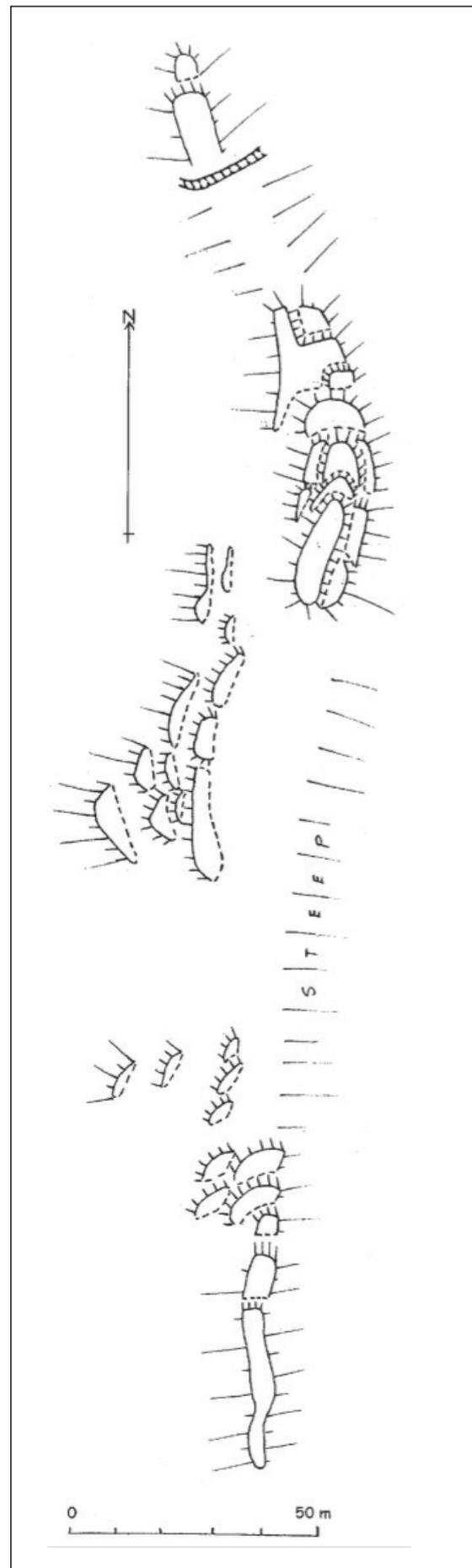


Figure 76: Layout of Te Ikatiere Pā

Archaeological Survey of the Southern Hawke's Bay Coast, Department of Conservation- Science for Conservation 202

This section of coastline includes the burial place of Morena Hawea, a reputable Chief with a high level of influence along the Central Hawke's Bay coast, which is located above Tuingara Point.

Chief Taunui, the likely last custodian of Tohunga's Retreat, who was a religious authority and chief who boarded Captain Cook's vessel in 1773¹⁰ is also buried at an un-named pā site on the coastal cliffs 2.5km south of Blackhead Beach.

Of legendary importance is the Giant's footprint located in the shallow waters just south of Paoanui Point. This could relate to Maui, with the footprint being created as he raised up Te Ika a Maui (the North Island), or alternatively it could relate to Rongokako. There is a strong indication in the Māori oral history which suggests that this is one of the locations where Rongokako first took giant strides, after learning the incantation from the High Priest Tupai¹¹.

Key Characteristics

Very high landscape values derived from the memorable steeply eroded coastal escarpments which are visually striking. There is a very high level of expressiveness and aesthetic values, which is coupled with very high cultural values which feature frequently along this stretch of coastline.

¹⁰The Pourerere Road- Section written by Patrick Parsons, Pg 3.

¹¹The Pourerere Road- Section written by Patrick Parsons, Pg 3.

Potential Issues

Any proposed activity within the ONF should be keenly aware of the historic cultural features/activities and not have adverse effects on these values. This is likely to occur through built development and earthworks.

