TARANAKI REGION Coastal plan review

ARCHAEOLOGICAL SCOPING STUDY DECEMBER 2012



ANDY DODD SUBSURFACE LTD PO BOX 31 PAEKAKARIKI 5258 04 902 3290 | 021 148 3290

TARANAKI REGION COASTAL PLAN Review

ARCHAEOLOGICAL SCOPING STUDY

CONTENTS

Contents	1
Introduction	2
Project brief	2
Limitations	2
Statutory and planning background	2
Method of research	4
Results	4
Site types	5
Canoe landings	5
Petroglyphs	5
Shipwrecks	6
Sunken aircraft	8
Wharves and jetties	8
Protective works	9
Coastal defences	10
Anchorages	10
Shipbuilding	11
Whaling	11
Iron sand mining	11
Oil prospecting	11
Finds	12
Reclamations	12
Sites recorded in the coastal margins above MHW	12
Preliminary assessment	13
Conclusion	22
Recommendations	22
Select annotated bibliography	23
Additional references cited	26
Appendix	30

r

INTRODUCTION

Taranaki Regional Council is undertaking a review of its Coastal Plan. Since the current Coastal Plan for the Taranaki region was made operative in 1997, a revised New Zealand Coastal Policy Statement issued by the Department of Conservation in 2010 requires Coastal Plans to identify and assess historic heritage, including archaeological sites, and to initiate assessment and management of historic heritage in the context of historic landscapes.

This scoping study has been commissioned by Taranaki Regional Council to identify archaeological sites in the Taranaki Region Coastal Marine Area, and to shortlist sites for further assessment.

PROJECT BRIEF

The project comprised two stages:

- **Stage 1** undertake a desktop analysis of existing information in order to identify potentially significant historic heritage sites in the Taranaki CMA;
- Stage 2 assess each of the sites on the basis of available documentation to determine if the site is likely to have significant historic heritage values. This process is to use established criteria for determining archaeological significance.

It is proposed that the desktop analysis results in a list which clearly identifies potentially significant sites, their location (including grid references if available), and an annotated bibliography of principal sources consulted during the project. This report deals with Stage 1 of this process. Stage 2 of this process has been prepared as a separate appendix.

This report deals only with historic heritage located in or on the boundary of the Coastal Marine Area. The Coastal Marine Area is defined as the area seaward of Mean High Water Springs (MHWS) to the 12 nautical mile limit, and in river mouths as defined by the Taranaki Coastal Plan, Appendix 2: Coastal marine boundaries at river mouths. Identification and protection of archaeological sites located on the landward side of these boundaries falls within the mandate of the District Councils, so has not been included.

LIMITATIONS

The scoping study has been prepared as a desk-top study, and has not involved field work or site visits to record new sites or assess present condition of previously recorded sites. Additionally, iwi have not been involved in the preparation of this report.

While this report discusses both Māori and non-Māori site types it does not include wāhi tapu or consider the significance of sites to Māori. It is anticipated that work to recognise and provide for sites of significance to Māori, including wāhi tapu, will be informed separately through the Taranaki Regional Council working closely with tangata whenua.

For the purposes of this report, it is acknowledged that iwi hold information on the sites listed below as well as other unrecorded archaeological sites within their rohe. Accordingly, there will be an opportunity for these sites to be assessed at a later stage if iwi choose to share that information. It is also anticipated that there will be some overlap between sites of significance to Māori and Māori type archaeological sites identified through this study.

STATUTORY AND PLANNING BACKGROUND

The review of heritage listings in the Taranaki Regional Plan is being carried out in light of a number of legislative changes and policy reviews that have taken place since the operative plan was adopted in 1997. These have been set out briefly below.

TARANAKI COASTAL PLAN 1997 (OPERATIVE)

The 1997 Coastal Plan for the Taranaki region contains objectives, policies and methods to mitigate against loss of significant coastal heritage. Like many other first generation regional coastal plans the operative plan contained general policies around historic heritage, but does not identify or schedule specific historic heritage sites.

Objective 3(b) is "To recognise the heritage values of sites, places or areas and to provide protection of those values from adverse effects of use or development of the coastal marine area." This objective is given effect by two policies. Policy 3.1(d) is to "avoid, remedy or mitigate adverse effects on sites or areas of historical or cultural significance.", and Policy 3.3 is that "Regard will be had in making coastal management decisions, to areas, places objects or sites protected by the *Historic Places Act* 1993 and other areas, places, objects or sites with archaeological, historical, cultural or heritage values of regional or national importance."

These policies are then applied through Methods 2(i) and 2(ii) which allow for the consideration of the above values when setting conditions on coastal permits, or considering discretionary or non-complying coastal permit applications.

RESOURCE MANAGEMENT AMENDMENT ACT 2003

Since the preparation of the 1997 Taranaki Coastal Plan a number of changes have been made to the Resource Management Act 1991 with regard to historic heritage.

The 2003 Resource Management Amendment Act elevated the protection of historic heritage from inappropriate subdivision, use, and development to a matter of national importance which local authorities are required to 'recognise and provide for'. Prior to this change, councils were only required to have particular 'regard to' the protection of historic heritage. Another change is that historic heritage is now included as a restriction on activities in the CMA (s12(1)(g).

INVENTORY OF COASTAL AREAS OF LOCAL OR REGIONAL SIGNIFICANCE 2004

In 2004 Taranaki Regional Council prepared an inventory of coastal areas of local or regional significance (Taranaki Regional Council 2004). The purpose of this document was to provide planning authorities with information pertaining to the values in these locations which in turn could assist with decision making. The inventory included details of 69 locations around the Taranaki coastline, and included general information about historic heritage and archaeological sites, but did not include specific protection mechanisms.

REVIEW OF EFFECTIVENESS 2009

In 2009 a review of the operative coastal plan was undertaken by the Taranaki Regional Council. The review considered the effectiveness of the policies, rules and processes in the plan, but also considered these in light of changes to the *Resource Management Act* since 1997, and sought submissions from stakeholders including the New Zealand Historic Places Trust.

The review proposed changes to a number of policies, including those for the identification and protection of historic heritage (TRC 2009:83-85).

CNC Policy 4 "Areas in the coastal environment of importance to the region will be identified and priority given to protection of the natural character, ecological and amenity values of such areas from any adverse effects arising from inappropriate subdivision, use and development". Areas of importance includes "historic heritage values, including archaeological sites of national or outstanding significance".

CNC Policy 5 "Recognition will be given to the protection where appropriate of other features or landscapes in the coastal environment not covered by Policy 3 above but still important to the region". Importance to the region includes "recreational and historic areas" and "cultural features of significance to tangata whenua".

NEW ZEALAND COASTAL POLICY STATEMENT 2010

The New Zealand Coastal Policy Statement 2010 (Policy 17) contains specific guidelines for the identification and protection of historic heritage in the coastal environment from inappropriate subdivision, use and development:

Specifically 17(a) provides for the identification of historic heritage by requiring "identification, assessment and recording of historic heritage, including archaeological sites; and (c) initiating assessment and management of historic heritage in the context of historic landscapes".

METHOD OF RESEARCH

The NZAA site recording scheme (Archsite) and the New Zealand Historic Places Trust Register were reviewed for recorded sites associated with the coastal marine area in the Taranaki region. The records of 185 archaeological sites recorded in the sea or within 100 metres of the Taranaki coastline were accessed and reviewed to determine if archaeological remains were likely to be present in the coastal marine area.

Digitized Survey Office Plans, Māori Land Plans, and Deposited Plans for the Taranaki Land District were also reviewed. These occasionally allowed for accurate location of sites that were not visible on aerial photographs.

Heritage studies prepared for the New Plymouth District Council (Holman 1995; Mana Whenua Reference Group 2006), and South Taranaki District Council (Cochran 2000a and 200b) were reviewed for listings that were located in the coastal marine area.

Information provided by the Taranaki Regional Council included the Inventory of Coastal Areas of Local or Regional Significance in the Taranaki Region (2004), and a spreadsheet of 76 potentially significant sites in and adjacent to the coastal marine area. High resolution digital aerials were also supplied by the Taranaki Regional Council. These allowed for the identification and accurate placement of some archaeological features, particularly those in shallow water on in the intertidal zone.

The remaining sites were identified from secondary histories and regional and thematic overviews. These books, along with the other most valuable sources of information have been included in the annotated bibliography.

RESULTS

Of the 1874 archaeological sites recorded in Taranaki, approximately 10 percent (185) have features located within 100 metres of the coast.¹ Archaeological records for these sites provided information on 25 sites or features located within the coastal marine area. Two shipwreck sites within the Taranaki coastal marine area associated with the New Zealand wars have been included in the NZHPT register of Historic Places (*Tasmanian Maid* wreck site, No.9521, and the *Alexandra* wreck site, No. 9520).

Built heritage inventories prepared for the District Councils largely focused on buildings and structures located on land, but a small number of coastal structures were included. These were the lee and main breakwaters at New Plymouth (Holman 1995), the Kawaroa salt water pool (Holman 1995), the Waitara wharf (Holman 1995), the Pātea power station (Cochran 2000:45-47), and the original 1874 bridge piles at Pātea (Cochran 2000:9-10).

Archaeological sites located immediately adjacent to the coastal marine were excluded from the shortlists prepared for this study unless it was considered likely that the remains extended onto the foreshore, or into the sea. Some of these sites may be subject to erosion and as a result archaeological material may be deposited on the beach or into the sea, but once eroded this material loses most of its archaeological context.

Archaeological remains in the coastal marine area may include intertidal structures partially visible above water, but for many the only surviving remains will be located on or below the seabed. While the removal or

¹ Figures accurate as at August 2011, supplied by Archsite central file.

destruction of many structures has been documented, there may still be elements that survive where structures were attached to the seabed, or where piles have been cut off above the seabed. In some instances it will not be possible to fully determine the extent to which archaeological remains survive beneath the seabed without excavation. Archaeological excavation underwater is beyond the scope of this study, but if undertaken in future could result in the recovery of significant historical information.

The study identified 183 potential and recorded sites located in the coastal marine area, and these have been included as a spreadsheet appended to this report. 30 sites were shortlisted for further assessment (Table 1). Many of the sites can be categorized by types, and these are discussed below.

SITE TYPES

CANOE LANDINGS

Canoe landings or tauranga waka have been recorded in a number of locations around the Taranaki coast. These may be areas of the foreshore cleared of boulders adjacent to pa, such as those at Warea (P20/125), Cape Egmont (P20/95) and Opunake (P20/19), or in the case of some North Taranaki sites, they may utilize naturally occurring breaks in coastal cliffs (Mana Whenua Reference Group 2006:11,17). In the case of a canoe harbour reported at Waitara (Q19/94), the site was recorded on the basis of canoe finds during swamp draining. The number of canoe landing sites recorded around the Taranaki coast in the site recording scheme is likely to be considerably underrepresented. Tangata whenua will almost certainly have information about additional sites within their individual rohe.



Figure 1: Example of a tauranga waka at Tikopa. Photo: Ivan Bruce, 2006

The landing sites of ancestral waka, such as the Tokomaru landing place near Mohakatino, and that of the Aotea at Pātea , are typically acknowledged as having high cultural values, but are not recorded as archaeological sites. Archaeology deals with the recording of physical remains, so unless there is tangible evidence of past activity it is not recorded.

PETROGLYPHS

A number of petroglyphs have been reported along the Taranaki coast (P19/147; P19/240; P19/241; P20/80; Q18/58). Rock art has been recorded in numerous locations around New Zealand, but the carvings on andesitic boulders particularly in the coastal zone, can be considered unique to the Taranaki region. Various suggestions

have been offered as to the purpose of these carvings, and these include boundary markers, markers for fishing grounds or where warriors were killed, or locations of religious significance (Best 1927:137-140; Day 1980:113-117; Prickett 1981:198-201; Fyfe 1989:177-181).

Petroglyphs have also been recorded in coastal caves at Tongaporutu (Q18/58, Delph 1939:116-121), but these appear to have been affected by erosion in recent years (*Taranaki Daily News* 3.7.2007). One petroglyph (P20/80) previously located near the end of Bayly Road, Pungarehu, has since been removed from its original location. The stone has now been installed as a monument to the Parihaka prisoners at Andersons Bay in Dunedin (Fyfe 1989:180).



Figure 2: Petroglyphs recorded near Omata. Image reproduced from Prickett 1981: Fyfe 1989:177-181

SHIPWRECKS

Shipwrecks are what most people think of when they consider underwater cultural heritage. The archaeological provisions of the *Historic Places Act* 1993, and the *Protected Objects Act* 1975 both make specific mention of shipwrecks. Of the almost 3000 shipwrecks and abandoned vessels documented around New Zealand, approximately half pre-date 1900, and on this basis fall under the protection of the *Historic Places Act*. Because of their association with a specific event, artefacts from shipwrecks are from a known date which can be important for determining date ranges for similar artefacts elsewhere. If well preserved, they also act as a time-capsule of items from shipboard life or cargo.

While it may seem as though shipwrecks around an exposed coastline such as Taranaki are at risk of being destroyed by natural processes, and this is often used by souvenir hunters as a justification for removing items, the reality is that many of these shipwrecks have survived *in-situ* for well over a century and will continue to do so if left undisturbed. Models for wreck site formation show that without intervention shipwreck sites will eventually reach an equilibrium with their environment as they settle into the seabed (Ward, Larcombe and Veth 1998, 1999).

Excluding wrecks which were successfully salvaged, there are at least 126 documented shipwrecks in the Taranaki region, of which 64 wrecked prior to 1900. The earliest documented wrecks in the Taranaki region include the schooner *Tohora* (1827-1828) the barque *Harriet* (1819-1834), the Plymouth Company schooner *Regina* (1841-1841) and the cutter William and James (1850). Of these the only wreckage to have been discovered in recent times is the *Harriet*, near the mouth of the Okahu stream, from which a bell and anchor have been recovered (de Jardine 1984:5-6).

Of the remaining 62 vessels at least 8 were constructed prior to 1900, and on this basis have the potential to inform about nineteenth century ship construction. Of note are the *Gairloch* (1884-1903) at Ahu Ahu and the *Waitangi* (1889-1923) at Pātea.



Figure 3: Gairloch on the rocks at Oakura, 1903 'Sir George Grey Special Collections, Auckland Libraries, 589-88'



Figure 4: Remains of Gairloch in 2010. Additional remains can be found underwater

The NZAA site recording scheme includes records of 11 wreck sites in Taranaki. These include *Tasmanian Maid* 1856-1868 (P19/248), *Alexandra* 1863-1865 (Q18/51), *Harriet* 1819-1834 (P20/124), *Lord Worsley* 1858-1862 (P20/20), *Gairloch* 1884-1903 (P19/251), *Wanaka* 1876-1891 (P19/249), *Rangatira* 1863-1880 (P19/164), *Waitangi* 1889-1923 (Q22/78), *Paterson* 1854-1874 (Q19/284), *Airedale* 1857-1871 (Q19/63), and *John Whiteley* 1850-1851 (P19/250). Also recorded is the wreck of a vessel which was uncovered near East End Beach, the identity for which has not been confirmed (P19/247). Possibilities include *George Henderson, Seagull* and *Black Diamond*. Two shipwrecks associated with the Taranaki wars of the 1860s, the *Tasmanian Maid* (No. 9521) and *Alexandra* (No. 9520) have been registered by the New Zealand Historic Places Trust.



