

# ***TRANS-TASMAN RESOURCES SOUTH TARANAKI BIGHT OFFSHORE IRON SAND PROJECT: ARCHAEOLOGICAL ASSESSMENT***

Report prepared for Trans-Tasman Resources Limited

By

Andy Dodd (MA)  
Rod Clough (PhD)

December 2015

*In November 2015 Clough and Associates Ltd was provided with a summary of additional scientific work commissioned by TTR since 2014. The conclusions from my report dated August 2013 remain valid in light of TTR's additional information.  
**Andy Dodd & Rod Clough 3 December 2015***

*Clough & Associates Ltd.  
[heritage@clough.co.nz](mailto:heritage@clough.co.nz)  
321 Forest Hill Rd, Waiatarua  
AUCKLAND 0612  
Telephone: (09) 8141946  
Mobile 0274 850 059  
[www.clough.co.nz](http://www.clough.co.nz)*

# EXECUTIVE SUMMARY

## Summary

Trans-Tasman Resources Ltd (TTR) have selected a location for iron sand extraction in the South Taranaki Bight, and are seeking consent for their operations. They have sought archaeological advice from Clough & Associates Ltd on the potential for the discovery of historic shipwreck sites within the area of operations as part of the assessment of effects for the project.

The assessments undertaken consisted of a review of previous research, including a multibeam bathymetry survey of the proposed area of operations commissioned from NIWA by TTR. A desk-based review of the literature relevant to shipwrecks on the South Taranaki Coast was also carried out to provide background historical detail and supplement the results of that survey.

There are at least 126 documented shipwrecks in the Taranaki region, of which 64 pre-date 1900. The remains of the majority are in unconfirmed locations and only 11 of these wrecks have been successfully relocated in recent times. Twenty-three vessels are recorded to have been lost on the South Taranaki coast at or near Patea, and 28 on the coast at or near Wanganui. These include 14 near Patea and 20 near Wanganui that were wrecked before 1900.

No shipwrecks are known to be present within the project area. The potential for encountering shipwrecks in the South Taranaki Bight Economic Exclusion Zone (EEZ) is low, but cannot be discounted entirely. A review of NIWA's multibeam sonar data suggests that there is no significant wreckage exposed above the seabed in the project area; however, it is still possible that wreckage could be encountered buried beneath the seabed.

Any shipwrecks pre-dating 1900 have statutory protection under the Historic Places Act 1993 and cannot be modified or destroyed unless an Authority has first been obtained from the New Zealand Historic Places Trust (NZHPT). To provide for the possibility that a shipwreck may be encountered, a 'Discovery Protocol for Shipwreck Finds' has been prepared to ensure that statutory requirements and processes are followed in the event that nineteenth century wreckage is encountered (see Appendix). Any information recovered from a previously unidentified shipwreck (whether pre- or post-1900) could add significantly to our knowledge of New Zealand's history.

---

## Recommendations

- There should be no constraints on the proposed iron sand mining project on archaeological grounds, as no shipwrecks are known to be present within the project area, and the potential for previously unrecorded shipwrecks is low.
  - Archaeological monitoring of mining/drilling operations in the EEZ in the areas reviewed for this project is not necessary.
  - If a shipwreck is encountered during extraction operations, the appended 'Discovery Protocol for Shipwreck Finds' should be implemented, and on site contractors should familiarise themselves with this document.
-

# CONTENTS

---

Introduction.....	1
Purpose.....	1
Methodology.....	1
The Coast in Prehistory.....	4
Occupation of the Coast.....	4
Recorded Maori Archaeological Sites.....	4
Maritime History.....	7
Patea.....	7
Wanganui.....	9
Recorded Historic Sites.....	11
Vessels Lost at Sea in New Zealand Waters.....	12
Discussion and Conclusions.....	14
Potential for Shipwrecks in the Project Area.....	14
Statutory Requirements.....	14
Conclusion.....	15
Recommendations.....	16
References.....	17
Appendix: Discovery Protocol for Shipwreck Finds.....	19

---

# INTRODUCTION

---

## Purpose

Trans-Tasman Resources Ltd (TTR) have selected a location for iron sand extraction in the South Taranaki Bight (Figure 1). The proposed seabed excavation operations will be based around a detailed Mine Plan. Seabed material will be excavated using a Subsea Sediment Extraction Device (SSED) which will transfer it to a Floating Production Storage and Offloading vessel (FPSO). On the FPSO, extracted sediment will be processed into iron ore concentrate, with de-ored sand discharged to the seabed into previously worked-over areas. The concentrated ore will then be transhipped to a Floating Storage and Offloading vessel (FSO) which will store and de-water the concentrate, and in turn trans-ship it onto standard Cape-size export vessels for delivery to world markets for use in steel production.

TTR have requested archaeological advice from Clough & Associates Ltd on the potential for the discovery of historic shipwreck sites within their proposed area of operations in the Southern Taranaki Bight Coastal Marine Area (CMA) and Exclusive Economic Zone (EEZ). Previous research has included a multibeam bathymetry survey commissioned from NIWA by Trans-Tasman Resources Ltd covering five potential areas of operations (Pallentin et. al. 2013).

This report assesses the likelihood of historic shipwreck sites being present in the NIWA study area and wider Southern Taranaki Bight CMA and EEZ between the Manawapou and Whangaehu River mouths.

---

## Methodology

The area surveyed by NIWA comprised five discrete areas off the South Taranaki coast, one of which is within the proposed extraction site in the EEZ beyond the 12 nautical-mile limit. The approximate locations of these survey areas are shown below in **Error! Reference source not found.**

Multibeam sonar data collected during the survey was reviewed by the first author at the NIWA offices in Wellington on 1 August 2013. A desk-based review of the literature relevant to shipwrecks on the South Taranaki Coast has been carried out to provide background historical detail and supplement the results of that survey.

Information relating to recorded archaeological sites<sup>1</sup> on the landward side of the coastline close to the project area was also reviewed, and has been summarised to provide further background information.