Browsing in general (domestic or wild) is considered a threat which compromises regeneration and can lead to a loss of indigenous vegetation and should be deterred.

The establishment of production forestry within the ONF areas is also considered an issue as this would significantly compromise the perceptual values of these coastal formations.

Potential Response

- Maintain and enhance indigenous vegetation throughout the ONF.
- Discourage establishment or spread of exotic plants
- Limit earthworks
- Limit built development
- Discourage development which would destroy cultural features/values and Restrict development which could compromise cultural features/values.



Figure 77: Coastal Cliffs between Blackhead Settlement and Blackhead Point



Figure 78: Ridgeline of Te Ikatiere Pā which overlooks Aramoana (Ouepoto) Beach

Parimahu

Identification: Outstanding Natural Feature

Location:

NZ Topo 50 – BM 39 & BM 38

Description

South facing coastal wetland basin enclosed by rolling hills near the northern headland of the Pōrangahau beach system.

Natural Science

Geological/Geomorphological

Sandstone/Mudstone hills surround a wetland basin of well sorted aeolian sand deposits, which have left relic dune patterns discernible under the vegetation cover.

Ecological

The Parimahu Wetlands (and Pōrangahau Estuary, located to the south of this area) is recognised as a nationally significant wildlife habitat and holds the largest concentrations of wrybill (*Anarhynchus frontalis*) and banded dotterel (*Charadrius bicinctus* – threatened species) in the Hawke’s Bay Region. The wetlands are also used as part of the wider Pōrangahau stepping stone for a number of other migratory birds¹ that provides a roosting, feeding and breeding area.

In conjunction with the adjacent Estuary/Foredune and Sand Plain, this area provides an important habitat for a characteristic range of sandy shore invertebrates and also lizards (skink and gecko)².

The Parimahu ONF has grazing occurring throughout the wetland grasses across the basin, however it is possible to see how the difference in vegetation cover where the grazing regime is reduced.

1 Hawke’s Bay Conservancy CMS 1994-2004. Appendix 4 ‘Areas with important natural and historical values in the Hawke’s Bay Conservancy’s coastal environment’. Pg 7.

2 Recommended Areas for Protection 22 – Eastern Hawke’s Bay Ecological District. Pg 81.



Figure 79: Clear difference in grazing regime

Hydrological

The Parimahu basin appears to have interconnected wet areas within the sand dunes due to its low-lying position.

Perceptual Memorability

The remaining dune patterns and processes at Parimahu are a memorable natural feature which is elevated by the containment of the basin.

Legibility/Expressiveness

Dune patterns and wetland systems are clearly legible at Parimahu.

Transient

The transient influences along the coast include onshore/offshore winds, sea spray and coastal birds.

Aesthetic

The composition of the basin and mosaic of interconnected wetlands produce a coherent feature which has a high aesthetic value.

Naturalness

The perceived naturalness is reduced at Parimahu due to the degraded vegetation and ongoing grazing, however the wetland system and surviving native species are still ecologically important and illustrate natural processes.

Associational Shared/Recognised

Recognition of the ecological values associates with this wetland system. There is a lighthouse located within this ONF at Blackhead Point which increases its prominence as a recognised landmark.

Recreational

This is private land and there are not opportunities for public recreation.



Figure 80: Lighthouse at Blackhead Point



Parimahu
1:15,000

Historical

Parimahu was the southern coastal extent of the Waipukurau Block (Hapūku's Block), which was purchased by Donald McLean, the Government Lands Purchase Commissioner, on 4 November 1851. This would have included the land north east of a line running inland from Blackhead Point. The remaining area of this ONF would have been within the Pōrangahau Block sales of 1858/1859.

A European grid settlement was surveyed at Parimahu, however this never eventuated. The proposed settlement layout is now one of the Cultural Redress Properties, referred to as 'Blackhead Property', under the Heretaunga Tamatea Claims Settlement.

