

# **COASTAL RESOURCE INVENTORY**

## **FIRST ORDER SURVEY**

### **HAWKES BAY CONSERVANCY**

**Compiled by:**

**P.R. Henriques, H. Binmore, N.E. Grant,**

**S.H. Anderson and C.A.J Duffy**

**Supervised by:**

**COASTAL RESOURCE INVENTORY TASKFORCE**

**Jeremy Gibb  
Helen Menzies  
Rachel Barker  
Elspeth Waghorn**



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TE PAPA ATAWHAI**

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## PREFACE

The Coastal Resource Inventory (CRI) programme is an ongoing project of the Department of Conservation. The programme is organized into First, Second and Third Order Surveys which span the coastal zone of New Zealand. The First Order Survey provides the basis for a national overview of coastal conservation values and is derived from information on the physical, biological and human resources of the coastal zone. The Second Order CRI Surveys will provide regional overviews for each of the Departments Conservancies. Third Order Surveys will provide detailed information at a site specific level for a specific purpose.

The coastal zone covered by the Coastal Resource Inventory is an area bounded by the outer limits of the New Zealand Territorial Sea, 12 nautical miles offshore and the landward limit of marine influence. The latter varies from place to place depending on site specific physical, biological and human factors.

The First Order Coastal Resource Inventory presented here covers the coastal zone of one of the thirteen coastal conservancies of the Department. It is based on existing information compiled by conservancy staff from regional and national databases, published and unpublished reports, limited field surveys and personal or anecdotal information from various experts. The information has been compiled according to guidelines and standards set by the Departments' Coastal Resource Inventory Taskforce.

As one might expect, the First Order Survey has revealed a substantial variation in the quality and quantity of information between Conservancies and also between information categories. In general there is more information about the resources and attributes of the landward part of the coastal zone than the seaward part, especially offshore. Conservancies with large metropolitan centres such as Auckland have more information than the remote coastal areas of New Zealand such as the East Coast. This does not mean that the latter areas are lower in coastal conservation values or resources. Rather, it simply reflects the lack of knowledge and possible directions for further work, so that a balanced national overview of coastal conservation values and resources is eventually obtained.

The First Order CRI provides essential information for managers, planners and users of the coastal zone of New Zealand. The national overview provided by the First Order Survey will be updated from time to time by the Department as new information comes to hand.



**Bill Mansfield**  
**DIRECTOR GENERAL**  
**DEPARTMENT OF CONSERVATION**

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## NATIONAL OVERVIEW

### INTRODUCTION

The Coastal Resource Inventory (CRI) programme was initiated in 1987 as the Department of Conservation's principal tool for breaking the cycle of reactive management that has characterised coastal management in New Zealand in the past. CRI provides important information on the physical, biological, recreational, cultural, historic, archaeological, human modification, uses, protection and threats to the coast.

The First Order Survey consists of thirteen volumes, one from each coastal conservancy (Northland, Auckland, Waikato, Bay of Plenty, East Coast, Hawke's Bay, Wanganui, Wellington, Nelson/Marlborough, Canterbury, West Coast, Otago, Southland). Each volume includes a brief description of the conservancies' coastal zone, a summary of the conservation values, a list of issues of concern and recommendations for further work. The information is described on site sheets and plotted on maps at a scale of 1:250 000 to give a broad, overall impression of the coastal conservation values within each conservancy.

In addition to its primary use for coastal management, First Order CRI information will help identify areas suitable for marine reserves and aid in the advocacy role of the Department at both the national and conservancy level.

#### Mission Statement:

The primary mission of the First Order Survey was:

*"To provide information for the maintenance, enhancement and restoration of natural character and qualities of coasts and their sensitive use."*

The following specific tasks were developed to achieve the mission:

1. *"To identify coasts with important natural, scientific, historic, cultural and spiritual values;*
2. *to identify coasts currently protected and warranting protection;*
3. *to identify coastal conservation values susceptible to existing and potential threats;*
4. *to identify human modification and uses of coasts".*

## INSTRUCTIONS FOR USE OF THE COASTAL RESOURCE INVENTORY

This folder consists of an introduction, summary, site record forms, and maps. The site record form gives written information on each site and is to be used with corresponding maps for that site.

Read the site record form with its corresponding maps by following these steps:

### SITE RECORD FORMS

1. Turn to the site record forms.
2. Find the site number in the top right-hand corner of the page e.g. CRI 01 0001. The number 01 represents a conservancy coastline. Refer to map of New Zealand below e.g. 01= Northland Conservancy. The number 0001 refers to a particular site e.g. Firth of Thames.
3. Each site record form gives written information on the following:

natural values cultural values historic values	}	site of conservation value
--	---	-------------------------------

existing threats  
 human use and modification  
 existing protection

4. Letter codes (a,b,c,d,e,f,g) give detail for each part of the information on the site record form. A key is provided on the maps and the codes are listed in the "Methods" section.

### MAPS

5. Turn to the map index overleaf. The index gives the site number and its corresponding maps.
6. Find the corresponding maps in the second part of the folder.
7. Accompanying the maps are two transparent map overlays:
  - i) CONSERVATION VALUES overlay
  - ii) BASE MAP overlay
8. The BASE MAP and CONSERVATION VALUES overlays are designed to lift out and overlay onto each of the previous pages (i.e. natural, cultural, historic, human modification and use, existing threats, existing protection etc.)
9. To accurately overlay the base map with each page, use register marks which are found on each map.

i.e.  overlays on 

### DEPARTMENT OF CONSERVATION COASTAL CONSERVANCIES

- |                  |                        |
|------------------|------------------------|
| 1. Northland     | 8. Wellington          |
| 2. Auckland      | 9. Nelson/ Marlborough |
| 3. Waikato       | 10. Canterbury         |
| 4. Bay of Plenty | 11. West Coast         |
| 5. East Coast    | 12. Otago              |
| 6. Hawkes Bay    | 13. Southland          |
| 7. Wanganui      |                        |



**MAP INDEX - HAWKES BAY**

<b>Site No.</b>	<b>Map Grp.</b>
0001	8.2
0002	8.2
0003	8.2
0004	8.2 and 7.4
0005	7.4
0006	7.4
0007	7.4
0008	7.4
0009	7.4
0010	7.4
0011	7.4
0012	7.4
0013	7.4
0014	7.4
0015	7.4 and 7.1
0016	7.4 and 7.1
0017	7.1
0018	7.1
0019	7.1
0020	7.1
0021	7.1
0022	7.1
0023	7.1
0024	7.1
0025	7.1
0026	7.1

## METHODS

The information for the First Order Survey has been collated and mapped in six major categories: natural, historic, cultural, existing threats, human modification and use, and existing protection.

### 1. Natural Values:

Information on known areas of physical, biological and ecological value in the coastal zone under the following headings:

- a - High degree of naturalness
- b - Rare/unique species, communities or habitats
- c - Important breeding/feeding/roosting/haulout/nursery areas
- d - Fragile/environmentally sensitive areas
- e - Unique or unusual landforms
- f - Representativeness
- g - Known scientific value
- h - National or international importance
- i - Other

### 2. Cultural Values:

Areas of important Maori and non-Maori cultural values in the coastal zone under the following headings:

- a - Traditional values
- b - Aesthetic value
- c - Landscape (seascape) value
- d - Spiritual value
- e - Educational value
- f - Other

### 3. Historic Values:

Areas of important historic and archaeological value in the coastal zone under the following headings:

- a - Known historic value
- b - Archaeological value - Maori origin
- c - Archaeological value - Non-Maori origin
- d - Shipwrecks and wreck sites
- e - Known national or international significance
- f - Other



## Explanatory Notes

(i) The decision to include the attributes "high degree of naturalness", "representativeness", aesthetic value", "land/seascape value" and "spiritual" value was based on the experience of the data recorder.

The Natural, Cultural and Historic categories of information were combined to form the Conservation Value overlay map, where all features of natural, historic or cultural value were overlaid then amalgamated to form sites of conservation value (Conservation Sites). For each of these sites a brief description was provided on the Site Record Form. The Site Record Form contains details of the conservation values mapped and includes the following three other categories (4-6) that impact on these values:

### 4. Existing Threats:

Threats may be natural or human induced activities that are or have a history of damage or destruction of the coastal resources. Information on the following was collated and mapped:

- a - Erosion, flooding, landslip
- b - Siltation
- c - Noxious and invasive exotic plants
- d - Noxious or farmed animals
- e - Water pollution
- f - Mining
- g - Shore stabilisation works
- h - Aquaculture
- i - Fishing techniques
- j - Spoil and refuse dumping
- k - Recreation
- l - Coastal subdivision
- i - Other

### Explanatory Notes

(ii) The inclusion of "recreation", "mining", "aquaculture" and "fishing techniques" in the "Existing Threats" category was only used where these activities threatened conservation values. It is acknowledged that there are many places where these activities do not pose a threat.

### 5. Human Modification and Use:

Information on the following was collated and mapped:

- a - Land development
- b - Reclamations and causeways
- c - Commercial port areas
- d - Small boat harbours and moorings
- e - Outfalls, major pipelines and cables
- f - Artificial cuts
- g - Beach replenishment
- h - Shoreland-based recreation
- i - Water-based recreation
- j - Traditional Maori use
- k - Other

#### 6. Existing Protection:

Areas of varying protection status in the coastal zone were mapped, including:

- a - National protected areas
- b - Regional protected areas
- c - Local protected areas
- d - Protective zonings
- e - Marine parks
- f - Private protected areas
- g - Voluntary protection of areas
- h - Rahui
- i - Other

#### Evaluating Site Importance

Evaluation of site importance was largely species based using the following criteria: The criteria for fauna (Bell, 1986) and flora (Given et al, 1987 and Wilson and Given 1989) are based on the IUCN Red Data list.

1. If a species of plant or animal is listed as endangered and it is an endemic species, then the place(s) where this plant or animal still remain are of INTERNATIONAL importance.
2. If a species of plant is vulnerable or rare, then the site where it naturally occurs is of NATIONAL importance. Similarly if a species of animal is classified as threatened or rare then the site is of NATIONAL importance.
3. For a species of animal that is classified as threatened regionally only, the site has regional importance.
4. Where sufficient information allowed the Ramsar convention was used to determine site importance in Wellington, East Coast and Bay of Plenty. The Ramsar convention states; *"a site is of international importance if 1% of the total*

*population of a species or subspecies is found there or if the area supports 1% of breeding pairs".*

5. Other information on site importance from the historic or cultural categories which is documented in the literature was also used.
6. The highest level of importance for any category located within a site is given to the whole site.

### **Explanatory Notes**

(iii) The site importance is not a ranking system for the sites. It merely indicates whether there is a feature present at the site which is of known importance. The Conservation Sites identified in the First Order Survey vary considerably in size and importance.

(iv) Wildlife which have an established international conservation status in New Zealand include the terrestrial mammals, birds, reptiles and amphibians and terrestrial arthropods and molluscs. There is no established status list for fish, marine invertebrates and marine mammals. This means that the assessment of comparative site importance in this survey has an unavoidable bias towards the importance of terrestrial wildlife.

(v) Archaeological site information was presented here without comment on its comparative importance. This was necessary because:

(a) authority to assess archaeological site importance under the Historic Places Act 1980 rests with the New Zealand Historic Places Trust, for the purpose of regulating site damage.

(b) No methodology is recognised for assessing comparative importance in a similar manner applied to the other resources described here.

## GLOSSARY

archaeological site	Any place in New Zealand associated with human activity which occurred more than 100 years before that time.
historic place	A place which is associated with the past. This includes archaeological sites, traditional sites, buildings, natural objects and historic areas.
holostratotype	A geological term describing the type section that has become the time definition for a New Zealand stage.
tombolo	A bar connecting an island with the mainland or with another island.
type locality	The place where a geological formation is named, and is typically displayed.
ventifact	Rock cut by wind-blown sand.

## BIOLOGICAL TERMS:

endangered	Species in danger of extinction and whose survival is unlikely if the causal factors continue operating. Included are those whose numbers have been reduced to a critical level or whose habitats have been so drastically reduced that they are considered to be in immediate danger of extinction.
threatened/ vulnerable	Species believed to likely to move into the endangered category in the near future if the causal factors continue operating.
regionally threatened	Where species are considered to be threatened regionally.
rare	Species with small world populations that are not at present endangered or vulnerable, but are at risk. These are usually localised within restricted geographic areas or habitats or are thinly scattered over a more extensive range.
indeterminate	This category is used for plants thought to be extinct, endangered, vulnerable or rare, but for which there is insufficient information to allow allocation to a category.

In New Zealand a category additional to those used by IUCN (International Union for the Conservation of Nature and Natural Resources) has been found useful:

local	This category includes plants not under threat but potentially threatened, and hence deserving some level of monitoring and possibly protection. Included are regional endemics, plants of potentially vulnerable habitats, and species occurring as frequent but small populations.
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endemic	A species which is confined to New Zealand and is not found elsewhere.
endemic subspecies	A subspecies or geographic race which is confined to New Zealand.
introduced	A species which has been transported to New Zealand, and helped establish by humans.

**MAORI****ENGLISH**

hāngi	earth oven
hapū	section of large tribe, clan, subtribe
iwi	nation, people; tribe that traces its history back to a common ancestor
kai moana	food from the sea
kāinga	dwelling place, village
kaitiaki	guardian, keeper
Kaumātua	adult, old man or woman
kōhatu/ toka	stone, rock
mātaitai	food resources from the sea
mahinga mātaitai	the areas from which these resources are gathered
mahinga kai	sites for harvesting kai moana according to tribal customary values
mana	authority, control; influence, prestige, power; psychic force
mana whenua	customary authority exercised by a tribe in an identified area
marae	enclosed space in front of a meeting house, courtyard
mauri	life principle which is latent in all things
midden	Māori shell deposits
moana	sea
Moriōri	tangata whenua of Rēkohu (Chatham Islands)
pā	fortified place
rāhui	control/ restriction (e.g. fishing control)
rūnanga	assembly/ council
taiāpure	area of coastal water set aside under the Maori Fisheries Act 1989 as a local fishery because of its special significance to an iwi or hapū, either as a source of food or for spiritual or cultural reasons
Tangaroa	god of the sea
Tangata whenua	indigenous people
tapu	sacred, forbidden (tapu consists of different levels of prohibitions)
tauranga waka	original canoe landing site
tupuna/ tipuna	ancestor/ grandparent
urupā	burial place
wāhi tapu	sacred site
waka	canoe; supra-tribal grouping
whānau	family

## HAWKE'S BAY CONSERVANCY

### COASTAL RESOURCE INVENTORY FIRST ORDER (STAGE 1)

#### SUMMARY

##### 1.0 INTRODUCTION

This summary of Stage One of the Coastal Resource Inventory outlines information collected for the Hawke's Bay Conservancy coastline.

All the information listed and discussed in the Site Record forms is a collation of existing information under the six categories (refer main report) for the coastline of the Conservancy. Approximately 83% of the coast has been covered by available information, 51% has included field observation and 17% remains undocumented.

Some comment has been made where applicable, on potential threats or proposed protection of areas. However this information is not comprehensive and such issues will be further investigated in the second order survey along with collection of data on the undocumented areas of the coast.

##### 2.0 SUMMARY OF THE CONSERVATION VALUES OF THE COASTLINE

###### 2.1 General Description of the Area

The coastal environment of the Hawke's Bay Conservancy comprises a major portion of the curve of Hawke Bay (all that south of the Waikari River) and the exposed coast from Cape Kidnappers south to Cape Turnagain. Total length of the coastline is approximately 197 km.

The majority of the coastal zone is farmed with few remaining areas of coastal forest. Some areas, such as Cape Kidnappers and along the Hawke's Bay Coastal Walkway, are suffering from accelerated erosion as the result of grazing by stock and feral goats.

However, large areas of the coastline itself are relatively unmodified and provide important habitats for a diversity of biota. Remnants of coastal forest persist at Waipatiki and Cape Turnagain and in the vertical - walled gullies incised in the raised bench of Cape Kidnappers.

Rangaiika and Ocean Beach support dune systems which contain the last significant populations of the threatened native sandbinder plant Pingao Desmoschoenus spiralis in Hawke's Bay.

The Ahuriri, Waitangi and Porangahau estuaries are recognised as wildlife areas of national significance, providing roosting, feeding and breeding areas for common and rare coastal species and they are important feeding grounds for native fish species. Cape Kidnappers has the most accessible mainland gannet colony, while Motu-o-Kura (Bare Island) is a breeding ground for significant numbers of seabirds.

Mangakuri, Blackhead, Pourerere and Waipatiki are high priority marine areas and currently under survey as potential Marine Reserves.

Several features of geological significance occur on the coast. The shores alternate between uplifted cliffed tracts (eg Matangimoemoe) and lowland stretches of drowned coasts (eg Heretaunga). Active upwarping at Matangimoemoe and Cape Kidnappers has resulted in exposure of tectonic features. Cape Kidnappers in particular has high educational value and is extensively used for studies of geology and rocky shore biology. Motu-o-Kura is the only island off the Hawke's Bay Coastline and Karamea and Hinemahanga rocks are ancient Hawaiian Basalt remnants of the subducted Pacific Plate. An excellent example of mass slumping occurs at Aramoana and the Porangahau estuary is the best example of a landshore bar in the region. Overall the coastal landscape is often dramatic and of high scenic value.

The coastline contains many sites of archaeological/cultural interest. Traditionally the coast was visited by the Takitimu Canoe of the Great Migration and eventually settled by Ngati Kahungunu.

Maori occupation of Hawke's Bay was intensive, the rich plains and estuaries providing abundant food, while the southern coast supported excellent intertidal fishing grounds. A number of pa sites occur along the coastline, one of the more impressive examples being the Heipipi site. The transpeninsular route across the Cape and long sandy stretches of Rangaiika, Ocean Beach and Waimarama are particularly rich in Maori archaeological remains and are culturally important.

European settlement of Hawke's Bay was initially confined to the coast, and transport routes were developed along beaches, or along the cliffs. Remains of these routes are still visible in places and portions now form the basis of walkways. As the hinterland was developed for farming, landing places were established for transfer of goods and stock to ships. Whaling stations were also established at Tangoio, Rangaiika, Waimarama and Aramoana.

Table 1

Summary of the First Order CRI Survey, Hawke's Bay Conservancy. Coastline occupied by sites of known and unknown conservation value.

IMPORTANCE	NO. OF SITES	APPROX LENGTH (KM)	% OF COASTLINE
International	1	8.2	4.2
National	15	120.0	60.7
Regional	5	20.5	10.4
Local	5	8.0	4.0
Undesignated	-	7.3	3.7
Unknown	-	33.5	17.0
<b>TOTAL</b>	<b>26</b>	<b>197.5</b>	<b>100.0</b>

## 2.2 Areas Identified as sites of International and National Significance

### 2.2.1 International Significance

#### i) Cape Kidnappers (Site No: CRI 08 0013)

The gannet Sula serrator colonies at Cape Kidnapper are currently the most accessible mainland nesting colonies of gannets in the world. As such they are of international significance (23).

### 2.2.2 National Significance

#### i) Cape Turnagain (Site No: CRI 08 0002)

The spectacular landscape, associated Moa Hunter and Maori pre-history, coastal forest remnants, unique flax hybrid and diverse dune communities make this site of national significance (14, 18, 20, 28).

#### ii) Porangahau (Site No: CRI 08 0004)

The area contains a dune system and estuarine habitats of recognised national importance (15, WERI) as well as being rich in archaeological remains dating back to the Moa Hunter period (8, 21, 28).



## iii) Aramoana/Blackhead (Site No: CRI 08 0005)

The presence of a typically estuarine species assemblage (extensive eelgrass Zostera muelleri beds and migratory wading birds) on a high energy shore of wave cut platforms makes for a unique intertidal zone (11). This, and the evidence of a large pre-European Maori population (12, 21) make this a site of national importance. The intertidal platforms are an important feeding area for the threatened Reef Heron Egretta sacra.

## iv) Tuingara (Pourerere-Aramoana) (Site No: CRI 08 0006)

Several features combine to make this site of national importance. The coastal slump at Aramoana is a geomorphically significant feature (R. Black pers. comm.), complimented by quicksands (3) and intertidal platforms of mudstone and pumice. Intertidally there is an unusual (11) association of extensive beds of eelgrass and migratory waders with exposed, wave cut platforms. In addition to these platforms are important feeding areas for the threatened Reef Heron.

## v) Paoanui (Site No: CRI 08 0007)

The fossil horizon exposed at the northern end of the intertidal platform contains the youngest larger foraminifera so far recorded in New Zealand (27). The intertidal platform also supports the same unusual assemblage of eelgrass and migratory waders found at Tuingara and Aramoana/Blackhead. The first pigs to be introduced to New Zealand were probably those presented to Chief Tuanui at Pourerere by Captain James Cook in 1773 (12, 26). This combination of natural and historic values makes Paoanui nationally significant.

## vi) Mangakuri (Site No: CRI 08 0008)

The same unusual combination of extensive eelgrass beds and exposed wave cut intertidal platforms (11) found at Paoanui, Tuingara and Aramoana/Blackhead occurs at Mangakuri. These distinctive eelgrass beds and their importance to migratory wading birds makes this site nationally important.

## vii) Kairakau (Waimoana-Mangakuri Beach) (Site No: CRI 08 0009)

The Hinemahanga rocks are remnants of the subducted Pacific plate and are recognised as nationally significant geological features (4).

## viii) Waimarama (Site No: CRI 08 0010)

The potential wildlife value of Motu-o-Kura (Bare Island) (19), the geological significance of Karamea Island (4) and the presence of at least 95 archaeological sites (25) makes this area nationally significant.

## xi) Ocean Beach (Site No: CRI 08 0011)

This area contains a significant population of the threatened pingao Desmoschoenus spiralis (10), and the least modified dune system on the east coast of the North Island south of East Cape. These features, and the presence of extensive and numerous archaeological sites (G. Walls pers. comm.) combine to make the area nationally important.

## x) Rangaiika (Site No: CRI 08 0012)

The combination of a relatively unmodified dune system, an unusual dune flora containing rare and locally threatened plant species (10) and the abundance of archaeological sites (25) make this area one of national importance.