---

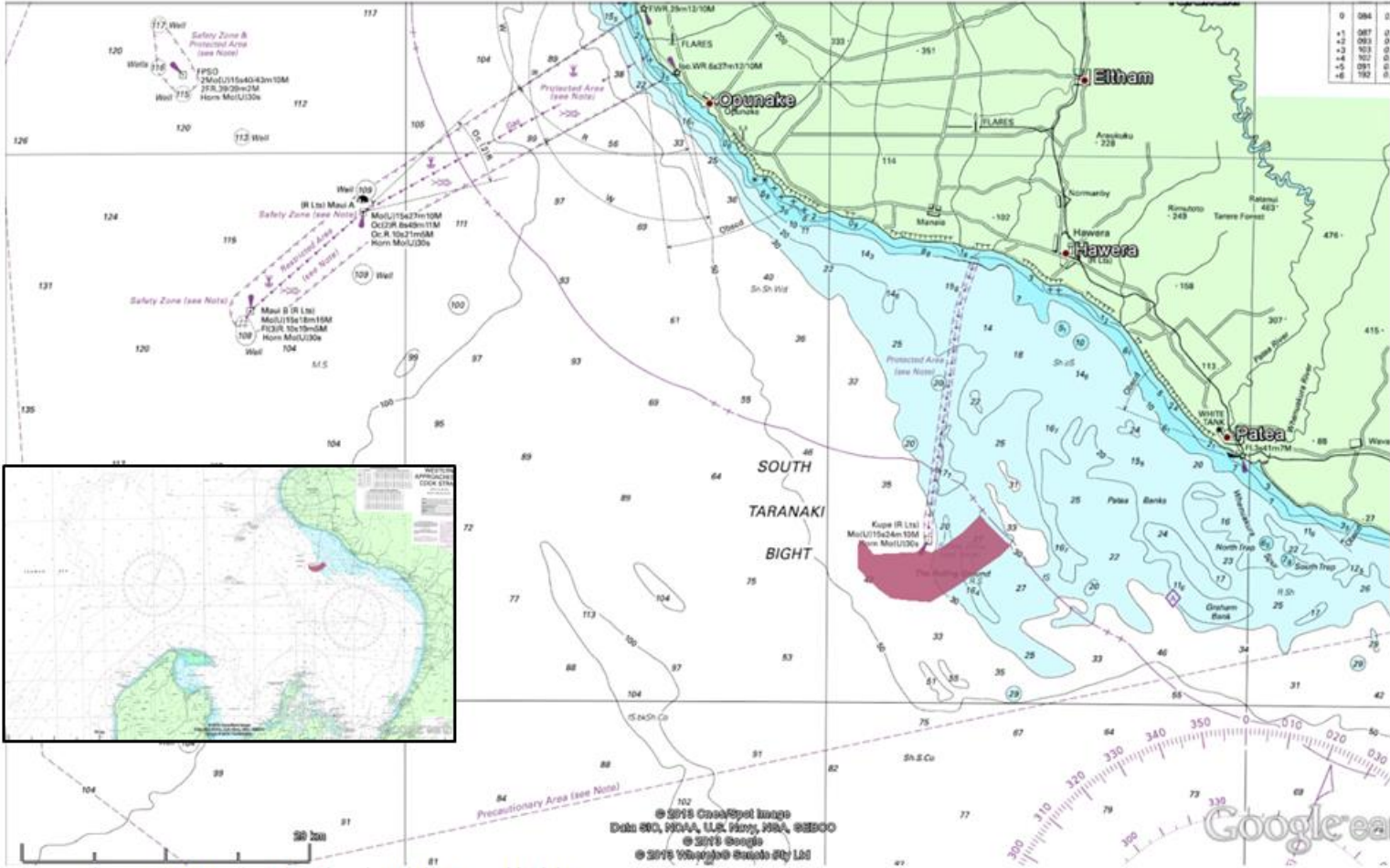
*Continued on next page*

---

<sup>1</sup> In the New Zealand Archaeological Association's (NZAA) site record database (ArchSite) accessible at <http://www.archsite.org.nz>.

# INTRODUCTION, CONTINUED

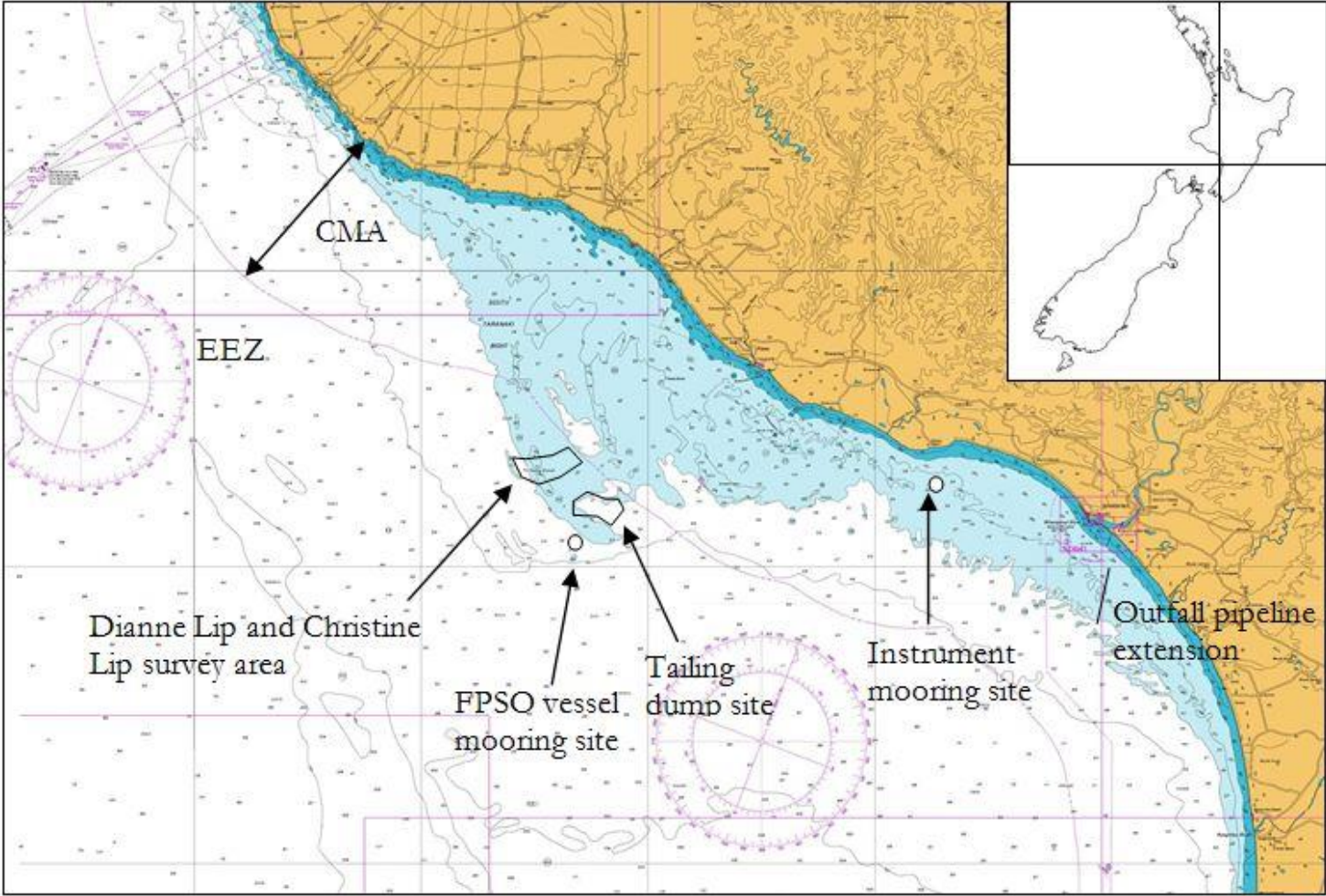
Figure 1. TTR Project location in South Taranaki Bight (TTR 2013)