The Parimahu settlement (approximately 2km west of this identified ONF area) was part of the coastal highway for Māori and then also for early European. The Parimahu area would have been where the inland walking route from Kairakau once again joined the coastline.

Tangata Whenua

Parimahu is highly valued by tangata whenua with two recorded pā sites and evidence of considerable occupation. This area is located along the transpeninsular route stretching from Cape Kidnappers to Cape Turnagain which is plentiful in Māori archaeological sites. The coast has always been significant as a traditional food gathering area, as a source of cultural materials and as a place of cultural significance (historical and legendary).

This area is was retained within the possession of Te Angiangi, despite the gifting of land further south to Manuhiri (between Rangitoto Pā and Taurekaitai/Pōrangahau River) and Te Whatuiapiti (Refer to Tangata Whenua Section of 'Pourerere, Aramoana and Blackhead Coastline' above).

Key Characteristics

There is a very high landscape values due to the landform containment created by the basin, in conjunction with the naturalness exhibited by this contained coastal wetland which holds significant ecological values.

There are also very high cultural values associated with this area.

Potential Issues

The potential issues relating to Parimahu primarily include earthworks (e.g. for drainage) and exotic forestry plantations. To maintain the natural process, maintain free of productive plantations and buildings within the ONF area.

This area does hold cultural significance and any proposed activity within the ONF should not compromise these features or values. This is most likely to occur through built development and earthworks.

Browsing of this wetland system (domestic or wild) should be deterred as it will compromise regeneration and result in the loss of indigenous vegetation.

Potential Response

- Maintain and enhance indigenous vegetation throughout the ONF.
- Discourage establishment or spread of exotic plants
- Discourage grazing, particularly by cattle or large animals
- Discourage earthworks
- Discourage built development
- Discourage development which would destroy cultural features/values and Restrict development which could compromise cultural features/values.



Figure 81: Parimahu Dune System



Figure 82: Parimahu Wetland System

Porangahau Foredune and Estuary

Identification:

Outstanding Natural Feature

Location:

NZ Topo 50 – BM 39 & BM 38

Description

A 13km long beach system bound between the headlands of Blackhead Point and Te Paihare Point.

Natural Science

Geological/Geomorphological

This is where the Pōrangahau River (Tāurekaitai River) meets the ocean, the best regional example of a longshore sand bar has been formed. This dune system is recognised by both the District (CHB) and Regional (HBRC) Council's Plans as being part of the DoC Recommended Areas for Protection¹. This estuary (river mouth barrier system) is also recognised by the NZ Geopreservation Inventory as Regionally Significant.

The sand deposited within this embayment has been primarily transported up the coast from Wairarapa in the south, with additional sediments having been deposited by the rivers and streams which join the coast here.

The Taikorai Rocks (also known as Twin Rocks) are located approximately 1km off shore along the northern half of Pōrangahau Beach.

1 Recommended Areas for Protection 22 – Eastern Hawke's Bay Ecological District

Ecological

The Pōrangahau Estuary has a national priority rating for conservation². The flora on the foredune is dominated by marram grassland (*Ammophila poaceae*) with *Spinifex sericeus* and pingao (*Ficinia spiralis*). The dune flats have; sand sedge (*Carex pumila*), *Juncus gregiflorus*, marram (*Ammophila arenaria*), *Scirpoides* and *Leptocarpus* with some haretail, melilot, *Olearia solandri*, *Cassinia leptophylla* and pampas. The dune ridges are predominantly marram grassland and *Scirpoides* with some pingao, sand Coprosma, spinifex and sand pimelea.

Although the coastline has been highly modified, Pingao (*Ficinia spiralis*) is present at various sites across the Pōrangahau sand dunes. This native species, that is typically found on the seaward faces of coastal foredunes, is endangered (listed as 'at Risk, Relic') and is threatened by browsing/trampling by stock (cattle, sheep, possum, rabbits etc) and competition by other exotic sand binding plants (e.g. marram grass). Pingao is considered to be one of the most important native sand binding species and is capable of growing closer to the shoreline than any of the sand binder. This plant also provides a nesting habitat for the rare New Zealand dotterel and New Zealand pipit, while providing a food source for several species of moth and butterfly³.