## xi) Waitangi Estuary (Site No: CRI 08 0016)

The high diversity of bird species, the presence of good numbers of the threatened Australasian bittern Botaurus poiciloptilus, and the large number of bird species breeding in the estuary (OSNZ) make this site of national importance.

## xii) Ahuriri (Site No: CRI 08 0019)

The record of earth deformation preserved around the estuary following the 1931 earthquake (17), the areas importance to rare bird species (eg: White Heron Egretta alba; Royal Spoonbill Platalea regia; White-winged Black Terns Chlidonias leucopterus) and migratory waders (1), and the abundant pa sites with their associated Maori history combine to make this site nationally significant.

## xiii) Heipipi and Ridge Pa (Site No: CRI 08 0021)

The Heipipi pa is a nationally important example of Ngati Arawa pa construction prior to the general Maori migration (22).

## xiv) Arapaoanui/Waipatiki (Site No: CRI 08 0025)

The combination of nikau Rhopalostylis sapida forest, diversity of coastal and forest bird species, cultural and historical features (6, 30, Parsons pers. comm.) and high public usage, make this a site of national importance.

## xv) Waikare/Moeangiangi (Site No: CRI 08 0026)

The Wairoa Hard Area offshore and the geologically significant Matangimoemoe Bluffs (17, 19) make this site one of national importance. The presence of the Hawke's Bay Coastal Walkway, points of historical interest and wahi tapu (12, Parsons pers. comm.) confirm this value.

## 2.3 Areas Identified as Sites of Regional and Local Significance

### 2.3.1 Regional Significance

(i) Wainui (Site No: CRI 08 0001)

This site contains threatened pingao Desmoschoenus spiralis and banded dotterel Charadrius bicinctus (2,10), and important archaeological remains (26, 27) making it one of regional significance.

(ii) Whangaehu (Site No: CRI 08 0003)

The relatively unmodified shore with its unusual intertidal platform (R. Black pers.comm.), remnant karaka Corynocarpus laevigatus forest (G. Walls pers.comm.) and archaeological significance (26, 27) make this site regionally important.

(iii) Tukituki/Haumoana (Site No: CRI 08 0015)

The use of the estuary as a feeding and roosting area for large numbers of birds (OSNZ), and the presence of rare or threatened species of birds and insects (OSNZ, 7) make this a regionally significant site.

(iv) Napier (Site No: CRI 0017)

Pania and Town reefs, the wreck of the Montmorency, the historical significance of the seawall (25), the cultural aspect of the area (5, 13, 16) and high public use make this a regionally important site.

(v) Tangoio (Site No: CRI 0024)

Pingao Desmoschoenus spiralis on Punakarau Beach (10), the unusual landforms of Whakaari Headland and Te Papa rock, the associated Maori and European history (6, 25, P. Parsons pers.comm.) and the recreational and educational value of the area make it regionally important.

### 2.3.2 Local Significance

(i) Te Awanga-Clifton (Site No: CRI 08 0014)

The presence of interesting native insect communities (7), Maori and European archaeological sites (9) and the Clive Hard offshore (B. Pearson pers. comm.) make this a locally important site.

(ii) Northumberland Shipwreck (Site No: CRI 08 0028)

The wreck's interest to recreational divers makes it locally important.

## (iii) Wreck of the Ida Zeigler (Site No: CRI 08 0020)

The wrecks interest to recreational divers, and the traditional use of the nearby mussel beds by local Maori make this a locally important site.

## (iv) Esk River Mouth (Site No: CRI 08 0022)

The river mouth provides a locally important fishery (24), and the burial grounds at Ararata are of spiritual value to local Maori (P. Parsons pers. comm.).

## (v) Whirinaki Bluff Lagoon (Site No: CRI 08 0023)

The site represents an interesting coastal habitat and aquatic community but disturbance to wildlife by passing traffic and shooting limit its value to local importance only.

2.4 Areas of Undesignated or Unknown Significance

Approximately 83% of the coastline has been covered by available information and field checks during this survey. As a result of this 79.3% of the coastline has had some importance in terms of its conservation values assigned to it. What remains is either of unknown conservation value, due to a lack of existing information (17%), or of undesignated value (3.7%). Undesignated areas are those that are covered by existing information that either indicates the area is of little or no conservation value, or (as is more likely) is insufficient to permit designation of one of the above categories of importance. Investigation of both unknown or undesignated sites must be a priority of future coastal surveys.

2.4.1 Undesignated Significance

(i) Approximately 3.25 km of the coastline between Cape Turnagain and Whangaehu.

(ii) Approximately 1.25 km of coastline between the Tukituki River Mouth and the Waitangi Estuary.

(iii) Approximately 2.25 km of coastline from Napier to Awatoto.

(iv) Although there are two sites of national and four sites of local importance along the coast from Westshore to the mouth of the Pakuratahi Stream, most of the approximately 15 km of the beach and near shore zone of this area remains of undesignated conservation value. It should be noted that only 0.55 km of this contributed to the calculation of the length of coastline occupied by sites of undesignated conservation value presented in Table 1.

### 2.4.2 Unknown Significance

The 17% or 33.5 km of coastline that was not covered by existing information or field checks during this survey is distributed fairly evenly between the areas of known or undesignated importance within the conservancy. The largest gaps in coverage exist between Whangaehu and Porangahau (10 km), and from Kairakau to Waimarama (4.75 km).

Within those areas covered by the survey, a conspicuous absence of data on wildlife and archaeological values of the coastline in the Waikare-Moeangiangi area (Site No: CRI 08 0026) was noted.

Very little detailed or recent information was available on the sub and intertidal habitats or communities found throughout the conservancy.

### 3.0 ISSUES OF CONCERN AND RECOMMENDATIONS

Estuaries and promontories both feature in the Stage I Inventory. Estuaries have traditionally been associated with human activity and therefore their important natural, historic, cultural and recreational values tend to be readily identifiable. Promontories also feature, as they were well suited for defence, and later for the establishment of whaling stations and landing places for coastal shipping (eg Tongoio, Tuingara).

However long stretches of the coastline are "non registering" because of the lack of information or outstanding features. Early surveying of these areas is imperative, as they could be important for reasons inherent in their isolation, and although self protecting to a degree are nevertheless at risk.

Prevalent threats along the coastline are erosion accelerated by deforestation and hinterland farming, stock grazing of sensitive or regenerating vegetation, disturbance and reduction of habitat by recreational pressure, competition with exotic pests, and reduced water quality.

On the coast between Tangoio and Clifton, pollution is a significant factor, with outfalls from major industries and sewage from the Napier-Hastings area being discharged into Hawke Bay.

Active planting of native trees or shrubs should be encouraged and fencing undertaken to impede stock grazing of the remaining areas of regenerating coastal forest and fragile dune systems. Eradication of marram grass Ammophila arenaria on dune systems where Pingao Desmoschoenus spiralis is present, and of Norway rats on Motu-o-Kura should also be a high priority.

Reducing human impact on sensitive coastal areas is needed, but can be difficult to achieve without full public support and appreciation of the issues involved. Some areas of the coast however are showing adverse effects from overfishing, vehicle use on beaches, littering and coastal subdivision, and these problems must be addressed.

The coast is conspicuous in its lack of Coastal Reserves, although locally administered Recreation Reserves are well represented. Certain coastal terrestrial areas warrant some form of protection, namely, Cape Turnagain, Rangaiika, Motu-o-Kura, Porangahau, and the extensive dune system north of Ocean Beach. The status and geography of these areas make this a feasible proposition. There are a number of areas that would make outstanding marine reserves and warrant protection.

Arrangement for protection of sensitive Maori areas is also required, and this should be pursued in consultation with respective tangata whenua.

Finally this is not a definitive study and the benefits of it lie largely in the basis that it provides for further investigation.

#### PERSONAL COMMUNICATIONS

Black, Robin:	Policy Investigations Manager/Geologist Hawke's Bay Regional Council Napier	Telephone: (070) 353164
Parsons, Patrick:	Historian Poraiti R D 2 Napier	Telephone: (070) 442287
Pearson, Brian:	Commercial Fisherman/Former Fisheries Officer 65 York Avenue Tamatea Napier	Telephone: (070) 444470
Walls, Geoff:	Conservancy Advisory Scientist Department of Conservation Napier	Telephone: (070) 350415

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Archaeological sites in the Hawkes Bay Conservancy.

The main source of information is the New Zealand Archaeological Association's site recording scheme, which at present contains some 43 000 site records from throughout the country. The majority of these are coastal. Information has also been gathered from the book The First Thousand Years, edited by Nigel Prickett and published in 1982.

General.

Due to the fact that systematic site surveys in the Hawkes Bay Conservancy are few in number, the pattern of site distribution in this conservancy is less clear than would otherwise be the case. In general, however, the sites tend to concentrate on the coast and up the major river valleys. The coastal distribution of sites is, in part, related to the importance of fishing and gardening as sources of food. Unsurveyed coastal areas are expected to yield sites. Much of the interior hill country has not yet been surveyed. However, sites are expected to occur there.

1. Mohaka - Bay View.

Between Mohaka and Bay View, the narrow coastal strip is backed by steep hills and is dissected by narrow rivers and streams. Only sporadic recording of sites has taken place. Archaeological remains are composed primarily of pa, middens and pits.

2. Bay View - Cape Kidnappers.

Extensive alluvial flats are backed by moderately steep to rolling hill country. The alluvial flats are crossed by two major rivers.

This part of the Hawkes Bay conservancy has had some intensive site survey, especially from Te Awanga to Cape Kidnappers and around the Poukawa Basin. Among the archaeological remains, pa are most prominent, although middens, pits and stone row systems have also been recorded.

3. Cape Kidnappers - Porongahau.

Between Cape Kidnappers and Porongahau, the narrow coastal platform is generally less than 1 kilometre in width and is backed by steep hills and dissected by rivers and streams. Sand dunes are common along this coastal platform.

Some intensive site survey has been conducted between Cape Kidnappers and Waimarama but otherwise only isolated sites have been recorded. Archaeological remains include pa, pits, midden and terraces. Some very interesting archaic sites have been located along the coast but as yet archaeologists have not been able to demonstrate a link between moa and humans despite sand dunes containing a moderate number of moa bones and egg shell.

Such sites occur at Ocean Beach and between Blackhead and Porongahau. On the basis of such finds, it is believed that sand dune areas are likely to be important for determining the relationship between humans and moa in the area.

Compiled by Bruce McFadgen and Ann Williams.

SITE DIRECTORY

## BASE MAP NO. 7.1

SITE		Page (s)
08 0026	Waikare/Moeangiangi	22
08 0025	Arapaoanui/Waipatiki	24
08 0024	Tangoio	27
08 0023	Whirinaki Bluff Lagoon	29
08 0022	Esk River Mouth	31
08 0021	Heipipi and Ridge Pa	33
08 0020	Wreck of the Ida Zeigler	35
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08 0018	Northumberland Shipwreck	40
08 0017	Napier	42
08 0016	Waitangi Estuary	44
08 0015	Tukituki/Haumoana	46

## BASE MAP NO. 7.4

SITE		
08 0014	Te Awanga-Clifton	48
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08 0012	Rangaiika	53
08 0011	Ocean Beach	55
08 0010	Waimarama	57
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08 0007	Paoanui	64
08 0006	Tuingara (Pourerere-Aramoana)	66
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## BASE MAP NO. 8.2

SITE		
08 0003	Whangaehu	73
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# Site Record Forms



Site Name(s): Waikare/Moeangiangi  
 Recorders Name: S H Anderson  
 Map/Grid Ref: W20 28586 62127

Site No: CRI 08 0026  
 Conservancy: Hawkes Bay  
 Date: 220390

#### Brief Description of Site:

This area of approximately 12.5 km of broken cliff coastline, bounded by the Moeangiangi and Waikare Rivers, includes the Matangimoemoe Bluffs where upward warping creates the only irregularity in the smooth curve of Hawkes Bay (1).

Road access to Waikare ends at a parking and rest area at the end of the Hawke's Bay Coastal Walkway, where a track leads to the beach. Access to Moeangiangi is by vehicle track; the coastal walkway provides access to the coastline between here and Waikare.

The beaches are exposed sand/gravel river mouths on a predominantly rocky coastline (2). Some *Calystegia* occurs on the beach, dunes at the cliffbase support *Spinifex hirsutus*; *Scirpus nodus*, *Phormium cookianum* and *Poa anceps* grow on the cliff faces and *Cynodon* turf on the sand terraces (Coastal Sanddune Survey).

The adjacent land is farmed and the coast is used for recreational fishing and diving.

#### Conservation Values:

Natural: b c d e f

Cultural: a b d

Historic: a c b

#### Comment:

1. The waters offshore include the southern limit of the Wairoa Hard Closed Fishing Area. This is a series of low marine ridges of unique sediment mixture comprising gravel, pebbles, 'coral', mud and sand. Big *Mustelus lenticulatus* spawn in the area and it provides an important nursery ground for at least six other species of fish. The area is very sensitive to trawling and is closed to all commercial finfishing and amateur netting (3).

The 400m sandstone bluffs at Matangimoemoe represent the seaward edge of an emergent block, eroded by sea and earthquake activity (4). This rotational Crown scarp is preserved from an earthquake-initiated coastal slip (5).

The rocks are highly fossiliferous.

The indigenous vegetation of the Coastal cliffs, slumps and beaches between Moeangiangi and Waikare includes distinctive representative communities of tauhinu *Cassinia leptophylla*, karamu *Coprosina lucida*, tutu *Coriaria arborea*, manuka *Leptospermum scoparium*, Pimelea, the coastal tussock *Chionochloa flavicans*, *Spinifex*, raupo *Typha orientalis*, *Machaerina sinclairii*, *Gnaphallium audax*, *G. gymnocephalum* and *Senecio banksii* (6).

2. The sheer papa cliffs are a stunning visual feature. A Maori track originally ran along the cliffs close to the edge and is described by Bishop Selwyn (1).

The inshore reefs are traditional kaimoana grounds for the local Maori, and hapuku *Polyprion oxygeneois* 'paddocks' exist offshore (10).

The presence of burial grounds is of spiritual significance to the Maori.

3. 10 hectares of land on the north side of the Moeangiangi River is Maori Reserve and burial caves occur in this vicinity. A Maori cemetery is also located at the Waikare River mouth at Te Kuta (7).

A whaling station was sited at Moeangiangi (8). Both Waikare and Moeangiangi were important outlets for wool shipment (9) and a Landing Reserve originally for trading boats is situated at Waikare. An historic hotel exists adjacent to this Reserve.

#### Site Importance:

International

National

Regional

Local

Unknown

#### Comment:

The Wairoa Hard Area offshore, and the geologically significant Matangimoemoe Bluffs make this site one of national importance. The presence of the Coastal Walkway, points of historical interest and waahi tapu confirm this value.

#### Existing Threats: a d

#### Type and Comment:

Rapid coastal erosion and large slips occur along the soft siltstone cliffs. Stock grazing threatens the beach vegetation at Waikare.

**Human Modification and Human Use: h i j**

A public walkway extends along this coast (NZ Gazette 1981). Commercial and non commercial crayfishing occur, as do recreational paua and finfishing. Flounder and whitebait are taken at the Waikare Rivermouth. The area is a traditional kaimoana ground for the Maori.

**Existing Protection: a****Type & Comment:**

The coastal strip is surveyed Crown land to the clifftops, except the Moeangiangi Block on the north bank of the Moeangiangi River which is Maori Reserve (2).

A boat landing Reserve gazetted in 1915 and administered by DOC exists at Waikare.

The Wairoa Hard has been closed to all forms of commercial finfishing and ammateur netting since 1981 (3). Despite occassional poaching by comemrcial trawlers the recovery of fish stocks inside the closed Fishing Area is reported to be good (B.Pearson pers.comm.).

**Availability of information:**

Natural 1(2)3  
Cultural 1(2)3  
Historic 1 2(3)  
Threats 1(2)3  
Human Mod. & Use 1(2)3

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of information:**

Natural (1)2 3 4 5 6 7  
Cultural (1)2 3 4 5 6 7  
Historic (1)2 3 4 5 6(7)  
Threats 1 2 3 4 5(6)7  
Human Mod. & Use (1)2 3 4 5(6)7

1. Derived info. from existing literature & databases
2. Derived info. as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

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Personal Communication: Brian Pearson (Fisherman), 65 York Avenue, Tamatea, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other Existing CRI files for Hawkes Bay Conservancy. Coastal Sand Dune Survey.
7. None

**Other Considerations:**

There is a conspicuous absence of data on wildlife values for the coast and rivermouth areas. Likewise little information is available on the archaeology of the area.

**Accompanying Maps and Photographs:** Available, DOC Napier



Site Name(s): Arapaoanui/Waipatiki  
 Recorders Name: S H Anderson  
 Map/Grid Ref: W20 28542 62047

Site No: CRI 08 0025  
 Conservancy: Hawkes Bay  
 Date: 220390

**Brief Description of Site:**

This site covers approximately 5 km of steep broken coast with farmed hinterland. A diverse shore reef system and rocky foreshore is backed by flat sand rising to sheer bluffs.

Both Arapaoanui and Waipatiki can be reached by metal road. Waipapa Beach to the north is accessible only via the Hawke's Bay Coastal Walkway.

Waipatiki is enhanced by a Scenic Reserve and serviced by a Recreation Reserve, although road access to the camping ground was washed away in the 1988 cyclone. The wide sand beach was estuarine until the 1931 earthquake.

Arapaoanui is more exposed than Waipatiki, and the beach is composed of coarser sand. The river mouth at Arapaoanui is enclosed by a 1/2 km longshore-bar.

Waipapa Beach has a waterfall and pool.

**Conservation Values:**                      **Natural:** b c f                      **Cultural:** a c e d                      **Historic:** b c

**Comment:**

1. The area is of mod-high natural value (SSW). The Waipatiki Scenic Reserve contains a diverse coastal forest of remnant containing abundant nikau Rhopalostylis sapida, totara Podocarpus totara, karaka Corynocarpus laevigatus and kahikatea Dacrycarpus dacrydioides. The diverse vegetation makes the reserve very important to native birds, particularly those such as, tui Prothemadera novaeseelandiae, pigeons Hemiphaga novaeseelandiae and bellbirds Anthornis melanura that rely on fruits and nectar (1). The estuary contains Spotless crane Porzana tabuensis, breeding White fronted terns Sterna striata, Little shag Phalacrocorax melanoleucos colonies and the increasingly rare Reef heron Egretta sacra (OSNZ). The regionally scarce native insects Epiphryne verriculata, Orocrambus flexuosellus, O pedias and Tingena armigerella depend on remaining native plants for survival; Locusta migratoria and Pericoptus truncatus are also recorded (2).

Large flocks of White fronted terns are found at Arapaoanui, as well as more common coastal birds and nesting Pied stilts Himantopus leucocephalus (OSNZ).

The offshore area from Waipatiki to Waipapa includes small reefs (Q. Bennett, pers.comm.).

At Arapaoanui the sandstone bluffs are highly fossiliferous. An assemblage containing fan shells (Chlamys sp), large oysters, tusk shells (Scaphapoda), large barnacles (Balanus sp), two species of lamp shell (Brachiopoda) and sand dollars (Arachnoides sp), is exposed along the Hawke's Bay Coastal Walkway. Fallen blocks of stone contain casts of ostrich foot (Struthiolaria sp), volutes (Alcithoe sp), and olive shells (Amalda sp), as well as a surf clam (Paphies sp; Dosinia sp) assemblage (C Duffy pers.comm.).

2. School parties frequently use the area for the study of rocky shore biology (4).

The intertidal area is a traditional shellfishing ground for the Maori (5); tarakihi Nemadactylus macropterus, moki Latridopsis ciliaris, snapper Pagrus auratus and hapuku Polyprion oxygeneios 'paddocks' also existed offshore (6).

James K Baxter has published a poem entitled "Waipatiki Beach" (7).

The sea cave and pool at Waipapa was used by stockdrovers to shelter and water their horses (8).

The beaches, coastal forest and limestone bluffs give this area a distinctive visual quality.

Some legends are attached to the area, one relating a battle being lost by Taraia of the landed Takitimu canoe, where his wife climbed onto a rock and urged the side onto win (P. Parsons, pers.comms.); another of the Maori maiden Hariata who stood at a high point between Waipatiki and Arapaoanui to sing waiata and look down on the dwelling of her lover at Waikoau (6). Makaro, son of Te Hunga of the Takitimu canoe was reputedly installed as custodian at Arapaoanui.

3. Fortifications on the north side of the Waipatiki River outlet date back to the Te Kooti era (1860) (P. Parsons, pers.comm.).

A pa site with adjacent middens and terraces lies between the Domain and Reserve. Another ridge pa at the Arapaoanui River mouth with associated pits, middens and terraces suggests the area was well populated in pre-European times (HPT). Arapaoanui was also a landing place for wool shipments (3), and two settlers graves remain just north of the river mouth.

Traces of an important maori foot track, subsequently used by European Settlers, are found in the Waipatiki Scenic Reserve (1).

**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**

**Comment:**

The combination of nikau forest, diversity of coastal and forest bird species, interesting marine habitat, cultural and historical features, and high public usage recommends this site as one of national importance.

**Existing Threats: e d k c****Type and Comment:**

Water pollution is a problem in the Waipatiki Lagoon, where the faecal coliform level has been seven times that recommended for bathing (Hawkes Bay Catchment Board). The cause of this is probably agricultural runoff and septic tank seepage (DSIR test 1986).

Browsing by feral goats is a serious problem in both the Waipatiki Recreational and Scenic Reserves. Possum browsing causes canopy damage in the Waipatiki Scenic Reserve, and cattle and sheep graze the backshore zone at Waipatiki and Arapaoanui (1).

Exotic pines (*Pinus radiata*) present the major weed problem in the Waipatiki Scenic Reserve, occupying an area of 1.3 ha (1). Blackberry occurs in the forest remnant within the Waipatiki Recreation Reserve (1), and the backshore zone of Waipatiki and Arapaoanui (C Duffy pers.comm).