Continued on next page

**INTRODUCTION, CONTINUED**

**Figure 2. South Taranaki Bight showing extent of the CMA and approximate locations of NIWA survey sites. The Dianne Lip and Christine Lip survey area is within the proposed iron sand extraction site**



## THE COAST IN PREHISTORY

---

### **Occupation of the Coast**

The initial settlement of New Zealand from East Polynesia is believed to have occurred by AD1250-1300 (c.800 BP/750 cal.BP) (Higham and Jones 2004:232), and this is supported by environmental studies which show widespread forest clearance and establishment of fern species around AD1200-1400 (McGlone and Wilmshurst 1999:12). Forest clearance in Taranaki is believed to have occurred 200-400 years later than in other parts of the country (Wilmshurst et al 2004:177). The date that people first settled the Taranaki coast is also generally reported as being later than in other parts of New Zealand, at around 700BP (Walton 2000:6; Prickett 1983:299).

The earliest radiocarbon dates come from sites in South Taranaki, notably Kaupokonui and Ohawe (Prickett 2005:52-53), but more recently investigations have yielded comparably early dates from North Taranaki at Moturoa (Bruce 2010:30-32). The general settlement pattern is that most pre-contact archaeological sites are found in the coastal zone delineated by the pre-1840 bush line, and the earliest archaeological sites are found at the mouths of rivers and streams.

---

### **Recorded Maori Archaeological Sites**

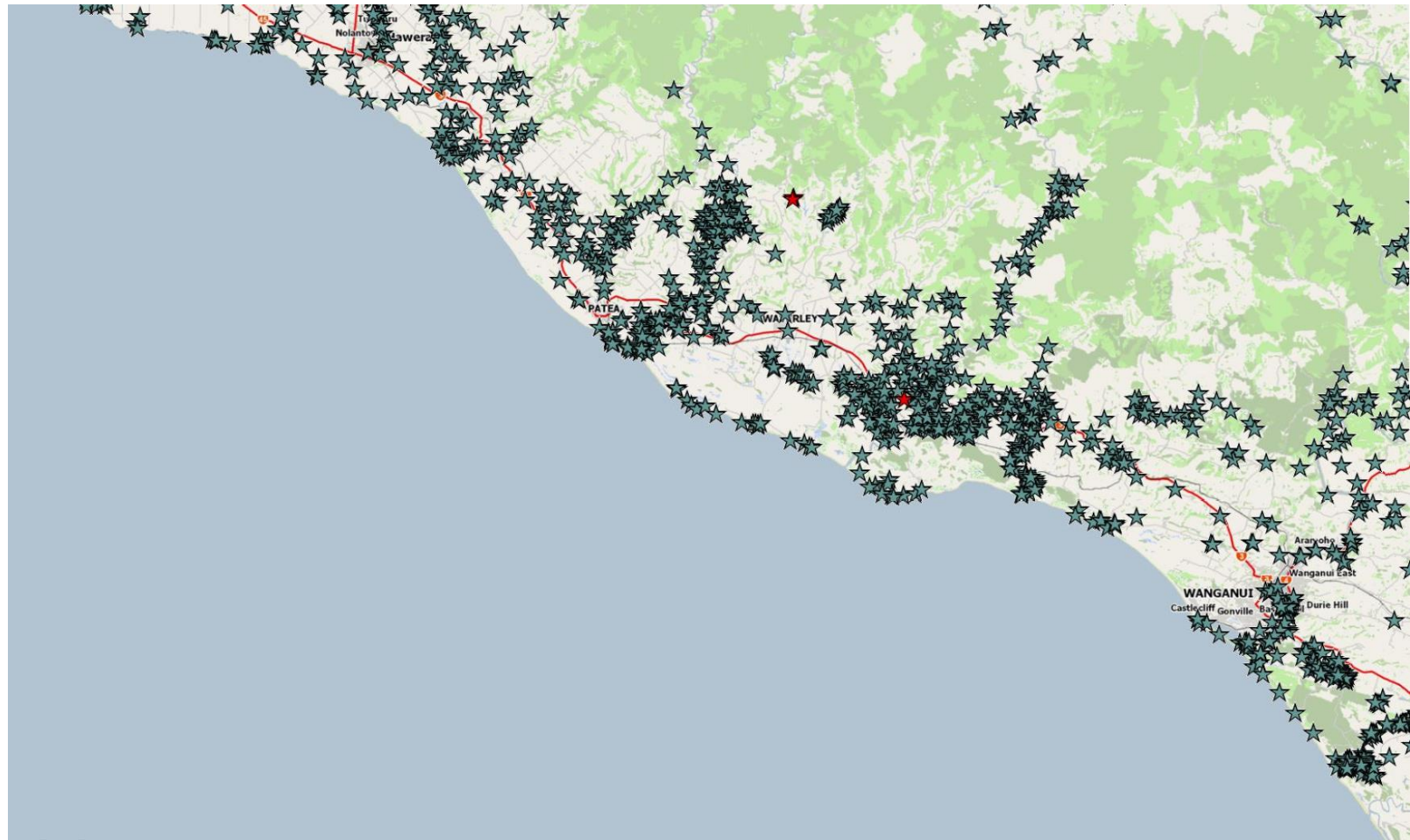
The most common site types along the coastal strip between the Manawapou River and the Whangaehu River within a few hundred metres of the beach or river mouths are midden/oven features containing burnt rock and in some cases shell and broken or discarded artefacts. Also notable are a small number of pa and open occupation sites. Figure 2 shows the distribution of recorded archaeological sites along this stretch of coast and Table 1 summarises the recorded sites within 200 metres of the coast in this area.

