

BEFORE THE ENVIRONMENT COURT

Decision No. [2011] NZEnvC 402

IN THE MATTER of appeals under Section 120 of the
Resource Management Act 1991 (**the Act**)

BETWEEN TE RUNANGA O NGAI TE RANGI IWI
TRUST
(ENV-2010-AKL-000185)

S TUAHAKARAINA ON BEHALF OF
TE TAUMATA O NGA TE POTIKI
(ENV-2010-AKL-000189)

NGATI RUAHINE & L WAAKA
(ENV-2010-AKL-000192)

Appellants

AND BAY OF PLENTY REGIONAL
COUNCIL

Respondent

PORT OF TAURANGA LIMITED

Applicant

Hearing: At Tauranga, 4 – 8 April, 11/12 April, 18 – 21 April, 26 April, 14/15
November 2011

Court: Environment Judge J A Smith
Deputy Chief Maori Land Court Judge C Fox
Environment Commissioner A J Sutherland
Environment Commissioner H M Beaumont



Appearances: Ms V J Hamm and Ms M Paddison for Port of Tauranga Limited
(the Port)

Mr P H Cooney and Ms R Zame for Bay of Plenty Regional Council
(the Regional Council)

Mr J P Koning and Mr C Manuel for Te Runanga O Ngai Te Rangi
Iwi Trust (Ngai Te Rangi)

Ms H J R Rollison for Ngati Ruahine and others

Ms R S Tuahakaraina for herself

Date of Decision: 21 December 2011

**RECOMMENDATIONS TO THE MINISTER OF CONSERVATION AND
DECISIONS OF THE ENVIRONMENT COURT**

- A. The Court recommends to the Minister of Conservation that the restricted coastal activities be granted appropriate consents subject to Conditions being finalised and approved by this Court, as set out in the Court's Reasons for Recommendations, and the Draft Conditions attached as "C" for the following activities:

Consent 65806

- (a) Under sections 12(1)(c) and 12(1)(e) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Coastal Environment Plan to undertake a restricted coastal activity being to disturb the seabed of Tauranga harbour by dredging; and
- (b) Under sections 12(1)(d) and 15A(1)(a) of the Resource Management Act 1991 and Rule 14.2.4(za) of the Bay of Plenty Regional Coastal Environment Plan to undertake a restricted coastal activity being to deposit dredged material in the coastal marine area; and
- (c) Under section 12(2)(b) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional



Coastal Environment Plan to undertake a restricted coastal activity being to remove dredged material from the coastal marine area; and

- (d) Under sections 12(1)(c) and 12(1)(e) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Environment Plan to undertake a restricted coastal activity being to disturb the seabed of Tauranga Harbour by maintenance dredging.

B. The Court confirms consents being granted, subject to Conditions of Consent being finalised and approved by this Court as set out in the Court's Reasons for Decision and Draft Conditions for the following activities:

Consent 65807

- (a) Under section 15(1)(a) of the Resource Management Act 1991 and Rule 9.2.4(b) of the Bay of Plenty Regional Coastal Environment Plan to undertake a discretionary activity being to diffusely discharge sediment and sediment laden water to Tauranga Harbour during dredging; and
- (b) Under sections 12(1)(d) and 15A(1)(a) of the Resource Management Act 1991 and Rule 14.2.4(b) of the Bay of Plenty Regional Coastal Environment Plan to undertake a discretionary activity being to deposit boulders and to carry out beach nourishment in the coastal marine area; and
- (c) Under section 14(1)(2) of the Resource Management Act 1991 and Rule 10.2.4(d) of the Bay of Plenty Regional Coastal Environment Plan to undertake a discretionary activity being to take coastal water during dredging.

C. The Port is to liaise with other parties and circulate Proposed Draft Conditions within 30 working days:

1. A Consent Memorandum agreeing a set of conditions is to be forwarded to the Court by the Port within a further 30 days. If such a Consent Memorandum cannot be agreed between the parties then all parties are to file comments on the Port's proposed draft conditions within a further 20 working days;
2. The Port and the Council may submit a joint memorandum within the above 20 days should they wish to do so.



- D. Any application for costs to be filed within 50 working days. Any replies to be filed a further 10 working days thereafter.**

REASONS FOR RECOMMENDATIONS AND DECISION

Introduction

[1] How do we integrate the competing interests of the Port of Tauranga (**the Port**) seeking to widen and deepen the entrance to its entry channel to accommodate larger ships, while recognising and providing for the legitimate cultural concerns and relationship of relevant local iwi who have an interest in Mauao (Mt Maunganui), Panepane Point on Matakana Island, and the large pipi beds in and around the entrance to the wider harbour of Tauranga Moana known as Te Awanui?

[2] In this decision we examine these questions in the context of the Resource Management Act (**the Act**), and consider a breadth of scientific, cultural and metaphysical concerns. This case highlights many of the tensions inherent in the Act and the need to exercise careful value judgments in order to achieve sustainable management as that term is defined in the Act.

[3] As was noted by the Privy Council in *McGuire v Hastings District Council*¹

21. ... The Act has a single broad purpose. Nonetheless, in achieving it, all the authorities concerned are bound by certain requirements and these include particular sensitivity to Maori issues ... While, as already mentioned, this cannot exclude compulsory acquisition (with proper compensation) for necessary public purposes, it and the other statutory provisions quoted do mean that special regard to Maori interests and values is required in such policy decisions as determining the routes of roads.

[4] In considering this case, the Court has had regard to the implications of the Privy Council decision paragraphs [28] & [29]² for the protection of Maori land rights under the Act, and the appropriate composition of the Court in such cases. Commissioner Sutherland brings to the Court extensive experience and reputation in the area of harbour hydrodynamics. Commissioner Beaumont brings scientific expertise. The Court also

¹ [2001] NZRMA 557 (PC) at [21]

² These noted the use of Alternate Environment Judges from the Maori Land Court



includes Deputy Chief Maori Land Court Judge Fox to ensure cultural issues are considered and addressed.

The Context of the Application

[5] The Port of Tauranga is accessed via the Pacific Ocean through an entrance between Mauao and Matakana Island (more particularly Panepane Point). Beyond the entrance is a wide harbour (Tauranga Moana, or more particularly Te Awanui) as shown on the attached General Map marked **A**, with the Port located largely along the Mt Maunganui Spit between Tauranga and Mt Maunganui. The shipping channel runs from Panepane Point directly to the wharves at Mt Maunganui. It then runs alongside these wharves directly to the Sulphur Point wharves and Stella Passage, the entrance to the southern or upper harbour.

[6] There are two other significant channels in the harbour:

- [a] the Western Channel, running east/west to the south of Matakana and Rangiaea Islands; and
- [b] the Otumoetai Channel, extending westwards from Sulphur Point. Together with the shipping channel, these channels bound a shallow section of the harbour known as Centre Bank or Te Paritaha. This area has portions exposed at low tide and contains extensive pipi beds.

[7] We will discuss the history of Maori occupation in this area shortly. Suffice for current purposes to note that the area has been extensively occupied by various iwi for many centuries. Other iwi have also had ability to access the area by agreement with local iwi. Mauao is a central element of the oral tradition of all local iwi, as is Tauranga Moana. As well as a marker for all residents in the area, Mauao also has major cultural and ritual significance for Maori. Mauao has been vested in trustees for local iwi for the last few years in recognition of its general importance to Maori.

[8] The Port utilises only a part of Te Awanui, namely a reach to the main entrance at Panepane Point and then a reach across Pilot Bay to the Mt Maunganui wharves (known as Cutter Channel) and then a long section alongside the wharves (known as the Maunganui Roads). In more recent years the Port has developed container facilities on



the Tauranga side of Maunganui Roads (Stella Passage) and is seeking to extend those to provide for larger ships and more container handling. The current access for shipping to the wharves is provided by resource consents which have been granted to allow dredging to depths of up to 14.1m in the outer channels (the Entrance Channel and part of the Cutter Channel) and to 12.9m in the inner channels (for the remainder of the Cutter Channel, Maunganui Roads as well as the Stella Passage).

[9] The earlier deepening and widening of the entrance channel altered part of Tanea Shelf, at the sub-tidal part of Mauao adjacent to the entrance. It is also clear that the continued dredging to maintain channel depth has had an impact on the pipi beds within the entrance channel and, to a lesser extent, on the sides of the entry channel.

[10] There have been a significant number of historical changes to the harbour as a result of the Port activity, including the construction of the wharves, the reclamation and subsequent construction of the container facilities on the Tauranga side at Sulphur Point, and the widening and deepening of the channels. Other changes in and around the harbour include the building of the causeway and harbour crossing, development of the roading network and of Tauranga City, and an increase in agricultural and forestry activity.

[11] Many witnesses for the appellants gave evidence as to the nature of historical changes to the harbour environment and the deterioration in water quality and the kaimoana resources, attributing some or all of the blame for them to the Port. This was strenuously denied by the Port and its witnesses, which indicates something of the background tone to this hearing.

[12] The recent report of the Waitangi Tribunal on Tauranga Harbour claims (WAI 215) was cited to us by many of the appellants' witnesses. Although urging us to exercise caution in its application, the Port and Regional Council eventually acknowledged that:

- [a] the report could be referred to by the Court;
- [b] the Court could consider the factual and other conclusions as persuasive;
and



[c] that caution should be exercised where conflicting evidence was before the Court.

[13] In this case the factual history was not contested by the applicant or the Regional Council. We quote from the report where we consider it summarises evidence given to us, is uncontested, or summarises legal positions upheld by superior courts.

HISTORY

[14] The Tauranga Harbour has been a source of unrest for many generations of Maori. It has reached the point now, that the Waitangi Tribunal (WAI 215) noted:

... The understandable result has been that some Tauranga Māori have become so frustrated that they themselves are no longer engaging with local authorities in the necessary spirit of good faith,³ and willingness to compromise, that must characterise the Treaty partnership.³

[15] This is not a result of a single event but a culmination of a number of events where the Waitangi Tribunal recently held that:

... it cannot be consistent with the principles of the Treaty to strip Māori of possession of their Taonga by 'tacit application of presumptions of English law of which Māori knew nothing'.⁴

[16] Tauranga was one of the first areas settled by Maori in New Zealand. Tauranga was blessed with a mild climate and a range of available resources, access to these resources ensured that Maori thrived in the area:

... The entire Tauranga district, estimated at 290,000 acres, was included in the confiscation proclamation of 1865. Of this area, the Crown retained a 50,000 acre area known as the 'confiscated block'. Though the land outside the 50,000 acre block was returned to Māori between 1865 and 1886, most of this land was quickly lost from Māori ownership as well. The Crown purchased some 90,000 acres within the district known as the Te Puna-Katikati block and a further area of 'returned land', estimated at 75,000 acres, was sold to the Crown or private purchasers. By 1886, Tauranga Maori retained only an estimated 75,000 acres of relatively poor quality land and this was no longer held under customary title.⁵

...

³ Waitangi Tribunal, *WAI 215: Tauranga Moana ; 1886-2006*, p. 623

⁴ *Ibid*, p. 607

⁵ Waitangi Tribunal, *WAI 215: Te Raupatu o Tauranga Moana: Report on the Tauranga Confiscation Claims* (2004), Waitangi Tribunal Website www.waitangi-tribunal.govt.nz, Summary pages



... The land loss of Tauranga Māori in the late nineteenth century was considerable. Added to the effects of the raupatu, that loss forms a critical backdrop to understand the impact of Crown policies and practices in the century or so that followed.⁶

... As a consequence of the Raupatu and its aftermath, Māori communities in the Tauranga area were confined to reserves on the coastline around Tauranga Moana; to a handful of blocks of land around the eastern end of the harbour and to some slightly larger blocks in the hill country running into the Kaimai ranges.⁷

[17] Maori therefore had to adapt and became reliant on the sea and rivers to sustain themselves in the area:

... During the early intercourse of Europeans with New Zealand[,] Tauranga became of much consequence as a port.⁸

[18] This was due to the location of Tauranga between Auckland and Wellington and the ability for a safe, all-weather, deep water berth to be utilised:

... by the 1880s, Māori and the Crown had assumed distinctly contrary positions as to who rightfully possessed and controlled the foreshore and seabed – positions that remain today. In Tauranga, these differences emerged over the question of who possessed and controlled Tauranga Moana. In practice, the Crown settled this question by passing a series of Acts that vested authority in bodies entirely composed of Pākehā settlers. With these Acts, possession and authority over Tauranga Moana passed from Tauranga Māori, without consultation ... Their Harbour was under the direct jurisdiction of the Tauranga Harbour Board, and its control was backed by the full authority of the Crown. Henceforth, Tauranga Māori would struggle to assert their Treaty rights to participate in the management of the harbour before the Crown; the question of ownership was foreclosed.⁹

Therefore,

... Tauranga Māori lost the great majority of their ancestral lands. Even so, they [did not and] have not lost their association with those many places and environments, which remain the source of their cultural identity.¹⁰

... The development of the Port had several components; the construction of the Mount Maunganui deep-water wharf, the construction of the Sulphur Point container terminal, the dredging of shipping channels, and the harbour bridge.¹¹

⁶ Waitangi Tribunal, *WAI 215: Tauranga Moana ; 1886-2006*, p. 837

⁷ *Ibid*, p. 6

⁸ *Ibid*, p. 509

⁹ *Ibid*, p. 516

¹⁰ *Ibid*, p. 490

¹¹ *Ibid*, p. 534



[19] The drive to develop a deep-water international port within Tauranga Harbour gathered momentum in the mid-twentieth century as the region's economy boomed, especially the forestry industry.

[20] From 1915, there was a burst of activity around the harbour. The government was at the forefront of this activity, but withdrew when it became clear that dredging was pointless because the channel filled with silt as fast as it cleared. The Harbour Board took over, and in 1923, the Stella Passage was dredged and the Cutter Channel deepened.¹²

[21] In 1925, the Harbour Board received government approval for a concrete wharf to replace the Mount Maunganui railway wharf that had fallen into disrepair. During this time, there were several reclamations in the Sulphur Point area.¹³

... The next round of major harbour works, starting in 1968 focused on Sulphur Point. The decision to reclaim land here was crucial; it created the twin port structure (Sulphur Point and Mount Maunganui) and dictated transport networks.¹⁴

[22] The actual development of the Port was extraordinarily rapid. The Government was to design and construct the port, and pass control over to the Tauranga Harbour Board after the initial phases were completed. An official's committee called for the work to be declared in the national interest so that construction could be accelerated. The fast tracking of the construction may have contributed to potential adverse effects being overlooked; this resulted in:

... Siltation caused by port construction, transport infrastructure, and agricultural development ... detrimentally affect[ing] the ecology of the harbour and its fisheries.¹⁵

... Estuaries, rivers, streams, and wetlands at the harbour edge - all areas providing rich and easily accessible food supplies for Tauranga Māori - have been impacted ...¹⁶,

most notably the once vibrant pipi beds.

¹² Ibid, p. 531

¹³ Ibid, p. 531

¹⁴ Ibid, p. 535

¹⁵ Ibid, p. 565

¹⁶ Ibid, p. 540



[23] These developments were recorded as being in the national interest but seemed to overlook Maoris' beliefs and as such:

... the port and airport developments resulted in much of their whareroa land being lost to public works, with only limited compensation – it is relevant to note here that the Crown in fact took more land than it needed and sold off the excess for considerable profit.¹⁷

[24] These sales did little to strengthen the belief that the land was needed for the national interest and created a feeling of distrust and animosity between iwi and the Port authorities, which is still evident today:

The expansion of Tauranga City to the east was done without consideration for the history of raupatu in the region: the eastern end of the harbour was precisely where much of the remaining Māori land was situated. Māori were not involved in key public works and planning decisions in Tauranga, and their interests and concerns were not protected. The result was that, from 1886 to 2006, at least 4961 acres of Māori land was taken for public works in Tauranga.¹⁸

[25] Reclamation has affected more than the Harbour itself, it has impacted on the expression of Maori customs and beliefs as well, including their right to protect their lands.

[26] Not only were the fertile lands that Maori had once possessed taken from them, but during the period from 1886-1991, Tauranga Harbour and other waterways were polluted by numerous discharges, including sewage and stormwater outfalls, septic tank seepage, urban runoff, rubbish tip seepage, agricultural runoff and industrial wastes. As a result *bacterial contamination of rivers and streams was a serious problem in Tauranga by the mid-1990s.*¹⁹

[27] Maori have always opposed such pollution as any harmful discharge into the harbour, or into the key waterways such as the Wairoa, is culturally unacceptable.²⁰ This had a lasting effect on Tauranga Maori unable to sustain their traditional way of life, and unable to utilise their taonga as a base for economic development.²¹ Effectively:

¹⁷ Ibid, p. 838

¹⁸ Ibid, p. 852

¹⁹ Ibid, p. 545

²⁰ Ibid, p. 559

²¹ Ibid, p. 854



Māori customary or aboriginal title to rivers and waterways in Tauranga has been displaced through a combination of the raupatu and the application of introduced law in New Zealand.²²

[28] As is evident from the history of Tauranga, development of the Port is always going to create disagreement and resentment between parties and this appeal is not going to solve that. As the Waitangi Tribunal has stated:

... We note that Tauranga Māori retain ownership of ancestral lands with water frontage at numerous places around Tauranga Harbour. However, it is not our role to determine as a matter of law whether these lands include the foreshore or the seabed ...²³

This Court notes the Tribunal's finding that,

... in usurping ownership over Tauranga Moana and presuming to delegate ownership to other entities, the Crown has committed a number of Treaty breaches.²⁴

[29] This Court cannot undo past wrongs but it can to a limited extent mitigate the damage caused through conditions that address cumulative effects.

[30] The Waitangi Tribunal recommended that:

... Where the wider public also have a strong interest in taonga, as is the case with the harbour, significant waterways, and the native forests of Kaimai Range, we recommend that the Crown explore possibilities for joint management between local government and Māori.

We are also concerned at the evidence of resource loss and environmental degradation, particularly in relation to the harbour and waterways. We therefore recommend that the Crown, in conjunction with the tangata whenua, investigate the possibilities for remedial action, and that the Crown contributes towards to the costs of any projects identified.²⁵

[31] This should be the focus and main aspiration for the future running and development of the Port of Tauranga. We can see no reason in principle, why local government and the Port Company cannot partner in restoration projects. These benefit all users including tangata whenua.

²² Ibid, p. 518

²³ Ibid, p. 607

²⁴ Ibid, p. 608

²⁵ Ibid, p. 862



THE CURRENT APPLICATION

[32] The current application seeks to:

- [a] Deepen²⁶ the entrance channel as far as the midpoint of the Cutter Channel from 14.1m to 17.4m, a deepening of some 3.3m. The deepening includes part of the Tanea Shelf;
- [b] Widen the channel in Number 2 Reach by removing 32m of Tanea Shelf;
- [c] Deepen the inner section of Cutter Channel and Mt Maunganui Roads from 12.9m to 16m, a deepening of 3.1m and a widening of those channels by up to 115m, the widening varies depending on its position along the channel;
- [d] Create a defined turning basin adjacent to Sulphur Point. This will involve the widening and deepening of the Stella Passage and a portion of the Otumoetai Channel to 16m.

[33] All the various works are shown on Plan marked **A** and annexed hereto. We note, in particular, that a temporary storage and extraction site near Sulphur Point is intended to provide a site for storage of sand material prior to its permanent extraction and use ashore.

[34] As can be seen, in addition to the main channels, there is a side channel to the Number 1 Reach which is dredged to 10.4m.

[35] For the sake of understanding the impact of the proposal, also annexed hereto and marked **B** is a further map showing in more detail the areas to be dredged in relation to existing morphology and the pipi beds. It can be seen that the widening of the entry towards Mauao will involve removing composite boulder material, and it is intended that this be utilised to create artificial reefs further inshore. The dredging of the pipi beds is unavoidable to achieve the finished depth in the Cutter Channel and Number 2 Reach. The pipi will not survive deposition in the offshore disposal area.

²⁶ Water depths are measured from chart datum which corresponds with the lowest astronomical tide



[36] It is acknowledged that there will be impacts on Tanea Shelf (Mauao) and the Central Bank pipi bed (Te Paritaha). These areas are recognised as having cultural values and are part of a Mātaitai Reserve managed by tangata kaitiaki, which we will discuss in due course.

[37] The proposal sought capital dredging of approximately 15 million cubic metres of material and the ability to remove some 10 million cubic metres of that from the coastal system. These activities involve restricted coastal activities, and also discretionary activities under the Bay of Plenty Regional Coastal Environment Plan.

[38] The larger channels will be maintained by maintenance dredging which will involve;

- [a] Beach replenishment within Pilot Bay and on the ocean beaches, as appropriate;
- [b] Deeper water off-shore disposal (removal from the coastal sediment transport system) near areas marked H on appropriate maps (annexed hereto and marked A);
- [c] The removal of some of the sand, for sale and other purposes.

[39] Maintenance dredging was calculated to be in the order of 180,000 to 200,000m³ per annum after capital dredging.

THE PROCESS

[40] This application did not have an auspicious beginning. The Port, for unexplained reasons, decided to repeat the dredging application, updating for the new width and depth, they had made in 1989 prior to the enactment of the Resource Management Act 1991. Around one month prior to the hearing of the application before the Council, the Port was advised that it needed to at least consult with tangata whenua.

[41] Unsurprisingly, tangata whenua were both surprised and disappointed at the way in which the Port consulted well after the application was filed. Tangata whenua sought more time to consult on several occasions. The Port agreed to several deferments and



then refused further adjournments, and the matter proceeded to a hearing. Various elements of the tangata whenua were unhappy with both that process and the outcome which granted consent. They then appealed to this Court. The Port declined mediation and sought an early hearing.

[42] The Port's expert witnesses acknowledge that this process was less than ideal (which we regard as a massive understatement). During this hearing the Court attempted on a number of occasions to encourage meaningful dialogue between the various iwi, the Port and the Regional Council. We are satisfied that the Regional Council has clearly recognised the issues arising in this case and sought to encourage some accommodation between the parties.

[43] While the parties were willing to attend hui, the end result has been that the parties have agreed to disagree and have sought an outcome imposed by this Court. While it is this Court's duty to make a decision in respect of such an application, the importance of the decisions to be made in this case for both the Port and tangata whenua cannot be underestimated. They concern not only the economic, but the ecological and cultural welfare of this area into the foreseeable future. They involve competing values and potentially incompatible uses in part of Te Awanui. This Court would have preferred that the participants had a hand in integrating and managing the allocation of space and resources within the harbour, rather than having decisions imposed on them by the Court.

[44] We are particularly sensitive to the fact that this is not the only matter relating to Tauranga Moana which is currently being determined. The Crown and various iwi groups are currently in negotiation relating to Treaty of Waitangi Tribunal claims given the second interim Treaty of Waitangi report for Tauranga Moana (WAI 215) released in 2010. Some of those claims relate to the activities of the Port from 1920s to 1960s which resulted in some adverse findings by the Waitangi Tribunal relating to the Port's acquisition of land and use of facilities.

[45] That the Port would file an application without any prior consultation with iwi tends to reinforce perceptions, currently raw because of the Treaty of Waitangi process, of ignoring the legitimate cultural concerns of local iwi in pursuit of economic outcomes. It has been a general theme of this case that the Port does not deny the cultural concerns of iwi, but simply reiterates the economic importance of their application being granted. Given the minimal amount of mitigation/compensation originally proposed, it seemed to



be assumed by the Port that the economic benefits would outweigh, or trump, any concerns under Sections 6, 7 and 8 of the Act in relation to Maori cultural values in this case.

[46] At the final sessions of the hearing held on 14th and 15th November 2010, the Port closed in a very different way. Concerns with Te Paritaha and Mauao were not only recognised but proposals were made to defer works until necessary and to fund a Trust to advance Te Awanui on a series of fronts. The new proposals are important and meaningful in recognising and providing for the relationship of iwi and hapu with Te Awanui and Mauao. We will discuss these proposals as part of the applicant's package in due course. It is regrettable that such proposals were not explored with iwi at an earlier stage.

Activity Status

[47] These applications predated removal of restricted coastal activities from the Coastal Plan and these require ministerial approval. This applies to the applicant's proposed activities from Consent 65806. The applicant listed these activities as follows:

Consent 65806

- (a) Under sections 12(1)(c) and 12(1)(e) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Coastal Environment Plan to undertake a restricted coastal activity being to disturb the seabed of Tauranga harbour by dredging; and
- (b) Under sections 12(1)(d) and 15A(1)(a) of the Resource Management Act 1991 and Rule 14.2.4(za) of the Bay of Plenty Regional Coastal Environment Plan to undertake a restricted coastal activity being to deposit dredged material in the coastal marine area; and
- (c) Under section 12(2)(b) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Coastal Environment Plan to undertake a restricted coastal activity being to remove dredged material from the coastal marine area; and
- (d) Under sections 12(1)(c) and 12(1)(e) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Coastal Environment Plan to undertake a discretionary activity being to disturb the seabed of Tauranga Harbour by maintenance dredging.



[48] Consent 65807 is subject to direct decision of this Court. The applicant listed these activities as follows:

Consent 65807

- (a) Under section 15(1)(a) of the Resource Management Act 1991 and **Rule 9.2.4(b)** of the Bay of Plenty Regional Coastal Environment Plan to undertake a discretionary activity being to diffusely discharge sediment and sediment laden water to Tauranga Harbour during dredging; and
- (b) Under sections 12(1)(d) and 15A(1)(a) of the Resource Management Act 1991 and **Rule 14.2.4(b)** of the Bay of Plenty Regional Coastal Environment Plan to undertake a discretionary activity being to carry out beach nourishment in the coastal marine area; and
- (c) Under section 14(1)(2) of the Resource Management Act 1991 and **Rule 10.2.4(d)** of the Bay of Plenty Regional Coastal Environment Plan to undertake a discretionary activity being to take coastal water during dredging.

[49] The rules are shown in the following tabulated form:

Rule Number	Zone	Classification	Description of Activity
14.2.4(z)	All zones	Discretionary Restricted Coastal Activity	Disturbance of (including removal of sand, shingle, shell, or other natural material from) the foreshore or seabed which: <ul style="list-style-type: none"> • Is not maintenance dredging, or • Is not explicitly provided for by Rule 14.2.4(y), or • Is not prohibited by another rule, and • Is in volumes greater than 50,000 cubic metres, or • Is extracted from areas equal to or greater than 4 hectares, or • Extends 1,000 metres or more over the foreshore or seabed.