2 Hawke's Bay Conservancy CMS 1994-2004. Appendix 4 'Areas with important natural and historical values in the Hawke's Bay Conservancy's coastal environment'. Pg 7, (Partridge, 1992).

3 <https://www.landcareresearch.co.nz/science/plants-animals-fungi/plants/ethnobotany/weaving-plants/information-sheets/pingao>



Figure 83: Pōrangahau Sand Bar and Estuary



Porangahau Foredunes
1:100,000

The estuary is an important habitat for migratory waders and is considered to have the least modification of any other estuary on the east coast of the North Island, south of Okiwi Harbour (Bay of Plenty). The estuary (and Parimahu Wetlands located to the north of this area) is recognised as a nationally significant wildlife habitat and holds the largest concentrations of wrybill (*Anarhynchus frontalis*) and banded dotterel (*Charadrius bicinctus* – threatened species) in the Hawke’s Bay Region.

The estuary is also used as a stepping stone for a number of other migratory birds⁴ that provides a roosting, feeding and breeding area. It is also an important habitat for native fish species (e.g. flatfish, kahawai, eels, whitebait, shellfish crabs and estuarine invertebrates) and has been recognised as a wetland of national importance to fisheries⁵ (MAF Fish 1987 Category A – Outstanding). In conjunction with the adjacent Sand Plain and Parimahu, this area also provides an important habitat for a characteristic range of sandy shore invertebrates and also lizards (skink and gecko)⁶.

Hydrological

In behind this sand bar the Pōrangahau River (Tāurekaitai River) flows into the Pōrangahau Estuary. This ONF area is influenced by the tide and river levels, as it is located on the inland edge of Mean High Water Springs (MHWS).

Perceptual Memorability

Memorable section of Central Hawke’s Bay coastline for this extensive longshore bar formation and frontal dune patterns. The dynamic coastal process littoral drift have created a unique feature for the District.

Legibility/Expressiveness

The dune patterns are clearly legible along this coastal edge.



Figure 84: Dune System

4 Hawke’s Bay Conservancy CMS 1994-2004. Appendix 4 ‘Areas with important natural and historical values in the Hawke’s Bay Conservancy’s coastal environment’. Pg 7.

5 Hawke’s Bay Regional Coastal Plan June 1999, pg 155.

6 Recommended Areas for Protection 22 – Eastern Hawke’s Bay Ecological District. Pg 81.

Transient

The transient influences along the coast include onshore/offshore winds, sea spray and coastal birds.

Aesthetic

The extensive linear nature of this feature demonstrates a large scale active coastal edge with dynamic erosion processes clearly visible, particularly when viewed from the beach. The dune and estuary feature combination add to the aesthetic appreciation.

Naturalness

There is a high degree of perceived naturalness in terms of geological visibility and coastal processes. There is a higher degree of natural processes evident along the Pōrangahau Foredune and Estuary than at the adjacent Inland Dunes because of the dominance of coastal features and landform.

Associational Shared/Recognised

Coastal dune systems are recognised as an important and diminishing resource throughout the country. The inland dunes at Pōrangahau have been diminished by farming activities which has reduced the intact dune system to a narrow strip along the estuary edge.

Recreational

Coastal areas recognised for recreational purposes and kai moana. Activities include; swimming, surfing, fishing, water sports, diving, and as traditional source of kai moana. Walking tracks, horse trekking and the occasional polo game are also recreational activities that take place in this ONF.

Historical

In 1894 a bridge was built at Pōrangahau by the local road board to allow easier access for trade up and down this portion of coastline. The bridge replaced the a ferry service which had operated since 1889 charging 1 shilling per person to cross⁷. This ONF would have been within the Pōrangahau Block sales of 1858/1859.