---

*Continued on next page*

## *THE COAST IN PREHISTORY, CONTINUED*

**Figure 2. NZAA ArchSite map showing distribution of sites along the South Taranaki coast between the Manawapou and Whangaehu Rivers**



*Continued on next page*



## *THE COAST IN PREHISTORY, CONTINUED*

**Table 1. Summary of Maori archaeological sites recorded on the South Taranaki coastline between Manawapou and Whangaehu Rivers**

NUMBER	EASTING	NORTHING	SITE TYPE	APPROXIMATE LOCATION
R23/2	1779172	5566195	Midden/Oven	Whangaehu River mouth
R22/225	1777471	5568595	Midden/Oven	Whitiau
R22/222	1776170	5569995	Midden/Oven	Whitiau
R22/220	1775069	5571494	Midden/Oven	Whitiau
R22/219	1773869	5572794	Midden/Oven	Whitiau
R22/462	1772579	5575088	Midden/Oven	Whanganui River – left bank
R22/461	1772706	5575116	Midden/Oven	Whanganui River – left bank
R22/501	1772867	5575094	Midden/Oven	Whanganui River – left bank
R22/451	1773668	5575895	Midden/Oven	Whanganui River – right bank
R22/397	1760563	5584091	Pakerewa pa	Ototoka Stream mouth
R22/213	1756663	5585589	Midden/Oven	Ototoka Stream mouth
R22/169	1749162	5585586	Midden/Oven	Waiinu
R22/168	1748262	5585586	Midden/Oven	Waiinu
R22/167	1747562	5585486	Midden/Oven	Waiinu/Waitotora
R22/166	1747462	5585386	Findspot	Waiinu/Waitotora
R22/165	1746762	5585456	Midden/Oven	Waiinu/Waitotora
R22/162	1745862	5585585	Midden/Oven	Waverley Beach
R22/160	1741761	5586085	Midden/Oven	Waverley Beach
R22/159	1741561	5588883	Midden/Oven	Waverley Beach
R22/158	1741261	5589183	Midden/Oven	Waverley Beach
R22/157	1740260	5589383	Midden/Oven	Waverley Beach
Q22/73	1737968	5590426	Midden/Oven	Waverley Beach
Q22/66	1737760	5590582	Midden/Oven	Waverley Beach
Q22/65	1737560	5590582	Midden/Oven	Waverley Beach
Q22/33	1736749	5590621	Ditch	Waverley Beach
Q22/24	1734960	5591181	Kainga housefloors	Waverley Beach
Q22/21	1729450	5595604	Kainga	Whenuakura
Q22/2	1729258	5595778	Tihoi pa	Whenuakura
Q22/19	1728856	5595739	Pits/Terraces	Whenuakura
Q22/23	1727658	5596277	Burial	Patea
Q22/79	1727558	5597077	Haere Hau pa	Patea
Q22/105	1715949	5609408	Manawapou pa	Manawapou

# MARITIME HISTORY

---

## **Patea**

The port at Patea started out as a supply base during the New Zealand wars of the 1860s. The first shipping to enter the river were the government steamers *Sandfly* and *Gundagai*, which crossed into the river to establish the commissariat base in 1865 (Church 1977:5). By 1867, Patea had a signal mast and wharf, and was declared a Port of Entry in February 1871. A Harbour Board was established in 1876, and the Patea Steamship Company was formed two years later in 1878 and established an overnight service to Wellington (Church 1977:34). Channel protection works including the moles at the river mouth were designed by Sir John Coode in 1878, but not fully completed until the early twentieth century (Church 1977:29,56).

By 1888 a meat canning works was established on the site on the east bank that would later become the freezing works. Principal exports were meat, dairy and wool and in the early twentieth century Patea became New Zealand's leading cheese exporting port (Church 1977:57-58). After the Patea Steamship Company went out of business in 1959, the Patea Harbour Board was disbanded and its responsibilities were transferred to the Taranaki Harbour Board in 1965. There have been 23 reported shipwrecks around the Patea River mouth and adjacent coastline. The first four of these occurred within the first couple of years of Patea being established as a supply port and included the *Alpha*, *Waihopai* and *Shamrock* in 1865 and the *Gundagai* in 1866. Strandings were common up until the 1920s, but many of these vessels were successfully recovered (Church 1977:58-59).

The table below (Table 2) summarises the 23 vessels lost on the South Taranaki coast at or near to Patea. Of these, 14 shipwrecks pre-date 1900.

---

*Continued on next page*

# MARITIME HISTORY, CONTINUED

**Table 2. Vessels wrecked at or near Patea**

VESSEL NAME	DATE OF WRECK	TYPE	APPROXIMATE LOCATION OF WRECKAGE	SOURCE
<i>Alpha</i>	1865	Cutter	Patea	dJ:26; CH:77; IN:111; WA:20
<i>Shamrock</i>	1865	Schooner	Patea	dJ:26; IN:117; CH:98
<i>Waihopai</i>	1865	Cutter	Patea	CH:101
<i>Gundagai</i>	1866	Paddle steamer	Patea	CH:86; dJ:27-28; IN:132; VE:34-36
<i>Wairarapa</i>	1867		Patea	VE:36
<i>St Kilda</i>	1868	Cutter	7 miles north of Patea	CH:16,105; IN:157; DI:108
<i>Woodpecker</i>	1869	Paddle steamer	Patea	CH:104; dJ:34; PA:107; IN:161; AL:100; WA:761
<i>Pioneer</i>	1872	Ketch	Patea, inside the bar	CH:96; dJ:42; IN:177
<i>Alert</i>	1875	Ketch	Patea, on end of mole	dJ:55; CH:76-77; IN:192; WE:260; AL:100; WA:15; AM:131
<i>Fawn</i>	1876	Cutter	Patea River bar	CH:85; dJ:42-43,55; IN:199; AL:101
<i>Egmont</i>	1876	Steamer	Patea, inside the bar	CH:83; dJ:58-9; IN:196
<i>Jane Elkin</i>	1877	Ketch	Patea River bar	IN:207; CH:88; dJ:66; WA:276
<i>Patea</i>	1882	Schooner	Patea, near cliffs	CH:96; dJ:91-2; IN:232; WA:503
<i>Falcon</i>	1884	Ketch	Patea	CH:84; dJ:117-8; IN:243
<i>Aotea</i>	1904	Schooner	Patea River	dJ:171-2; IN:319; CH:78; WA:34
<i>Waitangi</i>	1923	Schooner	Exposed on beach at Patea	CH:58,102; dJ:212-3; IN:384; FA:40-41; FU:195; WA:54
<i>Kingfisher</i>	1947		Patea west beach	dJ:266
<i>La Lita</i>	1957		Patea	dJ:264-5
<i>Quo Vadis</i>	1963		Patea	dJ:270
<i>Kaio</i>	1963	Cutter	Patea	dJ:271; CH:89; IN:450; WA:297
Unknown	1966		Patea River mouth	dJ:274
<i>Fidelis</i>	1974		Ohawe	dJ:285-86
<i>Normandy</i>	1981		Ohawe	IN:508; dJ:306