Rule Number	Zone	Classification	Description of Activity
14.2.4(za)	All zones	Discretionary Restricted Coastal Activity	Deposition of any material on the foreshore or seabed which: <ul style="list-style-type: none"> • Is not explicitly provided for by rules 14.2.4(t) or 14.2.4(u), or • Is not prohibited by another rule, and • Is greater than 50,000 cubic metres in any 12 month period.

Rule Number	Zone	Classification	Description of Activity
10.2.4(d)	All zones	Discretionary Activity	The taking of coastal water from within harbours or estuaries at rates or quantities greater than 15 cubic metres a day.

Rule Number	Zone	Classification	Description of Activity
14.2.4(b)	All zones	Discretionary Activity	Any disturbance of, deposition on, dredging of, or removal of sand shingle and shell, from the foreshore or seabed, not expressly provided for or prohibited by the other rules of this plan.

Rule Number	Zone	Classification	Description of Activity
9.2.4(b)	All zones	Discretionary Activity	Any discharge except as expressly prohibited by other rules in this plan.

The Activity Status of the Reef

[50] There is a concern as to whether the deposition of the boulders within the on-shore area to the east of Tanea Shelf is a prohibited activity as it is located within the Port Zone. Mr Lawrence, the planner for the opposing parties noted that the reef was to be preferentially sited within the Port Zone. It is acknowledged that deposition of the boulders outside the Port Zone (i.e. at the eastern end of the Pilot Bay Reef) is a discretionary activity. It also seems to be common ground that if a reef is to be established, the best position for it was adjacent to the area of Tanea Shelf which is to be affected.



[51] The boulders selected for placement to create the artificial reef are a resource in exactly the same way as clean sands used for beach renourishment. We agree with Mr Kemble that these boulders are not waste products and should not be characterised as spoil. Accordingly, the placement of these boulders does not trigger Rule 14.2.4(x) prohibiting the disposal of spoil within the Port Zone.

[52] Mr Cooney submitted that Rule 14.2.4(b) captured the placement of boulders as it provides for all disturbances of the foreshore and seabed not specifically covered by any other rule.²⁷ He rejected the suggestion by Mr Koning that this rule only related to *sand, shingle and shell*.²⁸

[53] We accept the submission of Mr Cooney that Rule 14.2.4(b) operates as a *catch all* rule and provides for the deposition of boulders in the Coastal Marine Area as a discretionary activity. While not the best example of Chancery drafting, it is clear from the policy context and rule framework that 14.2.4(b) is not limited to activities relating only to *sand, shingle and shells*.

[54] Accordingly, this activity is to be included alongside the beach replenishment authorised by Rule 14.2.4(b) in Consent 65807.

Activity of Maintenance Dredging

[55] Another issue which arises is whether maintenance dredging is a discretionary activity, as granted by the Commissioners, or a discretionary restricted coastal activity. Rule 14.2.4(z) might apply, however that rule appears to specifically exclude maintenance dredging. Mr Kemble was of the view that this exclusion related to the definition in the Regional Coastal Environment Plan Schedule One (drawn from the New Zealand Coastal Policy Statement 1994) S1.6 which confines maintenance dredging to that necessary to *maintain water depths to previously approved levels*.

[56] As new levels are being approved Mr Kemble argued that this was not maintenance dredging in accordance with the definition in the Plan. The other planners agreed and thus 14.2.4(z) applies and the activity is a restricted coastal activity.²⁹

²⁷ Cooney Opening submissions at [16]

²⁸ Transcript at 136

²⁹ Joint Statement of Fraser, Lawrence and Kemble, 25 March 2011, at [3.8]



[57] If the maintenance dredging were not covered by Rule 14.2.4(z) we agree that it would be covered by Rule 14.2.4(b) and would be part of the discretionary consents package, as they were originally granted by the Commissioners' decision. We conclude that we should include maintenance dredging in the restricted coastal activities recommendation out of caution.

[58] Mr Kemble considered the removal of or damage to indigenous vegetation present on the seabed to be a discretionary activity under Rule 14.2.4(j).³⁰ However, no such application for consent was received either in the first instance or as part of these proceedings. We note that the dredging carried out under Rule 14.2.4(z) includes the *removal of sand, shingle, shell or other natural material* and we have interpreted this to include both plant and animal material. The evidence from the various witnesses and our evaluation of these applications have considered the dredging to remove all such material and assessed the effects accordingly. This matter of the possible need for an additional consent was not further discussed during the hearing and nor was it the subject of cross-examination. We invite the Port and the Regional Council to address the issue of whether or not the removal of plant material should be specifically addressed and added to Consent 65807.

[59] Accordingly, we conclude that given the applications are for discretionary restricted coastal activities and discretionary activities, Section 104 of the Act guides this Court to consider the actual and potential effects of allowing the activity. In addition, the Court must consider relevant provisions of the New Zealand Coastal Policy Statement 2010 (NZCPS), the Regional Policy Statement, the Regional Coastal Environment Plan and other regional plans, and the District Plans. The Court may also consider any other matters it considers relevant, and we shall discuss:

- [a] Mataitai area;
- [b] Waitangi Tribunal issues; and
- [c] Ongoing relationship.

³⁰ Kemble, EIC, at [3.1]



THE COURT'S APPROACH

[60] The Court intends to approach this decision in the following way:

- [a] Discussing the proposal as presented to the Court in final closing. Where necessary, in the course of the decision, we shall discuss earlier iterations of the application as it assists or explains the actions of the parties in the case;
- [b] Consider effects including:
 - Hydrodynamic Effects
 - Morphological Effects
 - Ecological Effects
 - Cultural Effects
 - Economic Effects
- [c] Evaluate under Part 2 of the Act
- [d] Conclusion

CONCERNS ABOUT CHANNEL DIMENSIONS

[61] In opening, the Port of Tauranga said it sought consents for capital and maintenance dredging to deepen and widen the existing channels within Tauranga Harbour (**the Port Zone**) to enable the Port to accept bigger vessels, up to 7,000 Twenty Foot Equivalent Units (TEU). Initially there was some confusion and inconsistency in the applicant's evidence as to what was meant by the term TEU.

[62] A report produced by the NZ Shippers' Council, known as The Big Ships Report,³¹ distinguishes between slot (or nominal) TEUs, which are based on volume and loaded capacity TEUs, which are TEUs at 14 metric tons per TEU. The report's conclusion that it is logical for two ports (one of which is Tauranga) to invest to become

³¹ *The Question of Bigger Ships*, New Zealand Shippers Council, August 2010



7,000-TEU-ship-capable within five years (from the 2010 date of the report) is clearly referring to slot capacity.

[63] Despite its reference to a 7,000 TEU ship in its counsel's opening, the applicant seeks enlarged channel dimensions based upon the results of model tests of a vessel 347m long with a draught of 14.5m and a beam of 42.92m. These dimensions are those of a Post-Panamax vessel, the Susan Maersk, which, we were told, was listed in the 2007 version of the Sea-web data base as having a slot capacity of 7,000 TEU and a laden capacity of 6,600 TEU (14t).³² The Port, in its evidence, referred to the modelled vessel as being of 7,000 TEU.

[64] However, the current version of the Sea-web data base shows the Susan Maersk having the same dimensions, the same laden capacity of 6,600 TEU (14t), but with a slot capacity of 8,160 TEU.³³ These dimensions and TEU ratings correspond with those given in the 2010 Big Ships Report at Table 3.

[65] We acknowledge that the important aspects of a vessel when considering an appropriately sized channel are its physical dimensions. It has been unfortunate, and led to some confusion, that the Port described its modelled vessels in terms of the one parameter (an unimportant one in this instance) that was changed by the international data base for reasons that remain unknown.

[66] A second concern to the Court was that a witness called by the Port authority originally said that only 0.5m clearance for the keel needed to be provided. Captain Drake, also for the Port, believed a much larger clearance was necessary.

[67] Captain Drake's explanation to this Court was that a 20% allowance was required to give a satisfactory comfort or safety margin in large seas.

[68] Captain Drake was recalled after another witness for the applicant, Mr A Boyle, suggested considerably less clearance (0.5m) was required. What is clear to this Court is that whether or not 2m or 3.3m is removed from the channel entry, dredging will be required which will alter the existing benthic environment. Given that situation, we are satisfied that little turns upon whether or not a 20% clearance is provided for or simply

³² Captain Drake, Third brief of Evidence, at [4] and Appendix A

³³ Captain Drake, Third brief of Evidence, at [6] and Appendix B



something in the order of 1 - 2m. We note that almost all Post-Panamax vessels have a draught between 14m and 15.5m. Although it is likely that even larger vessels could make port based upon their draught, other key issues are the vessel's beam and its length.

[69] The entry to the Tauranga Harbour involves an S bend approach. The vessel on an original bearing towards Panepane Point (Number 1 Reach) must then change direction, firstly to make Number 2 Reach, then to enter Cutter Channel, and subsequently Maunganui Roads and Stella Passage. Given the tidal flow at the entrance, it is necessary for vessels to be making good speed to maintain steerage. Tide and wind can have an impact on the movement of a vessel if speed is lost. As the speed increases the vessel sinks in the water – referred to as *squat*. As the vessel makes each turn, the vessel may heel and thus sections of the hull are lower in the water as the vessel changes direction – referred to as *squat heel*.³⁴

[70] As the vessel makes each turn it sweeps over an area largely determined by the length of the vessel. The extra channel width required is thus essentially to cater for the change from the 300m length of vessels maximum to the 340m provided in the modelled vessel. Although Captain Drake acknowledged that such a vessel could make port on the current channel width (if dredged to the new depth), he was seriously concerned about safety margins.

[71] Safety margins are built into the modelling to provide for untoward events. Nevertheless, it is clear that if events, such as engine cut-out during entry occurs, there is still a risk of the vessel running aground, whatever the design of the Port entry. Wind and tide situations are likely to be the determinant of the outcome in such a major event.

[72] Also the design was predicated upon there being no tug assistance for entry to the harbour, relying upon pilotage only. As was conceded by Captain Drake, the question of vessel safety is always under review and it is always possible that the Harbour Master may require more significant safety steps in the event large ships do begin to visit the Port.

[73] Finally, we should note that this application is not the first application for the deepening or widening of the Port, and there has been some experience with previous

³⁴ Transcript at 548 - 588



dredging campaigns and projects to create artificial reefs just inside the entrance near Mauao, re-seeding pipi, and with deposition sites.

EFFECTS

Hydrodynamic Effects

[74] We heard extensive evidence as to the effects a larger dredged channel and its maintenance would have on the hydrodynamics, including sediment transport, within the harbour, around its entrance and offshore at proposed disposal sites. Experts who presented evidence were:

- [a] Dr W P de Lange from the Department of Earth and Ocean Sciences at the University of Waikato for the Port of Tauranga;
- [b] Dr P Kench, a coastal consultant from the University of Auckland for the Port of Tauranga;
- [c] Dr P J McComb, a physical oceanographer for the Regional Council; and
- [d] Mr J Dahm, a coastal scientist for Te Runanga o Ngai Te Rangi Iwi Trust

[75] In addition to their own evidence the experts filed a joint statement in which considerable agreement was noted together with a number of points of disagreement. We consider each of these in later sections.

[76] The experts' views were based on current and earlier numerical model studies, field studies within and adjacent to the harbour over many years by staff and students of the University of Waikato and documentation of the effects of the 1991/92 capital dredging of the existing shipping channel and its subsequent maintenance. The court accepts this body of knowledge is an appropriate basis for predicting possible effects from the proposed dredging and channel maintenance.

Numerical Modelling

[77] Dr de Lange described in detail the use of the numerical model 3DD to examine the flow regimes for the existing and proposed bathymetries. This model provides



information on flow velocities and water depths as functions of time. It does not model sediment transport.

[78] The area modelled extended from the start of the Entrance Channel through to the southern end of Stella Passage and included part of the Western Channel. Time series data from the model for the existing and proposed bathymetries were compared at 18 locations across the modelled area for spring and neap tides.

[79] In their joint report the experts agreed:³⁵

- 2.1 The numerical model was properly calibrated and verified, and the results represent a reliable snapshot of the harbour hydrodynamics for the pre-dredging and post-dredging bathymetries simulated.

Further, they agreed:³⁶

- 2.2 The model results can be used to make inferences regarding changes to the harbour hydrodynamics consequent on the proposed dredging.

[80] We therefore accept the use of the 3DD model and the results obtained from it.

[81] Numerical modelling of sediment transport within and from and to the harbour formed part of The Tauranga Harbour Study carried out in 1984/85. This established the annual sediment flux through the entrance to be in the order of $1\text{Mm}^3/\text{yr}$ with negligible contribution coming from the upper harbour (above Stella Passage). More recent sediment transport modelling with updated models could not be successfully validated and thus the results were not considered as part of the evidence for the present hearing. The field data collected in connection with this modelling did form part of Dr de Lange's evidence.

[82] In making his predictions of changes to the sediment transport regime Dr de Lange relied principally on past studies of the harbour. There have been many such studies since the 1970's including the major Tauranga Harbour Study of 1984/85. The most recent study referred to by Dr de Lange is the Tauranga Harbour Sediment Study by NIWA in 2009/10. In his review of Dr de Lange's evidence Dr Kench states that:³⁷

³⁵ Joint Statement, 1 April 2011, at [2.1]

³⁶ Ibid, at [2.2]

³⁷ Kench, EIC, at [11]



11. ... these studies have provided a high resolution understanding of the natural and anthropogenic impacts on the harbour ...

[83] Dr de Lange also used the results from the 3DD model to infer possible changes in the sediment transport regime. This could only be done qualitatively. Dr McComb was critical of this approach preferring to have seen a robust numerical model study. He did acknowledge that the 3DD model provides qualitative indications of potential sediment transport based on changes to the flow regime. Dr Kench also expressed concern over the paucity of quantitative evidence on sediment transport changes but conceded that the lack of a numerical model of sediment transport is not a weakness in the evidence presented.

[84] In response to these concerns Dr de Lange determined approximate sediment volumes associated with the predicted hydrodynamic changes by considering the changes observed following the 1991/92 dredging. His volumes are given as the maximum expected increase/decrease in sediment volumes per year. We found this helpful in gaining an understanding of possible changes to bathymetry and sediment fluxes.

[85] A review by NIWA for the Regional Council (appended to Dr de Lange's rebuttal evidence) concluded:³⁸

The use of the hydrodynamic model results to make largely qualitative statements about the potential effects on sediment transport is reasonable.

[86] We find that the approaches used to predict both hydrodynamic and geomorphic changes in the harbour and at its entrance to be appropriate.

Summary: Hydrodynamic Effects

[87] The 3DD model results were undisputed. They may be summarised as:

- [a] Velocities – increases will occur around Panepane Point (minor to significant); in the deeper areas over Centre Bank and in the Otumoetai Channel (both minor). There will be no changes in the upper harbour, at Matakana and Motuopohi Islands and on the open coastline. Reductions

³⁸ NIWA, *Review of AEE (Port of Tauranga Ltd Channel Deepening and Widening): Post-dredging Impacts*, Executive Summary



in velocities will occur from the entrance channel all the way up to and including Stella Passage and over the ebb shields on Centre Bank;

- [b] Water levels – increases in maximum water levels of up to 0.02m at spring tides and up to 0.01m at neap tides will occur from Number 2 Reach through to Stella Passage. There will be no change in maximum water levels outside the harbour;
- [c] Tidal phase – the tidal curve will be advanced by up to 5 minutes within the harbour;
- [d] Tidal prism – there will be a small increase in the tidal prism.

[88] The expert evidence is that the changes in maximum water levels and the tidal parameters are of no consequence. We consider them no further. The changes in velocities are important as they may give rise to changes in sediment transport patterns and thus patterns of erosion, deposition and accretion.

Morphological Effects

[89] Dr de Lange's conclusions as to the effects that may arise from the proposed dredging can be summarised as:

- [a] Increased deposition – up to 15,000m³/yr in the entrance channel will require increased maintenance dredging; minor increases with minor consequences for maintenance dredging in Cutter Channel, Maunganui Roads, the turning basin and the lower Western Channel; of fine sediments in Stella Passage which will have significant implications for maintenance dredging;
- [b] Increased erosion – in the Otumoetai Channel up to 1000m³/yr which is considered to be minor;
- [c] Reduced erosion – in Pilot Bay of approximately 50m³/yr which is considered negligible;



- [d] Subsumed by natural variability – on the ebb tidal delta where changes are governed by sediment supply and wave climate; at Panepane Point where measured historical fluctuations in the shoreline exceed expected changes from the dredging; on the shallow areas of Centre Bank where velocity changes between calm and windy conditions exceed by two orders of magnitude the predicted changes in velocity;
- [e] No impact – in Number 2 Reach due to the presence of scour resistant material and the expected velocities' competence to transport all available sand and silt material; in the upper harbour; on the open coast however there may be some effects arising from the disposal sites.

[90] The experts addressed the question: *Will the capital dredging result in geomorphic changes that differ substantially from those summarised in the AEE and in evidence presented on behalf of the Port of Tauranga?* In their joint statement they agreed that for regions other than the ebb tide delta the changes as summarised were reasonable. The ebb tide delta they agreed was the region of greatest uncertainty and the area likely to be most impacted.

[91] Mr Dahm, in general, accepted and concurred with the evidence of Dr de Lange. However he also concurred with the concerns raised by Dr Kench and Dr McComb. He listed these concerns as:

- [a] The potential impact on the ebb tide delta and adjacent Matakana foreshore;
- [b] The potential for serious maintenance dredging requirements with the widening of Number 2 Reach on its western side; and
- [c] The conclusion that the impacts of the proposed entrance channel are within the range of historic dynamic variability.

[92] We agree these are matters of concern and now address them. These concerns are linked to the possibility of the volumes of maintenance dredging approaching the supply of sediment to the harbour by littoral drift and onshore transport. If this occurs less



sediment will be transported on the ebb tide thus causing changes on the ebb tide delta and the adjacent beaches.

Maintenance Dredging

[93] Estimates of past annual average dredged volumes were given by a number of witnesses. The experts, in their joint statement, agreed 160,000m³/yr was an appropriate baseline against which to assess the increased dredging requirements. We note this figure is at the upper end of Mr Thompson's estimate of 50 to 70% of the currently consented annual average dredging limit of 240,000m³/yr and see no reason to dispute it.

[94] Dr de Lange's evidence that the expected increase in annual average dredging volumes would be approximately 15% was accepted by the experts. A total annual average value of 184,000m³/yr is thus expected. This volume, the experts agreed, is not likely to generate adverse effects. However, they recognised the uncertainties surrounding possible adverse impacts on the ebb tide delta and adjoining beaches by agreeing a trigger level of 185,000m³/yr of maintenance dredging averaged over 5 to 6 years which if exceeded would indicate the potential for such effects.

[95] A further concern recognised by the experts is that rapid shoaling may occur in Number 2 Reach which will then be difficult to maintain at its dredged depth.

[96] The proposed conditions for Coastal Consent 65806 address these concerns as follows:

- [a] Limiting the volume of maintenance dredging to 185,000m³/yr averaged over a rolling 5-year period (Condition 5.3);
- [b] Requiring annual bathymetric and topographic surveys of the ebb tide delta and adjacent shorelines (Condition 12.3);
- [c] Giving the Regional Council power to give notice of its intention to review the monitoring conditions:
 - [i] Within the three months of receiving each of the above surveys (Condition 16.1); and



[ii] During June of 2013, 2016, 2019 and 2023 (Condition 16.3).

[d] Requiring a report if the specified dredging depths cannot be maintained within the 185,000m³/yr annual average dredged volume (Condition 14.5).

[97] We see this approach as appropriate but will require any final set of conditions to reflect the matters set out below.

[98] During the five years following commencement of Coastal Consent 65806 the Port will investigate and seek consent for disposal site(s) that may be required to avoid, remedy or mitigate morphological changes that may occur on the ebb tide delta or adjacent shorelines as a result of the maintenance dredging. A condition (Condition XX) should be drafted accordingly. Should Condition 14.5 be triggered, a disposal site will then be available.

[99] Condition 14.5(c) should then be amended to read:

(c) Assess whether any of the sites identified under Condition XX are required to and adjacent coastal areas.

[100] It was suggested in evidence that should Matakana shoreline excursions extend beyond the range defined by the 1925 and 1992 shorelines the Port be required to take remedial action. We agree and would require an appropriate condition. This would follow Condition 12.3 and could read:

Should the Matakana shoreline retreat beyond the 1925 shoreline the Chief Executive of the Regional Council shall direct the consent holder to deposit material at the site(s) identified under Condition XX.

[101] With the trigger mechanisms as described, the ability of the Regional Council to intervene and our proposed additions we are satisfied that the conditions provide a sufficiently cautionary approach to harbour bathymetry.

Stella Passage

[102] Witnesses discussed adverse effects on the upper harbour (south of Stella Passage) which, in their view, have occurred as a result of the establishment of the wharves at Mount Maunganui and Sulphur Point. Of particular concern was erosion at the



Whareroa Marae which was linked to the dredging of Stella Passage. In their joint statement the experts recorded their disagreement over the existence of this link.

[103] There have also been other major works in the vicinity including a causeway and bridge, a marina and a roading network which would all have influenced the sediment transport regime of the upper harbour. There is no evidence before us which might separate out the effects attributable to these works from those arising from activities associated with the port. Fortunately we do not have to enter such a debate. Our task is to consider effects that may arise from the current proposal, including any that may be seen as cumulative.

[104] Dr de Lange asserts that modern littoral sediments do not form a significant component of the upper harbour sediments. Mr Dahm's evidence is that dredging of Stella Passage has *entirely cut off sand supply* to the upper harbour. His view is that there is no longer any sand supply into the upper harbour from the wider harbour. If this is the case then the proposal cannot have any effect on the passage of sediment to the upper harbour. Mr Dahm produced no evidence to back his view.

[105] We prefer Dr de Lange's evidence that littoral sediments are not a significant component of upper harbour sediments and note that the original dredging of Stella Passage would have reduced the transport capacity of flood tides through the passage. We are thus confident that there is now little transfer of sediment from the wider harbour into the upper harbour, which is in keeping, although not entirely in accord, with Mr Dahm's view.

[106] Accordingly, we conclude that the proposal will have a negligible effect on flood tide sediment transport through Stella Passage and thus on erosion at Whareroa Marae.

[107] Nevertheless, there is provision for the deposition of clean suitable sand for beach renourishment adjacent to the Whareroa Marae if required by the Tangata Whenua Reference Group and approved by the Chief Executive of the Regional Council (Condition 10.10 of Coastal Consent 65806). We endorse this provision.

[108] Witnesses suggested that the dredged sands could also be used in part for environmental restoration work at other locations around the harbour. Beach renourishment and provision of high tide bird roosts were mentioned. No plans for such



work are before us. Although such renourishment works may be desirable we endorse Advice Note 5 which records the importance of compatibility of material, hydrological processes, ecological values, cultural values and the determination of any adverse effects. Any such works will require consents and are beyond the scope of this decision.

Current Disposal of Dredged Material at Existing Sites

[109] Port of Tauranga has six consented sites for the disposal of material dredged under the current maintenance dredging programme. Three are near shore sites in 5 to 15m of water. One is off Main Beach, Site A, with Sites B and C being off Marine Parade. Sites D and G are offshore in 20 to 35m of water and site F is in Pilot Bay. A further site, Site E adjacent to the Sulphur Point wharves in Stella Passage may be used for temporary storage of material before its removal and sale. The volume is limited to 100,000m³/annum.

[110] Material from the current maintenance dredging programme suitable for beach renourishment can be deposited in Sites A, B, C and F if requested by the Regional Council which monitors the state of the adjacent beaches. From Sites A, B and C the material moves naturally towards the beaches. As the bulk of this material is derived from the Entrance Channel the process is essentially one of passing the littoral drift material across the harbour entrance. Material from Site F is pumped onto Pilot Bay beach.

[111] Material with a high-shell content or with a silt content greater than 5% and very fine sands, all of which are unsuitable for beach renourishment, are deposited in Sites D and G. Currently these sites are receiving only minor amounts of maintenance dredging namely that material judged unsuitable for beach renourishment. This material is lost from the littoral system.

[112] Some material can be removed and sold, and this was being pursued by the Port at the commencement of the hearing.



Material from Capital Dredging

[113] It is proposed to deposit material from the capital dredging (approximately 15Mm³) in Site H of 900ha which encompasses and enlarges Sites D and G. Together these latter sites have a combined area of approximately 550ha in 20 to 35m of water.

[114] Consent Condition 10.4 of Proposed Consent 65806 requires the Port to, as far as practicable, ensure that the dredged material is spread over the entire disposal site so as to keep the resultant mound as low as possible. For 15 Mm³ over 900ha the height would be 1.67m.

[115] It is likely that the mound in places may be up to 2m in height, some 7% of the water depth. Dr de Lange acknowledges such a mound may cause wave refraction. On the basis of calculations he believes the associated increases in wave energy at points on the coast line will have minimal impact. No issue was taken with this and we accept it.

[116] Dr de Lange believes the consent conditions imposed by the commissioners to control the disposal of sediment at site H are reasonable and will minimise any adverse impacts. The monitoring requirements are appropriate and practical in his view. This was not disputed by the other experts. The Commissioners' conditions have been carried through into the tabled conditions before us. With the exception of Condition 10.3 of Consent 65806, which we agree should be deleted, we see them as appropriate and sufficient.

[117] The loss to the coastal system of in situ sand material through the capital dredging proposal was of concern to Mr Dahm. Up to 10 Mm³ may be lost. This loss he conceded, since it is largely in situ material, is unlikely to be *noticed* by the wider harbour and beach sediment system apart from the effects associated with the resulting larger channels. He questioned whether the removal of these sands from the active harbour and beach systems is an appropriate or efficient use of this natural material. The experts recorded their disagreement on this point.

[118] For their part Port of Tauranga has sought consent to place some of the medium to coarse sand ashore where it can be sold and/or used for beneficial purposes. These could include inner harbour beach renourishment or use on roading projects. Mr Thompson expects areas of channels may be sporadically dredged to bring quantities ashore as



required. Proposed Condition 10.1 of Consent 65806 limits this material to a total of 1 Mm³.

[119] Mr Dahm recommended disposal of the capital dredging material at nearshore locations between Mount Maunganui and Maketu from which it would naturally renourish adjacent beaches thereby increasing the resilience of the coastal system to future climate changes. His indicative calculations suggested beach widths would increase by 40 to 50m between Mount Maunganui and the Maketu Estuary, a distance of some 28km.