A schooner named the Maroro came ashore, on 25 October 1927, at the northern end of Pōrangahau Beach after being wrecked on the Blackhead Reef. The ship came ashore intact and all crew were safe. The wreckage had been buried under sand dunes for decades and was exposed in 2015 by Cyclone Pam. More information on the Maroro can be found at the Central Hawke’s Bay Settlers Museum, which have the Maroro’s anchor, bell and steering wheel on display.

7 Road to Porangahau, pg 17



Figure 85: Newspaper clipping of the Mororo Shipwreck www.ketechb.co.nc - 117 shipwreck at pōrangahau



Figure 86: Photo of the Maroro Shipwreck from Omakere School Newsletter 1 April 2015

Tangata Whenua

Pōrangahau Beach (foredune and estuary) is of great significance to tangata whenua with a rich history of Māori settlement which is centred on the resource of the estuary and ocean, but also holds significance in terms of historical and legendary events. This area is part of the transpeninsular route stretching from Cape Kidnappers to Cape Turnagain and has many archaeological sites, vast shell middens in the dunes, fishing sites, pā sites surrounding the estuary and has also provided the first records of moa hunter occupation in the North Island.

This important resource of the river, estuary and coast was protected by Pitapitawai Pā on the sand spit (called Pukepuketauhinu) east of the lagoon, with a further four pā located between the Pōrangahau township and river mouth. These were Te Makahue Pā, Te Manga Pā, Oreorewaia Pā and Kahotai Pā.

In one version of the Māori legend regarding Kupe and the octopus (Te Wheke o Muturangi - the octopus of Muturangi), it is said that Kupe fought with the octopus at Pōrangahau during the journey down the length of the East Coast of the North Island (with the battle ending further south in the Marlborough Sounds).

One of the most important events in the southern East Coast oral tradition is that Pōrangahau was one of the later stops of the Takitimu Canoe which left Hawaiki under the command of Tamatea-arikunuihe.

The river (Tāurekaitai River/Pōrangahau River) has also been geographic marker for ownership, with Te Angiangi gifting the land south of the river, down to Akito, to Te Whatuiapiti. The land north of the river up to Ngapunawaitai [Assumed to be a stream just south of Rangitoto Pa], was also gifted by Te Angiangi to Manuhiri, which has later been ongifted and is within the Ngāti Kere Rohe.

The Pōrangahau stretch of coast (Pōrangahau taiapure) remains an abundant source of kaimoana for Ngāti Kere, a coastal hapū of Ngāti Kahungunu iwi, who uphold their mana through the prestige of being able to provide kaimoana for visitors.⁸ These waters (as defined by a line drawn between Blackhead Point (Parimahu) and Cape Turnagain) were established as Te Taonnga o Ngāti Kere (The treasure of Ngāti Kere) in 1992.

There are two rocks approximately 500m offshore (just east of the northern extent of the estuary) that are wāhi tapu and known as Taikorai Rocks.

⁸ Wakefield and Walker 2005 – Referenced in Māori methods and indicators for marine protection



Figure 87: Aerial Photo of Taikorai Rocks

The native dune sedge pīngao (*Ficinia spiralis*), otherwise referred to as Pikao, has bright orange leaves which were commonly used by Māori for weaving tukutuku (decorative panels in meeting houses) and kete (baskets).⁹ The legend associated with pīngao is as follows;

In the beginning of time there was a great conflict between Tane Mahuta, God of the Forest, and his brother Takaroa, God of the Sea. Takaroa was jealous of Tane Mahuta's success in separating Ranginui, the Sky Father from Papa-tu-a-nuku the Earth Mother. Tane Mahuta tried to end the warring between them and as a sign of peace plucked out his eyebrows and gave them to Takaroa. Takaroa's jealousy was so great that he could not find it in his heart to forgive Tane, and threw the eyebrows back onto the shore. There they grow today as Pikao [pīngao], the Golden Sand Sedge, as the boundary between the forest and the sea, and in his continuing anger, Takaroa is still fighting against the domains of Tane Mahuta.¹⁰

Approximately 9ha of land along the foredune at the northern end of Pōrangahau is one of the Cultural Redress Properties, referred to as 'Parimahu Beach Property', under the Heretaunga Tamatea Claims Settlement.