*Continued on next page*

### **Wanganui**

The first regular service between Wanganui and Wellington was established in the 1840s by Captain McGregor in the schooner *Surprise*, and later cutters *Sandfly* and *Catherine Johnstone* joined in the trade (McLauchlan 2012:62). A navigation aid was erected at Castlecliff in 1842, and the town had its first wharf by 1848 (Attwell 2006:9, 14). Wanganui was declared a Port of Entry in 1855, and had a customs house by 1857 (Goater 2009:59). Wanganui also supported a small shipbuilding industry (Attwell 2006:15). The first steamer to cross over the bar into the Whanganui river was the *Wonga Wonga* in 1857. As with Patea, shipping movements around Wanganui substantially increased with the onset of the New Zealand wars of the 1860s. Initially international trade out of Wanganui was with Australia; by the 1870s there were also direct links with Britain (Goater 2009:59). A Harbour Board was established in 1877, and harbour improvements including the construction of the moles at the river mouth and training walls were completed between 1877 and 1880 (Attwell 2006:56-57). Unfortunately for the port competition from the railway, which was completed between Wellington and Wanganui in 1886, significantly affected domestic trade and passenger transport and reduced reliance on coastal shipping.

Further port improvements including extension of the moles and dredging of the river channel was carried out in the first decade of the twentieth century. By 1913 Wanganui was ranked as the eleventh largest port in New Zealand, but was still handicapped by the bar, which necessitated the use of lighters to trans-ship goods from larger ships that were unable to enter the port (Attwell 2006:95). An attempt to revive the port in the late 1920s saw the construction of oil handling facilities at Castlecliff, but gains were short-lived (Attwell 2006:108). The wreck of the *Port Bowen* on the Castlecliff beach in 1939 spelt the end of the lightering service in the roadstead (Goater 2009:60). The removal of the 8267 ton vessel necessitated the extension of the railway line and construction of a purpose built pier on Castlecliff beach, but eventually it was dismantled and removed completely. By the 1940s the port was further in decline, but Wanganui continued as a coastal trading port until the introduction of the Cook Strait rail ferry service in the 1960s made this increasingly unviable. The completion of the bridge crossing at Putiki in 1961 also severed the shipping access to the town wharf.

The table below (Table 3) summarises the 28 vessels lost on the coast at or near to Wanganui. Of these, 20 shipwrecks pre-date 1900.

---

*Continued on next page*

# MARITIME HISTORY, CONTINUED

**Table 3. Vessels wrecked at or near Wanganui**

VESSEL NAME	DATE OF WRECK	TYPE	APPROXIMATE LOCATION OF WRECKAGE	SOURCE
<i>Surprise</i>	1841	Schooner	Castlecliff beach	AT:13; IN:32
<i>Rainbow</i>	1846	Schooner	Wanganui bar	IN:49
<i>Surprise</i>	1847	Schooner	Wanganui bar, south spit	IN:109; DI:112; WA:626
<i>Governor Grey</i>	1847	Schooner	Wanganui bar	IN:61-2
<i>Harriett Leathart</i>	1848	Schooner	Wanganui bar	IN:47; WA:229
<i>Phoebe</i>	1850	Schooner	Wanganui bar, south spit	IN:69; WA:515; HA:184
<i>Emily Allison</i>	1850	Three-masted schooner	Wanganui	IN:111
<i>Stormbird</i>	1854	Steamer	Wanganui River entrance, south mole	IN:364-5; SB:28; WA:623
<i>Daring</i>	1856	Two-masted schooner	Wanganui Heads	BY:262; IN:110; HA:173
<i>Charles Edward</i>	1864	Paddle Steamer	Wanganui, at end of breakwater	IN:342-3; AT:84; KI:172; PA:32; AL:100-101; WA:88
<i>Moa</i>	1864	Steamer	Wanganui, about 2½ miles south of entrance	IN:359-60; AT:90; FA:50-51; CH:93-94; SB:285; WA:439
<i>Meteor</i>	1864	Schooner	Wanganui bar, north spit	IN:180; HA:182; WA:433
<i>Adeona</i>	1865	Schooner	Wanganui River mouth, south spit	IN:113
<i>Maiden City</i>	1872	Schooner	Wanganui, about a mile north of the signal station	IN:212; AM:225; WA:384
<i>Mabel Jane</i>	1872	Schooner	Wanganui River entrance	IN:216; WA:377
<i>Edith May</i>	1875	Schooner	Wanganui, about 3½ miles north of the River entrance	IN:278
<i>Grace Dent</i>	1878	Schooner	Wanganui Heads	IN:288-9; DI:72
<i>Dorset</i>	1883	Steamer	Wanganui bar	IN:367
<i>Mana</i>	1886	Steamer	Wanganui River, south spit	CH:92; WA:391; dJ:153-5;
<i>Pelotas</i>	1897	Barquentine	Castlecliff beach	IN:352; DI:99; WA:510
<i>Ururoa</i>	1900	Three-masted schooner	Wanganui, about 3 miles south of entrance	IN:343; HA:188
<i>Eunice</i>	1902	Schooner	Wanganui bar, south mole	IN:370; dJ:175; SB:285; HA:175
<i>Cyrena</i>	1913	Steamer	Wanganui	IN:389; AT:106,113; SB:285
<i>Wetere</i>	1913	Steamer	Wanganui, Imlay wharf	IN:411; dJ:197-200
<i>Galileo</i>	1914	Fishing launch	Wanganui, north mole	IN:416
<i>Port Bowen</i>	1939		Castlecliff (salvaged)	IN:415-16; SB:285-86; GO:60
<i>Regina</i>	1948	Fishing boat	Wanganui, south beach	IN:449
<i>Wairoa</i>	1967	Tender	Wanganui River mouth	IN:500
<i>Wairata</i>	1977	Fishing boat	Wanganui, south side of river mouth	IN:497