[120] In response to this suggestion Mr Thompson estimated extra costs to be at least \$24M to place the sand in this manner. Further the trailer/suction dredge to be used for the capital dredging can only deposit material in water depths greater than 10m. There will then be additional costs of \$18M to pump the material ashore. While we appreciate the benefits to be gained by the increased beach resilience that may result from such placement, we have no evidence as to its practicality nor a request for any consents that may be required. We take the matter no further.

[121] Capital dredging will involve extraction of natural materials from their in situ position. They are thus uncontaminated. This was not challenged and we accept there will be no contamination effects from capital dredging.

[122] Mr Thompson states the capital dredging is likely to be done in phases to match requirements of the vessels visiting the port. Effects associated with the dredging operation occur only when the dredging occurs and are related to the magnitude of the dredging. Thus phasing the dredging will give rise to a series of the same, albeit smaller, effects over a longer time scale. Dr de Lange and Dr Grace (from an ecological view point) both conclude there are no additional adverse effects arising from phasing the capital dredging. This was not disputed and we accept it. As noted elsewhere, if consent is granted we would require the capital dredging to be done in at least two stages.

Material from Maintenance Dredging

[123] Maintenance dredging and disposal methods will be the same as those currently used, and as described above. Increased areas will be involved and there will be



increased quantities. An increase of 15% to 184,000m³/yr is anticipated by the experts in their joint statement.

[124] No one has suggested that the expected increase of 15% in volume of the maintenance dredging will have any noticeable effect on the existing situation within the harbour. Nor has the possibility of cumulative effects arising from the increase been advanced.

[125] Mr Dahm observes the volume of maintenance dredging represents a net loss from the volume of sediment being actively transferred around within the flood and ebb tide delta systems. This is true for the material to be deposited at Site H (the former Sites D and G). That deposited at Sites A and B will be returned to the littoral system as beach renourishment. That deposited at Site F will be returned to the sediments in Pilot Bay. Deposition at these sites is to be done under the direction of the Regional Council who will control the volumes returned to the littoral system and Pilot Bay.

[126] Tabled Condition 10.11 allows a total of 1 Mm³ to be removed from the coastal system. If this is to be by way of Site E then it must be made clear that Conditions 10.5, 10.6 and 10.7 also apply to the disposal of maintenance dredging.

[127] There is the possibility that sediments accumulating in the dredged channels and later removed by maintenance dredging could be contaminated. Port of Tauranga has been aware of this and carried out investigations to determine if the sediments removed to date by maintenance dredging have been contaminated. Their tests show the sediments to be *in good health* with respect to heavy metals and not otherwise contaminated above background levels. Conditions 13.1 and 13.2 address this issue in an appropriate way and we endorse them.

Turbidity Effects on Water Quality

[128] Suspended sediments and thus turbidity are inevitable consequences of dredging. Associated adverse effects are deposition of fine sediments affecting benthic communities and degradation of water quality. Effects on water quality are discussed here. Those on benthic communities are discussed in a subsequent section.



[129] The severity of these effects is determined by the composition of the dredged sediments, the dredging technique employed and the nature of the currents which disperse the resultant sediment plume. The sediments to be dredged range from sands through silts to cohesive material which will include clays. Turbidity effects will be minimised by selecting the dredging method best suited to the sediment size being dredged. Trailer suction dredging will be used for the sandy materials. These are found in the Entrance Channel, Cutter Channel and in Maunganui Roads. A digger excavator will be used for the finer sediments in Stella Passage and on Tanea Shelf where steep batters will be encountered.

Geomorphological Effects in the Harbour

[130] Possible changes in water quality within the harbour as a result of turbidity plumes were addressed by a number of witnesses. Dr Grace expressed the majority view when he wrote:³⁹

200. ... I do not consider the proposal will adversely affect water quality in the harbour and that water quality standards set out in the Thirteenth Schedule of the Regional Coastal Environment Plan will be achieved after reasonable mixing has occurred.

[131] Dr Coffey, a scientist for Te Runanga o Ngai Te Iwi Trust, while not disputing this, believed a robust monitoring programme should be carried out.

[132] Proposed Conditions 10 and 11 of Consent 65807 address turbidity and monitoring issues. We find them confusing and difficult to interpret. In particular, are the locations in Condition 10.1 to be the same as those in Condition 11.2? In Condition 11.2, how can a site be *200m from the dredged area but adjacent to an active operating dredge*? Is the dredged area that shown blue hatched on Plan 324-97? We cannot interpret Condition 10.2. The Council and the Port are strongly urged to redraft these conditions with an emphasis on consistency between the monitoring conditions and those setting the turbidity limits.

[133] In a rewritten Condition 10.1 we recommend placing a limit on the maximum change in turbidity at the Aerodrome Bridge when Stella Passage is being dredged.

³⁹ Grace, EIC, at [200]



[134] Dr de Lange suggested it is more effective to measure turbidity continuously at two sites – the Harbour Bridge and Number 7 beacon, which is on the edge of Cutter Channel just north of Salisbury Wharf. The former is to give a control over turbidity in the upper harbour principally in the vicinity of the sea grass beds while the latter is to give control over turbidity on Centre Bank and in the Entrance Channel.

[135] Condition 11.10 of Proposed Consent 65807 invites the Port to submit a Continuous Turbidity Monitoring Plan for approval.

[136] Such a plan⁴⁰ has been prepared by the Port and based on conditions imposed on dredging consents at the Port of Melbourne. The plan nominates turbidity values which if exceeded require actions by the Port. These range, depending upon the measured turbidity, from investigating the cause of the rise in turbidity to ceasing dredging.

[137] This approach to managing turbidity levels is appropriate. However, Dr de Lange's comment that natural turbidity levels in parts of the harbour exceed the Melbourne limits set in the plan suggests further work needs to be done to set realistic turbidity limits. We can offer no comment as to what these limits might be but they should be set once a better understanding of natural fluctuations in turbidity is obtained. It may well be that such an approach is inappropriate for this harbour.

[138] Monitoring before and after the 1992 dredging showed no issues arose from turbidity plumes in the Entrance Channel, Cutter Channel or Maunganui Roads. Fine sediments from Stella Passage dispersed into Waipu Bay during flood tides and onto Centre Bank during ebb tides. This dredging was done with a suction dredge. Mr Park, a Senior Environmental Scientist for the Regional Council, reported that no significant ecological damage resulted from these plumes.

[139] Later studies on plume dispersal from dredging in Stella Passage using a barge-mounted digger suggested turbidity levels returned to ambient levels within 500m downstream of the dredge. It is this dredging method that is proposed for Stella Passage and thus Dr de Lange believes turbidity levels in the vicinity of sea grass beds, the closest of which are 600m from the dredging, area will not be affected. Dr Coffey expressed some doubt about this and considered that a programme to monitor the cover and health

⁴⁰ Thompson, EIC, Appendix C



of the sea grass beds should be implemented. We note that should plumes reach the sea grass areas dredging can be restricted to occur on the ebb tides only.

[140] Dredged material will be deposited at Site E in Stella Passage and Site F in Pilot Bay. That in Site E will subsequently be pumped ashore for sale and that in Site F will be pumped ashore for beach renourishment. No witness questioned these operations or raised any issues with them. Condition 10.6 of Proposed Consent 65806 limits deposition at Site E to sediments with less than 5% by weight of silt material.

[141] With respect to the pipi beds on Te Paritaha, Dr Grace, a consultant ecologist for the Port, believed that any sediment plume arising from dredging in Stella Passage would be so dispersed when it reached the area that it would not pose a threat to the pipi population. This was not disputed by Dr Coffey. Should continuous turbidity monitoring be done at Number 7 Beacon it will provide the data necessary to instigate any remedial actions, including ceasing dredging, that may be required under the Continuous Turbidity Monitoring Plan.

[142] We find on the basis of the 1991/92 dredging experience, the further test on plume dispersion from Stella Passage, the option of dredging on the ebb tide only and the proposed limitation on disposal of fine sediments at Site E that there will be no unacceptable physical effects on water quality in the harbour arising from turbidity plumes generated by the proposed dredging. However, we do require better wording for the monitoring and control conditions as requested above.

Effects outside the Harbour

[143] Turbidity increases are expected as dredged material is released and falls through the water column. They may also occur if material disperses from the disposal site through the action of waves and currents.

[144] During previous disposal events increased turbidity from releasing sandy material was short-lived and of limited extent with no long term effects on the water column. Some surface discolouration occurred when silt and clay material from Stella Passage was released. Dr de Lange's evidence is that the discolouration lasted only a few minutes.



[145] The current proposal is much greater in scope (three times) than the 1992 capital dredging. One expects perhaps three times as many disposal operations. The interval between operations will necessarily be similar to that of the earlier dredging and the operations will occur for a longer time. Accordingly, we conclude the increases in turbidity (decreases in water quality) and their duration will be similar to those arising from earlier dredging. Although there will be more operations there will be no cumulative effects on water quality and thus no long term effects on the water column.

[146] Currents in the vicinity of the disposal Site H have been shown to have mean speeds of 0.2m/s with a recorded maximum of 0.3m/s which is approaching the threshold velocity for sand sized non-cohesive sediments. Larger speeds resulting in turbidity plumes can be expected under severe storm conditions. Dr de Lange suggests wave heights of 2m or more would be necessary. Cyclone Fergus was one such event. The current directions are such that material will be transported alongshore.

[147] The mobility of the finer sediments is to be controlled by requiring any material with more than 25% by weight of silt or smaller sized material to be placed on the seaward (deeper) side of the disposal site. Initially it was proposed to cap these finer silts with coarser sands as soon as practical. However Mr Dahm did not favour mixing the sediments in this manner. While he acknowledged that strong coastal storms may disturb these sediments, he considered that any plume would disperse quickly and would not cause any problems.⁴¹ Any associated turbidity is limited by Condition 10.3 of Consent 65807 and its possible effects on reef biota are to be monitored under Condition 12.7 of Consent 65806. We endorse this approach.

[148] Turbidity plumes will occur in Sites A, B, and C as material from these sites is expected to migrate towards the shore for beach renourishment. The material will be chosen to be compatible with the beach material and thus of sand size. Most of the transport will therefore be in the lower portions of the water column and not visible. All parties favoured beach renourishment and we assume, accept any resultant degradation of water quality.

[149] Disposal of dredged material will increase turbidity within the water column during release of the material. The effects will be of short duration and have no lasting

⁴¹ Transcript at 896-897



effect on water quality. At Site H the disposal mound will be stable except under storm conditions. Turbidity plumes from the inshore sites will renourish the adjacent beaches.

ECOLOGICAL EFFECTS

Evidence

[150] We heard from three ecologists, Dr Roger Grace, a marine biologist with some 20 years experience of the ecology of the Port of Tauranga; Dr Brian Coffey, a scientist with 30 years experience in aquatic biology; and Mr Stephen Park, a marine ecologist who has been involved in work with the Tauranga harbour since 1990. The ecologists had participated in an expert conference prior to the hearing and produced a comprehensive and helpful document.

The Tauranga Harbour Environment

[151] Te Awanui is a large harbour with wide sand and mud flats supporting extensive shellfish beds and some seagrass beds, with occasional infestation by sea lettuce. The rocky shores and reefs of the Mt Maunganui coast, Moturiki, and Motuotau islands are areas of significant conservation value (ASCV). They are the only mainland rocky reefs in the Waikato and Bay of Plenty areas and are a valuable source of kaimoana. Small and expanding mangroves are found in some sheltered upper harbour areas. Sediment and nutrient inputs from the surrounding land and rising global temperatures have contributed to the increased seasonal abundance of sea lettuce and the expanding mangrove areas.⁴²

[152] Development of the port over time has altered both the foreshore, through reclamation and wharves, and the seabed, by dredging. Development of the Mt Maunganui wharf area resulted in the complete loss of the natural shoreline from Whareroa to Pilot Beach and the Sulphur Point reclamation removed high value (ecologically and for kaimoana) intertidal areas and a substantial bird roost.⁴³ The Stella Passage, Maunganui Roads and Cutter Channel are regularly dredged and hence occupied by fast growing opportunistic species with little chance to develop a stable or mature ecology.⁴⁴ In marked contrast, the wharves have very high biodiversity values with a rich and diverse ecology. They act as settling areas for juvenile crayfish which can be found

⁴² Grace, EIC, at [21] – [26]

⁴³ Grace, rebuttal, at [34] – [35]

⁴⁴ Grace, EIC, at [71] – [72]



in large numbers over the summer months. Dr Grace observed that few crayfish stay and he expected that they would move to the reefs, in the harbour entrance or off-shore, a more suitable habitat for larger crayfish. He attributed the low numbers on the reefs to harvesting pressure.⁴⁵

[153] A number of witnesses gave evidence of the deterioration in the water quality and kaimoana resources of Te Awanui over many decades. Dr Grace noted the impact of urban development in and around Tauranga City, changes to land use in the region and the escalating demands from a growing population. The importance of the various activities impacting the harbour depended on the location and history. He acknowledged that some losses were directly attributable to Port of Tauranga activities.⁴⁶ Dr Grace and Dr Park⁴⁷ considered the upper harbour areas to be mostly influenced by land clearance and agricultural practices. For the offshore areas and islands over-harvesting had the biggest impact with many popular seafood species being seriously depleted.⁴⁸ Dr Grace also noted the impacts of the collapse of the Ruahihi dam, sewage disposal, the railway embankment and expressway, and the inadequate management of fisheries (including fin-fish, crayfish, paua, scallops and mussels).⁴⁹

[154] There are five habitats of particular interest in this case:

- [a] Sandy areas off-shore – where the dredged material will be placed;
- [b] Seagrass beds within the harbour – which can be affected by high turbidity;
- [c] The pipi beds of Te Paritaha, an important kaimoana resource, located on a sand bank to the west of the channel and close to the Port area – a 100m wide swath will be dredged when widening and deepening the channel;
- [d] The deep gorge of the Entrance Channel between Mauao and Panepane Point – the channel is to be dredged and deepened; and

⁴⁵ Grace, EIC, at [84] – [91]

⁴⁶ Grace, rebuttal at [12]

⁴⁷ Transcript at 490

⁴⁸ Grace, EIC at [216] and transcript at 280

⁴⁹ Grace, Rebuttal at [13] and [35]



- [e] The Tanea Shelf, a rocky reef area, along the western side of Mauao adjacent to the Entrance Channel – rocks and boulders are to be removed and the papa rock excavated to widen and deepen the channel.

Off-shore Disposal Sites

[155] The ecologists were agreed that the information from the 1991/92 dredging programme demonstrated that impacts on the off-shore disposal sites were minor and short-lived. The proposed benthic monitoring programme of the sandy off-shore sites and ongoing observational monitoring of the ecology of the rocky reefs off Motuotau were considered to be adequate.⁵⁰

Seagrass Beds

[156] Dr Coffey noted that seagrass beds were once more widespread in the harbour but now only occurred in intertidal areas due to insufficient light penetration through more turbid water.⁵¹ He also noted their sensitivity to oils spills and emphasised the importance of monitoring both turbidity and hydrocarbons. Seagrass beds support a diverse range of animals and are important as habitat for juvenile fish.⁵²

[157] There are small areas of seagrass south of the harbour bridge and offshore from the Whareroa marae. Dr Grace considered these to be too far away (the closest being 600m up harbour from a dredging site) to be affected by the dredging and Dr Coffey commented that the conditions with respect to turbidity were *onerous* and adequate to protect the seagrass beds.⁵³ During cross-examination Dr Grace acknowledged that fine sediments had affected the seagrass beds during the 1991/92 dredging campaign. However, he maintained that the proposed new dredging method would not produce such high levels of turbidity and a repeat of such contamination was not possible.⁵⁴

[158] Given the dredging method chosen, and the amended conditions imposed with respect to turbidity levels, we find that the seagrass beds would not be adversely affected by the proposed dredging.

⁵⁰ Joint Statement of ecologists, 3 April 2011, at [6]

⁵¹ Joint Statement of ecologists, 3 April 2011, at [7]

⁵² Transcript, at [817] – [818]

⁵³ Grace, EIC, at [93] - [95] and [172], and Joint Statement at [7]

⁵⁴ Transcript, at [256]



Pipi Beds of Te Paritaha

[159] Pipi are widely distributed and are the most abundant of the bivalves within the harbour.⁵⁵ Pipi have been the main focus of the ecologists as they are an important species within the ecosystem, of value as kaimoana and a good indicator species – being particularly sensitive to turbidity or poisoning effects. If pipi are present there will be a healthy assemblage of other organisms that are associated with them in clean shell and coarse sand environments.⁵⁶ The ecologists were all agreed that the extent of the disturbance of the intertidal exposed parts of the pipi beds would be very small and the effect on the ability to harvest pipi would be inconsequential.⁵⁷

[160] Te Paritaha, located on the Centre Bank, to the west of the dredged Port channels, is the largest single pipi bed within the harbour. Dr Grace had mapped the areas of moderate or high density but noted that pipi were *patchy in their distribution*.⁵⁸ He considered the pipi beds in the southern harbour to be a *significant habitat of indigenous fauna*.⁵⁹ He explained that pipi are found in shallow water, accessible at low tide, and to depths of around 36m in the bottom of the channels.⁶⁰ Dr Park noted that beds of edible pipi occur on sand banks east of the Omokoroa peninsula and further up the harbour, although at lower densities and smaller size. The distribution pattern is repeated in the northern end of the harbour which also provides larvae for recruitment. Dr Park agreed with Dr Grace that the Centre Bank was a valued location for collecting pipi however he considered the more accessible Wairoa estuary entrance to be the most popular. The beds at Te Puna estuary are also heavily utilised.⁶¹

[161] The dredging would remove sand, and all marine life present, along a 90m to 100m wide swath of the eastern edge of Te Paritaha. The remaining sand would slump to form a batter along the new channel edge. Initially Dr Grace had estimated that 5% to 10% of the area of low tide access to pipi would be affected by dredging and slumping.⁶² After more detailed mapping Dr Grace considered that *just a tiny fraction of the dried bank would be affected* and plenty of large pipi would still be available.⁶³ While the pipi

⁵⁵ Transcript, at [487]

⁵⁶ Transcript, at [283] and [819]

⁵⁷ Joint Statement of ecologists, 3 April 2011, at [8]

⁵⁸ Grace, EIC, at [166]

⁵⁹ Grace, EIC, at [167]

⁶⁰ Transcript, at 247

⁶¹ Park, EIC, at [2.2]

⁶² Grace, EIC, at [183]

⁶³ Grace, Rebuttal, at [51] and map at Appendix C



removed by dredging would die (they do not survive in open ocean sites) a certain number are expected to survive the slumping process and re-establish a bed on the batter.⁶⁴ He considered juvenile pipi to be *very happy* in mobile sands and would not be affected at all in the slumped area.⁶⁵ Dr Grace noted that sand was continuing to build up on the Centre Bank and this was expected to continue following the dredging. As a result he anticipated a net increase in accessible pipi habitat at low tide.⁶⁶ Dr Park similarly observed that the area of Te Paritaha *has been shoaling and making beds more and more accessible for harvesting over the years.*⁶⁷

[162] In response to questions from the Court Dr Grace explained that the dredged areas may well revert to pipi beds in the future, depending on the frequency of maintenance dredging, although he was unsure as to the quality of any newly established pipi beds. Dr Park and Dr Grace confirmed that pipi had been observed in areas of ongoing maintenance dredging although they were unsure of the extent of pipi beds before and after the 1991/1992 dredging campaign. Dr Park noted that the shellfish beds are dynamic and move around.⁶⁸ He agreed that pipi would re-colonise in the vicinity of Te Paritaha following the dredging saying that the habitat was not lost but would suffer a *significant short term disruption*. He noted that in some areas of the harbour, such as the Stella Passage, the habitat had been lost to pipi as the slow currents and fine sediments were unsuitable.⁶⁹ Dr Coffey noted that areas subject to regular maintenance dredging would not recover to a stable *climax* community but would be colonised by opportunistic taxa, including pipi, with small class sizes.⁷⁰

[163] As partial mitigation Dr Grace anticipated moving some pipi to an area about 100m to the south west of the area to be dredged. While no detail of the methods have been decided he suggested it could be done using a small scallop dredge.⁷¹ Dr Coffey did not consider it was possible to relocate shellfish without stressing the communities to which they were added. For example broken or injured pipi might attract predators. He considered the plants and animals within the footprint of the dredging should be sacrificed and efforts put into enhancing habitat, particularly the water quality.⁷²

⁶⁴ Transcript, at [249] and [525]

⁶⁵ Transcript, at [263] – [264]

⁶⁶ Grace, EIC, at [62] and [229]

⁶⁷ Transcript, at [508]

⁶⁸ Transcript, at [284] and [288] (Grace); [506] – [508] (Park)

⁶⁹ Transcript, at [488], [507] and [529]

⁷⁰ Coffey, EIC, at [79]

⁷¹ Grace, EIC, at [238] and Transcript at [268]

⁷² Transcript, at [804]



[164] When asked to confirm his agreement that the effects on the ability to collect pipi from the Centre Bank were inconsequential Dr Coffey added three riders – that the supply of spat does not decrease, there is no change in water quality, and the recreational take and natural predation remain constant.⁷³ Sexually mature pipi are found throughout the harbour with the larger and more vigorous individuals being found at greater depths down the subtidal channels.⁷⁴ The ecologists were agreed that the Entrance Channel is an important source of spat for Te Paritaha and we address this issue in the next section. We have already found that water quality, particularly turbidity is adequately controlled by the dredging methods and conditions requiring monitoring against trigger levels with appropriate management responses. The pressure from the recreational take is a matter outside of the effects of this proposal. Natural predation is unlikely to be affected by this proposal although we note the potential effect if relocation of pipi were to be attempted.

[165] Given that very little of Te Paritaha is to be dredged, and most of the impact on the more accessible areas of pipi is from slumping, we agree with Dr Coffey that such relocation is likely to do more harm than good and should not be attempted.

The Entrance Channel and Gorge

[166] The channel between Matakana Island and Mt Maunganui reaches a depth of 36m so much of it will not be disturbed by dredging. Dr Grace described the *shell lag*, a stable substrate of dead pipi shells that armours the sea floor. Large numbers of adult pipi live in the channel, inaccessible to people seeking to harvest them, providing a reservoir of breeding stock and an abundant source of pipi larvae to replenish stocks within the harbour.⁷⁵ During cross examination Dr Grace agreed that some 50% of the shell lag between Matakana Island and Mt Maunganui would be removed. He considered the remaining pipi to be plenty to maintain the shallow beds within the harbour and noted the presence of other mature pipi in the Western Channel and to the west of Te Paritaha.⁷⁶ Similarly, Dr Park had no concerns that the removal of these pipi would affect recruitment given the large number of pipi throughout the harbour, including those at the northern end.⁷⁷ In response to questions from the Court on his experience of the 1991/92 dredging campaign Dr Park noted that recruitment to dredged areas was variable and

⁷³ Transcript, at [793] – [794]

⁷⁴ Transcript, at [793]

⁷⁵ Grace, EIC, at [59] to [63]

⁷⁶ Transcript, at [261]

⁷⁷ Transcript, at [497] and [512]



depended on the supply of spat – juveniles could turn up the next day or take a year or two to establish.⁷⁸

[167] Dr Coffey agreed that large numbers of adult pipi at depths below 17.4m in the entrance channel should ensure a large reservoir of breeding stock and an abundant source of pipi larvae available to replenish stocks within Te Awanui. However, he was concerned that coarse mobile sand could replace or cover the shell lag within entrance channel.⁷⁹ Dr Dahm addressed this point and concurred with Dr de Lange that the fierce currents on the ebb tide would take the sand seaward and no blanketing by mobile sand would occur. He expected a shell lag to re-establish over time.⁸⁰

Overall Findings on Pipi

[168] We accept that the loss of pipi is small in scale and would have no long-term discernable effect on the extensive and widely dispersed pipi population of the harbour as a whole. At a local level the dredging and slumping along the edge of Te Paritaha is a temporary disruption and the habitat is disturbed rather than destroyed. The dredged areas are expected to recover quickly, with re-colonisation by pipi and other species, as a result of natural processes within the harbour. While the area disturbed is substantial the impact is minor in the context of the size of this pipi bed and inconsequential with respect to the ability to gather pipi. The dredging in the Entrance Channel will remove some shell lag and mature pipi important to the lifecycle of the pipi beds within the harbour. However, the remaining areas of shell lag would provide an adequate supply of spat and the shell lag itself is expected to recover, albeit more slowly than pipi beds in a sandy substrate.

[169] However, as acknowledged by the ecologists, the evaluation of the significance of these effects on pipi does not end with the scientific assessment. The impact must also be considered in the context of the cultural importance of Te Paritaha and its value to local iwi. That consideration comes later in this decision.

⁷⁸ Transcript, at [528]

⁷⁹ Coffey, EIC, at [70] - [74]

⁸⁰ Transcript at [901]-[902]



The Tanea Shelf

[170] The rocky shelf to the southwest of Mauao formerly extended out into the shipping channel. It is a rich and diverse habitat with rounded stable boulders providing crevices for kaimoana species such as kina and crayfish. Sections of the shelf were removed by dynamiting in the early days of the Port development and further boulders removed during the 1992 channel widening programme. Many of these boulders were relocated to form an artificial reef in Pilot Bay where they provide a good substrate for a range of animal and plant species.⁸¹ Dr Grace described the Pilot Bay reef as *a great success* with marine life recovering to a rich biodiversity within two years of boulder placement. He noted more voids and holes suitable for crayfish than on natural boulder reefs and the popularity of the reef as a fishing spot.⁸² During cross-examination Dr Grace acknowledged that few crayfish had been observed on the Pilot Bay reef. However, he considered the habitat to have recovered and lack of kaimoana species to be influenced by the fishing take.⁸³

[171] The entrance is to be widened by 32m at Tanea Shelf by dredging and excavating a crust of slighted cemented sand strewn with boulders, with some areas of overlying silt and sand.⁸⁴ The work would disturb a rich marine community. The larger boulders would be placed in shallower water further inshore towards Mauao, with any excess boulders going to the Pilot Bay reef.⁸⁵ The ecologists were agreed that the excavated area would provide a similar habitat to that there at present and the re-stacked boulders (at a depth of 2 to 4m) would provide a better habitat for kina and crayfish than exists there at present.⁸⁶ Dr Grace considered the new boulder reef at Tanea Shelf would offer better and more accessible (by snorkel) habitat than the Pilot Bay reef within approximately two years of boulder placement.⁸⁷ He agreed that the new reef might not increase crayfish numbers unless there was better control of the harvest pressure within the Mataitai Reserve, explaining that juvenile crayfish prefer to settle where there is already a population of adult crayfish.⁸⁸

⁸¹ Grace, EIC, at [39] - [46]

⁸² Grace, EIC, at [49] - [58]

⁸³ Transcript, at [254]

⁸⁴ Reynish, EIC, at [39]

⁸⁵ Grace, EIC, at [190] - [192]

⁸⁶ Joint statement of ecologists 3 April 2011 at [1]

⁸⁷ Transcript at 265

⁸⁸ Transcript at 270-271



[172] We accept the evidence of the ecologists that the ecosystem of the excavated portion of the Tanea shelf will recover to a similar type and quality. The new boulder reef will provide better habitat for kaimoana species, including kina and crayfish. Marine species would establish naturally and a mature community is expected after approximately two years. The new boulder reef is in shallow water and more accessible to divers seeking to gather kaimoana. The success and potential benefits of this new reef for kaimoana species are likely to be dependent on the ability to manage harvesting pressure, particularly for crayfish.