**Human Modification and Human Use: h i j a**

The Coastal Walkway to the north begins at Arapaoanui. The area is popular for recreational fishing, swimming, diving and picnicking. There is considerable commercial crayfishing and trawling activity. The offshore and inshore areas are important kaimoana grounds for the local Maori (8). Camping grounds exist at Waipatiki.

The adjacent land block is forested to MHW (i.e. no Crown Strip being retained between MHW and the commercial property).

**Existing Protection: a b c****Type & Comment:**

The coastline is part of the National Coastal Walkway and protected by the Crown.

The Waipatiki Recreation and scenic reserves contain important remnants of diverse coastal vegetation but their value is being undermined by browsing of the understory by feral goats (1).

**Availability of information:**

Natural 1②3  
Cultural 1②3  
Historic 1②3  
Threats ①23  
Human Mod. & Use 1②3

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of information:**

Natural ①2345⑥7  
Cultural ①23456⑦  
Historic ①23456⑦  
Threats ①23456⑦  
Human Mod. & Use ①2③45⑥7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Walls, G (1986): Biological Survey of Scenic and Allied Reserves, DSIR provisional report series for Departments of Lands and Survey, and Conservation; held on file DOC, Napier.
2. Davies, T (1986): A Checklist of the Arthropoda from Hawkes Bay, New Zealand Royal Forest and Bird Protection Society Community Service Project, Napier.
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6. Guthrie Smith, H (1921): Tutira: The Story of a NZ Sheep Station. William Blackwood and Sons Ltd, Edinburgh and London. 2nd edition 1926, 3rd edition 1953).
7. Baxter, J.K (1969): The Rock Woman: Selected Poems. Oxford University Press, London.
8. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Hawke's Bay.

Personal Communication: Quentin Bennett (diver), 20 Napier Terrace, Napier  
 Personal Communication: Clinton Duffy, Protection, Use, Advocacy, DOC, Napier  
 Personal Communication: Patrick Parsons (historian), Poraiti, R D 2, Napier

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**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI grid no: 43/36 (Waipatiki Domain Bush, Stream mouth, Scenic Reserve; Aropoanui Station Scrub)
3. PNA
4. Geopreservation
5. HPT County Inventories Hawkes Bay County Archaeological sites W20/, 1, 2, 10, 12, 13 Maori Record Status C
6. Other Coastal Sand Dune Survey. Existing CRI files DOC, Napier.
7. None

**Other Considerations:**

It is recommended that the existing Waipatiki Scenic Reserve fence be replaced with goat-proof fencing or that regular culling occur. Possum control should be ongoing in order to prevent serious canopy damage, and the large pines felled. The adjacent areas of native forest to the northeast and southwest should be considered as a valuable additions to the Reserve.

The forest remnant, and the valley floor-hillside sequence within the Waipatiki Recreation Reserve is biologically and visually important enough to warrant "Scenic" rather than "Recreation" classification. It complements the nearby Waipatiki Scenic Reserve and could be managed in conjunction with it (1).

Human impact from recreational overuse of the area should be minimised.

The small reefs in the area from Waipatiki to Waipapa offer good diving (Q Bennett, pers.comm.) and the area is considered a potential marine reserve site (DOC files, Napier).

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**Accompanying Maps and Photographs:**

Available, DOC Napier

Site Name(s): Tangoio  
 Recorders Name: S H Anderson  
 Map/Grid Ref: V20 28495 62001

Site No: CRI 08 0024  
 Conservancy: Hawkes Bay  
 Date: 230390

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**Brief Description of Site:**

The Tangoio coastline is of high undulating sea cliffs cut by marine erosion. The site extends for approximately 5km from the long sandy Punakarau Beach, including a crescent of gold sand and the Whakaari headland, to the mouth of the Te Ngaru stream. There is a road to the shingle beach at Tangoio, and access to the remaining coastline is by foot. The hinterland is farmed, with some holiday houses present.

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**Conservation Values:**                      **Natural:** b d e                      **Cultural:** a e                      **Historic:** b c  
**Comment:**

1. The Whakaari Headland 'tombola' is a distinctive landform, as is the extensive flat rock Te Papa to seaward. The threatened native sandbinding species Pingao Desmoschoenus spiralis, valued for Maori weaving exists on Punakarau Beach (1). The sand dunes are environmentally sensitive areas.

2. The area is a traditional kaimoana ground. Good mussel beds occur off the mouth of the Te Ngaru Stream (3) pipis Paphies spp at Stringray Bay and Punakarau, and tarakihi/moki (Nemadactylus macropterus/Latridopsis ciliaris) fishing 'paddocks' offshore (4).

The Headland was originally a Maori Reserve of 10 acres but has since fallen into European use. It was an early canoe landing site, and a rock visible at low tide off the Te Ngaru Stream mouth is the anchor stone of one of the first canoes landing to obtain fresh water (P. Parsons, pers.comm.).

A legend associated with the area tells of Tangoio, a vain ancestor so engrossed with his spear throwing that he failed to notice an approaching war party and was killed (P. Parsons, pers.comm.).

The area has educational value for school parties studying shore biology, offering a scope of aquatic fauna, maritime plants, intertidal communities, physical processes and beach zonation (5).

3. Moa bones have been unearthed at Punakarau and the hillside above has traces of kumara pits, adzes and whalebone patu from Maori habitation (2).

A coastal pa was situated on the cliffs above Tangoio with a lookout at Whakaari Headland. When invaded the Maori reputedly appeared like shags perched on the cliff (P. Parsons, pers.comm.).

In 1840 Tangoio was the site of a whaling station, the headland again servicing as a lookout. The 300 kg tripots have since been removed to Napier (2).

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**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**  
**Comment:**

The presence of pingao, the unusual landforms of Whakaari Headland and Te Papa, the associated history, and the educational and recreational value to the public make this a site of regional importance.

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**Existing Threats:** i k f j  
**Type and Comment:**

The uncontrolled building of baches on the foreshore of Tangoio Beach and associated rubbish dumping problem pose a threat to the immediate environment. The Hawkes Bay County Council has required that the baches be removed by 13.5.95 and the allotment be used as a Public Foreshore Reserve.

Vehicle use on the beach is detrimental to the native shore vegetation (Coastal Sand Dune Survey).

A quarry mines the soft limestone above Tangoio Bluff.

**Human Modification and Human Use: a h i j**

The offshore reef system provides good crayfishing and diving.

The coast is also used for swimming, fishing, surfing and picnicking.

The coast is negotiable on foot from Tangoio to Waipatiki (2).

The area is important for Maori shellfish gathering.

A quarry has been bulldozed into the soft limestone above Tangoio Bluff.

Some housing development occurs along the foreshore.

**Existing Protection: a b****Type & Comment:**

The Whakaari Landing Reserve at Tangoio Bluff is Crown Lease. DOC administration of the small neighbouring block of land allows public access for recreation and seafood collection.

The Tangoio Beach Recreation Reserve is located at the northern end of Tangoio Beach and reached by Right of Way from the roadend.

The Coastal Walkway is a strip of Crown Land from MHWM to the clifftops.

**Availability of Information:**

Natural 1 2 3  
 Cultural 1 2 3  
 Historic 1 2 3  
 Threats 1 2 3  
 Human Mod. & Use 1 2 3

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of Information:**

Natural 1 2 3 4 5 6 7  
 Cultural 1 2 3 4 5 6 7  
 Historic 1 2 3 4 5 6 7  
 Threats 1 2 3 4 5 6 7  
 Human Mod. & Use 1 2 3 4 5 6 7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Given. D.R, Sykes, W.R, Williams, P.A and Wilson, C.M (1987): Threatened and Local Plants of New Zealand: A Revised Checklist. Botany Division Report, DSIR, Christchurch.
2. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Hawke's Bay.
3. Pene, D. (1989): Summary of Statement by David Pene Secretary Ahuriri Maori Executive Chairman Waiohiki Marae. Town and Country Planning Appeal No. 597/88, Planning Tribunal Hearing Hawke Bay Water Classification.
4. Guthrie Smith, H (1921): Tutira. The Story of a New Zealand Sheep Station. William Blackwood and Sons Ltd, Edinburgh and London. 2nd edition 1926, 3rd edition 1953.
5. Lane, R: Biology Teacher, Tamatea High School, Napier.

Personal Communications: Patrick Parsons (historian), Poraiti, R D 2, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Hawke's Bay County Archaeological Site V20/27 Whaling Station Record Status C
6. Other Coastal Sand Dune Survey. CRI files.
7. None

**Other Considerations:**

The land tenure of the Whakaari Headland is a contentious issue. The Tangoio Marae have lodged a claim with the Waitangi Tribunal for acquisition of the Whakaari Landing Reserve. Apparently 10,000 acres of land was given to the Crown as settlement while 10 acres was reserved for their own use; however closing of the vehicular access has meant this has lost its identity.

**Accompanying Maps and Photographs:** Available and held at DOC, Napier

**Site Name(s):** Whirinaki Bluff Lagoon  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V20 28462 61976

**Site No:** CRI 08 0023  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The site is a shallow lake of 5 hectares, with approximately 50% open water and 50% raupo Typha orientalis cover, probably a saline lagoon prior to the 1931 earthquake.

**Conservation Values:**  
**Comment:**

**Natural:** f b

**Cultural:**

**Historic:**

This is a representative coastal lagoon of gravel base and almost permanent water retention (except in extreme drought), with a good growth of weed.

The lagoon has been rated of moderate value, providing good habitat for Spotless crane Porzana tabuensis and the threatened Australasian bittern Botaurus poiciloptilus (1), and breeding for mallards Anas platyrhynchos, pukeko Porphyrio melanotus and Grey teal Anas gibberifrons (SSWI). Shoveler Anas rhynchos and dab chick Podiceps rufopectus have also been reported here.

**Site Importance:**  
**Comment:**

**International**

**National**

**Regional**

**Local**

**Unknown**

The site represents an interesting coastal habitat and aquatic community but disturbance to wildlife by passing traffic and shooting limit its value to local importance only.

**Existing Threats:** k m  
**Type and Comment:**

The birdlife is disturbed by visitors passing the wetland.

The raupo has been accidentally fired in the past.

**Human Modification and Human Use: h**

The three private owners of the lagoon shoot it in season.

**Existing Protection:****Type & Comment:**

The lagoon is privately owned and unprotected.

**Availability of information:**

Natural 1 2 ③  
 Cultural 1 2 3  
 Historic 1 2 3  
 Threats 1 2 ③  
 Human Mod. & Use 1 2 ③

**Comment:**

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Sources of information:**

Natural ① 2 3 4 5 6 7  
 Cultural 1 2 3 4 5 6 7  
 Historic 1 2 3 4 5 6 7  
 Threats ① 2 3 4 5 6 7  
 Human Mod. & Use ① 2 3 4 5 6 7

**Comment:**

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

1. Bell, B.(1986): Conservation Status of New Zealand Wildlife. New Zealand Wildlife Service Occasional Publication No.12. Department of Internal Affairs, Wellington.

**Recorded on Existing Databases: Comment:**

1. WERI Name: Whirinaki Bluff Lagoon Date: 6/84 Record No: 128 Grid Ref: V20 28462 61976
2. SSWI Grid No: 43/35 (Whirinaki Bluff Lagoon)
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other Existing CRI files DOC, Napier.
7. None

**Other Considerations:**

It is suggested that the area be negotiated for private protection under covenant.

**Accompanying Maps and Photographs:**

Available, DOC Napier

**Site Name(s):** Esk River Mouth  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V20 28445 61935

**Site No:** CRI 08 0022  
**Conservancy:** Hawkes Bay  
**Date:** 240390

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**Brief Description of Site:**

The site comprises 1.5 km of coastline, including a river mouth and lagoon area providing access to the sea for juvenile fish species.

A small area of wetland exists on the fringes of the lagoon.

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**Conservation Values:**  
**Comment:**

**Natural:** c d

**Cultural:** a d

**Historic:** b

1. The river mouth and lagoon area are important areas for native fish species completing life cycles. Elvers Anquilla spp. smelt Retropinna retropinna, flounder, yellow eyed mullet Aldrichetta forsteri and kahawai Arripus trutta all use the lagoon mouth (1).

2. Maori burial grounds exist at Ararata, on the north side of the Esk River mouth (P. Parsons, pers. comm.). These are waahi tapu and of spiritual value to the Maori.

---

**Site Importance:**  
**Comment:**

**International**

**National**

**Regional**

**Local**

**Unknown**

The Esk River, both upper and lower reaches, provides a locally important fishery, and the burial grounds at Ararata are of spiritual value to local Maori.

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**Existing Threats:** m h e  
**Type and Comment:**

Water extraction by Carter Oji Kokusaki Pan Pacific Ltd (Whirinaki Pulp Mill) takes place at a daily average rate of 15700m<sup>3</sup> from the Esk River. Although controls on water abstraction from the river help maintain a mouth opening by ensuring higher flows, rough seas frequently block the mouth. If blockage occurs at low river levels high fish mortality can ensue (1).

The outfall from the Whirinaki Pulp Mill is situated in the bay.



**Human Modification and Human Use: e h a**

The Esk River mouth is popular for angling, surfcasting and whitebaiting. Recreational use for swimming and picnicking is also high.

The pipeline and effluent outfall from Whirinaki Pulp Mill extends into the bay.

**Existing Protection: c**  
**Type & Comment:**

Esk River Recreation Reserve, Whirinaki.

Beach Recreation Reserve.

Le Quense Recreation Reserve.

**Availability of information:**

Natural 1 2 ③

Cultural 1 2 ③

Historic 1 2 ③

Threats 1 2 ③

Human Mod. & Use 1 2 ③

Comment:

1. Well documented

2. Limited information (general)

3. Little information (if any)

**Sources of information:**

Natural ① 2 3 4 5 6 7

Cultural 1 2 3 4 5 6 ⑦

Historic 1 2 3 4 5 6 ⑦

Threats ① 2 3 4 5 6 7

Human Mod. & Use ① 2 3 4 5 6 7

Comment:

1. Derived info from existing literature & databases

2. Derived info as above & field check

3. Derived from existing maps & aerial photographs

4. Recent DOC survey including sampling & analysis

5. Recent DOC survey excluding sampling & analysis

6. Experience

7. Expert opinion

1. Porter, S (1986): Esk River Instream Low Flow Requirements. Hawkes Bay Catchment and Regional Water Board, Napier.

Personal Communication: Patrick Parsons (Historian), Poraiti, R D 2, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI Name: Esk River Mouth Date: 6/84 Record No: 22 Grid Ref: V20 28444 61934

2. SSWI Grid No: 43/85 (Esk River Mouth)

3. PNA

4. Geopreservation

5. HPT County Inventories

6. Other Existing CRI files DOC, Napier.

7. None

**Other Considerations:**

It is important that provision for wildlife habitat be maintained and catered for in any future planning decision .

Two applications for aquaculture in the area have been submitted to date.

**Accompanying Maps and Photographs:**

Available, DOC Napier.

**Site Name(s):** Heipipi & Ridge Pa  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V20 28430 61930

**Site No:** CRI 08 0021  
**Conservancy:** Hawkes Bay  
**Date:** 240390

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**Brief Description of Site:**

The site is a ridge bearing the remains of several pa. The Heipipi site overlooks the coastal flat at the north end of the Ahuriri Lagoon, and is a hill fort covered with slight excavations; the lack of important terraces and defensive earthworks make the site unique, and likened more to a village. More recent, smaller, fortified pa are situated on the ridge. The surrounding area is developed for housing and agriculture.

---

**Conservation Values:**  
**Comment:**

**Natural:**

**Cultural:** a

**Historic:** b a

Heipipi is the site of a very extensive and important pa built by the Ngati Arawa prior to the general Maori migration, who typically built huge constructions with immense ruas and communicating trenches. The pa was eventually conquered by the strategy of the Ngati Kahungunu who arranged their men to wear dark garments and lie on the seashore in the dawn. The Heipipi tribe taking these for stranded whales descended and were ambushed (1).

The pa has been extensively studied and mapped as an example of a unique construction (2).

Wai-o-hinganga, a smaller fortified pa, existed on the highest hills overlooking Petane.

Kai-mata pa on the cliff above the bridge crossing of the Esk is a fine example of a naturally fortified site. It was surrounded by water and swamp and guarded intensively on the entrance spur. The chief when besieged, defended the pa with such resistance that when he eventually fell into enemy hands they tore him to pieces and ate him raw, hence the name. The chieftaness continued to defend the pa and it was never taken, but her chant of lament from the edge of the cliff bewailing the loss of her husband is well known to this day (3).

The sites are of cultural importance to the Maori.

---

**Site Importance:**  
**Comment:**

**International**

**National**

**Regional**

**Local**

**Unknown**

The scale of construction, antiquity and design of the Heipipi site, and the presence of other culturally important sites make this area one of national importance.

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**Existing Threats:** m l  
**Type and Comment:**

The ridge pas are under threat from residential subdivision.

**Human Modification and Human Use: a j**

The Heipipi site was farmed and giant disking has obscured the surface features.

It is of significant traditional value to the Maori.

**Existing Protection: a  
Type & Comment:**

The Heipipi site has been acquired by DOC.

**Availability of information:**

Natural 1 2 3

Cultural 1 ② 3

Historic 1 ② 3

Threats 1 ② 3

Human Mod. & Use 1 ② 3

Comment:

1. Well documented

2. Limited Information (general)

3. Little information (if any)

**Sources of information:**

Natural 1 2 3 4 5 6 7

Cultural ① 2 3 4 5 6 7

Historic ① 2 3 4 5 6 7

Threats ① 2 3 4 5 6 7

Human Mod. & Use ① 2 3 4 5 6 7

Comment:

1. Derived info from existing literature & databases

2. Derived info as above & field check

3. Derived from existing maps & aerial photographs

4. Recent DOC survey including sampling & analysis

5. Recent DOC survey excluding sampling & analysis

6. Experience

7. Expert opinion

1. Buchanan, JDH (1973): The Maori History of Place Names of Hawkes Bay. A.H & A.W Reed, Wellington.

2. File 6/13/1/1: Archeological Reports : Department of Conservation, Napier.

3. Nicols, D. (1937): Tales of Pioneer Women. Second Edition, pp 60-64. New Zealand Country Women's Institute.

**Recorded on Existing Databases: Comment:**

1. WERI

2. SSWI

3. PNA

4. Geopreservation

5. HPT County Inventories Hawke's Bay County Archaeological Sites V20/8-18, 30, 31 Maori Record Status C

6. Other Relevant files, Department of Conservation, Napier.

7. None

**Other Considerations:**

The Heipipi pa site is of national significance being a traditionally important but damaged site and providing historical links with other pa in the region. The archaeological features, recreation and conservation potential, and public access to a reserve with such location and views make this an important acquisition.

The smaller pa, Kaimata, presents a model situation, is accessible and could be rebuilt at little cost for educational purposes.

**Accompanying Maps and Photographs:**

Available and held at Department of Conservation, Napier.

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**Site Name(s):** Wreck of the Ida Zeigler  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V20 28438 61911

**Site No:** CRI 08 0020  
**Conservancy:** Hawkes Bay  
**Date:** 240390

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**Brief Description of Site:**

The Ida Zeigler was wrecked off Bay View in 1869.  
Good mussel beds occur on the reefs off the wreck.

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**Conservation Values:**            **Natural:**            **Cultural:** a            **Historic:** d  
**Comment:**

The shellfish beds were traditionally used by tribes inhabiting strongholds on the ridge above Bay View.

The Ida Zeigler, registered 860 tons and built in Germany 1857 was driven ashore and broken up by heavy southeast seas within a few hours. All twenty-eight crew were saved but only 300 of the total 2,500 wool bales were salvaged. The following day a heavy westerly gale drove everything out to sea, hardly a vestige of the ship or cargo remaining (!).

---

**Site Importance:**            **International**            **National**            **Regional**            **Local**            **Unknown**  
**Comment:**

The wrecks interest to recreational divers, and the traditional use of the nearby mussel beds by local Maori make this a locally important site.

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**Existing Threats:**  
**Type and Comment:**

None

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**Human Modification and Human Use: i**

Local divers use the area.

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**Existing Protection:****Type & Comment:**

None required.

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**Availability of Information:**

Natural 1 2 3  
 Cultural 1 2 ③  
 Historic 1 2 ③  
 Threats 1 2 3  
 Human Mod. & Use 1 2 ③

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:**

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**Sources of Information:**

Natural 1 2 3 4 5 6 7  
 Cultural ① 2 3 4 5 6 7  
 Historic ① 2 3 4 5 6 7  
 Threats 1 2 3 4 5 6 7  
 Human Mod. & Use 1 2 3 4 5 ⑥ 7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Bell, R (1954): Roundaway: the story of a sheep farm. Unpublished. Script held in the historical library Hawkes's Bay Art Gallery and Museum, Napier.

---

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other
7. None

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**Other Considerations:**

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**Accompanying Maps and Photographs:**

Site Name(s): Ahuriri  
 Recorders Name: S H Anderson  
 Map/Grid Ref: V21 28415 61865

Site No: CRI 08 0019  
 Conservancy: Hawkes Bay  
 Date: 240390

#### Brief Description of Site:

The site covers approximately 50 hectares and contains lagoons, ponds, tidal flats, saltmarsh covered islets, channels and poorly drained paddocks. Previously the area was a large estuary; the 1931 earthquake and subsequent reclamations drained it appreciably. The estuary supports a rich diversity of bird and fish species and has been declared a Wildlife Refuge. Being adjacent to the city of Napier it is under constant pressure for development and has already been much modified. It is utilised by the public for both recreational and educational purposes. The area was well populated by the Maori, providing an abundant food supply, and has considerable cultural and historic value.