Key Characteristics

Very high landscape values derived from the geomorphological process resulting in an extensive longshore sand bar and the resulting ecological values (flora and fauna) of the dune system/estuary. This is a dramatic coastline which has a very high level of expressiveness and aesthetic values, along with very high cultural values associated with this stretch of coastline.

Potential Issues

The potential issues relating to this area include earthworks (e.g. for drainage) and exotic forestry plantations. To maintain the natural process, maintain free of productive plantations and buildings within the ONF area.

Domestic stock and off-road vehicles are considered to be the main cause of disturbance along the dunes, which threatens Pingao and the wider biodiversity of the area. The estuary and foredunes are vulnerable to domestic stock and weed invasion, while the control of rabbit's and marram grass would also be beneficial. Exotic plants such as marram grass, pampas and wilding pines may

⁹ <https://teara.govt.nz/en/photograph/4827/plants-of-the-sand-dunes>

¹⁰ <https://www.doc.govt.nz/about-us/science-publications/conservation-publications/native-plants/pikao-or-pingao-the-golden-sand-sedge/cultural-significance/>

displace other native sand binding plants (e.g. pingao and spinifex), while mammals (e.g. rodents, mustelids, cats, dogs and hedgehogs) are an ongoing threat to native fauna (e.g. birds and lizards) and terrestrial invertebrates. There is an opportunity here for ecological restoration.

Any proposed activity within the ONF should be keenly aware of the historic cultural features/activities and not have adverse effects on these values. This is likely to occur through built development and earthworks.

Potential Response

- Maintain and enhance indigenous vegetation throughout the ONF.
- Discourage establishment or spread of exotic plants
- Discourage grazing, particularly by cattle or large animals
- Discourage earthworks
- Discourage built development
- Discourage development which would destroy cultural features/values and Restrict development which could compromise cultural features/values.

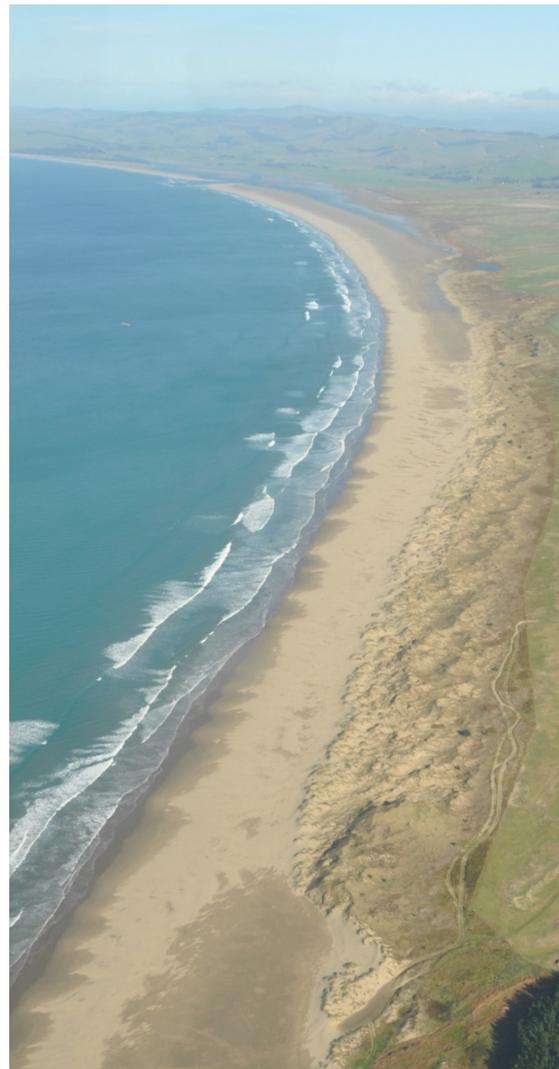


Figure 88: Aerial Photo of Pōrangahau Coastline



Figure 89: Aerial Photo of Pōrangahau Estuary and outlet

Whangaehu Coastal Cliffs

Identification:

Outstanding Natural Feature

Location:

NZ Topo 50 – BM 38

Description

Coastal Cliffs south of Pōrangahau to the District's Southern Boundary.