[173] Given the longer timeframe for recovery of the reef communities compared to the shellfish beds of the sand banks, we conclude that the excavation of Tanea Shelf should be carried out in one single operation. The timing of this excavation is addressed later in this decision. We conclude that the effects on the ecology are minimal and the construction of the shallow reef would be a potential benefit for kaimoana species such as kina and crayfish.

CULTURAL EFFECTS

[174] Mauao also known as Maunganui, stands as a sentinel looking out over the Pacific ocean, Te Moana a Toi. We were told Mauao was a victim of unrequited love, so he asked to be pulled by the patupaiarehe (fairy people) during the night from the Hautere forest to the sea so he could drown himself. At dawn he was caught by the sun before he could accomplish his task, thus the name Mauao which means *caught by the dawn*. He has since *forever stood tall at the entrance of the harbour*. Mr Awanuiarangi Black explained that the ancient name Maunganui, was given by Tamateaarikinui of the Takitimu canoe. He named it after the ancient mountain in Hawaiki climbed by the God Tane on his quest in search of nga kete wananga (the ancient baskets of knowledge).

[175] Mauao or Maunganui is associated with several ancestors from Hawaiki who undertook rituals and ceremonies or built alters (tuahu) on their arrival in this area so that settlement could take place. Thus it has historical importance and a deep cultural and spiritual significance which, we were advised, extends from the ocean floor (including Tanea Shelf) to its peak.

[176] Te Awanui (big river) is the name of the channel or body of water that runs from the mouth of the Waimapu River to the base of Mauao. This was the traditional path that



was created when Mauao was moved to the sea. The name is also used to refer to the entire Tauranga Harbour. Mr Charlie Tawhiao stressed that Te Awanui is important in terms of the tribes' identities. According to him they discuss it as an *identifier* and as an *integral part* of their territory, inextricably linked to their health and welfare.

Ancestral Relationship and Heritage Values

[177] Mr Hauata Palmer, a kaumatua of Ngai Te Rangi, advised that Mauao is the sacred mountain for all tangata whenua of Tauranga Moana who are themselves linked by whakapapa (genealogy). It is, he claimed, *the most sacred landmark in the Tauranga area and has significant historical value for us*. In Mr Tuanau's opinion, it is the most *sacrosanct place of all Tauranga Moana*. Mr Morehu Ngatoko Rahipere noted the mountain holds much history and that there were battles fought on the mountain. Thus it is considered a waahi tapu. Mauao Historic Reserve and Mauao Recreation Reserve are registered waahi tapu on the New Zealand Historic Places Trust Register of Historic Places, Historic Areas, Waahi Tapu and Waahi Tapu Areas.

[178] Te Awanui is considered a symbol of tribal identity, mana and rangatiratanga. It is this harbour that physically links all the tribes of Tauranga to each other, as demonstrated to us through the production and translation by Mr Awanuiarangi Black of the waiata (song) Tu Mokemoke.

The Cultural Landscape

[179] The relationship of the tangata whenua to these iconic features was demonstrated to this Court, through evidence of:

- [a] tribal names such as Nga Papaka o Rangataua (the Crabs of Rangataua – used to describe certain hapu of the Rangataua area) and place names such as Te Paritaha o Te Awanui (the tidal bank of Te Awanui), Tauranga Moana (the anchorage, resting place, fishing ground);
- [b] tribal waiata/moeatea (songs) and haka;



- [c] expressions of kaitiakitanga manifest through stories of human deeds and activities or by stories of taniwha and sea kaitiaki such as stingrays and certain species of shark and fish;
- [d] associated customary or cultural practices;
- [e] tribal histories such as those concerning Kuia Rock and the Ruahine sand bank and other stories; and
- [f] oratory.

[180] To the tangata whenua, these cultural sites have a mauri (or life essence) binding each member of the tribes through mana (prestige), tapu (sacredness), and whakapapa (genealogy) to these sites and the early ancestors of the canoes who discovered them. It is these links from the past to the present that create the relationship the tribes have with their ancestral lands and waters.

[181] The nature of the relationship the tribes have with Te Awanui was perhaps best captured in the expression provided by Mr Hauata Palmer, *Ko au te Moana, ko te Moana ko au*, or *I am the sea - the sea is me*. He used this saying when he explained that the marine environment has been their source of sustenance, recreation and spiritual well-being. In terms of its fisheries the relationship of Maori with their relatives of the sea was captured in a similar way when Hori Tupaea, a chief of Ngai Te Rangi, stated in ancient times, *Ko au te patiki, ko te patiki ko au* or *I am the flounder - the flounder is me*.

[182] Mr John Te Kira Toma advised that Te Awanui was and remains a major settlement area and he named in excess of 45 places dotted around its margins which were villages, pa sites or marae.

[183] In practical terms the stretch of Te Awanui affected by the Port of Tauranga's application to dredge along the shipping channel was used, and continues to be used, as a customary harvesting area, as a waka route and as a place to find rongoa (health remedies).

[184] We were told that the kai of a region reflects the mana of the people of that region. Te Awanui was and remains a major food source for the Tauranga tribes,



jealously guarded and protected. The previous abundance of the fishery in the harbour is well documented and an example from the evidence relates to Taiaho, another Ngai Te Rangi chief, who once said of Te Awanui, *Kaore koe e mate kai ana, anei taku mara kai* which when translated means, *You will never be hungry for here is my food garden*. The entire area surrounding Mauao has also been an important customary food gathering site.

[185] Spiritually, Mauao and Te Awanui remain for the tribes, the passage way to Hawaiki. It is through these waters that the spirits of the dead leave on the outgoing current, past Panepane Point on the southern end of Matakana Island, out into the Bay of Plenty, to Tuhua and then on to the ancient homeland - Hawaiki. Evidence of this pathway taken by the ancestral spirits of the appellants was provided by Reon Roger Tuanu and Mr Matiu Dickson through waiata and prose.

Other Sites of Significance

[186] The entire area known as Te Paritaha o Te Awanui and the Number 2 Reach of the shipping channel are considered an important spawning area and nursery for juvenile pipi. The evidence was that from ancient times to the present, it has been considered an important fishery for the tribes and their identity and their way of life. The pipi are considered a taonga species, with evidence that the appellants consider that they have whakapapa (genealogy) linking them directly to the environment, the sand, the sea and to the pipi. Mr Olsen explained this Maori world view:⁸⁹

22. ... as a holistic framework in which all things both animate and inanimate are connected through a web of kinship. Thus all things are deemed to have a life force/mauri. It is the principle of mauri that determines environmental and cultural well-being, for Māori the protection of mauri (spiritual integrity) is paramount.

[187] Mr Morehu Ngatoko Rahipere (born in 1927) told us that it was and continues to be a significant mahinga kai (food gathering area). According to him, the name Te Paritaha o Te Awanui is derived from its position in reference to Mauao. At one time prior to the port development at Sulphur Point, Te Paritaha was much larger and easily accessed by foot. Now it may only be accessed by boat.

[188] Mr Brendon Taingahue gave evidence that he collected pipi from Te Paritaha when he was younger and he continues to do so today. It was his view that is still a

⁸⁹ Olsen, EIC, at [22]



plentiful source of pipi for the tangata whenua and we note this accords with the ecological evidence in these proceedings. It seems that the Bay of Plenty District Health Board monitors shellfish health under a programme called Toi Te Ora. Results from monitoring indicate that shell contamination occurs at various places around the harbour thus increasing the significance of Te Paritaha as a customary fishery.

[189] We also heard evidence that kina has been harvested at the entrance to the Harbour where the species is, we were told, abundant at around 20 feet down. Mr Graeme Borrell believes these beds of kina are the main breeding stocks for that species. There was limited scientific evidence on this point, however. What we can be certain of is that mussels are collected at the entrance to the harbour and on rocks at the foot of Mauao along with kina, paua and koura.

[190] Ms Antoine Coffin referred to traditions associated with Panepane Point (or Te Panepane o Raumati). These traditions concern the beheading of Raumati who, according to her account, was responsible for the burning of the Te Arawa Waka. In seeking revenge, Hatupatu of Te Arawa with his brothers fought Raumati and his kin at the base of Mauao and overcame him after facing off towards Panepane Point. Mr Matiu Dickson referred to a waiata that commemorates the sacred nature of this site and likens the sounds of the tides to the falling of tears for those buried there. Panepane, we were told by Ms Coffin, is still revered today by Matakana Islanders and descendents of Raumati living at Wairoa-Bethlehem.

Kaitiakitanga

[191] To nurture their relationship with Te Awanui, we were told that over many centuries the tribes developed management practices and customs to preserve the resources of the area. As kaitiaki, they used tikanga and kawa (rules/customary practices and rituals) to moderate and manage the tapu aspects of the relationship with these sites and waters and the resources to be found there. These tikanga, according to several witnesses, can be sourced to the gifting of the first fish-hook from Tangaroa who imposed conditions on its use. These rules included:

- [a] requirements to practice karakia (prayer and incantations);
- [b] the return of the first fish caught in reciprocity for his initial gift; and



[c] limiting catches to only that which was needed.

These rules, it was contended, continue to pervade the appellants' fishing practices to this day.

[192] According to the report attached to the evidence of Mr Anthony Fisher (Appendix B), the Tauranga Moana tribes acted as guardians of the domain of Tangaroa and the sea creatures who were his kin. The evidence before us touching on the subject, noted that management included the imposition of rahui or prohibitions against harvesting, restrictions on take, preservation and propagation of sea resources and harvesting done in line with the Maori lunar calendar which prohibited or permitted harvesting certain species at various times of the year.

[193] The ability to protect and manage these ancestral resources as kaitiaki is considered important, because it discharges the tikanga obligation of the appellants to future generations. An example from the evidence of Mr Anthony Fisher relates to the *Ngati Te Rangi Resource Management Plan (1995)* he developed and its first whakatauki or proverb exalting the people to care for their tribal domain including the feet of Mauao.

[194] Management also ensures other cultural practices and values which underpin the way of life of the appellants can continue. Such practices and values include manaakitanga (ensuring there is kaimoana to feed manuhiri or visitors and whanaunga or extended family not resident in Tauranga). In so providing, the mana and prestige of the Tauranga Moana tribes is upheld. There is major whakama or embarrassment when no kaimoana can be provided in accordance with this custom.

[195] Thus, settlement and fishing and gathering remain tangible expressions of the identity of Tauranga Moana tribes and the relationship they enjoy with the physical and metaphysical aspects of Mauao and Te Awanui and their surrounds.

Te Awanui – The Fishery

[196] The *Te Awanui Tauranga Harbour Iwi Management Plan (2008)*⁹⁰ notes that kaimoana was gathered from these waters on a seasonal basis. The authors reflect on the use of Te Awanui as a fishery noting that seasonal harvesting was and remains a feature

⁹⁰ At pages 59 - 61



of the traditional and contemporary way of life of the tribes of Tauranga Moana. The evidence we heard was that people gathered and still gather kaimoana such as kina, koura (crayfish), paua, pipi, tuangi, papaka (crabs), kukuroa (horse mussels), titiko and they fished and continue to fish the species to be found in the harbour and its oceanic surrounds.

[197] We received evidence demonstrating such use from ancient times, during the 20th Century and continuing into the present. In particular we note the report of Robert A. McClean,⁹¹ produced by Te Timatanga Neil Te Kani, recording the importance of these fisheries for sustaining Maori living in the area. In addition, the importance of Te Awanui as a fishery was addressed by several witnesses including:

- Mr Hauata Palmer, who told us about their connection and dependence on Te Awanui as a food source, whilst explaining their tikanga as applied to these fisheries.
- Mr Charlie Tawhiao, who explained that eating food from Te Awanui was about continuing their traditions and cultural practices and reconfirming their ancient and long-standing links with Te Awanui and Tauranga Moana.
- Mr Penetaka Brian Dickson explained that there are cultural obligations that the tribes must meet to maintain their mana over the waters that surround Mauao and Te Awanui. Having the ability to manage the resources of Te Awanui, as an expression of their rangatiratanga and kaitiakitanga, is an essential component in meeting their cultural obligations.
- Mr Brendon Taingahue described how he wants his children to collect kaimoana from Te Awanui so as to *reaffirm their connection to Te Awanui by gathering pipi at Te Paritaha o Te Awanui and kina, paua and other kaimoana at Mauao*, for this he advised, was *a fundamental part of what it means to be Ngai Te Rangi*.

⁹¹ *Tauranga Moana – Fisheries, Reclamation, And Foreshore Overview Report (April 1999, Vol 1)*



- Mr Anthony Fisher recorded the stories of elders who could recall families travelling from Waipu Bay, Matapihi, to camp at Waikorire (Pilot Bay) below the base of Mauao to gather kaimoana and to harvest karaka berries from karaka tress that once thrived on the base of the mountain.
- Mr Hori Ross and Ngaroimata Ngatai Cavill advised that foreshore from Whareroa to Mauao was completely sandy prior to the development of the Port. It was the main walkway to Mauao and along this foreshore people gathered shellfish such as pipi, pupu, koikota and tupa.
- Mr John Te Kira Toma noted that Te Awanui was a place to meet and enjoy and practice whakawhanaungatanga (rekindling familial relationships).
- Mr Reon Roger Tuanau advised that the important thing about kaimoana was the practice, the tikanga and the kawa associated with this resource and the pride and the learning derived from engaging in harvesting it.

Impacts of Development on Te Awanui

[198] After referring to the continuing ability to gather kaimoana and to fish, nearly all the witnesses for the appellants complained about the impacts of urbanisation and port and industrial development on Te Awanui. These changes, aggravated by land use changes within the catchment, have led in their view to the degradation and diminishment of Te Awanui and its fisheries. There has also been a discernible decline in shell-fish and fish stocks, with a large number of witnesses concerned that the abundance of kaimoana previously associated with Tauranga Moana is no more.

[199] A summary of how these adverse effects impact upon the appellants comes from the *Te Awanui Tauranga Harbour Iwi Management Plan (2008)*⁹² where the impacts of any destruction of cultural sites was described as follows:

5.1.1 Pressures on Significant Cultural Sites

Significant cultural sites form an integral part of Māori life. These areas can include kai gathering areas, mahinga mataitai, wahi tapu, wahi taonga and wahi tupuna. They give Māori reference points for direction and growth and ensure stable cultural development. Removal or destruction of these sites are a major

⁹² Page 27



issue for whanau, hapu and iwi and threatens the integrity of our tribal identity and growth ...

Environmental Management

[200] To give modern day expression to their rangatiratanga and kaitiaki obligations to work on restoring the mauri of Te Awanui, the iwi of Tauranga Moana have worked together on the *Te Awanui Tauranga Harbour Iwi Management Plan (2008)*. According to Kia Maia Ellis, the purpose of this plan was to address the significant concern they had around the ongoing impact of urban and industrial development on Te Awanui. It was a way for the tangata whenua to have a voice under Sections 61, 66 and 74(2A) of the Resource Management Act 1991.

Fisheries Management

[201] As kaitiaki, the Tauranga Moana tribes aspire to co-manage their rohe moana (traditional sea domain). This area includes Te Awanui. We were told that they attempt to do so in accordance with their tikanga underpinned by the values of manakitanga (hospitality), whakawhanaungatanga (cause to establish familial relationships), whakapapa (genealogy) and aroha (love or respect). In giving expression to these values they have established or worked with the Ministry of Fisheries (now Ministry of Agriculture and Fisheries) to establish:

- [a] The Tauranga Moana Iwi Customary Fisheries Charitable Trust with two representatives from each of the three iwi and invited representatives, one representative from Tuhua and one from Te Puni Kokiri. The Trust was represented before us by the Chairman, Mr Penetaka Brian Dickson. The Trust aims to:
 - [i] provide for the education of fishing and environmental management based on Maori cultural values;
 - [ii] produce educational resource material on the Maori relationship with Papatuanuku and Tangaroa;



- [iii] promote research into Maori cultural and scientific tikanga; and
- [iv] educate and promote the culture and history of Maori customary environmental and fisheries tikanga.

It provided a cultural impact assessment on the proposed channel deepening, widening and dredging.

- [b] Tangata kaitiaki positions appointed under the Fisheries (Kaimoana Customary Fishing) Regulations 1998 so as, we were told, to uphold the mana over their customary fishing rights and resources in their rohe moana. Tangata kaitiaki have authority to grant applications for customary harvesting; and
- [c] A mataitai under the Fisheries (Kaimoana Customary Fishing) Regulations 1998 was approved by Minister of Fisheries and is known as Te Maunga o Mauao Mataitai Reserve. A letter dated 25 August 2008 from the Minister declaring the establishment of the reserve was filed. In addition, notice of the establishment of the reserve was published in the New Zealand Gazette on 28 August 2008, effective from 25 September 2008. This was also produced for these proceedings by Mr Penetaka Brian Dickson, who aside from being the Chair of the Tauranga Moana Iwi Customary Fisheries Trust, is also Chair of the Te Maunga o Mauao Mataitai Reserve. According to Mr Dickson, the area was chosen because of its *historical and traditional significance in providing sustenance to the tribes*. The Reserve covers an area of approximately 6 km² which includes the waters surrounding Mauao, Moturiki and Motuotau Islands and part of the Tauranga Harbour and thus will be directly affected by the proposed consents. Commercial fishing is excluded from this area and recreational fishing restricted for certain species, such as mussels or kutae. The Reserve is an inshore area where, we were advised, paua, kina, kutae, pupu and koura can be gathered. The well known areas are Te Paritaha o



Te Awanui for pipi and tuangi and Mauao, Moturiki Island and Motuotau for kina, paua, kutae and koura.

The Iwi of Tauranga Moana

[202] Ngai Te Rangi and representatives from Nga Ruahine and Ngai Tamarawaho of Ngati Ranginui and one representative from Nga Potiki appeal from the decision of the Hearing Panel dated 31 May 2010 granting Consents 65806 and 65807 to allow dredging of that part of the harbour used as a shipping lane impacting in particular on Mauao and Tanea Shelf, Panepane Point, Te Paritaha o te Awanui and Te Kuia Rock.

Ngai Te Rangi

[203] Te Runanga o Ngai Te Rangi Trust was established in 2007. There are 11 Ngai Te Rangi marae, with each having a representative on the Runanga. These marae are named in the evidence of Mr Charlie Tawhiao and are located on strategic sites adjacent to Te Awanui and costal foreshore, with a large number on Matakana Island. At the last census in 2006, approximately 12,600 people identified as Ngai Te Rangi with around 42% living in Tauranga. It is those living in Tauranga that represent the ahi kaa of the tribe. Mr Graeme Borrell advised that it is the role of ahi kaa to protect these sites, their waters and their resources, particularly their fisheries.

[204] Ngai Te Rangi are descendants of those who arrived from Hawaiki, principally on the Mataatua canoe. They have whakapapa with Ngati Ranginui and Waitaha who were in occupation when Ngai Te Rangi arrived in this district from the East Coast.

[205] We received evidence about the importance of the relationship that Ngai Te Rangi has with Mauao and Te Awanui and how these were inextricably bound to their identity and mana as a tribe, when witnesses before us proclaimed their pepeha (tribal proverb):

Ko Mauao te Maunga	Mauao is the mountain
Ko Tauranga te Moana	Tauranga is the sea
Ko Mataatua te waka	Mataatua is the canoe
Ko Ngai te Rangi te iwi	Ngai te Rangi is the tribe
Tihei Mauri Ora	Thus the life force is awakened



[206] Mr Anthony Fisher, who interviewed over sixty elders of Ngai Te Rangi for research he completed, noted that Tauranga Harbour was and continues to be one of *the primary cultural markers and a source of mana and identity, in terms of physical landscape, cultural relationship and spiritual relationship* and that *their way of life, and hence, their culture, practices, and traditions were strongly influenced by, and linked to, Te Awanui.*

[207] Ms Rongokahira Sandra Tuhakaraina of Nga Potiki, a hapu of Ngai Te Rangi, who is one of the appellants also gave some evidence of her hapu relationship with Mauao and its surrounds.

Ngati Ranginui

[208] Ngati Ranginui descend from those who arrived in Aotearoa on the Takitimu canoe. The people of Ngati Ranginui comprised several hapu whose rangatiratanga is respected by their central tribal authority. Thus in this Court, Ngati Ranginui was represented by several witnesses from hapu or sub-tribes such as Ngai Tamarawaho and Ngati Ruahine. Mr Morehu Ngatoko Rahipere demonstrated the importance of Mauao and Te Awanui to his tribe in his evidence summarised as follows:

Ko Mauao, ko Puwhenua oku Maunga	Mauao and Puwhenua are my mountains
Ko te Awanui toku moana	Te Awanui is my sea
Ko Takitimu toku waka	Takitimu is my canoe
Ko Ngati Ranginui toku iwi	Ngati Ranginui are my people
Ko Ngai Tamarawaho toku hapu	Ngai Tamarawaho is my sub-tribe
Ko Huria toku marae	Huria is my marae

[209] The ancient nature of the relationship enjoyed by Ngati Ranginui with Mauao was described by Mr Reon Roger Tuanu, who told the Court that the rangatira of Takitimu canoe, Tamatea Arikinui, *ascended Mauao and through karakia he imbued the mauri into Mauao for his people and their descendents.* In specific terms, he planted the mauri of the wananga (traditional learning) of Rehutai and Hukatai under the rock Tirikawa known today as North rock. Mr Antoine Coffin added that he also planted harakeke at the summit and conducted rituals to open up the lands for occupation. Mr Lance Waaka added to the evidence by providing the full tradition associated with Mauao.



Ngati Pukenga

[210] Although not appellants, our review would not be complete without acknowledging Ngati Pukenga's relationship to Tauranga Moana. This iwi descend from the ancestors of Mataatua canoe. The evidence of Mr Anthony Fisher informs us that Ngati Pukenga were a *nomadic mercenary-type tribe who fought and lived in many areas of the North Island. They were hired for their prowess as warriors.* However, Ngati Pukenga eventually settled at Rangataua with Nga Potiki and Ngati He and collectively they are referred to as *Nga Papaka o Rangataua – the Crabs of Rangataua.* Mr Awanuiarangi Black gave evidence before this Court as a cultural expert for Nga Ruahine but he is also a member of Ngati Pukenga. In speaking of the importance of Mauao, he referred to the mountain and its surrounds as *powerful esoteric places.* In his view, the depth of history that pertains to Mauao is extensive and it was a key area within Tauranga embodying an *abundance of knowledge like no other.* In terms of Te Awanui, he referred to late Hohua Tutengaehe (once a recognised spokesman from this area) and his understanding that the full name for this water-body was Te Awanuiarangi, the name of the celestial pathway, between heaven and earth.

Cultural Evidence for the Appellants

[211] We were told by witnesses for the appellants that the significant historical and cultural status of these sites and waters and their relationship with these must, in accordance with their tikanga, be protected.

[212] Whilst acknowledging that the mauri of Te Awanui has been diminished by previous reclamation works, dredging of the harbour, pollution, over-fishing and numerous other impacts that flow from the industrial use, urban sprawl and land use changes around the harbour, they contend their relationship remains as does their mana, rangatiratanga and kaitiakitanga over the sites. As Mr Black put it, they have a *intergenerational responsibility* to their ancestors and grandchildren *to preserve in the best state possible an environment that will be a fruitful resource for future generations.*

[213] The appellants believe that the cumulative effects of these previous impacts, which have all occurred following the confiscation of their lands and a number of public works takings, combined with the effects of the proposed dredging, widening and deepening of the shipping channel, will further undermine their relationship,



kaitiakitanga, cultural values and traditional and cultural practices associated with Mauao and Te Awanui. Mr Koning counsel for Ngai Te Rangi, submitted that the proposed dredging, when added to previous cumulative effects, represents a tipping point in terms of the Maori relationship with Te Awanui and Mauao. He also contended that previous cumulative effects have already degraded the mauri of Te Awanui and Mauao which has resulted in lasting impacts on the mana of Ngai Te Rangi. The Port's proposal will degrade the mauri of Mauao and Te Awanui even further and adversely affect Ngai Te Rangi. Ms Rolleston for Nga Ruahine, contended that the Port's proposal represents a significant cumulative physical adverse effect on areas of immense spiritual and cultural value, with adverse effects affecting the relationship of Nga Ruahine to Te Awanui and Mauao.

[214] Ngai Te Rangi further claim that the Port fails to understand the true nature of the deep association between them and Te Awanui, reducing that relationship to nothing more than one based on the harbour as a source of kaimoana and describing any other cultural effects as residual. They contend that while Mauao and Te Awanui are important sites for kaimoana, these also serve, according to them, as an anchor nourishing their history, traditions, identity and mana. Dredging, widening, and deepening the shipping channel, will result in significant adverse cultural effects.