Continued on next page

## MARITIME HISTORY, CONTINUED

### Recorded Historic Sites

The most commonly recorded historic period sites along this stretch of coast are the WWII era pillboxes (concrete machine gun posts) clustered at the Whanganui and Patea River mouths. Also of note are the hulk of the *Eunice* deposited in the Whanganui River and the wreck of the steamer *Waitangi* exposed on the beach at Patea. Recorded historic period archaeological sites are listed below in Table 4.

In addition to the recorded sites there are a number of unrecorded features of maritime interest around the Whanganui and Patea River mouths. These are listed in Table 5, below.

**Table 4. Historic period archaeological sites recorded within 200 metres of the coast between the Manawapou and Whangaehu Rivers**

NUMBER	EASTING	NORTHING	SITE TYPE	APPROXIMATE LOCATION
R22/470	1773269	5573294	Pillbox	Kaitoke Stream mouth
R22/467	1770767	5575594	Hulk ( <i>Eunice</i> )	Whanganui River – left bank
R22/443	1772268	5574994	Pillbox	Whanganui River – left bank
R22/431	1769867	5576393	Pillbox	Castlecliff
R22/430	1769367	5576393	Pillbox	Castlecliff
R22/429	1769277	5576663	Pillbox	Castlecliff
R22/438	1769267	5576393	Pillbox	Kai iwi Stream mouth
R22/419	1761864	5583591	Redoubt	Okehu Stream mouth
R22/433	1756705	5585552	Flaxmill	Ototoka Stream mouth
Q22/80	1727558	5596177	Pillbox	Patea
Q22/78	1727388	5596348	SS <i>Waitangi</i> wreck	Patea
Q22/9	1727558	5597077	Redoubt	Patea

**Table 5. Unrecorded maritime heritage sites around Whanganui and Patea**

EASTING	NORTHING	FEATURE	DATE	GENERAL LOCATION
1770239	5576332	<i>Te Anau</i> hulk	1924	Whanganui River
1769447	5576040	Moles	1877-1880	Whanganui River
1773180	5575424	Training walls	1877-1880	Whanganui River
1727507	5596348	Training walls	1902	Patea River
1727220	5597730	Railway wharf	1883	Patea River
1727507	5596348	Town wharf	1881	Patea River
1721525	5601180	Powerstation	1901	Patea

*Continued on next page*

## MARITIME HISTORY, CONTINUED

### Vessels Lost at Sea in New Zealand Waters

The second half of the nineteenth century and early twentieth century saw a large number of shipping movements through the South Taranaki Bight area, particularly those associated with the smaller ports of the Waikato-Taranaki-Manawatu coastal trade, and Auckland and Kaipara trade destined for Wellington and the east coast South Island ports.

The majority of wrecks occurred on or near the coast, particularly around reefs and river bars. A smaller number occurred as a result of a vessel catching fire and sinking or foundering in heavy seas, but many of these ended up washed up on the coast also.

A recent review of historic heritage in the Taranaki Coastal Marine Area identified there have been at least 126 documented shipwrecks in the Taranaki region, of which 64 pre-date 1900 (Dodd 2012:6). The remains of the majority of these are in unconfirmed locations and only 11 of these wrecks have been successfully relocated in recent times (Dodd 2012:7).

The table below (Table 6) summarises the vessels reported lost, missing or foundered at sea around New Zealand where there are no details for the location.

**Table 6. Vessels reported missing or lost at sea in New Zealand waters – no specific location given (NB excludes vessels lost between ports that would not have necessitated travelling along the South Taranaki coast or Cook Strait)**

VESSEL NAME	DATE OF WRECK	TYPE OF VESSEL	CIRCUMSTANCES OF LOSS	SOURCE
<i>Port Nick</i>	1840s	Schooner	Lost after departing Kapiti for Sydney	DI:28
<i>Nelson Packet</i>	1844	Two-masted schooner	Departed Nelson for Kaipara in 1844 and not seen again	IN:36; DI:97; WE:249; AL:91; WA:457
<i>Gipsey</i>	1845	Schooner	Vessel foundered in Nov-Dec 1845	AM:53
<i>Governor Fitzroy</i>	1845	Schooner	Vessel lost 1845	IN:41; WA:218
<i>Robert Burns</i>	1846	Schooner	Register closed 'lost about Oct 1846'	IN:45; DI:107; WA:563
<i>Highlander</i>		Two-masted schooner	Vessel wrecked on the coast of NZ location and date unknown (built 1848)	IN:48; HA:177
<i>Patiki</i>	1849	Dandy	Register closed 26.2.1849	IN:51; WA:504
<i>Erena</i>	1850	Schooner	Certificate cancelled 1850	IN:52; WE:251; WA:169
<i>Katherin</i>	1850	Two-masted schooner	Register closed 'missing since December 31, 1850'	IN:53; WA:316
<i>Alligator</i>	1851	Schooner	Register closed in 1851 'vessel lost'	IN:53; WA:19