Figure 5: Remains of a paddle wheel hub from the Tasmanian Maid in 2008.

A position has also been confirmed by divers for the wreck of the Northern Monarch off Oaonui (Rippon 1986:68), but this site has not been recorded in the NZAA site recording scheme.

Of particular interest are New Zealand built vessels, as these have the potential to contribute to knowledge about the methods and materials used historically in the New Zealand shipbuilding industry. Thematic research into wrecks of Australian built vessels has provided information on unique aspects of those vessels and some of the rationale behind certain elements of construction (eg. Coroneos 1991, Jeffery 1989). Twenty-five New Zealand built vessels are known to have wrecked in the Taranaki region. Of particular note is the schooner *John Whiteley* which was built at Kawhia in 1850, other early New Zealand built vessels wrecked in Taranaki but in unverified locations, include *Margaret* (1846-1846), *Harry* (1854-1857), *Eclipse* (1863-1865), *Celt* (1865-1867), *Woodpecker* (1865-1869), *Falcon* (1864-1870), *Lizzie* (1864-1870), and *Dawn* (1866-1877).

Other shipwrecks are historically significant because of the remarkable stories of survival. Much has been written about the wreck of the *Harriet* and the survival of Betty Guard which resulted in the first officially sanctioned use of British military force in New Zealand (Grady 1978:60-74; McNab 1913:112-132). The survival of the victims from the wreck of the *Lord Worsley* in 1862 was also significant, occurring at the time when tensions were still running following the first Taranaki war (De Jardine 1984:11-15; Ingram 2007:87-8; Griffin 1989:15-24).

SUNKEN AIRCRAFT

Only one recorded instance of an aircraft wreck occurring in the coastal marine area was identified. This was the Fairy Gordon NZ617 which wrecked off New Plymouth in 1942 (Locker-Lampson and Francis 1994:122). Aircraft are not included within the jurisdiction of the archaeological provisions of the *Historic Places Act* as none were in existence before 1903. However, archaeological work on sunken aircraft remains is a growing field of research and has been carried out with some success on Catalina aircraft in Darwin Harbour, Australia (eg. Jung 1996). In New Zealand *in-situ* aircraft wreck sites can be described as nationally rare, as only those in remote areas or underwater are left un-salvaged.

WHARVES AND JETTIES

Most of the minor river ports on the Taranaki coastline had wharves to facilitate the loading and landing of goods and passengers. Wharf and jetty sites are often good repositories of artefacts. Archaeological remains can include artefact deposits on the seabed, as well as structural elements of construction and repair over the duration of its use. They accumulate items dropped over the side over the duration of the life of the structure in much the same way as archaeological deposits form over time on land.

Distribution of artefactual material is likely to be concentrated towards the seaward end of the jetty where there is deeper water for berthing, with material concentrated in decreasing density further away from the sides of the

jetty. Discrete concentrations are likely to occur between the jetty and the ship, as well as further away from the jetty depending on the width and number of vessels which berthed alongside. Like slipways and landings the jetties form the interface between the land and the sea, so structural remains will be located underwater, in the intertidal zone and on land.

The first wharf at Waitara was privately owned and constructed by the Webster Brothers at the end of High Street in 1868, and went on to become the town wharf in later years (de Jardine 1992:64,81). A railway wharf was built at the end of Whitaker Street in 1875 and was eventually extended south as far as the bridge, although only a portion of this structure presently remains (de Jardine 1992:66). The 1907 wharf at Tongaporutu was located in the vicinity of the baches on the south side of the river, but any remains are likely to be buried beneath the reclamation (de Jardine 1992:50-51).

Opunake had a number of jetties and wharves located along the northern side of the bay, and a few piles from the 1927 wharf are still visible near the boat ramp immediately east of the mole. Pātea was site of a garrison from 1864, and later developed into a busy port. Entrepreneurs Hirst and Milroy built wharves which projected out into the steam in 1871 and 1875 (de Jardine 1992:156). A town wharf was constructed in 1881, and these structures were later replaced with a new wharf in 1900. On the opposite side of the river a railway wharf was constructed in 1883 and dairy factory wharf built in 1904 (de Jardine 1992). While these wharves have been out of use since the port closed in 1959, they still remain on either side of the river, in a dilapidated state.



Figure 6: Town wharf remains at Pātea. Photo Ange Lenz, 2010

The first wharf at Port Taranaki was constructed behind the newly built harbour wall in 1887 (Scanlan 1991:57-58, 144-145). This wharf was named the Moturoa wharf in 1924 to differentiate it from the newly constructed Newton King wharf, and was largely replaced in 1959 (Scanlan 1991:124, Lambert 1983:127). The Blyde wharf reclamation in 1973, and dredging around the port, is also likely to have affected the integrity of archaeological remains on the seabed.

PROTECTIVE WORKS

The movement of sediment and exposed nature of the Taranaki coastline has necessitated the construction of protective works at most ports. The construction of the main breakwater at New Plymouth was started in 1881, and was extended progressively up until 1967 (Scanlan 1991:35,144-145). The outer form of the 1881 works have since been encased by the reclamation at Mikotahi, but the inner form still continues along its original alignment. A mole was constructed at Opunake in 1924 to provide shelter for its wharf (de Jardine 1992:136-7).

The river ports required training walls and protective walls at the mouth to keep their shifting bars open. Like the works for many harbours around New Zealand including New Plymouth, these were designed at Pātea and at Waitara by the marine engineer, Sir John Coode, during his tour of Taranaki ports in 1878. The eastern training

wall was first constructed in 1880 (de Jardine 1992:158,160). It wasn't until 1902 that the western wall was built, and the protective works were largely completed in their present form by 1916 (de Jardine 1992:180-86).

COASTAL DEFENCE

Compared with other principal ports, preparations for coastal defences at New Plymouth were relatively light. It wasn't until the Japanese entry into WWII in 1941 that a gun was mounted above the port (Tullet 1981:285, Cooke 2000:274). Home guard districts in Taranaki were based at New Plymouth, Hawera, and Stratford (Cooke 2000:574).

During WWII a total of 22 pillboxes (concrete machine gun emplacements) were constructed around the Taranaki coast (Cooke 2000:769). These included ten at New Plymouth, six at Pātea , and two at Waitara. Only one of these is recorded in the NZAA Archsite (Q22/80). At least two pillboxes are known to exist in the coastal marine area, one at Pātea and one at Waitara. The majority of the remaining pillboxes are likely to be located outside of the CMA, so are beyond the scope of the Coastal Plan. Other elements of coastal defence which were established on the beaches included rolls of barbed wire at Waiwakaiho, Oakura, and Pātea (Cooke 2000:773). These have all since been removed.

ANCHORAGES

Anchorages are frequently marked on historic charts, and these may refer to locations where specific ships anchored on a given date, or locations where deep and calm water was available and would be used by numerous ships over a period of time. As a result, they have the potential to accumulate refuse thrown or dropped overboard from the ships that visited, in much the same way as jetties and wharves. Archaeological evidence of moorings is likely to be similar to that of anchorages, but with the possible presence of mooring anchors and lines.

Prior to the creation of the harbour at New Plymouth, the mooring was located in the roadstead about 1.5kms off the coast of New Plymouth (de Jardine 1997:24). A cluster of five anchors (P19/260) has been recorded in the vicinity of this location and may be a remnant of this feature. An alternative anchorage at New Plymouth was located at the Sugarloaves (NZ Pilot 1856:118-119). One of the first vessels reported to have anchored at this location was the *Tory* on 27 November 1839 (Wells 1878:21).



Figure 7: Detail of 1841 plan of New Plymouth by Fred. A. Carrington showing description of moorings and anchorages in the New Plymouth roadstead. Sir George Grey Special Collections, Auckland Libraries, NZ Map 3672.

SHIPBUILDING

Shipbuilding in Taranaki was a fairly minor industry. The first vessels to be built at New Plymouth were completed by June 1842 (McAlister 1976:9-10). These were small trading vessels of 5 and 13 tons. The construction of a significantly larger vessel, commenced in 1853, was the schooner *Taranaki* which was launched at Ngāmotu beach in 1855 (Tullet 1981:108). The *Taranaki* was constructed by Richard Rundle and Thomas Clare and was launched in the vicinity of the present day yacht club (Moorhead 2009:94-95). The roadstead port necessitated the building of surfboats and these were made in New Plymouth by Crocker and Brooking from 1842 (Moorhead 2009:27-28). Archaeological remains from these sites have not been reported to date, and it is unknown if any subsurface remains exist on land or in the coastal marine area.

WHALING

Shore whaling at New Plymouth started relatively lately compared to other west coast locations in Cook Strait. Ngāmotu beach was the location of Dicky Barrett's whaling station from 1841-1847, and Richard Brown operated a competing whaling station on the beach at New Plymouth before relocating to Ngāmotu (Prickett 2002:100-101, Tullet 1981:57; Wells 1878:205-206; Hursthouse 1849:137-138). The New Plymouth stations targeted right whales both for baleen and oil, but were relatively short-lived. Dicky Barrett died in a whaling accident in 1847, and his business partner Richard Rundle continued for one more season before closing down. By this time whale sightings were increasingly rarer. Brown's station continued in business until at least 1847 after which time no further figures are available (*New Zealand Spectator and Cook Strait Guardian*).

Whaling stations in undeveloped parts of the coastline sometimes contain archaeological remains in the coastal marine area in the form of discarded whale bone and other refuse dumped into the sea. Later operations sometimes included foreshore structures. However this is unlikely in the case of the New Plymouth whaling stations as both sites are likely to have been fairly ephemeral operations and the locations where they were sited have since been considerably modified through reclamation and development. The whaling sites at Ngāmotu site is listed as destroyed by (Prickett 2002:150), and it is unlikely that remains have survived in the coastal marine area. Canon used by Barrett and Love in the siege of Otaka pā, and trypots from one of the shore whaling establishments are in Puke Ariki museum.

IRON SAND MINING

In 1848 a smelting operation was established by John Perry on Carrington Road in the vicinity of the Huatoki stream (Wells 1878:289). Hursthouse, writing a prospectus for the new settlement in 1849, noted the iron sand deposits on the beaches (Hursthouse 1849:20,131-132). Another smelting operation was attempted in 1869 by a Wellington based firm, Henochberg and Co., in the vicinity of the Mangaotuku stream, and limited success there led to the formation of the Pioneer Steel Company (Wells 1878:289; Tullet 1981:57). A third operation, the New Zealand Titanic Steel and Iron Company, set up a furnace on the banks of the Te Henui stream which smelted iron sand from 1876 (Wells 1878:290). While the mining of iron sand was carried out in the coastal marine area, it is unlikely that any archaeological remains of this activity survive. The remains of the smelting furnaces were all well outside the coastal marine area.

OIL PROSPECTING

The earliest oil prospecting on the Motuora field, and in New Zealand, was carried out on Ngāmotu beach in the vicinity of the Sugar Loaves in 1865. Carter and Co sank their Alpha shaft in the vicinity of what is now the southern end of the main breakwater (Lambert 1995:4-5, 12-15). Another well, Taranaki Petroleum Co. No. III bore was sunk just above the coastal escarpment on nearby Mikotahi Island. The Moturoa field was operational until 1972, and during that time most wells were located well above the high tide mark. Two wells, Republic 2 and Republic 3 were established on the Blyde wharf reclamation in 1975, and Moturoa No. 4 was established on the escarpment above Ngāmotu beach in 1934, with the walking beam pump, still present there today, installed in 1953 (Lambert 1995:55).

FINDS

While they may lack immediately apparent archaeological context, finds are often incorporated in the NZAA site recording scheme as an indicator that additional archaeological sites might be found in the vicinity, or have subsequently been destroyed.

Cannon, anchors and other large metal objects may be good indicators that other wreckage from ships is in the vicinity. Anchors were frequently cast off to stay vessels that were in danger of striking the coast, and these would become lost when cables parted under strain. Often if stranding or wreck seemed imminent, other heavy items such as cannon would be cast overboard in an attempt to reduce the draught and make the vessel more buoyant, so these features might be indicative of a near miss. The direction of an anchor chain or shaft can shed light as to the wind direction when it was cut loose or lost, and spatial distribution of discarded cannon and other heavy objects can similarly provide additional information about the sequence of events in wrecks or near misses.

Items found washed up on beaches may also be re-deposited from their original context. An example of such a find was a ship's dead-eye (part of the rigging) found on Ngāmotu beach in 2009 (*Taranaki Daily News* 23.02.2009). While not possible to identify definitively, at the time it was believed that this might have come from the wreck of either the barque *Australind* (1860-1882) or brig *Star of Mersey* (1863-1886). It was further speculated that it may have been from deposits exposed as a result of recent dredging activity at the Port of Taranaki.

A number of anchors have been recovered from around Taranaki, but without detailed records it can be difficult to say if these were isolated finds or whether they originated from an archaeological context. These include the *Lizzie Bell* anchor at Pihama cemetery, and the *Harriet* anchor mounted at Opunake. An intriguing item deposited in the Puke Ariki museum in 1927 is reported to be the anchor stone of the Tokomaru canoe, which for many years was hidden on the south side of the Mohakatino River until the construction of the road bridge (de Jardine 1992:45). Another find site which may indicate further archaeological remains in the nearby coastal marine area was reported in 2010 following the discovery of 15 stone sinkers near the end of Stent Road (P19/399).

RECLAMATIONS

Areas where reclamations have taken place have potential to preserve archaeological heritage which was located on the foreshore, and often functioned as a repository for rubbish during the reclamation process. The number of reclamations in Taranaki is limited but notable examples include the reclamations at Port Taranaki north of Mikotahi which buried the outer edge of the 1881 main breakwater, and for the Blyde wharf and at Ngāmotu beach. The esplanade reserve where the Tongaporutu baches are located is likely to have preserved archaeological deposits associated with the 1907 wharf at that location.

SITES RECORDED IN THE COASTAL MARGINS ABOVE MHW

The NZAA site recording scheme includes details on many sites which are located in the coastal margins around Taranaki above MHW which fall outside the scope of the coastal plan, but can still be affected by activities carried out in the CMA. The most common types are briefly mentioned here because of the potential for them to be lost or damaged as a result of activities which cause or contribute to erosion. Such activities might include sand mining or gravel extraction, or siting of foreshore structures in such a way that redirects water movement.

The NZAA site recording scheme includes records for 88 pa and 37 midden/oven sites within 100 metres of the coastline. Other commonly recorded sites include burials, and also earthwork features such as terrace and pits sites, which can be indicative of settlement sites such as papakainga, or horticultural activities. Notable sites of significance which are at risk from erosion and illegal fossicking include the early occupation sites located at Ohawe and Kaupokonui river mouths.

While some midden/oven sites might be actively eroding into the CMA, they have not been included in the shortlisted sites. Once an archaeological deposit has eroded from its primary deposit the context and much of the archaeological information that can be derived from it is lost. For most of the midden/oven sites in Taranaki the surviving portion is well above MHW.

PRELIMINARY ASSESSMENT

Consideration of archaeological sites to be incorporated in the heritage schedule appended to the Coastal Plan will be largely determined by significance. The criteria used for assessing archaeological significance is based on established guidelines (Walton 1999, NZHPT 2006). These include condition, representativeness, period and archaeological significance, and have been briefly expanded upon below.