Natural Science

Geological/Geomorphological

The cliffs along this portion of coastline are formed from Eocene mudstone with bentonitic weathering¹, while south of Whangaehu a limestone cap has protected the underlying siltstone and this produced a system of sheer coastal (papa) cliffs which are steeper than those cliffs north of Whangaehu. The siltstone contains rare fossil crabs².

Ecological

This coastal edge contains dense areas of shrubland and scrub with a portion of this stretch of coastline has been identified in the DoC Recommended Areas for Protection (RAP 26 EHB). This portion includes native shrubland consisting of; *Oleria solandri*, *Ozothamnus leptophyllus*, *Leptospermum scoparium*, *Coriaria spp*, *Austroderia toetoe*, and *Myoporum laetum*.

1 Recommended Areas for Protection 26 – Eastern Hawke's Bay Ecological District. Pg 97.

2 Hawke's Bay Conservancy CMS 1994-2004. Appendix 4 'Areas with important natural and historical values in the Hawke's Bay Conservancy's coastal environment'. Pg 8.

Hydrological

The Whangaehu River is the main watercourse that enters the sea along this section of coast, passing along the southern side of the Whangaehu settlement. The drainage pattern sends the water from the cliffs straight down into the sea, while the catchment from the top of the cliff inland initially works its way inland (away from the cliff formations, before joining either the Whangaehu or Pōrangahau Rivers.

Perceptual Memorability

This section of coastline has visually striking exposed coastal cliffs which are contextually part of the Cape Turnagain coastal landform (although the Cape is beyond the CHB District Boundary.

Legibility/Expressiveness

Clearly expressive of underlying rock type, with exposed faces showing the presence and composition of the sedimentary mudstone.

Transient

The transient influences along the coast include onshore/offshore winds, sea spray and coastal birds.

Aesthetic

The active coastal edge is a prominent illustration of the power of the sea and of nature, with tall cliffs up to one hundred meters or more high climbing steeply from the beach. The light grey colour of the mudstone is reflective and bright in the sunlight, adding to the aesthetic appeal.



Figure 90: Aerial Photo of eroding Coastal Cliffs north of Whangaehu Settlement



Whangaehu Coastal Cliffs
1:10,000

Naturalness

There is a high degree of perceived naturalness in terms of geological visibility and coastal processes. The varied vegetation, with pasture and nearby pine plantations can reduce perceived naturalness, but there is value where native regeneration is occurring or there are naturally exposed surfaces.

Associational Shared/Recognised

There is a coastal Settlement established where the Whangaehu River outlet is located. Approximately 5km inland from this length of coastline is the location of the worlds longest placename.

Taumatawhakatangihangakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu

This translates to “The place where Tamatea, the man with the big knees, who slid, climbed and swallowed mountains, known as landeater, played his flute to his loved one”.

Recreational

Coastal areas recognised for recreational purposes and kai moana. Activities include; swimming, surfing, fishing, water sports, diving, and as traditional source of kai moana.

Historical

Cape Turnagain, which is located beyond the CHB District Boundary, is considered part of the landform at the southern end of the District. This striking exposed cliff system was given the name ‘Turnagain’ by Captain Cook on his first visit to New Zealand in 1769, as it was the location at which he realised that had circumnavigated the North Island.

This length of ONF coastline would have been within the Pōrangahau Block sales of 1858/1859.