*Continued on next page*

## MARITIME HISTORY, CONTINUED

VESSEL NAME	DATE OF WRECK	TYPE OF VESSEL	CIRCUMSTANCES OF LOSS	SOURCE
<i>Mary Paul</i>	1851	Two-masted schooner	Missing	IN:53; WA:418
<i>Lucidian</i>	1852	Schooner	Reported 'lost prior to 1852'	WA:372
<i>Rover's Pride</i>	1852	Schooner	Reported missing in 1852	WE:251; IN:58; WA:575
<i>Dove</i>	1852	Two-masted schooner	Register closed in 1852 'vessel lost'	IN:57; WA:135
<i>Fly</i>	1853	Cutter	Not heard of since 1853	IN:58; WA:191
<i>Catherine</i>	1853	Two-masted schooner	Register closed in 1853 'vessel lost'	IN:58; WA:82
<i>Diana</i>	1853	Two-masted schooner	Register reports 'lost on the coast prior to 1853'	IN:57; WA:130
<i>Sarah Berry</i>	1853	Cutter	Register states 'vessel lost in 1853'	AL:92; IN:44; WA:586
<i>Gipsy</i>	1853	Schooner	Vessel lost prior to 1853	IN:58; WA:208
<i>Mary</i>	1853	Schooner	Wrecked some time prior to 1853	IN:58; WA:411
<i>Mary Ann</i>	1853	Schooner	Lost at sea in 1853	IN:60; WA:413
<i>Fairy</i>	1854	Two-masted schooner	Vessel lost. Certificate canceled in 1854	IN:61; AM:77; WA:179
<i>Wyvern</i>	1856	Schooner	Failed to arrive at Sydney, after departing Nelson 1.7.1856	IN:66
<i>Mary Jane</i>	1860	Schooner	Lost off the West Coast in 1860	IN:78; HA:181; WA:416
<i>Reindeer</i>	1865	Ketch	Foundered at sea off the coast of Taranaki in 1865	dJ:27; IN:117
<i>Star of Dunedin</i>	1866	Schooner	Certificate cancelled Feb 1866 'Lost'	IN:124
<i>Triton</i>	1867	Schooner	Missing prior to 1867	WA:679
<i>Surprise</i>	1867	Cutter	Disappeared from the coast in 1867	IN:139; WA:626
<i>Theodore</i>	1867	Schooner	Last seen Jan 1854, reported missing prior to 1867	IN:139; DI:118; HA:187
<i>Pacific</i>	1875	Schooner	Wrecked on route from Timaru to Manukau. Sailed 4.6.1875.	IN:191; DI:99; HA:183; WA:498
<i>Kilmeny</i>	1883	Three masted barque	Lost at sea, departed Wellington 5 May 1883	IN:239; DI:79
<i>Vindex</i>	1891	Schooner	Lost off the coast of NZ in 1891	IN:274; HA:188; WA:698
<i>Toroa</i>	1903	Three-masted auxiliary schooner	Departed Greymouth for Wanganui and never seen again	IN:317; HA:187; WA:675



## DISCUSSION AND CONCLUSIONS

---

### **Potential for Shipwrecks in the Project Area**

There are no known shipwrecks within the proposed extraction site. The potential for encountering shipwrecks in the South Taranaki Bight EEZ is low, but cannot be discounted entirely. The potential for shipwreck sites to be present in the Coastal Marine Area (CMA) closer to the land is considerably higher. There have been a significant number of reported shipwrecks in the South Taranaki area, particularly around the river ports at Patea and Wanganui. Shipping losses most frequently occur on or near the coast rather than at sea. A smaller number of vessels have been reported as being lost or having foundered at sea, but for many of these the specific location is unknown.

A review of the multi-beam sonar data suggests that there is no significant wreckage exposed above the seabed in the project area, although it remains a possibility that wreckage could still be encountered buried beneath the seabed. If nineteenth century wreckage was encountered during mining or drilling operations in New Zealand waters there would be a legal obligation to cease operations in the immediate area and report the discovery to the New Zealand Historic Places Trust. An archaeological discovery protocol which outlines this process has been appended to this document.

---

### **Statutory Requirements**

The proposed extraction site is located outside the CMA and there are therefore no statutory requirements relating to heritage protection under the Resource Management Act 1991 (RMA), or in the Regional Coastal Plan for Taranaki prepared under the RMA.

Pre-1900 shipwrecks are, however, protected as archaeological sites under the Historic Places Act 1933 (HPA). The HPA protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority to modify an archaeological site has been issued by the New Zealand Historic Places Trust (NZHPT).

An archaeological site is defined by the HPA Section 2 as:

*Archaeological site means any place in New Zealand that –*

*(a) Either –*

*Was associated with human activity that occurred before 1900; or*

*Is the site of the wreck of any vessel where that wreck occurred before 1900; and*

*(b) Is or may be able though investigation by archaeological methods to provide evidence relating to the history of New Zealand.*

---

*Continued on next page*

## ***DISCUSSION AND CONCLUSIONS, CONTINUED***

---

### **Statutory Requirements, continued**

Authorities to modify archaeological sites can be applied for either under Section 11, in respect to a particular site or sites, or under Section 12, for all sites that may be present within a specified area. Applications made under S12 relating to sites of Maori interest require approval by the Maori Heritage Council of the NZHPT. An application to undertake an archaeological investigation can also be made under Section 18 of the Act. The tangata whenua must be consulted regarding applications to modify, destroy or investigate archaeological sites which have Maori cultural associations.

Under Section 15(1) of the Act, the NZHPT may impose an Authority condition requiring that an archaeological investigation is carried out, if this is *'likely to provide significant information as to the historical and cultural heritage of New Zealand'*. This provision allows the information contained within a site affected by development (and any associated artefacts) to be recorded and preserved, in mitigation of the modification of the site.

While no shipwrecks are known to be present within the project area, if a pre-1900 shipwreck should be discovered during iron sand extraction operations, an Authority will be required from the NZHPT before further work is carried out that may affect the site.

---

### **Conclusion**

The proposed iron sand extraction project will not affect any known shipwreck sites and has only limited potential to affect unidentified shipwrecks.

However, if a shipwreck or artefacts indicating the possible presence of a shipwreck are encountered during iron sand extraction operations, work should be halted in the immediate vicinity while archaeological advice is obtained. The provisions of the HPA may apply and an Authority may be required (depending on the date of the shipwreck). Shipwrecks of any date, however, are of historical interest and should be recorded to add to our knowledge of New Zealand's history.

A 'Discovery Protocol for Shipwreck Finds' has been prepared to ensure that statutory requirements and processes are followed in the event that nineteenth century wreckage is recovered (see Appendix).