Sites that can be clearly defined in terms of location, extent and condition are best able to be afforded protection through inclusion in a heritage schedule with corresponding rules in the plan. Where structures are still in use and actively maintained it may be useful to consider separate schedules for protection (limited intervention) and preservation (active intervention). It is desirable that any heritage list includes the most significant sites in the project area, but also that it encompasses a representative range of site types and themes.

The shortlist of 30 sites proposed for further assessment have been selected on the following criteria:

SURVIVAL/CONDITION:

Sites have been selected on the basis of those which are most likely to have survived *in-situ* within the coastal marine area, and preference has been given to sites where physical remains have been reported in recent times. The coastline within the Taranaki region is dynamic, and where changes have occurred as a result of accretion or reclamation archaeological deposits might still exist, but fall outside of the scope of the boundaries defined by the Coastal Plan, so cannot be included.

REPRESENTATIVENESS:

Where possible representative examples of different site types have been selected with examples from around the region. However the majority of archaeological remains that are likely to survive in the Taranaki region coastal marine area are in the vicinity of New Plymouth, Waitara and Pātea where most of the maritime activity has been concentrated. Because Māori archaeological remains in the coastal marine area are comparatively rarer, and often tend to be at greater risk from natural coastal processes, these should be given precedence where physical remains have been confirmed or are likely to exist *in-situ*. Intangible sites of cultural or traditional significance have not been addressed in this study, but it is recommended that where possible these are identified within the coastal landscape and given protection.

PERIOD:

Preference has been given to earlier sites, where remains have been confirmed or are likely to survive. Where multiple structures such as wharves and jetties were constructed at the same location later structures can also be included with earlier listings. In areas where multiple wrecks occurred such as the Long reef at Kawaroa, or the Puke Tapu reef at Bell Block it may be possible to extend the listing for a later wreck to include protection for the remains of earlier vessels wrecked at that location for which remains have not been verified.

ARCHAEOLOGICAL SIGNIFICANCE:

Sites which are likely to have high information potential, or historic significance to a particular area, have been given priority. Archaeological sites with high information potential are likely to be sites which have potential for recovery of artefactual material from a well preserved context, or structural remains where limited historical documentation exists. Where historical data is available, information from archaeological remains can be complementary, particularly if it shows inconsistencies or provides additional context.

The shortlisted sites, in geographical order, are set out in the table and accompanying maps below:

No	Grid ref (NZTM)	Туре	Name	Location	NZAA	Built	Lost	References (see notes on abbreviations p.25)
1	1732293 5694876	Shipwreck	Alexandra	Puke Aruhe	Q18/51	1863	1865	DE1:25-26; CH:76; LF:19; RI:67; IN:116; WE:254; VE:29; ST:19; WA:17; DI:47; DO2:16-19
2	1707604 5684856	Shipwreck	Airedale	Waitara	Q19/63	1857	1871	DE1:37-40; LF:17-18; RI:67; IN:169-70; DI:46; WI:84,96; BE:10
3	1706305 5683955	Shipwreck	Paterson	Waitara	Q19/284	1854	1874	DE1:45-51;DE2:70-72,76, IN:188
4	1706320 5683885	Training walls		Waitara		1880		DE2:77,104-105
5	1705965 5683785	Pill box		Waitara		1942		CO:769
6	1707175 5682585	Wharf	Railway wharf	Waitara		1875		DE2:66,68,74,80-84
7	1699009 5680950	Shipwreck	Rangatira	Bell Block	P19/164	1863	1880	DE1:82-85; LF:86; RI:67; IN:223
8	1698515 5680915	Shipwreck	Wanaka	Bell Block	P19/249	1876	1891	MO1:108-11; MO2:74-75; DE1:135-37; FA:6-7; HU:15-23; LF:116; IN:275; ML:132; SC:68-69; DI:122; BE:32; WA:733
9	1699209 5680850	Shipwreck	John Whiteley	Bell Block	P19/250	1850	1851	IN:53; CU:48; HA:178; WA:288
10	1692912 5678146	Anchors	Mooring	New Plymouth	P19/260			DE3:24
11	1695112 5677748	Shipwreck		New Plymouth	P19/247			DE1:15; MO2:72-73
12	1692213 5676845	Shipwreck	Tasmanian Maid	New Plymouth	P19/248	1856	1868	AL:96; CH:5-8,97; CO:312,321,419; DE1:30-33; DO1:1-8; DI:117; IN:150- 51; KI:22-24; LA:39; LF:105; PA:12,96; RI:67; ST:18-19,23-25; WA:645; WE:272; WI:206-209; WN:73-78
13	1691684 5676495	Baths		New Plymouth				TU: 116
14	Withheld	Petroglyph		Wairere	P19/147			DA:113-117
15	Withheld	Petroglyph		Тариае	P19/240			PR1:198-201; FY:177
16	Withheld	Petroglyph		Тариае	P19/241			PR1:198-201
17	1679321 5669937	Shipwreck	Gairloch	Ahu Ahu		1884	1903	DE1:124-25; DI:71; FU:107; IN:315; LF:41-42; LL:107; ML:1; MO1:123-27; RI:67; SC:93
18	1666850 5656015	Tauranga waka		Warea	P20/125			
19	1665147 5649305	Tauranga waka		Tipoka	P20/95			SM:35
20	1666343 5644436	Shipwreck	Harriet	Cape Egmont	P20/124		1834	BA:105-106; BE:2; CT:3-6; CR:280-81; DE1:5-6; DE2:115; DI:74; GD:60-74; IN:20; HO:75; MN:112-132; MI:41-42; SO:154-165; TU:104; WE:19-20
21	1671848 5633143	Shipwreck	Lord Worsley	Opunake	P20/20		1862	BE:7; CH:128; DE1:11-15; HU:15-23; GR:15-19,23-24; IN:87-88; LF:61-62; LL:50; MR:134; RI:68; TU:104; WE:231
22	1672380 5632900	Tauranga waka		Opunake	P20/19			PR2:35
23	1672380 5632900	Wharf		Opunake		1927		DE2:138,140,143
24	1673008 5631843	Mole		Opunake		1924		RO:108; DE2:136-37; CH2:134
25	1721525 5601180	Power Station		Pātea		1901		CC:45-47; DE2:174
26	1727220 5597730	Wharf	Railway wharf	Pātea		1883		DE2:161
27	1727130 5597730	Wharf	Town wharf	Pātea		1881		DE2:158-59,163,177
28	1727507 5596348	Training walls		Pātea	Q22/78	1902		DE2:158-59;
29	1727388 5596348	Shipwreck	Waitangi	Pātea	Q22/80	1887	1923	CH:58,102; DE1:212-13; DI:121; FA:40-41; FU:195; IN:384; WA:54
30	1727558 5596177	Pill box		Pātea		1942		CO:769















CONCLUSION

This report presents the results of a desk based study of archaeological remains within the Taranaki coastal marine area (defined as the area between MHWS and the 12-nautical mile limit, including river mouths as far inland as defined by the schedule appended to the 1997 Operative Coastal Plan).

This research has identified 9 sites of Māori association, 127 vessels known to have been wrecked on the Taranaki coast, and 64 sites with potential for archaeological deposits or structural remains. The number of Māori sites in the Taranaki coastal marine area recorded in the New Zealand Archaeological Association site recording scheme is likely to be under represented.

Thirty archaeological sites within the Taranaki coastal marine area have been recommended for possible listing as a result of the Coastal Plan Review.

RECOMENDATIONS

- That the 30 shortlisted sites are considered for listing and protection in the revised Coastal Plan
- That records are submitted in the NZAA Archsite for any sites visited as a result of this project. Where further assessment has identified that archaeological remains are likely to be present, site records should also be filed with the NZAA site recording scheme.
- That the Taranaki Regional Council approach tangata whenua directly for information about any additional sites that they would like to see given protection in the Coastal Plan.
- That the Taranaki Regional Council review the 1996 ICOMOS Sofia charter and 2001 UNESCO Convention appended to this report and adopt policies that are consistent with this international best practice.

SELECT ANNOTATED BIBLIOGRAPHY

Church, I. 1977. The Little Ships of Pātea . Dunmore Press, Palmerston North

This book covers the history of Pātea, formerly Carlyle from the outset of European settlement. It covers the use of the Pātea River as a Commissariat river port from the mid-1860s, and the establishment of the town and Harbour Board in the 1870s, through to the decline of the port in the 1960s. The book is well illustrated and contains details of many of the ships which used the port during that time.

de Jardine, M. 1984. Shipwrecks on and off the Taranaki Coast. Self Published, New Plymouth

This publication contains a comprehensive list of shipwrecks and strandings on the Taranaki coast between 1828 and 1981. It has been largely compiled from research from the Taranaki Herald and other contemporary newspapers, supplemented with research from archival and secondary sources. The area covered extends over a larger area than the regional council boundaries including Awakino and Mokau in the Waikato region, and the book covers a number of strandings and incidents where the subsequent salvage of the wrecked vessel means that there are unlikely to be any remaining archaeological deposits.

de Jardine, M. 1992. The Little Ports of Taranaki. Self Published, New Plymouth

This book contains a history of the development of several of Taranaki's minor river ports which operated during the later part of the nineteenth century and early twentieth century. As with de Jardine's earlier publication on shipwrecks this is well researched using primary sources. As the title suggests, *The Little Ports of Taranaki* does not cover the deep water port at New Plymouth, and includes two smaller ports, Awakino and Mokau, that fall outside the region.

de Jardine, M. 1996. Of Signals, Ships and Sundry Snippets. Self Published, New Plymouth

This book is largely a collection of Taranaki maritime research that didn't feature in the author's previous works. It includes additional information on shipwrecks covering the period 1984-1996 as well as a few corrections to *Shipwrecks on and off the Taranaki Coast*, and information on navigation aids, and beacons located at the minor ports.

ICOMOS 1996. International Charter on the Protection and Management of Underwater Cultural Heritage. ICOMOS, Sofia

This charter was adopted by the International Council on Monuments and Sites (ICOMOS) and details an international best practice approach for the protection of underwater cultural heritage. The charter was ratified by the 11th ICOMOS General Assembly in Sofia, Bulgaria, in October 1996, and succinctly covers the key aspects of underwater heritage protection including *in-situ* preservation, appropriate research and investigation, conservation, reporting, community involvement and interpretation. The charter was subsequently adopted by the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage, and has been included as an appendix to this report.

Ingram, C.W.N. 2007. *New Zealand Shipwrecks: Over 200 years of disaster at sea* (7th Edition revised and updated by Diggle, L., Diggle, E. and K. Gordon). Hachette Livre, Auckland

This is the primary reference for shipwrecks in New Zealand. First published in 1936, the book is now in its eighth revision. Arranged chronologically from 1795 until the present day, each entry includes the details of the circumstances around the wreck, and usually information about the ship itself such as rig, tonnage, dimensions, official number, date of construction, etc. The book does not cite sources for its information which is often frustrating as it does contain numerous errors. The text was first adapted verbatim from a newspaper special publication in 1899 called *Toll of the Sea*, which chronicled wrecks of the nineteenth century. Wrecks from 1899 to 1936 were added to create the first edition. Since the publication of the eighth edition a companion has been published which corrects a number of errors, and adds a number of previously unreported wrecks (Diggle 2009).

Locker-Lampson, S. and I. Francis, 1994. *The Wreck Book: Rediscovered New Zealand Shipwrecks.* Halycon Press, Auckland

This is the principal reference for New Zealand shipwrecks for which positions have verified in recent times. This book is the second revised edition of an earlier publication. Locker-Lampson and Francis detail eight shipwrecks in the Taranaki region, as well as an aircraft wreck. It includes notes on their condition at the date of publication. The book is arranged alphabetically by the name of the ship, and includes a brief outline of events surrounding the wreck and summaries of the vessels' attributes. Generally this is a fairly reliable source of information, and where the author is uncertain as to the claims of divers to have re-located a vessel it has been omitted. Much of the information on Taranaki shipwrecks in this book has come from the New Plymouth Underwater Club. Information on these wrecks was generally submitted in the New Zealand Archaeological Association site recording scheme by the then president of the club, Barry Hartley, who was also the district file keeper. This book typically contains written descriptions of location rather than grid co-ordinates or detailed maps, so it is useful to use this in conjunction with another source such as Rippon's book *The New Zealand Divers Handbook*.

Rippon, P. 1985. The New Zealand Divers Handbook. Reed Methuen, Auckland

This is, as the title suggests, a handbook for New Zealand divers and covers a range of topics including marine ecology and health & safety. It contains locations of a number of wreck sites around New Zealand, marked on marine maps for ease of reference, and typically contains a sentence or two about each. It contains details on 8 wrecks around the Taranaki region and is complementary to Locker-Lampson and Francis which does not provide specific coordinates or map references.

Scanlan, B. 1991. Port Taranaki: 115 years of elected control. Westgate Transport Ltd., New Plymouth

This book is a revision of an earlier book titled Harbour at the Sugar Loaves, first published in 1975. It includes additional illustrations and a chapter on the Maui and Motunui gas developments since 1975. The book is largely focused on the development of the port since 1879, but to put this in context also includes chapters on the surf boat service which preceded it. It is well illustrated, which is useful conveying the changes to the port over time, but lacks primary references.

Tullet, J.S. 1981, *The Industrious Heart. A history of New Plymouth.* New Plymouth City Council, New Plymouth

This book covers the history of New Plymouth from the early nineteenth century to 1980. It was commissioned by the then City Council as a centennial history of the borough. Maritime history is a minor theme in this book, but it does identify a number of sites around New Plymouth for which relatively little information is otherwise available. It also contains a good overview of a number of relevant themes including iron sand smelting, oil prospecting and shipbuilding. It is well researched and covers a range of themes which have impacted on the foreshore over time from industry to recreation.

Watt, M. 1962. *Index to the New Zealand Section of all British Register of Ships 1840-1950.* New Zealand Ship and Marine Society, Wellington

This is available on microfiche at the Alexander Turnbull Library, and is an account of all New Zealand ships over 100 tons in the Lloyds register of shipping from 1890. The Watts Index was published by the NZ Ship & Marine Society and contains records of 2884 vessels registered in New Zealand between 1840 and 1950. It also includes lists of shipbuilders, ship owners and masters. Like other compilations of shipping information the index contains errors so it is useful to verify the information with other sources. It contains useful background into many of the vessels wrecked in Taranaki that may have been omitted from Ingram and is at times a useful tool for verification.

UNESCO, 2001. Convention on the Protection of Underwater Cultural Heritage.

The 2001 UNESCO convention builds on the principles of the 1996 ICOMOS Sofia charter, and establishes international best practice for legal frameworks around the protection of underwater cultural heritage. It was adopted by the 2001 General Conference of UNESCO, and came into force following its adoption by 20 countries in January 2009, and at present 42 countries have ratified the convention. New Zealand is as yet not a signatory to the convention as to do so would require changes to the *Historic Places Act* 1993, including the adoption of a 75 year rolling date for the protection of underwater cultural heritage rather than a static pre-1900 date. While the New Zealand government has signaled that this is not a priority at this stage, the Australian government is presently considering adopting legislation which could facilitate the adoption of the convention, and adoption of an approach consistent with the convention is recommended. A copy of the charter has been appended to this assessment.