Conservation Values: Natural: b c e g Cultural: a e Historic: a b c

#### Comment:

1. The estuary is an important breeding and feeding ground for a high number of bird species. Pied Stilt Himantopus leucocephalus nest around the lagoon and occur here in the largest numbers on the East coast of the North Island; White Faced Heron Ardea novaehollandiae and migratory waders feed in the shallower waters, Little Black Shags Phalacrocorax sulcirostris and Marsh Crakes Porzana pusilla occur in substantial numbers. The area is an important non breeding habitat for rarer species such as the Royal Spoonbill Platalea regia, White Heron Egretta alba and, White Winged Black Terns Chlidonias leucopterus, and overwintering smaller waders (4). Waterfowl feed and breed on the outfall channel and ponds and this is one of the main habitats for Grey Teal Anas gibberifrons, Paradise Shelduck Tadorna variegata and New Zealand Shoveller Anas rhynchotis and Harrier Hawk roost here (2). Eleven species of fish use the sheltered waters as a nursery and breeding ground including shortfinned eel Anguilla australis, flounder Rhombosolea spp., greymullet Mugil cephalus and kahawai Aripius trutta (3).

The estuary was raised 2 metres in the 1931 earthquake causing extensive drainage and diverting the main tributary, the Ngaruroro River, south to the Waitangi Estuary. The changing nature of the estuary and adaptive succession of plants and organisms has been monitored closely since (4). The wildlife status of the estuary and immediate threats have also been extensively studied (5).

2. The Takitimu canoe landed at Keteketerau, the original opening to the inner harbour, and anchored at Whareponga where an anchorstone remains. The Ahuriri channel was dug by Tu Ahuriri when the sandbar at Keteketerau blocked the opening and caused flooding (7). These sites mark significant events in oral history and are of cultural value. The Ahuriri estuary is of education value to school parties, who use various areas of it for biological studies (8).

The estuary was declared by the tohunga of the Takitimu canoe to be his personal garden, and held kuku (mussels), cockles Chione stutchburyi, pipi Paphies australis, flounder Rhombosolea spp. and sole Peltorhamphus novaezealandiae in the inner estuary and kura Jasus edwardsii and pipi in the channel. A small Tauranga Waka Reserve remains on the west side of Meanee Quay (Napier City District Scheme 1985).

3. Archaeological remains of Maori origin are numerous. A number of islands in the original inner harbour were fortified pas. At the island pa Upokopoito after a battle of revenge there were so many heads left bobbing in the water they resembled fishing floats. Another island fortified because of its inaccessibility was Parapara, just inside the original outlet and guarding the extensive fishing and shellfishing area. Muskets were first used in Hawkes Bay here by a raiding party exacting revenge and the island population exterminated. At Roro-o-Kuri a murderer seeking refuge at nearby Heipipi Pa was advised to pacify the expected avenging party by killing his dogs and preparing a feast (5). Quarantine Island, Taputerangi, Matawhero, Awaowaha, Tuterahuku and Tirongaha were also island pa.

The Customs House on the inner harbour is a classified historic building (HPT). Two historic beacons also exist north of the airport and are still used for shipping (DOC).

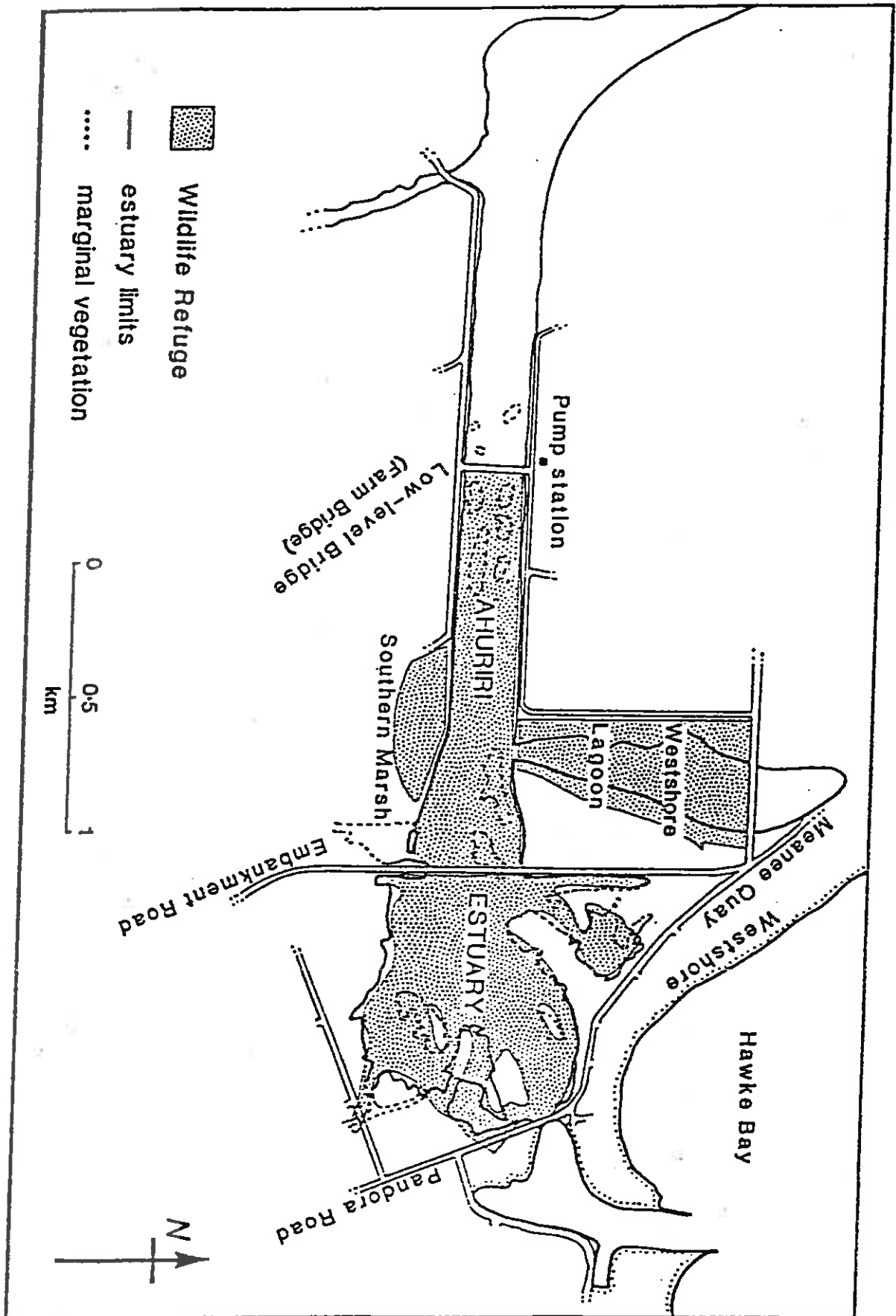
Site Importance: International National Regional Local Unknown  
 Comment:

The dramatic change in landform resulting from the recent earthquake, high wildlife status and cultural and historical attributes make this site one of national significance.

Existing Threats: e j m b c g d f

#### Type and Comment:

The estuary is subject to pollution receiving stormwater runoff and industrial effluent, leachates and leakage from the nearby industrial areas (NCC). Indiscriminate dumping of sawdust has affected the marsh in recent years. Siltation occurs at the entrance to the inner harbour and is periodically dredged. The breakwater here restricts material access to the adjacent beach and causes scouring (9). Metal quarrying on Parapara has considerably reduced the island. Minor algal blooms occur due to nutrient enrichment. Grazing in the vicinity of the southern marsh results in habitat trampling.



**Human Modification and Human Use: f h j a b d g**

The ancestor Tu Ahuriri dug a channel at Ahuriri when the Keteketerau outlet blocked; this has remained the opening for 3 centuries and is periodically dredged. The estuary is used for swimming, fishing, birdwatching, walking and windsurfing. It is a traditional Maori fishing and shellfish gathering ground (10). A section of the land has been developed for the Napier airport. Reclamation and causeways have modified the estuarine area. A natural deep basin just inside the harbour entrance provides berthing for small boats and yachts and is a popular fishing facility. The estuary contains drains and is stopbanked as part of the central flow system (NCDS 1985). As part of the Westshore Beach Replenishment Scheme 1986, material is taken from ponds dug in Westshore Domain and deposited on Westshore Beach.

**Existing Protection: d i c****Type & Comment:**

The middle estuary is an Estuarine Park zone. The estuary between the low level and Pandora bridges, and the Westshore lagoon, are Wildlife Refuges (NZ Gazette 1958). The Watchman Head Reserve of pond and swampland is a natural extension of the adjoining Refuge. The Refuge protection extends only to wildlife and does not include the habitat. A number of historic sites have been classified and are protected under the Historic Places Act 1980. DOC is currently facilitating a management plan for the entire estuary. Various locally protected areas also exist within the site.

**Availability of information:**

Natural ①23  
Cultural 1②3  
Historic 1②3  
Threats ①23  
Human Mod. & Use ①23  
Comment:

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Sources of information:**

Natural ①234567  
Cultural ①23456⑦  
Historic ①23456⑦  
Threats ①234567  
Human Mod. & Use ①234567

1. Derived info. from existing literature & databases
2. Derived info. as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Imber, M.J (1979): Investigation of Wildlife Values. New Zealand Wildlife Service. Report to the Ahuriri Estuary Technical Committee, Napier.
2. Wheeldon, R (1979): Submission to Napier City Council from the Raptor Association of New Zealand.
3. Kilner, A.R, Akroyd, J.M (1979): Fish and Invertebrate Macrofauna of the Ahuriri Estuary, Napier. Fisheries Technical Report No. 153, MAF, Wellington.
4. Olivers, W (1979): The New Vegetation of the Sea Floor raised during the Hawkes Bay Earthquake 1931 - Dominion Museum.
5. Voice, A.J (1978): Resource Evaluation and Management Alternatives : Ahuriri Estuary, Napier. Estuarine Research Unit, Department of Zoology, University of Canterbury, Christchurch, Report No.12.
6. Buchanan, J.D.H (1973): The Maori History and Place Names of Hawkes Bay. A.H & A.W Reed, Wellington.
7. Parson, P: Historian, Poraiti, R D 2, Napier.
8. Shannon, L: Advisory Unit, Ministry of Education, Napier.
9. Town and Country Planning Division, Ministry of Works (1971): National Resources Survey Part VI : Hawkes Bay Region. Government Printer, Wellington.
10. Pene, D. (1989): Summary of Statement by David Pene Secretary Ahuriri Maori Executive Chairman Waiohiki Marae. Town and Country Planning Appeal No. 597/88, Planning Tribunal Hearing Hawke Bay Water Classification.

**Recorded on Existing Databases: Comment:**

1. WERI Name: Ahuriri Estuary Record No: 1 Grid Ref: V21 28515 61843
2. SSWI Grid No: 42/34
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other
7. None

**Other Considerations:**

There have been several Maori claims on the land surrounding and including the Ahuriri Estuary by a number of local Hawkes Bay tribes. The claims cover 3000 hectares including the Napier City Councils lagoon farm, airport and Landcorp farmland just north of the airport. The claim is to be heard by the Waitangi Tribunal (Daily Telegraph 13.3.88)

A proposed motorway over the southern marsh and Ahuriri channel threatens to further modify the estuarine environment.

**Accompanying Maps and Photographs:**

Available, DOC Napier.



**Site Name(s):** Northumberland Shipwreck  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V21 28432 61875

**Site No:** CRI 08 0018  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

This wreck lies off Bay View Beach Napier about 2 miles south of the harbour head beacons in 3-7 metres of water at high tide. Parts of the wreckage break water at low tide but visibility is always poor due to the wreck lying in the surf line (1).

**Conservation Values:**                      **Natural:**                      **Cultural:**                      **Historic:** d  
**Comment:**

The Northumberland was an iron hulled rigged ship wrecked on the 11th of May 1887. It sank after running ashore on Bay View Beach Napier in a severe storm; no lives were lost.

**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**  
**Comment:**

The wrecks interest to recreational divers makes it locally important.

**Existing Threats:**  
**Type and Comment:**

None

**Human Modification and Human Use: i**

The Northumberland is an interesting wreck for recreational and scuba divers to explore.

**Existing Protection:  
Type & Comment:**

None

**Availability of information:**

Natural 1 2 3

Cultural 1 2 3

Historic 1 2 ③

Threats 1 2 3

Human Mod. & Use 1 2 ③

1. Well documented

2. Limited information (general)

3. Little information (if any)

**Comment:****Sources of information:**

Natural 1 2 3 4 5 6 7

Cultural 1 2 3 4 5 6 7

Historic ① 2 3 4 5 6 7

Threats 1 2 3 4 5 6 7

Human Mod. & Use 1 2 3 4 5 ⑥ 7

1. Derived info from existing literature & databases

2. Derived info as above & field check

3. Derived from existing maps & aerial photographs

4. Recent DOC survey including sampling & analysis

5. Recent DOC survey excluding sampling & analysis

6. Experience

7. Expert opinion

**Comment:**

1. Locker-Lampson, S. and Francis, I (1979): The Wreck Book: rediscovered New Zealand shipwrecks. Millwood Press, Wellington.

**Recorded on Existing Databases: Comment:**

1. WERI

2. SSWI

3. PNA

4. Geopreservation

5. HPT County Inventories

6. Other

7. None

**Other Considerations:****Accompanying Maps and Photographs:**

Site Name(s): Napier  
 Recorders Name: S H Anderson  
 Map/Grid Ref: V21 28479 61843

Site No: CRI 08 0017  
 Conservancy: Hawkes Bay  
 Date: 240390

**Brief Description of Site:**

The site includes approximately 7.5 km of the Napier foreshore and two outlying reef systems. The shoreline enclosing the city is much modified and utilised by the public, but scenic and containing features of historical and cultural importance. It also supports a substantial population of overwintering seabirds, and the reefs provide a reasonable fishery.

**Conservation Values:**                      **Natural:** f c b                      **Cultural:** a e                      **Historic:** a c d  
**Comment:**

1. The Pania and Town Reefs are the remains of a system which once spread from the Port to Town Reef, and are a good representation of reefs on the Napier coastline.

The rare insect species Culladia strophaea and the earwig Euborelia annulipes have been collected on the foreshore (1).

Marine Parade supports a large overwintering population (up to 1000) of gulls and terns (OSNZ).

A diverse fossil limestone macrofauna including a unique Ross seal jaw and type locality Phialopectra triphooki have been located on the Bluff Hill face (2).

2. The Hardinge Road foreshore is frequently used by primary school parties for studies of rocky shore biology (4).

Tuhinapo under Bluff Hill is a waahi tapu formerly only approached by the tohunga (5). The port area is traditionally used by Maori for kuku (mussels) and kina (Evechinus chloroticus) collection; Pania Reef is a hapuku (Polyprion oxygeneios) "paddock" (6). A legend associated with the reef tells of Pania, descendant of a sea-dwelling taniwha who went ashore and married, but was lured back to the sea when out diving and bound to the reef (7).

3. The shipwreck of the Montmorency, reputedly set alight by sailors who had fallen in love with local girls and wanted to stay, is visible at low tide on a reef to the east of the pier (3).

The seawall, a solid stone structure built in 1885 and bordering the Napier foreshore along the line where the sea reached before the 1931 earthquake, is classified of high historical importance (HPT).

**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**  
**Comment:**

The presence of the two reefs, a shipwreck, and historically classified site, along with the cultural aspects and high value to the public, make this site of regional importance.

**Existing Threats:** e j  
**Type and Comment:**

Sewage pollution drift from the Napier and Hastings outfalls affects this area. Stormwater outlets also occur along the foreshore.

Spoil dredged from the Port of Napier, comprising large quantities of fine sands and lesser amounts of mud, is dumped in shallow waters offshore from the Port. These are resuspended by swell and local storms and transported south east by weak residual currents (8).

**Human Modification and Human Use: a c j h i**

The foreshore is much modified for recreational use and contains a number of attractions including gardens, a Marineland and Aquarium, restaurants and leisure areas. The shore is used for walking, surfcasting, swimming and small craft sailing.

Pania and Town Reef are both extensively dived, and are also a traditional Maori hapuku fishery. The wharf and adjacent rocky coastline are under public pressure as kaimoana grounds.

The site encloses a port which modifies the surrounding environment by the actions of dredging and breakwaters. Dumping of dredge spoil close to Pania Reef by the Harbour Board has in the past adversely affected marine in this area, and has been discontinued (Hawkes Bay Catchment Board).

**Existing Protection: a c****Type & Comment:**

The sea wall is protected under the Historic Places Act 1980.

A Beach Domain extends along the shore from the Marine Parade gardens.

The foreshore is well endowed with various reserves, including Spriggs Park Reserve and Perfume Park Reserve.

**Availability of Information:**

Natural 1 2 ③  
Cultural 1 2 ③  
Historic 1 ② 3  
Threats 1 ② 3  
Human Mod. & Use ① 2 3

1. Well documented  
2. Limited information (general)  
3. Little information (if any)

**Comment:****Sources of Information:**

Natural ① 2 3 4 5 6 7  
Cultural ① 2 3 4 5 6 7  
Historic ① 2 3 4 5 6 7  
Threats ① 2 3 4 5 6 7  
Human Mod. & Use ① 2 ③ 4 5 6 7

1. Derived info from existing literature & databases  
2. Derived info as above & field check  
3. Derived from existing maps & aerial photographs  
4. Recent DOC survey including sampling & analysis  
5. Recent DOC survey excluding sampling & analysis  
6. Experience  
7. Expert opinion

**Comment:**

1. Davies, T (1986): A Checklist of the Arthropoda from Hawkes Bay, New Zealand. Royal Forest and Bird Protection Society Community Service Project, Napier.
2. Records from Fossil Localities Inventory Hawke's Bay, DOC file 9/1/6 Napier.
3. Stevenson, H.K (1977): Port and People, A Century at the Port of Napier. Hawkes Bay Harbour Board, Napier.
4. Shannon, L: Advisory Unit, Ministry of Education, Napier.
5. McLean, D (1986): The Long Pathway: Te Ara Roa. Collins, Auckland.
6. Pene, D (1989): Summary of Statement by David Pene Secretary Ahuriri Maori Executive Chairman Waiohiki Marae. Town and Country Planning Appeal No. 597/88, Planning Tribunal Hearing Hawke Bay Water Classification.
7. Buchanan, J.D.H (1973): The Maori History and Place Names of Hawkes Bay. A H & A W Reed, Wellington.
8. Hume, T.M and Bell, R.G (1989): Dredge spoil dispersal and shelf sediment transport on the Napier Coast. Abstracts of presented papers, New Zealand Marine Sciences Society annual conference, in NZMSS Newsletter 32: 12-13 (1990).

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Hawkes Bay County Archaeological Site V21/155 European Well Record Status C
6. Other
7. None

**Other Considerations:**

Pania reef is a candidate for protection as a marine reserve, being highly accessible and popular with local divers.

Modification of the means of sewage disposal would improve water quality in the area.

**Accompanying Maps and Photographs:**

Available and held at DOC, Napier

**Site Name(s):** Waitangi Estuary  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V21 28468 61745

**Site No:** CRI 08 0016  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The estuary is a shingle river mouth covering 90 hectares, with small areas of mudflat, saltmarsh, reed and succulent herb swamp. It is moderately populated, being adjacent to the provincial town of Clive, and suffers disturbance from human use. The estuary is fed by the Ngaruroro, Clive and Tutaekuri Rivers and the smaller Muddy Creek tributary. The waters are of well mixed lagoonal type and are an important wildlife area, though threatened by pollutants from nearby industrial outfalls.

**Conservation Values:**                      **Natural:** c b                      **Cultural:** a                      **Historic:** a  
**Comment:**

1. The Waitangi estuary supports a high diversity of bird species. It is an important breeding area for Black fronted dotterel Charadrius melanops, Pied stilts Himantopus leucocephalus and large numbers of White fronted terns Sterna striata, and is one of the few riverbeds outside the South Island with breeding colonies of Black-billed gulls Larus bulleri (OSNZ). The rare White heron Egretta alba and the Little egret Egretta garzetta overwinter on Muddy Creek; a good population of the threatened Australasian bittern Botaurus poiciloptilus also exists (1). Waterfowl breed on the Muddy Creek waterway and Spotted shags Stictocarbo punctatus from Black Reef roost near the sewer outfall (OSNZ). Black fronted terns Chlidonias albostratus overwinter here and many rarer waders have been recorded (SSWI).

2. Oral history tells of the Ngati Kahungunu who, hearing reports of abundant food to the south, trekked to the coast and found the information to be false. Returning famished, Chief Hikauera ordered dogs to be killed to feed the travellers and the offal was thrown into the Tutaekuri River, hence the name (4).

Awatoto, 'the stream of portage' was the point at which canoes landed and passed through to the inland waters of the Tutaekuri.

Taraia of the Takitimu canoe landed in this area and established headquarters during his occupation of Heretaunga (4).

The estuary is a traditional kaimoana ground, supplying flounder and pipi Paphies spp. (5).

3. Posts from the huge totara forest at Tarawera were floated down river to Clive to be caught in a boom (2).

A memorial remains at the Waitangi Estuary to William Colenso, the first missionary in Hawkes Bay. The mission was situated at Kowaharo, an undesirable swamp area of disputed ownership (3).

**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**  
**Comment:**

The high diversity of bird species, the presence of good numbers of Australasian bittern and the large number of bird species breeding in the estuary make this site of national importance.

**Existing Threats:** e f a d k  
**Type and Comment:**

The Napier and Hastings sewage outfalls to either side of the estuary, and the Napier emergency short outfall at Awatoto capable of discharging 100 l/s of wool scour effluents, are obvious threats to the area (Hawkes Bay Catchment Board).

Waste from the Ravensdown Fertiliser works is carried down open drains into the Waitangi Estuary (6).

UEB, Firth, and a Wool and Fellmongery also discharge waste on this coast.

Winstone Aggregates Ltd mine approximately 40000 m3 of shingle annually from the beach at Awatoto (DOC files). Localised beach erosion at Awatoto is due mainly to shingle extraction and a lack of supply of beach material from the south-east. Between the Ngaruroro and Tukituki river mouths coastal erosion has resulted in retreat and lowering of the foreshore. High seas overtop the beach and roll down into the lagoon area behind. There is a risk that the beach will be breached and the groyne work at east Clive and the sewer outfall will become islands (DOC files, Hawke's Bay Catchment Board and Regional Water Board records).

Upstream water abstraction, and channel modifications cause changes in the sedimentation processes.

Trail bikes and fishermen disturb nesting on the estuary. Grazing also presents a threat to the habitat (SSWI).