---

## RECOMMENDATIONS

---

**It is**

**Recommended:**

- That there should be no constraints on the proposed iron sand mining project on archaeological grounds, as no shipwrecks are known to be present within the project area, and the potential for previously unrecorded shipwrecks is low.
  - That archaeological monitoring of mining/drilling operations in the EEZ in the areas reviewed for this project is not necessary.
  - That if a shipwreck is encountered during extraction operations, the appended 'Discovery Protocol for Shipwreck Finds' should be implemented, and that contractors working on site should familiarise themselves with this document.
-

## REFERENCES

---

- Allan, R. 1954. *The History of Port Nelson*. Whitcombe & Tombs Ltd, Wellington.
- Amodeo, C. 2005. *The Mosquito Fleet of Canterbury*. Caxton Press, Christchurch.
- Attwell, B. 2006. *The Wharves of Wanganui: How Maritime Commerce Built a City*. Hilltop Publishing, Wanganui.
- Bruce, I. 2010. Project Greenhouse Archaeological Excavation, Bayly Road, New Plymouth. Archaeological Investigation Report NZHPT Authority 2009/157. Unpublished client report.
- Byrne, T.B. 2003. *Unknown Kaipara*. Self published, Auckland.
- Church, I. 1977. *The Little Ships of Patea*. Dunmore Press, Palmerston North.
- de Jardine, M. 1984. *Shipwrecks on and off the Taranaki Coast*. Self published, New Plymouth.
- Diggle, L. 2009. *Shipwrecks of New Zealand. Companion to New Zealand Shipwrecks*. Lynton Diggle, Titirangi.
- Dodd, A. 2012. Taranaki Regional Council Plan Review: Archaeological Scoping Study. Unpublished client report.
- Farquhar, I. 2001. *Union Fleet*. NZ Ship & Marine Society, Wellington.
- Furniss, C. 1977. *Servants of the North*. A.H. & A.W. Reed, Wellington.
- Goater, B.J. 2009. Castlecliff, Wanganui – the rise and fall of a port. *New Zealand Marine News* 56(2):59-68.
- Hawkins, C. 1960. *Out of Auckland*. Pelorus Press, Auckland.
- Higham, T. and M. Jones. 2004. Chronology and settlement, in L. Furey and S. Holdaway (eds), *Change Through Time: 50 Years of New Zealand Archaeology*. NZAA Monograph 26. New Zealand Archaeological Association, Auckland.
- Ingram, C.W.N. 2007. *New Zealand Shipwrecks. Over 200 years of disaster at sea*. 8th revised edition (L. Diggle, E. Diggle and E. and K. Gordon eds.). Hachette Livre NZ Ltd, Auckland.
- Kirk, A. 1967. *Anchor Ships and Anchor Men*. A.H. & A.W. Reed, Wellington.
- McGlone, M. and J. Wilmshurst. 1999. Dating initial Māori environmental impact in New Zealand. *Quaternary International* 59:5-16.
- McLauchlan, G. 2012. *The Saltwater Highway: The Story of Ports and Shipping in New Zealand*. David Bateman, Auckland.
- Pallentin, A., P. Gerring, S. Woelz and M. Fenwick. 2013. Multibeam Survey in Southern Taranaki Bight. Unpublished client report prepared for Trans-Tasman Resources Ltd.
- Parsons, R. 2002. *Paddle steamers of Australia and New Zealand. Harbours Coastal Rivers and Ocean-going*. Self published, Goolwa, SA.
- Prickett, N. 1983. Waitotara ki Parininihi: aspects of the archaeology of the Taranaki Region. In S. Bulmer, G. Law and D. Sutton (eds), *A Lot of Spadework to be Done*. New Zealand Archaeological Association Monograph No.14.
- Prickett, N. 2005. The Taranaki archaeological landscape – past, present and future. *Archaeology in New Zealand* 48(1):45-60.

---

*Continued on next page*

## **REFERENCES, CONTINUED**

---

- Smart, M. and A. Bates. *The Wanganui Story*. Wanganui Newspapers Ltd, Wanganui.
- TTR. July 2013. Trans-Tasman Resources Limited South Taranaki Bight Offshore Iron Sand Extraction and Processing Project. Application for Resource Consents, Project Description.
- Vercoe, G. 1997. *Paddle wheels on the Waikato*. Reed Publishing Ltd, Auckland.
- Walton, T. 2000. *Archaeology of the Taranaki-Wanganui region*. Department of Conservation Science for Conservation No.154, Wellington.
- Watt, M.N. 1962. *Index to the New Zealand Section of all British Register of Ships 1840-1950*. New Zealand Ship and Marine Society, Wellington.
- Westrupp, F. 2007. *Blind Bay Hookers. The Little Ships of Early Nelson*. River Press, Dunedin.
- Wilmshurst, J., T. Higham, H. Allen, D. Johnsand D. and C. Phillips, 2004. Early Māori settlement impacts in northern coastal Taranaki, New Zealand. *New Zealand Journal of Ecology* 28(2):167-179

### **Abbreviated References for Tables**

AL: Allan 1954; AM: Amodeo 2005; AT: Attwell 2006; BY: Byrne 2003; CH: Church 1977; DI: Diggle 2009; dJ: de Jardine 1984; IN: Ingram 2007; FA: Farquhar 2001; FU Furniss 1977; GO: Goater 2009; HA: Hawkins 1960; KI: Kirk 1967; PA: Parsons 2002; SB: Smart & Bates 1972; VE: Vercoe 1997; WA: Watt 1962; WE: Westrupp 2007.

---

## APPENDIX: DISCOVERY PROTOCOL FOR SHIPWRECK FINDS

---

- Individual finds do not necessarily constitute an archaeological site, but may indicate the presence of a site nearby.
- Where a number of finds are found in a discrete area, or substantially intact wreckage is encountered, efforts should be made to identify what it is and its likely age. In the first instance photographs and a description of the find should be sent to a consultant archaeologist for identification.
- Work should cease in the immediate area while the find is identified. If the wreckage is not a legally protected archaeological site (post-dating 1900), a record should be made of the find and works can resume.
- If the finds are confirmed as being a legally protected archaeological site (pre-dating 1900), it will be necessary to contact the New Zealand Historic Places Trust Regional Archaeologist in the first instance and obtain an archaeological authority from the New Zealand Historic Places Trust before works affecting the site can proceed. (NB this is a legal requirement under the Historic Places Act 1993).

### Consultant Archaeologist:

Rod Clough, Clough & Associates  
[heritage@clough.co.nz](mailto:heritage@clough.co.nz)  
(09) 814 1946 or 0274 850 059

### NZHPT:

David Rudd, NZHPT Regional Archaeologist  
[drudd@historic.org.nz](mailto:drudd@historic.org.nz)  
(04) 494 8323 or 027 217 8903