ADDITIONAL REFERENCES CITED

Allan, R. 1954. The History of Port Nelson. Whitcombe and Tombs Ltd, Wellington

Alexander, A.C. 1979. Waitara: A record of past and present. Taranaki Newspapers Ltd, New Plymouth

Barber, L. Clayton, G. and J. Tonkin-Covell eds. 1990 Sergeant, Sinner, Saint, and Spy: The Taranaki War Diary of Sergeant William Marjouram, R.A. Random Century, Auckland.

Bateson, C. 1972. Australian Shipwrecks: Including vessels wrecked en route to or from Australia, and some strandings. Volume One:1622-1850. A.H. & A.W. Reed Pty Ltd, Sydney

Beaglehole, H. 2006. Lighting the Coast: A History of New Zealand's Coastal Lighthouse System. Canterbury University Press, Christchurch

Bell, F. 1899. The Toll of the Sea: Being a chronological record of the chief wrecks which have occurred in New Zealand waters from the year 1795 to the present date, together with the most interesting events in connection with them. Supplement to *Otago Witness* 30.11.1899:1-35

Best, E. 1927. Notes on inscribed stones of the Taranaki District. *Journal of the Polynesian Society* 36:137-140

Byrne, B. 1991. Wing of the Manukau. The Author, Auckland

Charlton, E. 2012. Wreck of the Month: The barque Harriet, 1834. MAANZ Newsletter 60:2-6

Church, I. 1987. The Port of Opunake. Marine News 37(4):127-136

Cochran, C. 2000. Pātea. Heritage Inventory. Unpublished client report for South Taranaki District Council

Cooke, P. 2000. *Defending New Zealand*. Ramparts on the Sea 1840s-1950. Defence of New Zealand Study Group, Wellington

Coroneos, C. 1991. One interpretation for the short working lives of early Australian wooden sailing vessels in Victorian Waters. *Bulletin of the Australasian Institute for Maritime Archaeology* 15(2):7-14

Crosby, R. 1999. The Musket Wars: a history of inter-invi conflict 1806-45. Reed Books, Auckland

Cummins, P. 2004. A History of Kawhia and its Districts. Kawhia Museum, Kawhia

Day, K. 1980. Petroglyphs in South Taranaki. New Zealand Archaeological Association Newsletter 23(2):113-117

Delph, L.W. 1939. Cave Drawings near Tongaporutu. The Journal of the Polynesian Society 48(2):116-121.

Diggle, L. 2009. Shipwrecks of New Zealand. The Author, Auckland

Dodd, A. 2010. 'HMS Sandfly (ps Tasmanian Maid)' Forts & Works 26:1-8

Dodd, A. 2010. 'ss Alexandra' Forts & Works 27:16-69

Farquhar, I. 2001. Union Fleet. New Zealand Ship and Marine Society, Wellington

Furniss, C.A. 1977. Servants of the North: Adventures on the coastal trade with the Northern Steam Ship Company. A.H. and A.W. Reed, Wellington

Fyfe, R. 1989. Another Petroglyph at Omata, Taranaki. Archaeology in New Zealand 32(4):177-181

Grady, D. 1978. Guards of the Sea. Whitcoulls Publishers, Christchurch

Griffin, E. 1989. Tales of Te Namu and Hori Teira. Taranaki Newspapers Ltd, New Plymouth

Hawkins, C. 1960. Out of Auckland. Pelorus Press, Auckland

Houston, J. 1965. Māori Life in Old Taranaki [2006 reprint]. Reed Publishing Ltd, Auckland

Hutchinson, B. 2003. Ships' Bells. Marine News 52(1):15-23

Jeffery, W.F. 1989. Research into Australian built coastal vessels wrecked in South Australia 1840-1900. Bulletin of the Australasian Institute for Maritime Archaeology 13(2):51-56

Jung, S. 1996. Archaeological investigations of the Catalina wreck sites in East Arm, Darwin Harbour. The Bulletin of the Australian Institute for Maritime Archaeology 20(2):23-38

Kirk, A. 1967. Anchor Ships and Anchor Men. A.H. and A.W. Reed, Auckland

Lambert, R. 1995. In Crude State: A History of the Moturoa Oilfield New Plymouth. Methanex New Zealand Ltd and Taranaki Museum, New Plymouth

Lambert, R. and G. Lambert. 1983. An Illustrated History of Taranaki. Dunmore Press, Palmerston North

Laxon, W. 1966. Steamers Down the Firth. The Author, Auckland

Laxon, W. 1969. Steam on the Manukau. The Author, Auckland

McAlister, C. 1976. Old Taranaki and its Mountain. Millwood Press, Wellington

MacIntyre, D., Field, M. and C. Quinn. 1983. *Cook's Wild Strait: The Interisland Story*. A.H. and A.W. Reed, Christchurch

McLean, G. 2007. Full Astern! An Illustrated history of New Zealand shipwrecks. Grantham House, Wellington

McNab, R. 1913. Old Whaling Days [1975 reprint]. Golden Press Pty, Auckland

Moorhead, M. 2005. Settler Tales of Old New Plymouth. Zenith Publishing, New Plymouth

Moorhead, M. 2009. Tales of Old New Plymouth. Christchurch Digital Print Co-op, Christchurch

Moran, D., Enderby, T. and J. Enderby, 2007. Diving New Zealand. Spot-X Publications, Auckland

NZHPT, 2006. Archaeological Guidelines Series No.2: Guidelines for Writing Archaeological Assessments. New Zealand Historic Places Trust, Wellington.

Parsons, R. 2002. Paddle Steamers of Australia and New Zealand. The Author, Goolwa

Prickett, N. 1981. A Recently discovered petroglyph at Omata, Taranaki. New Zealand Archaeological Association Newsletter 24(3):198-201

Prickett, N. 1990. Historic Taranaki. An Archaeological Guide. GP Books, Wellington

Prickett, N.,2002. The Archaeology of New Zealand Shore Whaling. Department of Conservation, Wellington

Ross, J. O'C.1977. Pride in their Ports. Dunmore Press, Palmerston North

Scanlan, B. 1991. Port Taranaki: 115 Years of Elected Control. Westgate Transport Ltd, New Plymouth

Smith, A. 2010. 'Landscape and Identity in Taranaki Māori Songs of Lament.' in Stephenson, J. Abbott, M. and J. Ruru (eds.), 2010. *Beyond the scene: landscape and identity in Aotearoa New Zealand*. Otago University Press, Dunedin, pp.25-38

Sole, T. 2005. Ngati Ruanui: A History. Huia Publishers, Wellington

Stephenson, J. Abbott, M. and J. Ruru (eds.), 2010. Beyond the scene: landscape and identity in Aotearoa New Zealand. Otago University Press, Dunedin

Stowers, R. 2008. Blue Devils: History of the Royal Nary and Royal Marines in the New Zealand Wars including detailed medal rolls of officers and men who received the New Zealand Medal 1845-1866. The Author, Hamilton

Subritzky, M. 1993. Subritzky Shipping: A Heritage of Sail 1843-1993. Three Feathers Publishing Co., Papakura

Taranaki Regional Council. 2004. Inventory of Coastal Areas of Local or Regional Significance in the Taranaki Region

Taranaki Regional Council. 2009. Effectiveness and Efficiency of the Regional Coastal Plan for Taranaki

Tullet, J. S. 1981. The Industrious Heart: A History of New Plymouth. New Plymouth City Council, New Plymouth

Vercoe, G. 1997. Bow Waves on the Waikato. Reed Books, Auckland

Ward, I., Larcombe, P. and P. Veth. 1998. Towards new process orientated models for describing wreck disintegration – an example using the Pandora wreck. *Bulletin of the Australasian Institute for Maritime Archaeology* 22:109-114

Ward, I., Larcombe, P. and P. Veth. 1999. A New Process-based Model for Wreck site Formation. *Journal of Archaeological Science* 26:561-570

Watt, M.N. 1962. Index to the New Zealand Section of the Register of all British Ships 1840-1950. New Zealand Ship and Marine Society, Wellington

Wells, B. 1878. The History of Taranaki. Edmondson & Avery, New Plymouth

Westrupp, F. 2007. Blind Bay Hookers. Little Ships of Nelson. River Press, Dunedin

Williamson, J. 1966. Early New Zealand Steamers. Maritime Historical Productions, Wellington

Win, P.W. 2009. The Anchor Foundry: A History. The Author, Nelson

Key for abbreviations cited in Tables (full citations above):

Books:

AL Allan 1954; BA Bateson 1972; BC Barber et al 1990; BE Bell 1899; BY Byrne 1991; CC Cochran 2000; CH Church 1977; CH2 Church 1987; CO Cooke 2000; CR Crosby 1999; CT Charlton 2012; CU Cummins 2004; DA Day 1980; DE1 de Jardine 1984; DE2 de Jardine 1992; DE3 de Jardine 1997; DI Diggle 2009; DO1 Dodd 2010; DO2 Dodd 2010; DP Delph 1939; IN Ingram 2007; FA Farquhar 2001; FU Furniss 1977; FY Fyfe 1989; GD Grady 1978; GR Griffin 1989; HA Hawkins 1960; HO Houston 1965; HU Hutchinson 2003; KI Kirk 1967; LF Locker-Lampson & Francis 1994; LA1 Laxon 1966; LA2 Laxon 1969; LL Lambert & Lambert; MA McAlistair; MI MacIntyre et al 1983; ML McLean 2007; MN McNab 1913; MO1 Moorhead 2005; MO2 Moorhead 2009; MR Moran1007; MT Matheson 1994; PA Parsons 2002; PR1 Prickett 1981; PR2 Prickett 1990:35; PR3 Prickett 2002; RI Rippon; RO Ross 1977; SC Scanlan 1991; SM Smith 2010; SO Sole 2005; ST Stowers 2008; SZ Subritzky 1993; TU Tullett 1981; VE Vercoe 1997; WA Watt 1962; WE Wells 1878; WI Williamson 1966; WN Win 2009; WS Westrupp 2007

Newspapers and Periodicals:

AJHR Appendices to the Journal of the House of Representatives; CO Colonist; DSC Daily Southern Cross; EP Evening Post; NEM Nelson Evening Mail; NZM NZ Mail; NZS NZ Spectator and Cook Strait Guardian; OW Otago Witness; TH Taranaki Herald; WC Wanganui Chronicle; WH Wanganui Herald; WI Wellington Independent

APPENDIX

AIRCRAFT AND SHIPWRECKS

			1		
Name	Descriptor	Location	Date	Source_sec	Source_pri
NZ617	Fairy Gordon	New Plymouth	1942	LF:122	
Tohora (The					
Adventure)	Schooner	New Plymouth	1828	DE1:5; IN:17; TU:4	
				BA:105-106; BE:2; CT:3-6; CR:280-81;	
				DE1:5-6; DE2:115; DI:74; GD:60-74;	
Harriet	Barque	Cane Egmont	183/	IN:20; HO:75; MIN:112-132; MII:41-42;	SH 21 8 1837-2
Peging	Schooper	Now Plymouth	1034	DE1.6. INI-21 2: SC-40: TII-11: WE-71 72	51121.0.1054.2
Margarot	Schooner		1041	IN:44: MA:401	
William and	Schooner	LUSI at sea	1040	IN.44, WA.401	
James	Cutter	Paritutu	1850	DE1:7: IN:52: WE:150: MO2:8	SO 2404
John	Topsail				
Whiteley	schooner	Bell Block	1851	IN:53; CU:48; HA:178; WA:288	
Harry	Schooner	Tongaporutu	1854	IN:70; DE1:7-8; WA:229	
Polly	Brig	New Plymouth	1857	DE1:8; IN:69	
Mary Clarke	Brig	Waitara	1858	DE1:8-9; DE2:61; IN:72-3	
George	Ŭ			DE1:9-11; IN:77-8; BC:64; WE:211;	
Henderson	Brig	New Plymouth	1860	MO2:72-73; DI:72	
				DE1:11-15; LL:50; LF:61-2; RI:68;	
				MR:134; IN:87-8; TU:104; WE:231;	
Lord	Stoomer	Onunaka	1962	CH2:128; HU:15-23; WI:76-77,96;	FD 16 10 1990-2
Worsley	Steamer	Opunake	1802	GR.15-19,23-24, BE:7	EP 10.10.1880.2
Seaguii	Schooner	New Plymouth	1863	DE1:15-16; IN:96	
Queen oj Perth	Schooner	New Plymouth	1864	DF1:19-20: INI:108	
Wee Tottie	Brig	New Plymouth	1864	DE1:18: IN:106: DI:122	
Wee rottle	Ding	New Hymouth	1004	DE1.10, IN.100, D.122	WI 24.6.1864: TH
Marchioness	Brig	Okato	1864	DE1:16-17; IN:102-4; TU:104	9.7.1864
	Topsail			DE1:18-9; IN:107; DI:124; AL:119;	DSC 24.9.1864:4; NZS
Zephyr	schooner	New Plymouth	1864	WA:767	24.9.1864:2
Yathuna	Schooner	New Plymouth	1864	IN:106; DE1:18	
Black					
Diamond	Schooner	New Plymouth	1865	DE1:21; IN:111; DI:50	
Alpha	Cutter	Patea	1865	DE1:26; CH1:77; IN:111; WA:20	WC 8.4.1865
Choice	Brigantine	New Plymouth	1865	DE1:22-23; IN:113; DI:57	
Kate	Brig	Waitara	1865	DE1:21; IN:112; DI:79	TH 13.5.1865:2
				DE1:25-26; CH:76; LF:19; RI:67; IN:116;	
Alovandra	Stoomer	Duko Arubo	1965	WE:254; VE:29; S1:19; WA:17; DI:47;	FD 16 10 1990-2
Falinco	Schooner	Now Dumouth	1005	D02.10-19	EP 10.10.1860.2
Eclipse	Schooner	New Plymouth	1005	DE1.25-24, IN.114	
Snamrock	Schooner	Patea	1865	DE1:26; IN:117	
Reindeer	A 11	Lost at sea	1865	DE1:27; IN:117	
Waihopai	Cutter	Patea	1865	CH1:101	
Gundagai	Paddlesteamer	Patea	1866	CT1.80; DE1:27-28; IN:132; VE:34-36; DI-72	EP 16 10 1880-2
Colt	Schooper	Tataraimaka	1967	IN:147: DE1:28 20: HA:172: WA:9E	ED 16 10 1990-2
Wairgrana	Schooler	Dataa	1007	IN.147, DE1.20-29, TA:172; WA:85	LF 10.10.1080.2
vvunurapa		rdled	1901	VE.30 AL-96- CH-5-8 97- CO-212 221 410-	
				DE1:30-33: DO1:1-8: DI:117: IN:150-51	
				KI:22-24; LA:39; LF:105: PA:12.96: RI:67:	
Tasmanian				ST:18-19,23-25; WA:645; WE:272;	AJHR 1868 E6:18; EP
Maid	Paddlesteamer	New Plymouth	1868	WI:206-209; WN:73-78	16.10.1880:2