**Human Modification and Human Use: h i j e a**

The area is used for fishing, swimming, trail bike riding and rowing.

Clive River Domain provides a playing area for the public. The Farndon Park Domain on the Clive River provides sports and recreational facilities.

The area is a traditional Maori flounder and pipi fishing area.

The area contains the Awatoto emergency outfall, and the effluent trench from a fertilizer works.

**Existing Protection: a c****Type & Comment:**

A Wildlife Refuge covers the mouths of the Tutaekuri and Ngaruroro Rivers.

The Napier City Council administers the Upoko Crown Land on the foreshore above the Ngaruroro River mouth.

The Clive River Esplanade Reserve exists on the banks of the Clive, the Muddy Creek Esplanade Reserve on the left bank of Muddy Creek.

The Colenso Memorial Domain commemorates the site of the mission station of William Colenso.

**Availability of Information:**

Natural 1②3  
Cultural 1②3  
Historic 1 2③  
Threats ① 2 3  
Human Mod. & Use 1②3

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of Information:**

Natural ① 2 3 4 5 6 7  
Cultural ① 2 3 4 5 6 7  
Historic ① 2 3 4 5 6 7  
Threats ① 2 3 4 5 6 7  
Human Mod. & Use ① 2 3 4 5 6 7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Bell, B (1986): The Conservation status of New Zealand Wildlife. New Zealand Wildlife Service Occasional Publication No. 12. Department of Internal Affairs, Wellington.
2. Bell, R (1954): Roundaway: The story of a sheep farm. Unpublished. Script held in the historical library Hawke's Bay Art Gallery and Museum, Napier.
3. Wilson, J.G (1939): The History of Hawke's Bay. A H & A W Reed, Dunedin and Wellington (Reprinted by Capper Press, Christchurch, 1976).
4. Buchanan, J.D.H (1973): The Maori History and Place Names of Hawkes Bay. A H & A W Reed, Wellington.
5. Pene, D. (1989): Summary of Statement by David Pene Secretary Ahuriri Maori Executive Chairman Waiohiki Marae. Town and Country Planning Appeal No. 597/88, Planning Tribunal Hearing Hawke Bay Water Classification.
6. Hooper, G (1976): Discharge of process wastes from Ravensdown Fertilisers Coop to the Waitangi Estuary. Internal report Hawke's Bay Catchment and Regional Water Board, Napier.
7. Herald Tribune 22 January 1990.

**Recorded on Existing Databases: Comment:**

1. WERI Name: Waitangi Estuary Date: 7/84 Record No: 123 Grid Ref: V21 28475 61742
2. SSWI Grid No: 43/32
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other Related files DOC, Napier.
7. None

**Other Considerations:**

The Clive River is proposed for an international rowing course (7).

The present Wildlife Refuge status protects the wildlife but not the estuarine habitat. This is under considerable threat from outfall pollution and public disturbance, and further protection measures are recommended.

Present levels of shingle extraction are causing beach erosion at Awatoto and there is concern that these should not be allowed to increase to the maximum allowed by permit (60,000 m<sup>3</sup> pa). Due to sediment trapping occurring at the Tukituki river mouth there is insufficient material available for accumulation against the groyne work at east Clive. However these cannot be extended to trap sediment further offshore as this will aggravate the situation at Awatoto (DOC files, Hawke's Bay Catchment Board and Regional Water Board records).

**Accompanying Maps and Photographs:**

Available, DOC Napier

**Site Name(s):** Tukituki/Haumoana  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V21 28486 61712

**Site No:** CRI 08 0015  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The site comprises a gravel river mouth of 30 hectares with small areas of mudflat and backwaters dominated by Scirpus fluviatile. It is an important wildlife area, supporting high numbers of birds.

It is adjacent to the seaside town of Haumoana, and public use is high.

A number of scarce insect species are recorded in the lagoons and along the foreshore.

**Conservation Values:**

**Natural:** b c

**Cultural:** a d

**Historic:** b

**Comment:**

1. The estuarine habitat is rated mod-high and is an important feeding area for large numbers of gulls, Little black Phalacrocorax sulcirostris and Little shags P. melanoleucos, and smaller numbers of waders and waterfowl (SSWI). The estuary is the main Hawkes Bay roost for the threatened Caspian tern Hydroprogne caspia (1). The rare White heron Egretta alba (1) overwinters here annually and Spotless crane Porzana tabuensis reside in the backwaters (OSNZ).

The lagoons and beach frontage are habitat for a number of scarce and rare insect species. Haumoana is the holotype locality for Tebenna bradleyi and Nicrocheles scedastes. The damselfly Procordulia smithii and numerous moths of restricted distribution including Nymphula nitens also occur here. Other insects of note include members of the caddisfly, cicada and locust families (2). The food plant of Lycaena salustius grew on the beach but was killed by high seas recently; L. boldenarum had a precarious hold until the council filled in the habitat as carpark.

2. Traditional Maori flounder fishing grounds exist north of Haumoana (4). The pa sites are of spiritual value to local Maori.

3. Three pa sites exist near the Tukituki river mouth; Waipukureku, of which there is little remaining trace, Matahiwi where Te Moananui died in 1862, and Te Kauhanga across the river (3).

**Site Importance:**

**International**

**National**

**Regional**

**Local**

**Unknown**

**Comment:**

The use of the estuary as a feeding/roosting area for large numbers of birds, and the presence of rarities of both bird and insect species make this site of regional importance.

**Existing Threats: e a**

**Type and Comment:**

Discharges from the Hastings short and long sewage outfalls pollute the estuary, coastline and offshore waters. The short outfall is situated between the Tukituki and Ngaruroro rivers and discharges 50 m out to sea. The Hastings long outfall is submarine and 2590 m in length. The discharge includes domestic sewage and coloured trade/industrial waste. Approximately 75% of the discharge is industrial waste water used in the freezing, fruit and vegetable processing and wood scouring industries. The short outfall is used for emergency discharge during extremely wet weather and during maintenance to the long outfall (4).

The eastern side of the Tukituki river mouth acts as a natural groyne resulting in some local accretion. This, and shallow water immediately offshore slows passage of shingle north across the river mouth resulting in erosion of the area between the Tukituki and Ngaruroro river mouths (DOC files, Hawke's Bay Catchment Board and Regional Water Board records).

**Human Modification and Human Use: h j f a**

The area is used for fishing, walking and swimming.

A traditional flounder fishing area is located north of Haumoana (4).

The Tukituki River mouth is periodically cut to release impounded water.

The foreshore is modified for residential and recreational use.

**Existing Protection: c d i****Type & Comment:**

The Clive Grange Domain is situated on a shingle bank on the Tukituki mouth and provides access to the beach.

A large block of land between the Clive and Tukituki Rivers is reserved for river conservation.

Cavell Park is utilised by the public.

A Coastal Protection Zone has been developed prohibiting new building within a specified area.

The Tukituki is a Closed Game Area.

**Availability of Information:**

Natural 1 2 3  
 Cultural 1 2 3  
 Historic 1 2 3  
 Threats 1 2 3  
 Human Mod. & Use 1 2 3  
 Comment:

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Sources of information:**

Natural 1 2 3 4 5 6 7  
 Cultural 1 2 3 4 5 6 7  
 Historic 1 2 3 4 5 6 7  
 Threats 1 2 3 4 5 6 7  
 Human Mod. & Use 1 2 3 4 5 6 7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Bell, B (1986): Conservation Status of New Zealand Wildlife. New Zealand Wildlife Service Occasional Publication No. 12. Department of Internal Affairs, Wellington.
2. Davies, T (1986): A Checklist of the Arthropoda from Hawkes Bay, New Zealand. Royal Forest and Bird Protection Society Community Service Project, Napier.
3. Buchanan, J.D.H (1973): The Maori History and Place Names of Hawkes Bay. A H & A W Reed, Wellington.
4. Pene, D. (1989): Summary of Statement by David Pene Secretary Ahuriri Maori Executive Chairman Waiohiki Marae. Town and Country Planning Appeal No. 597/88, Planning Tribunal Hearing Hawke Bay Water Classification.

**Recorded on Existing Databases: Comment:**

1. WERI Name: Tukituki River Mouth Date: 9/84 Record No: 115 Grid Ref: V21 28485 61712
2. SSWI Grid No: 43/32
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other Related files DOC, Napier.
7. None

**Other Considerations:**

The importance of the area to wildlife should warrant its reconsideration for formal protection as a Wildlife Refuge.

**Accompanying Maps and Photographs:**

Available, DOC Napier



Site Name(s): Te Awanga-Clifton  
 Recorders Name: S H Anderson  
 Map/Grid Ref: W21 28530 61666

Site No: CRI 08 0014  
 Conservancy: Hawkes Bay  
 Date: 240390

**Brief Description of Site:**

The area includes approximately 5 km of beach frontage between two residential zones, and the mouth of the Maraetotara River.

The native coastal vegetation includes Carpobrotus, Muehlenbeckia, Calystegia and some Spinifex. The rivermouth is shingle with small areas of mudflat and an adjacent lagoon with raupo and Scirpus fluviatile. Small numbers of Oystercatchers Haematopus spp., Black fronted dotterel Charadrius melanops and Shags occur, however the habitat value is limited by high public use. Cultural and historical sites and a distinctive offshore area nevertheless make this area of some significance.

**Conservation Values:**  
**Comment:**

**Natural:** b

**Cultural:** a d

**Historic:** b c

1. The lagoon and coast are habitat for a number of uncommon native insects, including the dainty damselfly Ischnura aurora aurora which has probably spread from the ponds on Summerlee Station, and the small moth Nymphula nitens which is the only pond feeding moth in New Zealand and whose larvae depend on the aquatic plants in the lagoon. Zephlebia dentate and Lothybotus hudsoni have been collected from the Maraetotara Stream. The false trap-door spider Porrothele is recorded in this area in gardens only (1).

A distinctive zone of fluvial gravels known locally as the Clive Hard, and likened to the Wairoa Hard sediments exists offshore (2).

2. The mussel beds in the gravel zone off the Maraetotara are a traditional Maori fishery (5). The pa sites are of spiritual value to the Maori.

3. The Tirimoana Pa site at Te Awanga has been the subject of some study and excavation; other pa sites exist at Clifton and along the coast to the east. All occur on low land where cultivation was practical, on end-spur or headland sites. They were defended by transverse ditches and banks and the interiors mostly taken up by raised rim storage pits (3).

Whaling Stations existed at Te Awanga and Clifton (4).

**Site Importance:**  
**Comment:**

**International**

**National**

**Regional**

**Local**

**Unknown**

The presence of interesting native insect communities, maori and european archaeological sites, and the Clive Hard offshore (B.Pearson pers.comm.) make this area of local importance.

**Existing Threats:** k j  
**Type and Comment:**

Vehicles adversely affect the beach vegetation (Coastal Sand Dune Survey). Rubbish in the lagoon is also a problem (SSWI).

**Human Modification and Human Use: h i j a k**

The beach is popular for boating, surfing, swimming and diving.

A boat ramp at Clifton Motorcamp is run by the Marine Club.

Camping grounds exist at both Te Awanga and Clifton.

The offshore area is an excellent shellfish area and a traditional Maori flounder fishery lies just to the north (5).

The Clive Hard is trawled year round, primarily for flatfish (B.Pearson, pers.comm.).

**Existing Protection: c****Type & Comment:**

Te Awanga Domain provides limited facilities, and includes a shingle bank and part of the lagoon.

The Clifton No. 2 Domain has facilities and is the starting point for excursions to the gannet colony.

**Availability of Information:**

Natural 1 2 3  
Cultural 1 2 3  
Historic 1 2 3  
Threats 1 2 3  
Human Mod. & Use 1 2 3

**Comment:**

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Sources of Information:**

Natural 1 2 3 4 5 6 7  
Cultural 1 2 3 4 5 6 7  
Historic 1 2 3 4 5 6 7  
Threats 1 2 3 4 5 6 7  
Human Mod. & Use 1 2 3 4 5 6 7

**Comment:**

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

1. Davies, T (1986): A Checklist of the Arthropoda from Hawkes Bay, New Zealand. Royal Forest and Bird Protection Society Community Service Project, Napier.
2. Pantin, H.M (1986): Sedimentation in Hawkes Bay. New Zealand Oceanographic Institute Memoir No.28, DSIR, Wellington.
3. Fox, A (1978): Tirimoana Pa, Te Awanga Hawkes Bay : Excavations 1974-75. Studies in Prehistoric Anthropology 11. Department of Anthropology, University of Otago, Dunedin.
4. Prickett, N: Archaeologist, Auckland Museum.
5. Pene, D. (1989): Summary of Statement by David Pene Secretary Ahuriri Maori Executive Chairman Waiohiki Marae. Town and Country Planning Appeal No. 597/88, Planning Tribunal Hearing Hawke Bay Water Classification.

Personal Communication: Brian Pearson (Fisherman), 65 York Avenue, Tamatea, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI Name: Maraetotara River Mouth Date: 9/84 Record No: 61 Grid Ref: W21 28522 61671
2. SSWI Grid No: 43/32
3. PNA
4. Geopreservation
5. HPT County Inventories Hawke's Bay County Archaeological Sites W21/1, 4-7, 9 Maori Record Status C
6. Other Existing CRI files, DOC Napier.
7. None

**Other Considerations:****Accompanying Maps and Photographs:**

Available, DOC Napier

Site Name(s): Cape Kidnappers  
 Recorders Name: S H Anderson  
 Map/Grid Ref: W21 28598 61662

Site No: CRI 08 0013  
 Conservancy: Hawkes Bay  
 Date: 240390

**Brief Description of Site:**

Approximately 8.25 km of coast is backed by splendid cliffs 121m high, occasionally broken by gorges with vertical walls where streams emerge. At the foot of the cliffs is a small shingle beach, seaward of which the shore zone consists of clean coarse sand. In moderately rough weather the sea still reaches the base of the cliffs and the shore is for the most part kept clear of slip material. Beyond Black Reef a mudstone wave platform is cut in the cliffs.

The area is an emergent block once closing off the submerged bay of the Heretaunga Plains and extending out to the rapidly eroding promontory of the Cape. It contains several gullies of remnant native bush and a cliff-top pond important to native insect species of restricted distribution. It is also the location of an internationally important breeding colony of gannets (*Sula serrator*). Breeding colonies of several other seabird species also occur in the area. The coastal strip is much used for excursions to the Cape.

**Conservation Values:** Natural: b c e g h Cultural: e a c d Historic: b

**Comment:**

1. The arched high level terrace of the Cape is the most prominent feature of the landscape and is the only remnant of a raised coastal terrace of any considerable height above sea level from Napier to Castlepoint (1). The Cape is the extremity of an actual salient formed by upheaval, developed from a seaward pitching anticline (2). Conspicuous folding and fossils are evident in the excellent exposure of tectonic features along the cliffs (1, 11) making the area geologically and geomorphologically outstanding.

The gullies incising the cliffs provide habitat for remnant native insect populations and are one of the few areas where the Giant dragonfly *Uropetala carovei* occurs. The larvae of *Glyptotendipes locheaera* feed on the rushes and a few larvae of the regionally scarce *Arachnocampa luminosa* exist under overhanging rock faces. The rare *Tingena siderota* and *Aenetus virescens* have also been observed. The katipo spider *Latrodectus katipo* and rare cicada *Cicadetta microdara* are recorded from the gannet colony (3). Summerlee Pond on the cliffs contains a unique insect community (4).

The Cape is one of the world's most accessible mainland gannet colonies and has been the subject of considerable scientific investigation (5). On the cream sandstone near Black Reef breeding White fronted terns *Sterna striata* occur, also Rock pigeons *Columba livia* and Black shags *Phalacrocorax carbo*. The Reef is the only Hawkes Bay roost for Spotted shags *Stictocorax punctatus* (OSNZ).

2. The Cape is of educational value and the coast is used for studies of geology and rocky shore biology (6).

It is known as Te Matau a Maui and represents the remains of Maui's hook made from the jawbone of an ancestor, with which he fished up New Zealand (7). The kidnapping of Cook's Tahitian manservant from the "Endeavour" by local Maori, gives the area its name (8).

Kuku (mussels), paua *Haliotis* spp. and kina *Evechinus chloroticus* are taken by Maori at Black Reef (9).

The distinctive character of the cliffs presents a splendid landscape feature (1).

The urupa sites are of spiritual value to the Maori.

3. A Maori burial ground between Black Reef and the shelter hut has been sited and reburied. A pa site at Black Reef was associated with the transpeninsular route across the base of the Cape. Numerous pit and midden sites have also been classified (HPT).

**Site Importance:** International National Regional Local Unknown

**Comment:**

The mainland colony of breeding gannets and geologically outstanding nature of the area make it of international importance.

**Existing Threats: a k m c d**

**Type and Comment:**

Natural erosion is occurring along the length of the promontory, east of the lighthouse. In time this will divide the promontory into three separate blocks by erosion along old drainage channels. Erosion elsewhere is regulated by fencing out stock and/or the public, controlling water flow, and wild animal control (10).

Two commercial operators provide transport to the Cape. One operator transports visitors from Te Awanga to the gannet colony by tractor and trailer. The other runs an overland four-wheel drive service through Summerlee Station.

The Cape becomes extremely dry in summer and a high fire risk exists. No fire control base exists anywhere near the reserve (10).

Scotch (*Cirsium vulgare*), variegated (*Silybum marianum*) and Californian (*C. arvense*) thistles can spread rapidly and impede walking (10).

Apart from Black Reef headland, the beach access strip, the Ranger's cottage and the facility area, the reserve is grazed by sheep and cattle from Summerlee Station. Cattle aggravate erosion of the gully section of the access track from the rest hut to the ranger's cottage but grazing aids fire control by keeping the grass down. Wild goats disturb nesting gannets early in the season, particularly on the Saddle Colony. They also accelerate erosion. Feral cats have periodically established themselves near the Saddle and Plateau colonies and predated chicks from these. Stoats and ferrets also occur on the Cape (10).

#### Human Modification and Human Use: h j i k

The original track to the south running along the Coast and across the tableland is now much used by tractors transporting visitors along the coast to the colony. Walkers also use the tracks.

Good kaimoana grounds exist at Black Reef, and commercial kina fishing occurs here.

The coastline is popular for recreational diving.

#### Existing Protection: a Type & Comment:

A Nature Reserve (4.94 ha) and a Government Purpose Reserve (7.96 ha) administered by DOC comprise the National Protected Area of Cape Kidnappers.

In addition to this the plateau on which the plateau colony is situated (approx 2.0 ha), the Black Reef headland (approx 0.5 ha) and the strip behind the beach between Black Reef and the facility area (area unknown) are administered as Government Purpose Reserve in agreement with Summerlee Station Ltd. A minimum flying level of 600 m (2000 ft) exists within a designated area covering the reserve. Access onto all nesting areas is prohibited at all times. The reserve is closed from 1 July to the Wednesday before Labour Day to allow gannets to establish nests and commence breeding undisturbed (10).

Although there has been a downward trend in visitor numbers over recent years, the gannet colony still receives approximately 9000 visitors per year. This level of use appears to have no adverse effect on the growth of the colony. Both the Saddle colony, to which there is no public access, and the Plateau colony, to which access is restricted by a marker chain indicating the distance from which observations can be made without disturbance to the birds, appear to static. On Black Reef expansion of the colony there led to the establishment of a further colony on the adjacent headland approximately four years ago. Despite unimpeded public access to this site, the number of nests is reported to have increased from 4 to approximately 50 (K Hunt, pers.comm.).

#### Availability of Information:

Natural 1 2 3  
Cultural 1 2 3  
Historic 1 2 3  
Threats 1 2 3  
Human Mod. & Use 1 2 3  
Comment:

1. Well documented
2. Limited information (general)
3. Little information (if any)

#### Sources of Information:

Natural 1 2 3 4 5 6 7  
Cultural 1 2 3 4 5 6 7  
Historic 1 2 3 4 5 6 7  
Threats 1 2 3 4 5 6 7  
Human Mod. & Use 1 2 3 4 5 6 7  
Comment:

1. Derived info. from existing literature & databases
2. Derived info. as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

1. King, L.C (1934): Notes on the Geology and Geomorphology of the Coast Between Napier and Castlepoint. Transactions and Proceedings of the New Zealand Institute 63:72-79.
2. Cotton, C.A (1974): Bold Coasts : Annotated reprints of selected papers on coastal geomorphology, 1916-1969. A.H & A.W Reed, Wellington.
3. Davies, T (1986): A Checklist of the Arthropoda from Hawkes Bay, New Zealand. Royal Forest and Bird Protection Society Community Service Project, Napier.
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5. Wodzicki, K.A (1967): The Gannets at Cape Kidnappers 1. Population Changes 1945-64. Transactions of the Royal Society of New Zealand 8(4): 149-162.  
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8. Fox, A (1978): Tirimoana Pa, Te Awanga, Hawkes Bay : Excavations 1974-75. Studies in Prehistoric Anthropology II. Department of Anthropology, University of Otago, Dunedin.
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10. Department of Lands and Survey, Napier: Cape Kidnapper Bird Sanctuary Management Plan (1984).
11. Stirling, M.W: Inventory of New Zealand active earth deformation sites. First edition. Geological Society of New Zealand. Miscellaneous Publications No. 38 (1988).

Personal Communication: Ken Hunt, Manager Napier Field Centre, DOC, Napier.

**Recorded on Existing Databases:      Comment:**

1. WERI
2. SSWI Grid Square No: 44/31; 44/32
3. PNA
4. Geopreservation
5. HPT County Inventories Hawke's Bay County Archaeological Site W21/3 Maori Record Status C
6. Other CRI files, DOC Napier.
7. None

**Other Considerations:**

It is essential that management is kept relevant in respect of changing circumstances (eg, patterns of use, position and size of gannet colonies, threats) or increased knowledge relating to the reserve (10).

**Accompanying Maps and Photographs:**

Available, DOC Napier.

**Site Name(s):** Rangaiika  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** W21 28600 61633

**Site No:** CRI 08 0012  
**Conservancy:** Hawkes Bay  
**Date:** 240390

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**Brief Description of Site:**

Rangaiika is a predominantly sandy beach 4.25 km long, with sand-dune hinterland backed by high cliffs. It has low access, being impeded from the south by a papa bluff, with the foot of the cliffs to the north awash at all tides.