Tangata Whenua

The coastline of Central Hawke’s Bay, including the intertidal platforms and the adjacent nearshore reef systems, has always been important to tangata whenua as a source of kai moana for the local community. There is a long history of occupation along this coast with pā situated along the entire length of the Central Hawke’s Bay coast.

The Whangaehu area of immense cultural importance to Ngāti Kere. Approximately 600m inland from the coast, overlooking the Whangaehu township, is the once fortified Tumatauenga Pa. This pā was named after the deity of war and calamity, and belonged to the Paramount Chief of Ngāti Kere and the people of Ngarangiwakaupoko³.

3 Ngāti Kere Rohe Trustees - Cultural Heritage Report, Whangaehu, pg 2.

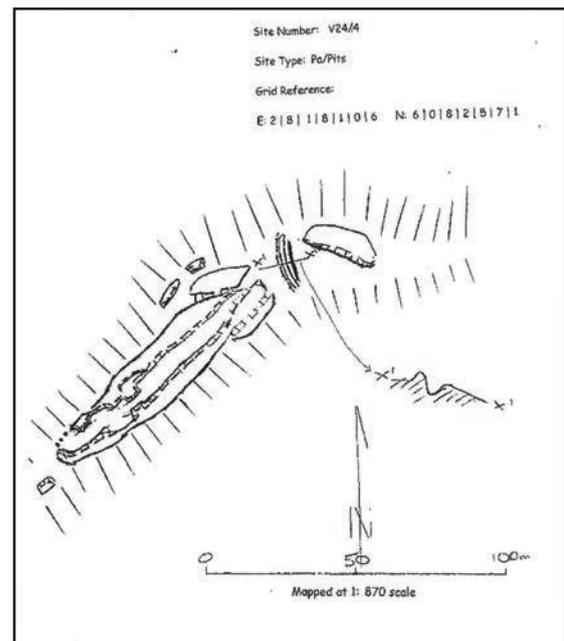


Figure 91: NZAA Site Record Map for Site V24/4



Figure 92: Coastline south of Whangaehu Settlement

Te Aho a Maui is the ancestral term for the headland of Cape Turnagain (just south of Whangaehu and the CHB District boundary). However, it translates to 'Maui's fishing line' and generally applies to the length of coastline extending from Te Aho a Maui (Cape Turnagain) to Te Matau a Maui (Cape Kidnappers or 'the hook of Maui') which includes all of the CHB coastline⁴.

Key Characteristics

Very high landscape values derived from expressive coastal processes, along with the legibility of the mudstone characteristics which are visually striking. Due to the majority of development being concentrated around the settlements, the remaining areas retain a high degree of perceived naturalness for the coastal processes that are underway. There are also high cultural values associated with this stretch of coastline.

Potential Issues

Erosion and loss of vegetation cover may be considered a threat, or may be considered a natural process that reveals the characteristic coastal rocktype and process of the coastal cliffs.

Stock can be seen to graze much of these coastal faces, although this is dependent of the steepness and slipping in individual areas. While the greatest threat to native vegetation establishment on these slopes is the natural erosion process, it is this very process which exposes the papa cliffs and produces such a striking coastal feature.

Any proposed activity within the ONF should be keenly aware of the historic cultural features/activities and not have adverse effects on these values. This is likely to occur through built development and earthworks. .

A serious threat is the potential for exotic forestry to be established on these coastal slopes as this would significantly compromise the perceptual values of these coastal formations. While plantation forestry may temporarily stabilise the slopes, the harvesting process would devastate the natural landform and cause intensive sedimentation.

Potential Response

- Maintain and enhance indigenous vegetation throughout the ONF.
- Discourage establishment or spread of exotic plants
- Limit earthworks
- Limit built development
- Discourage development which would destroy cultural features/values and Restrict development which could compromise cultural features/values.



Figure 93: Aerial photo looking in at Whangaehu Settlement

⁴ Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua - Statutory Acknowledgements pg6.