St Kilda	Cutter	Patea	1868	CH1:16,105; IN:157; DI:108	
					AJHR 1869 E4:33; EP
Mandanalian	Deddlaataawaa	Deter	1000	CH1:104; DE1:34; PA:107; LA2:82;	16.10.1880:2; CO
wooapecker	Paddiesteamer	Patea	1869	IN:161; DI:124; AL:100; BY:342; WA:761	5.3.1869:2
Falcon	Schooner	Opunake	1870	HA:175	AJHR 1871 G6:14
-					AJHR 1868 E6:17,
Lizzie	Cutter	Opunake	1870	DE1:35-7; 1992:117; IN:167	1871 G6:15
	<i>c</i> .		4074	DE1:37-40; LF:17-18; RI:67; IN:169-70;	AJHR 1871:G6:16; EP
Airedale	Steamer	Waitara	18/1	DI:46; WI:84,96; BE:10	16.10.1880:2
Pioneer	Ketch Drigonting	Patea	1872	DE1: 42; IN:117	AJHR 1873 H19A:13
Ottawa	Brigantine	Ukato	1873	DE1:43-44; IN:182	AJHR 1874 H22:15
	Punt	Orenui	18/3	DE2:56	AIHR 1875 H12A-10-
Paterson	Paddlesteamer	Waitara	1874	DE1:45-51; DE2:70-2,76; IN:188	EP 16.10.1880:2
Unidentified		Harriet Beach	1874	DE1:52	
				-	DSC 23.10.1874:2; CO
Eleanor	Barque	Cape Egmont	1874	DE1:52; BE:13	5.12.1874:2
		_		DE1:55; CH1:76-77; IN:192; DI:47;	
Alert	Ketch	Patea	1875	AL:100; WA:15	
_	Cabin crusier	Тариае	1875	DE1:292-3	
Fawn	Cutter	Patea	1876	CH1:85; DE1:42-43,55; IN:199; AL:101	
lanet Grav	Schooner	Opunake	1876	HA-178-AL-102-WA-279	
Famont	Steamer	Patea	1876	CH1:83: DE1:58-9: IN:196	AIHR 1876 H26·18
Lymont	Steamer	Tutcu	10/0		AJHR 1877 H29:29: EP
				DE1:65; CH1:81; IN:205; HA:174; VE:41-	15.06.1877:2; WH
Dawn	Cutter	Waitara	1877	42	16.06.1877:2
Unidentified		South Taranaki	1877	DE1:66	
Jane Elkin	Ketch	Patea	1878	IN:207; CH1:88; DE1:66;WA:276	AJHR 1878 H12:28
Arthur				DE1:76-77; IN:219; AL:121; HA:171;	
Wakefield	Schooner	Opunake	1879	WA:41	AJHR 1880 H13:24
Ranaatira	Steamer	Bell Block	1880	DF1:82-5: F:86: RI:67: IN:223	AJHR 1881:H27:12; EP
Samson	Paddlesteamer	Waitara	1881	DF1:88-9: IN:228-9	AIHR 1882 H12:13
Australind	Barque	New Plymouth	1882	DE1:93-5: IN:236: SC:43: BE:26: WA:47	AIHR 1883 H15:16
Patea	Steamer	Patea	1882	DF1:91-2: IN:232	AIHR 1883 H15:13
Falcon	Ketch	Patea	1884	CH1:84: DE1:117-8: IN:243: BE:28	AIHR 1884 H6:23
Star of the	Keten	Tutcu	1004	CH1.04, DE1.117 0, IN.243, DE.20	70mm 1004 m0.25
Mersley	Brig	New Plymouth	1886	DE1119-20; LF:97; IN:252-55	AJHR 1887 H4:20
Pelican	Schooner	Waitotara	1886	IN:255	
				DE1:106-12; DE2:88; IN:265; DI:74;	
				ML:127-9; 222; SC:60-2,64-5,130-1,139-	
Нажеа	Schooner	New Plymouth	1888	40; BE:31; FA:5; WA:232	AJHR 1889 H31:15
				MO1:108-11; MO2:74-75; DE1:135-7;	
				ML:132; SC:68-69; DI:122; BE:32;	
Wanaka	Steamer	Bell Block	1891	WA:733	AJHR 1892 H29:14
Annie				DE1:140-1; IN:281; BE:32; HA:171;	AJHR 1894 H18:14;
Wilson	Schooner	Oeo	1893	WA:30	OW 27.4.1893:12
Dunedin	Schooner		1894	DE1:144; IN:285; BE:33	AJHR 1895H29:19
Christine	Schooner	Waitotara	1894	IN:288; DI:57; BE:33; WA:92	AJHR 1895:H29:20
Marramarra	Lugger	Oeo	1896	DE1:148-9; DE2:19-20,87; IN:293	AJHR 1897 H15:23
					AJHR 1897 H15:27;
Manaia	Steamer	Oeo	1897	DE1:138-9: DE2:19-20.87: IN:294	11.2.1897
Lizzie Bell	Barque	Oeo River	1901	DE1:162-4: IN:307	
Northern	50.900				
Monarch	Barque	Oaonui Stream	1903	DE1:166-8; RI:68; IN:317	
- · ·	<u>.</u>	Oakura	1003	DE1-124-25- DI-71- EU-107- IN-315-	
Gairloch	Steamer	Uakura	1303	DE1.124 23, DI.71, 10.107, IN.313,	

				LF:41-42; LL:107; ML:1; MO1:123-27;	
				RI:67; SC:93	
Tauranga	Cutter	New Plymouth	1903	DE1:165; IN:316; AL:122; WS:46,225,235	NEM 27.5.1903:3
Aotea	Schooner	Patea	1904	DE1:171-2; IN:319; CH1:78; WA:34	
	Punt	Waitara	1905	DE1:173-4	
				DE1:178-9; LF:42; IN:325; HA:189;	
Warrior	Scow	Oakura	1906	WA:740	
Norah Bradshaw	Hulk	W/aitara	1907	DE1:1/19-51: IN:339	
Awakino	Launch	New Plymouth	1910	DE1:184-5	
Manukau	Steamer	Waitara	1912	DE1:144-7: IN:354: LA2:83	
Norseman	Fishing launch	New Plymouth	1919	DE1:247	
Te Kawau	Launch	Wainana	1919	DE1:205: DE2:4	
		New Plymouth	1919	DF1:247	
Nukuhakere	Launch	New Plymouth	1921	DE1:247	
Omega	Edditen	Omata	1921	DE1:211-2	
onicgu	Fishing hoat	Oaonui	1921	DE1:210	
	Cutter	New Plymouth	1021	DE1:210	
Thomas	Cutter	New Hymouth	1521		
King	Dredge	New Plymouth	1923	DE1:185-8; SC:125	
		,		CH:58,102; DE1:212-13; DI:121; FA:40-	
Waitangi	Steamer	Patea	1923	41; FU:195; IN:384; WA:54	
		Between			
		Otakeho and	1001	254 242 11 422 2	
Scotia	Fishing launch	Manaia	1931	DE1:248; IN:402-3	
Swan	Fishing launch	Waitara	1932	DE1:226-7	
Ocean Girl	Launch	New Plymouth	1932	DE1:249	
Mokau	Launch	New Plymouth	1936	DE1:250	
Rapanui	Launch	Waitara	1937	DE1:253	
Sicilia (Sicily)	Launch	Waitara	1937	DE1:254	
Tekua	Fishing launch	Waipapa	1938	DE1:255	
	Launch	New Plymouth	1940	DE1:255	
Dawn	Launch	New Plymouth	1943	DE1:257	
Gay	Launch	New Plymouth	1945	DE1:257	
Waitemata	Fishing launch	Puke Aruhe	1947	IN:427; DE1:208-9	
Kingfisher	Launch	Patea	1947	DE1:266	
Sea Bird	Fishing launch	Waitara	1956	DE1:264	
La Lita	Launch	Patea	1957	DE1:264-5	
Mona Lisa	Launch	New Plymouth	1958	DE1: 265	
	Fishing boat	New Plymouth	1958	DE1:266	
Huia	Fishing vessel	New Plymouth	1961	DE1:269	
Black Falcon	Fishing vessel		1962	DE1:269-70	
Каіо	Trawler	Patea	1963	DE1:271; CH1:89; WA:297	
Mary Dear	Yacht	Opunake	1963	DE1: 271	
Quo Vadis	Launch	Patea	1963	DE1:270	
White					
Horses II	Cruiser	New Plymouth	1963	DE1:271	
Westward					
Но	Launch	Tongaporutu	1964	DE1:272	
Matuhi	Launch		1965	DE1: 272-3	
Tempest	Fishing vessel	Waitara	1965	IN:553	
Wanderer	Cabin crusier	Waitara	1966	DE1:274-5	
	Barge		1969	DE1:277	
Miss Beverly	Runabout	Waitara	1970	DE1:278	
Pleiades	Ketch	Waitara	1971	DE1:258,279	
Cey La Vie	Yacht	Bell Block	1971	DE1:279	
Rangitoto	Barge	Waitara	1973	DE1:283; LA1:14-15: SU:163	

Arraha	Laurah	Hawera,	1072	DF1-202 2	
Apacne	Launch	Murphy's Bay	1973	DE1:282-3	
Dawn	Fishing boat	New Plymouth	1973	DE1:281	
Tamara S	Fishing vessel	Cape Egmont	1974	DE1:244-7; IN:492	
Fidelis	Fishing boat	Ohawe	1974	DE1:285-86	
Rawina	Cabin crusier	New Plymouth	1974	DE1:285	
Sonia Marie	Launch	New Plymouth	1975	DE1:286	
Deliverance	Launch	Waitara	1975	DE1:292	
Normandy	Fishing vessel	Ohawe	1981	DE1:306	
Gold Star	Fishing vessel	New Plymouth	1982	IN:511	
Karoro	Fishing vessel	New Plymouth	1984	IN:518	
Nickolene	Fishing vessel	New Plymouth	1984	IN:517-18	
Dorade	Fishing vessel	Cape Egmont	2002	IN:545	

OTHER HERITAGE SITES WITH ARCHAEOLOGICAL POTENTIAL

Туре	Location	Name	Date	Source
ANCHOR	New Plymouth		1841	DE1:6-7; WE:71
ANCHOR	Waitara River		1905	DE1:173-4
ANCHOR	New Plymouth		1905	DE1:175
ANCHORAGE	Sugarloaf Islands		1840s	WE:49
ANCHORAGE	Waitara		1886	RO:106
ANCHORS	New Plymouth			DE3:24
BATHS	New Plymouth		1880s	TU:116
BREAKWATER	New Plymouth	Main breakwater	1881	MO1:119; LL:127; WE:293-4; SC:25,35
TRAINING				
WALLS	Patea		1880	DE2:159
BREAKWATER	New Plymouth	Lee breakwater		LL:127
BRIDGE PILES	Patea		1874	CC:9-10
JETTY	Opunake		1880s	RO:107
JETTY	Patea			DE2:156
LANDING	Ngamotu			MA:9; LL:22-5
LANDING	Huatoki Stream mouth			WE:91
MOLE	Opunake			RO:108;DE2:136-7; CH2:134
MOORINGS	Opunake		1899	DE2:131
PETROGLYPHS	New Plymouth			DA:113-117
PETROGLYPHS	New Plymouth			PR1:198-201; FY:177
PETROGLYPHS	New Plymouth			PR1:198-201
PETROGLYPHS	Warea			DA:113-117
PETROGLYPHS	Tongaporutu			DP:116-121
PILLBOXES	Patea			CO:769
PILLBOXES	Waitara			CO:769
PILLBOXES	New Plymouth			CO:769
POWERSTATION	Kaikura Stream mouth			CC:45-47
SHIP BUILDING	New Plymouth	Crocker and Brooking	1842	MO1:27-28; TU:108
SHIP BUILDING	New Plymouth		1842	MA:9-10
SHIP BUILDING	New Plymouth	Rundle & Clark	1855	TU:108; SC:16-17; MO1:94- 95
STOCK RAMPS	Waitara River			DE2:66
	White Cliffs	Te Horo stock	1862	DE2:54
	White Cills		1002	UL2.J4
TAURANGA	waitara			

WAKA				
TAURANGA				
WAKA	Warea			
TAURANGA				
WAKA	Cape Egmont			SM:35
TAURANGA				
WAKA	Opunake			PR2:35
TRAINING WALL	Waitara River			DE2:77, 104-5
TRAMWAY	Waihi Stream			
WHALING				
STATION	New Plymouth	Dicky Barrett's	1841	PR4:100
WHALING	Now Diamouth	Dichard Brown's	1041	DD4:101
STATION			1841	PR4.101
WHARF	Patea	Hirsts Whart	1871	DE2:153, 156
WHARF	Patea	Milroys whart	1875	DE2:156
WHARF	Waitara	Railway wharf	1875	DE2:66,68,74,80-84
WHARF	Patea	Cattle wharf	1881	DE2:159
WHARF	Patea	Railway wharf	1883	DE2:161
WHARF	Waitara	Coal wharf	1883	DE2:80
WHARF	Waitara	Works wharf	1885	DE2:81,85
WHARF	Tongaporutu	Rattenburys wharf	1907	DE2:50-1
WHARF	New Plymouth	Blyde wharf	1973	LL:127; SC:177
		Websters wharf;		
WHARF	Waitara	Town wharf	1868	DE2:64,68,81,85,101
WHARF	Waitara	Cattle wharf	1879	DE2:78,81,85,104
WHARF	New Plymouth	Moturoa wharf	1887	LL:127; SC:124
				DE1:158; DE2:129,131;
WHARF	Opunake	First warf	1892	RO:107-108
WHARF	Waitara	Hattricks wharf	1900s	DE2:100
WHARF	New Plymouth	Newton King wharf	1924	LL:127,132; SC:124
WHARF	Opunake	Second wharf	1927	DE2:138,140,143
WHARF	Waitara	Borthwicks wharf		DE2:108



The site assessment must encompass background studies of available historical and archeeological evidence, the archeeological and environmental theracturations of the site and the consequencies of the instruction for the long term satisfy of the area affected by Documentation must provide a comprehensive record of the site, which includes the provensance of underwater cultural heritage moved or removed in the course of investigation, field notes, plans and drawings, photographs and records in other media. A programme of site management must be prepared, detailing measures for protecting and managing in situ underwater cultural herizage in the course of an upon termination of feahwark. The programme should include public information, reasonable provision for site stabilisation, monitoring and protection against interference. Public access to in situ underwater cultural herizage should be promoted, except where access is incompatible with protection and management. The material conservation programme must provide for treatment of archaeological remains during investigation, in transit and in the long term. The health and safety of the investigating team and third parties is paramount. All persons on the investigating team must work according to a safety policy that satisfies relevant statutory and professional requirements and is set out in the project design. Interim reports should be made available according to a time-table set out in the project design, and deposited in relevant public records. All investigation must be thoroughly documented in accordance with current professional Material conservation must be carried out in accordance with current professional standards. recommendations concerning future research, site management and curation underwater cultural itentage removed during the investigation. Article 10 - Site management and maintenance an account of the methodology and techniques employed; Article 9 - Material conservation standards of archaeological documentation. Article 11 - Health and safety an account of the results achieved; Article 8 - Documentation an account of the objectives; Article 12 - Reporting Reports should include: rvestigations Remearch objectives and the details of the methodology and techniques to be employed must be set forwin the project detailor. The methodology should accord with the research objectives of the interespection and the techniques employed must be as unitrustive as Investigation must be carried out in accordance with the project design. The project design should be made available to the archaeological community. Adequate funds must be assured in advance of investigation to complete all stages of the project design including conservation, report preparation and dissemination. The project design should include controgency plans that will ensure conservation of underwater cultural heritage and supporting documentation in the event of any interruption in ambiopated funding. Adequate time must be assured in advance of investigation to complete all stages of the project design including conservation, report preparation and dissemination. The project design should include contingency plans that will ensure conservation of underwater cultural defage and supporting documentation in the event of any interruption in anticipated timings. All intrusive investigations of underwater cultural heritage will only be undertaken under the direction and control of a named underwater archeeologist with recognised qualifications and experience appropriate to the investigation. Project funding must not require the sale of underwater cultural heritage or the use of any strategy that will cause underwater cultural heritage and supporting documentation to be interacted disposited. All persons on the investigating team must be suitably qualified and experienced for their project roles. They must be fully threfed and understand the work required. All intrusive investigations of underwater cultural hieritage must be preceded and informed by a site assessment that evaluates the vulnerability, significance and potential of the site. Post-fieldwork analysis of artefacts and documentation is integral to all investigation; adequate provision for this analysis must be made in the project design. Article 5- Research objectives, methodology and techniques Article 6 - Qualifications, responsibility and experience The project design should be revised and amended as necessary. Article - - Preliminary investigation dissemination, including public participation. Article 4 - Time-table Article 3 - Funding possible.