Legally the beach is included in the Sumerlee Estate title; previously it was Maori Reserve.

The beach contains biological and physical features of note, and is rich in archaeological history.

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**Conservation Values:**  
**Comment:**

**Natural:** a b d e f h

**Cultural:** a c d

**Historic:** d b c

1. Rangaiika is an isolated and relatively unmodified beach with a high degree of naturalness. Public access is by foot only, and the area contains a fragile dune system of distinct dimensions supporting the native sandbinders Spinifex hirsutus and the rare pingao Desmoschoenus spiralis (1). Clusters of karaka Corynocarpus laevigatus grow in the sand, also an unusual feature (2).

To the north remnants of a marine bench are cut into rock 10ft above MHW and covered with gravel (3); to the south are rock arches and reefs sheltering an interesting variety of tidal pool communities (4).

Gannets Sula serrator, Spotted shags Stictocarbo punctatus and breeding colonies of White fronted tern Sterna striata and black shags Phalacrocorax carbo occur.

2. The beach was the sacred altar at which the first fruits of the season were offered, and where none but the tohunga approached (6).

At the crest of Whakapu Bluff is a pa site and oral history relates that here two old chiefs enticed children up by flattening a clay patch for top spinning, selected their victims, lowered them down the cliff and made away for clandestine feasts (4).

The area is visually stunning, enclosed by high hills, with gold sand beaches extensive sand dunes and striking rock arches.

The urupa sites are of spiritual value to the Maori.

3. The screwsteamer "Go Ahead" went aground here in thick fog in 1887. All on board but one were saved. The vessel lay bottom up and was quickly broken up by the seas (5).

A whaling station was set up on the wide stretch of sand 2km south of the Cape in 1838. The settlement comprised 3 boats and 20 men and flourished for many years (4).

Maori archaeological remains include marae and pa sites, clearly visible middens, and burial grounds where bodies have been found uncovered on the beach (HPT).

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**Site Importance:**  
**Comment:**

**International**

**National**

**Regional**

**Local**

**Unknown**

The combination of a relatively unmodified dune system, an unusual dune flora containing rare and locally threatened plant species and the abundance of archaeological sites make this area one of national importance.

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**Existing Threats:** d c a  
**Type and Comment:**

Some grazing occurs by sheep and cattle on the dune vegetation. These animals are probably from Summerlee Estate.

The presence of marram Ammophila arenaria, an exotic sandbinding grass which outcompetes pingao, is of concern.

The area has a high erosion grading, with the dunes acting as an interface between cliff and sea.

**Human Modification and Human Use:**

The area is little modified or utilised.

**Existing Protection:****Type & Comment:**

A surveyed one chain strip was reserved from sale but much of this has probably eroded. Legally privately owned.

**Availability of Information:**

Natural 1 2 ③  
 Cultural 1 2 ③  
 Historic 1 2 ③  
 Threats 1 2 ③  
 Human Mod. & Use 1 2 ③

**Comment:**

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Sources of Information:**

Natural ① 2 3 4 5 6 ⑦  
 Cultural ① 2 3 4 5 6 7  
 Historic ① 2 3 4 5 6 7  
 Threats 1 2 3 4 5 ⑥ 7  
 Human Mod. & Use 1 2 3 4 5 ⑥ 7

**Comment:**

1. Derived info. from existing literature & databases
2. Derived info. as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

1. Given, D.R, Sykes, W.R, Williams, P.A and Wilson C.M (1987): Threatened and Local Plants of New Zealand : A Revised Checklist. Botany Division, DSIR, Christchurch.
2. Walls, G: Conservancy Advisory Scientist, DOC, Napier.
3. King, L.C (1934): Notes on the Geology and Geomorphology of the Coast Between Napier and Castlepoint Transactions and Proceedings of the New Zealand Institute 63:72-79.
4. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Napier.
5. Ingram, C.W.N (1972): New Zealand Shipwrecks 1795-1970. A.H & A.W Reed, Wellington.
6. Buchanan, J.D.H (1973): The Maori History and Place Names of Hawkes Bay. A.H & A.W Reed, Wellington.

**Recorded on Existing Databases:      Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other Existing CRI files, DOC Napier.
7. None

**Other Considerations:**

No deed of sale has been found for the passing of Rangaiika from Maori land to the Summerlee Estate title, and ownership of the land is now in contention.

The area is of high significance on all aspects of conservation value, and is recommended for Reserve status.

Grazing and the presence of marram grass are cause for concern, and it is suggested that a management plan to eradicate marram and prevent further grazing be implemented.

**Accompanying Maps and Photographs:**

Available and held DOC, Napier

**Site Name(s):** Ocean Beach  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** W22 28554 61578

**Site No:** CRI 08 0011  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The site is a gently sloping sandy beach extending 8 km north from the mouth of the Waipuka Stream.

Road access is available at the southern end of the beach, where some holiday and residential housing occurs; the hinterland to the north is farmed. The area is rich in archaeological remains and contains a unique dune system and sandbinding vegetation. The northern beach appears to be advancing seaward (1).

**Conservation Values:**  
**Comment:**

**Natural:** b d e g

**Cultural:** a d c

**Historic:** b

1. The area contains the best colony of the threatened native pingao Desmoschoenus spiralis (2), and the most intact dune system, on the entire East Coast of the North Island from Cape Palliser to East Cape. It is the last stronghold of pingao in Hawkes Bay, which has the best sandbinding properties of any native plant. The habitat is environmentally sensitive to damage by trampling and grazing.

The unique nature of the site is of scientific value, and has been monitored for several years (3).

Insects of restricted distribution also occur on the beach, namely the Katipo spider Latrodectus katipo, Migratory locust Locusta migratoria, and Chaerodes trachyscelides (the only record of this beetle in the region) (4).

2. The combination of open ocean, extensive dunes and steep hinterland lend this site a distinctive visual quality.

Pingao is highly regarded by the Maori as a traditional weaving material. The urupa sites mentioned are of spiritual value to the Maori.

3. The area is rich in Maori archaeological remains, containing extensive gardens immediately behind the dunes (G. Walls, pers.comm) and evidence of pa, pits, burial grounds and middens (HPT). The flanking hills are terraced and possibly provided traditional access inland along a backing spur and plateau. Tuatara jaws and moa egg shell have been recorded in archaeological remains on the beach.

**Site Importance:**  
**Comment:**

**International**

**National**

**Regional**

**Local**

**Unknown**

The site is of national importance, being a unique habitat for threatened dune species and containing important archaeological remains.

**Existing Threats:** c d k l  
**Type and Comment:**

The pingao is threatened by stock grazing and trampling, rabbit browsing, vehicle damage from trail bikes and dune buggies and competition from the introduced marram grass Ammophila arenaria (3).

Unplanned housing occurs along the foreshore.



**Human Modification and Human Use: h i j a k**

The beach is popular for recreational swimming, surfing and surfcasting. The coast is walked to the north (5). Vehicles are used on the foreshore.

Unplanned housing occurs immediately south of the Waipuka Stream and is difficult to control, the owners having leased the land as a company from the Maori owners.

Sand removal of 2000 yds from the beach has been allowed.

Pingao is traditionally used by the Maori for weaving.

**Existing Protection: a i  
Type & Comment:**

The only protection is a surveyed chain strip from MHWL reserved from sale, which becomes the legal road 5 chains north of the stream. The Hastings District Council has a foreshore Grant of Control over part of the beach.

An enclosure has been built for monitoring pingao at Ocean Beach and negotiations are underway for a proposed fence to protect the area from domestic stock (3).

**Availability of information:**

Natural 1②3

Cultural 1 2③

Historic 1②3

Threats 1②3

Human Mod. & Use 1 2③

Comment:

1. Well documented

2. Limited information (general)

3. Little information (if any)

**Sources of information:**

Natural 1②3 4 5 6 7

Cultural 1②3 4 5 6 7

Historic ① 2 3 4 5 6 7

Threats ① 2 3 4 5 6 7

Human Mod. & Use ① 2 3 4 5⑥7

Comment:

1. Derived info from existing literature & databases

2. Derived info as above & field check

3. Derived from existing maps & aerial photographs

4. Recent DOC survey including sampling & analysis

5. Recent DOC survey excluding sampling & analysis

6. Experience

7. Expert opinion

1. King, L.C (1934): Notes on Geology and Geomorphology of the Coast between Napier and Castlepoint. Transactions and Proceedings of the New Zealand Institute 63: 72-79.

2. Given, D.R, Sykes, W.R, Williams, P.A and Wilson, D.M (1987): Threatened and Local Plants of New Zealand : A Revised Checklist. Botany Division Report, DSIR, Christchurch.

3. Scott, J and Walls, G (1987): Proposal to Fence an area of Haupori Station, Ocean Beach, to Protect Pingao. Internal Report, DSIR, Havelock North.

4. Davies, T (1986): A Checklist of the Arthropoda from Hawkes Bay, New Zealand. Royal Forest and Bird Protection Society Community Service Project, Napier.

5. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Napier.

Personal Communication: Geoff Walls, Conservancy Advisory Scientist, DOC, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI

2. SSWI

3. PNA

4. Geopreservation

5. HPT County Inventories Hawke's Bay County Archaeological Sites W22/1-4, 28-46 Maori Record Status C

6. Other Existing CRI files, DOC Napier.

7. None

**Other Considerations:**

DOC, Napier is negotiating with landowners for the creation of a Reserve to protect the sensitive dune system.

**Accompanying Maps and Photographs:**

Available and held DOC, Napier

Site Name(s): Waimarama  
 Recorders Name: S H Anderson  
 Map/Grid Ref: W22 28519 61465

Site No: CRI 08 0010  
 Conservancy: Hawkes Bay  
 Date: 241090

**Brief Description of Site:**

Waimarama is a shallow basin of collected sediments eroded from the surrounding land, later uplifted and folded causing heavy faulting and fracturing of rocks (1). At the northern end of the site, cliff-backed sandy beach gives way to rocks in the vicinity of Pututaranui Bluff; to the south the coastline is littered with concretion boulders (2). Waimarama itself is a particularly popular seaside resort at the mouth of the Waingongoro Stream. Offshore the site includes Motu-o-Kura (Bare Island) and Karamea Islands and the Waimarama Fishing Reserve. Approximately 13.75 km of coastline is included in the site. Maori archaeological remains suggest considerable pre-European occupation of the area.

**Conservation Values:** Natural: e c g d Cultural: a e d c Historic: b c a

**Comment:**

Karamea Island is of known scientific value as an example of pillow lavas and coppers derived from the subducted Pacific Plate (3).

The mainland coast contains cretaceous fossils, and from Wainohu to Sandy Bay is littered with concretionary boulders comparable to those at Moeraki (3).

Motu-o-Kura is unique in being the only true island between Wairoa and Wellington, and is most important on the Hawkes Bay coast from a natural history perspective. It is a geological remnant of the mainland eroded away 25 million years ago and is of fragile composition. It is the nesting site for a number of seabirds, including Little blue penguin Eudyptula minor, Sooty shearwaters Puffinus griseus and Black shags Phalacrocorax carbo and feeding ground for the increasingly rare Reef heron Egretta sacra (4). The island has been extensively studied.

A fresh water spring rises vigorously from the ocean floor southeast of the island, known as Ngapuhaka (vessels filled to overflowing) - an unusual feature (5).

Fur seals Arctocephalus forsteri occasionally haul out at Waimarama, and the regionally scarce moth Orocrambus vulgaris occurs sporadically (6).

Sea caves and small intertidal platforms cut in the mudstone occur at Pututaranui (7). Offshore the Waimarama Fishing Reserve, encloses a wide variety of marine habitats and species (8).

2. The area is traditionally an important kaimoana ground and petitioning from the local Maori over fishing pressure has resulted in the declaration of a Fishing Reserve (8). Shellfish are abundant and thousands of paua shells have been recovered (9). At Pauaahinegatira, south of Te Puku, paua (Haliotis spp.) with a famed delicate flavour occurred. The maiden Hinegatira was a survivor of the siege on the Rangitane pa by Taraia, and was married to Taraia's son; many of the descendants of Waimarama stem from this union (5).

Waimarama was a landing place for the Takitimu canoe; Taupanga and Mhuaka rocks in the bay are jettisoned anchors and the Kuku Rocks, a reef running out across the south end of the beach, were the skids of the canoe (11). These were also used by surfboats for loading wool, and are still used for disembarking.

Motu-o-Kura was formerly occupied as a fishing place and translates as the "island of crayfish". The reefs around Pututaranui were also much utilised for seafood gathering and a block of Maori Land extends back from the point.

The Waimarama marae is used for traditional ceremonies, educational tours, and by local Maori.

The offshore islands, long beach and limestone backdrop give this area a distinctive visual quality.

3. The area was charted by Cook, and later visited by D'Urville.

A whaling station was established at Pututaranui in 1845. Another whaling station which operated at Taingamata in 1938 was the first to be established in Hawkes Bay (2). Cauldrons and the remains of ten whales have been found (9). Waimarama was also a landing place for wool shipments (10).

Maori archaeological remains are numerous. A kainga existed at Te Paongatiapa at the north end of the beach, a pa and kainga in the sandhills at the mouth of the Waingongoro, two pa on the flats across from the Puhokio Stream and a kainga at the southern end of the beach. A school of Makutu was established in the hills behind Waimarama, where Mahu journeyed to learn magic to avenge himself of a kumara thief. He practised his newly acquired powers on his niece washing by a lagoon, who was struck dead and remains as a rock (5). At the Paparewa Stream outlet, a reef of blue clay has exposed thousands of moa bones, indicating that moa hunters were the first probable inhabitants (11). Middens and tools have also been recovered. Burial caverns occur in the limestone bluffs above Waimarama (2). Motu-o-Kura was fortified and acted as an important escape stronghold from Waimarama. It is also the site of a burial ground (4).

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**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**

**Comment:**

The potential wildlife value of Motu-o-Kura island, the geological significance of Karamea Island and the large number of archaeological sites make this area nationally significant.

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**Existing Threats: g a d c l****Type and Comment:**

Protective works in front of the Waimarama beaches causes scouring at the north end of the beach by the Reserve (14).

Bare Island is composed of soft mudstone and subject to accelerated erosion. The vegetation cover is essential but under threat from Norway rats browsing plants and seeds and preventing revegetation. Rats also account for declining numbers of nesting seabirds and native reptiles (9).

The northern side of Karamea is actively eroding and browsed by rabbits (12).

Waimarama is under continuous pressure for residential subdivision (13).

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**Human Modification and Human Use: h i j a**

The length of the coast is accessible to walkers. Recreational boating, swimming, fishing, sailing, surfing and diving occur. The foreshore is developed for housing. The area is an important food source for local Maori who collect kura, kina, paua and kuku (mussels) for hui and tangi.

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**Existing Protection: e b c****Type & Comment:**

The area is well endowed with Esplanade Reserve and Domain land, including the Waimarama Domain, Waingongoro Stream Recreation Reserve and Paparewa Recreation Reserve.

Offshore the Waimarama Fishing Reserve is an area banned to commercial fishing.

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**Availability of Information:**

Natural                      1②3  
 Cultural                      1②3  
 Historic                      1②3  
 Threats                      1②3  
 Human Mod. & Use      1 2③  
**Comment:**

1. Well documented
  2. Limited information (general)
  3. Little information (if any)
- 

**Sources of Information:**

Natural                      ① 2 3 4 5 6 7  
 Cultural                      ① 2 3 4 5 6 7  
 Historic                      ① 2 3 4 5 6 7  
 Threats                      ① 2 3 4 5 6 7  
 Human Mod. & Use      1 ② 3 4 5 6 7

1. Derived info. from existing literature & databases
2. Derived info. as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Kingma, J.T (1971): Geology of the Te Aute Subdivision. New Zealand Geological Survey Bulletin No 70. Government Printer, Wellington.
2. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Napier.
3. Black, R, Braithwaite, R.L and Moore, P.R (1984): Pillow Lava and Associated Copper Minerals at Kairakau Rocks, Southern Hawkes Bay. New Zealand Geological Survey Record 3:92-97.
4. Walls, G, McLennan, J and Watt, J (1988): Natural History Survey of Motu-o-Kura (Bare Island), Hawkes Bay. DSIR, Havelock North. Report prepared for DOC, Napier.
5. Buchanan, JDH (1973): The Maori History and Place Names of Hawkes Bay. A.H & A.W Reed, Wellington.
6. Davies, T (1986): A Checklist of the Arthropoda of Hawkes Bay, New Zealand. Royal Forest and Bird Protection Society Community Service, Project, Napier.
7. King, L.C (1934): Notes on the Geology and Geomorphology of the Coast between Napier and Castlepoint. Transactions and Proceedings of the New Zealand Institute 63: 72-79.
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9. McGregor, M.F (1975): Pioneer Trails of Hawkes Bay : being an historic guide to pioneer routes, trails and trading paths of the Hawke's Bay District in the colony of New Zealand. A.H & A.W Reed, Wellington.
10. Waters, S.D (1959): Richardsons of Napier. A Century of Coastal Shipping 1859-1959. Richardson and Company Ltd, Napier.
11. Grant, S (1977): Waimarama. The Dunmore Press, Palmerston North.

12. Wright, A (1976): The Vegetation of Karamea (Red Island), Southern Hawkes Bay. Tane 22:135-138.  
13. Biological Survey of Scenic and Allied Reserves, DSIR provisional report series for Department of Lands and Survey, and Conservation; held on file, DOC Napier.  
14. Hawke's Bay Catchment and Regional Water Board (1984): Waimarama Beach Protection, Stage II (Northern Section), Napier.
- 

**Recorded on Existing Databases:      Comment:**

1. WERI
  2. SSWI Grid No: 44/29 (Bare Island); 43/30 (Waimarama Swamp)
  3. PNA
  4. Geopreservation
  5. HPT County Inventories Hawke's Bay County Archaeological Sites W22/5-20, 23-37, 47-49, 51, 55-58, 60-85, 87-136, 145-154  
Maori and European Record Status C
  6. Other Existing CRI files, DOC Napier.
  7. None
- 

**Other Considerations:**

Motu-o-Kura is recommended as a possible site for the conservation of rare or endangered native plants, birds, reptiles and/or invertebrates. Management should be in close co-operation with the Maori owners and include eradication of rats and pampas, minimising of human impact, and regular monitoring (4).

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**Accompanying Maps and Photographs:**

Available and held at DOC, Napier.

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Site Name(s): Kairakau (Waimoana-Mangakuri Beach)  
 Recorders Name: S H Anderson  
 Map/Grid Ref: V22 28457 61328

Site No: CRI 08 0009  
 Conservancy: Hawkes Bay  
 Date: 240390

#### Brief Description of Site:

Kairakau is a long sand beach bordered by a shoreline of igneous rocks, which can be crossed only at low tide. Total length of the site is approximately 7.5 km. The surrounding area is of high limestone cliffs with mudstone hills closer to the beach supporting a diverse native vegetation. The Mangakuri river enters the sea here and the offshore area supports a local fishery. Some baches and a camping ground are present. The geologically interesting Hinemahanga Rocks are situated in the bay.

Conservation Values:                      Natural: f e b                      Cultural: a e c                      Historic: b c  
 Comment:

1. Kairakau is a good representation of the Hawkes Bay coastal area. It is relatively natural and supports an interesting and diverse native coastal vegetation, including the regionally rare Wharangi Melicope ternata, characteristic Pittosporum ralphii, Hebe veronica squalida, rare Rengarenga Arthropodium cirratum, and calcicole Asplenium lyallii (1,2).

Offshore the Hinemahanga rocks are the remnants of the subducted mid-Pacific Plate, and so represent a unique tectonic landform (3). To the south of Kairakau lie a series of wave cut platforms that support beds of eel grass Zostera muelleri, and unique assemblage of waders usually associated with estuarine areas.

Offshore the area is reputed to be a nursery ground for crayfish Jasus edwardsii. The boulder area of the river mouth is used as a roost for White fronted tern Sterna striata (OSNZ), Red billed gulls Larus scopulinus and the increasingly rare Reef heron Egretta sacra (4) also occur. The beach is the location of a rare native insect species Heterojapyx novaezelandiae, which has only been noted elsewhere at Summerlee Station and Elsthorpe Reserve. The native earwig Pericoptus and the katipo Latrodectus katipo are also present (5).

The area north of Kairakau is dominated by a large coastal slump where the limestone cap of the Maraetotara Plateau is undercut by wave action (6).

2. Oral history associated with the area tells of the chief Marahuria, from a pa on the high river cliffs, who sent his wife away for fish. When she returned empty handed he threw her off the cliff and the Hinemahanga Rocks became the petrified floats of her fishing net (P. Parsons, pers. comm.).

The rock pools at the headlands are of educational value to school parties for the study of shore biology (8).

The association of offshore reef, intertidal platforms, sandbeach and limestone scarp lend this area a distinctive visual quality.

3. A pa site exists on the bank of the tidal creek; other sites occur along the high river cliffs (HPT).

Kairakau was a landing place for wool shipments (7).

Site Importance:                      International                      National                      Regional                      Local                      Unknown  
 Comment:

The geologically important Hinemahanga Rocks, and the scenic quality of this area make it of national significance.

Existing Threats: g c a  
 Type and Comment:

10 hectares of exotic pines planted in the area for stabilization, are detrimental to native coastal vegetation.

Shore stabilisation works are present on the beach front.

From Te Apiti south the escarpment has in part collapsed, producing enormous landslides, which the sea is actively eroding.

**Human Modification and Human Use: h i j a**

The offshore sandstone reef structures provide good diving.

Some of the local population engage in seaweed collection; paua and crayfishing also occur.

The area is used for recreational boating, surfcasting and set net fishing.

People walk the coast from Kairakau to Maungakuri (9).

The area is a traditional kaimoana ground.

The baches that formerly occupied the beach front just north of the mouth of the Mangakuri River were recently relocated behind the road by the Central Hawke's Bay District Council. Following this the vacated area has been landscaped and redeveloped to include a picnic area, camping ground and public carpark.