[215] We have discerned from submissions and the evidence the following potential cultural effects:

- [a] There will be interference with the sacred nature of Mauao, the ancestral mountain of all the tribes of Tauranga Moana by the widening of channels and partial removal of Tanea Shelf;
- [b] Panepane Point (an important significant historic waahi tapu site) could be affected by the Matakana shoreline moving beyond its observed historical range resulting in scouring of this point;
- [c] An immediate loss of pipi, and possibly other species such as kina, which by tikanga and tradition contravenes the genealogical associations of the tribes with Tangaroa and his sea creatures. This reduction will occur with no guarantee of these species, particularly those not surveyed, being restored to current stock levels;



- [d] There will be an impact on the connection the tribes have with Te Awanui and Mauao. Mr Anthony Fisher for example, was concerned that for every generation of Ngai Te Rangi, developments within the harbour have caused loss in terms of their connection to the harbour and that the Port's proposal would add further to that loss;
- [e] There will be a small change in water velocity and tidal levels of Te Awanui causing a further disruption of the natural rhythm and processes of Te Awanuiarangi, the original pathway of Mauao as he was dragged to the sea, and the waters through which their dead return to Hawaiki;
- [f] There will be some loss of tikanga and matauranga (knowledge) including place names associated with the sites destroyed by the dredging, widening and deepening of the shipping channel. Mr Awanuiarangi Black listed specific fishing grounds that could be affected as:
- Taurangaiti
 - Paritaniwha
 - Matangangara
 - Tutakiroto
 - Patukaramea
 - Puhirere
 - Rewa

He also suggested that the proposed dredging, widening and deepening would impact on the sandbank named Ruahine, where the Tainui canoe beached.

- [g] Te Paritaha o Te Awanui, Panepane Point, Waikorire (Pilot Bay) and Tanea Shelf of Mauao will be directly affected by the proposed removal of material from Te Awanui, with resulting effects on the cultural relationship with Te Awanui and recreational activities;



- [h] There will be the marginalisation of the rangatiratanga and kaitiakitanga of the appellants by over-riding the management regime of the Tauranga Moana Iwi Customary Fisheries Charitable Trust, tangata kaitiaki and their management of Te Maunga o Mauao Mataitai Reserve under the *Fisheries (Kaimoana Customary Fishing) Regulations 1998*; and
- [i] There will be an impact on the ancestral relationship, mana and identity of the Tauranga Moana tribes with Te Awanui and Mauao.

[216] Counsel further submitted that these adverse effects cannot be avoided, or adequately remedied or mitigated. In fact, given the tikanga of the tribes and the associated responsibilities they must discharge in relation Te Awanui and Mauao to protect these for future generations, they are unlikely to agree to any dredging of Te Awanui, Te Paritaha o Te Awanui, Tanea Shelf or any other reach of the Port shipping channel, a matter Mr Koning acknowledged. However, he also agreed that should this Court grant consent, Ngai Te Rangi would consider participating in the implementation of any conditions imposed.

Cultural Evidence for the Port

[217] The Port of Tauranga called Mr Buddy Mikaere, a consultant specialising in dealing with Maori cultural issues. Mr Mikaere noted that for the Port there is no debate as to the cultural importance of Te Awanui and Mauao to tangata whenua, or the emotional ties that people have to its waters and surrounds as an integral part of their tribal identity. The evidence of the appellants in this regard is not challenged.

[218] There is no argument from his perspective that the operations of the Port take place within a cultural landscape or that there are archaeological sites of significance in that landscape, or that reference needs to be made to the cultural landscape in dealing with tangata whenua.

[219] But on his review of the evidence, the main elements of the cultural landscape are Mauao, Te Kuia Rock, Tanea Shelf, Te Paritaha, Panepane, North Rock, Moturiki and Motuotau, most of which are not impacted by the dredging. The only aspects of the cultural landscape affected, in his view, are Te Paritaha, Tanea Shelf and Panepane Point.



Those effects will be modification of the seabed in respect of Te Paritaha and Tanea Shelf and possible risk of scouring at Panepane Point.

[220] In respect of these sites, the proposal to dredge so as to deepen and widen the shipping channel would result in cultural impacts on the harbour on two counts. He stated:⁹³

21. ... The first and what appears to be the main issue is the loss of a highly valued kai moana resource that has been of significant importance to all Tauranga Moana iwi and hapu over many generations. Associated with this issue is the potential for other traditional food gathering areas to be impacted upon as well.
22. The second ground is found in the potential to impact on sites of significance within or adjoining the project footprint.

[221] He concedes there will be impacts on cultural values associated with Te Paritaha o Te Awanui, Tanea Shelf and Panepane Point.

[222] In terms of Panepane Point, Mr Mikaere, pointed to Dr de Lange's evidence demonstrating that the point is a dynamic spit area and that the shoreline has fluctuated widely since traditional times but particularly from 1922-1995. We note that the experts have all agreed that the ebb tide delta is the region of greatest uncertainty of the Port's application to dredge, widen and deepen the shipping channel and there may be some effect on Panepane Point. In terms of the historical significance of Panepane Point as the place where Raumati was killed by Hatupatu, he noted that the dynamic nature of the shoreline has caused accretion and thus the killing would have taken place well inland of the current shoreline.

[223] In terms of the modification of Tanea Shelf and Te Paritaha, he considered that as there will be no visual impact, given modification happens under water, and as proper mitigation measures have been advanced by the Port to deal with habitat loss, he considered that cultural landscape values will remain unchanged. He further suggested that traditionally, Maori had no *qualms in modifying the landscape to fit their needs*. He considered that Mr Coffin's evidence likening the modification of the seabed at Tanea Shelf as akin to *cutting the toes of Mauao* as a modern day gloss. Mr Mikaere considers that the remedial measures proposed by the Port will mitigate these impacts and thus the impacts are acceptable.

⁹³ Mikaere, EIC, at [21] – [22]



[224] As to the appellants' belief that there will be impacts on the mauri and health of Te Awanui, he opined that the Port Zone has been heavily modified and is no longer in a pristine state. Thus the belief of the appellants that the mauri of the harbour will be diminished should not be determinative of the issues before this Court. Rather, the Court should recognise that the mauri of Te Awanui has historically been impacted, and that while it may be further diminished during the project, the mauri and health of the harbour will be subsequently enhanced by the proposed conditions offered by the Port.

[225] But, Mr Mikaere considers that much of the evidence of the appellants raises historical Treaty of Waitangi issues that have limited relevance to these appeals and should be balanced against the very real economic benefits that the Port represents for the region. Alternatively, the evidence raises issues concerning historical environmental effects from urban and industrial development, historical harbour works, the development of the harbour bridge and causeway, over harvesting of the fisheries, and a number of other factors. Some of the suggested remedial actions, including potential co-management regimes that may be adopted for the future management of the harbour as a result of a Treaty of Waitangi settlement, as addressed in the evidence of Mr Tukuroirangi Morgan, are all matters that have nothing to do with the Port's current application. In fact on the conditions advanced, an element of co-management is achieved.

[226] Mr Mikaere concluded that there are very strong cultural elements attached to these appeals, with which he has every sympathy. But on an objective level, all the proper planning, ecological, environmental and associated requirements are met and, he opined, in some cases *very innovative ways have been found to address the tangata whenua concerns to a level which is unmatched in my previous experience with harbour and marine developments.*

[227] Counsel for the Port, Ms Hamm submitted that the evidence of Mr Mikaere, coupled with the evidence of the scientific experts called by the Port, indicate that the coastal and ecological effects on Mauao (Tanea Shelf) and Te Paritaha are adequately addressed by the proposed conditions of consent. While Panepane Point may be affected by flow increase around the spit and flow on the south-western side of Matakana Island, the area is expected to continue fluctuating within the historical limits of 1922-1995 shorelines. In addition, while there may be some short term effects on ecology and habitat, these effects will be mitigated by the suite of conditions offered by the Port,



including the Kaimoana Restoration Plan. Finally, she contended that any residual cultural and spiritual effects have been addressed more comprehensively by the Port's proposed conditions as offered when closing its case for these appeals.

Conclusions on Cultural Effects

[228] The undisputed evidence before the Court is that Mauao and Te Awanui and their surrounds are iconic lands and waters of great historic and cultural significance to the tribes of Tauranga Moana. We also understand that their relationship with these features including Te Paritaha o te Awanui, Panepane Point and Mauao including Tanea Shelf, is an ancestral and historical one that extends back to settling of Aotearoa by their ancestors from Hawaiki, and for Ngai Te Rangi after arriving in the Tauranga region from the East Coast.

[229] We note that the appellants consider that Mauao and Te Awanui are indivisible and inextricably linked thus any effect on any aspect of these features, will affect the whole. From their perspective, there are cultural effects that flow from dredging, deepening and widening the shipping channel that will impact on all of Tauranga Moana. Thus they have identified a number of cultural effects that relate to the entire harbour and its oceanic surrounds.

[230] However, and based on all the evidence, we consider it is the appellants' concerns about the impacts of the dredging on those parts of Te Awanui relating to Te Paritaha o te Awanui, the ebb tide delta and Panepane Point, and Mauao at Tanea Shelf, including the associated fisheries and habitats that are directly relevant to the appeals. We also consider their concerns about the impacts on the management of customary fisheries by local tribal tangata kaitiaki and their management of Te Maunga o Mauao Mataitai Reserve established under the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 and the Fisheries (Kaimoana Customary Fishing) Regulations 1998.

[231] The mataitai, Mr Koning submitted, *has its own legal status as an expression of the Crown's continuing treaty obligations* to Tauranga Moana iwi. We agree with this position and we note that section 10 of the Treaty of Waitangi (Fishing Claims) Settlement Act 1992 and the Fisheries (Kaimoana Customary Fishing) Regulations 1998 record that the Crown agreed in 1992 to recognise and provide for customary food gathering and the special relationship between tangata whenua and places of importance



for customary food gathering (including Tauranga ika and mahinga mataitai). It was established after the Minister of Fisheries was satisfied, inter alia, that there was a special relationship between tangata whenua and the proposed mataitai reserve. In addition he needed to be satisfied that the mataitai reserve was an identified traditional fishing ground and of a size appropriate to effective management by tangata whenua. The Mauao Mataitai Reserve is managed in practice by tangata kaitiaki, and no person may engage in commercial fishing in the reserve.

[232] We consider that the law on mataitai reserves clearly reflects the interests of the Crown and Maori to provide for customary food gathering and the special relationship between tangata whenua and places of customary food gathering importance such as Te Paritaha o te Awanui, Mauao, and the general area within the shipping channel captured within the boundary of the reserve. Thus we reject Ms Hamm's argument that the reserve is predominantly about addressing the sustainability of the fishing resource in areas of significance to iwi for customary food gathering. Rather, the mataitai reserve was established to recognise and provide for the special relationship tangata whenua have with this area.

[233] We conclude as much because of the emphasis in the legislation on the relationship with such places. Thus, the impact of the proposal to dredge, widen and deepen the channel on the mataitai reserve is directly relevant to our Part 2 analysis, and we consider that there will be significant adverse cultural effects on the exercise of the kaitiakitanga and rangatiratanga of the appellants as a result. These impacts we have provided for in our proposed conditions.

[234] The Port's evidence indicates that any other effects on the broader Tauranga Moana (Harbour and Bay of Plenty), other than within the footprint of the project, will be minimal. Within the project footprint, it is these features that the Port acknowledges will be physically affected with a resulting need to avoid, mitigate or remedy any resulting cultural effects. The need to consider these effects relates to Section 104 of the Act which requires that we must have regard to any actual or potential effects on the environment.

[235] As noted previously in this decision, Section 104 of the Act also requires we have regard to a range of Policy Statements and Plans and any other matter we consider relevant and reasonably necessary to determine the application. There are also a number



of policies in the New Zealand Coastal Policy Statement, the Regional Policy Statement, the Regional Coastal Plan and other Regional and District Plans that complement Part 2 of the Act as agreed by the planning experts at their conference. These policies *inter alia* recognise the kaitiaki status of tangata whenua and require those exercising powers and functions to avoid, remedy or mitigate adverse effects on sites, resources and areas of significance to tangata whenua.

[236] In cases involving Maori issues, we are also required to have regard to the relevant provisions of Part 2, namely Sections 6(e) and 6(f), 7(a) and 8. Under Section 6(e) of the Act:

6 Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for a number of matters of national importance:

...

- (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:
- (f) the protection of historic heritage from inappropriate subdivision, use, and development.

[237] In terms of Section 6(e) and (f) of the Act, we find that Mauao, Te Awanui and their surrounds are the ancestral lands and waters of the tribes of Tauranga Moana and their respective hapu. Their relationship and their culture and traditions with this land and waters and associated taonga such as the fisheries, turns on their historic, spiritual and cultural associations and values. We also find these features form part of their historical heritage. We note that there will be an impact on their ancestral relationship, their culture and traditions including the mana and identity of the Tauranga Moana tribes with Te Awanui and Mauao. We consider that will also be some effect on their historic heritage values associated with Mauao and Te Awanui.

[238] Under Section 7(a) of the Act and to achieve the purpose of the RMA:

7 Other matters

... all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to-

- (a) kaitiakitanga:

...



[239] There is no dispute that the Tauranga Moana tribes and their hapu are the kaitiaki of these features in terms of Section 7 and thus we must have regard to their kaitiakitanga.

[240] We also note that in achieving the purpose of the Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). As the tribes of Tauranga Moana have recognised kaitiakitanga and mana whenua over Mauao and Te Awanui, we must take into account the relevant principles of the Treaty of Waitangi in reaching our decision, which we consider to be:

- [a] the principle of reciprocity – the exchange of the right to govern for the benefit of all New Zealanders in return for the protection of rangatiratanga referred to as partnership;
- [b] the duty of active protection of Maori interests; and
- [c] the principle of mutual benefit.

[241] In practical terms our findings above mean that we accept the evidence of the appellants that there will be the following cultural effects. We consider these effects to be more than minimal (*de minimis*) and as such, must be avoided, remedied or mitigated to achieve an acceptable level of effect under Section 5 of the Act. These cultural effects are:

- [a] the interference with Mauao by the channel widening at Tanea Shelf;
- [b] the potential effects on Panepane Point that could be affected by the Matakana shoreline moving beyond its observed historical range;
- [c] the damage to Te Paritaha and the immediate loss of pipi and other kaimoana such as kina and paua, titiko etc;
- [d] potentially some loss of tikanga and matauranga (knowledge); and



- [e] the limitation on the rangatiratanga and kaitiakitanga exercised by the appellants under the management regime of the Tauranga Moana Iwi Customary Fisheries Charitable Trust, tangata kaitiaki and their management of Te Maunga o Mauao Mataitai Reserve under the Fisheries (Kaimoana Customary Fishing) Regulations 1998.

[242] We must also consider these cultural effects alongside the undisputed evidence of the Port of Tauranga that it is of national and regional economic significance. We are also convinced that its ability to develop further will ensure its continued relevance to exporters who rely on efficient and cost effective access to international markets. Such access is increasingly dependent on bigger shipping vessels with expanded container capacity

Consideration of Alternatives

[243] In cases such as this the Court is entitled to have regard to questions of alternatives. As the High Court noted in *Meridian Energy Ltd v Central Otago District Council (Lammermoor)*⁹⁴, although the test is not mandatory, it will clearly be more likely to arise in circumstances where matters under Section 6 arise.

[244] We accept that there are no alternative methods or routes which would allow for the deepening of the channel with lesser effects. The issue in this case is simply whether the depth and the width sought are required i.e. is the full extent of this alteration achieving sustainable management.

[245] The further modification of Tanea Shelf is to provide a safety margin for vessels of between 300m and 350m in length. The Maersk S Class at 350m is not a vessel identified as being one likely to utilise the Port in the next 10 years. Thus, the question must arise as to whether or not the effect on Tanea Shelf and on the Mauri of Mauao is justified and whether it can be delayed or avoided.

[246] We see there may be advantages in delaying widening of the channel at Tanea Shelf. It may be that vessels requiring the widening do not appear in New Zealand until late in the consented period of 15 years. If they do appear they may be more manoeuvrable or there may be appropriate assistance by way of large tugs. A delay

⁹⁴ [2010] NZRMA 477



would also give each party more time to appreciate the positions of other parties and work towards a better solution.

[247] Against this are the reasons advanced by the Port for doing the widening early and establishing new habitat on the proposed reef. This has advantages for kaimoana gatherers who would have improved access to the resource offered by a shallow reef community.

[248] Our conclusion is that the widening should be delayed as long as possible and thus the dredging done in at least two stages.

[249] Condition 9 of Proposed Condition 65806 requires the dredging to be done in at least two stages. This is appropriate but we require the wording to be as follows:

Stage 1

- 9.2 To cater for a Post-Panamax vessel of 5000 or 6000 TEU (slot) capacity vessel with a maximum draft of 13.5m the Consent Holder shall:
- (a) Model the Stage 1 vessel on a ship handling simulator to determine the extent of widening and deepening required to the shipping channels with no widening at Tanea Shelf.
 - (b) Provide details of the results of the modelling to the Regional Council and the TWRG.
 - (c) Carry out the dredging required to meet the channel dimensions determined by the modelling carried out in accordance with Condition 9.2(a).

Subsequent Stages

- 9.3 To cater for a vessel larger than dredged for in a previous stage, the Consent Holder will:
- (a) Model the vessel on a ship handling simulator to determine the extent of widening and deepening required to the shipping channels.
 - (b) Provide details of the results of the modelling to the Regional Council and the TWRG.
 - (c) Carry out the dredging required to meet the channel dimensions determined by the modelling carried out in accordance with Condition 9.3(a). Should this require widening at Tanea Shelf this may be done to the extent authorised by this consent (32 metres).

Final Stage

- 9.4 To cater for a vessel of similar design parameters to those used in the application document entitled *Assessment of Environmental Effects for*



Port of Tauranga Limited Channel Deepening and Widening February 2009, the shipping channels shall be deepened and widened in accordance with the parameters set out in conditions 2, 3 and 5 of this resource consent, and no further modelling will be necessary.

[250] Table 3 of the Big Ships Report shows vessels of 5,000 to 6,000 TEU (slot) capacity to have lengths up to 300m and beams up to 40.0m. We expect the vessel modelled under Condition 9.2(a) will not exceed these dimensions.

[251] Several parties suggested another alternative was that Tauranga Port not be used for big ships. We reject this alternative for several reasons:

- [a] It would not provide for the efficient use of the existing Port infrastructure;
- [b] It is not for this Court to make decisions as to which ports should or should not cater for big ships; and
- [c] If a consent cannot be granted without unacceptable impacts then it should be refused rather than suggesting another port is more appropriate.

THE PLANNING DOCUMENTS

New Zealand Coastal Policy Statement

[252] Gazetted on 4 November 2010, this Statement is clearly relevant to this application. There does not appear to be any dispute about the key factors of the Policy Statement, and the relevance of Objective 2 (with respect to natural character and natural features), Objective 3 (tangata whenua as Kaitiaki) and Objective 4 (public access and recreation) is acknowledged in this case.

[253] Objective 6 provides for development and use while recognising a whole series of values, almost all of which were at play in this case. In particular, the first bullet point:

Objective 6

...

- the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits;



[254] It might be said that the 2010 Coastal Policy Statement is more supportive of the Port's activities than the earlier one with the addition of Policy 6(1)(a):

- a. recognise that the provision of infrastructure ... are activities important to the social, economic and cultural well-being of people and communities; ...

[255] The Ports are of course specifically recognised in Policy 9 which requires that the Court:

Policy 9: Ports

Recognise that a sustainable national transport system requires an efficient national network of safe ports, servicing national and international shipping, with efficient connections with other transport modes ...

[256] This must be balanced against the other policies within the provisions, including those relating to biological diversity, kaitiakitanga, preservation of natural character, natural features and natural landscapes, historic heritage, public access, and water quality. Although arguably it could be said that the 2010 Policy is intended to provide for greater levels of development within the already developed coastal area, at least in respect of infrastructure and energy works, this proposition was not put by the parties in this case.

[257] On balance we have concluded that the 2010 Policy Statement is an attempt to more explicitly state the tensions which are inherent within Part 2 of the Act. They are more generally discussed therein than in the 1994 Policy Statement. In other words, the question of important infrastructure within the coastal environment is always a matter that the Court has had regard to as is evidenced in *New Zealand Rail v Marlborough District Council*⁹⁵, and the 2010 Policy Statement is a more explicit statement of the various issues which need to be integrated in reaching a decision in respect of the coastal environment.

[258] Some of these policies might in the circumstances of a particular case be irreconcilable. It may not be possible, for example, to preserve the natural character of the coastal environment while providing for the future infrastructural requirements of the Port. Nevertheless, in reaching an integrated decision it is the Court's duty to seek an outcome of sustainable management. Looked at in terms of the modified utilitarianism principles of John Stewart Mill, it would be seeking to maximise the benefits to all sectors of society while minimising the detriments. If viewed in this way, we consider

⁹⁵ [1993] 2 NZLR 641



that the New Zealand Coastal Policy Statement accords with the objectives of sustainable management of Part 2 of the Act and fits well the various considerations under Section 6, 7 and 8.

[259] The questions therefore of inappropriate development, which we will address shortly under Section 6, result in conclusions involving the balance we have just discussed.

[260] Importantly, Objective 3 intends to explicitly recognise the status of tangata whenua as kaitiaki of the coastal environment and provide for involvement in its management. As has already been identified in this case, a fundamental problem with this application was the failure to identify the relevant parties who had an interest in the harbour, and identify and address impacts upon them. Although consultation is not mandatory, it is difficult to see how the applicant could have addressed these issues without doing so. In fact, as consultation has continued in the case, the applicant's proposals in this regard have also become more consistent with that identified in the Coastal Policy Statement and the outcome sought in Part 2 of the Act.

The Regional Documents Generally

[261] The Regional Coastal Environment Plan and the Operative Bay of Plenty Policy Statement address both the Port and Harbour. This includes not only the area of Te Awanui, but Mauao itself and Matakana Island. The following is accepted by all the parties:

- [a] Parts of Mauao, the seaward coastline of Matakana Island and Motutau Island are deemed to be sites of significance (on land);
- [b] The shorelines of Mt Maunganui and Matakana Island are sensitive to coastal hazards;
- [c] The seaward margins of Mauao and Matakana, the Mt Maunganui coastline and surrounding Moturiki and Motutau Islands are Areas of Significant Conservation or Cultural Value (ASCV). Deposition Site H is not within the ASCV. All of the near shore replenishment site A and parts of B and C are located within the ASCV;



- [d] Mauao, Moturiki and Motutau Islands and the Harbour are outstanding landscapes and natural features, while Matakana Island is a regionally significant feature and landscape;
- [e] Two mooring areas are apparent; one in Pilot Bay and the other in the Port Zone adjacent to the Cutter Channel. Planning Map 11B does not show ASCV 4 extending into the portion of the harbour directly affected by the proposal. However, the accompanying text does make reference to areas outside of those shown in the Planning Map 11B and appears to discuss the values associated with the harbour generally. For example, the 3rd Schedule to the Regional Coastal Environment Plan notes that Sulphur Point provides one of the most important roosts for wading birds in the harbour and the 14th Schedule states that Tauranga Moana is rich in cultural heritage sites. Pilot Bay is specifically cited amongst a number of other sites as being of particular significance to Ngai Te Rangi.

[262] In addition to the Regional Coastal Environment Plan identifications we have discussed above, the Regional Policy Statement does discuss generally:

- [a] Matakana Island as a community landmark, while Mauao and the Harbour are identified as prominent landmarks;
- [b] The Port is identified as a major international link for the Bay of Plenty Region and a major component of the region's economy; and
- [c] The Harbour is recognised as an outstanding wildlife habitat in an area of exceptional botanical conservation values. While it notes that these values have been degraded by inappropriate activities, the RPS points to environmental improvements having been made through the protection of intertidal flats, the reductions of sewage and industrial discharges.

The Recognition for the Port

[263] It was not argued by any party that the regional documents did not recognise the importance of the Port for its economic activity and the importance of the Port being able to remain open for continuing trade. This is recognised not only in the regional



documents by the existence of the Port Zone, but by provisions that discuss the Port and its activities. As well as this, the Port holds a series of consents including those we have discussed for earlier widening and deepening activities.

[264] By the same token, as we have already recognised both the Regional Policy Statement and the Regional Coastal Environment Plan recognise the environmental and cultural importance of the various features of the harbour, including Mauao, Matakana Island and Te Awanui. When it comes to how tensions between these elements are addressed, unfortunately, the Regional Coastal Environmental Plan recognises the tension and requires them to be resolved without providing any particular criteria.

[265] We now turn to consider in slightly more detail the provisions relating to this application.

The Ngai Te Rangi Iwi Resource Management Plan (Te Awanui Tauranga Harbour Iwi Management Plan 2008)

[266] This Plan prepared in 2008 is intended to avoid reactive responses to resource consent applications or issues and policies that affect iwi and hapu⁹⁶. It identifies in some detail Te Awanui and the values associated with it. It specifically refers to the Act and Sections 61, 66 and 74 (see Chapters 4.2). At Chapter 5.1.2 it moves directly to discuss the questions of dredging. It sets out Objectives and Policies which are directly relevant to this application. The Introduction to these Objectives and Policies reads:

The need to balance economic and urban growth with cultural and environmental sustainability is increasingly apparent. The impacts of dredging that have caused and continue to cause detriment to the relationship with tangata whenua have with Te Awanui need to be taken into account and provided for.

OBJECTIVES

1. To protect and enhance the kaimoana, ecology and habitats of the harbour, from the adverse effects of dredging.
2. To provide mitigation for the erosive impacts contributed by harbour dredging in culturally significant areas of land within the harbour margins.

POLICIES

1. All dredging activity within the harbour must not adversely affect mahinga kai sites of Te Awanui.

⁹⁶ See Objective 3, first bullet point



2. As a condition of resource consent, monitoring of the effects of dredging is that of the consent holder. Monitoring reports must be made available to iwi and hapū.
3. Identified mahinga kai areas must be afforded legal protection from dredging activity within Te Awanui.
4. Tangata whenua must have input into the decision-making process through appropriate mandated representatives with regard to all dredging activities carried out within Te Awanui.
5. Any proposed dredging of the seabed of Te Awanui must be endorsed by tangata whenua. Any opposition to dredging by iwi will be made within reasonable grounds.
6. Dredged materials should be made available for the restoration and maintenance to areas susceptible to erosion as a mitigation measure, especially in those areas of high significance to tangata whenua.

SPECIFIC POLICIES

1. The pipi bed known by tangata whenua as Te Paritaha o Te Awanui, has been a food basket to tangata whenua pre-European settlement until now. Any proposed dredging activity in this area must avoid, remedy or mitigate any potential adverse affects as determined by tangata whenua.
2. The sandbank area on Matakana Island known as Panepane has longstanding historical and traditional importance to tangata whenua. Any proposed dredging activity in this area must avoid, remedy or mitigate any potential adverse affects as determined by tangata whenua.