5

Article 13 - Curation

The project archive, which includes underwater cultural heritage removed during insetiopation and a copy of al supporting documentation, match be deposited in an institution that can provide for public access and permenent curation of the archive archive short of the archive should be agreed before investigation commences, and should be set out in the project design. The archive should be prepared in accordance with current professional standards. The scientific integrity of the project archive must be essured; deposition in a number of institutions must not preclude reasoning to allow threft research. Underwater cultural institutions on to be traded as items of commercial volue.

Article 14 - Dissemination

Public awareness of the results of investigations and the significance of underwater cultural heritage should be promoted through popular presentation in a range of media. Access to such presentations by a wide audience should not be prejudiced by high charges.

Co-operation with local communities and groups is to be encouraged, as is co-operation with communities and groups that are particularly associated with the underwater cultural heritage concerned. It is desirable that investigations proceed with the consent and endorsement of such communities and groups.

The investigation taken will seek to involve communities and interest groups in investopations to the extert that such involvements compatible with protection and imagement. Where practices, the investigation taken should provide opportunities for the public to develop archeeological skills through training and education.

Collaboration with museums and other institutions is to be encouraged. Provision for visits, research and reports by collaborating institutions should be made in advance of investigation. A final synthesis of the investigation must be made available as soon as possible, having regard to the complexity of the research, and deposited in relevant public records.

Article 15 - International co-operation

International co-operation is essential for protection and management of underwater cultural iteratings and should be perionical in the interacts of high standards investigation and revealer. International co-operation should be emouraged in order to make effective use of archeeologists and other professionals who are specialised in investigations of underwater cultural heritage. Programmes for exchange of professionals should be considered as a mersis of disseministing best practice.









-8-	-6-
(c) may conduct any necessary preliminary research on the underwater	3. All States Parties may take all practicable measures in conformity with this
cultural heritage and shall issue all necessary authorizations therefor, and	Convention. If necessary prior to consultations, to prevent any mimediate danger to
shall promptly inform the Director-General of the results, who in turn	the underwater cultural heritage, whether arising from human activity or any other
will make such information promptly available to other States Penties.	cause anciviting looting.
In coordinating consultations, taking measures, conducting realiminary	 The Coordinating State shall:
search and/or issuing aumorizations jurguant to this Anticle, the concombining and shall act on behalf of the States as a whole and not in its own interest any stat, action ball not in riself constitute a basis for the assertion of any efferential or jurisdictional rights not provided for in international law, including a United Nations Convention on the Law of the Sea.	(a) implement measures of protection which have been agreed by the consulting States, which include the Coordinating State, unless the consulting States, which include the Coordinating State, agree that another State Party shall implement those measures; and
Subject to the provisions of paragraphs 2 and 4 of this Arricle, no activity nected at State vessels and aucraft shall be conducted without the agreement of the g State and the collaboration of the Coordinating State.	(b) issue all necessary authorizations for such agreed measures, in conformity with this Convention, unlies the consulting States, which include the Coordinating State, agree that another State Party shall issue those authorizations.
Article 11 - Reporting and notification in the Area	5. The Coordinating State may conduct any necessary preliminary research on the
States Parties have a responsibility to protect underwater cultural heritage in	underwater cultural heritage and shall issue all necessary authorizations therefor, and
e Atras in conformity with this Convention and Article 149 of the United Nations	shall prompty inform the Director-General of the results, who in turn shall make
nuveration on the Law of the Sea. Accordingly when a national, or a vessel flying	such information available to other States Parties.
 flag of a State Party, discovers or intends to engage in activities directed at	 In coordinating consultations, taking measures, conducting preliminary
idenvater cultural heringe located in the Area, that State Party shall require its	research, and/or issuing authorizations pursuant to this Article, the Coordinating
thoual, or the master of the vessel, to report such discovery or activity to it.	State shall act for the benefit of humanity as a whole, on behalf of all States Parties.
States Parties shall notify the Director-General and the Secretary-General of	Purticular regard shall be paid to the preferential rights of States of cultural, historical
International Seabed Authority of such discoveries or activities reported to them.	or archaeological origin in respect of the underwater cultural heritage concerned.
The Director-General shall promptly make available to all States Parties any	 No State Parry shall undernake or authorize activities directed at State vessels
ch information supplied by States Parties.	and aircraft in the Area without the consent of the fing State
Any State Party may declare to the Director-General its interest in being	Article 13 - Sovereign immunity
nources for no now to ensure the electrice protections of nam uncertainte cumunal	Warships and other government ships or military aircraft with sovereign immunity,
triage such declaration shall be based on a verifiable link to the underwater	operated for non-commercial purposes, undernking their normal mode of operations,
dural heritage concerned particular regard being paid to the preferential rights of	and not engaged in activities directed at underwater cultural heritage, shall not be
astes of cultural historical or archaeological origin.	obliged to report discoveries of underwater cultural heritage under Arncles 9, 10, 11,
Article 12 - Protection of underwater cultural heritage in the Area	and 12 of this Convention. However States Purtles shall ensure, by the adoption of appropriate measures not impairing the operations or operational capabilities of their
No authorization shall be granned for any activity directed at underwater	warships or other government ships or military aircraft with sovereign immunity
Inturi heritage located in the Area except in conformity with the provisions of this	operated for non-commercial purposes, that they comply, as far as is reasonable and
ritcle.	practicable, with Articles 9, 10, 11 and 12 of this Convention.
The Director-General shall invite all States Parties which have declared an terest under Article 11, paragraph 4, to consult on how best to protect the derwater cultural heritate, and to appoint a State Party to coordinate such	Article 14 - Control of entry into the territory, dealing and possession States Parties shall take measures to prevent the entry into their ferritory, the dealing
acultations as the "Coordinating State". The Director-General shall also invite the	m, or the possession of underwarke cultural heringe illicity exported and/or
ternational Seabed Authority to participate in such consultations.	recovered where recovery was contrary to this Convention.

-11-	Article 19 - Cooperation and information-sharing	 States Parties shall coopente and assist each other in the protection and management of underwater cultural heritage under this Convention, including, where practicable, collaborating in the investigation, excavation, documentation, conservation, study and presentation of such heritage. 	2. To the extent compatible with the purposes of this Convention, each State Party undernates to share information with other States Parties concerning underwater cubraral heritage, including discovery of heritage, location of heritage, heritage excavated or recovered contrary to this Convention or otherivas in violation of international law, pertinent scientific methodology and technology, and legni developments relativate to such heritage.	3. Information shared between States Parties or between UNESCO and States	Parties, regarding the discovery or location of underwater cultural heringe shall, to the extern comparible with their mational legislation, be kept confidential and reserved to competent authorities of States Parties as long as the disclosure of such information might endanger or otherwise put at risk the preservation of such underwater cultural heritase.	 Each State Purty shall take all practicable measures to disseminate information, including where feasible through appropriate international databases, about 	underwater cultural heritage excavated or recovered contrary to this Convention or otherwise in violation of international law.	Article 20 - Public awareness	Each State Party shall take all practicable measures to raise public awareness regarding the value and significance of underwater cultural heritage and the importance of protecting it under this Convention.	Article 21 - Training in underwater archaeology	States Parties shall cooperate in the provision of training in underwater actineology, in techniques for the conservation of underwater cultural heritage terms, in the transfer of technology relating to underwater cultural heritage Arricle 22 – Competent authorities	 In order to ensure the proper implementation of dus Convention. States Parties shall establish competent autionities or reactions the existing ones where appropriate, with the atim of providing for the establishment, maintenance and updating of an inventory of underwater cultural heritage, the effective protection, conservation, presentation and management of underwater cultural heritage, as well as research and education.
-10-	Article 15 - Non-use of areas under the jurisdiction of States Parties	 Parties shall take measures to prohibit the use of their territory, including their time ports, as well as artificial islands, installandors and structures under their usive jurisdiction or control. in support of any activity directed at underwater and heritage which is not in conformuly with this Convention. 	Article 16 - Measures relating to ustionals and vessels is Parties shall take all practicable measures to ensure that their nationals and als flying their flag do not engage in any activity directed at underwater cultural age in a manner not in conformity with this Convention.	Article 17 - Sanctions	Each State Party shall impose sanctions for violations of measures it has taken plement this Convention. Sanctions applicable in respect of violations shall be adequate in severity to be	uve an second companance want ture conventioned and to discound zero warmous ever they occur and shall deputive offenders of the benefit deriving from their al activities.	States Parties shall cooperate to ensure enforcement of sanctions imposed a this Article.	Article 18 – Seizure and disposition of underwater cultural heritage	Each State Party shall take measures providing for the seizure of underwater and heritage in its territory that has been recovered in a manner not in conformity this Convention.	Each State Party shall record, protect and take all reasonable measures to line underwater cultural heritage seized under this Convextion.	Each State Party shall notify the Director-General and any other State with a hable link, especially a cultural historical or archaeological link, to the evaner cultural heritage concerned of any seizure of underwate cultural heritage it has made under this Convention.	A State Party which has seized underwater cultural heritage shall ensure that its stition be for the public benefit, taking into account the need for conservation research; the need for massembly of a dispresel collection; the meed for public as, edublican and education; and the interests of any State with a verifiable link, activity a cultural, historical or archaeological link, in respect of the underwater rail heritage concerned.



	-15-
Article 27 - Entry into force	the States Parties. Thereafter, for each State or territory that ratifies, accept,
This Convention shall enter into force three months after the date of the deposit of the twentieth instrument referred to in Article 26, but solely with respect to the month Create or environment of according their instruments. It shall enter into	approves or accesses to it, the amendment shall affect that affect the total affect and the date of deposit by that Parry of its instrument of infification, acceptance, approval or accession.
weary source on extronues and more so veryourse, use more more more than a new title that State force for each other State or territory fibre months after the date on which that State or territory has deposited its instrument	 A State or territory which becomes a Party to this Convention after the entry into force of amendments in conformity with paragraph 4 of this Article shall, failing an extrastion of different interminent by they State or territory be considered.
Article 28 – Declaration as to inland waters	 (a) as a Party to this Convention as so annended; and
When ratifying, accepting, approving or acceding to this Convention or at any time thereafter, any State or territory may declare that the Rules shall apply to inland waters not of a manimue character.	(b) as a Party to the unsamended Courventions in relation to any State Party not bound by the amendment.
Article 29 - Limitations to geographical scope	Article 32 - Denunciation
At the time of mitrying, accepting approving or acceding to this Convention, a Sine or territory may make a declaration to the depositiony that this Convention shall not	 A State Party may, by written notification addressed to the Director-General, denounce this Convention.
ce apparence to spectar parts or its returns', instrument an works, inturpresent entroperator waters out territorizes, and all identify therein the reasons for such declaration: Such State shall, to the extent practicable and as quickly as possible, promote conditions under	 The demunctation shall take effect twelve months after the date of receipt of the polification, unless the notification specifies a later date.
which this Convention will apply to the areas specified in its declaration, and to that end shall also withdraw its decharation in whole or in part as soon as that has been achieved.	3. The demunctation shall not in any way affect the dury of any State Parry to fulfil any obligation embodied in this Convention to which it would be subject under international law independently of this Convention.
Article 30 - Reservatious	Article 33 – The Rules
With the exception of Article 29, no reservations may be made to this Convention.	The Rules annexed to this Convention form an integral part of it and, unless
Article 31 - Amendments	expressity provided otherwise, a reference to this Convention includes a reference to the Rules.
 A State Party may, by written communication addressed to the Director- General propose amendments to this Convention. The Director-General shall 	Article 34 - Registration with the United Nations
curculate such communication to all States Parties. If within six months from the date of the circulation of the communication, not less than one half of the States Parties reply favourably to the request, the Director-General shall present such proposal to the next Meeting of States Parties for discussion and possible adoption.	In conformary with Article 102 of the Charter of the United Nations, this Convention shall be registered with the Secretariat of the United Nations at the request of the Director-General.
 Amendments shall be adopted by a two-thirds majority of States Parties present and volume. 	Article 35 - Authoritative texts
 Once adopted, amendments to this Convention shall be subject to ratification, acceptance, approval or accession by the States Parties. 	This Convention has been drawn up in Arabis. Chinese, English, French, Russian and Spanish, the six texts being equally authorizative.
4. Amendments shall enter into force, but solary with respect to the States Parties that have multified, accepted, approved or acceded to them, three months after the deposit of the instruments referred to in paragraph 3 of this Article by two thirds of	