**Existing Protection: c****Type & Comment:**

The Kairakau Beach Recreation Reserve is locally administered.

**Availability of Information:**

Natural 1(2)3  
Cultural 1 2(3)  
Historic 1 2(3)  
Threats 1 2(3)  
Human Mod. & Use 1(2)3

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of information:**

Natural ①2 3 4 5 6 7  
Cultural 1 2 3 4 5 6(7)  
Historic ①2 3 4 5 6 7  
Threats 1(2)3 4 5 6 7  
Human Mod. & Use 1(2)3 4 5(6)7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Given, D.R, Sykes, W.R, Williams, P.A and Wilson, C.M (1987): Threatened and Local Plants of New Zealand : A Revised Checklist. Botany Division Report, DSIR, Christchurch.
2. Druce, A.P (1980): Indigenous Vascular Plants in Vicinity of Kairakau Beach, Hawke's Bay. Botany Division Internal Report, DSIR, Lower Hut (copy held on file DOC, Napier).
3. Black, R, Braithwaite, R.L and Moore, P.R (1984): Pillow Lava and Associated Copper Minerals at Kairakau Rocks, Southern HB. New Zealand Geological Survey Record 3:92-97.
4. Bell, B (1986): The Conservation Status of New Zealand Wildlife. New Zealand Wildlife Service Occasional Publication No.12. Department of Internal Affairs, Wellington.
5. Davies, T (1986): A checklist of the Arthropoda from Hawke's Bay, New Zealand. Royal Forest and Bird Protection Society Community Service Project, Napier.
6. Black R, Ludecke, J and Mellor J (1989): The Coast : Hawke's Bay Geography Resource Kit Number One. Hawke's Bay Catchment Board/Hawke's Bay Geography Teachers Association, Napier.
7. Waters, S.D (1959): Richardsons of Napiers : A Century of Coastal Shipping 1859-1959. Richardsons and Company Ltd, Napier.
8. Shannon, L: Advisory Unit, Ministry of Education, Napier.
9. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Napier.

Personal Communication: Patrick Parsons (Historian), Poraiti, R D 2, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories
6. Other Existing CRI files, Department of Conservation, Napier
7. None

**Other Considerations:**

The scenic and largely unmodified nature of the surrounding country deserve recognition and protection from further pine planting and subdivision.

**Accompanying Maps and Photographs:**

Available and held by Department of Conservation, Napier.

Site Name(s): Mangakuri  
 Recorders Name: S H Anderson  
 Map/Grid Ref: V23 28443 61297

Site No: CRI 08 0008  
 Conservancy: Hawkes Bay  
 Date: 240390

#### Brief Description of Site:

The site is a sand beach enclosed by lowlying headlands. Its total length is approximately 9 km. There is road access and a number of baches occur near the shoreline. The hinterland is under pasture and grazed by domestic stock. The flanking rock platforms and associated wildlife are a distinctive feature.

#### Conservation Values: Comment:

Natural: c e b h

Cultural: a

Historic: c

1. North and south of the sand beach extensive sandstone platforms extend 2.5 km and 2.6 km along the coast respectively. Both platforms extend seaward for approximately 100m and are completely covered by broken rock. Unlike nearby Paoanui, Tuingara and Aramoana/Blackhead reefs there are no Corallina officinalis - Hormosira banksii flats. However, in common with these other sites large beds of eel grass Zostera muelleri are found on both platforms. Much of the platform south of Mangakuri is covered at all stages of the tide, whereas a large proportion of the platform to the north is exposed at low water. A feature of this reef is the presence of large deep pools (0.5-1.5m deep) and numerous channels. These support an abundant flora and fauna including large seaweeds, starfish, paua Haliotis iris, crustaceans, and small fish (4).

The shelves are an important feeding ground for Eastern bar-tail godwit Limosa lapponica and other migratory waders.

Distinctive concretionary boulders of Cretaceous origin are scattered along the beach (R Black, pers.comm.)

2. A Maori track once ran from Ngahere to the coast off Clarendon where the reefs supported a bed of exceptionally large mussels Atrina zelandica found only in very sheltered areas. Heavy seas have since broken the reef and the mussels are rare (2), however the area remains an important kaimoana ground.

3. Mangakuri was formerly a landing place for wool shipments (1).

#### Site Importance: Comment:

International

National

Regional

Local

Unknown

The distinctive intertidal Zostera beds (5), and their importance to migratory waders make this an area of national importance.

#### Existing Threats:

Type and Comment: a c

During heavy rain flooding and erosion of coastal streams and rivers in the area results in large inputs of fine sediments to the near shore zone (I Nilson, pers.comm.). Subtidally a layer of silt covers the bottom. This silt layer is easily resuspended, increasing the turbidity of the water above that of nearby sites such as Paoanui, Tuingara and Aramoana/Blackhead (4).

Large areas of marram Ammophila arenaria (4) threaten the indigenous dune flora and fauna and ultimately the long-term stability of the dunes themselves (G Walls, pers. comm.).

North of Mangakuri partial collapse of the escarpment has resulted in enormous landslides. These are being actively eroded by the sea, contributing to coastal turbidity.

**Human Modification and Human Use:** h i j a

The coast is negotiable for walkers from Maungakuri to Kalrakau (3).

The flanking reefs are an important kaimoana ground for the local Maori.

Commercial and recreational fishing occurs offshore.

Part of the shoreline has been developed for housing.

**Existing Protection:  
Type & Comment:****Availability of information:**

Natural 1 2 3  
 Cultural 1 2 3  
 Historic 1 2 3  
 Threats 1 2 3  
 Human Mod. & Use 1 2 3  
 Comment:

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Sources of information:**

Natural 1 2 3 4 5 6 7  
 Cultural 1 2 3 4 5 6 7  
 Historic 1 2 3 4 5 6 7  
 Threats 1 2 3 4 5 6 7  
 Human Mod. & Use 1 2 3 4 5 6 7  
 Comment:

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

1. Waters, S.D (1959): Richardsons of Napier : A Century of Coastal Shipping 1859-1959. Richardson and Company Ltd, Napier.
2. Bell, R (1954): Roundaway : The Story of a Sheep Farm. Unpublished. Script held in the historical library Hawke's Bay Art Gallery and Museum, Napier.
3. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Hawke's Bay.
4. Cresswell, P.D, Warren E.J: The Flora and Fauna of the Southern Hawke's Bay Coast. DOC survey report, Napier (1990).
5. King, K.J, Bailey, K.N and Clark, M.R: Coastal and Marine Ecological Areas of New Zealand. Department of Lands and Survey (1985).

Personal Communication: Robin Black, Policy Investigations Manager, Hawke's Bay Regional Council.

Personal Communication: Ian Nilson (local diver), Apollo Angus, R D 11, Hastings.

Personal Communication: Geoff Walls, Conservancy Advisory Scientist, DOC, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Waipukurau District Classified Buildings 1061, 1062 Status C
6. Other
7. None

**Other Considerations:****Accompanying Maps and Photographs:  
Available and held at DOC, Napier**



**Site Name(s):** Paoanui  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V23 284420 61183

**Site No:** CRI 08 0007  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The site is approximately 5 km long and includes an open sandy bay flanked by extensive intertidal rock platforms, with subtidal reef systems offshore.

The bay has road access and a small seaside community. The surrounding land is mainly hill country under pasture grazed by domestic stock. The area is of recreational value, and under intensive fishing pressure.

The Pourere Stream runs into the bay and creates a lagoon supporting a small population of birds. The lagoon mouth is mobile according to sea conditions.

**Conservation Values:**

**Natural:** b c e f

**Cultural:** a d

**Historic:** b c a

**Comment:**

1. Pourere lies on a faultline, where the reef disappears to give a sand-shell beach of Cretaceous origin. Earthflow erosion occurs to the waveline, where the soft sandstone is unable to withstand pressure. This creates an unusual geological feature of 65 million year old rocks exposed alongside 20 million year old headlands (R. Black, pers.comm.)

The mudstone and pumice intertidal platforms are dotted with deep rock pools fringed with algae, and beds of eel grass Zostera muelleri. The later provide an important feeding area for godwit Limosa lapponica and other waders, a unique species assemblage usually only associated with estuaries (1).

Subtidal reefs extend up to 100m offshore and support a diverse flora and fauna representative of this part of the Hawkes Bay coastline (8).

The fossil horizon in the intertidal rock platform at the north end of the beach is extremely rich in warmwater foraminiferal fauna, including the youngest larger foraminifera found in NZ (2).

North of Paoanui Point a small anticline discloses a band of spherical concretionary boulders up to 4 feet in diameter (3).

2. Oral history associated with the area includes the story of a tribal battle in the hills above Muddy Point, where the losing side hid their valuables in a swamp at the top before fleeing. The swamp has now degenerated into a series of slips coming down into the sea (4).

Church Knoll is reputedly the site of the last cannibal feast in Hawkes Bay (4).

Two tapu rocks exist associated with the legend of two young chiefs racing to challenge the rising sun who were turned to stone for their impertinence. One remains beside the entrance to Nairns drive and Maori still recognise the site en route to the beach. The other is situated out in the bay and according to local knowledge if waves break on it on a calm day a southeast storm will follow (4).

A meeting house, Wharepokakaha, finely decorated with toitoi stems is situated here.

The area is a traditional kaimoana ground, providing good sized paua Haliotis spp. and abundant pipis Paphies spp. on the sandbars to the south of Pourere.

The rocky shore at the headland is used by school parties for biology studies (7).

3. Archaeological remains including middens have been recorded (HPT). A fortified pa was situated at the foot of Punawaiti, another on Church Knoll (4).

Seventy-nine acres of Maori leasehold land around Pourere includes the native burial ground and cultivations of Chief Moruera.

The area was visited by Cook, who left seeds and pigs, probably the first pigs introduced to New Zealand (5).

A plaque commemorates the site of the first sheep station in Hawkes Bay.

The bay was a landing place for wool shipments, the suriboats using a channel at the north end of the beach (4).

**Site importance:**

International

National

Regional

Local

Unknown

**Comment:**

The unique intertidal zone and geological features of the area, and the accompanying cultural and historical aspects make this site of national importance.

**Existing Threats:** i k

**Type and Comment:**

Intensive fishing pressure is a long-term threat to the marine diversity of the area.

Vehicle use of the intertidal platforms damages intertidal communities.

**Human Modification and Human Use: h i j a**

The coast is walked from Pourere to Blackhead (6). The area is popular for recreational diving and swimming is safe, being sheltered by reefs. Amateur fishing with gillnets and lobster pots takes place, and the coast is also commercially fished. Part of the shoreline is modified by housing. The area is a traditional shellfish gathering site.

**Existing Protection: c d e****Type & Comment:**

Two small Recreation Reserves exist either side of Pourere Road where it comes down to the beach.

**Availability of Information:**

Natural ① 2 3  
Cultural 1 ② 3  
Historic 1 ② 3  
Threats 1 2 ③  
Human Mod. & Use 1 2 ③

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of Information:**

Natural ① 2 3 ④ 5 6 7  
Cultural ① 2 3 4 5 ⑥ 7  
Historic ① 2 3 4 5 6 7  
Threats 1 ② 3 4 5 6 7  
Human Mod. & Use 1 ② 3 4 5 6 7

1. Derived info. from existing literature & databases
2. Derived info. as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Central Fisheries Management Planning Team (1987): Regional Background Discussion Paper on AREAs to be Investigated for Proposed Marine Protected Areas in the Central Fisheries Management Area. Unpublished, reference copies lodged in MAF Central Library, Wellington.
2. Records from Fossils Locality Inventory, Hawkes Bay. DOC File 9/1/6, Napier.
3. King, L.C (1934): Notes on the Geology and Geomorphology of the Coast between Napier and Castlepoint Transactions and Proceedings of the New Zealand Institute 63:72-79.
4. Bell, R (1954): Roundaway : The Story of a Sheep Farm. Unpublished. Script held in the historical library Hawke's Bay Art Gallery and Museum, Napier.
5. McGregor, M.F (1975): Pioneer Trails of Hawkes Bay : being an historic guide to pioneer routes, trails and trading paths of the Hawke's Bay district in the colony of New Zealand. A.H & A.W Reed, Wellington.
6. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Napier.
7. Shannon, L: Advisory Unit, Ministry of Education, Napier.
8. Cresswell, P.D and Warren, E.J: The Flora and Fauna of the Southern Hawke's Bay Coast. DOC Survey Report, Napier (1990).

Personal Communication: Robin Black, Policy Investigations Manager, Hawke's Bay Regional Council.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Waipukurau District Other Historic Places : Visit by HMS Resolution 1773, First Sheep Hawke's Bay 1949.
6. Other Existing CRI files, DOC Napier.
7. None

**Other Considerations:**

The site is of obvious conservation value, but at risk of adverse affects from high public usage. It is recommended that attention be given to protection of the shoreline, in particular to the restriction of vehicular access along the beach and rock platforms.

An extension of the two recreation reserves along the riverbank is proposed by the Waipukurau District Council.

The area is one of three identified as alternative sites for a marine reserve in Southern Hawke's Bay.

**Accompanying Maps and Photographs:**

Available and held at DOC, Napier

**Site Name(s):** Tuingara (Pourerere-Aramoana)  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V23 28401 61135

**Site No:** CFI 08 0006  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The site covers approximately 6 km of coast. In the bay there is a small community situated at the mouth of the Onepoto Stream. Extensive intertidal platforms flank the bay. The surrounding area is high unstable cliff slumping into the sea. The hinterland is under pasture and grazed by domestic stock. The area is of recreational value.

**Conservation Values:**

**Natural:** b c e

**Cultural:** e a

**Historic:** c a

**Comment:**

1. The coastal slump at Aramoana is the best well exposed example in Hawkes Bay and a geomorphically significant feature (R. Black, pers.comm). An area of quicksands exists near the Onepoto Bridge (1).

The distinctive mudstone and pumice wavecut platforms support beds of eel grass Zostera muelleri and feeding waders, a unique species assemblage normally associated with estuarine areas. The shelves are important feeding grounds for migratory Eastern bar-tailed godwit Limosa lapponica and the threatened Reef heron Egretta sacra (OSNZ).

Subtidal reefs supporting a diverse flora and fauna representative of the Southern Hawke's Bay extend up to 100m seaward from the intertidal platforms (5). Further offshore the seafloor is composed of fine clean sand, interrupted in places by small, spectacular patch reefs (B. Pearson, pers.comm.).

The beach at Aramoana is littered with concretionary boulders.

2. At Onepoto bridge horses carrying timber for the bridge construction were almost lost in quicksands (1).

Tuingara Reef is a traditional Maori crayfishing ground (3).

School parties use the rocky headlands for the study of shore biology.

3. The woolshed at Aramoana is a historically interesting building. Originally part of Hawkes Bay's earliest sheep station and built of kauri floated down from Coromandel, it is a fine example of construction at the turn of the century. The building has a "C" classification (HPT).

The bay was a landing place for wool shipments and worked annually in October during the prevailing westerlies (2).

A whaling station was situated at Tuingara during the 1880's hunting baleen whales. The high hills behind Tuingara Cove served as a lookout.

**Site Importance:**

**International**

**National**

**Regional**

**Local**

**Unknown**

**Comment:**

The distinctive geomorphological features and intertidal communities, and the contributions to early Hawkes Bay history make this region of national significance.

**Existing Threats: k**

**Type and Comment:**

Intensive fishing threatens the marine diversity of the area.

Vehicular use of the beach and intertidal platforms threatens intertidal communities.

**Human Modification and Human Use: a h i j**

A camping ground is situated at Tuingara Point.

The coast can be walked north to Pourere and south to Blackhead (4).

Recreational use of the area is high, and includes swimming diving and fishing.

The rock platforms are traditional Maori kaimoana grounds.

**Existing Protection: c****Type & Comment:**

The Pourere Domain is situated at Tuingara Point.

A Recreational Reserve of 5 hectares extends along the beach front north of Aramoana (NZ Gazette Notice 40493.1, 1982).

**Availability of Information:**

Natural ① 2 3  
 Cultural 1 2 ③  
 Historic 1 ② 3  
 Threats 1 2 ③  
 Human Mod. & Use 1 2 ③

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of information:**

Natural ① 2 3 ④ 5 6 ⑦  
 Cultural ① 2 3 4 5 ⑥ 7  
 Historic ① 2 3 4 5 6 7  
 Threats 1 ② 3 4 5 6 7  
 Human Mod. & Use 1 ② 3 4 5 6 7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Bell, R (1954): Roundaway : The Story of a Sheep Farm. Unpublished. Script held in the historical library Hawke's Bay Art Gallery and Museum, Napier.
2. Waters, S.D (1959): The Richardsons of Napier : A Century of Coastal Shipping 1859-1959. Richardson and Company Ltd, Napier.
3. Wilson, J.G (1962): The Road to Porangahau and Notes on Land Settlement. Printed by Daily Telegraph, Napier.
4. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Hawke's Bay.
5. Cresswell P.D, Warren, E.J (1990): The Flora and Fauna of the Southern Hawke's Bay Coast. DOC survey Report, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Waipukurau District Classified buildings 1059, 1060 Status C
6. Other Existing CRI files DOC, Napier.
7. None

**Other Considerations:**

The area is one of the three identified by DOC as alternative sites for a marine reserve in Southern Hawke's Bay.

**Accompanying Maps and Photographs:**

Available and held at DOC, Napier

**Site Name(s):** Aramoana/Blackhead  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V23 28345 61055

**Site No:** CRI 08 0005  
**Conservancy:** Hawkes Bay  
**Date:** 240390

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**Brief Description of Site:**

Blackhead is a sand beach enclosed by rocky headlands and fed by three streams. The hinterland is pasture grazed by domestic stock on which some karaka Corynocarpus laevigatus grow.

The foreshore is scattered with boulders and gives way to intertidal platforms supporting Hormosira banksii and coralline turf. Total length of the site is approximately 10 km, this includes 7 km of intertidal platforms.

The beach has road access and is used for recreational purposes. Some holiday housing is present.

The geological composition is of tertiary bedded mudstone/sandstone, with the dip strike sequence standing out against a younger overlying sequence (R. Black, pers.comm).

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**Conservation Values:**  
**Comment:**

**Natural:** b c e f

**Cultural:** a e

**Historic:** a b c

1. Blackhead reef consists of 7 km of intertidal mudstone platforms. These platforms are dominated by Corallina and Hormosira flats. Large rock pools and scattered broken rock and boulders enhance the complexity of the intertidal environment and contribute to the diversity of the associated flora and fauna. Extensive areas of eel grass Zostera muelleri are frequently found surrounding rock pools. These Zostera and algal flats are an important feeding ground for the increasingly rare Reef heron Egretta sacra and migratory waders normally only found associated with estuaries. The upper shore is comprised of rocks and boulders and is inhabited by relatively few species (6).

The area contains many features representative of the Southern Hawke's Bay coastline. Both geological and biological composition of the reef platform is typical of neighbouring Aramoana and Purerere reefs. The upper shore rock and boulder beach resembles those typically found at Kairakau reef (6).

2. The area was traditionally famous for its crayfish, and Taraia of the Takitimu canoe sent a party south to Blackhead in search of these. Pipi Paphies spp. and paua Haliotis spp. were also abundant.

School parties use the headlands for the study of rocky shore biology (4).

3. Vast quantities of midden shells amounting to thousands of tons have been found south of Blackhead, suggesting intensive Pre-European occupation (1).

The area was noted by Cook as a high landmark apparently black against the skyline, on closer scrutiny proving to be black with Maori (2).

The reef at Blackhead was used for loading wool into surfboats for conveyance to coastal shipping (3).

Fortified pa sites occur in the cliffs north of Blackhead (P. Parsons, pers.comm).

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**Site Importance:**  
**Comment:**

**International**

**National**

**Regional**

**Local**

**Unknown**

The unique intertidal zone, importance to the threatened Reef Heron and evidence of high Maori occupation make this site of national importance.

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**Existing Threats:** d k  
**Type and Comment:**

Stock grazing is preventing any regeneration of karaka in the surrounding country.

Intensive recreational use, especially the high incidence of vehicles along the beach intertidal shelves, is detrimental to the coastal habitat.

**Human Modification and Human Use: a h i j**

The coast is walked from Blackhead to Pourere (5).

A camping ground exists at Blackhead.

The area has high recreational use. Diving, fishing and swimming occur and the firm sand allows an almost continual flow of beach traffic.

The Maori traditionally use the rock intertidal zone for the gathering of kaimoana.

**Existing Protection:  
Type & Comment:****Availability of information:**

Natural ①2 3  
Cultural 1 2③  
Historic 1②3  
Threats 1 2③  
Human Mod. & Use 1 2③

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of information:**

Natural 1 2 3④5 6⑦  
Cultural ①2 3 4 5⑥7  
Historic ①2 3 4 5 6⑦  
Threats 1 2 3 4 5⑥7  
Human Mod. & Use 1②3 4 5 6 7

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Wilson, J.G (1962): The Road to Porangahau and Notes on Land Settlement. Printed by Daily Telegraph, Napier.
2. McGregor, M.F (1975): Pioneer Trails of Hawkes Bay : being an historic guide to pioneer routes, trails and trading paths of the Hawke's Bay district in the colony of New Zealand. A.H & A.W Reed, Wellington.
3. Waters, S.D (1959): Richardsons of Napier : A Century of Coastal Shipping 1859-1959. Richardson and Company Ltd, Napier.
4. Shannon, L: Advisory Unit, Ministry of Education, Napier.
5. Cunningham, S (1983): Hawkes Bay for the Happy Wanderer. Cunningham, Bay View, Napier.
6. Cresswell, P.D, Warren, E.J (1990): The Flora and Fauna of the Southern Hawke's Bay Coast. DOC Survey Report, Napier.

Personal Communication: Robin Black, Policy Investigations Manager, Hawke's Bay Regional Council.

Personal Communication: P. Parsons (Historian), Poraiti, R D 2, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Waipukurau District Archaeological Sites V23/1-4 Maori Record Status C
6. Other CRI files, DOC Napier.
7. None

**Other Considerations:**

Measures to reduce human impact on sensitive intertidal habitats need to be considered. In particular vehicular access to the beach and tidal shelves should be restricted.