[267] The intended action includes forming a relationship with Environment Bay of Plenty and the Port. Chapter 5.9 goes on to discuss the Fisheries Management, and this clearly includes the area now covered by the Matakaitai Reserve. This again repeats the desire to ensure sustainability for mahinga kai and to ensure the capacity of tangata whenua to participate in fisheries management.

[268] Mr Kemble understood that the dredging works are intended to be within the Port Zone. He did notice that there was a drafting error and that the location of the Zone was to be corrected so that it sits over the Entrance Channel. He notes that sediment disposal areas are not identified as being within Coastal Habitat Preservation, Harbour Development or Port Zones, and accordingly, they are zoned Coastal Marine Area.

The Regional Coastal Environment Plan

[269] Section 3.3.2(b) of the Regional Coastal Environment Plan introduces the Port Zone:

3.3.2(b) Port Zone

The purposes of the Port Zone are to:



- (a) Enable efficient use of existing port area, so that the regional community may meet its social and economic needs;
- (b) Concentrate major new structural development in an area already modified ...

[270] The Eighth Schedule of the Regional Coastal Environment Plan has an Outline Development Plan. However, this does not contemplate the extent of works subject to this application. For example, dredging volumes in the Eighth Schedule are some 5.6Mm³, approximately one-third of the volumes now sought.

[271] The Coastal Management Zone introduced by Section 3.3.2(d) of the Regional Coastal Environment Plan manages activities on a case-by-case basis. The Zone supports a variety of notable environmental values, but notes that developments are considered on an individual basis. There is no doubt that in accordance with Section 4.1 of the Regional Coastal Environment Plan, the Harbour Zone at the Port and some areas are developed to a significant degree.

[272] Chapter 4 of the Regional Coastal Environment Plan recognises the need for further development in the Port Zone and suggests that it is appropriate that the remaining natural character give way to development where necessary. Although Mr Kemble draws some consolation from the alignments of the current dredged channels with those proposed, reference to the Eighth Schedule shows that the relative detailed information as to the intentions in this regard, there is no indication of an intention to deepen or widen the channels and the works described there appear to be works that have largely already been undertaken, if not completed.

[273] Chapter 23.2 of the Regional Coastal Environment Plan is a useful summation of the anticipated environmental results. It is clear on the one hand that the natural and physical resources of the harbour, including the Port, are intended to be sustainably managed. In our view, there is no doubt that this anticipated further works where the role of tangata whenua is recognised and provided for, and natural character was protected where possible.

[274] Policy 6.2.3 deals with the ecological effects, and it is clear that these are part of the balance that must be undertaken. Section 6.2.5 seeks further research on wildlife and botanical values in the coastal environment. The recognition of the Mataitai Reserve is



also a matter directly relevant to the role of tangata whenua and the obligations of the Port as it relates to its development.

[275] Overall, we do not think there was anything in the Regional Coastal Environment Plan which prohibits the further development of the Port. There is however a clear expectation for consideration and partnership in relation to further development of the Port, particularly with tangata whenua and taking into account the natural resources and values of Te Awanui.

[276] Chapter 8 discusses extensively tangata whenua interests. Chapter 8.2 contains three critical objectives:

- 8.2.2(a) The involvement of tangata whenua in management of the coastal environment.
- 8.2.2(b) The protection of the characteristics of the coastal environment of special spiritual, cultural and historical significance to tangata whenua,
- 8.2.2(c) Sustaining the mauri of coastal resources.

Policies 8.2.3(c) clearly identify the Fourteenth Schedule areas (including Mauao etc.):

- 8.2.3(c) To avoid, remedy or mitigate adverse effects on resources or areas of special spiritual, historical or cultural significance to tangata whenua. This includes, but is not limited to, those areas and values identified in the maps and Fourteenth Schedule – Areas of Significant Cultural Value.

[277] Methods of Implementation 8.2.4 includes protecting sites, resources etc. in the consent process 8.2.4(c). Although protection is expressed in absolute terms, the Plan must be read in the context of the tension between Chapter 4 and Chapter 8. We do not see any priority afforded to the Port over matters such as those in Chapter 8.

[278] Importantly, the Regional Coastal Environment Plan does not give carte blanche to the Port based upon its economic value, but requires the integration of a complex series of issues to reach a conclusion as to whether consents are appropriate. Key elements of that relate not only to detailed consideration of natural resources, but also to the extent of partnership and consideration of tangata whenua issues.



[279] The key question can variously be posed as to whether or not this particular development is inappropriate (Policy 6.2.1 – Key Issue), how the special spiritual, cultural and historic significance to tangata whenua are to be protected, including the involvement of tangata whenua and their continuing role.

[280] In considering the application of these various policy provisions, Mr Kemble and Mr Mikaere concluded that the proposal would result in adverse cultural and heritage effects. The question then turned to where some of the more tangible effects (i.e. those on kaimoana), were being adequately avoided, remedied or mitigated, and how the less tangible (the relationship) could be adequately recognised and provided for. Mr Kemble correctly records that the hearing committee found that the proposal would significantly adversely affect the cultural and spiritual relationship which tangata whenua have with the area of interest, and this effect could not be avoided or fully remedied or mitigated. He agreed with that conclusion and that some of the concepts and their consent conditions would go some way toward avoiding, remedying and mitigating those effects.

The Operative and Proposed Bay of Plenty Policy Statement

[281] The Regional Policy Statement is expressed in broad terms. The Proposed Policy Statement is still at an early stage having been notified in November 2010. Again, it contains relatively broad statements of relevance in this case, and is more detailed than the current Regional Policy Statement. But again, it highlights issues of natural character and habitats, landscape features and historic heritage. It also notes the special relationship tangata whenua have with the coastal environment. It notes the contribution made by the Port to the social and economic well-being of the region.

[282] Section 2.3 applies to Energy and Infrastructure, and on the face of it, appears to deal specifically with infrastructure such as the commercial Port operations. Benefits are to be recognised (Policy E1 4B). Policy E1 5B appears to give priority to the avoidance of effects associated with upgrades to regionally significant infrastructure where they could impact upon a matter of national importance. However, where a situation arises where they could not be avoided i.e. the impact upon Mauao affecting the relationship of tangata whenua with the sites of cultural and historic heritage, then it appears that the provisions would still fall back to consideration under Section 5 and Part 2 of the Act. Mr Kemble also acknowledges that Objective 6, being the avoidance and prevention of adverse effects, cannot be achieved in this case in all areas. There may be a wording



conflict with Policy E1 5B. Sections 2.6.1 to 2.6.9 again, spend some time dealing with the Treaty of Waitangi principles, and also the role of tangata whenua in resource management matters.

[283] Chapters 15 & 16 of the Operative Policy Statement deal with Historic Heritage and Indigenous Ecosystems. These reflect sensitivity to Maori issues including relationships (see Chapter 15.3.1(b)(vi)). Criteria are set out in Appendix 4 *Maori Culture and Traditions*. There is an emphasis on Protection of Historic Heritage and Outstanding Natural Features from (inter alia) inappropriate development.

[284] Similar provisions for Indigenous Ecosystems refer us to criteria – *Appendix F – Criteria for assessing specified matters in the Bay of Plenty region*, Sets 1 & 3. There is also general recognition of iwi and hapu concerns in Chapter 4 of the Policy Statement.

[285] Overall, it must be said that all of the regional documents are consistent with an approach involving tangata whenua and decision-making relating to critical matters of significance. There is no doubt at all that all the regional plans see Te Awanui and Mauao as matters of regional significance.

Commissioners' Decision

[286] Pursuant to Section 290A of the Act, we have regard to the Commissioners' decision. They have acknowledged the impact on tangata whenua. In particular, the commissioners recognised a key issue was whether the relationship of tangata whenua to the area was recognised and provided for as well as issues relating to effects and the overall integration required under the Act. They accepted *that the relationship with Te Awanui and Mauao is significantly affected by this proposal*.

[287] The commissioners concluded that in the round the consent would promote sustainable management. Although not explicit, they seem to see:

- [a] an appropriate relationship between tangata whenua and the Port;
- [b] adequate conditions of consent;
- [c] meaningful engagement by the Port; and



[d] tangata whenua's role in influencing timing of the works,

as leading to that integrated decision.

[288] While acknowledging active protection and partnership as applicable Treaty principles, they seem to see these fulfilled in the four approaches we have identified.

[289] We reach a similar conclusion with strengthened conditions and in clear expectation of active engagement and partnership in the future of Te Awanui.

Part 2 of the Act

[290] We acknowledge that Part 2 of the Act is concerned with sustainable management which enables people and communities to provide for their social, economic and cultural well-being, and for their health and safety. All counsel acknowledged that this was not only the Port and the general community of Tauranga, but included each of the hapu and iwi, and other specialised groups interested in ecological and environmental matters.

[291] In identifying certain matters of national importance, it is clear that these are of significance in reaching a decision under the Act. Both historic heritage and the relationship of iwi and hapu, to areas of cultural significance are elements of that. Also elements of natural character and outstanding natural landscapes are influenced and relevant under Sections 6(a),(b) and (c).

[292] By the conclusion of the case, the Port's set of conditions proffered in closing represented a relatively sophisticated approach to the various issues arising in this case. Some conditions were intended to remedy adverse effects, such as impacts on kaimoana. Others were intended to be mitigatory or compensatory in a broader sense, for example compensating for the loss of the pipi beds by the enhancement of kaimoana generally within the harbour.

[293] In proposing a Trust in respect of Te Awanui, the Port was recognising that the relationship of tangata whenua to Te Awanui and Mauao needed to be recognised and provided for, given that clearly the alteration of Tanea Shelf, and to a lesser extent, Te Paritaha, would interfere with that relationship. The principle of partnership derived from the Treaty of Waitangi and reflected in many of the aspects of the Regional Coastal



Environment Plan and the Regional Policy Statement, is sought to be encouraged by the mechanism of the Trust. We note that the Ngai Te Rangi Management Plan itself recognises the need for dialogue and agreement between key stakeholders, the Regional Council, the Port and tangata whenua. The creation of yet another Trust creates layers involving the trustees of Mauao, the Mataitai Reserve, and now a new Trust. We recognise that until a more formal regional relationship can be entered into, which might incorporate all these bodies, the Trust would at least have a broad mandate to improve the relationship between Te Awanui and Mauao for the benefit of tangata whenua.

[294] On the other hand, we do not consider that it would directly compensate for the alteration of Tanea Shelf which has an effect upon Mauao (seen as an ancestor in terms of the history of all local iwi). To that end we consider that if a consent is otherwise appropriate, there would need to be some direct compensation to the trustees of the Mauao reserve to enable them to undertake some improvements to the reserve as compensation or mitigation. This compensation is related to the works on Tanea Shelf rather than the dredging as a whole, and accordingly, we consider it appropriate that a sum of \$50,000 per annum should be paid from the time when the applicant commences works at Tanea Shelf for 5 years.

[295] The objective of the payment would be to give the trustees some particular ability to address the impacts of the dredging on that side of Mauao. This may involve works to improve the pa sites and middens on the nearby hillside. The use of the monies is a matter for the trustees.

[296] Some on the Court were concerned as to whether or not the relationship and historic heritage were being fully recognised and/or protected from inappropriate development by these measures.

[297] However, under Section 8 of the Act we must take into account the principles of the Treaty of Waitangi which we have previously identified in this decision. Two of which are the principles of partnership and mutual benefit. To that extent, we acknowledge that this hearing is in the context of extensive discussions relating to Te Awanui, including Waitangi Tribunal Claim WAI 215. In the context of this, we are all reasonably confident that on-going discussions between the parties will be necessary and that the type of partnership envisaged in the Regional Plan and the Act can be advanced. In that regard, we note that the Council appears committed to this type of process and has



appointed a staff member specifically to try and achieve the type of outcomes we are now discussing. There is enormous potential for ecological gains in Te Awanui, particularly with riparian improvements, reduction of sedimentation, control of nutrients from farming, kaimoana preservation projects and the like. We also detect that beneath the stated positions of the parties in this case, there is a real desire to see a significant improvement within the Te Awanui.

[298] On balance, taking into account those developments, we all conclude that the proposed conditions offered by the Port during the closing of its case and as varied in this decision, adequately avoid, mitigate or remedy all these cultural effects. We accept that the appellants' view of Mauao and Te Awanui as their tipuna or ancestors, and that they cannot as a matter of tikanga, ever agree to the Port's application. But, and as a number of cases including *Whangamata Maori Committee v Waikato Regional Council*⁹⁷ indicate, the provisions of Part 2 of the Act dealing with Maori interests where well founded in the evidence, give no veto power over developments under the Act. Rather, these interests must be balanced against the other matters listed in Part 2 and the overriding purpose of the Act under Section 5 to promote the sustainable management of natural and physical resources.

[299] We do, however, reject the submissions made for the Port that only physical effects must be taken into account by this Court, as clearly cultural effects include a range of impacts including those that may affect historic, traditional, and spiritual aspects of the relationship Maori have with their ancestral lands, waters, waahi tapu and other taonga, and their kaitiakitanga. Ms Hamm in opening submitted that there was a requirement for conclusive evidence of adverse effects before we could conclude that a cultural relationship is not provided for under Section 6(e) of the Act. She argued that there must be physical adverse impact on the values underpinning the iwi relationship.

[300] Ms Hamm then relied on *Sea-Tow Limited v Auckland Regional Council*⁹⁸ to support this proposition. That citation concerned whether belief of an adverse effect amounts to an adverse effect. She also quoted the Ngawha Prison case generally as to whether beliefs could be regarded as a natural and physical resource.

⁹⁷ A173/05

⁹⁸ A066/2006



[301] It is unclear whether Ms Hamm still adhered to this position in closing. Certainly, the impact on relationships is now accepted although the closing still discusses impacts on cultural and spiritual values.

[302] We conclude that the Port opening missed entirely the basic premise of the appellants' cases. Namely, that they have a long established, well-recognised, and vital relationship with Te Awanui and Mauao, Te Paritaha and Panepane.

[303] It was accepted, and we have concluded, that the modification to these areas will adversely impact on that relationship. The Port's original opening case did not even acknowledge the rangitiratanga of iwi. This focuses under Section 5 of the Act in two ways:

- [a] Enabling the cultural values of tangata whenua by recognising and providing for the relationship (Section 6(e)); and
- [b] Avoiding, remedying or mitigating any adverse impact on that relationship to such an extent that we are satisfied the application with conditions meets the purpose of the Act.

[304] The Act does not dismiss relationships or metaphysical issues at all, as is noted in *Bleakley v Environmental Risk Management Authority*⁹⁹ and confirmed in *Friends & community of Ngawha Incorporated v Minister of Corrections*.¹⁰⁰ The Act manages natural and physical resources to enable people and communities to achieve, to the fullest extent possible when balanced with other factors, their social, economic and cultural well-being. Social and cultural well-being may, in a particular case, involve relationships and metaphysical factors, particularly under provisions such as Section 6(e) of the Act.

[305] We have concluded that Ms Hamm's proposition in opening is too simplistic. Small physical changes may have more serious consequential effects on historic, traditional and spiritual aspects of the relationship Maori have with their lands, waters, waahi tapu and other taonga.

⁹⁹ [2001] 3 NZLR 213 (HC)

¹⁰⁰ [2002] NZRMA 401 at [41]



Integrated Decision under Part 2

[306] The proposal to delay works to the Tanea Shelf has convinced the Court to unanimously recommend and consent the Port's proposal, with a number of amendments to both the proposal and conditions. The delay enables the question of requirement and benefits to be directly assessed prior to the works being commenced. Given that this assessment would be peer reviewed, it would give an opportunity for tangata whenua to offer alternatives that might achieve a similar result, yet gives certainty to the Port that there is a consent which can be implemented if it is required. From the Court's perspective, it is likely that works to alter Tanea Shelf will not be undertaken for at least 7 years, and accordingly, requiring that notice of such works cannot be given for at least 5 years from the commencement of these consents, and then requiring 2 years of consultation and investigation to ascertain whether there are any alternatives, and whether those alternatives might be viable. This period might be reduced to one year if all parties consent. During that period of up to 7 years, both the Mātaitai Reserve and the Trust will have co-operated with the Port and undertaken improvement works.

[307] We are very hopeful that on-going dialogue between the Council, tangata whenua and the Port will lead to a much clearer understanding of each party's obligations given the co-operation required into the future. This may result in a general consensus as to future development.

[308] There is no doubt that this case concerns important infrastructural and economic benefits, with adverse impacts upon the relationship of tangata whenua with key features of the environment, particularly Mauao and Te Awanui. That relationship and the historic heritage involved, particularly with Mauao, are matters of national importance under Sections 6(e) and (f) under Part 2 of the Act.

[309] To justify modification of the harbour, the application needs to be of sufficient moment. In this case, the application relates to the operation of one of New Zealand's key ports and the largest export port. It is clear that ongoing containerisation is going to lead to bigger ships visiting New Zealand, and it is likely that within the next 15 years this Port may have to widen and deepen its entrance in order to allow these big ships to visit.



[310] The applicant has now agreed to defer the actual work on Tanea Shelf until the requirement to cater for big ships in this harbour is clear. We are satisfied that the conditions we have now proposed would give sufficient certainty that the works were required, and that other alternatives had been considered. There is the prospect that either technological change or discussions between the parties in the next few years might reveal other alternatives not yet considered.

[311] In reaching the conclusion that recommendations should be made and consents granted, we have taken into account the now comprehensive conditions. We have also proposed a further condition (with its financial consequences) upon the Port in relation to payment to the Trustees for the Mauao reserve.

OUTCOME

[312] For the reasons we have stated in some considerable detail, we would recommend and grant consent subject to the conditions generally in accordance with those annexed hereto, but modified as outlined in this decision, and specifically with amendments to require:

- [a] Notice for alterations to Tanea Shelf shall not be given for at least five years;
- [b] That at the time of notification, the parties would then enter into a process of consultation, generation of alternatives, and peer review of the decision to ascertain if the widening of Tanea Shelf is still appropriate. That process will engage at least one year of discussion and consultation, and then up to one year for further peer reviews and investigation if required, subject to the fact that all relevant parties could consent to a course of action after one year;
- [c] That upon commencement of the works on Tanea Shelf, the Port shall pay to the Trustees for the Mauao Reserve the sum of \$50,000 per annum, for five years. The payment shall be immediately due, and further payments due for a further four years on the annual anniversary of the first payment.



Final Comment

[313] We cannot leave this case without commentary on the proposition that iwi and hapu had not engaged constructively in resolving this appeal.

[314] We recognise the deep insult to the mana of some kaumatua from the way in which this application came to their notice. This was clearly seen as hurtful and disrespecting of their rangatiratanga. Seen from their perspective, it was yet another slap in the history of offence, rehearsed so recently before the Waitangi Tribunal. The Port appears to have been oblivious to the effect and interpretation of their actions when applying for their consents. The Port saw itself as being fair in delaying the Council hearing and attempting to consult. We accept that by the end of the case the Port had a better understanding of how it should be forging a relationship with tangata whenua.

[315] This case highlights to us the yawning chasm in cultural insight sometimes displayed by major infrastructural companies. The Port should have a Cultural Liaison Officer, or such persons, on retainer. This position would never have arisen if the Port had sought early cultural advice. Mr Mikaere was retained after the Council decision and prior to the Court hearing. That was far too late.

[316] For our part we have concluded that the Regional Coastal Environment Plan contemplates a major infrastructural applicant preparing and filing an application after extensive discussion with tangata whenua, and probably, with some level of understanding as to how on-going issues relating to Te Awanui should be addressed. Some 20 years after the enactment of the Resource Management Act, it is surprising that an infrastructural company of the size of the Port would not have been aware of its obligations in terms of the Regional Coastal Environment Plan, the New Zealand Coastal Policy Statement 2010 and the Act.

[317] During the course of this hearing, the Port has done a great deal to try and address this situation. However, we feel obliged to note that further examples of applications made without proper approach and consideration of the requirements of the relevant national and regional documents could lead to refusals of applications for consent.

[318] Put simply, a publicly listed company working in a highly sensitive area identified in all relevant national and regional documents, cannot purport that it has no obligation to



consider tangata whenua issues or consult with the relevant parties. This is not the case of a small business having no specific provisions and regional plans relating to it. This is the case of a major infrastructural company which has been dealing with these issues constantly for the last 50 to 60 years since its inception, and prior to that, the Harbour Board. To pretend that these matters are not being addressed through the Waitangi Tribunal (and having repercussions to on-going operations), is not in our view a reasonable position to take.

Directions

[319] The Port is to liaise with other parties and circulate Proposed Draft Conditions within 30 working days:

[a] A Consent Memorandum agreeing a set of conditions is to be forwarded to the Court by the Port within a further 30 days. If such a Consent Memorandum cannot be agreed between the parties then all parties are to file comments on the Port's proposed draft conditions within a further 20 working days;

[b] The Port and the Council may submit a joint memorandum within the above 20 days should they wish to do so.

[320] We consider that the appellants have preliminary grounds to seek costs against the Port, notwithstanding the outcome.

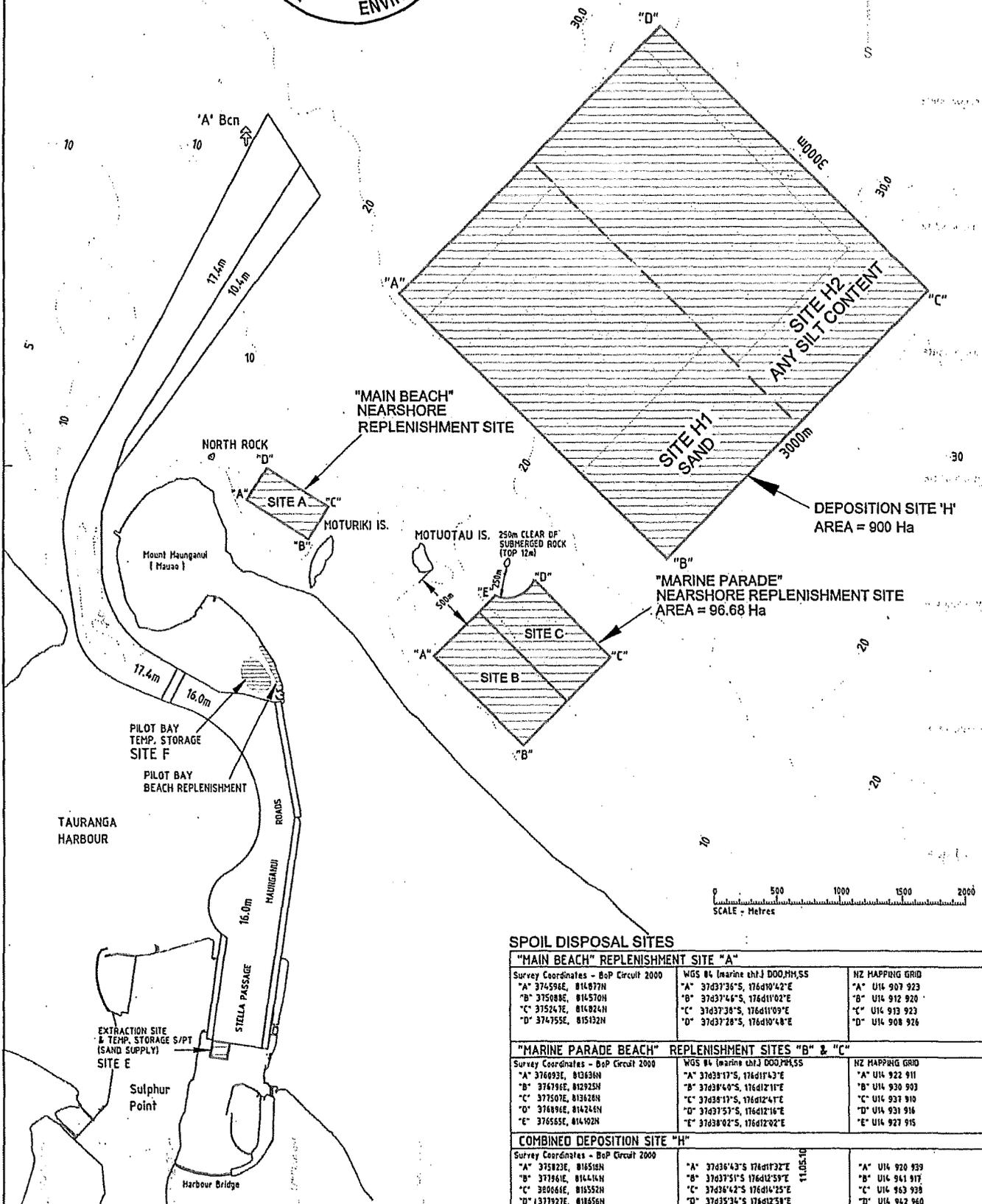
[321] Any application for costs to be filed within 50 working days. Replies 10 working days thereafter.