-17-	Rule 6. Activities directed at underwater cultural heritage shall be strictly	regumen to group projet recomming or cumual, misonwal and attaceological information.	Rule 7. Public access to <i>m</i> sim underwater cultural heritage shall be promoted, except where such access is incompatible with protection and management	Rule 8. International cooperation in the conduct of activities directed at underwater cultural heritage shall be encouraged in order to further the effective exchange or use of archaeologists and other relevant professionals.	II. Project design	Rule 9. Prior to any activity directed at underwater cultural heritage, a project design for the activity shall be developed and submitted to the competent authorities for subhorization and appropriate peer review.	Rule 10. The project design shall include:	(a) an evaluation of previous or preliminary studies;	(b) the project statement and objectives;	(c) the methodology to be used and the rechniques to be employed.	(d) the anticipated funding.	(e) an expected timetable for completion of the project.	(f) the composition of the team and the qualifications, responsibilities and experience of each team member.	(g) plans for post-fieldwork analysis and other activities;	(h) a conservation programme for artefacts and the site in close cooperation with the competent authorities.	 a site management and maintenance policy for the whole duration of the project. 	 a documentation programme. 	(k) a safety policy;	 an environmental policy; 	 antangements for collaboration with museums and other institutions, in particular scientific institutions. 	(a) report preparation:
- 16 -	Amer	Rule: concerning activities directed at anderwater cultured heritiese	I General principles	ule 1. The protection of underwater cultural heritage through <i>m</i> rin reservation shall be considered as the first option. Accordingly, activities directed at observater cultural heritage shall be authorized in a manner consistent with the	otes non of nationary and subject to train requirement may be automated for the uppeed of making a significant combution to protection or knowledge or	unter enter ou more worte contract retronge. ule 2. The commercial exploitation of underwater cultural heritage for trade or seculation or its internetable dispersal is fundamentally incompatible with the	cotection and proper management of underwater cultural nerrage. Underwater altural heritage shall not be traded, sold, bought or bartered as commercial goods.	his Rule cannot be interpreted as preventing	(a) the provision of professional archaeological services or necessary	services incidental thereto whose nature and purpose are in full conformety with this Convention and are subject to the authorization of	the competent authorities,	(b) the deposition of underwater cultural heritage, recovered in the course of	a research project in company with this convention, involutes and deposition does not prejudice the scientific or cultural interest on integrity of the recovered material or result in its intertexplote dispersal, is in	accordance with the provisions of Rules 33 and 34, and is subject to the authorization of the competent authorities.	ule 3. Activities directed at underwater cultural heritage shall not adversely fact the underwater cultural haritons more shan is macastary for the adviceriate of		ule 4. Activities directed at underwater cultural heritage must use non- istructive techniques and survey methods in preference to recovery of objects. If	cavation or recovery is necessary for the purpose of scientific studies or for the triante protection of the underwater cultural heritaze, the methods and techniques	ed must be as non-destructive as possible and contribute to the preservation of the mains.	ule 5. Activities directed at underwater cutural heritage shall avoid the	

aritees terroriset		Rule 20. An adequate timerable shall be developed to assure in advance of any activity directed at underwater cultural heritage the completion of all sages of the	project one-group project one-group microaura conservator, nocumentation and curation or recorded underwater cultural heritage, as well as report preparation and dissemination.	Rule 21. The project design shall include a contingency plan that will ensure concervation of underwise cultural haritage and supporting documentation in the event of any interruption or termination of the project.	directed at the	 activities for a Rule 22. Activities directed at underwater cultural heritage shall only be underased in the control of and in the regular presence of a qualified underwater actaeologist with scientific competence appropriate to the 		Rule 23. All persons on the project team shall be qualified and have demonstrated competence appropriate to their roles in the project.	by the proposed bitective.	Rule 24. The conservation programme shall provide for the treatment of the archaeological remains during the activities directed at underwater cultural heringe- during transit and in the long term. Conservation shall be carried out in accordance with current professional standards.	Rule 25. The site management programme shall provide for the protection and management in zin of underwater cultural heritage. in the course of and upon	ertives, and the rescatoble provision for site stabilization, monitoring, and protection against meaffearce.	IX Documentation	tural heringe, an Nove 26: The documentation programme shall set our thorough documentation ity, sufficient to including a progress report of activities directed at underwater cultural heringe, in accordance with current professional standards of archaeological documentation, hion.	Rule 27. Documentation shall include, at a minimum, a comprehensive record of the site, including the provenance of underwater cultural heritage moved or removed in the course of the activities directed at underwater cultural heritage, field notes,	plants, drawings, sections, and photographis or recording in other mecha. memation in the
-18 -	 deposition of archives, including underwater cultural he and 	 (p) a programme for publication. 	Rule 11. Activities directed at underwater cultural heritage shall b accordance with the project design approved by the competent author	Rule 12. Where unexpected discoveries are made or circumstan project design thail be reviewed and amended with the approval or authorities.	Rule 13. In cases of urgency or chance discoveries, activities	underwater cultural beriage, including conservation measures or period of short duration, in particular tite stabilization, may be an absence of a project design in order to protect the underwater cultural	III. Preliminary work	Rule 14. The preliminary work referred to in Rule 10 (a) st assessment that evoluates the stanificance and vulnerability of	cultural heritage and the surrounding natural environment to damage project, and the potential to obtain data that would meet the project of	Rule 15. The assessment shall also include background studie historical and archaeological evidence, the archaeological and characteristics of the site and the consequences of any potential is for a start scholibly of the underwater cultural herizone affected by the	IV. Project objective, methodology and techniques	Rule 16. The methodology shall courply with the project obje techniques employed shall be as non-intrusive as possible.	V. Funding	Rule 17. Except in cases of emergency to protect underwater cult adsquare funding base shall be assured in advance of any activit complete all stages of the project design, including conservation, doc cumbion of recovered artefacts, and report preparation and disseminat	Rule 18. The project design thall demonstrate an ability, such a bould to fund the project durough to completion.	Rule 19. The project design shall include a contingency plan t conservation of underwater cultural heritage and supporting docum event of any interruption of anticipated funding.



gnatures this 6th day of November 2001. ne jour de novembre 2001. An 6 de noviembre de 2001.	स्वाजन विज्याहर हे सल्बन्धि 2001 श्रीयो प सिन् रुस्ता सुन्तारेग हे त्या । श्रीयो सिन्दा	The Director General Le Director General El Director General Tenepatento (Lun, Jun) B 7 #
DN WITNESS WHEREOF we have appended our si EN FOI DE QUOI out apposé leur signature, ce бéu EN FE DE LO CUAL estatupan sus firmas, en este e	B y]DOCTOBEDEHHE ЧЕГО настоашую Конн год. - ۲۰۰۰ پالیا (مالی) میں نونسر/انشرین الثاني ۲۰۰۰ م 为此、我们于2001年11月6日並上我们的名字。	The Prezident of the General Conference Le Prezident de la Conference General El Prezidente de la Conference General Dipotecolmes Jeneparando Rond popenyuu 大会主派
ing is the authentic text of the Convention duly adopted by the General of the United Nations Educational Scientific and Cultural Organization Litty-first session, which was held in Paus and declared closed the third day or 2001. I precede est le texte authentique de la Convention dúment adopte par la	e prevene est se trans notame not auxour ano auxour ano auxour ano auxour a prevene par au génération de l'Organization des Natous Utités pour l'éducation, la science et sa trente-et-unième session, qui s'est teume à Puris et qui a élé déclarée close jour de novembre 2001. es el texto amientico de la Convención aprobada en busen y debida forma diferencia General de la Convención de las Naciones Unidas para la la Clearcia y la Cultura, en su tragésimo primera reunión, célébrada en Paris i el tres de noviembre de 2001.	கவன் கூவாச சகாப காபாசாலன் по பானாலை நலைகளாக காயாக பான் குற்காலன் பான்றில் பான்றில் காச்சு பிராவாகமுள் கொடை குற்காலைகள் பின்றி வான் குற்காரு காசில் காரியில் காரியில் குற்கா கால்கானமான்கா ராசாசல் கலந்த 2001 ரவுட கில் காம் கால்கானமான்கா நாகால் குற்கில் பிறிக்கு கில் காம் கிறியில் கிறிகிறி கிறிகிறி கிறிகிறி கிறிக்கு இட்டு– குறியிற் கிறிகியில் கிறிகிறி கிறிகிறி கிறிகிறி கிறில் கிறி குறியிற் கிறிகியில் கிறிகிறி கிறிகிறி கிறிகிறி கிறில் கிறி குறியிற் கிறிகியில் கிறிகிறி கிறிகிறி கிறிகிறி கிறிக்கு கிறி குறியிற் கிறிகியில் கிறிகிறி கிறிகிற கிறிகிற கிறிகிற குறி குறியிற் கிறிகியில் கிறிகிற கிறிகிற கிறிகிற கிறிகிற குறிகி குறியிற் கிறிகியில் கிறிகிற கிறிகிற கிறிகிற கிறிகிற கிறிகிற குறியிற் கிறிகியில் கிறிகியில் கிறிகிற கிறிகிற கிறிகிற கிறிகிற கிறில் கிறிகியில் கிறிகியில் கிறிகிற கிறிகிற கிறிகிற கிறிகிற கிறில் கிறிகியில் கிறிகியில் கிறிகிற கிறிகிற கிறிகிற கிறிகிற கிறிகிற கிறிகிற கிறிகிற குறிகிற குறியிற் கிறிகியில் கிறிகிற கிறிகிற கிறிகிற குறிகிற குறிகிற குறிக்கு கிறிகு கிறிகிற கிறிகிற குறிகி கால் கால் கிறிக்கு கிறிக்கு கிறிகிற குறிகிற குறிகிற குறிகிற குறிக்கு கிறிகு கிறுகிற குறிக்கு கிறிகு கிறிகிற குறிகிற குறிகிற குறிகி குறிகிற குறிக்கு கிறிக்கு குறிக்கு கிறிக்கு கிறிக்கு கிறிக்கு குறிக்கு குறிக்கு கிறிக்கு குறிக்கு கிறிக்கு குறிக்கு கிறிக்கு குறிக்கு கிறிக்கு கிறிக்கு குறிக்கு கிறிக்கு குறிக்கு கிறிக்கு கிறிக்கு கிறிக்கு குறிக்கு குறிக்கு கிறிக்கு கிறிக்கு கிறிக்கு கிறிக்கு கிறிக்கு கிறுக்கு கிறு குறிக்கு கிறிக்கு குறிக்கு குறிக்கு குறிக்கு குறிக்கு குறிக்கு கிறு குறைக் குறைக் குறைக்கு குறிக்கு குறிக்கு குறு குறு குறு

Done in Paris this 6th day of November 2001 in two authentic copies bearing the signature of the President of the thury-first session of the General Conference and of the Director-General of the United Nations Educational. Scientific and Cultural Organization, which shall be deposited in the archives of the United Nations Educational, Scientific and Cultural Organization and certified true copies of which shall be delivered to all the States and territoines referred to in Article 36 as well as to the United Nations.	Fair à Paris ce stivieure jour de novembre 2001, en deux evemplaties authentiques portaur la signature du Président de la Conférence générale reune en sa trente-er- uniseme session, et du Directeur grencal de l'Organisation des Nations Unies pour l'éducation. la science et la culture, qui seront déposé dans les archives de l'Organisation des Nations Unies pour l'éducation, la science et la culture, et donr les copies certifiées conformes seront remises à tous les Etars et territoires visés à l'article 26 ansi qu'à l'Organisation des Nations Unies	Hecho en Paris en este día seis de noviembre de 2001, en dos ejemplares antienkos que lievan la firma del Presidente de la Conferencia General, en su trigesimo primera reundo, y del Director General de la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, ejemplares que se depositarán en los archivos de esta Organización, La versa copias centíficadas conformes se reunitran a lodos los Estados y territoros a que se refiere el Artículo 26, así conto a las Naciones Unidas.	Совершено в г. Париже 6 козбул 1001 года в друх лучентичных эклемплирых за подписько Председатели Генерльной конференции. собраниейся на трицить перяую сессию, и Генерльного практоро Организации Объединиенски Наций по зопросым образования, влуки и культуры, задиекализм обраюм заверенные колпе которых будут напразленыя всем государствам и территориям, указанным в статье 26, а также Организации Объединенских Напий.	صدرت في باريس في هذا اليوم السادس من بوغمير/انترين الثاني ٢٠٠٧، من مسختين أصليتين تحملان توقيعي رئيس التُوتمر العام في دورت الحادية والثلاثين والدير العام لنظمة الأمم التحدة التربية والعام والثقافة، وستودع في محفوظات منظمة الأمم التحدة التربية والعام والثقافة، وسترمل نسع مُستُرق عليها مطابقة الأصل إلى جميع الدولد الثمار إليها في الددة ٢٢ وإلى منظمة الأمم التحدة.	2001年11月6日订于巴黎,正本两份,由联合国教科文组织大会第三十一届会议 主席和夏台 国教科文组织总干事签署,升持存放于取合国教科文组织的档案 中, 经核准的副本特分选第26条所提及的所有国家和地区以及联合国。
Centified Copy Copie centifies conforme Copie centificads conforme Stasperents source 」 上 1	Parris, Legel Adviser	United Nations Educational, Scientific and Cultural Organization Consettler juradique De l'Organisation des Nations Unites pour l'éducation, la science et la culture Consejero juridico de la Organizacion des las Naciones Unidas pura la Educacion, la Ciencia v la Cultura	Коранизатий советнани. Организация: Объещненных Наций по вопросам образованняя наука изран ималя 18 од инсл.я ил. д. والنفاذة	联合国教育、科学及文化组织 技神顾问	

APPENDIX - HERITAGE VALUES

METHOD

The thirty short-listed sites identified during the scoping phase of the project have been tentatively assessed for heritage values. This was undertaken as a desk-based exercise using information from existing sources which included aerial photography, photos and descriptions from previous site visits, information from New Zealand Archaeological Association site records, published and on-line material. Sites were given a score of 0 to 5 for each of the 10 criteria. It is proposed that any heritage site that scores of 25 or more points in total be scheduled in the Taranaki Coastal Plan.

CRITERIA

The assessment criteria were derived from standard texts used in New Zealand for assessing archaeological values including Walton 1999, Gumbley 1995 and NZHPT 2006. These are briefly outlined below:

PERIOD - CURRENCY

This takes into account the age of the site, but also considers the age of the site in terms of its cultural association. For example, an early site associated with Maori settlement in New Zealand might date to AD1400, whereas an early colonial period site might only date to AD1820.

RARITY

The rarity of the site is considered both in regional and national terms.

DIVERSITY OF FORM

This considers the diversity of the site class as a whole, also to what extent are these types of site generic or varied.

REPRESENTIVITY

This is the extent to which the site can be said to be representative of its type, and considers the site both in terms of its original form, and as an archaeological feature. For example, a site can be said to be a representative example of a shipwreck site, even though it bears little resemblance to the vessel while it was in service. The values in this category have been ascribed on the basis of existing information and a clearer understanding of the site's representivity could be ascertained from a site visit.

SURVIVAL - CONDITION

This is the degree to which the site survives relative to its original form and as an example of that type of site. For archaeological sites this also relates to the degree of preservation of archaeological context and information. To some extent this is difficult to ascertain for archaeological sites which by nature include components which are not visible prior to excavation, and as with a site's representivity this value has been ascribed on the basis of the last visit, and could be more reliably ascertained through a site visit.

DIVERSITY OF FEATURES

This considers the diversity of features present within the site itself. Some sites such as shipwrecks are relatively complex and are typically made up of a number of component parts and can contain large numbers of artefacts and structural elements. Other sites such as pillboxes are relatively simple by comparison.

GROUP VALUE

To what extent the site can be said to be part of a wider landscape, or set of sites that gain additional value through their association with each other.

INFORMATION POTENTIAL

This considers the potential of the site to contain information that is not otherwise available through written records. This includes information that is accessible through site inspection and/or through more detailed and intrusive archaeological investigation.

AMENITY VALUE

Amenity values are concerned with the potential of the site to be an educational, scenic, or recreational resource.

CONSERVATION VALUE

The extent to which he site enhances the value of the wider area.