A coastal strip of land above MHW is proposed for a QEII Open Space Covenant (DOC/QEII).

The area is one of three identified by DOC as alternative sites for a Marine Reserve in Southern Hawke's Bay.

**Accompanying Maps and Photographs:**

Photographs available and held at DOC, Napier

**Site Name(s):** Porangahau  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V24 28225 60965

**Site No:** CRI 08 0004  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The 13.75 km coastline of this site is the product of submergence and subsequent accumulation of sediments deposited by marine and alluvial agencies. Much of the material of the area drifts as dunes under wind influence.

The long sand and saltmarsh estuary is fed by the Porangahau River, with pure unvegetated low sand hammocks to seaward and muddy silt on the land side of the channel. It contains a diversity of wildlife and archaeological remains. The site has road access and supports a small community.

The coast is of recreational value and under pressure for modification.

**Conservation Values:**                      **Natural:** b c e h f                      **Cultural:** a d                      **Historic:** b e d

**Comment:**

1. The Porangahau estuary is the best regional example of a longshore bar, where the drowned river valley system under the influence of longshore currents has acquired a spit across the open side of the depression. The enclosed area of water opened to the north and gradually filled in by stream inflow until the Porangahau River breached the spit at a point further south nearer its entry (1). Hard points at Blackhead and Whangaehu have protected the feature, providing a stable habitat. The history of erosion in soft rock including older material transported from the Wairarapa, provides a mixture of Tertiary and Cretaceous significant in explaining tectonic evolution (R. Black pers.comm.). The dune complex just to the north of the golf course is of national importance, containing dune ridges and flats that in structure and species composition resemble dune systems of the Manawatu (11).

The habitat value of the estuary has been classified nationally significant (WERI) being the largest and least modified estuary on the East Coast south of Ohiva. It is an important feeding and wintering area for native and overseas waders (2) containing the largest concentration of Hawkes Bay Wrybill *Anarhynchus frontalis*, also the threatened Banded Dotterel *Charadrius bicinctus* (3) and rarities including Mongolian Dotterel *C. mongolus*, Asiatic Whimbrel *Numenius variegatus*, Lesser Knot *Calidris canutus*, Royal Spoonbill *Platalea regia*, Golden Plover *Pluvialis fulva* and Hudsonian Godwit *Limosa haemastica* (OSNZ). It is a breeding ground for Variable Oyster Catchers *Haematopus unicolor*, White Fronted Tern *Sterna striata*, Black-Billed Gulls *Larus bulleri* and the threatened Caspian Tern *Hydroprogne caspia* (SSWI). The muddy silt on the land side of the channel contains large numbers of mudsnails *Amphibola crenata* and cockles *Chione stutchburyi*. The Parimahu Wetlands at the northern end of the estuary are the most southern habitat containing North Island Fernbird *Bowdleria punctata vealeae* (SSWI).

The Porangahau estuary is also important for fish schooling upriver in response to dietary requirements not met by the sandy oceanic beach devoid of green algae. Species recorded include kahawai *Arripus trutta*, yellow-eyed mullet *Aldrichetta forsteri*, sand flounder *Rhombosolea plebia*, smelt *Retropinna retropinna* and grey mullet *Mugil cephalus* (4).

The vegetation is a reasonable representation of native coastal species although mostly reduced to remnant status, and includes cabbage tree *Cordyline australis*, ngaio *Myoporum laetum*, tauhinu *Cassinia leptophylla*, ribbonwood, *Spinifex* and coastal flax *Phormium cookianum*, as well as the regionally distinct matagouri *Discaria toumatou* and *Solanum aviculare* (5).

2. The main Maori track north ran up along this coast; another leading inland to the west was used frequently by war parties raiding Hawkes Bay.

The estuary was abundant in cockles *Chione stutchburyi*, pipi *Paphies australis*, and tuatua *P. subtriangulata* and 20 fishing sites existed between the township and the sea, the lower part of the river in particular providing kokopu *Galaxias* spp. (adults), patiki *R. plebia*, tuna *Anguilla* spp. and whitebait *Galaxias* spp. (juveniles) (4).

Oral history related to the area tells of the ancestor Mahu journeying south to search for a school of learning and arriving at Parimahu, whence he was redirected back to Waimarama (P. Parsons pers.comm.).

A sperm whale which beached as the Maori were completing carving of the Tamatea-o-te-waka-Takitimu recently was regarded as a great omen; traditionally the launching of a canoe required sacrifice to give life and spirit to the waka, and the whale was interpreted as having volunteered this. According to oral history the original Takitimu canoe was escorted to New Zealand in the Migration by a female sperm whale (10). A rock in the bay remains to signify the event.

3. The area is rich in archaeocological remains and is the site of the first authenticated records of moa hunter culture in the North Island. The moa flourished on the grassland slopes east of the main divide, and the associated sites are typically an estuary/sea culdesac (6). Red gizzard stones originating in the Tukituki and obsidian have been found (7) along with whale ivory reels and spools, a necklace of killer whale teeth, greenstone and argillite adzes and chisels. Vast quantities of midden shells amounting to thousands of tons have been recorded in the area, suggesting a numerous population over a long period of time (8). A pa site was situated at Rangitoto at the north end of the beach - others exist in the trees just south of the river winding to the sea (HPT).

The ship "Maroro" was stranded inside Blackhead Reef while sheltering from a storm in 1927. Other wrecks include the ketch "Petrel" which lost its way in a south east storm on the Porangahau Rivermouth in 1862, and the schooner Alice which stranded on the bar in 1872 (9).

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**Site Importance:** International National Regional Local Unknown  
**Comment:**  
 The distinctive geology, high wildlife status, and important cultural attributes of the site make it of national significance.

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**Existing Threats:** d k e c  
**Type and Comment:**

Grazing on the saltmarsh and sanddunes by introduced stock is a threat to these fragile systems.

Use of vehicles along the beach causes disturbance and trampling of habitat.

Oxidation ponds from the nearby settlement empty into the Porangahau River and onto the sanddunes diminishing the water quality, which is below SA qualifications and pollutes the estuary where shellfish are gathered (HBCB).

A forestry plantation, lupin Lupinus arboreus and extensive areas of marram Ammophila arenaria on the fore dune threaten the value of the dune system (11).

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**Human Modification and Human Use:** h i j e a

The area has high recreational use including boating, walking and diving.

A sewage outfall discharges onto the foreshore. The area is important for Maori traditional kaimoana gathering, especially paua, cockles and crayfish. A camping site is situated in the sandhill area.

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**Existing Protection:** c  
**Type & Comment:**

The area has little effective protection. Although vehicles are banned on the beach this is not policed.

Te Paerahi Beach Reserve in the sandhill area accommodates campers and visitors. The Waipukurau District Council held a Foreshore Grant of Control for the full length of this site, Gazette no 1968, which expired 1989.

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**Availability of Information:**

Natural ①23  
 Cultural 1②3  
 Historic 1②3  
 Threats 1②3  
 Human Mod. & Use 12③  
**Comment:**

1. Well documented  
 2. Limited information (general)  
 3. Little information (if any)

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**Sources of Information:**

Natural ①23456⑦  
 Cultural ①23456⑦  
 Historic ①234567  
 Threats 1②34567  
 Human Mod. & Use 1②34567

1. Derived info. from existing literature & databases  
 2. Derived info. as above & field check  
 3. Derived from existing maps & aerial photographs  
 4. Recent DOC survey including sampling & analysis  
 5. Recent DOC survey excluding sampling & analysis  
 6. Experience  
 7. Expert opinion

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**Comment:**

1. King, L.C (1934): Notes on the Geology and Geomorphology of the Coast Between Napier and Castlepoint. Transactions and Proceedings of the New Zealand Institute 63:72-79.
2. King, K.J, Bailey, K.N and Clark, M.R (1985): Coastal of Marine Ecological Areas of New Zealand. Department of Lands & Survey, Wellington.
3. Bell, B (1986): The Conservation Status of New Zealand Wildlife. New Zealand Wildlife Service Occasional Publication No. 12. Department of Internal Affairs, Wellington.
4. Ritchie, L and Briant, A (1966): The Fish of the Porangahau Estuary. Biological Society Victoria University, Wellington.
5. Druce, A.P (1975): Indigenous Vascular Plants on the Coast Between Porangahau and Blackhead. Botany Division Internal Report, DSIR, Lower Hutt (copy held on file DOC, Napier).
6. Duff, R (1950): The Moa Hunter Period of Maori Culture. Department of Internal Affairs, Wellington.
7. Wilson, J.G (1962): The Road to Porangahau and Notes on Land Settlement. Printed by Daily Telegraph, Napier.
8. Simcox, J: Private Collection, Hawke's Bay Art Gallery and Museum, Napier.



9. Bell, R (1954): Roundaway : The Story of a Sheep Farm. Unpublished. Script held in the historical library Hawke's Bay Art Gallery and Museum, Napier.
10. Herald Tribune, 20 January 1990.
11. Partridge, T.R.: The Sand Dune and Beach Vegetation Inventory of New Zealand I. North Island Botany Division Report, DSIR (1990).

Personal Communication: Patrick Parsons (Historian), Poraiti, R D 2, Napier.

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**Recorded on Existing Databases:    Comment:**

1. WERI Name: Porangahau Estuary Date: 12/84 Record No: 89 Grid Ref: V24 28235 60980
  2. SSWI Grid Square No: 41/24
  3. PNA
  4. Geopreservation
  5. HPT County Inventories Waipukurau District Archaeological Sites V24/8-11 Maori Record Status C
  6. Other CRI files, DOC Napier, Sand dune and beach vegetation inventory of New Zealand, Site 155 North Island
  7. None
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**Other Considerations:**

The Coastal area is targeted by the Waipukurau District Council for beach home development.

The site is recognised of significant value, being historically, culturally and scientifically important and of high recreational value. However it is afforded no legal protection, and in the face of this pressure for development immediate consideration should be given to safeguarding the area.

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**Accompanying Maps and Photographs:**

Available, DOC Napier

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Site Name(s): Whangaehu  
 Recorders Name: S H Anderson  
 Map/Grid Ref: V24 28185 60825

Site No: CRI 08 0003  
 Conservancy: Hawkes Bay  
 Date: 240390

**Brief Description of Site:**

The site is a short secluded beach approximately 300m long situated between rocky headlands. Total length of the site is only about 1.25 km. The beach is exposed, and eroded sandstone deposits a layer on the uniform intertidal rock platform. A few loose boulders are present on the surface.

The rock pools have a limited selection of habitats being dominated by the algae Hormosira banksii and Corallina officinalis.

The beach has access via a metal road and the hinterland is farmed, with a quarry in the vicinity.

**Conservation Values:**                      **Natural:** f e a                      **Cultural:** a                      **Historic:** b c  
**Comment:**

1. The site is an area of mass slumping resulting from faulting, with exposed sandstones forming an unusual shore platform (R. Black, pers.comm.).

The area is relatively unmodified, although the hinterland is farmed.

The vegetation consists of representative remnants of coastal karaka forest (Corynocarpus laevigatus) and flaxland (G. Walls, pers.comm.)

A colony of White fronted terns Sterna striata and Red billed gulls Larus scopulinus also occurs here.

2. The seaweed Porphyra is abundant in the coastal area and traditionally used by the Maori as food (1).

3. A fortified site occurs at Whangaehu along the cliff, another at Maruhiri Pa in the basin between the cliffs (HPT).

Archaeological remains associated with moa culture have been recorded, including skeletons with smoke-dried skulls, greenstone and argillite adzes and a needle fashioned from human bone (2).

The beach was a landing place for early wool shipments (3).

**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**  
**Comment:**

The relatively unmodified state of the site and the archaeological significance of the area make it of regional importance.

**Existing Threats:**  
**Type and Comment:**

None documented.

**Human Modification and Human Use: h i j**

Although some fishing and boating is undertaken in the area, this site is not under high pressure from recreational users.

It is of importance to the Maori as a ground for the traditional collection of Porphyra seaweed and paua.

**Existing Protection:****Type & Comment:**

No protection.

**Availability of information:**

Natural 1 2 3  
 Cultural 1 2 3  
 Historic 1 2 3  
 Threats 1 2 3  
 Human Mod. & Use 1 2 3

**Comment:**

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Sources of information:**

Natural 1 2 3 4 5 6 7  
 Cultural 1 2 3 4 5 6 7  
 Historic 1 2 3 4 5 6 7  
 Threats 1 2 3 4 5 6 7  
 Human Mod. & Use 1 2 3 4 5 6 7

**Comment:**

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

1. Cooper, R (1966): Whangaehu Reef: A study of an Exposed Habitat. Biological Society, Victoria University of Wellington.
2. Simcox, J: Private Collection, Hawke's Bay Art Gallery and Museum, Napier.
3. Waters, S (1959): Richardsons of Napier: A Century of Coastal Shipping 1859-1959. Richardson and Company Ltd, Napier.

Personal Communication: Robin Black, Policy Investigations Manager, Hawke's Bay Regional Council.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Waipukurau District Archaeological Site V24/13-15 Maori Record Status C
6. Other CRI files DOC, Napier.
7. None

**Other Considerations:**

The site is perhaps salient for lack of knowledge and recommended for further survey, considering the unmodified nature and archaeological importance of the area.

**Accompanying Maps and Photographs:**

Available, DOC Napier

**Site Name(s):** Cape Turnagain  
**Recorders Name:** S H Anderson  
**Map/Grid Ref:** V24 28175 60760

**Site No:** CRI 08 0002  
**Conservancy:** Hawkes Bay  
**Date:** 240390

**Brief Description of Site:**

The site is a major promontory comprising a small coastal platform of sand and active dunes covering outcropping rock, and enclosed by mudstone cliffs and near vertical limestone scarps.

Access to the 10 km of coastline contained in this site is by foot from the Tautane Road.

The hinterland is under pasture and contains remnants of coastal forest.

**Conservation Values:**                      **Natural:** f b a h d                      **Cultural:** a c                      **Historic:** a b  
**Comment:**

1. The site is relatively isolated and unmodified and contains a high diversity of communities within a small area - a function of the substrate, exposure to maritime influences, and history of human occupation (1).

Remnants of karaka Corynocarpus laevigatus and Pseudopanax anomalus scrub are representative of the former coastal forest (2).

A unique flax hybrid is prevalent in the slope communities and unusual growth forms of flax on the dune margins occurs in response to periodic inundation by sand.

The species assemblage and great range of stability in the sand communities is outstanding. The threatened native sandbinder pingao Desmoschoenus spiralis (3) is present in significant amounts. This is especially rare on the east coast of the North Island where the fragile dune systems have been reduced by stock damage and competition with introduced marram grass (1).

The locality is the focus for distribution of the daisy Senecio colensoi var. obtusifolius (1).

2. Cape Turnagain gained its name from the coastal exploration by Cook, when he turned here and sailed back north (6).

The huge (40 m) sand drifts, towering cliffs and open ocean create a spectacular physical environment (1).

The reef at Poroporo was used for fishing in Whatuiapiti's time (P. Parsons, per.comm.).

3. Middens in the sand dunes suggest prolonged or regular Maori occupation. The discovery of a spinner, spool and the trussed skeleton of an aged woman signify the presence of a moa hunter tradition (4).

Portions of a concrete jetty remain from the landing once used for shipment of supplies and considerable amounts of station wool (5).

After European settlement the site was surveyed for a potential village which never eventuated.

**Site Importance:**                      **International**                      **National**                      **Regional**                      **Local**                      **Unknown**  
**Comment:**

The scenic nature of the landscape, associated pre-history, and important botanical/ecological values make this site of national importance.

**Existing Threats:** c d  
**Type and Comment:**

Adjacent stock present the risk of grazing on sand systems, and prevent regeneration of karaka.

The presence of introduced marram grass Ammophila arenaria is a threat to the continued existence of pingao.

**Human Modification and Human Use:**

Use and modification of the area is not documented and therefore probably minimal although vehicular access is possible along the beach from Herbertville. Crashing surf would deter most recreational activity.

**Existing Protection:****Type & Comment:**

The site is unprotected, being in the private ownership of Tautane Station apart from some sections surveyed last century for a proposed village.

**Availability of Information:**

Natural 1(2)3  
 Cultural 1(2)3  
 Historic 1(2)3  
 Threats 1 2(3)  
 Human Mod. & Use 1 2(3)

1. Well documented
2. Limited information (general)
3. Little information (if any)

**Comment:****Sources of Information:**

Natural ① 2 3 4 5 6 7  
 Cultural ① 2 3 4 5 6 ⑦  
 Historic ① 2 3 4 5 6 7  
 Threats ① 2 3 4 5 6 7  
 Human Mod. & Use 1 2 3 4 5 6 7

1. Derived info. from existing literature & databases
2. Derived info. as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

**Comment:**

1. Walls, G (1985): Cape Turnagain Reserve Proposal, DSIR, Havelock North. Report for Department of Lands and Survey, Napier.
2. Park, G.N (1966): The Vegetation and Flora of Cape Turnagain, Biological Society, Victoria University, Wellington.
3. Given, D.R, Sykes, W.R, Williams, P.A and Wilson, C.M (1987): Threatened and Local Plants of New Zealand : A Revised Checklist. Botany Division Report, DSIR, Christchurch.
4. Simcox, J: Private Collection, Hawke's Bay Art Gallery and Museum, Napier.
5. Waters, S.D (1959): Richardsons of Napier : A Century of Coastal Shipping 1859-1959. Richardson and Company Ltd, Napier.
6. McGregor, M.F (1975): Pioneer Trails of Hawkes Bay : being an historic guide to pioneer routes, trails and trading paths of the Hawke's Bay district in the colony of New Zealand. A.H & A.W Reed, Wellington.

Personal Communication: Patrick Parsons (Historian), Poraiti, R D 2, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Waipukurau District Archaeological Site V24/5 Maori Record Status C
6. Other CRI files, DOC Napier.
7. None

**Other Considerations:**

The area is undoubtedly worthy of reservation and protection. A paucity of land formally protected within the Eastern Hawkes Bay Ecological Regions, of which only 13 hectares is coastal suggests that the Cape, possessing features not reserved elsewhere, would be a valuable contribution. The land could be acquired by the Crown, or protected in perpetuity by a Protected Private Land Agreement.

A fence at the northern boundary to exclude stock from the slopes, dune systems and karaka trees is recommended.

Control of marram grass is also desirable (1).

**Accompanying Maps and Photographs:**

Available, DOC Napier

Site Name(s): Wainui  
 Recorders Name: S H Anderson  
 Map/Grid Ref: V24 28117 60727

Site No: CRI 08 0001  
 Conservancy: Hawkes Bay  
 Date: 240390

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**Brief Description of Site:**

The site is a 5 km stretch of open sandy beach traversed by a river and two stream mouths.

Low sand hummocks shelter salt pans which fill during spring tides and storms.

The streams have Scirpus and Juncus fringes and some silt sediment, providing limited feeding areas (SSW).

The beach is serviced by a road.

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**Conservation Values:**                      **Natural:** b d c                      **Cultural:** a                      **Historic:** b  
**Comment:**

1. The threatened native sandbinder pingao Desmoschoenus spiralis, much prized by the Maori for weaving, is recorded on the sand dunes (1). The dune systems are fragile and sensitive to trampling and grazing.

Juveniles of the rare Banded dotterel Charadrius bicinctus (2) have been sited, suggesting a possible breeding area; Variable oystercatchers Haematopus unicolor are also suspected to breed in the locality.

New Zealand fur seals Arctocephalus forsteri occasionally haul out on the coast (DOC field observation).

2. The presence of archaeological remains and traditionally occupied sites is of cultural value to the Maori.

3. A fortified pa site with associated middens exists on the cliffs above the bridge across the Tautane Stream. Another pa site is recorded on the south side of the stream (HPT). Chisels, a utensil fashioned from the vault of a human skull and other artefacts representative of moa hunter culture have been found in the locality (3).

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**Site Importance:**                      International                      National                      Regional                      Local                      Unknown  
**Comment:**

The site contains threatened bird and plant species and important archaeological remains making, it one of regional significance.

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**Existing Threats:** k c  
**Type and Comment:**

Vehicular access along the beach threatens the dune vegetation. The exotic weed marram grass Ammophila arenaria is detrimental to the continued existence of pingao.

**Human Modification and Human Use:** h i a

Walking, surfcasting, diving, horse riding and boating recreational activities occur in the locality.

A motorcamp accommodates visitors.

**Existing Protection:  
Type & Comment:**

No legal protection.

**Availability of Information:**

Natural 1 2 ③  
Cultural 1 2 ③  
Historic 1 ② 3  
Threats 1 2 ③  
Human Mod. & Use 1 2 ③  
Comment:

1. Well documented
2. Limited Information (general)
3. Little information (if any)

**Sources of information:**

Natural ① 2 3 4 5 ⑥ 7  
Cultural ① 2 3 4 5 6 7  
Historic ① 2 3 4 5 6 7  
Threats 1 2 3 4 5 ⑥ 7  
Human Mod. & Use 1 2 3 4 5 ⑥ 7  
Comment:

1. Derived info from existing literature & databases
2. Derived info as above & field check
3. Derived from existing maps & aerial photographs
4. Recent DOC survey including sampling & analysis
5. Recent DOC survey excluding sampling & analysis
6. Experience
7. Expert opinion

1. Given, D.R, Sykes, W.R, Williams, P.A and Wilson C.M (1987): Threatened and Local Plants of New Zealand: A Revised Checklist. Botany Division Report, DSIR, Christchurch.
2. Bell, B (1986): Conservation Status of New Zealand Wildlife. New Zealand Wildlife Service Occasional Publication No. 12. Department of Internal Affairs, Wellington.
3. Simcox, J: Private Collection, Hawke's Bay Art Gallery and Museum, Napier.

**Recorded on Existing Databases: Comment:**

1. WERI
2. SSWI
3. PNA
4. Geopreservation
5. HPT County Inventories Waipukurau District Archaeological sites V24/1-4, 6, 7 Maori Record Status C
6. Other CRI files.
7. None

**Other Considerations:**

The site contains interesting biological and historical features and would justify some form of protection.

**Accompanying Maps and Photographs:**

Available, DOC Napier