DATED at AUCKLAND this 21st day of December 2011

For the Court

J A Smith
Environment Court Judge





SCALE: A3 1:30,000
 REF: PLAN 228
 Port of Tauranga Plan 228/75
 ENVIRONMENTAL No. 324-99

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PORT OF TAURANGA

NAME	DATE	APPROVED
RR	11.05.10	

Siting basins added.
 Coord. corrections
 AUTUMN 2010
 DATE 11.05.10

SPOIL DISPOSAL SITES

"MAIN BEACH" REPLENISHMENT SITE "A"		
Survey Coordinates - BoP Circuit 2000	WGS 84 (marine int.) DOO,PH,SS	NZ MAPPING GRID
"A" 374596E, 814877N	"A" 3743736°S, 176d10'42"E	"A" U14 907 923
"B" 375088E, 814570N	"B" 3743746°S, 176d11'02"E	"B" U14 912 920
"C" 375247E, 814824N	"C" 3743738°S, 176d11'09"E	"C" U14 913 923
"D" 374755E, 815132N	"D" 3743728°S, 176d10'48"E	"D" U14 908 926
"MARINE PARADE BEACH" REPLENISHMENT SITES "B" & "C"		
Survey Coordinates - BoP Circuit 2000	WGS 84 (marine int.) DOO,PH,SS	NZ MAPPING GRID
"A" 376092E, 813636N	"A" 3743817°S, 176d11'43"E	"A" U14 922 911
"B" 374796E, 812925N	"B" 3743844°S, 176d12'11"E	"B" U14 930 903
"C" 377507E, 813628N	"C" 3743817°S, 176d12'47"E	"C" U14 931 916
"D" 374894E, 814244N	"D" 3743757°S, 176d12'16"E	"D" U14 931 916
"E" 376565E, 814192N	"E" 3743802°S, 176d12'02"E	"E" U14 927 915
COMBINED DEPOSITION SITE "H"		
Survey Coordinates - BoP Circuit 2000	WGS 84 (marine int.) DOO,PH,SS	NZ MAPPING GRID
"A" 375823E, 816518N	"A" 3743643°S 176d11'32"E	"A" U14 920 939
"B" 377361E, 814414N	"B" 3743757°S 176d10'59"E	"B" U14 941 917
"C" 380646E, 816552N	"C" 3743842°S 176d11'25"E	"C" U14 963 938
"D" 377927E, 816656N	"D" 3743934°S 176d12'51"E	"D" U14 942 960

Conditions for coastal consent No. 65806

Appendix **C**

PORT OF TAURANGA LIMITED

A coastal consent

- (a) Under sections 12(1)(c) and 12(1)(e) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Coastal Environment Plan to undertake a **Restricted Coastal Activity** being to **Disturb the Seabed of Tauranga Harbour by Dredging**; and
- (b) Under sections 12(1)(d) and 15A(1)(a) of the Resource Management Act 1991 and Rule 14.2.4(za) of the Bay of Plenty Regional Coastal Environment Plan to undertake a **Restricted Coastal Activity** being to **Deposit Dredged Material in the Coastal Marine Area**; and
- (c) Under section 12(2)(b) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Coastal Environment Plan to undertake a **Restricted Coastal Activity** being to **Remove Dredged Material from the Coastal Marine Area**; and
- (d) Under sections 12(1)(c) and 12(1)(e) of the Resource Management Act 1991 and Rule 14.2.4(z) of the Bay of Plenty Regional Coastal Environment Plan to undertake a **Discretionary Activity** being to **Disturb the Seabed of Tauranga Harbour by Maintenance Dredging**;

subject to the following conditions:

1 Purpose of this Coastal Consent

To authorise and set conditions for the dredging of material from the coastal marine area to deepen and widen and maintain the navigation channels of the Port of Tauranga. This consent also authorises the deposition of dredged material at an offshore disposal site and the removal of dredged material from the coastal marine area. The Consent Holder shall carry out the works authorised by this consent in stages, provided that the widening at Tanea Shelf is completed in the first stage, in accordance with condition 9.

2 Locations

Tauranga Harbour shipping channels, entrance and deposition sites as shown on:

- The Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels Dredged Shipping Channels* and referenced as B.O.P.R.C. Plan Number RC 65806/1; and
- The Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels Spoil Disposal Sites* and referenced as B.O.P.R.C. Plan Number RC 65806/2; and



- The Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels New Channel Boundaries and Dimensions* and referenced as B.O.P.R.C. Plan Number RC 65806/3

3 Map References

Name of Area	Approximate NZMS 260 map references (midpoint)
Entrance Channel and No.2 Reach	U14:8980-9310
Cutter Channel	U14:9010-9080
Maunganui Roads	U14:9080-8980
Stella Passage	U14:9054-8838
Deposit Site H	U14:9414-9386

4 Legal Description

Seabed (Tauranga District).

5 Quantity of Excavation

- 5.1 The quantity of material removed from the coastal marine area for capital dredging purposes shall not exceed the volume required to achieve the following depths (from Chart Datum):

Locality	Works	Approximate volume (million cubic metres)
Entrance Channel and No.2 Reach	Deepen to 17.4 metres	5.9
Tanea Shelf	Deepen to 17.4 metres and widen by 32 metres	0.4
Cutter Channel	Deepen to 16.0 metres and widen by 115 metres	7.0
Maunganui Roads	Deepen to 16.0 metres and widen by 50 metres Create turning basin 16.0 metres deep and 200 metres by 200 meters	0.4
Stella Passage	Deepen to 16.0 metres	1.3

- 5.2 The total quantity of material removed for maintenance dredging purposes shall not exceed 185,000 cubic metres per year, averaged over a 5 year rolling period, and material shall only be removed for the purpose of maintaining the depths set out in condition 5.1 above (from Chart Datum).

6 Notification

- 6.1 The Consent Holder shall notify (in writing) the Chief Executive of the Regional Council or delegate, and the Tangata Whenua Reference Group, of its intention to commence dredging no less than 20 working days prior to each dredging operation. Notice shall include as a minimum;

• The modelling results obtained in accordance with condition 9;

• The area to be dredged;

• The depth(s) proposed to be achieved;



- An assessment of dredging volumes and whether those volumes consist of capital dredging or maintenance dredging;
- An assessment of the material types expected to be dredged;
- The expected duration of the dredging operation;
- A plan for the disposal of dredged materials;
- The name and contact details of the person with responsibility for supervising the works.

6.2 At least 10 working days prior to the start of dredging the Consent Holder shall notify (in writing) the Coastguard and the Tauranga Harbourmaster and shall place notices in the Bay of Plenty Times advising the general public of the following;

- The intention to start dredging;
- The area to be dredged;
- The period during which dredging is expected to occur; and
- Any restrictions that will apply to navigation during the dredging.

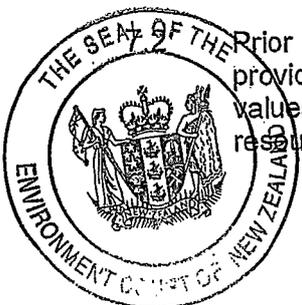
7 Relationship with Tangata Whenua

7.1 The relationship of Tangata Whenua with Te Awanui Tauranga Harbour (including Mauao) is to be recognised and provided for by the Consent Holder through:

- the establishment of a trust and a Tangata Whenua Reference Group (TWRG) and the Te Awanui Scholarship Programme, and the preparation of a Kaimoana Restoration Programme (under this condition),
- a requirement for all work at Tanea Shelf (Mauao) to be performed in one operation (conditions 1 and 9),
- provision for ceremonies prior to carrying out capital dredging operations under the consent, if deemed appropriate by iwi and hapu (condition 8.1)
- a minimum separation distance from Te Kuia Rock (condition 8.5),
- provision for renourishment of the beach at Whareroa Marae (conditions 10.1 and 10.10),
- provision for the TWRG to assist in settling the final position of the boulder placement plan at Tanea Shelf / Mauao (condition 10.9), and
- requirement for an environmental bond (condition 20).

New Trust to be established

Prior to carrying out any works under this consent, the Consent Holder shall settle and provide funding for a new trust to mitigate for adverse effects on cultural and spiritual values, which have not been directly avoided. The trust deed shall have the following resource management purposes:



- (a) To provide an appropriate mechanism through which the Consent Holder can recognise the relevant Iwi and Hapu as kaitiaki of Te Awanui Tauranga Harbour and the importance of Te Awanui, including Mauao and Te Paritaha to Tangata Whenua; and
- (b) To provide an appropriate mechanism through which Tauranga Moana Iwi and Hapu and the Consent Holder can form an enduring relationship and engage with each other directly and equally; and
- (c) To set priorities and allocate funding for projects within Te Awanui Tauranga Harbour including particularly projects to be implemented by the Tauranga Moana Iwi Customary Fisheries Trust and the Mauao Trust.

7.3 The Consent Holder shall contribute to the trust the following funds:

- (a) An initial fund of \$500,000; and
- (b) Ongoing annual payments of \$50,000 per annum, up until five years have elapsed after completion of all capital dredging authorised by this consent.

7.4 In settling the trust, the consent holder shall:

- (a) Determine the name of the trust in consultation with Tauranga Moana Iwi and Hapu;
- (b) Provide for the ability for the trust to regulate its own procedures;
- (c) Invite four Tangata Whenua trustees to be appointed to the trust to represent:
 - Ngai Te Rangī;
 - Ngati Ranginui;
 - Ngati Pukenga;
 - The Tauranga Moana Iwi Customary Fisheries Trust;
- (d) Appoint two trustees representing the Consent Holder;
- (e) Provide meeting space for meetings of the trust and secretarial support for the trust;
- (f) Provide for the trust to set priorities (and any criteria) for applications for funding from the trust;
- (g) Provide for the trust to make recommendations to the Consent Holder on the appointment of the Tangata Whenua Reference Group required by this condition of this consent.



Tangata Whenua Reference Group

7.5 The Consent Holder shall, before commencing any dredging and disposal activities authorised by this consent, and on the recommendation of the trust to be established in accordance with conditions 7.2-7.4 of this consent, invite members of the Hapu, Iwi and the Tauranga Mōana Iwi Customary Fisheries Trust to join a Tangata Whenua Reference Group. The purpose of this group is (but not limited) to:

- (a) Recognise the relevant Iwi and Hapu as kaitiaki of Te Awanui Tauranga Harbour and the importance of Te Awanui, including Mauao and Te Paritaha to Tangata Whenua; and
- (b) Enable the free flow of information between the Consent Holder and the Tangata Whenua of the Tauranga Moana in respect of activities carried out under this consent; and
- (c) Acknowledge, enable and provide for the value of hapu traditional environmental knowledge of Te Awanui with respect to all relevant research, planning and decision making processes in relation to this consent; and
- (d) Provide a forum for discussion between Tangata Whenua and the Consent Holder of any other matters considered relevant by the parties, including the appropriate ongoing monitoring that should be undertaken by the Consent Holder as required by conditions of this consent.

7.6 The Consent Holder shall:

- (a) Prior to preparation of the Kaimoana Restoration Programme (in accordance with this condition), any CTMP (in accordance with condition 11 of Coastal Consent No. 65807), and the Tanea Shelf (Mauao) boulder replacement plan (in accordance with condition 10.9 of this consent); and
- (b) Prior to, and at least once per month when dredging and disposal activities are being undertaken in accordance with this resource consent and Coastal Consent No. 65807; and
- (c) When results of monitoring activities are to be submitted to the Regional Council in accordance with this consent or Coastal Consent No. 65807,

convene a meeting with the Tangata Whenua Reference Group to discuss and seek advice from the Group on any cultural issues that may arise as a result of preparation of such documents, undertaking such activities or the results of monitoring. Any information shall be provided to the Tangata Whenua Reference Group sufficiently in advance of the meeting so that the Group has time to review and consider it prior to the meeting.

7.7 The Consent Holder shall take into account issues raised by the Tangata Whenua Reference Group when preparing such plans or commencing such activities, and shall provide a report to the Group and Chief Executive of the Regional Council summarising the advice received from the Group and how the issues raised have been taken into account in preparing such plans. Where it has not been possible to provide for the issues raised, the Consent Holder shall state its reasons in the report. The Consent Holder shall submit the report and copies of the plan or proposal prepared, to the Group for consideration and any further comments, prior to submitting the plan to the Chief



Executive of the Regional Council or delegate for approval, if required by the conditions of consent, or undertaking the activities.

- 7.8 Notwithstanding Conditions 7.5 to 7.7 the Consent Holder shall, at least once per calendar year, convene a meeting with representatives of the Bay of Plenty Regional Council and the Tangata Whenua Reference Group to discuss any matter relating to the exercise and monitoring of this consent. At this time the Consent Holder shall in addition to any matters relating to the exercise and monitoring of this consent, use its best endeavours to inform the Tangata Whenua Reference Group of the likely dredging to be undertaken in the following year.
- 7.9 The Consent Holder shall keep minutes of the meetings held in accordance with Conditions 7.5-7.8 and shall forward them to all attendees and to the Regional Council.
- 7.10 The meetings required by Conditions 7.5-7.8 need not occur if the Tangata Whenua Reference Group advise the Consent Holder (Condition 7.5) or the Bay of Plenty Regional Council (Condition 7.8) that the meeting is not required.
- 7.11 The Consent Holder shall provide final copies of the plans and proposals prepared in accordance with Conditions 7.6-7.7 to the Tangata Whenua Reference Group concurrently with them being submitted to the Bay of Plenty Regional Council.

Kaimoana Restoration Programme

- 7.12 Prior to carrying out any works under this consent, the Consent Holder shall develop a **Kaimoana Restoration Programme (KRP)**. The purpose of the KRP is to determine and mitigate the actual and potential loss of accessible kaimoana by identifying methods and techniques to ensure the ability of Tangata Whenua to collect the kaimoana species that are affected by the works authorised by the consents is maintained. The KRP will:
- Take into account the results of the monitoring undertaken in accordance with this consent.
 - Develop research and monitoring criteria to remedy or mitigate the effects on kaimoana.
 - Include baseline surveys to identify the abundance and diversity of kaimoana of the areas close by and affected by the proposed dredging, comprising Te Paritaha o Te Awanui, Mauao rocky reefs (Tanea Shelf), Motuotau and Moturiki Islands and surrounding rocky reefs.
 - Include annual monitoring of the main kaimoana species, their locations, abundance, size health and harvesting pressure within the vicinity of dredging and disposal sites comprising Te Paritaha o Te Awanui, Mauao, Tanea Shelf, Motuotau and Moturiki Islands and surrounding rocky reefs.

Restoration projects within the KRP shall include the following;



- A research project to be established to determine the feasibility of reseeded in alternative areas to provide an area equivalent to the area of accessible pipis lost through the dredging. The research project to commence as soon as the KRP has been developed. If the conclusion of the research project is that such reseeded is feasible, then work on such reseeded shall commence immediately. Annual monitoring surveys of the reseeded area shall then be carried out to record the success of the reseeded.
- Enhance existing kaimoana population in the vicinity of Tanea Shelf by extending and enhancing the rocky habitat area and reseeded if possible.

7.14 The programme described above in 7.12 and 7.13 shall:

- (a) Be developed in conjunction with the Tangata Whenua Reference Group (unless that Group advises that it does not wish to have any input into the programme in which case the Consent Holder must prepare a KRP and submit it to the Chief Executive of the Bay of Plenty Regional Council for approval); and
- (b) Continue for a period of five (5) years after the completion of the capital dredging,

and the Consent Holder shall undertake work to the value of \$50,000 per annum, up until five years have elapsed after completion of all capital dredging authorised by this consent.

Te Awanui Scholarship Programme

7.15 The Consent Holder shall, before commencing any dredging and disposal activities authorised by this consent, establish a new Te Awanui Scholarship Programme for students who are descendants of Tauranga Moana Iwi and Hapu. The programme shall continue for the term of this consent and shall:

- Provide total funding of \$4,500 per annum which will be allocated to a maximum of three students in any one year;
- Provide that the recipients of the scholarship funding must be pursuing studies in the Resource Management / Environmental Science / Marine Studies area; and
- Be administered in conjunction with the TWRG (should it wish to assist in administering the programme).

8 Dredging Works

8.1 Prior to carrying out any capital dredging operation under this consent, the Consent Holder shall provide an opportunity for representatives of the relevant Iwi and Hapu to carry out a ceremony or ceremonies at the site of the dredging operation, Tanea Shelf (Mauao) or Te Paritaha (Centre Bank) as the case may be, as may be deemed to be appropriate by the relevant Iwi and Hapu, prior to the carrying out of any capital dredging operations. The Consent Holder shall confirm by notice in writing to the Chief Executive of the Regional Council or delegate that the opportunity to carry out a ceremony or ceremonies has been given and that a ceremony or ceremonies has been carried out where deemed appropriate by Iwi.

All works associated with the dredging operation authorised by this consent shall be carried out generally as detailed in the application, specifically *Chapter 3.0 – Project Description – Dredging Options* of the application document entitled *Assessment of*



Environmental Effects for Port of Tauranga Limited Channel Deepening and Widening February 2009 and the further information regarding maintenance dredging submitted on 1 March 2010 and entitled *Maintenance Dredging*.

- 8.3 In the event that a significant proportion (greater than 5% by weight) of the material dredged is found to be silt, the Consent Holder shall employ an appropriate dredging method to minimise the turbidity effects in the vicinity of the works.
- 8.4 The Consent Holder shall ensure that no contaminants, including fuel oils, are permitted to enter the harbour waters as a result of these works.
- 8.5 The Consent Holder shall ensure that a minimum distance of 100 metres is maintained between any dredging activity and Te Kuia Rock.

9 Staged Dredging

- 9.1 The dredging works authorised by this consent shall be carried out in at least two stages as required by this condition 9.

Stage 1

- 9.2 To cater for a Post-Panamax vessel of 5000 to 6000 TEU (slot) capacity with a maximum draft of 13.5 metres ("Stage 1 Vessel"), the Consent Holder shall carry out the dredging as follows:
- (a) Model the Stage 1 Vessel on a ship handling simulator to determine the extent of widening and deepening required to the shipping channels (assuming the widening of Tanea Shelf by 32 metres).
 - (b) Provide details of the results of the modelling to the Regional Council and the TWRG.
 - (c) Carry out, as part of Stage 1, the widening of Tanea Shelf to the extent authorised by this consent (32 metres).
 - (d) Remove material from Te Paritaha to widen the channels only to the extent that it is required to safely accommodate the Stage 1 Vessel as determined by the modelling carried out in accordance with condition 9.2(a).

Subsequent Stages

- 9.3 To cater for a vessel larger than dredged for in a previous stage, the Consent Holder will carry out the dredging as follows:
- (a) Model the vessel on a ship handling simulator to determine the extent of widening and deepening required to the shipping channels.
 - (b) Provide details of the results of the modelling to the Regional Council and the TWRG.
 - (c) Remove material from Te Paritaha to widen the channels only to the extent that it is required to safely accommodate the vessel as determined by the modelling carried out in accordance with condition 9.3(a).



Final Stage

- 9.4 To cater for a vessel of similar design parameters to those used in the application document entitled *Assessment of Environmental Effects for Port of Tauranga Limited Channel Deepening and Widening February 2009*, the shipping channels shall be deepened and widened in accordance with the parameters set out in conditions 2, 3 and 5 of this resource consent, and no further modelling will be necessary.

10 Disposal of Dredged Material

Capital Dredging

- 10.1 All material, with the exception of boulders removed from Tanea Shelf, may be deposited at "Site H" as shown on the Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels Spoil Disposal Sites* and referenced as B.O.P.R.C. Plan Number RC 65806/2. In addition:
- Up to 1 million cubic metres of material (in total) may be removed from the coastal marine area; and
 - Clean suitable sand may be deposited for beach nourishment outside the Whareroa Marae as authorised by consent 04 0198; if requested by the Tangata Whenua Reference Group and approved by the Chief Executive of the Regional Council or delegate (see Advice Note 5).
- 10.2 When material is deposited at "Site H" material with a high (greater than 25% by weight) proportion of silt shall be dumped on the seaward side of the new disposal site, generally in the area shown on the Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5 m Container Vessels Spoil Disposal Sites* and referenced as B.O.P.R.C. Plan Number RC 65806/2 as "Site H2".
- 10.3 When material is deposited at "Site H" material with a high (greater than 25% by weight) proportion of silt the Consent Holder shall endeavour to ensure that that material is covered with sand as soon as practicable.
- [Port of Tauranga Ltd is agreeable to deletion of this requirement as suggested by Dahm.]**
- 10.4 When material is deposited at "Site H" the Consent Holder shall ensure, as far as practicable, that the material is spread over the disposal area to ensure that the mound created by deposition is as low as possible.
- 10.5 Material may be removed from the coastal marine area temporarily using "Site E" as shown on the Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels Spoil Disposal Sites* and referenced as B.O.P.R.C. Plan Number RC 65806/2.
- 10.6 The Consent Holder shall ensure that material deposited at "Site E" shall have a composition comprising less than 5% silt by weight.
- 10.7 Deposition of sand within "Site E" shall not result in a build up of sediment within the harbour bed such that navigation is restricted.



- 10.8 Despite conditions 10.1 to 10.7 above the Consent Holder shall deposit specified volumes of material at Sites A, B, C, F and/or on Panepane Point if so directed by the Chief Executive of the Regional Council or delegate (see Advice Note 4).
- 10.9 The Consent Holder shall ensure that boulders removed from **Tanea Shelf / Mauao** shall be placed in an area adjacent to the area dredged. A plan of the area of placement shall be developed in consultation with the TWRG and submitted to the Chief Executive Officer of the Regional Council, or delegate for approval, prior to carrying out the work at Tanea Shelf.

Maintenance Dredging

- 10.10 All clean suitable sand shall be deposited at Disposal Sites A, B, C authorised by consents 60077 and 60078. In addition, clean suitable sand may be deposited for beach nourishment outside the Whareroa Marae as authorised by consent 04 0198, if requested by the Tangata Whenua Reference Group and approved by the Chief Executive of the Regional Council or delegate (see Advice Note 5). Clean suitable sand is sand which:
- Has a low (less than 25% by weight) proportion of silt; and/or
 - Does not exceed guideline contamination level ER-L values as set out in Conditions 13.1 and 13.2 of this resource consent.
- 10.11 All other material may be deposited at established dump sites as authorised by consents 40157, 60077, 60078, 60079, 60080, 60083 and/or 65806 or up to 1 million cubic metres of material (in total) may be removed from the coastal marine area.
- 10.12 Despite Conditions 10.10 and 10.11 above, the Consent Holder shall deposit specified volumes of material at Sites A, B, C, F and/or on Panepane Point if so directed by the Chief Executive of the Regional Council or delegate (see Advice Note 4).
- 10.13 Despite Conditions 10.10 and 10.12 above, material removed from the coastal marine area may be used for beach nourishment only with the written approval of the Chief Executive of the Regional Council or delegate (see Advice Note 5).

11 Water Quality

- 11.1 The diffuse discharge associated with dredging and deposition operations shall be undertaken in accordance with the conditions of Consent No 65807.

12 Monitoring

- 12.1 The Consent Holder shall carry out bathymetric surveys at all dredge sites both immediately prior to and immediately after dredging. The bathymetric survey should be sufficient to enable an assessment of the volume of material dredged.
- 12.2 The Consent Holder shall annually for the first five years following capital dredging carry out bathymetric surveys of the harbour floor between the seaward extent of the dredged area and Tauranga Harbour Bridge, of Centre Banks and of Matakana Banks in sufficient detail to determine whether there have been changes in the harbour floor as a result of the dredging.

12.3 The Consent Holder shall, for the duration of this consent, carry out **bathymetric and topographic** survey (between high and low water) of the subtidal and intertidal regions in an area encompassing the full extent of the ebb tide delta and the adjacent coastline prior



to the capital dredging and **annually** thereafter. The survey procedures shall provide data of sufficient accuracy and density to enable volumetric and morphological analysis to determine whether changes are occurring to the ebb tide delta and/or adjacent coastline **as a result of the exercise of this consent 65806 and consent 65807**. The Consent Holder shall provide an annual report prepared by a suitably qualified person to the Chief Executive of the Regional Council or delegate and the Tangata Whenua Reference Group, detailing the extent of progressive or dynamic changes observed to the ebb tide delta and/or adjacent coastline. In the event that **progressive** changes to the ebb tide delta and/or adjacent coastline are confirmed by the monitoring, the Consent Holder must immediately notify, in writing, the Chief Executive of the Regional Council or delegate, and the Tangata Whenua Reference Group.

- 12.4 The Consent Holder shall undertake bathymetric profiles at 200 metre spacings over the disposal "Site H" before and after any deposition operations. Side scan or multi beam sonar surveys covering all of deposition "Site H" shall be done once after a major capital deposition event, and once every 250,000 cubic metres of deposition for maintenance dredging.
- 12.5 The Consent Holder shall, for each month that the deposition operation continues, take a sample from the hopper of the dredge disposal vessel and analyse the sample for proportion of silt content by weight.
- 12.6 The Consent Holder shall undertake the sampling required under Condition 12.5, in such a manner that a sample representative of the sediment to be deposited is obtained.
- 12.7 The Consent Holder shall undertake bi-annual surveys, at a minimum of three sites near Motuotau Island, to monitor the potential impact of dredge spoil dumping on reef biota. The minimum objective is to carry out a photographic and video transect survey at the established monitoring sites near Motuotau Island.
- 12.8 Prior to carrying out dredging under the authority of this consent the Consent Holder shall submit for certification to the Chief Executive of the Regional Council, or delegate, a programme outlining proposed monitoring of morphological change of Panepane Point (see Advice Note 6). The monitoring programme shall, as a minimum, include the following information:
- Preferred monitoring methodology; and
 - An annual shoreline survey, and
 - Proposed timing and frequency of monitoring (see Advice Note 7).
- 12.9 The Consent Holder shall carry out the monitoring in the monitoring programme required by Condition 12.8 as certified by the Chief Executive of the Regional Council, or delegate.
- 12.10 The Consent Holder shall undertake a biological study of the deposition grounds to be carried out prior to the commencement of each major capital dredging campaign, and to be followed by a single survey after disposal, the timing to be determined in consultation with the Regional Council. This sampling is to be at two sites just inshore of the main disposal site. Samples would be taken at each site, collected by scuba diving and sieved to 1mm, and processed in accordance with a methodology approved by the Chief Executive of the Regional Council.

12.11 The Consent Holder shall undertake photographic inspections of the Centre Bank slumping during dredging, Tanea Shelf boulder recolonisation and the *Zostera* beds located to the east of the Tauranga Harbour Bridge and near the western end of the



airport runways after the completion of the capital dredging and annually thereafter for five years.

- 12.12 The Consent Holder, after completion of the capital dredging, shall undertake tidal measurements of both water heights and velocity sufficient to confirm the accuracy of the results of the hydrodynamic modelling presented in the AEE.

13 Potentially Contaminated Sediment

- 13.1 Harbour sediments that exceed guideline contamination level ER-L values as presented by National Oceanic and Atmospheric Administration (NOAA) shall, upon direction, of the Chief Executive of the Bay of Plenty Regional Council, be removed to an approved landfill site.
- 13.2 Under the requirements of Condition 13.1, ER-L (Environmental Response – Low) is defined as a concentration at which less than approximately 10% of the local biota are likely to be affected.

14 Recording and Reporting

- 14.1 The Consent Holder shall forward a report to the Regional Council within 30 working days of completion of each dredging and deposition campaign describing:
- the area excavated;
 - the quantity of sediment removed;
 - the quantity of sediment disposed of and the areas to which the sediment has been disposed;
 - The quantity of sediment removed from the coastal marine area;
 - The results of the bathymetric surveys required under Conditions 12.1 and 12.2;
 - An analysis of the results of the bathymetric surveys showing areas and extent of geomorphologic change.
- 14.2 The Consent Holder shall forward the results of the bathymetric surveys required by Condition 12.4 within 30 working days of the completion of each survey. The reporting of results shall include an analysis of the results of the bathymetric surveys showing areas and extent of geomorphologic change.
- 14.3 The Consent Holder shall forward to the Regional Council the results of the monitoring required by Condition 12.9 within 10 working days of request by the Chief Executive of the Regional Council, or delegate.
- 14.4 Despite the requirements of Condition 14.3 the Consent Holder shall, by 31 May each year within the duration of this consent, submit to the Regional Council a report describing the monitoring required by Condition 12.9 undertaken during the previous year and an analysis of the results of that monitoring.