REFERENCES

Gumbley, W. 1995. Guidelines for provision of archaeological information and assessment for authority applications under Section 11 or Section 12 of the Historic Places Act 1993. *Archaeology in New Zealand* 38(2):100-105

New Zealand Historic Places Trust. 2006. *Guidelines for Writing Archaeological Assessments*. New Zealand Historic Places Trust, Wellington

Walton, T. 1999. Assessing the archaeological values of historic places: procedures, methods and field techniques. Science and Research Internal Report No.167. Department of Conservation, Wellington

		Characteris	ing the cla	ss		Comparing pl	aces				Overall	
No	Site	Period Currency	Rarity	Diversity Form	Period Representivity	Survival Condition	Diversity	Group value	Information potential	Amenity	Conservation	
1	Alexandra wreck, Puke Aruhe	4	5	3	4	3	3	4	4	1	4	35
2	Airedale wreck, Waitara	4	4	3	4	3	3	4	4	3	2	34
3	Paterson wreck, Waitara	4	4	2	4	2	2	4	2	3	2	29
4	Training walls, Waitara	4	4	3	3	3	3	4	2	3	2	31
5	Pillbox, Waitara	2	3	3	2	2	3	3	2	3	2	25
6	Railway wharf, Waitara	4	3	1	4	1	1	4	4	2	1	25
7	Rangatira wreck, Bell Block	4	4	3	4	3	3	4	4	3	3	35
8	Wanaka wreck, Bell Block	4	4	3	4	3	3	4	4	3	3	35
9	John Whiteley wreck, Bell Block	4	5	2	5	1	2	4	3	1	3	30
10	Mooring anchors, New Plymouth	4	5	3	4	4	1	2	4	2	1	30
11	Unidentified wreck, New Plymouth	4	4	4	4	4	4	2	4	1	1	32
12	Tasmanian Maid wreck, New Plymouth	4	5	4	4	4	4	3	4	4	3	39
13	Salt water baths, New Plymouth	4	4	4	4	3	1	2	2	3	3	30
14	Petroglyph, Wairere	5	5	2	5	5	2	5	2	4	3	37
15	Petroglyph, Tapuae	5	5	2	5	5	2	5	2	1	3	34
16	Petroglyph, Tapuae	5	5	2	5	5	2	5	2	1	3	34
17	Gairloch wreck, Ahu Ahu	3	4	4	3	4	3	2	4	3	2	32
18	Tauranga waka, Warea	5	4	4	5	3	2	5	1	3	2	34
19	Tauranga waka, Tipoka	5	4	4	5	3	2	5	1	3	2	34
20	Harriet wreck, Rahotu	5	5	2	5	1	1	2	4	1	3	29
21	Lord Worsley wreck, Opunake	4	5	3	4	3	3	2	4	3	3	34
22	Tauranga waka, Opunake	5	4	4	5	3	2	5	1	3	2	34
23	Wharf, Opunake	3	3	2	3	2	2	3	4	3	2	27
24	Mole, Opunake	3	3	2	3	3	2	3	2	3	2	26
25	Power Station, Pātea	3	4	4	3	4	4	4	3	3	2	34
26	Railway wharf, Pātea	4	3	4	4	4	2	5	4	3	2	35
27	Town wharf, Pātea	4	3	4	4	4	2	5	4	3	2	35
28	Training walls, Pātea	4	4	4	3	4	3	5	2	3	2	34
29	Waitangi wreck, Pātea	3	3	3	3	3	3	4	3	3	2	30
30	Pill box, Pātea	2	3	3	2	3	3	4	2	3	2	27

STATEMENTS OF HERITAGE SIGNIFICANCE

ALEXANDRA WRECK

The *Alexandra* is historically significant for its role in the New Zealand wars, and can be considered representative of the coastal steamers that were used as part of the coastal supply chain which provided for numerous otherwise isolated military outposts. Very few wrecks from this era have been located in recent times and are known to survive archaeologically. The site can be considered part of a significant historical landscape which includes the redoubt at Puke Aruhe, and pā and other positions used by Maori. The *Alexandra* wreck site is registered as a Category II historic place by the NZHPT, and lies in close proximity to the Parininihi Marine Reserve.



AIREDALE WRECK

The *Airedale* is a representative example of an iron steamship wreck from the late-nineteenth century. The Waitara River mouth was the location of at least 20 vessels since 1858, and the *Airedale* is part of a maritime cultural landscape which includes the nineteenth century training walls for the river port, coastal defence installations, and one other rediscovered shipwreck. Wrecks of nineteenth century vessels are rarely recorded in New Zealand and while over half of the approximately 3000 documented shipwrecks in New Zealand occurred prior to 1900, locations are confirmed for less than 5% of these.

PATERSON WRECK

The *Paterson* is a representative example of an iron steamship wreck from the late-nineteenth century. The Waitara River mouth was the location of at least 20 vessels since 1858, and the *Paterson* is part of a maritime cultural landscape which includes the nineteenth century training walls for the river port, coastal defence installations, and one other rediscovered shipwreck. Wrecks of nineteenth century vessels are rarely recorded in New Zealand and while over half of the approximately 3000 documented shipwrecks in New Zealand occurred prior to 1900, locations are confirmed for less than 5% of these.





TRAINING WALLS, WAITARA RIVER

The training walls at the mouth of the Waitara River were designed by eminent British marine engineer, Sir John Coode following his visit to New Zealand in 1878. The walls were completed by 1885, and formed part of a wider complex of maritime infrastructure in the Waitara River which included a number of wharves, and mooring piles north of the bridge. Coode designed harbour improvements for a number of other ports around New Zealand, and surviving examples are limited to smaller ports which have not been subject to ongoing upgrade and expansions.



PILLBOX WAITARA

The pillbox at Waitara is one of 4 surviving examples of the 22 machinegun emplacements erected around the Taranaki coast in 1942-43. It is representative of the more complex arrow-head design of pillbox which appears to have been used extensively in Taranaki. The site is part of a rapidly disappearing and otherwise unprotected group of sites associated with the defence of New Zealand during WWII.



RAILWAY WHARF, WAITARA

The Waitara river was a busy commercial port rivaling New Plymouth and with its own Harbour Board between 1877 and 1941. Wharves lined both sides of the river north of the bridge and included the Railway wharf constructed in 1875. These have since been removed, but occasional truncated piles are still visible and it is possible that archaeological deposits remain. Wharves and jetties can be important repositories of historical information and as well as structural remains they form underwater deposits artefacts in the same way as historic middens form on land.

RANGATIRA WRECK

The *Rangatira* is a representative example of an iron steamship wreck from the late-nineteenth century. The Puketapu reef was the location of a number of wrecks and three have been rediscovered and documented in recent times. Wrecks of nineteenth century vessels are rarely recorded in New Zealand and while over half of the approximately 3000 documented shipwrecks in New Zealand occurred prior to 1900, locations are confirmed for less than 5% of these.





WANAKA WRECK

The *Wanaka* is a representative example of an iron steamship wreck from the late-nineteenth century. The Puketapu reef was the location of a number of wrecks and three have been rediscovered and documented in recent times. Wrecks of nineteenth century vessels are rarely recorded in New Zealand and while over half of the approximately 3000 documented shipwrecks in New Zealand occurred prior to 1900, locations are confirmed for less than 5% of these.



The *John Whiteley* is a wreck of a New Zealand built wooden vessel from the mid-nineteenth century. It was built at Kawhia in 1850 and named after Wesleyan missionary John Whiteley who was stationed there from 1835, and later in Taranaki from 1856. The Puketapu reef was the location of a number of wrecks and three have been rediscovered and documented in recent times. It is unclear how much survives, but wrecks of New Zealand built wooden vessels from the mid-nineteenth century are exceptionally rare.

MOORING ANCHORS

A cluster of five large admiralty pattern anchors and chain was located by divers in January 1996 in the approximate position of the mooring buoy marked on Stokes 1849 map of the Taranaki roadstead, and a water colour showing a barrel buoy in this location is held by Puke Ariki museum. While anchors were probably used as moorings elsewhere around New Zealand, no similar examples are recorded elsewhere in New Zealand.

UNIDENTIFIED WRECK, NEW PLYMOUTH

The wreck of a wooden vessel was uncovered by erosion at East End beach near the mouth of the Te Henui stream in 1980, it was not possible to positively identify the vessel and it has since been buried again. Well preserved wrecks of wooden vessels from the mid-nineteenth century are exceptionally rare in New Zealand.







Taranaki Daily News image

TASMANIAN MAID WRECK

The *Tasmanian Maid* is historically significant for its role in the New Zealand wars, and can be considered representative of the coastal steamers that were used as part of the coastal supply chain which provided for numerous otherwise isolated military outposts. It served as a tender to gun boats and was used during the Waikato and Taranaki campaigns of the New Zealand wars, was the first steamer to enter the Buller River and transported miners to the West Coast gold rushes of the 1860s. Very few wrecks from this era have been located in recent times and are known to survive archaeologically. The *Tasmanian Maid* wreck site is registered as a Category I historic place by the NZHPT.



SALTWATER BATHS, KAWAROA

The saltwater baths were reportedly first built in this location in the 1880s using surplus concrete from the harbour improvement works at Moturoa. The concrete has started to deteriorate in places but they largely retain the same form as when they were built. This is a relatively uncommon example of a nineteenth century recreational structure surviving in the coastal marine area.



PETROGLYPH, WAIRERE

Carved andesite boulders are forms of Maori rock art that can be considered unique to the Taranaki region. The function and age of the petroglyphs are not well understood, but are a significant aspect of the coastal landscape.



PETROGLYPH, TAPUAE

Carved andesite boulders are forms of Maori rock art that can be considered unique to the Taranaki region. The function and age of the petroglyphs are not well understood, but are a significant aspect of the coastal landscape. This stone is likely to be covered in sand drift and has not been seen in many years.



PETROGLYPH, TAPUAE

Carved andesite boulders are forms of Maori rock art that can be considered unique to the Taranaki region. The function and age of the petroglyphs are not well understood, but are a significant aspect of the coastal landscape. This stone is likely to be covered in sand drift and has not been seen in many years.



GAIRLOCH WRECK

The *Gairloch* is a representative example of a wreck of an iron steamship wreck that was built in the late nineteenth century. The wreck occurred in the twentieth century, and is not otherwise protected as an archaeological site, but is still retains significant values in terms of documenting nineteenth century shipbuilding methods. Wrecks of nineteenth century built vessels are rarely recorded in New Zealand.

TAURANGA WAKA/PETROGLYPHS, WAREA

This site is a representative example of a number of tauranga waka known to be present along the Taranaki coast, but is also part of a cultural landscape that includes pā, open settlement sites, and petroglyphs in the immediate area. One of the larger petroglyphs has been relocated from this site to Andersons Bay in Dunedin to acknowledge the Parihaka prisoners that were imprisoned there, but at least two still remain in-situ.

TAURANGA WAKA, TIPOKA

This site is a well preserved example of a tauranga waka, of which a number are known to be present along the Taranaki coast. It is also part of a cultural landscape that includes pā, and open settlement sites in the immediate area.







HARRIET WRECK

The *Harriet* is one of Taranaki's earliest documented shipwrecks, and the earliest wreck site to be rediscovered in recent times. It has outstanding historical significance to the area and is associated with well-known historical figures Jacky and Betty Guard, and Oaoiti. It is unclear to what extent wreckage remains buried in the beach, but the anchor has been recovered and mounted on the main street in Rahotu.



LORD WORSLEY WRECK

The Lord Worsley is of high historical significance as a wreck which occurred during the 1860s. It has associations with important historical figures including Wiremu Kingi te Matakatea and Te Whiti who both used their influence to bring about non-violent resolution at a time when tensions between Maori and Pakeha were running high in Taranaki. Wrecks of nineteenth century vessels are rarely recorded in New Zealand and while over half of the approximately 3000 documented shipwrecks in New Zealand occurred prior to 1900, locations are known for less than 5% of these.



Puke Ariki image

TAURANGA WAKA, TE NAMU

This site is a well preserved example of a tauranga waka, of which a number are known to be present along the Taranaki coast. It is associated with the pa at Te Namu and is also part of a cultural landscape that includes other pā, and open settlement sites in the immediate area.



WHARF, OPUNAKE

The wharf at Opunake was constructed in 1924 from materials salvaged from the earlier 1899 jetty. The Opunake Harbour Board which raised funds for its construction had a brief existence, formed in 1913, and amalgamated with the Borough Council by 1938. The wharf was last used by shipping in 1929, and has historical significance for its association with the largely unsuccessful attempts to establish a port at this location. The wharf remains are part of a heritage trail which offers historic interpretation on a number of maritime heritage features around the township including the wharf, mole, and shipping signals.



MOLE, OPUNAKE

The mole at Opunake was constructed from local materials in 1924-25, and extended in 1926 to provide shelter for the wharf. The Opunake Harbour Board which raised funds for its construction had a brief existence, formed in 1913, and amalgamated with the Borough Council by 1938. The mole has historical value for its association with the largely unsuccessful attempts to establish a port at this location. The mole is part of a heritage trail which offers historic interpretation on a number of maritime heritage features around the township including the wharf, mole, and shipping signals.



POWER STATION, PĀTEA

The Pātea power station was constructed in 1901 and was the first municipally owned electrical plant in New Zealand. This makes it an important example of its type and such structure from this period can be considered rare nationally and regionally. The coastal elements are part of a much larger site which extends inland and includes the water supply and transmission lines.



TOWN WHARF, PĀTEA

The town wharf ruins of the true right bank of the Pātea River. Pātea was gazette as a port of entry in 1871. The first town wharf was constructed to the specification of Sir John Coode and replaced earlier privately owned structures. The town wharf was rebuilt in 1900. The site is a representative example of turn of the century timber wharf remains, and as a ruin has good education potential. Wharves and jetties can be important repositories of historical information and as well as structural remains they form underwater deposits artefacts in the same way as historic middens form on land.



RAILWAY WHARF & GRADING WHARF, PĀTEA

The New Plymouth to Foxton railway line was completed by 1885, and a railway wharf was erected on the true left bank of the river in 1883. The grading wharf for the cheese factory was constructed downstream from the Railway wharf in 1904. In the years following exports from Pātea exceeded those of Wanganui, largely as a result of the dairy trade. Wharves and jetties can be important repositories of historical information and as well as structural remains they



form underwater deposits artefacts in the same way as historic middens form on land.

TRAINING WALLS, PĀTEA

The training walls at the mouth of the Pātea River were designed by eminent British marine engineer, Sir John Coode following his visit to New Zealand in 1878. The eastern wall was completed by 1880, but the western wall was not built until 1905. These walls helped keep the Pātea River open for shipping and formed part of a wider complex of maritime infrastructure which included a number of wharves for the township and railway. Coode designed harbour improvements for a number of other ports around New Zealand, and surviving examples are limited to smaller ports which have not been subject to ongoing upgrade and expansions.



WAITANGI WRECK

The *Waitangi* is a representative example of a wreck of an iron steamship wreck that was built in the late nineteenth century. The wreck occurred well into the twentieth century, and is not otherwise protected as an archaeological site, but is still retains significant values in terms of documenting nineteenth century shipbuilding methods. The Pātea river has been the location of at least 21 wrecks since the 1860s, but only the *Waitangi* has been rediscovered and documented in recent times. Wrecks of nineteenth century built vessels are rarely recorded in New Zealand.

PILL BOX, PĀTEA

The pillbox at Pātea is one of 4 surviving examples of the 22 machine gun emplacements erected around the Taranaki coast in 1942-43. It is representative of the more complex arrow-head design of pillbox which appears to have been used extensively in Taranaki. The site is part of a rapidly disappearing and otherwise unprotected group of sites associated with the defence of New Zealand during WWII.