Ebb tide delta

- 14.5 In the event that the maintenance dredging volumes stated in condition 5.1 are not sufficient to maintain the depths specified in the table forming part of condition 5.1, the Consent Holder shall provide a report to the Chief Executive of the Regional Council or delegate (which shall be peer reviewed and approved by a Peer Review Panel at the Consent Holder's expense, prior to submission of the report to the Regional Council) which shall:
- (a) Specify the volumes exceeding or likely to exceed the maintenance dredging volume limits in condition 5.1 and explain the reasons why the increased maintenance dredging volumes exceed or are likely to exceed the predicted maintenance volume limits in condition 5.1; and
 - (b) Assess whether the dredging volumes may be causing or contributing to morphological changes to the ebb tide delta and adjacent coastal areas, including Panepane Point, and causing or contributing to any other changes to the Tauranga Harbour tidal inlet system;
 - (c) Assess whether alternative disposal site(s) are required to avoid, remedy or mitigate potential geomorphological changes that may be occurring to the Tauranga Harbour tidal inlet system, including the ebb tide delta and adjacent coastal areas, and if so, identify the location of any alternative site(s) and undertake investigations as to the effects the alternative disposal site(s) would have on the environment;
 - (d) Provide a description of the further consents that may be required as a result of the increased maintenance dredging, including alternative disposal site(s) within the coastal system; and
 - (e) Provide a description of any further monitoring requirements considered necessary as a result of the predicted increase in maintenance dredging volumes.
- 14.6 The Peer Review Panel shall consist of at least two experts suitably qualified in the field of coastal science as nominated by the Consent Holder and approved by the Regional Council, provided that approval shall not be unreasonably withheld or delayed.
- 14.7 Upon receipt of the above report from the Consent Holder, the Regional Council shall determine whether the matter can be dealt with by way of a variation to consent conditions or whether a new application is required.

15 Lapse of Consent

Unless this consent is given effect to, the consent shall lapse on 31 January 2026.

16 Review of Conditions

- 16.1 The Regional Council may, within three months of receiving information from any of the bathymetric surveys or other monitoring data, serve notice on the Consent Holder under section 128(1)(a)(i) of the Resource Management Act 1991 of its intention to review Condition 12 of the consent. The purpose of such a review is to ensure that the monitoring regime is appropriate and can if necessary be extended.



16.2 The Regional Council may, during the month of June in the years 2010, 2013, 2016, 2019, and 2023, serve notice on the Consent Holder under section 128(1)(a)(i) or (iii) of the Resource Management Act 1991, of its intentions to review the conditions of this consent. The purpose of this is to ensure that the conditions of this consent are adequate to deal with one or all of the following:

- (a) the effects of the exercise of this consent on the ecology and water quality of Tauranga Harbour; and
- (b) the effects of the exercise of this consent on the ecology and water quality of the Pacific Ocean; and
- (c) the material available to the sediment budgets of the Matakana Island, Mount Maunganui and Pāpāmoa beaches and near-shore systems;
- (d) the appropriate mitigation of the environmental effects of the activity having regard to the available dredging technology; and
- (e) the appropriate mitigation of the environmental effects of the activity having regard to the available deposition technology.

17 Term of Consent

This consent shall expire on 6 June 2027.

18 Royalties

Within 15 working days of the completion of dredging, the Consent Holder shall pay to the Regional Council the appropriate Government Royalty as prescribed by the Resource Management (Transitional Fees, Rents and Royalties) Regulations 1991.

19 Resource Management Charges

The Consent Holder shall pay the Bay of Plenty Regional Council such administrative charges as are fixed from time to time by the Regional Council in accordance with section 36 of the Resource Management Act 1991.

20 Environmental Bond

20.1 The Consent Holder shall enter into a bond to ensure the remedy of any unforeseen adverse effects on the environment arising from the exercise of Coastal Consent No 65807 or this consent and which become apparent for a period of up to five years after the completion of the capital dredging.



20.2 The bond shall be in the sum of One Million Dollars (\$1,000,000.00) and shall be in favour of the Bay of Plenty Regional Council with an insurance company or bank approved by the Chief Executive of the Regional Council and carrying on business in New Zealand.

20.3 The bond is to be given by the Consent Holder before Coastal Consent No 65807 or this consent may be exercised. The Consent Holder shall forward a copy of the bond to the Chief Executive of the Regional Council prior to the commencement of works and shall forward evidence at the end of each twelve month period thereafter that the Bond remains in place.

20.4 The bond shall provide that:

- The Consent Holder and the surety remain liable under the bond for the remedy of any unforeseen adverse effects on the environment arising from the exercise of Coastal Consent No 65807 or this consent and which become apparent for a period of up to five years after the completion of the capital dredging;
- Unforeseen adverse effects are those effects not contemplated by or approved in the granting of Coastal Consent No 65807 or this consent. The question of whether there are any such unforeseen adverse effects is to be determined by the reasonable opinion of the Chief Executive of the Bay of Plenty Regional Council. Where the Consent Holder does not agree with the reasonable opinion of the Chief Executive of the Bay of Plenty Regional Council, that question is to be determined by a suitably qualified independent expert to be appointed by the Regional Council and the Consent Holder and that determination is to be binding;
- In the event that it is necessary for the Consent Holder to remedy any such unforeseen adverse effects, any adversely affected natural features are to be remediated to their condition existing at the date of the grant of the consents, or to a condition that is agreed to by the Chief Executive of the Regional Council;
- The bond may be used by the Chief Executive of the Regional Council to carry out any environmental rehabilitation work necessary to remedy any unforeseen adverse effects, but the funds secured by the bond shall not be called upon and utilised for that purpose unless the Consent Holder has first been given the opportunity to carry out such environmental rehabilitation work within a reasonable time and failed to do so;
- The form of the bond is to be approved by the Regional Council's solicitors, and the Consent Holder is to pay the Regional Council's reasonable costs associated with such approval and execution of the bond;
- The Consent Holder is to pay the Regional Council's reasonable costs associated with investigation under and implementation of the bond;
- Five years after the capital dredging authorised by this consent is completed, the Consent Holder shall prepare a review report summarising and interpreting the monitored effects and changes in comparison to those contemplated in the application for resource consent and accompanying Assessment of Environmental Effects. The Chief Executive of the Regional Council shall release the bond provided that:

(a) The Consent Holder has complied with the conditions of Coastal Consent No 65807 and this consent; and



- (b) The review report confirms that there are no ongoing unforeseen adverse effects on the environment.

20.5 Non compliance with any conditions of Coastal Consent No 65807 or this consent may result in loss of all or part of the bond.

21 **The Consent** hereby authorised is granted under the Resource Management Act 1991 and does not constitute an authority under any other Act, Regulation or Bylaw.

Advice Notes

- 1 *The Consent Holder is advised that failure to comply with all or any of the conditions of this consent may result in enforcement action being taken against the Consent Holder or their agents.*
- 2 *All notification and reporting required under this consent should be directed (in writing) to the Pollution Prevention Manager, Environment Bay of Plenty, PO Box 364, Whakatane or fax 0800 368 329 or email notify@envbop.govt.nz, this notification shall include the consent number 65806. In this regard, where conditions require notification and/or reporting to the Regional Council in writing, notification and/or reporting by email will be acceptable.*
- 3 *Permitted activity levels for noise emitted by activities in the Tauranga Harbour are contained in Rules 20(2)(4)(a) and (b) of the Bay of Plenty Regional Coastal Environment Plan.*
- 4 *The Chief Executive of the Regional Council shall direct material to be deposited at alternative sites should monitoring show a shortage of sediment in those areas. The Consent Holder also holds other consents to authorise the discharge of material from maintenance dredging sites A, B and C, and F under consents 60077, 60078 and 60080 respectively.*
- 5 *The Regional Council recognises that mitigation of beach erosion can, in some cases, be relatively easily achieved by beach renourishment – which will need to be an ongoing programme of beach replenishment. The Regional Council will consider compatibility of material, hydrological processes, ecological values, cultural values and any potential adverse effects before approving any nourishment proposal.*
- 6 *The Regional Council recognise that a variety of monitoring techniques are available to the Consent Holder, including shore normal profiling, analysis of LIDAR information, surveying of mean high water springs, aerial photograph analysis and so on. It also recognises the suggestion put forward in the evidence of Willem de Lange that continuous video monitoring could be used to carry out monitoring of Panepane Point. Rather than specify methodologies as a condition of consent the intention is to provide flexibility to allow the most appropriate methodology to be selected at the time.*
- 7 *Generally the frequency of monitoring will be higher immediately following dredging campaigns.*

Staged dredging will occur to accommodate the requirements of a vessel with design parameters resulting in channel dimensions less than that shown in drawing B.O.P.R.C Plan Number RC 65806/3, but not capable of safely transiting the existing channels. The



modelling requirement for staged widening is to ensure that no dredging is carried out in excess of immediate needs.



Conditions for coastal permit No. 65807

PORT OF TAURANGA LIMITED

A coastal permit

- (a) Under section 15(1)(a) of the Resource Management Act 1991 and Rule 9.2.4(b) of the Bay of Plenty Regional Coastal Environment Plan to undertake a **Discretionary Activity** being to **Diffusely Discharge Sediment and Sediment-Laden Water to Tauranga Harbour during Dredging**; and
- (b) Under sections 12(1)(d) and 15A(1)(a) of the Resource Management Act 1991 and Rule 14.2.4(b) of the Bay of Plenty Regional Coastal Environment Plan to undertake a **Discretionary Activity** being to **Carry Out Beach Nourishment in the Coastal Marine Area**; and
- (c) Under section 14(1)(2) of the Resource Management Act 1991 and Rule 10.2.4(d) of the Bay of Plenty Regional Coastal Plan to undertake a **Discretionary Activity** being to **Take Coastal Water during Dredging**;

subject to the following conditions:

1 Purpose of this Coastal Consent

To authorise and set conditions for the dredging operations in the coastal marine area (up to 15 million cubic metres) to deepen, widen and maintain the depth of navigation channels of the Port of Tauranga. This consent authorises the deposition of the dredged material at an offshore disposal site, the discharge of sediment to Tauranga Harbour during maintenance dredging and capital dredging (authorised by Consent No 65806) and the use of suitable material for beach nourishment.

2 Locations

Tauranga Harbour shipping channels, entrance and deposition sites as shown on:

- The Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels Dredged Shipping Channels* and referenced as B.O.P.R.C. Plan Number RC 65807/1; and
- The Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels Spoil Disposal Sites* and referenced as B.O.P.R.C. Plan Number RC 65807/2; and
- The Port of Tauranga plan entitled *Widening and Deepening Shipping Channels for 14.5m Container Vessels New Channel Boundaries and Dimensions* and referenced as B.O.P.R.C. Plan Number RC 65806/3; and
- Any other site approved in writing by the Chief Executive of the Regional Council or delegate.



3 Map References

Name of Area	Approximate NZMS 260 map references (midpoint)
Entrance Channel and No.2 Reach	U14:8980-9310
Cutter Channel	U14:9010-9080
Maunganui Roads	U14:9080-8980
Stella Passage	U14:9054-8838
Deposit Site H	U14:9414-9386

4 Legal Description

Seabed (Tauranga District).

5 Quantity of Excavation

The quantity of material removed from the coastal marine area is authorised by Coastal Consent No. 65806 and shall not exceed the volume required to maintain the following depths (from Chart Datum):

Locality	Works
Entrance Channel and No.2 Reach	Maintain a depth of 17.4 metres
Tanea Shelf	Maintain a depth of 17.4 metres and an additional width of 32 metres
Cutter Channel	Maintain a depth of 16.0 metres and additional width of 115 metres
Maunganui Roads	Maintain a depth of 16.0 metres and additional width of 50 metres. Maintain a turning basin 16.0 metres deep and 200 metres by 200 meters
Stella Passage	Maintain a depth of 16.0 metres

[Port of Tauranga Ltd suggests that this condition could be deleted from this consent as the quantity of excavation is authorised by consent 65806 but at this stage it has been left in with a cross reference to consent 65806.]

6 Notification

6.1 The Consent Holder shall notify (in writing) the Chief Executive of the Regional Council or delegate, and the Tangata Whenua Reference Group (required by condition 7 of Coastal Consent No. 65806) of its intention to commence dredging no less than 20 working days prior to each dredging operation. Notice shall include as a minimum;

- The area to be dredged;
- An assessment of dredging volumes and whether those volumes consist of capital dredging or maintenance dredging;
- An assessment of the material types expected to be dredged;
- The expected duration of the dredging operation;

A plan for the disposal of dredged materials;



- The name and contact details of the person with responsibility for supervising the works.

6.2 At least 10 working days prior to the start of dredging the Consent Holder shall notify (in writing) the Coastguard and the Tauranga Harbourmaster and shall place notices in the Bay of Plenty Times advising the general public of the following;

- The intention to start dredging;
- The area to be dredged;
- The period during which dredging is expected to occur; and
- Any restrictions that will apply to navigation during the dredging.

7 Relationship with Tangata Whenua

7.1 The Consent Holder shall comply with conditions 1, 7, 8.1, 10.1, 10.9, 10.10 and 20 of Coastal Consent No. 65806 either prior to or in implementing this consent (as the case may be) which recognise and provide for the relationship of Tangata Whenua with Te Awanui Tauranga Harbour (including Mauao) through:

- the establishment of a trust and a Tangata Whenua Reference Group (TWRG) and the Te Awanui Scholarship Programme, and the preparation of a Kaimoana Restoration Programme (condition 7 of Coastal Consent No. 65806),
- a requirement for all work at Tanea Shelf (Mauao) to be performed in one operation (condition 1 of Coastal Consent No. 65806),
- provision for ceremonies prior to carrying out capital dredging operations under the consent, if deemed appropriate by iwi and hapu (condition 8.1 of Coastal Consent No. 65806)
- a minimum separation distance from Te Kuia Rock (condition 8.5 of Coastal Consent No. 65806 and condition 8.4 of this consent),
- provision for renourishment of the beach at Whareroa Marae (conditions 10.1 and 10.10 of Coastal Consent No. 65806),
- provision for the TWRG to assist in settling the final position of the boulder placement plan at Tanea Shelf / Mauao (condition 10.9 of Coastal Consent No. 65806), and
- requirement for an environmental bond (condition 20 of Coastal Consent No. 65806).

8 Dredging Works

8.1 All works associated with the dredging operation authorised by this consent shall be carried out generally as detailed in the application, specifically *Chapter 3.0 – Project Description – Dredging Options* of the application document entitled *Assessment of Environmental Effects for Port of Tauranga Limited Channel Deepening and Widening February 2009* and the further information regarding maintenance dredging submitted on 1 March 2010 and entitled *Maintenance Dredging*.

8.2 In the event that a significant proportion (greater than 5% by weight) of the material dredged is found to be silt, the Consent Holder shall employ an appropriate dredging method to minimise the turbidity effects in the vicinity of the works.



- 8.3 The Consent Holder shall ensure that no contaminants, including fuel oils, are consented to enter the harbour waters as a result of these works.
- 8.4 The Consent Holder shall ensure that a minimum distance of 100 metres is maintained between any dredging activity and Te Kuia Rock.

9 Disposal of Dredged Material

- 9.1 All material may be deposited at established dump sites as authorised by consents 40157, 60077; 60078, 60079, 60080, 60083 and/or 65806 or removed from the coastal marine area as authorised by Consent No 65806.
- 9.2 Despite Condition 9.1 above, the Consent Holder shall deposit specified volumes of material at Sites A, B, C, F and/or on Panèpane Point if so directed by the Chief Executive of the Regional Council or delegate (see Advice Note 4).
- 9.3 Despite Conditions 9.1 and 9.2 above, material removed from the coastal marine area may be used for beach nourishment only with the written approval of the Chief Executive of the Regional Council or delegate (see Advice Note 5).

10 Water Quality

- 10.1 Dredging operations shall not result in a change in turbidity within the water column greater than 15 NTU, above the background turbidity levels at the following locations:
- 200 metres distant from the dredged area of any active trailer-suction dredging operation;
 - 600 metres distant from the southern boundary of the dredged area from any active back-hoe digger dredging operation;

The background turbidity levels shall be defined as being the natural turbidity level in harbour water no closer than 500 metres up current of the dredging.

- 10.2 The change in visual clarity between the upstream and downstream points described in Condition 10.1 shall not be changed by more than 20% with visual clarity measured with a black disc or equivalent calibrated secchi disk measurement.
- 10.3 The Consent Holder shall undertake the deposition operations so that the difference in surface water turbidity between locations 100 metres outside the updrift boundary of the deposition site and 100 metres outside the downdrift boundary of the deposition site shall not exceed 5 NTU.

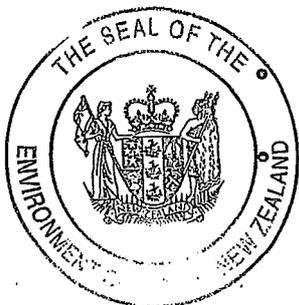
11 Monitoring

- 11.1 The Consent Holder shall carry out bathymetric surveys at all dredge sites both immediately prior to and immediately after dredging. The bathymetric survey should be sufficient to enable an assessment of the volume of material dredged.
- 11.2 On every second day that excavations occur by trailer-suction dredge under the authority of this consent or Consent No 65806, the Consent Holder shall (during excavation operations) take two water samples:

from a site 200 metres from the dredged area but adjacent to an active operating dredge; and



- from a site 500 metres upstream (away from the direction of the sediment plume) of the operating dredge.
- 11.3 On every second day that excavations occur under the authority of this consent or Consent No 65806, the Consent Holder shall (during excavation operations) take two water samples:
- from a site 200 metres from the dredged area but adjacent to an active operating dredge;
 - except when the dredge nears the southern boundary of the dredged area when the sample shall be taken 600 metres downstream; and
 - from a site 500 metres upstream (away from the direction of the sediment plume) of the operating dredge.
- 11.4 From each sampling site two water samples shall be taken, one from the surface and the other from the mid-depth of the water column, and analysed as soon as practicable for turbidity.
- 11.5 All sampling and analyses required by Conditions 11.2, 11.3, and 11.4 shall be carried out in accordance with the latest edition of: "Standard Methods for the Examination of Water and Wastewater APHA, AWWA, WEF" or such other method as may be agreed in writing by the Chief Executive of the Regional Council or delegate.
- 11.6 The Consent Holder shall note, at the time of sampling under Conditions 11.2, 11.3, and 11.4, the time, stage of tide and weather and sea conditions including the prevailing wind direction, speed, wave height and period.
- 11.7 If the results of three consecutive measurements taken under Conditions 11.2, 11.3 and 11.4 are below the limits specified in Condition 10.1, then monitoring may be suspended for a period of fourteen days.
- 11.8 If the results of three consecutive measurements taken under Conditions 11.2, 11.3 and 11.4 exceed the limits specified in Condition 10.1, the Consent Holder shall;
- Cease dredging operations;
 - Notify the Regional Council and the TWRG;
 - Remedy or mitigate any significant adverse effects resulting from the excavation works;
- 11.9 Where dredging operations have ceased as a result of the implementation of Condition 11.8, the Consent Holder shall not recommence dredging operations without the written approval of the Chief Executive of the Regional Council or delegate.
- 11.10 The Consent Holder may submit a **Continuous Turbidity Monitoring Plan (CTMP)** for the approval of the Chief Executive of the Bay of Plenty Regional Council. The CTMP shall include details of the continuous turbidity monitoring proposed, including the following:
- A description of the reliability and accuracy of the continuously sampled data;
 - Sampling locations, which shall include a site in close proximity to Te Paritaha, a site at the Aerodrome Bridge, and a site at the harbour bridge crossing;
 - Proposed data transformation, such as 6-hourly exponentially weighed moving average;
 - Proposed response levels and environmental limits; and



- Accessibility of results.

- 11.11 If a CTMP submitted under Condition 11.10 is approved by the Chief Executive of the Regional Council, or delegate, as an alternative to the monitoring described in Conditions 11.2 and 11.3 above the monitoring under those conditions may be discontinued in lieu of the monitoring required under the CTMP.
- 11.12 The Consent Holder shall, for each month that the deposition operation continues, take a sample from the hopper of the dredge disposal vessel and analyse the sample for proportion of silt content by weight.
- 11.13 The Consent Holder shall undertake the sampling required under Condition 11.12 in such a manner that a sample representative of the sediment to be deposited is obtained.
- 11.14 Once every week that deposition at "Site H" occurs under the authority of this consent, the Consent Holder shall (during excavation operations) take water samples at locations 100 metres outside the updrift and downdrift boundaries of deposition "Site H".
- 11.15 The Consent Holder shall collect the surface water turbidity samples required by Condition 11.14, on a day that deposition is being carried out. Test samples shall be representative of any plume generated by the deposition operation.
- 11.16 If results of three consecutive measurements indicate less than 5 NTU change in turbidity between the updrift and downdrift sites, monitoring of water turbidity for that deposition operation can be suspended for 30 days.
- 11.17 In the event that the level specified in Condition 11.16 is exceeded, the sampling procedure shall be repeated daily for three consecutive days whilst deposition is carried out.
- 11.18 If the results of three consecutive measurements, taken under Condition 11.17, record turbidity changes of greater than 5 NTU, the Consent Holder shall:
- (a) Immediately cease deposition operations;
 - (b) Activate appropriate contingency plans to remedy or mitigate any unacceptable effects detected;
 - (c) Notify the Regional Council and the TWRG;
 - (d) Consult with the Chief Executive of the Regional Council or delegate over possible explanations for the exceedance; and
 - (e) Implement any modifications to the deposition operation that the Executive of the Regional Council, or his delegate, considers appropriate following the consultation under Condition 11.18(d).
- 11.19 Where deposition operations have ceased as a requirement of Condition 11.18, the Consent Holder shall not recommence deposition operations without the written approval of the Chief Executive of the Regional Council or delegate.

12 Potentially Contaminated Sediment

- 12.1 Harbour sediments that exceed guideline contamination level ER-L values as presented by National Oceanic and Atmospheric Administration (NOAA) shall, upon direction, of the Chief Executive of the Bay of Plenty Regional Council, be removed to an approved landfill site



12.2 Under the requirements of Condition 13.1, ER-L (Environmental Response – Low) is defined as a concentration at which less than ca. 10% of the local biota are likely to be affected.

13 Recording and Reporting

13.1 The Consent Holder shall maintain records of the sampling and analysis carried out under Conditions:

- 11.2, 11.3 and 11.4 (relating to turbidity monitoring during dredging);
- 11.12 and 11.13 (relating to the proportion of silt in material being deposited);
- 11.14 and 11.15 (relating to turbidity monitoring during deposition)

and shall make these records available to Regional Council compliance staff on request.

13.2 The Consent Holder shall forward a report to the Regional Council within 30 working days of completion of the each dredging and deposition campaign describing:

- the area excavated;
- the quantity of sediment removed;
- the quantity of sediment disposed of and the areas to which the sediment has been disposed;
- The quantity of sediment removed from the coastal marine area;
- The results of the bathymetric surveys required under Condition 11.1;
- An analysis of the results of the bathymetric surveys showing areas and extent of geomorphologic change.

14 Lapse of Consent

Unless this consent is given effect to, the consent shall lapse on 31 January 2026.

15 Review of Conditions

15.1 The Regional Council may, within three months of receiving information from any of the bathymetric surveys or other monitoring data, serve notice on the Consent Holder under section 128(1)(a)(i) of the Resource Management Act 1991 of its intention to review Condition 9.6 of the consent. The purpose of such a review is to ensure that the monitoring regime is appropriate and can if necessary be extended.

15.2 The Regional Council may, during the month of June in the years 2010, 2013, 2016, 2019, and 2023, serve notice on the Consent Holder under section 128(1)(a)(i) or (iii) of the Resource Management Act 1991, of its intentions to review the conditions of this consent. The purpose of this is to ensure that the conditions of this consent are adequate to deal with one or all of the following:

- (a) the effects of the exercise of this consent on the ecology (including shellfish resources) and water quality of Tauranga Harbour; and



- (b) the effects of the exercise of this consent on the ecology and water quality of the Pacific Ocean; and
- (c) the material available to the sediment budgets of the Matakana Island, Mount Maunganui and Pāpāmoa beaches and near-shore systems;
- (d) the appropriate mitigation of the environmental effects of the activity having regard to the available dredging technology; and
- (e) the appropriate mitigation of the environmental effects of the activity having regard to the available deposition technology.

16 Term of Consent

This consent shall expire on 6 June 2027.

17 Royalties

Within 15 working days of the completion of dredging, the Consent Holder shall pay to the Regional Council the appropriate Government Royalty as prescribed by the Resource Management (Transitional Fees, Rents and Royalties) Regulations 1991.

18 Resource Management Charges

The Consent Holder shall pay the Bay of Plenty Regional Council such administrative charges as are fixed from time to time by the Regional Council in accordance with section 36 of the Resource Management Act 1991.

- 19 **The Consent** hereby authorised is granted under the Resource Management Act 1991 and does not constitute an authority under any other Act, Regulation or Bylaw.

Advice Notes

- 1 *The Consent Holder is advised that failure to comply with all or any of the conditions of this consent may result in enforcement action being taken against the Consent Holder or their agents.*
- 2 *All notification and reporting required under this consent should be directed (in writing) to the Pollution Prevention Manager, Environment Bay of Plenty, PO Box 364, Whakatane or fax 0800 368 329 or email notify@envbop.govt.nz, this notification shall include the consent number 65807.*
- 3 *Permitted activity levels for noise emitted by activities in the Tauranga Harbour are contained in Rules 20(2)(4)(a) and (b) of the Bay of Plenty Regional Coastal Environment Plan.*

The Chief Executive of the Regional Council shall direct material to be deposited at alternative sites should monitoring show a shortage of sediment in those areas. The Consent Holder also holds other consents to authorise the discharge of material from



maintenance dredging sites A, B and C, and F under consents 60077, 60078 and 60080 respectively.

- 5 *The Regional Council recognises that mitigation of beach erosion can, in some cases, be relatively easily achieved by beach renourishment – which will need to be an ongoing programme of beach replenishment. The Regional Council will consider compatibility of material, hydrological processes, ecological values, cultural values and any potential adverse effects before approving any nourishment proposal.*

